# THE GORDION EXCAVATIONS, 1950-1973: FINAL REPORTS VOLUME IV Text <br> THE EARLY PHRYGIAN POTTERY <br>  




## THE EARLY PHRYGIAN POTTERY

Text


The late Necmettin Bektöre with rim of 1077

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E.L. Kohler, Editor

## THE EARLY PHRYGIAN POTTERY

## G. Kenneth Sams

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## Abbreviations

Akurgal, Hittites
Akurgal, $P K$

AnatSt
AntCl
Athens to Gordion

AthMitt
Bankoff and Winter

BASOR
Bayburtluoğlu
BCH
Belleten
BrOr
Bittel
Boğazköy IV

Brixhe and Lejeune
$B S A$
Buluç

Archäologischer Anzelger
American Journal of Archaeology. [Often used in reference to preliminary reports on Gordion by Rodney S. Young for campaigns from 1953 to 1967; see TGET, xxxv-xxxvi.]

Amencan Journal of Semitic Languages
Akurgal, Ekrem, The Art of the Hittites. London: Thames and Hudson, 1962.
Akurgal, Ekrem, Phrygische Kunst. Ankara: Türk Tarih Kurumu Basımevi, 1955.

Anatolian Studies
L'Antiquité classique
DeVries, K., ed., From Athens to Gordion: The Papers of a Memorial Symposium for Rodney S. Young. Philadelphia: The University Museum, 1980.

Mittellungen des deutschen archäologischen Instituts: Athemsche Abteilung
Bankoff, H. Arthur and Frederick A. Winter, "Northern Intruders in LH IIIC Greece: A View from the North." JIES 12 (1984): 1-30.

Bulletin of the American Schools of Oriental Research
Bayburtluoğlu, İnci, "Eskiyapar Phryg Çağı." TTK VIII, 293-303.
Bulletin de correspondance hellénique
Belleten Türk Tarih Kurumu
Bibliotheca Orientalis
Bittel, Kurt, Les Hitthes. Paris: Gallimard, 1976.
Bittel, Kurt et al., Boğazkoy IV: Funde aus den Grabungen 1967 und 1968. Berlin: Gebr. Mann, 1969.

Brixhe, Claude and Michel Lejeune, Corpus des inscriptions paléo-phrygiennes. Paris: Institut Français d'Etudes anatoliennes, 1984.

The Annual of the British School at Athen.
Buluç, Sevim, Ankara Frig Nekröpölünden U̧̧ Tümulüs Buluntularn. Doçentlik tezi, Ankara Üniversitesi, 1979.

| C.4H 1II/1 | Cambridge Ancient Hıstory, Vol. III, Part 1, 2d ed. Cambridge: Cambridge University Press, 1982. |
| :---: | :---: |
| Carchemesh | Hogarth, D. G. et al., Carchemish: Report on the Excavations at Djerabis on Behalf of the British Museum. 3 vols. Oxford: Trustees of the British Museum. I, 1914; II, 1921; III, 1952. |
| Čičikova | Čičikova, Maria, "La Thrace à l'époque homérique et géomètrique." Proc.Xth.Int.Congr., 187-194. |
| Çinaroğlu | Çinaroğlu, Ay̧kut, "Tepebağları Kazısında Demir Devri." TTK VIII, 215218. |
| Coldstream, Greece | Coldstream, J. N., Geometric Greece. New York: St. Martin's Press, 1977. |
| Coldstream, GGP | Coldstream, J. N., Greek Geometric Pottery: A Survey of Ten Local Styles and Their Chronology. London: Methuen, 1968. |
| Desborough | Desborough, V. R. d'A., Protogeometric Pottery. Oxford: Clarendon Press, 1952. |
| Detev | Detev, Peter, "Traces de la civilisation de Razkopanitza en Transylvanie.' Apulum 7/1 (1968): 61-90. |
| DeVries, "Gordion" | DeVries, Keith, "The Gordion Excavation Seasons of 1969-1973 and Subsequent Research.".AJA 94 (1990): 371-406. |
| DeVries, "Phrygians" | DeVries, Keith, "Greeks and Phrygians in the Early Iron Age." Athens to Gordion, 33-49. |
| Emre, "Acemhöyük" | Emre, Kutlu, "The Pottery from Acemhöyük." Anadolu 10 (1966): 99-153. |
| Emre, "Pottery" | Emre, Kutlu, "The Pottery of the Assyrian Colony Period According to the Building Levels of the Kaniş Karum." Anatolia 7 (1963): 87-99. |
| Emre, "Sultanhan" | Emre, Kutlu, "The Excavations 1971 and 1972 at Sultanhan Höyük." Anadolu 15 (1971): 87-138. |
| Expedition | Expedition: The Universtit Museum Magazine of Archaeology and Anthropology |
| Firatlı | Firath, Nezih, "New Discoveries Concerning the First Settlement of Ancient Istanbul-Byzantion." Proc.Xth.Int.Congr., 565-574. |
| Fischer | Fischer, Franz, Boğazkoy-Hattus̆a. Vol. IV, Die hethitische Keramik von Boğazköy. WVDOG 75. Berlin: Gebr. Mann, 1963. |
| Gordion | Körte, Gustav and Alfred, Gordon: Ergebnisse der Ausgrabungen im Jahre 1900. Jahrbuch des kaiserlich deutschen archäologischen Instituts, Ergänzungsheft V. Berlin: Reimer, 1904. |
| Gunter | Gunter, Ann C., Gordion Excavations, Final Reports. Vol. III, The Bronze Age. Philadelphia: The University Museum, 1991. |
| Hama II/3 | Riis, P. J., Hama: Fouilles et recherches 1931-1938. Vol. II, 3, Les Cimetières à cremation. Copenhagen: Gyldendal, 1948. |
| Hammond, Macedonia | Hammond, N. G. L., A History of Macedonia. Oxford: Clarendon Press, 1972. |
| Hammond, Megrations | Hammond, N. G. L., Migrations and Invasions in Greece and Adjacent Areas. Park Ridge, N.J.: Noyes Press, 1976. |


| Heurtley, PM | Heurtley, W. A., Prehistoric Macedonia: An Archaeological Reconnaissance of Greek Macedonia (West of the Struma) in the Neolithic, Bronze, and Early Iron Ages. Cambridge: The University Press, 1939. |
| :---: | :---: |
| Heurtley, "Tombs" | Heurtley, W. A. and T. C. Skeat, "The Tholos Tombs of Marmariane." BS. 4 31 (1930-31): 1-55. |
| Hoddinott | Hoddinott, R. F., The Thracians. New York: Thames and Hudson, 1981. |
| IJNA | International Journal of Nautical Archaeology |
| $J d I$ | Jahrbuch des deutschen archäologischen Instituts |
| $J F A$ | Journal of Field Archaeology |
| JIES | Journal of Indo-European Studies |
| Karahöyük | Özgüç, Tahsin and Nimet, Ausgrabungen in Karahöyük. Ankara: Türk Tarih Kurumu Basımevi, 1949. |
| Knudsen | Knudsen, A. K., A Study of the Relatoonship between Phrygian Metaluork and Pottery in the 8th and 7th Centuries B.C. Ph.D. dissertation, University of Pennsylvania, 1961. Ann Arbor: University Microfilms, 1961. |
| Kohler | Kohler, Ellen L., "Cremations of the Middle Phrygian Period at Gordion." Athens to Gordion, 65-89. |
| Kültepe 1948 | Özgüç, Tahsin, Kulttepe Kazı Raporu, 1948. Ankara: Türk Tarih Kurumu Basımevi, 1950. |
| Kültepe 1949 | Özgüç, Tahsin, Kültepe Kazı Raporu, 1949. Ankara: Türk Tarih Kurumu Basımevi, 1953. |
| Kültepe in I.A. | Özgüç, Tahsin, Kuiltepe and its Vicinity in the Iron Age. Ankara: Türk Tarih Kurumu Basımevi, 1971. |
| Kültepe-Kaniş | Özgüç, Tahsin, Kültepe-Kaniş: New Researches at the Center of the Asyrian Trade Colonies. Ankara: Türk Tarih Kurumu Basımevi, 1959. |
| $L A A A$ | Liverpool Annals of Art and Archaeology |
| Lamb | Lamb, W., "Antissa.' BSA 32 (1931-32): 41-67. |
| Lefkandi I | Popham, M. R. et al., Lefkandi I: The Iron Age. BSA Supplement Vol. XI. London: Thames \& Hudson, 1979. |
| Lloyd and Mellaart | Lloyd, Seton and James Mellaart, "Beycesultan Excavations: First Preliminary Report." AnatSt 5 (1955): 39-92. |
| Malatya-I | Puglisi, S. M. and Meriggi, P., Malatya-I: Rapporto prehmmare delle Campagne 1961 e 1962. Orientis Antiqui Collectio, Vol. III. Rome: Centro per le Antichità e la Storia dell'Arte del Vicino oriente, 1964. |
| Maşat I | Özgüç, Tahsin, Excavations at Maşat Höyük and Investigations in its V'icinity. Ankara: Türk Tarih Kurumu Basımevi, 1978. |
| Maşat II | Özgüç, Tahsin, Maşat Höyük II: A Hittte Center Northeast of Boğazköy. Ankara: Türk Tarih Kurumu Basımevi, 1982. |
| MDOG | Mittellangen der deutschen Orient-Gesellschaft |


| Mellink, Hitt. Cem. | Mellink, M. J., A Hittite Cemetery at Gordion. Philadelphia: The University Museum, 1956. |
| :---: | :---: |
| Mellink, "Tyana" | Mellink, M. J., "Midas in Tyana," in Masson, E. and C. Brixhe, eds., Florilegium Anatolicum. Mélanges offerts à Emmanuel Laroche. Paris: Editions E. de Boccard, 1979. |
| METU | Middle East Technical University, Ankara |
| Morintz | Morintz, Sebastian, "Quelques problèmes concernant la période ancienne du Hallstatt au Bas-Danube à la lumière des fouilles de Babadag." Dacia n.s. 8 (1964): 101-118. |
| Muscarella, Fibulae | Muscarella, Oscar White, Phrygian Fibulae from Gordion. Colt Archaeological Institute Monograph 4. London: Quaritch, 1967. |
| Muscarella, "Tumulus" | Muscarella, Oscar White, "King Midas' Tumulus at Gordion" [review article on TGET]. QRA (Dec. 1982): 7-10. |
| Noble | Noble, Joseph Veach, The Techniques of Painted Attic Pottery. New York: Watson-Guptill, 1965. |
| OIP | Oriental Institute Publications. Chicago: University of Chicago Press. |
| OIP 6 | Schmidt, Erich F., The Alishar Hüyük, Season of 1927. OIP 6. 1930. |
| OIP 19 | Schmidt, Erich F., The Alishar Hüyük, Seasons of 1928 and 1929. OIP 19. 1932. |
| OIP 29 | Osten, H. H. von der, The Alişar Hüyük, Seasons of 1930-32. OIP 29. 1937. |
| Özdoğan | Özdoǧan, Mehmet, "Taşlıcabayır. A Late Bronze Age Burial Mound in Eastern Thrace." Anatolica 14 (1987): 5-39. |
| Phrygie III | Haspels, C. H. Emilie, Phrygie. Vol. III, La Cité de Midas: Céramique et trouvalles diverses. Paris: E. de Boccard, 1951. |
| Popham | Popham, M. R. et al., "Further Excavation of the Toumba Cemetery at Lefkandi." BSA 77 (1982): 213-248. |
| Porsuk I | Dupré, Sylvestre, Porsuk I: La Céramique de l'âge du bronze et de l'âge du fer. Paris: Institut Français d'Etudes Anatoliennes, 1983. |
| Proc.Xth.Int.Congr. | The Proceedings of the Xth International Congress of Classical Archaeology. Ankara: Türk Tarih Kurumu Basımevi, 1978. |
| QRA | The Quarterly Review of Archaeology |
| RevArch | Revue archéologique |
| RHA | Revue hittite et asianique |
| Roller | Roller, Lynn E., Gordion Special Studies. Vol. I, Nonverbal Graffiti, Dipmtr, and Stamps. Philadelphia: The University Museum, 1987. |
| Rutter | Rutter, Jeremy B., "Ceramic Evidence for Northern Intruders in Southern Greece at the Beginning of the Late Helladic IIIC Period." AJA 79 (1975): 17-32. |
| Samos V | Walter, Hans, Samos. Vol. V, Frühe samische Gefässe: Chronologie und Landschaftsstile ostgriechischer Gefässe. Bonn: Habelt, 1968. |


| Sams, "Animals" | Sams, G. Kenneth, "Phrygian Painted Animals: Anatolian Orientalizing Art." AnatSt 24 (1974): 169-196. |
| :---: | :---: |
| Sams, "Beer" | Sams, G. Kenneth, "Beer in the City of Midas." Archaeology 30 (1977): 108-115. |
| Sams, "Patterns" | Sams, G. Kenneth, "Patterns of Trade in First Millennium Gordion." Archaeological News 8 (1979): 45-53. |
| Sams, "Schools" | Sams, G. Kenneth, "Schools of Geometric Painting in Early Iron Age Anatolia." Proc.Xth.Int.Congr., 227-236. |
| Sandars, "Bronze to Iron" | Sandars, N. K., "From Bronze Age to Iron Age: A Sequel to a Sequel," in John Boardman et al., eds., The European Community in Later Prehistory: Studies in Honor of C. F. C. Hawkes. Totowa, N.J.: Rowman \& Littlefield, 1971. |
| Sandars, Sea Peoples | Sandars, N. K., The Sea Peoples, rev. ed. London: Thames \& Hudson, 1985. |
| SCE | Gjerstad, E. et al., Swedish Cyprus Expedition. Stockholm: Swedish Cyprus Expedition, 1934-. |
| Schachermeyr | Schachermeyr, Fritz, Die Ägäische Fruhzert. Vol. 5, Die Levante im Zeitalter der Wanderungen, vom 13. bis 11. Jahrhundent v. Chr. Vienna: Osterreichische Akademie der Wissenschaften, 1982. |
| Schweitzer | Schweitzer, Bernhard, Greek Geometric Art. London: Phaidon Press, 1971. |
| Sendschirli V | Andrae, Walter, Ausgrabungen in Sendschirli. Vol. V, Die Kleinfunde von Sendschuli. Berlin: Berlin-Orient-comites, 1943. |
| Shepard | Shepard, Anna O., Ceramics for the Archaeologist, 6th ed. Washington, D.C.: Smithsonian Institution, 1968. |
| TAD | Türk Arkeoloji Dergisi |
| Tarsus III | Goldman, H. et al., Excazations at Gözlü Kule, Tarsus. Vol. III, The Iron Age. Princeton: Princeton University Press, 1963. |
| Tell Halaf III | Moortgat, Anton, Tell Halaf. Vol. III, Die Bildwerke. Berlin: Walter de Gruyter, 1955. |
| Tell Halaf IV | Hrouda, Barthel, Tell Halaf. Vol. IV, Die Funde historischer Zeit. Berlin: Walter de Gruyter, 1957. |
| Tezcan | Tezcan, Burhan, "1968 Göllüdağ Kazısı." TAD 17/2 (1968): 211-235. |
| TGET | Young, Rodney S. et al., The Gordion Excazations, Final Reports. Vol. I, Three Great Early Tumulh. Philadelphia: The University Museum, 1981. |
| Troy | Blegen, Carl W. et al., Troy: Excavations Conducted by the L'niversity of Cincinnati. 1932-1938. 4 vols. Princeton: Princeton University Pres. I-II, 1951; III, 1953; IV, 1958. |
| TTK VII | VII. Turk Tarih Kongrest: Kongreye Sumulan Bildiriler. Ankara: Türk Tarih Kurumu Basımevi, 1972. |
| TTK VIII | VIII. Türk Tarih Kongres: Kongreye Sunulan Bildmiler. Ankara: Türh Tarih Kurumu Basımevi, 1979. |

$U M B$

Vergina I

Winter

Woolley

WVDOG
Zagora I

University Museum Bulletin. Philadelphia: The University Museum. [Used in reference to preliminary reports on Gordion by R. S. Young for campaigns from 1950 to 1952; see TGET, xxxv.]

Andronikos, Manolis, Vergina I: To Nekrotapheion ton Tumbon. Athens: Archaiologike Hetaireia, 1969.

Winter, Irene J., "On the Problems of Karatepe: The Reliefs and their Context." AnatSt 29 (1979): 115-151.

Woolley, Leonard, "The Iron-Age Graves of Carchemish." LAAA 26 (1939): 11-37.

Wissenschaftliche Veröffentlichungen der deutschen Orient-Gesellschaft
Cambitoglou, Alexander et al., Zagora I: Excavation of a Geometric Settlement on the Island of Andros, Greece. Sydney: Sydney University Press, 1971.

## Editor's Preface

Volume IV in the series of final reports on the Gordion excavations for the years 1950-1973, carried out by The University Museum of the University of Pennsylvania, follows directly upon Volume III, The Bronze Age, both substantively and temporally. It extends the pottery reporting beyond the end of the Anatolian Bronze Age by presenting Phrygian pottery from its earliest introduction at Gordion through the time of the Kimmerian Destruction.

This pre-Kimmerian Iron Age material has hitherto been published inconsistently, i.e., only individually or in small groups in preliminary reports according to the year of excavation, or in short discussions which pursued the special and restricted interests of the authors. G. Kenneth Sams, in his Ph.D. dissertation, The Phrygum Painted Pottery , which was supervised by Rodney S. Young, laid the groundwork for this full and thorough study, which here is expanded to include all the forms of the decorated and undecorated polished and plain preKimmerian wares from Gordion.

The proveniences considered here are regions of the City Mound which are datable with relation to each other-and which are given real dates by the author. Pot groups from these regions are also furnished with a few comparanda from the contemporary tumuli. The sourcepottery for this study comes from the full complement of R. S. Young's campaign-years: 1950-1973.

For support of the complex of excavations referred to in this volume, we are pleased to acknowledge our obligations to the Turkish Ministries of Education and (more recently) to the Ministries of Culture and Tourism (now only Culture), in which the General Directors of the Department of Antiquities and Museums have resided. The directors of the Museum of Anatolian Civilizations, formerly the Ankara Archaeological Museum, and the kaymakams of the district of Polath have afforded us their friendly attention at all times.

The representatives sent out to Gordion from the Department of Antiquities and Museums constitute too long a list to be detailed here, but their courtesy, efficiency, and friendship will never be forgotten.

We acknowledge a profound indebtedness to the

Board of Managers of The University Museum, chaired from 1941 to 1962 by Percy Madeira and from 1963 to 1980 by Howard C. Petersen; and to Froelich Rainey, Director of The University Museum from 1947 to 1976. These three persons showed unflagging interest in Cordion itself, as well as in the project's financial support.

The early preparation of the Phrygian pottery material was supported in part by a grant from the National Endowment for the Humanities ( $\mathrm{RO}-20170$ ) during the years 1981-82, which aided initial artwork (profiles) and printing of photographs and supported Sams's transportation and maintenance in Philadelphia during periods of study in the Gordion archives. In 1985 the Endonment further granted funds (RO-20826) for a graphic artist to set up the figures and plates and for another study trip to The University Museum.

Institutions which have been called upon repeatedly for the use of their libraries and which have afforded much moral support and cheerful hospitality to Gordion staff while they were studying in Ankara are the British Institute of Archaeology at Ankara and the American Research Institute in Turkey. To the staffs of these, our eternal thanks.

The Museum of Anatolian Civilizations at Ankara, which holds the Pennsylvania material in its charge, the Archaeological Museums of Istanbul, which possess the greater portion of the Körtes' material, and the Berlin Museum, where the Körtes division of the finds is housed-all have cooperated in every possible way over the years. To their directors, and the staff members who attended us during our research, our heartfelt appreciation.

The basic but profuse subject of the ceramics from Gordion will be further pursued in volumes devoted to the pottery of the Middle and Late Phrygian periods. These will appear in their turn as good fortune and finances allow.

Ellen L. Kohler
The University Museum 1993

## Preface

The principal goals of the following study have been to present the ceramic evidence of the Early Phrygian period at Gordion, an age that terminated ca. 700 B.C., and to place the material in broader cultural perspectives both within Anatolia and beyond. These objectives had to take precedence over the more humanistic issue of what the pottery conveys about the Phrygians themselves, an area of interpretation that should, in any event, be dependent on the physical analysis of the material. Nonetheless, the human dimension of a very basic human material is often implied in the study, and it remains for subsequent scholarship to make the ultimate, most noble application of archaeology.

In an ideal scheme, the study would have been preceded by a detailed account of the stratigraphy, architecture, and physical development to which the pottery is intimately tied; yet the ideal proved not to be workable, and for the present the ceramically biased overview of the Early Phrygian sequence in Part I must suffice. Part II, Handmade Pottery, is to a degree a separate study in itself. Parts III to $V$ address the techniques, shapes, and decoration of wheelmade pottery, while Part VI consists of summary accounts that were felt to be necessary in view of the study's length and complexity; the last includes a brief section on the absolute chronology of the period. In the Catalogue of 1089 entries, efforts were made to include representative examples of every type and variety known from contexts of the Early Phrygian period on Yassıhüyük, the City Mound of Gordion. Although later levels have yielded much that may be residual, i.e., displaced, from the earlier Iron Age period, only two categories of contextually later pottery are here included (1036-1081, 1082-1089; p. 17). The Catalogue does not incorporate pottery from Early Phrygian tumuli. That found in the Körte brothers' Tumuli III-IV and the Pennsylvania expedition's Tumuli $\mathrm{P}, \mathrm{MM}$, and W is published, and references to the pottery, as to other
categories of finds, are made by catalogue number (e.g., K-III 10, TumP 50), generally without a bibliographical citation for either Gordion or TGET (see Abbreviations). The general Index refers readers to discussion or mention of items from these tumuli. For the pottery from other tombs of the period, to be published by E. L. Kohler, references are made by Gordion inventory number; several items are here illustrated with the kind permission of Dr. Kohler.

The Catalogue is arranged by context, with typological divisions according to shape and wares; in each contextual section, wheelmade pottery follows handmade. The Destruction Level, by far the greatest source of material, is treated as a single context; the items given entries in the Catalogue are listed by provenance in the Context Register, pp. 311-317. Unlike the scheme of the Catalogue, the drawings and photographs of the entries are organized basically by shape, in the order of discussion in the text; in both series of illustrations, the range of handmade pottery precedes that of wheelmade. Unless decorated or bearing other features that warrant a photograph, fragmentary material, e.g., bases and rims, is illustrated only by drawing. Whole or nearly complete vessels, with the primary exceptions of bowls and the rims of large amphoras and storage jars, are generally represented only by photograph. For these reasons, neither the drawings nor the photographs alone show the full representation of a shape, although all Catalogue entries are illustrated by at least a drawing or a photograph. Many vessels included in the study, particularly diagnostic fragments bearing no decoration, are uninventoried, i.e., they have no P (Pottery) number in the Gordion classification as adopted from the Athenian Agora. In the Catalogue, each of these items is given a number within its context unit (e.g., ${ }^{\prime}-65-21: 2$, Ter 5: 3), and the description of the locus can be found in the Context Register, pp. 311-317.

## Acknowledgments

The study has profited in innumerable ways from the assistance and interest of a great many people. Rodney S. Young, whose vision of unearthing Phrygian culture became a reality, entrusted the pottery to me in 1967 during my first season of work at Gordion, and his valuable counseling continued until his death in 1974. Ellen L. Kohler, Gordion staff member since the beginning, has been a constant source of help and advice; her extraordinary talents as registrar and archivist have made working with the material far easier than it might have been. Similarly, Machteld J. Mellink has kept a close eye on the study since its initiation. The many hours spent with her over pottery tables or in discussion of things Phrygian and Anatolian have been most profitable. Keith DeVries, Field Director for the Gordion Project from 1975 to 1987, has been a valuable friend, comrade, and consultant, and it was largely through his efforts and good sense of coordination that the necessary summer seasons of study at the site were possible. In Philadelphia, Martin Biddle and Robert H. Dyson, Jr., Directors of The University Museum during most of the period of study, deserve special thanks for their general interest in, and support of, the publication of Gordion.

Karen Brown Vellucci, head of Scholarly Publications at The University Museum, has been an instrumental force in seeing the study through the later stages of preparation and production. I am also grateful to Tamara Stech and Oscar White Muscarella, whose careful reading of the manuscript and thoughtful suggestions led to many improvements. For the final copy editing and indexing, I would like to acknowledge my profound gratitude to Laurie Tiede, who undertook this tedious chore with good humor and an uncanny eye for detail. The study has benefited greatly from the careful work of many photographers and artists at Gordion. Special thanks go to Robert Vincent, who, with the assistance of his wife, Frances, took most of the excellent photographs appearing here, and to Jean Carpenter Efe, whose eye for drawing pottery is well-nigh unparalleled (e.g., fig. 45). The task of inking a large number of penciled profiles was shared by a number of people, and I especially thank Barbara Hayden, for her many hours spent at the job, and Elizabeth Simpson, who provided
expert technical advice. The marshaling of the illustrations into an attractive format was the responsibility of Anita Liebman, whom I thank warmly for all her contributions, but especially for her patience in dealing with me. In general, the Department of Scholarly Publications is an unsung jewel in the crown of The University Museum.
Other friends and colleagues have knowingly or unknowingly contributed to the final product, if only through general interest. They include Frederick A. Winter, Crawford H. Greenewalt, Jr., Charles K. Williams III, Karen Vitelli, Wilson Cummer, Lynn Roller, and Ann Gunter. Colleagues in Chapel Hill have been perennial sources of encouragement, especially Sara Immerwahr, Emeline Richardson, George Kennedy, Kenneth Snipes, Mary Sturgeon, Gerhard Koeppel, Charles and Marie-Henriette Gates, and Philip Stadter.

In Turkey, the study has been honored by the support of the General Directorate of Antiquities and Museums in the Ministry of Culture and by that of the Muscum of Anatolian Civilizations. I am also grateful to individual Turkish colleagues for their interest and collaboration. especially Tahsin and Nimet Özgüç, Raci Temizer. Burhan Tezcan, Çetin Anlağan, Aykut Özet, Aykut Çinaroğlu, Inci Bavburtluoğlu, Osman Aksoy, and Sevim Buluç. For permission to study unpublished pottery from Boğazköy, I am indebted to Kurt Bittel, and I also extend warm thanks to Peter Neve for his assistance and hospitality during my stay at the site in 1969. Other colleagues whose assistance and consultation in Turkey has been much appreciated include Toni Cross, David French, Hans Güterbock, Peter Kuniholm, Prentiss DeJesus, Louise Alpers Bordaz, Andrew Ramage, and silvestre Dupré. At Yassıhüyük-Gordion, many resident friends have given direct assistance during the course of the study; representative of them is the late Necmettin Bektöre (frontispiece), whose skills at restoration are well attested throughout the photographic illustrations.

Several organizations also lent support to the study. The University of Pennsylvania and the American Research Institute in Turkey sponsored the initial vears of work in 1968-70. Subsequent periods of study in Turkes were underwritten by the Research Council of the Univer-
sity of North Carolina at Chapel Hill (1973, 1975, 1979, 1981, 1983), by a Kenan Research Leave from the same institution (1977-78), and by the American Philosophical Society (1973, 1975, 1979). The Research Council also provided a generous subvention for publication costs in 1985. Support for the preparation of the illustrations was given by the National Endowment for the Humanities. To all these funding agencies I am most grateful.

I reserve for last a special note of thanks to my wife,

Judy, who has been a part of the work since the beginning, and whose encouragement has been a mainstay throughout. Most of the profiles of whole vessels that appear here were originally done by her, during our initial period of ceramic study at Gordion (fall 1968).

All the above should take consolation in knowing that I assume full responsibility for the contents of the present study.

## Introduction

The first study of Early Phrygian pottery was made by Gustav Körte in his publication of Tumulus III, a wealthy burial that, in his opinion as now, belonged to the general time of the historical king Midas. ${ }^{1}$ Like all that he and his brother Alfred discovered at Gordion in 1900, the tomb was opened largely in a cultural vacuum, since until then the archaeology of Phrygia, and that of Central Anatolia in general, had been based primarily on isolated monuments and chance finds; even at Gordion the brothers work on the main settlement mound, the City Mound, did not penetrate so deep as the period of Tumulus III.

Gordion was to lie archaeologically fallow until 1950; but excavations elsewhere during the half-century interval made significant progress in revealing the rich and varied antiquity of Central Anatolia, and in so doing they provided a broader context for the Körtes' discoveries, including the pottery from Tumulus III. The Iron Age levels found overlying Bronze Age deposits at Alişar Hüyük (Period IV) and Büyükkale-Boğazköy (Period II) in the Halys region yielded an abundance of ceramic material that generally complemented the finds from the Phrygian tumulus. ${ }^{2}$ In other investigations, pottery brought to light in testings made on Alâeddin Tepe in Konya showed remarkably close stylistic affinities with some of the painted vessels from Tumulus III, while excavations at Midas City in the Phrygian highlands yielded pottery that could in part be as old as the Early Phrygian period. ${ }^{3}$ In Ankara, said to have been founded by Midas, the general ceramic corpus had been supplemented by the excavation of several tumuli, including those on the site of the Mausoleum of Atatürk (the Anıt Kabir), and by other investigations in and around the

[^0]capital. ${ }^{4}$ Farther afield, expeditions to KarahüyükElbistan, the Amuq, Malatya, Carchemish, and Hama unearthed pottery closely comparable to that of the Central Anatolian Iron Age. ${ }^{5}$

The great pioneer in bringing order to the vastly increased body of ceramic material was Ekrem Akurgal, who devoted almost half of Phrygische Kunst, completed by 1954 and published the following year, to the pottery of the Central Anatolian Iron Age. That from Tumulus III at Gordion was integrated with the sequences in the Halys district, and became, in Akurgal's system, the western manifestation of the first phase ("Blütezeit") of the "Reifphrygischer Vasenstil." ${ }^{6}$ His earlier "Frühphrygischer Vasenstil," centered in the Halys region, includes the showy silhouette style of figural painting that had become familiar to scholarship through the many examples from Alişar IV. ${ }^{7}$ Akurgal's absolute chronology for the two periods, from before 750 down to 676 B.C., was based primarily on stylistic comparisons with Greek art and on the ancient historical dates for Midas. ${ }^{\text {® }}$

When Phrygische Kunst appeared, the recently resumed excavations at Gordion had just begun to make progress in investigating the Early Phrygian Destruction Level, with its rich inventories of pottery and other goods (pp. 2-7). Thus Akurgal, while aware of the great prospects that the new work held for the earlier phases of the Iron Age, had little more than Tumulus III to guide him in

[^1]assessing the character of Phrygian pottery at Gordion. As can now be seen, the ceramic contents of the tomb, especially the painted vessels that attracted Akurgal the most, include much that does not conform to regular Early Phrygian practice (pp. 165-167). It was, moreover, to be several years before the Pennsylvania team began to carry out any extensive investigation of the earlier, pre-destruction phases of the Early Phrygian citadel, although a deep probe made in 1950 had offered a preview (p. 14). Thus the momentary, once-isolated evidence of Tumulus III has come since Phrygische Kunst to be supplemented not only in general kind but also by the sequential perspective of the City Mound, while the corpus of Early Phrygian pottery, from tombs and settlement alike, can now be more effectively viewed within broad cultural horizons.

Other excavations and reports since the appearance of Phrygische Kunst have also contributed to the sum of comparative ceramic material now available for the general period in Central Anatolia. In Ankara, the Great Tumulus opened by METU is generally comparable in scope and date to wealthy tumuli of the Early Phrygian period at Gordion, including III, while two smaller tumuli excavated under the same auspices (METU I and II) may belong to the end of the period. ${ }^{9}$ On the eastern plateau, pottery generally corresponding to that of Alisar IV is now known over a wide area. Continuing work in the Iron Age levels at Boğazköy, especially on Büyükkale since 1963, has made much progress in refining the ceramic sequences there. ${ }^{10}$ On the main mound at Kültepe, the period of Alişar IV is represented in a fragmented yet stratigraphically discernible series of Iron Age levels, while investigations elsewhere in the area, e.g., at Kululu, have yielded contemporary material. " As at Kültepe and Boğazköy, pertinent Iron Age evidence has also come as a bonus to primarily Bronze Age investigations at Eskiyapar and Maşat Hüyük, where work began in 1968 and 1973 respectively. ${ }^{12}$ To the south of the immediate Halys region, the Iron Age is less well documented through excavation. From Göllüdağ and Tepebağları, near Niğde, some comparative material is available in print, but the pottery of the region is

[^2]currently best documented by that retrieved from two Iron Age levels at Porsuk, just inside the Cilician Gates, between 1969 and 1977. ${ }^{13}$ Supplementary to excavation, surveys in the northeast and south have also contributed to the general picture. ${ }^{14}$ At Tarsus in Cilicia, a rich Iron Age sequence had been excavated between 1934 and 1938, with publication following in 1963, but for present purposes the ceramic corpus is instructive primarily in showing that Cilician Iron Age pottery bears little connection with that of Central Anatolia. ${ }^{15}$ The strong Cilician affinities of the earlier Iron Age period at Porsuk most likely result from the site's having been an outpost settled from Cilicia. ${ }^{16}$ To the west, the earlier Lydian levels at Sardis provide some comparative material, as does Troy VIII, settled $c a .750$ by Aeolians, ceramically the most Anatolian of the East Greeks. ${ }^{17}$ The earlier VIIb settlement at Troy is of considerable importance in assessing a category of Iron Age handmade pottery at Gordion (p. 20).

The term "Early Phrygian" is a borrowing from Akurgal, but the sense differs. It includes Tumulus III, placed by him early in the Mature Style, and is restricted in use to what are considered actual "Phrygian" materials, as found at Gordion, Ankara, Midas City, and perhaps Konya. This narrow definition is intended to suggest an ethnic and linguistic distinction among the Iron Age peoples of Central Anatolia, since it cannot be demonstrated conclusively that contemporary centers on the eastern plateau were populated by Phrygians. Of the sites in the Halys region that have yielded Phrygian inscriptions, Pazarlı and Alaca Hüyük show no clear signs of Iron Age settlement as early as the period under consideration, while the inscribed altar on Kalehisar, near Alaca Hüyük, cannot be dated. ${ }^{18}$ Boğazköy is perhaps the strongest contender in the region for a Phrygian element in the eighth century, yet the several Phrygian inscriptions found there all appear to belong to the seventhcentury and later period of occupation, when aspects of Phrygian culture do appear to have spread eastward. ${ }^{19}$

[^3]The type-site of the general region, Alişar, did not yield Phrygian inscriptions, and it is likely that the strongest affinities of this important center in the eighth century lay to the south in Tabal, which was in turn an upland extension of the Syro-Hittite sphere. Kültepe, lying just to the south of the Halys and not far distant from Alişar, with less doubt had similar ties, especially now that an excavated fragment of a Luwian hieroglyphic inscription lends credence to others that were claimed to have come from the site. Such epigraphical evidence is also attested for Kululu, less than 50 km . northeast of Kültepe. ${ }^{20}$ Farther south in Tabal, the Phrygian inscriptions from Kemerhisar-Tyana, one bearing the name Midas, probably reflect Phrygian political dealings in the area in the late eighth century rather than a primarily Phrygian population. ${ }^{21}$ The connections may explain why the pottery of the later Iron Age period at Porsuk, while generally within the sphere of Alişar IV, shows some affinities with Phrygia that are lacking in the Halys region (p. 145 and p. 155).

The elements that contributed to the formulation and development of Early Phrygian pottery, as narrowly defined, appear to have been diverse. Both generally contemporary influence, as comes through human contact, and inheritance from earlier times seem to have been at play, as well as the inventiveness and originality of the Phrygians themselves. That they had a southeast European background is indicated by literary and linguistic evidence, while the handmade pottery that helps to identify the earliest Iron Age strata at Gordion bears affinities with the same cultural sphere (pp. 19-21). It cannot as yet be conclusively demonstrated, however, whether the handmade gave rise to Phrygian wheelmade pottery, although the indirect evidence for a connection is compelling (pp. 175-176). Nor can it be shown whether those who brought the handmade tradition somehow interacted with the site's Late Bronze Age population, a possibility that is allowed by the absence of a clear stratigraphical marker (e.g., a destruction or abandonment layer) separating Bronze from Iron. Thus the correspondences that exist between Phrygian and earlier Anatolian pottery cannot easily be interpreted as either coincidental parallels or genuine connections that stemmed from a merged, Anatolian and European community (pp. 175-176).

Although the shift from Bronze to Iron remains to be understood, Gordion has yielded both sequential and typological evidence, other than the handmade pottery, for early, if not also incipient phases of Phrygian ceramic evolution (pp. 175-176); and in this respect the site is
unlike known centers of the Halys region, where Iron Age pottery appears suddenly and already in a fully developed stage. A separate evolution on the western plateau, as well as the European background of the Phrygians and a possible merger with native Anatolians, might explain why their pottery shows fundamental differences from that of their neighbors to the east. Yet Early Phrygian pottery also indicates, as does other evidence, that the Phrygians came to be integrated within the broader cultural community of Central Anatolia and North Syria (p. 177). Although they became, to a degree. naturalized Anatolians, some features of the pottery suggest that they also maintained open channels with the Balkans. It is, for example, otherwise difficult to explain why only Phrygians, of all Iron Age Anatolians, came to share with Central Thrace the practice of elaborate pottery stamping (p. 176). Elsewhere to the general west, the Phrygians surely had communications with the Greek world, as indicated primarily by their alphabet and the literary record for Midas, particularly the traditions of the gift of his throne to Apollo at Delphi (Herodotos I.14) and his marriage to an Aeolian princess (Pollux IX.83). Yet the debt that Early Phrygian and contemporary pottery in Central Anatolia owed to Greek Geometric, considered by Akurgal to have been great during his Early and Mature "Phrygian" styles, seems in fact to have been minimal (p. 176). ${ }^{22}$

Since no other Phrygian center of the period is so extensively known through excavation, Gordion has the distinction of being the type-site of Phrygia, not only for the early period here considered but also for successive periods down into the Hellenistic age. The distinction has considerable drawbacks, however, not the least of which is the relative scarcity of comparative sequences and material within Phrygia itself. The situation is particularly keen in regard to the Early Phrygian pottery at Gordion. Much that occurs here, including production groups, painting styles, and other cohesive series, in not found beyond the site, and is thus presumed to be peculiarly Phrygian rather than part of broader Anatolian convention. Yet with relatively few exceptions it is uncertain to what extent the assemblage represents widespread Phrygian ceramic idiom, production localized in or around Gordion, or the works of regionalied centers elsewhere in Phrygia. The points of correspondence that do exist, in Ankara, Midas City, and homya, are instructive and suggest some degree of ceramic conformity, as well as Phrygian intercommunication. Few attempts are made to speculate on what might be imports from other parts of Phrygia, but it is likels that

[^4][^5]Gordion, as the capital of the land by the time of Midas, attracted a good deal from outside.

One of the roles of a type-site is to provide an index against which the material evidence of other settlements in a cultural area can be measured. In the case of Gordion, that process of comparison still lies largely in
the future, and it is hoped that the present study, like others in the Gordion series, will prove to be helpful companions in the exploration of Phrygia that lies ahead.

Yassıhüyük and Chapel Hill, 1987

# Architectural Setting and Stratigraphy 

The Early Phrygian period is the first phase of Iron Age habitation on the City Mound of YassıhüyükGordion. The age has its archaeological beginning with a new cultural element that appears intermingled with Late Bronze Age material, and terminates in the destruction by fire of a wealthy, industrious citadel (plan A, pl. H ). The sequence finds a probable historical bearing only at its end, for the devastation, in all likelihood, is to be associated with the invasion of Phrygia by nomadic Kimmerians, an event recorded by later writers and linked with the death of the Phrygian king, Midas. ${ }^{1}$ The incursion was dated by the Christian chronographers Eusebios and Julius Africanus to $696 / 5$ and 676 в.c. respectively. ${ }^{2}$ Although neither date commands absolute trust, the earlier seems to be closer to the truth in light of its general conformity with both Near Eastern sources and the archaeological evidence.

In the Assyrian form of Mita, Midas appears in the annals of Sargon II between 717 and 709, but thereafter no further references to the Phrygian king occur in either Sargon's records or those of his successors. ${ }^{3}$ The Assyrians' chronicling of Kimmerian activities is also suggestive of a time close to 700 for the destruction of Gordion, rather than appreciably later. In 707, two years after the last reference to Midas, the annals of Sargon record the appearance of these trans-Caucasians (Gimurru) in Urartu. Two years later still, in 705 and after an intervening Assyrian encounter with the invaders, Sargon himself died in Tabal while engaged in battle against a hitherto unrecorded enemy. According to a recent

1. Little reason exists to doubt that Yassshuyuik is in fact Gordion; that Gordion was, in turn, the ruling seat of Midas finds testumony in Classical sources: Gordion, 28-35; UMB 16/1 (May 1951), 3-4. More recently: DeVries, "Phrygians," 33-34; TGET, xxxvi and 271-272.
2. Gordion, 20 and 23-24.
3. J. N. Postgate, "Assyrian Texts and Fragments," Iraq 35 (1973), 21.34; J. D. Hawkins in CAH III/1, 417-422.
view, the force may have been an arm of the Kimmerian host, at the time of its victory only a few days distant from Phrygia and Gordion. ${ }^{4}$

Even if an association of Gordion's destruction with the Kimmerians is to be doubted, archaeological factors suggest that the burning occurred $c a .700$. A glass bowl from Tumulus $P$ (TumP 48), a burial with ceramic affinities in the later phases of the Early Phrygian citadel (p. 193), has Sargonid parallels at Nimrud and may have been made in Assyria, ${ }^{5}$ while a lion-headed situla from Tumulus MM (MM 45), possibly the tomb of Midas himself, finds matches on a wall relief at Sargon's new and short-lived city of Khorsabad. ${ }^{6}$ Although such goods could admittedly have come to Gordion long before entering tumuli, evidence of a somewhat different nature may serve to place the destruction and Early Phrygian burials no later than ca. 700 . Tumulus H contained an imported East Greek bird bowl that indicates a terninus post quem for the burial of about the mid-seventh century. The accompanying Phrygian pottery reflects considerable development beyond what is seen at the time of the destruction and implies a gap of sufficient length, perhaps a generation or more, for the innovations to have transpired. ${ }^{7}$

[^6]
## The Destruction Level

The culminating stratigraphic phase of the Early Phrygian period, hereafter the Destruction Level, has yielded an estimated three thousand vessels in excavation. ${ }^{8}$ The buildings themselves are to be the subjects of a separate study, which will include an analysis of their contents and furnishings. Here, however, a summary account of the citadel is desirable in order to convey the relationship of the pottery to its architectural and human environment.

The citadel at the time of the destruction is known through extensive excavations in the E half of the City Mound of Yassihüyük (plan A, pl. H). Within this area, the ancient limits are set at the NW and NE by stretches of fortification walls, while at the SE stands a major gate complex with adjoining circuit to the N . At the SW, the situation is presently less understandable. Three sections of a large wall running NW-SE may represent a major zoning device with a considerably lower enclosed area beyond. The entry complex at the SE consists of two structurally separate units: a deep rampway flanked to N and S by large, inward-facing courts, termed collectively the Gate Building, and, at the head of the approachway, the actual gate structure, the "Polychrome House." ${ }^{9}$ For all its grandeur, the complex opens onto no more than a small triangular space, necessitating sharp turns to right or left in order to proceed farther into the citadel. This awkward arrangement may reflect an earlier plan with a greater openness inside the gate for traffic. The entire entry system seems to have become obsolete before the destruction, since a major terracing operation, still underway when the disaster occurred, had entailed the demolition of the Polychrome House through the construction of a massive drain. ${ }^{10}$

Within the walls, the citadel as revealed has three distinct quarters: a palatial complex in the NE, a street lined with service buildings at the SW, and a multiroomed structure to the NW, between the citadel wall and an enclosure wall for the palace and service areas. In the first district, a thick wall running NE-SW divided two open courts, each lined with megarons. The outer court, that toward the gate complex, has a stone-slab paving and

[^7]two buildings on either side. Megs. 1 and 2 at the SW have the same alignment as the dividing wall. ${ }^{11}$ Across the court, Meg. 9 is not far from the same orientation, whereas Meg. 10 has an axis all its own in this final phase. ${ }^{12}$ A relatively late addition to the outer court was a lightly constructed mudbrick wall stretching from Meg. 1 to Meg. 9. The function of a slightly bowed mudbrick wall approaching Megs. 9-10 from unexcavated territory at the NE is presently unclear. The court beyond has generally larger buildings. Meg. 3, the largest, continues the line and orientation of Megs. 1-2 and the enclosure wall, and has as its immediate neighbor Meg. 4, a smaller structure elevated on a platform and approached from the front by a broad ramp. ${ }^{13}$ Beyond Meg. 4, and at a right angle to it, is a poorly preserved building, Meg. 5, while across the court Meg. 12, facing NW, presents its long side to the open square and has a close neighbor in the partially cleared Meg. 11 to the NE. ${ }^{14}$ The last two buildings presumably fronted onto a street leading from the inner court. Since the area beyond to the N remains unexcavated, the complete plan of the inner palace court is unknown.

Taking its orientation from the palace courts, but turned away from them and facing SW, is a great row of eight nearly identical service units of megaron plan, built as a single structure over their combined 105 m . length. A similar, partially excavated row of buildings stands opposite, across a broad street or esplanade ca. 20 m . wide. The entire complex was built as a single project on an extensive terrace about a meter higher than the ground level of the Palace Area, hence the name "Terrace Building" (TB) for the eight-unit structure, its halls numbered $1-8$ (TB $1,3,6$, etc.) from SE to NW. All the main rooms have been excavated, as have the antechambers of TB $1,4-5$, and 7-8. The structure opposite retains its old working name of the Clay-Cut (CC) Building, the excavated units numbered CC 1-3 from SE to NW; at least one unit extends farther N (CC 4), and others may well exist to the S. CC 1 was only partially cleared, as was its anteroom, the only one in this series that was investi-

[^8]gated. ${ }^{15}$ The Terrace on which these buildings stood is later than Megs. 2-3 and 5, whose walls served to retain the Terrace fill. The filling even extends as a tongue between Megs. 2 and 3, where a stretch of the large wall dividing the palace courts had to be demolished to the level of the Terrace. Starting at the S corner of Meg. 2, the Terrace had its own retaining wall, heading SE behind Meg. 1 and making a return to the SW in front of the South Court of the Gate Building. The area between Meg. 1 and the retaining wall for the Terrace, and the corridor separating Megs. I and 2 were subsequently partitioned into a series of storage and work rooms (pl. A). On the Terrace, behind TB 1, stands a gate house that controlled access to the Palace Area from this higher level, via an open $L$-shaped passageway and steps down to the inner court beside Meg. 3. This double-doored building, the Terrace Gateway (TG), had adjacent to it at the NW a pottery depot of light construction. ${ }^{16}$ To the SW, behind the CC units, the Terrace was contained by the large wall running NW-SE, while at the NW the installation of the Terrace was accompanied by the construction of a retaining and enclosure wall running parallel to the end of the TB. A broad staircase led through the wall to the lower quarter at the NW. Meg. 4, at a higher level than other buildings of the inner palace court, was constructed after the Terrace, since the hall's platform is the Terrace itself with an extension into the area of the court. In a manner recalling the modifications behind and to the side of Meg. 1, the narrow space between Meg. 4 and the rear wall of the TB was made into a storeroom. In the lower area between the retaining wall of the Terrace and the citadel wall at the NW, excavations revealed part of a multi-roomed structure. The building belonged originally to the Early Phrygian plan, but was reused in subsequent periods, apparently as a series of basement compartments. Dubbed the "Phrygian-Persian Building" (PPB) because of its two periods of use, the structure yielded no contextual material from the Early Phrygian period, although some of the pottery deposited here at a much later time is Early Phrygian at least in style (1044, 1049, 1059, 1063-1064, 1077A, 1079). ${ }^{17}$

The great fire destroyed the megarons along the SW side of the Palace Area and the adjacent TB, as well as the CC units opposite. Megs. 9-12 on the far sides of the palace courts seem to have escaped the catastrophe.

[^9]These buildings did not contain the characteristic thick layer of burned debris found in the other structures, but were instead largely empty, with walls preserved only one or two courses above ground level. A wooden plank floor between Megs. 9 and 10 apparently showed no burning, nor did a mantle of reeds that marked the preserved top of the latter building's wall.

Of those buildings that succumbed to the fire. Megs. 1-2, both with patterned mosaic floors, are exceptional in having been largely empty at the time of the destruction. Meg. 1 had only a few vessels in a corner of the anteroom. The small rooms behind the building, however, were crammed with pottery (pl. A): large storage vessels (e.g., 994,1005 ) and smaller pots, the former containing grain and more pots, one of which, in turn, held 494 astragals (see 994). ${ }^{18}$ Among these largely workaday vessels were some finer items: a sieve jug (824) and a small painted jar
 than Meg. l, including another astragal container (741) and a large storage jar (987). The latter stood in the far $S$ corner of the main room, where the building's mosaic flooring curbed a slightly sunken, rectangular area. Burned debris over the paved court in front of both the megarons contained pottery that is probably to be associated with the buildings (e.g., 415, 1020).
The elevated Meg. 4 (pl. B1) suffered severe disturbances at some time after the destruction, as indicated by the jumbled nature of the contents in parts of the building and by the scattering of burned vessels on the Terrace floor directly to the NW (e.g., 999). Enough pottery was intact and lying about, however, to show that the building had been well stocked at the time of the conflagration. A notable feature of Meg. 4 is the abundance of large storage vessels, including a considerable number with stamped decoration, a feature perhaps related to a particular function of the hall (pp. 124-125). Over a dozen large pots were concentrated in the $E$ corner of the main room, beside the door (e.g., 883, 889, 1000-1001), and more had stood in other parts of the building. An enormous stamped jar (992), burned, came from a higher level over the hall, no doubt having been displaced by the later rummaging. That such scavenging did occur is indicated by the spouted bowl 500 , part of which was found within the megaron, while a joining section came from a later context overlying the nearby TB 7. Just as Meg. 4 is notable for large shapes, the seeming absence of certain other standard types (e.g., round-mouthed jugs, trefoil jugs, sieve jugs) may be more than a fortuitous result of the looting and instead imply that the hall had special functions that did not require such shapes. The storeroom behind Meg. 4 held a considerable amount of pottery, but some vessels may have fallen in when the rear wall of TB 6 , directly in back, collapsed outward (as is known to have happened with

[^10]TB 2-4 farther S). One of the few pots that can be firmly associated with the storeroom is 900 , an amphora found partially sunk in the floor; other depressions within the unit no doubt also once housed large vessels. ${ }^{19}$

The only palatial building well provisioned and undisturbed was Meg. 3, the grandest of the Early Phrygian halls. ${ }^{20}$ The count of the inventoried pottery stands close to a hundred items; at least thirty more, mostly coarse storage containers, were also found. The anteroom contained fewer than a dozen vessels, including three large trefoil jugs to the left upon entering from the court, and was thus in striking contrast to the corresponding rooms in TB and CC, where pottery was abundant. In the main room of Meg. 3, however, the distribution of pottery followed a general pattern familiar from the service units. The central aisle had been kept relatively clear of goods, while the major accumulations were along the side (SE, NW) and rear (SW) walls. The burned debris overlying the floor and its furnishings contained high concentrations of scattered sherds that no doubt represent vessels kept in the upper galleries and perhaps also on shelves. Such, for example, appears to have been the case with 638, whose pieces were recovered from two areas along the left side of the room. Although the arrangement of the pottery on the floor cannot be reconstructed in detail from the excavation accounts, it is evident that some order attended the placement. Directly inside, occupying the E corner, was a grouping of over half a dozen large storage vessels, of which the jar 989 was the only one kept. Other large containers, including the amphoras 884 and 886 , were set in a double row along the NW side of the room, together with bronze vessels, while more big vessels stood two or three rows deep along the rear wall toward the W corner. This corner itself, flanked by large pots, may have been a little storage nook, judging from the large trefoil jugs placed there upside down $(\mathbf{7 2 3}, 744)$ and from the pair of odd perforated pans (e.g., 863) found leaning one upon the other against a wall. The remaining space along the rear wall and the SE aisle for much of its length to the $S$ corner housed fine, painted, and otherwise special vessels, of which the megaron had considerably more than most other buildings. Almost all appear connected with eating and drinking, a view that is strengthened by the presence of foodstuffs in a few. ${ }^{21}$ The ceramic inventory includes bowls, round-mouthed and trefoil jugs in quantity, and also a proportionately high number of large round-mouthed jugs and kantharos kraters. The presence of at least seven side-spouted sieve

[^11]jugs indicates the drinking of beer or some such grainy brew, and an otherwise very rare type of stand, eight in all, seems to have been specially designed for holding the jugs ( p .76 ). Ceramic dinoi and bronze counterparts were probably in use as serving vessels $(\mathbf{9 6 0}, \mathbf{9 6 3}, \mathbf{9 6 7})$, as may have been a unique, lidded krater (929). A pedestaled basin (511) perhaps held non-liquid foods, while a pair of ornate open-work stands (867-868), large and durable, could have supported various larger shapes. The exact arrangement of these vessels is known only for a stretch along the rear wall beginning at a point not far from the $S$ corner. Here, pots seem to have been set side by side on a wooden beam at the base of the wall, their order from SE to NW being as follows: a bowl (526), a dinos ( $\mathbf{9 6 0}$ ), a sieve jug (822), the lidded krater (929), a trefoil jug (688), a wide-mouthed trefoil jug (771) and a second containing Ziziphora seeds (P 2370), a painted bowl (499), a painted basin with spout (507), another wide-mouthed trefoil jug ( P 2377), a painted round-mouthed jug ( P 2305 ) set into the mouth of another (618) containing hazel nuts, and two more of the same shape, neither saved. That some non-ingestive amusement took place in the room is indicated by a round-mouthed jug (542) full of astragals, one of several reminders in the Destruction Level that small pots were not always used for food and drink. Similarly, the round-mouthed jug 544 contained a ropelike substance. Antiquarian interests are possibly reflected by a handmade, spouted jug (414) from the $S$ corner (pp. 28-29). Exceptional vessels not mentioned above include a number of trefoil jugs ( $698,704,776$ ) and a few other jugs of rare types (784, 787). Notably absent from the megaron are large stamped vessels like those in the neighboring Meg. 4. Also missing here and in the other palatial buildings is the one-handled utility pot, a humble shape that occurs with high frequency in the TB and CC service units (pp. 70-73).

In contrast to the leisurely, opulent life suggested by the finds in Meg. 3, TB 3-8 and the CC units opposite were working centers whose activities included the mass processing of cereals and the production of textiles ( pls . B2, E2). The anterooms had to one side or the other a standard outfitting of fixed kitchen equipment, while the main chambers, with galleries above, held one or more low grinding platforms designed to accommodate a number of workers. ${ }^{22}$ In each of these units, pottery was present in quantities far greater than in Meg. 3. TB 7, for example, had a store of at least 500 vessels, about 130 in the anteroom and over 370 in the main chamber. The main room in CC 3 had over 300 , while that in TB 3 contained at least 225. In TB 8, the later intrusion of a massive cellar still left the large room with over 220 pots,

[^12]slightly over twice the number in the antechamber. ${ }^{23}$ The cellar and some other disturbances in TB 8 no doubt explain the presence of a few Early Phrygian vessels in higher layers over the unit (see $\mathbf{8 7 8}$ and $\mathbf{9 7 1}$ ). CC 3 also suffered later intrusions, but otherwise the signs of ancient disruptions in TB and CC are few. A large, painted amphora (927), severely burned in part, was found scattered as sherds in a mixture of destruction debris and clay over CC 2-probably a victim of later rummaging within the building.

The distribution of pottery within these service units conforms to a general pattern. The kitchen quarters in the anterooms and the grinding stations in the main chambers were kept relatively tidy and free of clutter, as were the axial passageways of both rooms. In the kitchen areas, to judge by those in TB 7-8, the few vessels on hand were set beside the fixed equipment and in other out-of-the-way places. Storage vessels (e.g., 912) and large trefoil jugs seem to have been mainstays of the cooks and their crews. The grinding platforms in the main rooms in several instances had a selection of vessels directly in front and sometimes to the sides and rear as well, for the most part in neat order. Large amphoras (914-915, 921), bowls, round-mouthed jugs (566, 570 , 617), and trefoil jugs (648) are among the shapes known to have been close at hand for the grinders. In TB 8, the pots seem to have been so placed in front of the large platform that a kneeling or squatting worker would have had a vessel on either side. Near the smaller grinding platform in the E corner of TB 7 there appear to have been several large trefoil jugs, at least one of which contained grain (p.57).

In other parts of the main rooms and antechambers, pottery was kept in quantities varying from a few scattered vessels to sizable concentrations of eighty or more set usually in aisles, in corners, and against walls. Large vessels in TB 8 seem to have spilled over onto the front steps (e.g., 899, 933, 935). The upper galleries also held vessels of all sizes, as indicated by the many "floaters" found in the destruction debris and by the sherd streams of shattered and mixed pots lying on floors. The tumble from above sometimes complicated the picture of what actually stood at ground level, yet the distinction was usually clear because of the great many vessels found upright or simply toppled to their sides. Large containers, amphoras and storage jars, dominated the floor assemblies. These were often placed one or several deep along walls or in corners, but in some cases they stood singly or in groups away from the walls. They sometimes flanked doorways or stood to one side of the central aisle.

[^13]In at least a few instances, one or more of these big containers seem to have been used as dividers along walls, to create niches or bays. Smaller pots were often intermingled with or set in front of the large ones, but they also occurred in separate concentrations of varying size around the rooms. It seems to have been common practice to stack bowls in inverted piles of as many as nine, and various other small shapes were often grouped together in kind. Many vessels were evidently in active use at the time of the disaster. Others, however, appear to have been in temporary storage: vessels other than bowls were sometimes stacked one upon another, while some of the floor deposits were so deep and dense that pots close to the walls could have been reached only with difficulty.

Relatively few vessels in the service units yielded evidence for their specific use at the time of the destruction. Large amphoras definitely, and probably storage jars as well, in several instances held grain (e.g., 894, 904, 998), as did a number of large trefoil jugs (p. 58). A few smaller pots were presumably scoops for grain (e.g.. 429), while others found singly in large vessels also may have been scoops or dippers for contents no longer preserved (418, 421, 592, 599). Several vessels held implements for working cloth or textiles $(677,680,794$. 984 ), and some big pots were used to store clay loom weights. Mingled with the workaday items in a large round-mouthed jug in CC 3 was a snack of hazel nuts. while 984 held some astragals (cf. also 770). Large vessels sometimes had a bowl for a stopper, and in some instances, the bowl-cum-lid itself held a small, closed pot, as though the two together composed a set of cover and dipper (e.g., 468). Large vessels also seem to have been used on occasion for storing smaller ones (e.g., 432, 522, 875 ), but it is not always clear whether the littler pots had been in or atop the host vessel $(439,466,491,504,907$. 978). ${ }^{24}$

Beyond these lucid, if mundane, reflections of daily routine, the pottery of the TB and CC working halls no doubt says much in less direct ways about the activities that took place in these units. Vessels ordinarily associated with dining, particularly round-mouthed jugs, small trefoil jugs, and bowls, occur in great quantities and suggest either that meals were taken here or that the dishes for eating were supplied from the halls. Sieve jugs for drinking beer are known from every one of the working units except TB 3 , yet their generall- limited numbers may well indicate use by only a few (pp. 67-68). Other special shapes, e.g., dinoi and kantharos kraters. also appear sporadicall in TB and CC, and with the sicve jugs they echo some of the palatial trappings seen in Meg. 3. Similarly, the units have vielded an arrat of exceptional vessels (e.g., 813-814, 832, 858, 927, 932, 1002). TB 4 is particularly notable, for in addition to at least

[^14]seven sieve jugs it contained over half a dozen remarkable pots ( $\mathbf{7 9 3}, 812,815,859,861,875-876,980$ ). Painted pottery, generally rare in the Destruction Level, is nonetheless present in varying quantities in all these halls, and is a further indication that ceramic finery was not restricted to palatial settings and royal tombs. Even among standard shapes in monochrome fabrics, the elegant works of master potters often occur (e.g., 529-531, 645, 648). ${ }^{25}$

TB 1-2 were different in nature from the other units of the Terrace series. Neither of the main rooms had provisions for the processing of grain, while the anteroom of TB 1 (like that of TB 2, excavated in 1989) was void of fixed kitchen furnishings. These anomalies, like the absence of hearths in both units, suggest that TB 1-2 were storage facilities, a view supported by their contents. ${ }^{26}$ Pottery seems not to have been present in the great quantities attested in the service units. The anteroom of TB 1 was in general sparsely equipped, with a few vessels placed against the walls and a relatively light concentration of pottery in the N corner area. The latter grouping included a large vessel that was apparently a crockery bin, judging from its contents (e.g., $\mathbf{5 9 6}, 788$, 891). The main room of TB 1 had in the $W$ corner a large deposit of close to fifty small pots, perhaps in stacks. Included were at least thirty round-mouthed jugs (e.g., 539, 576, 578, 605-606, 628, 632), kantharos kraters (877, 882), and a few remarkable vessels (502, 866). Large pots stood along the NW wall, and the great number of floaters in the destruction debris indicates that the gallery above had also been a storage space (e.g., 790, 922). In contrast, the SE aisle appears to have been relatively clear of pottery, although an excavator did report quantities along the rear wall. The main room in TB 2 had a somewhat similar distribution of pottery, with the principal concentrations along the NW aisle (pl. C). Here, however, it was the area toward and in the N corner that contained the major complement of ceramic finery, although the quantity was apparently not as great as that in the $W$ corner of TB 1 . Among the more notable vessels from the cache are a painted krater and stand (930, 871) and a spouted jug (789). At least a pair of vessels in Fine-Line Buff ware, an uncommon class with only one other specimen known from the Destruction Level, was found scattered in the area, perhaps fallen from the gallery above (634-636). Much of the remaining $N W$ aisle as far as the $W$ corner was given over to large storage vessels set two to four deep (e.g., 913), yet among them was a finely painted pair of nearly miniature trefoil jugs (711-712). Just to the left of the door from the anteroom had stood a large storage jar (993) on an iron tripod stand. Another on the opposite side of the entry-
way had toppled and smashed a little jug standing beside it (see 533). The S corner area of the room apparently housed more large vessels; among them were a few smaller pieces, including a painted amphora (923) and the only sieve jug known from TB 1-2 (820). The area also contained an extraordinary jar riddled with holes (981). Away from this corner, along the SE aisle and across the rear, relatively few vessels were found. These areas bore instead stores of wealth in gold, bronze, and ivory, goods that may mark TB 2 as a royal treasury. From destruction debris on the Terrace floor directly behind the unit, and extending as far as Meg. 3, came a number of fragmented vessels that very likely fell from upper stories when the TB wall collapsed outward (601, 782, 862, 1034).

Supplementing the ceramic deposits of the great halls in the Palace and Terrace areas is the inventory of a small pottery depot that apparently served as a supply center for the larger buildings (pls. D-E1). Of light construction, the unit stood on the Terrace behind TB 2, in the corner formed by the retaining wall of the Terrace to the rear of Meg. 1 and the NW wall of the Terrace Gateway (TG). The TG depot was a little over five meters in length, with an opening apparently at the NW, and housed at least 135 vessels. ${ }^{27}$ The inventory is thoroughly utilitarian in character, consisting of common, generally unexceptional shapes, as found in great quantities in the halls. None of the vessels is painted, nor do other types of embellishment occur except for a few instances of simple patterned incision (559, 745). Most of the pottery was found at the rear, along the wall of the TG. Here, large trefoil jugs stood two to three deep, while smaller closed shapes, round-mouthed and trefoil jugs, were crammed in among them ( $\mathrm{pl} . \mathrm{D}$ ). The latter, in every possible orientation, had been either haphazardly stacked by the attendants or set on a shelf above, from which they toppled during the fire. Bowls had been brought to the depot in wicker baskets, set beside and in front of the closed shapes, and were found as stacks and mounds of as many as 28, the bottoms of their friable containers still preserved underneath (pl. E1). Against the NE wall stood a large vessel that either contained or had stacked in its mouth two bowls, one of which was 503 . Since the big pot was the only one at this scale in the unit, it may have been a permanent furnishing.

To the NE of the TG, and perhaps approached from it, is a higher level that was part of the major terracing project underway at the time of the destruction (p. 2). An isolated burned stratum overlying this surface, directly to the SE of Meg. 1, is difficult to explain (topple from Meg. 1?), although it is most likely related to the disaster. The layer yielded a fragmentary dinos (971)

[^15]25. See also DeVries, "Phrıgans," 39-40.
26. Ibdd., 38-39.
whose form and painted style (Polychrome House) have good parallels in the Early Phrygian citadel (p. 161). Debris to the SE of the TG, on the open Terrace floor, also yielded some pottery (e.g., 508, 1032).

In addition to the deposits and material cited above, a number of vessels were found at the general level of the destruction, but in contexts that were removed from the destruction itself. Since the entire area of the citadel lay open and exposed until the sixth century, when it was rebuilt at a much higher level, unequivocal evidence for the dates of these deposits is lacking. The material comes primarily from the NE sides of the palace courts, areas that appear to have escaped the great fire (p. 3). The contexts in question, like the rest of the central citadel, were directly covered by a massive bedding of clay, several meters thick, that was part of the later rebuilding. The history of the area from the destruction until this major stratigraphical event is unclear, but the pottery belonging to these pre-clay deposits generally exhibits no indications of stylistic advancement beyond that in the burned buildings, and, in fact, many close correspondences exist with material from the Destruction Level. Inside Meg. 12, pottery was found on the floor, crushed beneath apparently unburnt mudbrick tumble. A painted bowl (501) has particularly good parallels across the inner court in Megs. 3-4 (p. 157), while another painted vessel (643) is generally consistent with Early Phrygian style. Outside Meg. 12, to the SW, a gravelly fill mixed with burned debris (Context NCB-SEB) yielded a
great amount of pottery, yet since only selected, diagnostic sherds were kept, it is impossible to know whether most of the vessels were whole or already piecemeal at the time of deposition. Included are several standard shapes familiar from the Destruction Level, and mans bowls that repeat or closely parallel profiles from the burned buildings. A painted sipping bowl ( 860 ) is very likely by the same workshop or hand as the fluted jar from one of the storerooms behind Meg. 1 (p. 75), while other decorated pieces are also in keeping with material from the Destruction Level (e.g., 642, 974, 1031). The general impression is that the deposit represents a cleaning-up operation at some time after the destruction. Since only a few pieces show signs of secondary firing (a condition common in the burned buildings), it might be supposed that the material came largely from buildings unaffected by the conflagration.

Another pottery-bearing stratum overlay the floor of Meg. 9 and the wooden plank floor installed between this building and Meg. 10 (Context Y-63-8). Characterized by fragments of wall plaster, but devoid of other building remains, the fill is perhaps to be associated with the life of these units. The ceramic material is completels early in nature and shows no indications of secondary firing ( $p$. 34). The pottery also appears to have been present as large fragments, if not whole vessels, as, for example, the painted jar 973, one of the very few items from the deposit that does not have close parallels from the burned buildings.

## Pre-Destruction Contexts on the City Mound

The pottery from earlier Iron Age contexts on the City Mound differs from that of the Destruction Level in consisting primarily of fragmented material coming from fills. Only a single pre-destruction deposit affords a seemingly unadulterated view of the pottery in use during a particular block of time (EPB III, pp. 9-10). The earlier corpus constitutes the principal index for considering Early Phrygian ceramic evolution, and since the contexts bearing the pottery are directly tied to the physical development of Gordion as an Iron Age center, it is necessary to review the stratigraphical setting in connection with the sequence of topographical events that led to the plan of the destroyed citadel.

The pertinent deposits do not belong to an overall, unified stratigraphical sequence, but are instead scattered around the excavated portions of the mound. The courts of the Palace Area present a major problem because they stand between and separate the sequences to either side, so that there are no sure stratigraphical links between the NE and the SW. At the same time, investigation of the earlier citadel has proceeded along
somewhat limited and sporadic lines. As a result, much of what is known comes from isolated probes, and is thus without the benefit of horizontal clearance. Such is the case, for example, with Trench NCT, a deep sounding made in 1950 that came down to and penetrated below the floor of Meg. 12. Other investigations include work to the NW of Meg. 12 (the PN 3 and EB Trenches) and, across the palace courts, in select areas below the floor of the Terrace. All these activities contribute to the corpus of Early Phrygian pottery, but none prevents an extensive sequence of ceramically rich deposits. The case is significantly otherwise on the $N E$ side of the outer palace court, where the vicinity of Megs. $9-10$ has seen the most concentrated investigations of the earlier Phrygian citadel. The sequence in this area centers around the life and demise of the so-called Early Phrvgian Building (EPB), a gate structure partially under Mcg. 9 (plan B). Beyond this pivotal area, the grounds exist for making horizontal correlations with the stratigraphy both in Mes. 10, the site of a second deep sounding, and to the $S$, in the area of the Polichrome House.

## The Sequence in the Area of the Early Phrygian Building

The EPB, oriented almost due E-W, belongs to a fortification system that preceded the one current at the time of the destruction. ${ }^{28}$ The Early Citadel Wall (ECW) of which the gate was a part has been traced in a NE-SW line to the SW; but the actual connection of wall and EPB has never been revealed because the crucial area is still overlain by a massive wall connected with the final terracing operations before the destruction. Originally, the gate was not much more than a recess, with returns and a door at the inner end (plans C-D). A succession of extensions to either side at the E, i.e., the exterior, no doubt functioned as part of a viable gate system, but a subsequent transformation of the entire structure into a long sloping corridor with a central row of posts, extending far beyond the E face, no doubt implies a change in the use of the EPB (plan C). Little pottery is connected with these operations. Immediately W of the structure, however, was a sequence of four ceramic-bearing contexts, EPB I-IV, that parallel the life of the building, while a subsequent fifth, EPB V, represents a massive fill that buried the EPB complex as part of a major program of renovation. Meg. 10, built while the EPB was still functioning, was spared by this last operation, but the area farther $S$ was not. Overall, five major floor levels are represented in this quarter, the last, Floor 1, being the paved outer court of the Palace Area, a project that accompanied the construction of Meg. 9. Plan D shows the plan of the area immediately before the EPB V deposition: a cobbled floor level (Floor 2, pl. Fa) sloping down from $W$ to $E$ toward the EPB ; a small room adjacent to the EPB directly S of the entry (EPB, SW Room); to the N of this room, a large stone-lined pit with an irregular outline (pl. Fd); a NE-SW wall running over the previous two units and blocking the EPB door ( pl . Fh ); and a drain that comes from the N behind Meg. 10 to angle $W^{-}$-ward before petering out over the sloping floor.

## EPB I

The cobbled floor (2) to the W of the EPB proved to be the last of three associated with the structure and the fourth in the total series of pre-EPB V floors discovered in the immediate area. The original floor connected with the EPB (Floor 4, pl. Fc) was of earth, with absolute levels ranging from +2.58 m . in the W part of the investigated area to +2.35 m . directly before the threshold. ${ }^{29} \mathrm{~A} 2 \times 4 \mathrm{~m}$. cut was made by the excavator to the immediate $W$ of

[^16]the EPB, in the angle formed by the drain (pl. Fj). Here Floor 4 overlay a 1 m .-thick stratum that, in turn, covered an earlier floor level (Floor 5) about 0.80 m . below the base of the EPB wall directly to the E. Floor 5, clearly predating the EPB, has no close correspondent in the sequence of the Meg. 10 sounding to the N , while its thick overburden likewise does not conform with the stratigraphical pattern found there (p. 12). The Floor 4-5 unit thus appears to have been telescoped, perhaps as a result of grading and leveling operations in connection with the construction of the EPB. The layer between Floors 4 and 5 in this cut (Context Y-65-21) stands at the head of the EPB sequence, as EPB I. ${ }^{30}$ Of close to a hundred sherds retrieved, most are of Late Bronze Age types. About a dozen, however, belong to the category classified as Early Phrygian Handmade (1-4; p. 19), many showing signs of secondary firing. With the possible exception of two vessels that may have West Anatolian affinities, the context did not yield a single discernible piece of Iron Age wheelmade pottery. ${ }^{31}$ Excavation to the $S$ of the doorway, within the EPB SW Room and in front of the W face of the gate building, also encountered the EPB I stratum, but the pottery here was reported to have been all Bronze Age. The observation was probably correct, for in the Meg. 10 sounding the stratum beneath the level equated with Floor 4 in front of the EPB produced almost totally, if not entirely Bronze Age material (p. 12). It is tempting to view EPB I as a horizon belonging exclusively to a pre-wheel phase of Phrygian pottery, but the stratum has had only limited exposure. Moreover, a transverse cut made by the excavator within the EPB (Context Y-65-18) came to a pre-building floor and yielded, from the overlying fill, a few specimens of advanced, albeit scrappy, Phrygian pottery, including a painted sliver among about forty sherds; Early Phrygian Handmade is not represented. The stratum may correspond to EPB I, but it is perhaps more likely that the remodeling of the EPB into a long, sloping corridor entailed grading activity that left behind contemporary material.

## EPB IIa-b

The original floor level to the W of the EPB, Floor 4 (pl. Fc), was succeeded by another earth floor (Floor 3, pl. Fb ), 0.35-0.40 m . higher, that extended up to the face of the building and to a remodeled threshold. Floor 3 sealed a lightly constructed mudbrick wall built at the

[^17]original EPB ground level and running E-W on the same line as the later N wall of the EPB SW Room (pl. Fi). Belonging perhaps to a predecessor of the room, the mudbrick wall had tumbled to the N ; burned material and cinders accompanying the debris may reflect an incident that prompted the reflooring. Floor 3 was, in turn, eventually overlain by the cobbled Floor 2. The cobbling had a somewhat steeper gradient than its immediate predecessor, about half a meter in eight down to the E , and merged into Floor 3 at points $c a .3-3.75 \mathrm{~m}$. short of the EPB threshold (plan D indicates the line of termination at level +2.70). The EPB SW Room (pl. Fe) was built at the cobbled level. These refloorings together constitute EPB II, with a subdivision into IIa and IIb. EPB IIa, the earlier and more narrowly defined of the two, consists of the material between Floors 4 and 3 where this part of the sequence was clearly isolated, in front of the EPB and in the NW corner area of the EPB SW Room (pl. F; Contexts Y-65-15, Y-65-19, Y-65-20; 5-9). Wheelmade Phrygian pottery, including advanced types, is present in each of the IIa contexts, and its sudden appearance following EPB I possibly indicates a considerable gap in time between the original phase of the EPB and the first of the refloorings (p. 175). The contexts also contain Early Phrygian Handmade and Bronze Age pottery, the latter comprising about $50 \%$ of the material; both categories continue to appear in subsequent pre-destruction contexts, with the exception of EPB III (infra). No stored pottery exists from the layer between Floor 3 and the overlying cobbled Floor 2, but a group of contexts appearing to represent general precobbling are taken to compose EPB IIb (10-29). Within the EPB SW Room, to the SE of the later diagonal wall, excavation beneath the room's cobble-period floor came directly to the original EPB ground level, Floor 4, with no trace of an intervening Floor 3 (Contexts Y-65-13, Y-6514). The reason for this absence is probably given by the nature of the cobbled Floor 2 outside to the N, where the surface yielded to Floor 3 several meters short of the EPB face. If the same overlapping occurred in the area of the SW Room, the floor in the E part of the room could well have approximated the Floor 3 level. Although the material from beneath the floor at the E may thus parallel EPB IIa, it is safer to regard the deposition here as general post-EPB I and pre-cobbling, i.e., EPB IIb. In a probe directly to the SW of the EPB SW Room, an earth floor corresponding to the cobbled level sealed a stratum whose underlying floor comes closest in elevation to that of the pre-EPB ground level (Context Y-63-6). Although the unit is seemingly telescoped, it nonetheless appears to be earlier than the cobbling and thus is assigned to EPB IIb. Advanced Phrygian pottery occurs in all three contexts of EPB IIb and is particularly abundant in Y-65-13, one of the units that could go back to EPB IIa. Other material associated with EPB IIb comes from the area of the Polychrome House (p. 13).

## EPB III AND IV

At the cobbled Floor 2 level was a great stone-lined pit of irregular outline, about 4.30 m . long, 2.80 m . wide, and 1.80 m . deep below the level of the floor (plan $\mathrm{D}, \mathrm{pl}$. Fd). Set directly in the approach to the EPB, the pit presumably belonged to a time when the gate building was no longer a primary entry, perhaps after it was modified into a long, sloping tunnel. The excavator judged that the pit had originally been cut into Floor 3 rather than the subsequent cobbled Floor 2 because the latter showed no signs of disruption. Instead, the cobbling came up to the stone lining of the pit, even overlapping it slightly, as though to accommodate a pre-existing feature. The pit was clearly earlier than the EPB SW Room built at the cobbled level, since the $N$ wall of the room overlay the straight-sided stone lining of the pit's $S$ side. Upon discovery, the pit was filled practically to the brim with coarse sand of a greenish yellow hue, cinders, layers of gray ash, animal bones. and copious sherds representing at least 34 vessels, of which most are included in the Catalogue ( $\mathbf{3 0 - 5 9}$ ). The deposit appears to have been a domestic dump, while the coloration of the sand, like the yellowish stains and encrustation on most of the pottery, suggests additional use as a latrine. The deposit in the Latrine Pit was reported to have been stratified, thus indicating a gradual filling up, but the material was not excavated accordingly and therefore has to be treated as a single unit. The garbage may have begun to accumulate during the life of Floor 3, i.e., before EPB IIb, yet since the pit continued to be used at the subsequent cobbled level, all the material is taken to constitute EPB III and to postdate EPB II. This assignment is justified by material from a "fireplace" in the contemporary EPB SW Room (Context I-65-12), since two sherds found here belong to bowls also represented in the Latrine ( $39-40$ ). The only difference between the matching pieces is that those tossed in the pit, presumably by the users of the SW Room, are stained, whereas those from the fireplace are not.

An important aspect of the pottery from the Latrine is that it represents a definite period of use and discard, whereas other pre-destruction contexts are fills that can include pottery predating in varying degrees the times of deposition. The assemblage is like EPB II in representing an advanced stage in Phrygian wheelmade production, but it does not include a single piece of either Bronze Age or Early Handmade pottery (p. 21 and p. 180).

The lower limit for the use of the pit is defined archaeologically only by the EPB $I$ ' deposition that buried the area. It is reasonable to assume, however, that the life of the pit as a rubbish dump largely ceased when the EPB SW Room was demolished and the entrance to the EPB was blocked by the diagonal wall running SW-NE. The wall, part of a remodeling program in the quarter, ran over an already filled Latrine and in fact
came to sag where it crossed because of the inadequate underpinning afforded by the soft fill (pl. F). Since much of the pit was still visible after this operation, some final pieces could have been deposited before EPB V. The construction of the overlying wall was followed by the laying of an earth floor leading up to it in the area of the NW corner of the EPB SW Room. This surface, triangular in shape, continued the cobbled Floor 2 level and was no doubt intended to cover over the remaining wall stumps of the SW Room. From the fill between this minor reflooring and the floor of the SW Room came a fragmentary painted dinos ( 60 ), the only ceramic find known from the context. Although the latest material deposited in the Latrine could be contemporary with or postdate the reflooring, the fill for the reflooring is nonetheless regarded as a discrete unit, EPB IV; like the pit deposit, it is earlier than EPB V. A brown earth fill behind, i.e., to the SE of, the diagonal wall and directly overlying the EPB SW Room contained some more pieces of the painted dinos and thus may be associated with the period of the wall as a second EPB IV unit (Context Y-65-11). Iet since some ambiguity exists regarding the exact nature of the fill, it has been assigned to the subsequent EPB V deposition.
To summarize the sequence of events in this area leading to EPB V: EPB I appears to have been fill connected with the construction of the EPB; the stratum overlay the pre-EPB Floor 5 and was sealed by Floor 4, the original exterior floor level for the EPB. EPB IIa overlay Floor 4, and was fill brought for the first reflooring to the W of the EPB, Floor 3; it was apparently at this level that the Latrine was installed. EPB IIb was fill for the next reflooring, the cobbled Floor 2; the Latrine was kept, and it was at this level that both Meg. 10 and the EPB SW Room were erected. The domestic fill of the Latrine, EPB III, may have begun to accumulate as early as Floor 3, but was topped off during the life of Floor 2. EPB IV was fill for an extension of Floor 2 that ran up to a diagonal wall crossing over the EPB SW' Room (now demolished) and the Latrine.

## EPB V

The covering of the EPB and the cobbled floor to its W was part of an ambitious undertaking that, in the immediate area, involved a considerable raising of the ground level, the construction of Meg. 9, and the installation of a stone-slab paving in the outer palace court (Floor 1). The operation appears to have accompanied the construction of the new Gate Building and citadel wall, since the N wall of the North Court of the Gate Building and the inner (W) face of the fortification wall, which abuts the court wall at the NE, are bedded high, in what seems to be an upward-sloping ( W -E ) continuation of the EPB V
leveling fill. ${ }^{32}$ Behind Meg. 9, a thick, poros-chip floor corresponding to the paving of the outer court sealed the EPB V deposit and sloped upward in the same direction, i.e., toward the citadel wall. The outer ( E ) face of the citadel wall, bedded at a much lower level than the inner, would have been the retainer for the EPB V fill. The fills brought in for this massive program contained much pottery, to the extent that EPB V is one of the two major ceramic sources on the City Mound before the destruction period, the other being the fill of the Terrace to the SW. Altogether, EPB V is represented by 11 context units retrieved in three seasons of work from 1963 to 1969. The nearly 120 items in the Catalogue (61-176) approach the total number of recognizably discrete Phrygian vessels available from the deposit, including ten Early Handmade pots. EPB $V$ also yielded a great amount of Bronze Age material, surely residual by this time and no doubt giving some clue to the sources of the fills. ${ }^{33}$

The units composing EPB V are not homogeneous. In the area where Meg. 9 was to stand, the immediate substratum was a thick layer of rubble and broken plaster that served as a bedding for the hall and as a matrix for the foundations (Contexts Y-65-10 and NB 107, Bag 6). This deposit overlay fillings of brown earth extending to the EPB level (Contexts Y-65-4/5, Y-65-11). Y-65-11, as noted above, may belong with EPB IV. To the NE of Meg. 9, where the filling had to be considerably deeper because of a downward slope to the E at the old EPB level, a tremendous volume of earth mixed with clay was deposited (Contexts Y-65-28, EPB-69-1/2). This filling rose a maximum of $c a .5 \mathrm{~m}$. from the lowest excavated point of the EPB corridor to the stone-chip floor behind Meg. 9. Other units include the area between Megs. 9 and 10 , beneath the wooden and pebble floors installed in this space (Contexts Y-63-7, Y-65-7/8, Y-65-9), and, in the court area before Meg. 9, the fill between the older cobbled floor level and the bedding for the slab paving that was here robbed (Contexts Y-63-5, Y-63-X). The drain that had been laid seemingly in preparation for the leveling had in its channel two almost-complete large trefoil jugs (120-121). The only other vessels from EPB V that approach their original states are a plain-rimmed bowl with handles (102) and a round-mouthed jug (110). All may have been in use soon before the deposition.

## MEGARON 10

The construction of Meg. 10 occurred during the cobbled Floor 2 period and while the EPB was still in view, if not functioning. The megaron, in fact, took its

[^18]orientation from the gate and even used the $W$ face of the EPB as a partial backer for its own rear wall. The $S$ wall of Meg. 10 cut into the sloping cobbled floor along a neat line to the $S$; the floor level of the main room corresponded approximately to that of the exterior cobbling at its higher points near the front of the building. The megaron was spared by the EPB V operations, and its $S$ wall came to serve as a retainer for the leveling fill. At the front, a flight of steps was added to give access from the new slab-paved level of the court (pl. G). ${ }^{34}$ Although the sounding within Meg. 10 revealed a succession of Phrygian levels, problems exist in equating the sequence here with that immediately to the S . One contributing factor is the slope of the area, down from W to E and down from N to S , before the building was constructed. ${ }^{35}$ To compound the situation, elevations were not made in sufficient number at any level within the sounding to give an indication of the degree of slope, and thus of correspondence with the sloping floors to the S. In fact, more floor levels are represented within the area of the building than in the sequence to the $S$ down to approximately the level of the pre-EPB Floor 5. As yet another element of difficulty, the construction of Meg. 10 appears to have involved a grading for the building site and thus some disruption to the upper strata. Given these various factors, the sounding is here reviewed as it was excavated rather than in chronological order.

In the main room of the building, the first stratum dug beneath the floor (Layer 1 or Meg. 10-1) was $0.60-0.80 \mathrm{~m}$. thick and cleared to a level that was everywhere below the base of the walls. Since the layer produced a fair quantity of wheelmade Phrygian pottery (197-212), including a bowl with a Phrygian inscription (202), analysis of the stratum is warranted. The cobbled Floor 2 had evidently been removed in the area of the building as part of the pre-construction grading; a deposit of cobblestones $c a$. 0.30 m . thick in the SE corner of the megaron probably came from the tearing up of the floor. How deeply the graders penetrated below the cobbled level is unclear, but it is doubtful that they went as far down as the floor underlying Meg. 10-1. A clue to the grading depth may be at hand in a mudbrick structure found seemingly floating in the $S$ half of Layer 1 . The unit had been cut into by the S wall of Meg. 10, and its preserved top was only about 0.20 m . below the floor of the megaron (pl. G). The structure presumably belonged to the cobbled Floor 2 level, since its orientation is the same as that of the EPB SW Room. The mudbrick unit had an interior floor that matches nothing in level, thus suggesting that it had been sunk below the cobbled surface. If the preserved top of the structure does in fact mark the approximate depth of grading for Meg. 10, then what was excavated between

[^19]this level and the underlying floor may have been an earlier deposition that signaled no strong traces of separation or change. The removal of the mudbrick structure revealed the continuation of the lower floor directly underneath, thus indicating that the floor had been a living surface rather than a grading level. The possibility of an undetected level notwithstanding, it is tempting to view Meg. 10-1 as no later than the construction of Meg. 10 and thus earlier than EPB V. Yet further conflation may have occurred in the upper reaches of the layer. Although no earlier floor levels belonging to the main room in Meg. 10 were encountered, a large central hearth appeared beneath the floor, and was clearly covered by it. This installation, in turn, had been replaced by an off-center hearth visible before excavation as a burned area. It thus seems that the main room had been refloored at least once, presumably at some point before the destruction. ${ }^{36}$ Consequently, it is impossible to know whether any pottery deposited at the time of reflooring is included in the material from Meg. 10-1. The inscribed bowl 202, judging by its relative point of entry in the field notebook, appeared just under the floor in the N half of the room and thus may have arrived here at the time of reflooring rather than earlier. ${ }^{37}$ From a developmental point of view, certain vessels in Meg. 10-1 (as excavated) are consonant with material from the EPB III Latrine Deposit (e.g., 198), whereas others (200, 206, 209) look to the Terrace fill, thought to postdate EPB $\mathrm{V}^{\prime}$. for their closest parallels on the City Mound (pp. 15-16, 187). Because of the uncertainties surrounding Meg. $10-1$, the material from the context is viewed as no earlier than the presumed final floor, a surface laid after construction.
The anteroom of Meg. 10 presented a somewhat different, and in certain respects more helpful, picture. Here, a pavement of rough stones sloping slightly down from W to E to the crosswall is either related to or later than the EPB $V$ operations, since at the $W$ the stones were set in a straight line against the lowest wooden step of the flight leading down from the slab-paved court. It is conceivable that the stone flooring was laid directly, or almost so, on the original floor of the anteroom, but no note of this possibility was made in the course of excavation. Instead, the stones and the underlying stratum were treated as Anteroom Layer 1, from which came little Iron Age pottery (e.g., 213), and the excavator re-marked-rightly or not-that the fill was the same as that of Layer 1 in the main room. ${ }^{38}$ The stratum was cleared to a floor (Floor 2) that was not present in the main room and that corresponded well in level, despite

[^20]the absence of cobbles, to Floor 2 outside at the S. Moreover, it was the excavator's judgment that Meg. 10 had been constructed at this interior level. The relation of the floor in general level to the mudbrick structure under the main room also indicated an equation with the cobbling. The discrepancy in sequence between the anteroom and main chamber is difficult to explain, but may somehow be connected with the working pattern of those who did the grading for Meg. 10. In any event, Layer 1 in the anteroom, whether conflated or not, has to be taken with the laying of the stone floor as subsequent to the court paving and EPB V. Whether the actual lower limit of Layer 1 in the main room was the same as that in the antechamber cannot be determined.

With the lower Phrygian strata in the Meg. 10 sounding the same ambiguities do not exist, since these units preceded the building and are related in one way or another to the pre-EPB V sequence. In no case is the Phrygian ceramic material abundant, and the proportion of Bronze Age types is usually high. In the anteroom, Floor 2, which is equated with the exterior cobbled level, overlay a stratum (Layer 2) that was cleared to the same floor as the one beneath Layer 1 in the main chamber. This lower level thus became Floor 3 in the overall Meg. 10 sequence. As noted above, excavation beneath the mudbrick structure in the S half of the main room came to the same floor, as did that under the central, original hearth of the building. Although the latter excavation unit may have included some construction fill for the megaron, that beneath the mudbrick structure certainly did not. Nonetheless, both were considered together as Layer 2 in the main room, and with the second layer in the antechamber they constitute Meg. 10-2.39 The Phrygian pottery from all three of these units over Floor 3 is in any case sparse, yet included are both Early Handmade and wheel-formed specimens (189-196). Since the material generally predates the cobbling of the sequence at the S, it can be equated with EPB IIb. The sherds underlying the central hearth (195-196) are possible exceptions, since, as noted, the unit may have included some construction fill for Meg. 10 .
Beginning with Floor 3 and extending down, the equation of levels within Meg. 10 with those outside at the S becomes somewhat problematic. Floor 3 itself might be the same as the Floor 3 in front of the EPB, i.e.,

[^21]the immediate predecessor and partial contemporary at the $\mathbf{E}$ of the cobbled Floor 2. In the Meg. 10 sounding, two layers, 3 and 4, separated Floor 3 from Floor 5, a surface whose elevation invites an equation with the original ground level of the EPB, Floor 4 to the $S$ of Meg. 10. Moreover, Floor 5 within the megaron showed traces of burning in several areas, a feature that may be related to the signs of fire present amidst the topple of the E-W mudbrick wall at the exterior Floor 4 level (p. 9). If Floors 3 and 5 within Meg. 10 can thus be associated with Floors 3 and 4 to the S , the interior Floor 4, ca. 0.10 m . below Floor 3, has no match in the EPB sequence and is presently inexplicable. The overburden of the enigmatic floor, Layer 3, is in any case not represented by stored material. Layer 4 (Meg. 10-4) over Floor 5, on the other hand, yielded about 115 sherds. The great majority are Bronze Age, but with these occur also Early Phrygian Handmade and a few sherds of wheelmade gray ware (187-188, with note following the latter). ${ }^{40}$ Given the suggested equation of Floor 5 in the sounding with Floor 4 to the S, it would follow that Meg. $10-4$ is to be associated with EPB IIa.
It has been stated elsewhere that Layer 4 was the earliest stratum within the Meg. 10 sounding to produce Phrygian material. ${ }^{41}$ In fact, the stored material from the underlying Layer 5 includes a single, very small sherd of a gray-ware trefoil jug. The piece is suspicious in a lot that is otherwise entirely Bronze Age and may, especially given its size, have been a contaminant. Another factor, however, also may have a bearing on Layer 5. If the floor overlying it is to be equated with Floor 4 at the $S$, the original EPB ground level, then the stratum itself should correspond in some way to EPB I, with its Early Phrygian Handmade, as revealed in the cut directly S of Meg. 10 (p. 8). Layer 5 in the Meg. 10 sounding was cleared to a level (Floor 6) that was still almost half a meter above the pre-EPB Floor 5 in the cut made to the S ; and even the lower Floor 7, with an overburden of purely Bronze Age material (Layer 6), was about 0.20 m . above the exterior Floor 5. In fact, no level within the sounding came close to the elevation of Floor 5 in front of the EPB, for the next surface (Floor 8) was a considerable 0.60 m . below the Floor 5 level just S of Meg. 10. The implication, as noted above, is that the exterior Floor $4-5$ stratum that constitutes EPB I (Context Y-65-21) was somehow telescoped. Yet nonetheless the Early Handmade pottery from the unit points to a new cultural presence by the time Floor 4 was laid (p. 9). The same conclusion would apply to the presumed continuation of the floor to the N as Floor 5 within the area of Meg. 10. It is worth recalling that within the EPB SW Room the stratum corresponding to EPB I, apparently also telescoped, is reported to have contained only Bronze Age material (p. 8).

[^22]
## The Area of the Polychrome House

The area of the Polychrome House (plan B) has stratigraphical links with the EPB complex to the N-NE through both the cobbled Floor 2 level and the slabpaved Floor 1 belonging to the EPB V program. As a result, select materials from in and around this gate chamber may be used to supplement, and even to continue beyond EPB V, the core EPB sequence.

## EXTENSION OF EPB IIb

The current view of the Polychrome House is that it was a relatively late addition to the ECW, of which the EPB was also a part (p. 8), and that it came to be incorporated into the later, more massive complex of the Gate Building with its courts to N and $\mathrm{S} .{ }^{42}$ The construction of the Polychrome House appears to have been accompanied by the removal of a section of the ECW and also by a grading operation in the area to be occupied by the building. The original ground level going with the Polychrome House seems with little doubt to have been the cobbled Floor 2 of the EPB area. Where cobbling is revealed beside the NW corner of the Polychrome House, its elevation corresponds within centimeters to that of the Floor 2 level in the court area before the EPB. The stratum that underlay the cobbled level in a cut beside the N wall of the Polychrome House is perhaps best interpreted as construction fill for the building (Context Y-63-4) and thus should belong at the latest with the pre-cobbling EPB IIb (11-12, 28). A trench made nearby, against the W (interior) face of the ECW, revealed a gritty floor that seems to have continued the level of the cobbling up to the older fortification wall. Material from the underlying stratum (Notebook 92, Bag 14A), down to what seems to have been the original ECW ground level, is also assumed to have EPB IIb as the lower chronological limit $(22,24)$. A cut within the gate chamber, in the NE corner, penetrated beneath the floor into what is taken to be construction fill (Context Y'-63-1). Since the Polychrome House appears to be no later than the cobbled Floor 2, the material of this unit as well is considered to date before the cobbling and to be no later than EPB IIb (13, 26, 29). These horizontal correlations, like that suggested for Context Y-63-6 (p. 9), supplement the typological range of EPB IIb through the addition of both light-fired monochrome and painted Phrygian wheelmade wares (pp. 179-180).

## EPB VI

The slab paving of the outer court (Floor 1), a part of the EPB V program, rests directly on the cobbled Floor 2
4.. AJA 68 (1964), 291.
beside the NW corner of the Polvchrome House. Floor 1 is, in turn, slightly overlapped by a pebbled floor that slopes up E-ward to the $N$ of the gate chamber. This ramp-like floor extends over the preserved top of the ECW, demolished by the time the surface was laid, and continues to the front of the North Court of the Gate Building; the N wall of the Polychrome House retains the underlying fill of the floor. The sloping floor thus appears to postdate, if only slightly, the construction of the Gate Building. The floor also postdates the slabpaved Floor 1 that it overlaps and is thus later than EPB V. Material from the fill under this sloping floor, down to the gritty floor beside the ECW (Notebook 92, Bag 14), is here viewed as representing EPB VI, in continuation of the core EPB sequence ( $\mathbf{1 7 8}-180,182$ ). Two sherds of Fine-Line Buff ware from EPB VI (182) could belong to the same vessel as an uncatalogued piece from EPB ${ }^{\prime}$ (see 166 ).

The sloping pebbled floor that sealed EPB VI was the first exterior surface connected with the North Court of the Gate Building. The floor may have followed closely the construction of the court in order to cover over an obstacle to traffic, the remains of the ECW after its demolition. The court itself had a series of two floors, one associated with the original phase and another with a subsequent remodeling. ${ }^{43}$ In the first phase the court was a storage magazine containing rows of large vessels. These had been removed at some time before the laying of the second floor, and their nestling pits were filled with clay so that they appeared as circular patches at the original ground level. Such extensive accommodations for big ceramic containers are otherwise unknown in the Early Phrygian citadel. Also associated with the original floor of the court is a nearly complete round-mouthed jug (181). The context of the vessel may be later than the laying of the exterior pebbled floor, but it is perhaps expedient to include the jug with EPB V'I and thus to consider this unit as generally parallel with the life of the North Court. ${ }^{44}$

## EPB VII

In connection with the terracing program that seems to have been in progress at the time of the destruction, the Polychrome House was razed to make way for a massive drainage system occupying the entire length of the gate chamber ( p .2 ) ${ }^{+5}$ A thick deposit of potterybearing, gravelly fill was dumped in the building appar-
43. AJ/ 59 (1955), 12-14 and pl. 7, fig. 29. A/A 60 (1956), 260; (ir) Notebook 50, pp. 52-74 passm.
44. Also placed with EPB \'I is the Early Handmade bowl 177. The vessel is recorded as having come from the floor of the North Court, but which floor is not specified.
45. A/A 60 (1956). $960-261$, and pls. 90 , fig. 37 and 92, fig. 38 .
ently as part of the operation. Presumably later than the final floor of the North Court, which stood to be obliterated by the intended terracing program, the fill is viewed as EPB \'II, the lower terminus of the EPB sequence. The representation of Bronze Age pottery from the fill is strong, yet much of the Phrygian ceramic material from EPB III is typologically late, with parallels in the Terrace fill and Destruction Level. Only two vessels from the
context appear in the Catalogue, both painted in a distinctive style that takes its name from the demolished gate chamber (183-184). A shed built against the $W$ face of the Polychrome House, to the $S$ of the inner door, contained two painted amphoras (185-186) that are also assigned to EPB VII. Some sherds of 186 were in fact found in the fill overlying the Polychrome House.

## The Area of Megaron 12

To the NW of the EPB district, and beyond the great enclosure wall dividing the palace courts, Meg. 12 and the presumed street onto which it faced were the sites of two separate investigations below the final level of the Early Phrygian citadel.

## THE NORTH-CENTRAL TRENCH (NCT)

The work conducted within Meg. 12 was actually a deep, isolated sounding, the North-Central Trench ( NCT ), made from the top of the mound in 1950, the first season of the Pennsylvania excavations. ${ }^{46}$ The third major level of the probe was the floor of the megaron near its rear wall, at an elevation of +4.70 m ., and it was here that the excavators had their first glimpse of the Early Phrygian citadel and its pottery (pp. 6-7). Beneath the floor, two Iron Age strata, each a meter thick, were designated the fourth principal horizon in the trench, the later becoming NCT IVa and the earlier NCT IVb. The next stratum, beginning at +2.70 m ., yielded Late Bronze Age wares. The separation between the two layers of NCT IV, at +3.70 m ., seems not to have been distinct. A few joining sherds between the two units (217-218) suggest that the excavation of the upper layer may have dipped into the lower, as does a considerable admixture in NCT IVa of the relatively early Iron Age types that help to characterize NCT IVb (infra). The demarcation line at +3.70 m . might thus be considered approximate and not reflective of an actual level. How the NCT sequence was related to that at the SE, in the EPB area, is unclear in the absence of sure stratigraphical links. Furthermore, attempts to equate absolute levels in the two areas are at best risky because the configuration of the once-sloping terrain in this area of the citadel is not well understood (infra). For the present, therefore, reliance is placed on analysis of the pottery from NCT IVa and $b$, rather than on stratigraphy, to gain some idea of the relationship of these units to the broader predestruction sequence.

[^23]In NCT IVb, Late Bronze Age wares are dominant by a considerable margin. ${ }^{47}$ With them occur a number of Early Phrygian Handmade vessels (214-219) and a small quantity of wheelmade specimens, some clearly in gray ware (220, 223-224) and some that are perhaps intentionally gray $(222,225)$. A notable aspect of the wheelmade vessels preserving upper profiles is that they are not of the standard types seen in the advanced repertory, as occurs in EPB II and III. Instead, the material suggests an incipient stage of wheelmade pottery production, one that was perhaps intermediate between EPB I and II (p. 175). Accompanying these, however, are a few wheelmade body sherds of gray ware that display technical features of advanced Phrygian potting while preserving no formal traits that might indicate a relative level of development. ${ }^{4 \%}$

In contrast with NCT IVb, NCT IVa yielded a number of types that find parallels in such later pre-destruction contexts as EPB V and the Terrace fill (e.g., 233-234; p. 187). As noted above, it is perhaps through conflation that the unit has a quantity of Early Phrygian Handmade pottery (226-231), including many sherds of a single large vessel (229) and some joins with the material from NCT IVb. Since NCT IVa is both typologically late and stratigraphically isolated, only select examples of the Phrygian wheelmade pottery from the unit appear in the Catalogue, these having been chosen largely to augment the general pre-destruction corpus (232-236).

## THE PN 3 AND EARLY BRONZE TRENCHES

To the NW of Meg. 12, work in 1961 and 1965 revealed close below the final Early Phrygian surface the preserved top of an Early Bronze Age mound that had apparently been truncated by Phrygian leveling activities ${ }^{49}$ It was very likely this earlier, extraordinary configuration that contributed in large part to the N-S down-

[^24]ward slope across the area of the later Meg. 12 and the EPB district beyond. The NCT Trench, ca. 20 m . distant from the top of the prehistoric mound, had reached the Early Bronze Age horizon only after a great series of second-millennium deposits, and at a level roughly 7 m . lower than the Early Bronze Age material found in front of Meg. 12. ${ }^{50}$ The slope seems to have continued to be a feature of the terrain into Phrygian times, until a more or less horizontal plane was imparted to the entire area by the installation of the palace courts. In the outer court, this would have been achieved by the EPB V program. For the inner court, it is possible that the partial grading away of the Early Bronze Age mound was connected with a similar operation.

The Phrygian overburden of the Early Bronze Age remains in front of Meg. 12 is treated here as a single
unit, despite the presence of a limited stratified sequence. In the first trench, PN 3, the stratigraphy was not defined until after most of the available pottery had been collected from a cut made with sharp (and insensitive) digging spades. In the later extension toward the front of Meg. 12, the Early Bronze (EB) Trench, the area proved to be heavily disturbed by a series of pits that had unclear stratigraphic associations. All, however, were sealed by the latest exterior floor in front of Meg. 12, a pebbled surface that was either the second or the third associated with the building. As in N(T IVa, the pottery (237-247) includes specimens bearing advanced features, with particular correspondences in EPB $V$, the Terrace fill, and the Destruction Level (e.g., 239, 241-242. 244: p. 187); the Catalogue entries represent a typological selection of the material.

## The Terrace District

The extensive platform of the Terrace to the SW of the palace courts belongs to a single renewal program, and thus the fill of earth and rubble forms a homogeneous contextual unit. Although probed in relatively small areas, the Terrace fill proved to contain a high concentration of pottery, so much so that the unit parallels EPB V in providing an abundance of pre-destruction material (251-398).

The pre-Terrace plan of the area is known primarily in the vicinity of TB 8, through work conducted from 1965 to $1973 .{ }^{51}$ Here, three buildings, Megs. 6-8, extended SW-ward in a row from Meg. 5, the only one of the series to be spared by the terracing program (plan B). An enclosure wall ran behind the row, while an offshoot separated Meg. 6 from Meg. 7. Megs. 7-8 contained ovens and other kitchen equipment, and thus they appear to have been the functional predecessors of TB and CC. Farther to the SE, excavation revealed the stretch of the large enclosure wall that had been covered by the Terrace beside Meg. 3. The wall abuts an earlier NW-SE wall running under the rear wall of the $Г В$. Just beyond to the SE, the Terrace buried a pair of small structures, Houses X and Y , built against the rear wall of Meg. $2 .{ }^{52}$

## MEGARON 5

The only context in the area that appears to be clearly earlier than the Terrace installation is within Meg. 5.

[^25]Here, investigations beneath the floor of the poorly preserved megaron revealed a pre-building complex consisting of a hearth and oven unit in association with a series of wooden beam beds and postholes. ${ }^{53}$ The complex presently makes little sense, but the fill that overlay it seems to have been connected with the construction of Meg. 5 and thus would be pre-Terrace. The context yielded a stamped vessel (249) and a painted sherd ( $\mathbf{2 5 0}$ ): a fragmentary, secondarily fired round-mouthed jug from the oven of the earlier complex (248) very likely belonged to the pre-Meg. 5 level.

## THE TERRACE FILL

In preparation for the terracing program, Mcgs. 6-8 had been dismantled to the approximate level of the Terrace and had also been largely cleared of portable contents. Some sherds and fragments found directly on the floors possibly belonged to the buildings (e.g., 265. 294, 297, 312, 323, 389), as may have a few wellpreserved vessels from the Terrace fill ( $\mathbf{2 5 5}, \mathbf{2 8 2}$ ). including two large amphoras found together beside the NF. wall of Meg. $6(\mathbf{3 0 5}, \mathbf{3 0 8})$. Two stamped vessels from the Destruction Level $(918,1009)$ may indicate that the Phrygians saved a portion of the contents of the condemned buildings for later use, since each has impressions that seem to have been made with the same stamp that was used for vessels from the Terrace fill (pp. 129. 132).

The Terrace fill vielded, in addition to wheelmade Phrygian wares, Earl Handmade (251-256) and Bronze Age material-a combination reminiscent of that in EPB

[^26]V'(p. 10). The chronological relationship between these two important contexts cannot be directly determined in the absence of secure stratigraphical links across the courts of the Palace Area. Yet indirect evidence, based on architectural and topographical considerations, suggests that the installation of the Terrace was the later of the two projects. As noted above (p. 10), EPB V appears to have been contemporary with the construction of the new Gate Building and citadel wall. The South Court of the Gate Building was bedded at a level considerably higher than that of the Polychrome House and thus required at the $W$ a retaining wall, which formed a small terrace in front of the entrance to the court. Extending $S$ from the SW corner of the Polychrome House, the retaining wall of the South Court was damaged by the construction of the Terrace, whose own retaining wall makes a return to the SW at the point of contact with the wall in front of the South Court. ${ }^{54}$ Since the South Court and its retaining wall were presumably contemporary with the construction of the North Court and citadel wall at the N , and thus coeval with the covering over of the EPB, the Terrace stands to be later than EPB V.

Consideration of the pottery from the two contexts generally supports the later date for the Terrace, since overall the fill has a considerably greater number of direct correspondences with the Destruction Level than does EPB V. At the same time, various features of the material from the Terrace are shared with the Destruction Level while being either absent or rare in EPB V. Among these ceramic indications are certain forms of bowls (p. 184), a variety of rim for large vessels (p. 106), patterned incision (p. 114), and pattern-banded storage jars (p. 119). Moreover, pottery stamping is well attested in the Terrace fill, including impressions that recur in the Destruction Level, whereas few stamped vessels are known from EPB $V$ (p. 123). EPB $V$ does have, however, a few close links with the Destruction Level that are not shared by the Terrace fill. These include a certain type of petaled relief work (pp. 120-121) and a distinctive painted ware, Fine-Line Buff (p. 159). The latter also occurs in the post-Terrace M4I context (infra). Although the Terrace appears to have been later than EPB V, it is possible that the two contexts were not far removed in time. Both display a wide range of standard, advanced types and painting styles, several of which they share. They also have a few mutual traits that seem not to have carried down to the destruction period, e.g., a particular variety of carinated bowl (p. 45), bowls with beveled rims and other small bowls in general (pp. 43,50), and the practice of placing painted zones between prominent ridges ( pp . 117-118).55

## THE MEGARON 4 TERRACE

It is evident that the construction of Meg. 4, elevated beside Meg. 3, came after the major terracing operation, since the building required a NE-ward addition to the Terrace for its platform ${ }^{56}$ Investigations in the area of the extension yielded three contextual units that form a relative sequence, here designated M4 I-III. Certainly the latter two, and possibly the first as well, are related directly to the construction and life of Meg. 4, and thus are later than the Terrace.
M4 I, the earliest in the series, represents a small cut made within the re-entrant angle formed by the NE face of the terrace extension and the NW retaining wall for the broad ramp leading up to Meg. $4 .{ }^{57}$ The unit underlay a floor at the base of the Meg. 4 terrace wall and, as dug, was cleared to a floor ca. 0.70 m . lower and very close to the ground level of Meg. 3. It is possible that M4 I predated the terrace extension and perhaps the Terrace itself, but since the area investigated was without horizontal scope, the context is viewed as being no earlier than the leveling and/or foundation fill for the platform of Meg. 4. In M4 I, Bronze Age and Early Phrygian Handmade wares (399-400) occur with wheelmade Phrygian vessels that display generally late traits: a specimen of Fine-Line Buff ware (406) looks to EPB V, and possibly belongs to the same vessel as 113 from that context; a variety of carinated bowl (401-403) has close affinities with vessels from both EPB V and the Terrace fill; 405 bears patterned incision, as occurs in the Terrace fill but not in EPB V.

M4 II and III are without doubt connected with the construction and life, respectively, of the Meg. 4 extension. M4 II represents the fill beneath an earth ramp that led up within the area of the extension to the higher level beside Meg. 4 at the NW. The only item from this unit included in the Catalogue is a pattern-banded storage jar (407) that belongs to a series otherwise known from the Terrace fill and the Destruction Level (p. 99). M4 III (408-409) was the fill for a sloping earth floor in the re-entrant angle at the N . The fill of the unit, overlying M4 I and the floor at the base of the extension, had been packed against the faces of the retaining walls that formed the angle, and was evidently an afterthought to the main program of terrace addition and frontal ramp. In the area, the next stratigraphical event in sequence from the installation of the Terrace is the Destruction Level.

[^27][^28]
## Later Contexts on the City Mound

The Phrygian pottery from post-destruction levels is to be presented in a subsequent study, even though a fair amount may be residual from Early Phrygian times. The only material here included from these later contexts is examples of Brown-on-Buff ware and its extended stylistic circle (1036-1081), and selected vessels painted in the

Alişar IV style (1082-1089). Both categories are helpful supplements to the evidence of the Early Phrvgian sequence, even though their production may have continued beyond the time of the Kimmerian sack (pp. 88-90, 163-164, 165-167). Few attempts are made here to interpret the contexts of these vessels.

## Early Phrygian Tumuli

The ceramic furnishings of tumuli in the vicinity of Gordion are an important component of the Early Phrygian corpus. The vessels are generally well preserved, and include some of the more remarkable products of Phrygian potting. The Catalogue does not incorporate the pottery from these burials, but a few vessels are here illustrated for comparative purposes.

Of those tombs judged Early Phrygian and thus generally contemporary with the stratified sequence on the City Mound, Tumuli III and IV-excavated by the Körte brothers-and Tumuli W, P, and MM are published. ${ }^{58}$ Others that seem on typological grounds to belong to the early series are Tumuli G, KY, X, and Y. ${ }^{59}$ Of the wealthy, presumably royal burials, Tumulus W appears to have been the earliest (pp. 192-193). ${ }^{60}$ Tumulus III perhaps preceded P, a child's tomb, yet regardless of their order the two seem close in date to each other. How far removed they are temporally from Tumulus W is uncer-

[^29]tain, but in relation to the ceramic sequence on the City Mound both appear to be later than EPB V and generally close in time to the installation of the Terrace (p. 193). ${ }^{61}$ Tumulus MM is judged the latest of the wealthy group (p. 193), ${ }^{62}$ yet whether the tomb is that of Midas, and thus linked to a historical event, remains an open and debated issue. ${ }^{63}$ The contents of MM do, however, speak strongly of the era of Midas, particularly the North Svrian bronzes (e.g., MM 2-3) that parallel items of similar origin in the destroyed citadel and recall Midas' dealings with the Neo-Hittite sphere. ${ }^{6-4}$

Other tumuli judged early are comparatively modest, and thus present fewer grounds for either their relative order or synchronisms with the City Mound. On the basis of ceramic correspondences, Tumulus $G$ may be close in time to the installation of the Terrace, and KY' somewhat later, while X and Y might not be far removed from the time of the destruction (p. 194).

[^30]
## II

## Handmade Pottery

Handmade pottery occurs throughout the Early Phrygian sequence, from EPB I and NCT IVb into the destruction period. The corpus invites a threefold division based on stratification and typology. The first group, Early Phrygian Handmade, helps to define the earliest Iron Age strata. Representing a tradition of competent, conventionalized potting, it may well be significant both for the question of Phrygian origins and for the future course of Phrygian ceramics. The second category consists of a small and disparate collection of vessels from the

Terrace fill and the Destruction Level. Some are reminiscent of the Early Handmade tradition, whereas others are not. They are classified separately, as Miscellaneous Handmade, primarily because of their relatively late currency. The third division is Crude Handmade Pottery, a class of small, cursorily executed vessels that recall the fruits of kindergarten pot-making. They are among the commonest finds in the Destruction Level, and there is some reason to doubt that all were the works of trained potters.

## Early Phrygian Handmade Pottery

(Figures 1-4, Plates 1-7)

## EPB I: 1-4

EPB IIa: 5-6
EPB IIb: 10-13
EPB V: 61-70
EPB VI: 177
Meg. 10-4: 187
The Early Phrygian Handmade corpus consists of vessels related not only by method of forming but also by various traits of detail and decoration. Fabrics are generally coarse, while surfaces may be either dark- or lightfired. The commonest shapes are bowls, both carinated and plain, and two varieties of open-mouthed vessels, all of which frequently bear lugs. Decoration consists primarily of incision, notching, and simple impressions. The material is for the most part typologically distinct from handmade pottery of the Early Bronze Age at Gordion. Thus, even though the latter often occurs in Phrygian deposits, there are few difficulties in distinguishing the two (e.g., 399). It is, however, the stratification of Early Handmade that separates it most clearly from earlier hand-formed wares.

In the area of Megs. 9-12, Early Handmade first appears in EPB I, Meg. 10-4, and NCT IVb. The latter two contexts also contain Phrygian wheelmade pottery,

Meg. 10-2: 189-191
NCT IVb: 214-219
NCT IVa: 226-231
PN 3: 237-238
Terrace fill: 251-254, 256
M4 I: 399-400
and they follow a succession of Middle and Late Bronze strata that were largely free of residual material (pp. 12-14). The pottery from Meg. $10-4$ and N(T INh belongs mostly to the advanced Late Bronze Age, with few distinctive Early Bronze types. ${ }^{1}$ In context ${ }^{-}-65-21$ of EPB I, below which there was no further digging, Early Handmade again appears with Late Bronze potter!, but discernible Phrygian wheelmade is not present (p. 8). After these initial occurrences, Early Handmade is found in most pre-destruction contexts, with the notable exception of EPB III (p. 21).

Early Handmade presents several features that betray a new ceramic direction at the site. The practice of handformation itself, appearing suddenly after long sequences of competently thrown Bronze Age wares, is definitely a technological anomaly and perhaps stands as

[^31]the most fundamental of the new features. The technique of reduction firing to produce gray wares, used also for Phrygian wheelmade pottery in NCT I\'b and Meg. 10-4 (p. 34), is in literal contrast with the traditionally clearfired products of local Late Bronze Age potters. Certain shapes of the Early Handmade repertory likewise have no immediate precedents, while the decorative code marks yet a further departure from Late Bronze Age practice." These novel aspects would, in themselves, appear to argue against a locally spawned, "sub-Hittite" tradition, but it is through correspondences beyond Gordion that Early Handmade comes most sharply into focus as an intrusive element with broader affinities.

Early Handmade is with little doubt related to a widespread series of phenomena that sees hand-formed pottery of Balkan types occurring, inter alia, in Late Helladic IIIC contexts in Greece and in Troy VIIb 1-2. ${ }^{3}$ The Greek and Trojan corpora, while looking to a common general background, each seem to have had more direct ties with specific areas of the Balkans. ${ }^{4}$ The "Coarse Ware" of Troy VIIb 1-2 and "Knobbed Ware," which seems restricted to VIIb 2, no doubt have their sources across the Hellespont in Thrace, where pottery of related types occurs over a broad area extending north to the mouth of the Danube and west into the Maritsa plain. ${ }^{5}$

The Early Handmade at Gordion shares sufficient traits with the material of Troy VIIb to indicate that both bodies of pottery are related to the same general cultural sphere. Similarities in fabric, finishing practices, and coloration point to a common technological tradition, one as alien at Troy as it is at Gordion. Early Handmade also allows distinctions analogous to those that separate Troy's Coarse and Knobbed Wares, yet at Gordion the evidence is presently insufficient for determining whether a parallel chronological factor is involved (infra). Certain shapes of the Early Handmade repertory also may be related to those of Troy VIIb, but the fragmentary nature of the material at Gordion limits formal comparisons, as does the relative paucity of published upper profiles from Troy. The shared use of lugs, however, seems to be an important formal correspondence, and at least equal in comparative value is the predilection at

## 2. $\mathrm{Ib} d$.

3. The bibliography on the diffusion of Balkan pottery into Greece and northwestern Anatolia has increased considerably in the past several years. For recent assessments and references: Sandars, Sea Peoples, 191-195; Bankoff and Winter, 1-30; Schachermeyr, 102-106.
4. Bankoff and Winter, 8.
5. Sandars, Sea Peoples, 199-193: Bankoff and Winter, 25; Troy IV, 154 and 158-159. Although the excavators of Troy wondered about possible connections between Coarse and Knobbed Ware, Elizabeth French was the first to suggest that Coarse Ware is intrusive: "The First Phase of LH IIIC," AA (1969). 136. Jeremy B. Rutter later expanded on the idea of associating Coarse Ware with the Balkans: Rutter, 17-32, esp. 31-32. For recent finds of Balkan-type pottery in Turkish Thrace: Özdogan. A few pieces had already been known from excavations in Istanbul: Firath, 570 and pl. 163, fig. 4.
both sites for incised and simple impressed ornament, often of the same basic types and often similarly applied (pp. 26-27). At the same time, however, Early Handmade differs in a considerable number of aspects from the Troy VIIb corpus. Several of the more distinctive shapes in Knobbed Ware, including varieties of one- and twohandled cups, have neither parallels nor analogies at Gordion. ${ }^{6}$ Furthermore, some of the decorative devices common at Troy are either rare or unknown in Early Handmade. The namesake trait of Knobbed Ware, for example, occurs seldom at Gordion $(\mathbf{6 4}, \mathbf{2 5 1})$ and never in the exaggerated, horn-like forms found in the Troad. ${ }^{7}$ Likewise, the thick, impressed ridges that are especially popular as neck ornament on Coarse Ware find very few correspondences in Early Handmade (229, 256; p. 27). ${ }^{8}$ Totally absent from the handmade corpus at Gordion are the $U$-shaped lugs found frequently on Coarse Ware, and the false running spirals of Knobbed Ware, as well as the circular stampings, single or concentric, used to form them. ${ }^{9}$ The oblique and vertical "rippling" of Knobbed Ware is also unattested in Early Handmade, although a few specimens at Gordion do exhibit the analogous treatment of horizontal fluting ( 61,177 ). ${ }^{10}$

The differences between Early Handmade and the corresponding wares of Troy VIIb seem to be fundamental and to suggest that although the two corpora look to a general Balkan ancestry, those who brought the handmade tradition to Gordion had no direct and immediate ties with the newcomers at Troy. More precise attempts to interpret the variances encounter difficulties, for it is presently unknown to what extent the factors involved are chronological or spatial in nature. The general dating of Troy VIIb l-2 is from the twelfth into the eleventh century, the latter phase lasting perhaps until about 1050 B.C. ${ }^{11}$ At Gordion, a similar time frame is possible, but cannot be proven archaeologically (p. 195). The strata immediately preceding those with the first Early Handmade in the Meg. 10 and NCT soundings contain wares that belong typologically to the later phases of the Hittite Empire, while the Bronze Age material accompanying the initial appearances of the new pottery is possibly further advanced. ${ }^{12}$ Yet these later strata, Meg. 10-4 and NCT IVb, are fills that also contain wheelmade gray wares (pp. 12, 14), and in the absence of domestic contexts, such as House 769 in Troy VIIb 2, it is presently

[^32]impossible to know whether Late Bronze and Early Handmade pottery saw contemporary use at Gordion. Moreover, since Gordion has so far yielded no level of destruction corresponding to that of the early twelfth century at Hattusha, it is conceivable that local Bronze Age traditions continued without interruption for some time after the Hittite collapse. ${ }^{13}$

If generally contemporary with Troy VIIb, Early Handmade might stem from a separate and ceramically distinct source in Thrace, perhaps even an individual group or tribe whose movements led them to westcentral Anatolia. If, on the other hand, the new pottery at Gordion is appreciably later than the Troy VIIb 1-2 assemblages, at least two interpretations are possible. First, Early Handmade might represent a ceramic tradition substantially evolved from that of the Troad, and thus belong to a developmental pattern that transpired within and across Anatolia from west to east, as the newcomers penetrated inland over time. Alternatively, Early Handmade might appear at Gordion as the result of continuing migrations of southeastern Europeans into Anatolia during the centuries following the end of the Hittite Empire. The Thracian evidence allows this possibility, since the traditions of handmade pottery to which the Anatolian material is related last well into the first half of the first millennium. ${ }^{14}$ Regardless of the circumstances under which handmade pottery came to Gordion, there is evidence pointing to subsequent infiltrations of Balkan elements at the site, and thus to open lines of communication between Phrygia and Europe (p. 176). The most compelling is elaborate pottery-stamping in a variety of motifs. Present by EPB V, the practice is unknown in Early Handmade, yet close parallels exist in Early and Middle Iron Age material from Thrace (p. 124). The same region affords good correspondences for Knobbed Ware, in which the use of circular stamps, and no others, may indicate an early stage of pottery stamping.

Whether the new pottery at Gordion actually warrants the designation Early Phrygian Handmade ought to depend ultimately on the language and ethnicity of those who introduced it. The linguistic affinities of Phrygian and Thracian allow the possibility, as do the later statements of Herodotos (VII.73) and Strabo (VII.3.2) that link the Phrygians with Macedonia and Thrace. ${ }^{15}$ Y'et this evidence could perhaps be applied equally well to Balkan elements that appear later at Gordion, particularly pottery stamping (p. 176). In any event, Early Handmade makes use of techniques, shapes, and mannerisms that recur in the site's Iron Age wheelmade repertory, thus possibly indicating that, even if not "Phrygian," the intrusive pottery to some extent lay behind Phrygian

[^33]ceramic development. Easily the most fundamental of the recurring features is the technique of dark-fired or gray pottery, a practice common in the Balkans and one that was to remain for many centuries the most distinctive and conservative trait of Phrygian production. Early Handmade itself may have incorporated aspects of the local Late Bronze Age tradition. Some handmade shapes have indigenous analogues (pp. 23-26), while there are a few indications that the new technique of dark-firing may have been used for wheelmade, second-millennium forms (pp. 34-35). Certain aspects of wheelmade Phrygian pottery also might look to a general Bronze Age ancestry. These issues of interplay and influence must, however, remain open, since evidence is lacking to indicate whether the bringers of Early Handmade were somehow integrated with an Anatolian Bronze Age community, or whether Phrygian wheelmade pottery began to emerge while the handmade, and possibly even the indigenous, tradition still existed (pp. 175-176).

The duration of Early Handmade as an active tradition is presently impossible to determine within close limits. In context Y-65-21 of EPB I, it may be significant that the new pottery (1-4) is not accompanied by discernible Phrygian wheelmade wares (p. 8). In the subsequent EPB IIa and IIb, Early Handmade does appear with wheelmade Phrygian, but it is not present in the EPB III deposits of the Latrine and the adjacent EPB SW Room, where the assemblage of over thirty vessels is totally Phrygian wheelmade (p. 9). The domestic, contemporary nature of the unit, representing what was being used and discarded within a finite block of time, suggests that by EPB III Early Handmade was no longer a major tradition at Gordion. If this is the case, occurrences of the pottery in the subsequent EPB $V$ and in other relatively late pre-destruction contexts may be largely, if not entirely, residual, especially since all are fills containing mixed material. The same might even be true of the Early Handmade from EPB IIa-b, since the accompanying Phrygian wheelmade pottery already includes several specimens belonging to an advanced, solidified stage of development (pp. 8, 178-180). Meg. 10-4, equatable with EPB IIa, presents a somewhat similar blend, although the amount of wheelmade Phrygian pottery is small ( p . 12). In NCT IVb, Early Handmade also makes its initial appearance in the company of wheelmade gray wares. The latter comprise a mixed lot of featureless body sherds that have advanced technical traits and specimens whose forms suggest an incipient stage of development. with possible Bronze Age connections (pp. 14, 75). It is also notable that the quantity of Early Handmade in NC:T IVb is great in comparison with wheelmade grat wares, close to a $1: 1$ ratio based on rims. NCT IVb may thus be closer than EPB II to the active life of Early Handmade, but it is uncertain whether the handmade pottery in NC.T IVb was to any extent contemporary with the deposit. Although the floruit of Early Handmade mas have ended
by EPB III, vessels of the Miscellaneous and Crude Handmade categories indicate the continuing presence of hand-formed pottery through the time of the destruction. Crude Handmade seems very much a "tradition" of its own, with no signs of a direct connection with Early Handmade (p. 29). Within the Miscellaneous Handmade category, however, certain vessels might indicate that the tradition of Early Handmade persisted somewhere in Phrygia down to the time of the Kimmerian invasion (pp. 28-29).

Since a great proportion of Early Handmade pottery may be residual in pre-destruction contexts, it seems preferable to treat the assemblage largely as a summary of the tradition rather than attempt to construct a
sequence for the material on the basis of stratification or stylistic analysis. EPB I yielded only closed vessels of coarse fabric with minimal finishing, whereas in NCT IVb and Meg. 10-4 similar types are accompanied by polished, open shapes that have some affinities with Troy's Knobbed Ware. There may thus be a chronological analogy with Troy VIIb, where Coarse Ware occurs earlier than Knobbed, but because of its limited clearance EPB I does not provide sufficiently strong evidence for making such distinctions with any conviction. It is, in any event, in contexts later than these that the bulk of Early Handmade occurs, including the greatest range of shapes and decorative treatments.

## Fabrics

The clays of Early Handmade tend to be poorly refined and prepared, and they range generally from mediumcoarse to very coarse in quality. The crumbly, sometimes soft fabric of certain specimens suggests low-temperature firing (e.g., 228, 251). A few exceptions appear among bowls and other small shapes, where the fabric can be as good as medium-fine (e.g., 5, 64-67, 189, 214, 226). As in wheelmade Phrygian, clays are usually micaceous, sometimes heavily so (e.g., 69, 237, 252).

Surface coloration allows a general threefold division of wares: gray/black, light, and "variegated," in which exterior and interior surfaces contrast. ${ }^{16}$ The order given is in descending frequency: light-colored vessels are somewhat less numerous than dark-fired, while those with variegated surfaces are the least common. These three approaches to firing are already present in EPB I (1-4). Variegation seems to be restricted to larger vessels, but otherwise there are no apparent correspondences between color and shape or size. The coloration within all three categories is often uneven.

The basic methods of surface finishing are common to all wares. Slips of fine clay are frequent in every shape category and usually serve as a base for polishing. Bowls and relatively small closed vessels are invariably polished. The treatment often results in a low or medium luster, but in several instances the coarseness of the clay and the cursory application of the slip have produced a rough, practically matte surface. Polishing may be uneven or spotty, in certain instances giving a streaky effect of darker and lighter, lustrous and matte (e.g., 5, 62, 65, $\mathbf{2 5 1}$ ). From a technical point of view, 67 is probably the finest specimen in the handmade assemblage. Among larger, closed vessels polishing is also frequent, yet in several cases the treatment is summary, imparting only a very low or faint luster (e.g., 1-2, 219, 229, 400). On some large vessels the surfaces are merely smoothed to a matte,

[^34]and still fairly rough, finish (3-4, 11-13, 68, 230-231, 256). Since all are open-mouthed, the finishing normally extends onto the upper interior. These general distinctions in the finishing of vessels are similar to those that help to separate Coarse from Knobbed Ware in Troy VIIb. ${ }^{17}$

## GRAY WARES

The surface coloration of Early Handmade dark-fired pottery ranges from various shades of gray to black, with dark grays and black being the most frequent (color pl. I \{1\}). The light grays of Phrygian wheelmade pottery do not appear (p. 35). Potters used two separate firing methods to achieve either a thorough reduction of surface and biscuit (e.g., 1, 63, 65-67, 69, 190, 216, 227) or a partial reduction that darkened the surface while leaving at least a portion of the biscuit light, usually reddish brown (e.g., 13, 62, 64, 214, 226, 254). Pots fired by the latter method often have as well a thick, dark core, and thus show a multi-layered section. Both firing procedures appear to have been used with roughly equal frequency, and it is perhaps significant that they are also found side by side in wheelmade gray wares (p. 34). In Early Handmade, it may be more than coincidence that dark-fired carinated bowls were incompletely reduced (5, 10, 61, 177), yet otherwise no patterns are discernible in the use of either firing method. Like streakiness from polishing, mixed dark coloration and lighter blushing are common (1,5, $10,62,65,187,214,216)$; the last condition is particularly frequent on incompletely reduced vessels. Where there was little or no penetration in the reduction firing, blushing occurred readily, while light wear and scratches were enough to reveal the lighter biscuit (e.g., 215). 190 may be a special case, since its contrasting light rim seems

[^35]less an accident of firing than intentional variegation. The carinated bowl 177 has a thin, light-colored micaceous coating that lends a glittery quality to the surface. The substance, called here a "mica film," is one of the commonest features of wheelmade Phrygian pottery (pp. 32-33). This single occurrence in Early Handmade is difficult to interpret, but it could reflect influence from wheelmade pottery during a period of overlap (p. 175).

## LIGHT WARES

In contrast with Phrygian wheelmade pottery, where light wares from pre-destruction contexts represent a small proportion of the total monochrome corpus (pp. 35-36), it is notable that Early Handmade vessels of light coloration occur in roughly a $1: 2$ ratio with dark-fired. Reddish browns and browns predominate (2-3, 6, 189, $219,228-229,252$ ), while the reds and lighter tans (i.e., yellowish red, reddish yellow) found in the wheelmade repertory are somewhat fewer ( $\mathbf{6 6}, \mathbf{6 8}, \mathbf{2 3 8}, \mathbf{2 5 1}, 253$, 399). As among gray wares, little uniformity is found in
the coloration of handmade light vessels. The red bowl 399 is conceivably Bronze Age in date (infra).

## VARIEGATED WARES

Variegation, the least common of the Early Handmade firing processes, seems to have been exclusively a feature of closed vessels. In the prevalent color scheme, the exterior is black or gray, and the contrasting interior is reddish brown or red $(\mathbf{4}, \mathbf{1 2}, \mathbf{7 0}, 217,400) .218$, gra inside and yellowish red out, is the single instance of the reverse, while 11 has two light surfaces, reddish brown and yellowish red. Whether these contrasts were intentional is unclear, since the bi-coloration could have resulted from inadvertencies of firing. In any event, variegation recurs on a few wheelmade vessels from pre-destruction contexts. Since some of these are from relatively early strata and of forms that seem short-lived, it is possible that their bi-coloration was somehow connected with Early Handmade (pp. 35-36).

## Shapes

The repertory of shapes in Early Phrygian Handmade. as judged primarily by upper body fragments, apparently comprised only a basic few utilitarian forms. Bowls occur in carinated and plain-rimmed varieties. Closed vessels, all with relatively open mouths, can be divided into two general groups on the basis of upper profile. Lugs, usually triangular in form, are attested in every category, but the evidence for regular handles is limited.

## BOWLS

Early Handmade bowls first appear in EPB II (5-6, 10), Meg. 10-4 (187), and NCT IVb (214). Thereafter, they are present in most pre-destruction contexts. Overall, carinated bowls and those with plain rims occur with approximately equal frequency. The incised 227 from NCT IVa, the largest fragment of an Early Handmade bowl, lacks its rim and is thus unclassifiable.

Carinated bowls to a great extent comprise a series related by profile and details of design (5-6, 10, 61, 177, 189, 251-252). Fabric, however, is not a unifying feature, since the bowls are about equally divided between light and gray. Estimated rim diameters suggest two groupings by size, one between 20 and $25 \mathrm{~cm} .(5,10,189)$ and the other between 30 and 35 cm . across. The rims themselves tend to be high-flaring; that of 6, more broadly flaring and open, is an exception. A particularly notable aspect of the series is the attention given to the upper interior, above the level of carination. Most have a wide, flattened band, often neatly trimmed and promi-
nent, running around the top inside ( $10,177,189$, 251-252). 6 bears a related feature, a series of faceted planes in the same position. Interior faceting also occurs on 61, a bowl whose unusual exterior fluting may have been a substitute for the normal carination. Over half of the bowls are further united by obliquely notched or furrowed rim-edges (5-6, 177, 251-252; p. 26). Other decoration, incised or impressed, also occurs (e.g., 177. 252). Two examples have lugs, one triangular (252) and the other a conical form (251) that recalls the knobs of Knobbed Ware in Troy VIIb. The use of lugs may have been more extensive than is now apparent, since most bowls are represented by no more than small rim sherds.

Only a few real anomalies exist in the carinated shape. 399 has an upright rim that is as different from the others as its fabric. The variegated 237, whose rim is missing. bears a blunt, ridge-like carination. The feature has no parallel among Early Handmade bowls, but does find correspondence in a handmade basin of the Miscellaneous category from the Destruction Level (410; p. 28).

Carinated bowls occur in Knobbed Ware at Troy, but the lack of published profiles hampers comparisons. ${ }^{18}$ Evidence from Korakou and Lefkandi in Greece indicates that the general type had a broader distribution among handmade wares of the late second millennium. ${ }^{19}$ At Troy, however, there had already been a long succession of carinated forms in wheelmade Gray Minyan in

[^36]Troy VI, and in Troy VIIa-b Shape A 93, with a high-flaring rim, carries on the tradition. ${ }^{20}$ The possibility of some interplay between producers of Knobbed and Minyan Wares thus exists. Late Bronze Age strata at Gordion also have yielded a carinated type with highflaring rim that could perhaps point to a local, rather than alien, background for the commonest Early Handmade variety. ${ }^{21}$

In wheelmade Phrygian pottery, carinated bowls exhibit a great variety of forms, most of which differ considerably from those of Early Handmade. It is likely that many evolved entirely within the wheelmade tradition, yet certain types that occur relatively early may have handmade forms in their background. Thus handmade bowls with high-flaring rims (e.g., 10, 189, 251) could have been the precursors of a common wheelmade variety that appears first with 33 from EPB III (p. 45). The more broadly flaring type of 6 may, on the other hand, have led to that represented by 15 from EPB IIb, a bowl that stands at the head of the Class 1 carinated series (p. 44). The anomalous 399 from M4 I may be a Bronze Age product, but its erect, convex rim has at least a coincidental parallel with the Phrygian wheelmade bowls 95 from EPB V and 272 from the Terrace fill. Flattened bands around the top interior, as on 10 and 177, recur on a few wheelmade bowls, perhaps as a survival from Early Handmade (80, 232, 258), yet the trait had seemingly run its course by the destruction period. The use of lugs on a few wheelmade bowls from the Destruction Level also might reflect a continuum (p. 43).

Plain-rimmed bowls have diameters that are almost all between 20 and 30 cm . Dark-firing is commonplace, but $\tan$ wares also occur $(66,238)$. A dominant general group consists of relatively thick-walled bowls with flaring rims ( $62-66,187,190,226,238$ ). On most, the rims have an inward thickening that is either convex $(63,190,226)$ or trimmed to a flattish band ( $64-66,238$ ), as on several carinated bowls. A number of examples also have planed, flattened rim-tops, sometimes with a beveled edge (64$65,187,238$ ). The majority of the bowls are further linked by notched rims and/or incised embellishment ( $62-64,187,190,226,238$ ), features that also occur on carinated specimens. 64 and 187 are the only plain bowls with lugs, yet as noted above for the carinated series, lugs might have been more common. The one on 64 is conical and, like that borne by the carinated 251, recalls Knobbed Ware. 214 is the only handmade plain bowl that falls somewhat outside the common mold. The small size and relative shallowness are unusual (infra), yet the planing of the rim-top finds parallels within the dominant group. The vessel apparently had a rounded base rather than a flattened one or any kind of articulated foot; otherwise,
nothing is known about the bases of Early Handmade bowls. Plain bowls are a rarity in the Knobbed Ware of Troy VIIb 2, yet the rim of the best-preserved example recalls the Early Handmade series in being flaring, inward-thickened, and flattened on top. Moreover, the vessel's incised decoration closely parallels that on the unclassifiable bowl 227 (p. 27). ${ }^{22}$ The similarities suggest at least a general connection, perhaps through a common Thracian background. On the other hand, plain bowls of generally similar proportions occur in Late Bronze Age strata at Gordion. ${ }^{23}$ The anomalous 214 from NCT IVb is possibly a handmade rendition of the indigenous type, with the modification of a flattened rim-top.

Early Handmade plain bowls may, like the carinated, lie in the ancestry of Phrygian wheelmade forms. Wheelmade plain bowls of Class 2 have flaring rims that recall the normal attitude for the Early Handmade series. In EPB IIb, where the class first occurs in this sequence, the gray-ware 19 is an already standardized form with fine clay and thin walls. Yet the basin 20 from the same general context is of coarse, heavy construction like the handmade bowls and also has a planed rim that is paralleled on such handmade specimens as the contextually later 65 from EPB V. The inscribed 202 from Meg. $10-1$ is similar to 20 , and both may represent an early wheelmade variety evolved from handmade (p. 50). The type of inward-thickened, convex rim found on several handmade bowls (e.g., 63, 190, 226) recurs on a number of wheelmade specimens of various classes through the time of the destruction ( $101,284,288,513$ ), and is possibly a trait that carried over. The handmade 63, on which exterior grooving offsets the rim, conceivably points to the background of Phrygian bowls with articulated rims, a category that begins in EPB IIa (8). The simple grooving on 63 occurs on wheelmade bowls as late as the Destruction Level (524-526; p. 51).

## LOOP-HANDLED CUP

A small, loop-handled cup with plain rim from NCT IVb (215) is the only one of its kind known in Early Handmade, and the type has no apparent successors in wheelmade production. The handle is notable for both the doweled attachment and the oblique channeling along the shaft. The latter feature is echoed by a rare detail of wheelmade pottery (p. 108), and it also affords a link between Early Handmade and the broader Balkan tradition (p. 27). The shape is not attested in Troy VIIb, although a handmade cup from a Late Helladic

[^37]IIIC context at Korakou in Greece is similar in having a plain rim and closely set handle attachments. ${ }^{24}$

## CLOSED SHAPES

Closed vessels, all with relatively wide mouths, are divisible into two categories, Groups 1 and 2, on the basis of upper profile. Both occur in EPB I (1-4), while NCT IVb yielded only Group 1 examples (216-219). ${ }^{25}$ Subsequently, the two groups appear in various pre-destruction contexts. Most closed vessels have rims that are between 20 and 35 cm . in diameter, yet a few-primarily of Group l—are smaller, 10 to 15 cm . (1-2, 67, 216). The majority of specimens correspond generally in their technical aspects to the handmade Coarse Ware of Troy VIIb, but several, including a number of unclassifiable body fragments, are closer to Knobbed Ware in finish and/or decoration (67, 69-70, 191, 230, 400).

Group 1 vessels are characterized by upper contours that taper to the rim as either a neck or a steep shoulder (1, 11, 67, 216-219, 228). The rim itself is usually articulated and tends to be of band type (11, 67, 217, 228). 67 is a small-scale version in relatively fine ware. The incised body sherd 69 , with evidence of a tapering neck, may also belong to the group. The vessel is one of the few in Early Handmade that indicate the use of handles (infra), and it probably comes from an amphora. Otherwise, the only lifting device known in Group 1 is the lug on 1.

Group 2 vessels have vertically oriented necks that, where discernible, rise from steeply sloping shoulders (2, 12, 68, 229). Similar upper necks on a number of other specimens suggest that they also belong to this general category of wide-necked containers (3-4, 13, 253-254). A relatively cohesive group within this larger one is represented by $3-4,12,68,229,253$, vessels whose rims are either bands or plain and incised as though they were bands with oblique to vertical dashes (p. 26). 400 is similar in profile to certain members of this inner group (e.g., 3, 229), but it has a plain, unadorned rim. Markedly different is 2 from EPB I, with short, vertical neck and erect rim, while 13 and 254 are the only examples with everted rims. Lugs, triangular and set just below the rim, occur on Group 2 vessels with greater frequency than in Group $1(2-3,12,229) .68$ seems to have had a vertical handle rather than a lug. 254 also may have borne a handle.
24. Rutter, 21-22 and ill. 10 [11]. The handle of the vessel from Korakou, consisting of oval and strap sections, is most unlike the rolled shaft on 215, yet it is an important feature for establishing at least a general connection between the intrusive handmade pottery at Korakou and that at Troy (ibid., 27).
25. Meg. 10-4 yielded a variegated, lugged specimen that is too fragmentary for classification.

With their wide apertures and similar ranges of scale, Group 1 and 2 vessels were probably related in function. Specific features common to both are band rims and incised or impressed decoration on this and other rim types (3-4, 11-12, 67-68, 217, 229, 253). Notched rimedges appear only on Group 1 vessels (218-219), yet the provide a decorative link between closed shapes and bowls. The occurrence of similar elements of design in the Coarse Ware of Troy VIIb 2 very likely points to a common vocabulary of such details within a broader. southeastern European spectrum. ${ }^{26}$ The shapes of Coarse Ware, however, provide good analogues only to Gordion's Group 2 vessels. Shape C 85, new in V'IIb, has a steep shoulder and short, vertical neck, sometimes crowned by a band rim, and is of a scale generally commensurate with that of Group $2 .{ }^{27}$ The type is essentially an amphora, with handles whose upper attachments can come at about the same level as that on 68. Shape C 86 , similar to C 85 but larger, has lugs, as do a number of Group 2 specimens. ${ }^{28}$ In contrast, both types at Troy sometimes have a thick, impressed band at the base of the neck, a common element of Coarse Ware and other varieties of Balkan pottery. The feature is absent on Group 2 vessels that preserve this transition, while its general rarity at any position in Early Handmade (p. 27) is one of the indicators that connections between the handmade pottery of Troy and Gordion are indirect or remote (p. 20).

For Group l vessels, Troy's Coarse Ware has a possible analogue in a large, hole-mouthed storage jar, Shape C $58 .{ }^{29}$ The vessel bears a plain, direct rim whose closest approximation in Group 1 is on the unusual 219. An amphora of Knobbed Ware at Troy seems related to a common Balkan shape with offset, tapered neck. ${ }^{30}$ The tapering upper profile of the Group 1 specimens 216-217 brings to mind the same general type, yet not enough is preserved to show whether the taper belonged to the neck or a steep shoulder. The incised 69, on which the beginning of a tapered neck is preserved, also might be related to the Balkan shape, but here too more of the profile is needed. In Central Anatolia, vessels with sloping shoulders crowned by articulated rims have a long history in the second millennium (p. 93). At Gordion, such types continue through Late Bronze Age strata and occur in a range of sizes commensurate with that of Group 1. ${ }^{31}$ Furthermore, there are some indications that the wheelmade Bronze Age shapes may have been

[^38]rendered in the new technique of dark-firing (pp. 34, 99). The handmade vessels of Group 1 thus might look, at least in part, to local inspiration, but poor preservation is again a hindrance in seeking antecedents. The upper profile of 228, with heary, blocky rim, recalls the banded pithoi of Beycesultan II. ${ }^{3}$

The Phrygian wheelmade repertory includes shapes that recall Early Handmade closed vessels in upper contour and general proportioning. Yet whether Early Handmade actually lay behind these more advanced forms remains an open question, in part because other potential models exist for certain shapes. Thus, the low-necked jars, dinoi, and similarly proportioned storage jars of wheelmade Phrygian pottery are analogous in design to Group 1 vessels, but it is also possible that they might be more directly related to the similar Bronze Age types or look to other Iron Age forms (pp. 92-93, 98-99). Some suggestion of a connection with Early Handmade is provided by the wheelmade 194 and $\mathbf{2 1 0}$, from Meg. 10-2 and 1 respectively, for not only do the vessels recall Group 1 in their upper contours but they also echo an occasional feature of handmade closed forms in general through their variegated coloration (pp. 35, 99-100). Another specimen (153) could be a wheelmade, grayware version of the handmade type represented by 228 from NCT IVa (p. 100). Yet, as noted above, a similar form also occurs in the Bronze Age. In any event, 153, $\mathbf{1 9 4}$, and 210 are all of specific types that seem not to have continued, and thus they may reflect elementary stages
of Phrygian wheelmade production that were perhaps still in sight of the active Early Handmade tradition.

Group 2 vessels also have formal correspondences, and possibly descendants, in the Phrygian wheelmade corpus. 68 seems to have been an amphora. Its profile, and those of 12 and 229 , preview a favored contour for wheelmade open-mouthed amphoras, one that was gradual and shallow in ascent from steep shoulder to wide neck (e.g., 305-306, 900, 926-927, 932). The band rim on 68 is an unusual feature for these wheelmade amphoras, but it might be reflected in the relatively early 51 from EPB III, probably a krater (p. 102). Another possible direction of development may have led to onehandled utility pots, a common wide-necked type that first appears in EPB III (49); a few handmade examples are known from the Destruction Level (p. 28). Since the shape is poorly attested outside Phrygia, a local evolution may be indicated (p. 72). The handmade 68 again provides a comparable upper profile, and in this case the vessel's band rim does prefigure a common feature on the wheelmade shape. The lugged 2 from EPB I also could represent an ancestral type; that the form may have continued largely unchanged into wheel production is suggested by the gray-ware 27 from EPB IIb (p. 107). The band-rimmed 253 matches the general scale and upper profile of the kantharos krater and its onehandled counterpart, the large round-mouthed jug, and possibly has a bearing on the ancestry of these characteristically Phrygian shapes (p. 54).

## Embellishment

Decoration imparts a considerable measure of coherency to the corpus and is at the same time instrumental in relating Early Handmade to the traditions of southeastern Europe and the Troad. Incised ornament is most common and ranges from plain, straight lines to geometric motifs. Also occurring with some regularity are rows of simple impressions, mostly round or oval. Both types of decoration find parallels in the handmade pottery of Troy VIIb. Relatively few examples of Early Handmade are totally devoid of decoration (1, 10, 65-66, 189, 214, 216, 228, 254, 399).

Rims frequently carry decoration. On bowls both carinated and plain, notched rim-edges are common, the notches tending to be closely set and oblique rather than vertical (5-6, 62-64, 187, 190, 226, 238, 251). A probable refinement of the idea occurs on a few carinated bowls whose rims are obliquely furrowed or channeled with a wider instrument to create a rope-like effect ( 61,177 , 252). Rim-notching appears occasionally on Group I closed vessels (218-219), but far better represented on

[^39]closed shapes are oblique or vertical lines placed in a row on the face of the rim, itself either plain or a band (3-4, 217, 229, 253; see also 411-412, p. 28). Parallel in use are the large, oval impressions on the band rim of 11, and the vertically incised band placed just below the rim on 12. In the handmade pottery of Troy VIIb, both rim-notching and the favored rim decoration on closed vessels find parallels, in almost all cases with Coarse rather than Knobbed Ware. ${ }^{33}$ The small Group 1 vessel 67 has a different and unparalleled scheme of rim adornment that consists of horizontally incised lines on the rim-face and a row of small round impressions just below. The latter device recurs on 13, where it marks the base of the everted rim.

Parallel to the architectonic use of incised and impressed work on rims are the special treatments given the

[^40]carinations of a few bowls. 252 has a prominent row of circular impressions running just below the carinated edge and across a lug, while the blunt carination on 237 is emphasized by obliquely incised lines and a border of tiny impressions (cf. also 410, p. 28). Similar to the treatment on 237 are the raking lines that underscore the inset of the neck on 69. The combination of horizontal lines and oblique dashes on the upper shoulder of 70 also marks a transition, as does the row of sizable circular impressions in the same position on 231. The latter and 13 above have parallels for their use of impressed ornament in Troy VIIb. ${ }^{34}$

Incised primary decoration on the body of a vessel is common in Early Handmade, yet the fragmentary nature of the material does not allow a good understanding of overall programs. Bowls were particularly favored for such adornment, but more than a few closed vessels bear similar kinds of work. In both their designs and their generally good finishing, these decorated specimens are analogous to the Knobbed Ware of Troy VIIb 2. ${ }^{35}$ The most frequently recurring genus of pattern is rectilinear, with one or more lines in general zigzag formation. Yet since in many cases only a small portion of the design is preserved, it is impossible to know whether zigzags, triangles, chevrons, or perhaps lozenges are represented ( $64,177,191,226,230,252,400$ ). The best view of an overall scheme is provided by the bowl 227 from NCT IVa, on which a large, multi-line zigzag envelops much of the body. The decoration has a close parallel in both type and placement on a bowl of Knobbed Ware, in which such rectilinear ornament is generally common. ${ }^{36}$ The closed vessels 191 and 230 have related designs on their shoulders and thus recall the similar treatment of a large amphora in Knobbed Ware. ${ }^{37}$ The Group 2 vessel 400 has the same general kind of pattern on the neck. The designs sometimes appear beneath a border of horizontal lines $(\mathbf{2 2 6}, 400)$, and on 64 there is also an undulating row of tiny pricked ovals. The bowls 63 and 190 preserve only horizontal lines, perhaps above a now missing design. The pattern on the closed vessel 230 has as its upper border a narrow strip of oblique lines enclosed by straight ones, an ancillary pattern that is paralleled in Knobbed Ware. ${ }^{38}$

Other types of incised primary decoration are infrequent. The bowl 62 has a double wavy line on the upper body. The probable amphora 69 is too poorly preserved to discern the scheme, but the proliferation of incised ornament generally recalls some of the more elaborate programs seen in Knobbed Ware. ${ }^{39}$ The plain bowl 238

[^41]shows an unusual approach to decoration in the combination of incised vertical lines and impressed dashes that resemble stitching.

The incised handle sherds 195-196 from Meg. 10-2 may be either Early Handmade or early examples of patterned incision in the Phrygian wheelmade repertory (p. 14). In either assemblage, the pieces are unparalleled in their uses of incised chevrons, although general analogies exist in the decoration of the handle tabs characteristic of Knobbed Ware. ${ }^{40} 382$ from the Terrace fill is shaped like an arrowhead and incised with a feather tree. The sherd may be part of a handle, yet it is again uncertain whether it belongs to Early Handmade.

Plastic and other types of relief decoration are rare in the Early Handmade corpus. The body of the large Group 2 vessel 229 has an unclear program of impressed ridging with curved ends, while 256 bears a scheme of notched, snaky ridges. Both recall a common feature of Coarse Ware from Troy and of handmade Balkan pottery in general. The ridgework at Gordion, however, does not occur in the same architectonic manner that prevails at Troy and elsewhere, i.e., to mark the base of a neck, but seems instead a more purely decorative element. ${ }^{41}$ The undulating rather than straight ridges also have no parallels at Troy, but that on 229 finds correspondences in Istanbul. ${ }^{42}$ The bowl 61 has horizontal fluting on the exterior. The prominent grooving in a similar position on 177 may be an attempt at the same effect. On a larger scale, broad channeling accompanies the ridgework on 256. Analogous treatments occur in Knobbed Ware, but it is probably significant that Early Handmade provides no parallels for the vertical and oblique bodyrippling that is characteristic of the Trojan pottery and its European kin (p. 20). ${ }^{43}$ Such work does occur, however. on wheelmade vessels from Tumuli P and 111 (p. 120). The obliquely channeled handle on the cup 215 from NCT IVb represents a different application of the idea, and is a feature that recurs within the broader Balkan tradition. ${ }^{44}$

Wheelmade Phrygian pottery also made use of nonpainted embellishment, but it is uncertain whether Early Handmade practice lay in the background. The various conventions for rim decoration that help to integrate the handmade corpus do not recur in wheelmade, although the emphasis given to rims in painted pottery conceivabls stems from these older ideas (p. 139). Such simple impressed motifs as ovals and rounds almost never

[^42]appear in the wheelmade Early Phrygian repertory (323), while the decorative ridging on 229 and 256 has no real parallels in wheelmade. It is possible, however, that the latter practice lay behind curving handle trails, devices that appear as early as EPB III (p. 109).

Patterned incision appears with some regularity in wheelmade Phrygian pottery, where certain kinds of designs, e.g., zigzags and triangles, recall the favored motifs of Early Handmade (pp. 115-116). In the wheelmade assemblage, however, the uses of patterned incision tend not to be the same. Bowls were the principal recipients of such incision in Early Handmade, yet with the single exception of the basin 482, whose decoration is
not like that of handmade pottery, wheel-formed bowls do not bear such work. At the same time, the incised designs of wheelmade pottery are often used sparingly and relegated to narrow, sometimes inconspicuous zones, as opposed to the usually prominent display of patterns in the handmade corpus. Distribution might also isolate the patterned incision of wheelmade pottery from that of Early Handmade. The former occurs with some regularity in the Terrace fill and is well represented in the Destruction Level. Yet with the possible exception of the handles 195-196, patterned incision does not appear on wheelmade Phrygian pottery in the EPB sequence or in NCT IVb (p. 114).

# Miscellaneous Handmade Pottery 

(Figure 5, Plates 8-9)

## Terrace: $\mathbf{2 5 5}$

Although Early Handmade may have passed out of use at Gordion by EPB III (p. 21), half a dozen vessels from the Destruction Level attest the later existence and use of competently formed handmade pottery at the site. One is a basin (410), and the others are closed shapes, three utility pots (411-413) and two spouted jugs (414-415). A small amphora from the Terrace fill (255) also suggests late use because of its relatively good state of preservation, as though it were a discard of the time. No single explanation seems to account for these vessels. Some bear traits that recall Early Handmade, and thus they may represent either "antiques" or a lingering tradition of hand-formed pottery somewhere in Phrygia. Others, including two painted specimens, have no parallels in the Early Handmade assemblage as presented above.

The carinated basin 410, found as a fragment in the storeroom behind Meg. 4, could have been a scrap from an earlier age. The oblique notching on the carination recalls 237 , while the lug is generally reminiscent of Early Handmade practice. In contrast, the broad and prominently flattened rim-top of 410 represents an approach to forming that has no close parallels in the handmade corpus.

The one-handled utility pots 411-412 have the general form and proportions of their common wheelmade counterparts. At the same time, they resemble certain Group 2 contours and also have obliquely incised band rims recalling those on Early Handmade closed vessels. Such rim decoration does not occur on the wheelmade shape. It is possible that the two vessels were curios, somehow preserved from the time when Early Handmade was actively produced. Yet given their contexts and the fact that at least 411 was in use on the floor of TB 3, it

## Destruction Level: 410-415

seems more likely that the vessels represent a continuation of handmade production. To follow the circumstantial evidence further, it may be more than coincidence that two "heirlooms" from separate buildings should be so much alike, perhaps even from a single source. 413, found inside a large amphora, is more crudely formed and considerably smaller than 411-412, but it still follows the general standards of the wheelmade shape. Its trimmed strap handle with concave face seems to be a feature borrowed from wheelmade pottery, whereas the bosses on the shoulder may be a reflection of the knob-like lugs that appear occasionally, and with a recollection of Troy's Knobbed Ware, in Early Handmade. The closest wheelmade parallel is $\mathbf{8 4 9}$.

Unlike the vessels above, the spouted jugs 414-415 and the small amphora 255 have no correspondences with Early Handmade except in their basic method of production. The shapes lack even remote parallels in that assemblage, where narrow-necked forms of any type are unknown. In similar manner, the painted decoration on 255 and 415 is totally alien to Early Handmade practice. 255 is one of two bichrome-on-ground amphoras, the other being wheelmade, that may have come from the eastern plateau (p. 165). The large spouted jug 415, on the other hand, is decorated in the Chevron-Triangle style, a characteristically Phrygian mode of painting that occurs in the Destruction Level and in the relatively late Tumuli P and III (pp. 157-158). The vessel might thus be part of a lingering tradition of handmade and reflect the influence of wheelmade pottery, where jugs of analo-gous-albeit smaller-forms occur. At the same time, however, both the general shape and the painting style of 415 have Balkan correspondences, and it is conceivable
that the vessel looks more directly to southeastern Europe (p. 65, pp. 134-135). The other handmade jug, 414 from the $S$ corner of the palatial Meg. 3 , is poorly formed and bears a clumsy, disproportionate handle. This vessel
also may be the product of a lingering tradition, but since it is generally reminiscent of Anatolian Early Bronze Age jugs, it might already have been an antiquity in its context. ${ }^{45}$

## Crude Handmade Pottery

(Plates 10-13)

## EPB IIb: 14

This series of small, crudely formed vessels has a distribution that is essentially the reverse of that of Early Handmade. The pots occur in abundance in domestic units of the Destruction Level, but are practically unknown in earlier contexts (14). The principal shape is a jar or "pinch-pot" that, as the latter name implies, was formed with fingers and thumb, and thus it is never taller than the grasping length of a hand, i.e., less than 10 cm . Other forms, except for one bowl (416), are essentially modifications of the basic pinch-pot by such additions as handles, side-spouts, and trefoil mouths. Several specimens are miniatures (417, 419-420, 423-424). Fabrics are almost invariably coarse, while surfaces generally receive only cursory smoothing. Walls tend to be thick and uneven, bases are usually rounded and not well defined, and the overall shape is often asymmetrical. Rims generally lack detail or articulation. Handles are poorly formed, rolled appendages.

If a connection exists between these humble pots and the far more competent tradition of Early Handmade, it is not readily apparent. Crude Handmade lacks the various niceties of detail and decoration that characterize Early Handmade production. At the same time, shapes are for the most part different. Certain specimens recall the contours of Group 1 closed vessels (e.g., 429-430), yet as with the series as a whole, they are of considerably smaller scale than any Early Handmade vessel. Similarly small creations do occur, however, in the Phrygian wheelmade repertory, which also has parallels in shape for several Crude Handmade types. These correspondences, as well as the series' strong representation in the Destruction Level, suggest a tradition of pot-making that had at best remote ties with Early Handmade and that drew principally on the wheelmade repertory for models. It is suspected that many of the vessels were the works of amateurs, perhaps formed on the spot to meet routine needs and baked in cooking ovens, if fired at all before the conflagration. Several were found inside large vessels, with more than one sometimes occurring, but clues regarding use are few. 429, which appeared in a large patch of loose wheat on the floor of CC 3, may have been a scoop for grain. Two from TB 4 were in use as stoppers for large trefoil jugs at the time of the destruction, but like other shapes found serving a similar purpose it is doubtful that they were made for this specific function.

## Destruction Level: 416-434

The only known example from a pre-destruction context is $\mathbf{1 4}$ from EPB IIb, a pinch-pot with trefoil mouth. The gap between this specimen and those from the Destruction Level is probably fortuitous, and it may result from low, if any, firing and the subsequent returning of earth to earth.

Vessels from the Destruction Level present a combination of types that find good counterparts in wheelmade production and forms that are peculiar to Crude Handmade. Thus the bowl 416 bears little resemblance to wheelmade varieties, whereas 417 is a miniature roundmouthed jug that approximates rather closely wheelmade examples of the shape (cf. 574). Similarly, the trefoil jug 418, one of the better-formed specimens in the category, seems generally based on wheelmade types.

The mugs 419-421 represent a shape unparalleled in the wheelmade repertory. Their keg-like, open bodies and unusual handles are particularly alien to wheelmade practice, and thus the pots may be good indicators of amateur work. 421, found with a second mug of similar form in a storage vessel in CC: 3, may have been a scoop, as possibly was 420 . The tiny 419 , however, seems to have been formed over a fingertip and is the smallest Early Phrygian vessel known. Perhaps it was a toy.

The side-spouted jug 422, one of two handmade examples known, has a single wheelmade counterpart of similar size (791). Possibly inspired by the general idea of the side-spouted sieve jug, but too small to allow more than a single pour-hole, the vessels may have served as feeders (p. 165).

Pinch-pots, essentially little jars, include a few miniatures ( $\mathbf{4 2 3} \mathbf{- 4 2 5}$ ), but they are for the most part between ca. 5 and 10 cm . in height (426-434). The most frequent of Crude Handmade shapes, they occur in a variety of forms, and are generally reminiscent of small wheelmade jars of low-necked type (e.g., 940-947). A few have holes or pierced lugs set at the top (431, 433-434). 429, of fine clay and well polished, is a rare exception to the rule of coarse fabric and summary finishing.

[^43]
# Wheelmade Pottery: Fabrics and Ceramic Practices 

Early Phrygian wheelmade pottery displays a wide range of ceramic techniques and processes. The entire corpus supplies information on fabric quality and finishing procedures. For original colors, however, it is necessary to rely primarily on the pottery from pre-destruction contexts and early tumuli, since the fire that destroyed the citadel had a great effect on coloration (pp. 38-39). Most vessels from the Destruction Level are here classified as "indeterminable" if fired two or more colors, or "now buff," "now red," etc. if the coloration is generally uniform.

Within the body of material that allows reliable color identification, the major division is between mono-
chrome gray wares and those that are light- or clearfired. The latter include both monochrome and painted pottery, and are further classifiable as buff, red, or tan. The present terminology for color does not alwavs follow that of Munsell, although this objective index does serve as a descriptive guide. Thus, "buff" here denotes the "light browns," "(very) pale browns" and "pinks" of Munsell (color pl. I \{2\}); similarly, "tan" is a general rubric used for Munsell "reddish brown," "reddish yellow," and "yellowish red" (color pl. II \{3|). These non-scientific terms of reference can be checked against the Catalogue entries, where Munsell color names, but not the specific codes, are given. ${ }^{\prime}$

## General

Several aspects of fabric and technique are relevant to the entire corpus. Clays range in quality from very coarse through very fine, a grading based on the relative concentration of impurities. Inclusions are normally bits of rock, although some clays have a gritty texture suggestive of sand or fine gravel. Coarser wares may have uneven, bumpy surfaces caused by inclusions, while often the explosion of these particles (limestone in particular) under heat has resulted in spalling or pitting of the surface. Spalling is especially prevalent among vessels from the Destruction Level, where the secondary firing they received may in many cases have been responsible (e.g., 723). Yet since spalling is also found on vessels that were not refired, i.e., from tumuli and pre-destruction contexts, it presumably could have occurred as well in the original firing. Mica, not considered an impurity, is present in varying concentrations in most clays, and is sometimes extremely dense and glittery.

Regardless of the degree of refinement, clays were generally well prepared to create a compact biscuit with little or no sponginess. Small vessels are usually of fine fabric and have walls that are sometimes as thin as $2-3$ mm . (e.g., pp. 54, 62). As size increases, fabrics
generally become coarser and heavier, to the point that the largest vessels have walls as thick as $2-3 \mathrm{~cm}$. (e.g., p. 88). However, some notable exceptions exist. Small vessels are sometimes relatively thick-walled and/or as coarse in fabric as far larger shapes (e.g., 439, 573, 665 , 684,834 ), while one-handled utility pots are almost invariably coarse, regardless of size (p. $\overline{7} 0)$. On the other hand, a number of large vessels, particularly openmouthed amphoras, are of relatively fine fabric and have remarkably thin walls for their scale (p. 82-83).

Three methods of finishing are in evidence by the time of EPB III: wheel-finishing, smoothing, and polishing. Any one can occur in combination with a slip or mica film (infra), and it is not unusual to see one technique of finishing used with another. In general, the methods of finishing have no regular correlation with fabric quality or scale.

1. The decision not to molude Munsell code numbers is based on the difficulties inherent in attempung such exacutude. The coloration of vessels is not always thoroughly uniform. Noreover, in a number of instances second readings were found not to correspond with the first in terms of code within a particular color designation. To presume a higher degree of accuract than the color name seemed unwarranted.

In wheel-finishing, rotation marks were not removed, and as a result the surfaces are roughly textured and matte. The method is the only one that is not found on painted wares, while within the monochrome corpus it is the least frequent. In the Destruction Level, the only shape that sometimes has wheel-finishing as the sole technique is the one-handled utility pot (e.g., 836-837, 840, 843). In pre-destruction contexts, where the method is attested as early as EPB IIb in both gray and light fabrics ( $\mathbf{1 6 , 2 5}$ ), the material is almost always too fragmentary to indicate whether wheel-finishing was used alone or in combination with another technique (e.g., 49, 122, 144, 201, 211, 233, 310, 377).

The commonly used technique of smoothing obliterated wheel marks, but did not produce a lustrous surface. Smoothing was sometimes carefully executed to produce a fine, even, albeit matte finish (e.g., 466, 474, 634, 665, 696, 707, 738, 873), but in a number of instances it was done cursorily, so that the surface shows both wheel marks and smoothed areas (e.g., 483, 495, 716, 835, 899). The intentional, orderly combination of smoothing and wheel-finishing was also practiced, in particular on one-handled utility pots and related shapes, where the smoothed lower body provides a textural contrast with the wheel-finishing above (573, 838-839, 842, 846-848, 978; p. 71).

Polishing, by far the most popular finishing technique, imparted varying degrees of luster. The marks of the polishing tool are often prominent, appearing either as hand strokes, going in various directions, or as horizontal lines if the finishing was done on the wheel. Potters frequently used both approaches on a single vessel. Many bowls, for example, show wheel-polishing on one surface, interior or exterior, and hand strokes on the other (e.g., 447, 461, 487, 493, 524), while closed shapes sometimes have hand-polished necks and wheel-polished bodies (e.g., 125, 532, 743, 747; see also 902). The intensity and evenness of polishing varied considerably, from token, cursory efforts that left much of the surface still matte, to finishes that resemble well-polished stone (e.g., 1041). Such variation can also occur on a single vessel. The rims and handles on large shapes, for example, occasionally received greater attention than other parts of the pot, and are thus more lustrous (e.g., 308, 335, 341, 355, 731-732, 993). Polishing was sometimes used with smoothing or wheel-finishing on separate parts of a vessel, the result being a contrast of both texture and color (e.g., 36, $88,99,144,147,269,348,367,460,498,513,564,694)$. The combination may have led to pattern-burnishing, a decorative technique that is attested only once for the Early Phrygian period (TumP 87bis); yet it was to have considerable popularity in later Phrygian times. ${ }^{2}$ A carinated bowl of variegated light ware from EPB IIb (17) is notable in displaying all three finishing methods.

[^44]In considering the coatings used to enhance surfaces, a distinction is made between regular clay slips and "mica films." That Phrygian potters made the same distinction is suggested by their occasional combining of a slip and a mica film on a single vessel (e.g., 31, 48, 73, 199, 901, 908, 911, 993; TumP 64, 72-73, 91-92, 97-99). A third type of surface covering is the light-colored ground-coat used infrequently as a base for painted decoration (p. 38). Relatively few vessels are without some sort of detectable coating, and the omission has no apparent correlation with size or quality (e.g., 15, 468, 575, 584, $600,602,655,657,665,676,704,755,763,788$ ).
Slips used as the sole surface layer are generally less frequent than mica films, although in certain categories they are more in evidence and sometimes even predominate. Thus painted vessels, regardless of the quality of the clay, were usually slipped to ensure a good surface for decoration, and perhaps also to hide glitter if the clay was micaceous (p. 37). Slipping by itself occurs with some frequency on coarse-ware pottery, especially in the Destruction Level, and often provided a base of fine clay for smoothing or polishing (e.g., 16, 98, 142, 359, 407, 443, $469,482,885,887,902,997-998)$. Vessels of fine monochrome ware occasionally bear a polished slip instead of a mica film. Such slips are virtually unknown from predestruction contexts (311), but they occur on a number of vessels from Tumulus P (TumP 65, 70, 74-78) and are one of the common traits of the amphoras of mediumfine quality from Tumulus MM (MM 372-377). All these examples are of gray ware, as were perhaps a few vessels with polished slips from the Destruction Level $(455,515$, 963 ). The burned citadel has yielded a greater number of polished-slip specimens that are now light in color, with red and tan surfaces predominating (e.g., 543, 574, 580, $590,662,691,759,945$ ). That individual potting sources were not always consistent in methods of finishing is suggested by a few formally related groups in which both polished slips and mica films occur (e.g., 582-583, 659660 ). The producers of the low-necked jars and dinoi found in the Destruction Level tended to avoid mica films in favor of slips (p. 92).
The term "mica film" denotes a micaceous layer present on most Early Phrygian monochrome vessels. By its very nature, the film imparts a glitter and seems to have been favored for this reason, i.e., as an enhancement for otherwise plain surfaces. The appearance is often metallic and may betray a desire for clay vessels to look like bronze. It is likely that the film was often inherent in heavily micaceous clays, with the mica particles becoming parallel to the surface and combining with water in the turning process to create a kind of self-slip. ${ }^{3}$

[^45]If this property of the clay had not been desirable, the surfaces could have been covered with a non-micaceous slip. ${ }^{4}$ Several vessels, however, indicate that mica films were at least occasionally additives, probably refined from heavily micaceous clays. The wide-mouthed trefoil jug 769 shows that the substance was sloshed around the interior as a kind of wash over the wheel-finished surface, while a few otherwise unremarkable pieces have drip marks resembling hardened masses of powdered graphite. In a number of cases the mica film appears to have been applied with a brush, sometimes unevenly (437, $548,556,567,675$ ), and a few bowls reveal selective use of the substance on either exterior or interior (89, 435). On some vessels an added mica film is indicated because the clay itself either is without an appreciably high mica content (e.g., 76) or has mica grains of a size different from those of the film. Separate application may explain why mica films are often preserved only in patches or traces, especially in the many cases where they overlie an already polished surface, a base to which they might not readily have adhered (infra).

By EPB II mica films had become an established feature of wheelmade gray and light wares (7-9, 25). Their presence on wheelmade body sherds of gray ware in NCT IVb may indicate a yet earlier phase of use (p. 14). Throughout the Early Phrygian sequence, mica films are the single most recurring element in Phrygian monochrome pottery. They are even found on a few painted vessels, an application that apparently had ceased by the destruction period but that may have led to the occasional use of micaceous slips as a base for painted decoration (p.37).

The consistency, texture, and treatment of mica films vary considerably through the sequence. They can occur as thin, transparent layers barely veiling what lies beneath, or as sparkling, blanketing masses so dense and heavily micaceous that surface coloration comes largely or wholly from the mineral itself, usually golden, silvery, or buff (e.g., 31-32, 72, 83, 88, 90, 529). When films were unevenly applied, the result was a mottling of mineral color and clay ground, an effect particularly evident among pre-destruction gray wares (e.g., 8, 18-19, 21, 79, $81)$. The grain size of the mica ranges from particles that
are difficult to detect by eye (e.g., 552,631 ) to noticeable flakes (up to $1-2 \mathrm{~mm}$.) that provide some of the most remarkable examples of surface glitter (e.g., 563, 565, $578,659,752,761,769$ ). The inherent shininess of the film was normally enhanced by polishing. In many cases mica films seem to overlie already polished surfaces, and are themselves polished as the final step in finishing (e.g., $547,553,675,769$ ), a sequence that suggests separate application of the substance. Vigorous polishing often disrupted the evenness of the film, resulting in much the same kind of streakiness that can occur with a regular polished slip. Potters sometimes left the film unpolished, as though to take advantage of the natural glitter without going through the effort of polishing. The practice bears no relationship to fabric quality or vessel size. In a number of these cases, mostly from pre-destruction contexts, mica films appear over wheel-finished surfaces, and were perhaps inherent, brought out in the turning (e.g., 25, 97, 122, 201, 233, 310, 329, 346). More often, however, the film was smoothed, sometimes over a polished ground (e.g., 51, 87, 197, 307, 533-534, 901, 907-910). The usual result was a paradoxical combination of glittery shininess and rough, grainy texture, not unlike that of brushed metal or of bronze when the patina has been stripped in strong cleaning processes (e.g., 293, 437, 567, 576).

Mica films are not new in Anatolia when they appear on Early Phrygian pottery. Although not a characteristic of the local Bronze Age, their presence in Beycesultan III-I on "imitation metal ware" seems to have been as widespread and common as in Iron Age Gordion. ${ }^{5}$ Interpreted there as a micaceous wash, the substance has a color range of gray, red, and "gold" that likewise prefigures Phrygian mica-film wares. A few bowls with heavily micaceous surfaces, but without the same appearance as Phrygian mica films, occur in the earliest Iron Age strata at Gordion. Thought to have affinities with Western Anatolia, the vessels may have a bearing on the source of the Phrygian practice (pp. 176-177). ${ }^{6}$ The single occurrence of a mica film in Early Handmade pottery (177) seems insufficient grounds to postulate a background in this tradition (p. 23).

## Monochrome Wares

At least 85-90\% of Early Phrygian ceramic production seems to have been in monochrome wares. In predestruction contexts, about $80 \%$ of the unpainted vessels

[^46]represented by rims are gray, while in early tumuli gray pottery would have been the exclusive monochrome medium were it not for a red polished amphora from
5. See Lloyd and Mellaart, 52-80. For the controversy over the date of Beycesultan III-I, Middle vs. Late Bronze, see. MI Mellink, BiOr 2 1/1-2 (1967), 3-9 (Middle); J. Mellaart, AnatSi 20 (1970), 55-67 (Late); J. G. MacQueen, The Huthtes (London, 1975), 89-90 (Late).
6. Gunter, 29-30 ("Wheelmade Buff or Orange Mucaceous").

Tumulus ${ }^{W}$ (TumW' 72) and an odd, black-coated amphora with light clay from P (TumP 94). It was no doubt this strong preference for unpainted pottery that led
producers to develop a wide range of ways to enhance their monochrome wares, one being the extensive use of mica films (p. 41).

## Gray Wares

The high frequency of dark-firing in Early Handmade pottery parallels the great popularity of wheelmade gray wares at Gordion. Both traditions also show the same two methods of firing gray pottery, by either thorough or partial reduction (p. 22). These common aspects may indicate that Early Handmade formed the immediate background of wheelmade Phrygian gray wares, but the steps that might have led from one to the other are largely obscure. In the EPB sequence, any transition is to a great extent lost between the Early Handmade of EPB I and the presence in EPB IIa-b of wheelmade gray wares that differ little or not at all in substance and technique from their successors. Both thorough and partial reduction occur in EPB II (e.g., 8-9, 15, 21 vs. 7, 16, 27), as do finely levigated clays (e.g., 8, 19, 21, 188), well-polished surfaces, and mica films. These advanced technical features are consonant with the overall level of ceramic development reflected in EPB II (pp. 178-180).

An intermediate stage (or stages) in the production of gray pottery may be represented in NCT IVb, where a relatively few examples of wheelmade gray ware occur with Early Handmade and much Late Bronze Age material. The hemispherical bowl 220 , itself of a shape that does not survive (p. 49), is similar in fabric and finish to the Early Handmade loop-handled cup 215 from the same context. Both were reduced for such a short period of time that any wear on the gray, cursorily polished surfaces revealed the much lighter, reddish brown biscuit. In the partially reduced wares of EPB II and later, the gray in most instances penetrates the biscuit at least enough to minimize the chances for such contrast through light surface damage. Other finds in NCT IVb possibly reflect another aspect of the early production of gray wares. 223-224 are large, coarse vessels that may have been dark-fired renderings of a type of Anatolian Late Bronze pithos (p. 99). 224 is gray throughout, whereas 223 has a biscuit of mixed gray/brown coloration and a gray surface with the kind of lighter blushing that often occurs on Phrygian gray wares. 222, a large vessel with a lightly ledged rim, and 225, possibly a hole-mouthed jar, are both of well-compacted, sturdy fabric, expertly thrown, and have slipped, wheel-finished surfaces. The aspects of technique recall Late Bronze Age production both at Gordion and elsewhere, ${ }^{7}$ yet the two specimens also have largely gray surfaces, unlike the usual buffs and browns of the Late Bronze Age in Central Anatolia. The dark coloration is uneven, with lighter blushing in colors
7. Ibvd.. 2 s .
familiar from Hittite-period wares. Such lack of uniformity, and the gray coloration itself, could have resulted from secondary firing, but it is also possible that the vessels were intended to be gray. All four examples, 222-225, conceivably belong to a time of cultural intermingling, when indigenous potters were learning from newcomers the technique of reduction firing and applying it to their own ceramic tradition (p. 175). The shape of 223-224 seems to have been short-lived in the Iron Age repertory, but 222 and 225 may be prospective of subsequent developments (pp. 93, 102).

The great quantity of gray wares in pre-destruction contexts and early tumuli, and also in later times on the City Mound, is in notable contrast with the evidence for dark-fired pottery in the Destruction Level. Here, of over 1200 vessels inventoried, fewer than a hundred are now gray, with no signs of having been otherwise originally. Many come from the Palace Area, Meg. 3 in particular (e.g., 526, 528, 550, 553, 681, 741, 756, 766, 768, 784, $888,939,960,990$ ), while the TG pottery depot housed a number of others (e.g., 455, 487, 489, 560, 563-564, $\mathbf{8 5 0}$ ); fewer are known from the domestic TB and CC units (e.g., 438, 749, 847, 866, 1010). It is likely that many more, probably the majority, were gray before the fire, but which ones, and in what proportion with light wares, is impossible to determine (pp. 38-39). The unit between Megs. 9 and 10 (p. 7) yielded almost exclusively gray wares. Typologically close to pottery from the Destruction Level, the material was not subjected to the fire, and thus may provide some indication of the originally high proportion of dark-fired pottery at the time of the disaster.

The range of colors in both biscuit and surface varies so considerably in Phrygian gray pottery that it would be misleading to speak of a single, uniform "ware." One contributing factor, as in Early Handmade (p. 20), is the presence of two firing procedures, resulting in either thoroughly reduced gray products or vessels whose surface gray barely penetrates the biscuit, itself usually reddish brown or light brown. In many instances, vessels fired by the latter, partial method have a gray core, sometimes so thick that only a strip of light-colored clay is sandwiched between the core and the gray of the surfaces (e.g., 7, 72, 81, 112, 133, 140, 158, 201, 307, 329). This dichotomy in the production of gray pottery is difficult to explain in terms of ancient methodology, especially since the visible result would in either practice have been the same, a gray surface. The two methods might reflect parallel traditions that were passed on by successive generations, in the kind of conservative vein found
among modern-day primitive potters. In any event, some discernible patterns of use indicate at least a degree of selective application. In EPB V and the Terrace fill, for example, large amphoras and storage jars normally exhibit partial reduction, whereas the small shapes from these and other pre-destruction contexts were fired in both ways indiscriminately. In the Destruction Level, among the relatively few vessels that are now gray, thoroughly gray biscuits are much in evidence in all shapes, but the evidence is to be considered with caution. Outside the citadel, partial reduction is almost universal for the gray wares of Tumuli $\mathrm{W}, \mathrm{P}, \mathrm{MM}, \mathrm{X}$, and Y. In Tumulus III, however, both methods of firing seem well represented.

The surface coloration of gray wares is often uneven, probably because of the difficulty in maintaining a reduction atmosphere that was both constant and uniform. Blushing is one of the most familiar marks of uneven firing (e.g., 120, 305). The condition is particularly common on vessels that underwent partial reduction, such as those from early tumuli, and is normally close in color to the underlying biscuit (e.g., TumP 70, 72, 79, 88-89, 91, 104; MM 372; TumW 63, 65-67). Less striking as examples of uneven firing are surfaces that show more than a single tone of gray, sometimes in mottled fashion and sometimes with patches of one or more tones amid the predominant gray color (e.g., 20, 36, 95, 273, 308; see also 73). Beyond the variables in reduction firing, mica films and unevenness in finishing also help to account for a lack of homogeneity in surface appearance.

The normal range of surface color among reduced wares from pre-destruction contexts on the City Mound is dark gray to gray. ${ }^{\text {. }}$. .ext in frequency is very dark gray, often close to black and sometimes grouped with that color under the rubric "black polished." 9 True black is relatively rare in these early contexts (e.g., 21, 35, 38, 84, $105,157,371,378$ ). Toward the opposite end of the range, clay tones of light gray are overall the least frequent ( $98,142,244$ ), although light gray, "silvery" mica films over darker surfaces are common. Vessels from the Destruction Level that are now gray exhibit a similar range of surface coloration.

In early tumuli the pattern of coloration is not the same as on the contemporary City Mound. Very dark gray and black surfaces prevail by a wide margin over lighter ones (e.g., TumP 68), and true black is particularly abundant. Somewhat over half of the reduced vessels from Tumulus P are black, including most of the small fine-ware shapes and dinoi, whereas practically all the pottery from MM is so colored. Black vessels also occur in Tumuli X (P 3137) and Y (P 3159, P 3160). This discrepancy between City Mound and tombs, especially in regard to black surfaces, may be part of a broader pattern of inconsistencies that points to special ceramic creations for the grave (pp. 192-193). The preponderance of partially reduced vessels in most tumuli might have a similar explanation. It is perhaps significant that Tumulus W , judged the earliest of the series, contained relatively few black vessels (TumW' 64-65, 68), as though a trend had not yet, or had just, begun.

## Gray Variegated Wares

A few vessels, all large, show gray exteriors and brown or reddish brown interiors. Seemingly intentional, the variegated coloration could represent a short-lived carryover from Early Handmade (p. 22). Except for a single example from the Terrace fill (363), such wares are known only from EPB III (53) and Meg. 10-2 and l (194, 210). The shapes of the last two are themselves apparently early and short-lived (p.99). These few vessels are further related by an absence of polishing, being either smoothed or wheel-finished; they also lack mica films, as do, with one exception, Early Handmade vessels (pp. 22-23).

A different kind of variegation, perhaps connected with that above, occurs on two carinated bowls from EPB $\mathrm{V}(74,89)$. The vessels are gray except for the exterior body below the carination, which is brown or reddish brown. The effect was possibly achieved through inverse placement of the bowls in the kiln, with upper bodies buried in sand or earth to the level of the carinated edge. This dark-light scheme is otherwise unattested in the Early Phrygian repertory, although an analogous variegation on a few vessels of light ware also may have been intentional (infra).

## Light Monochrome Wares

As does gray pottery, light- or clear-fired Phrygian wares have correspondences in Early Handmade pottery and may be related to this tradition (p. 23). Unlike gray pottery, however, light wares had been a principal characteristic of local Late Bronze Age production, and it is conceivable that the clear-fired wares of both Early Handmade and Phrygian wheelmade look ultimately to indigenous sources. Since Late Bronze and Phrygian
clear-fired monochrome wares exhibit similar ranges of color, some uncertainties exist in the separation of the
8. In dealing with mica-tilm gray wares, the color given in descriptions 1 , that (or those) of the surface where it can be detected underlying the film. 9. As was done, for example, in TCET, especially whth the very darh gray amphoras and certain other shapes from Tumuli $P$ and W ( IumP 69, 80 . 85, 89-9ㅇ, 95, 97-98, 101-105; TumW 63, 66-67, 69-71).
two in pre-destruction Iron Age contexts. The presence of a mica film is used to identify many vessels as Phrygian; although the substance is known elsewhere in Bronze Age Anatolia (p. 33), it was not a local characteristic in pre-Phrygian times. ${ }^{10}$ Of the light-ware vessels without mica films appearing in the Catalogue, most are considered Phrygian because in type or profile they have good parallels in the unequivocally Iron Age repertory (e.g., 152, 284, 348, 351-352, 364-367, 403); others bear characteristically Phrygian stamped decoration (163164, 323-325, 407). There remain a few admittedly ambiguous specimens, usually with profiles close to known Phrygian ones, that could be either Iron Age or earlier (e.g., 17, 26, 75, 103). An example of particular note is 221 , a slipped plain bowl from NCT IVb. Like the possibly gray-fired 222 and 225 from the same context (supra), the vessel combines seemingly Late Bronze Age technique with a profile that anticipates a form known in Phrygian gray ware (p. 50).

In pre-destruction contexts, the light-fired monochrome wares considered Phrygian are third in frequency after gray and painted. Although the least popular, they nonetheless begin to appear sporadically in EPB IIb (25) and III (57), that from the former unit bearing a mica film. In EPB V and the Terrace fill, light wares are present in quantities sufficient to indicate that a solid minority had become established (75-76, 90-91, 103, 122, 149-152, 163-164, 260-263, 271, 284, 289, 293, 323-325, 346-352, 364-368, 374-376). The red polished amphora TumW 72 shows that light monochrome pottery was occasionally included among tomb furnishings. In the Destruction Level, vessels that bear little or no indication of having been fired gray originally are considerably more numerous than those that are now gray. Of these, many are mottled light, often with one color predominating (e.g., 529, 532, 651, 661, 667, 765), and others are uniformly a single light color (e.g., 524, 531, 533, 575, 676, 696, 735, 767, 769-770, 830, 906). What proportion was light originally, and not gray turned light in the fire, is uncertain. Yet the painted pottery from the same level includes many vessels that are still mostly or wholly light, thus indicating that clear-fired wares could and did survive the conflagration without major color change. Pattern-banded storage jars from the Destruction Level, some of which are now red or reddish brown (e.g., 992, 1008-1009), were probably those colors originally, in
continuation of a tradition of light-firing that had been established in the series by the time the Terrace was installed (324-325, 407; p. 99). While gray pottery probably remained proportionately dominant through the destruction period, it is possible that light wares saw a relative increase in popularity by that time. Some indication of an upward trend may be at hand in the postTerrace M4 I unit (p. 16), where four of six carinated bowls are clear-fired (e.g., 402-403). The excavated unit is small, and the evidence admittedly scant, but no other pre-destruction context of Phrygian date on the City Mound has so high a representation of Iron Age light wares within a single shape.

Light monochrome wares from pre-destruction contexts normally have biscuits fired red or tan (i.e., reddish yellow to yellowish red). Gray cores, as in dark-fired pottery, are not unusual. An oddity of technique is represented by a few specimens with thoroughly gray biscuits beneath light surfaces $(\mathbf{2 5}, \mathbf{1 3 2})$, as though they had been exposed to short-term oxidation after an initial reduced firing. A few painted vessels indicate much the same procedure ( $\mathbf{1 7 3 - 1 7 4}, 391,409$ ), and it is possible that the technique in general betrays potters primarily accustomed to making gray wares.

Surface coloration, by which light wares are subdivided, is generally like that of the biscuit, although the actual tones are often different because of polishing. Red occurs principally in the clear Munsell tones of 10 R and 2.5 YR (e.g., 76, 90, 150, 261, 293, 346, 402, TumW 72) rather than in lighter shadings $(\mathbf{2 6 0}, \mathbf{3 4 8})$. Tans, about as frequent as reds, are normally in the 5 YR range of reddish yellows and yellowish reds (e.g., 132, 200, 262263, 271, 349-350, 403), but they also include reddish brown (e.g., 152, 179, 352, 367). The least-frequent surface color for monochrome wares is buff, i.e., light or pale brown and Munsell "pink" (e.g., 91, 149, 364). A few vessels show what may be intentional variegation of light colors. The bowls 17 from EPB IIb and 271 from the Terrace fill have tan exteriors while the interiors are red and buff respectively. In a different combination, the large red vessels 347 and 348 from the Terrace fill are crowned by tan rims. Since the mica films found frequently on clear-fired monochrome pottery are light in color by nature, they ordinarily do not contrast with the clay ground, as they often do on gray wares. In a few instances, however, buff films overlie red surfaces $(\mathbf{1 2 2}, 151)$.

## Painted Wares

The fabrics of painted pottery have much in common with those of monochrome wares, particularly the clear-

[^47]fired varieties. Clay quality again runs the gamut from very fine to coarse, and the poorer fabrics normally occur with large vessels. Similarly, the color range of painted wares, both biscuit and surface, tends to parallel that of Phrygian monochrome pottery from pre-destruction con-
texts. Reds and tans are as common, but buff is also popular, contrary to its infrequent occurrences among non-painted light wares. Also in contrast with predestruction monochrome is the regular use of slips on painted wares. Where a slip is not present, the clay is most often of fine quality, and was no doubt thought to be a sufficient base for finishing and decoration, as in Brown-on-Buff ware (p. 166). Slips that were refined from heavily micaceous clays have a glitter reminiscent of mica films, although they differ in consistency and appearance from that substance (e.g., 168, 180, 184, 317, 321-322, 384, 392, 711-712). Regular mica films were also used in a few instances, sometimes in combination with a slip (e.g., 116, 138, 315); the practice was perhaps an infrequent cross-over from monochrome production.

Whether slipped or not, fired surfaces can be the same tone as the biscuit or close to it (e.g., 114, 117, 129. 135. $165,290,300-301,387,393$ ), or in a different color. In some instances, the contrast is probably the result of polishing, particularly where the surface is red and the biscuit tan (e.g., 29, 60, 169, 389). ${ }^{11}$ Cooling down in the kiln might have caused other combinations, such as buff atop $\tan$ or $\tan$ over red, especially when no slip is detectable (e.g., 22, 123, 139, 170-171, 183, 294, 297, 394). ${ }^{12}$ In yet other cases, a differing surface color may have been caused by the slip, especially if the coating was refined from a separate clay with different clear-firing properties. A number of buff specimens with red or tan biscuits are perhaps to be so explained (e.g., 113, 118, $137,386,388$ ), as are possibly some tan-surfaced vessels (e.g., 180, 240, 296). A few pieces with red- or tan-slipped surfaces and gray biscuits (173-174, 391) seem to have been fired in a process similar to that used for some light monochrome wares (supra). Other technical curiosities include double slipping (119), a buff-slipped rim in combination with a tan neck overlain by mica film (315), and a few related cases in which the rim differs in color from the neck $(\mathbf{2 4 1}, \mathbf{3 1 4})$. Similar variegation occurs in light monochrome wares (supra). Although surface coloration tends to be uniform, unevenness in both polishing and the application of slips is sometimes apparent in streakiness or mottling (e.g., 116, 119, 173, 296, 298, 316, 320, 391).

Paints, where well preserved, range in color from black to dark or strong brown to Munsell "dusky red." In most cases, however, the paints are too worn to be coded, and are described simply as dark. Clear red saw use only as the secondary color in bichrome work, a variety of decoration that normally occurs on a ground-coat (mfra).
11. In later Phrygian pattern-burnished pottery, the burnished tones are often red against a smoothed $\tan$ ground.
12. In refiring tests buff ensued at a lower temperature than was required for $\tan$ (p. 39).

Wear and the uneven application of dark paint occasionally give the impression of light brown or even of bichromatic work (e.g., 1025). but in only a few cases does diluted paint seem to have been used intentionally as a filler within darker lines $(\mathbf{7 8 2}, \mathbf{1 0 3 2})$. On polished vessels, the painting was done either before or after polishing. If before, the paint itself acquired a luster along with the ground, and was also more durable (e.g., 29. 60, 135. 139, 294, 394, 599, 638, 640). When applied over a polished surface, however, the paint retained its inherent matte quality, and was more susceptible to flaking and general wear. In many cases it is impossible to determine the order of polishing and painting because of wear, ground action, and the effects of the great fire.

Since Early Phrygian painted wares are considerably varied, the categories of buff, red, and tan serve as no more than broad rubrics for general classification. The principal factors contributing to variety are the quality of the clay, coloration of biscuit and surface, finish, and type of slip, if present. For example, no fewer than five varieties of buff ware are represented in pre-destruction contexts (113, 165, 167, 172 [color pls. I $\{2\}$, II \{2\}], 387-388), while red and tan painted vessels exhibit a similar lack of homogeneity (color pls. I \{3\}, II \{2-3\}). These disparities are perhaps to be explained through the differing practices of individual potteries in and around Gordion and farther afield in Phrygia, if not beyond. Most painted vessels that are suspected as imports suggest a foreign source through style or form rather than through technique (e.g., 169-171, 281, 484485). A notable exception, however, is a small group of specimens whose bichrome painting directly on a clay ground is as anomalous at Gordion as their decorative programs (255, 925, TumW' 62; p. 165).

Within the diverse family of painted wares, some categories show varying degrees of technical uniformity. usually in conjunction with individual painting modes. The best represented is Brown-on-Buff, a distinctive ware that exhibits as well an integrated style of painting (pp. 165-166). Similarly, Fine-Line Buff ware is characterized by both a singular fabric and recurring stylistic traits (pp. 159-160). Of groups isolated by style rather than by ware, the Polychrome House and Ladders-and-Zigzags modes are not as uniform in fabric as those just cited, but they do show certain tendencies or predilections in technique (pp. 160-162). Such correlations between style and ware are difficult to detect in the Destruction Level because of the effects of the fire. Thus it is uncertain whether the Wary-Line and Chevron-Triangle stiles and the TB 8 Group, for example, were to some extent related through common technical procedures. The TB 8 Group, which incorporates a few ground-coated specimens, clearly had more than one technical approach. The W'ary-Line style in pre-destruction contexts tends to have polish over paint, but the examples show no uniformity in color (e.g., 29, 60, 294).

## Ground-Coat Painting

No less distinctive in appearance than Brown-on-Buff or Fine-Line Buff ware is the technique of painting against a special white slip or "ground-coat," which was applied only to the parts that were to be decorated, usually the shoulder and the neck (color pl. II \{1\}). Not generally associated with any particular mode of decoration, ground-coats were the normal background for bichrome painting and also served as a base for singlecolor work in dark paint. Decoration in one color occurs as early as EPB IIb (23), while in EPB V and the Terrace fill both color schemes are present in relatively small quantities (single-color: 175-176, 396; bichrome: 127, 281, 295, 397-398). The latter two contexts have also yielded a few badly worn specimens that cannot be classified (100, 395). PN 3 adds another pre-destruction specimen, with single-color painting (247). Limited representation continues into the Destruction Level, where about a dozen examples are known. Most show singlecolor work ( $485,624,751,806,814,926,1034-1035$ ), but. a few are bichrome $(626,644,722,927)$, while on some others the paint is too damaged to allow classification ( $625,813,820$ ). The only ground-coated vessel from an early tomb is the necked jar P 141 from Tumulus G, a likely import bearing single-color decoration.

Ground-coats appear to have been made from primary or residual clays, as is known to have been the case for Attic white lekythoi and various other Athenian shapes that bear similar coatings. ${ }^{13}$ The substance is ordinarily white or pink, sometimes with a dingy yellowish tinge, and can be either finely textured or somewhat gritty. Once applied, the ground-coat was usually smoothed, but in some instances light polishing achieved a faint or low luster (e.g., 127, 295). Ground-coats are customarily accompanied by a regular clay slip on the rest of the
body. Often red, where color can be judged, the slip usually provided not only a marked contrast in color with the whitish ground-coat but also a play on texture, through its lustrous polished finish as opposed to the generally dull coating ( $\mathbf{2 3}, \mathbf{1 7 6}, 295,395,398,626,820$, 927). Because of the nature of the ground-coat, the paint itself was often fugitive. Bichrome work, it should be noted, was never particularly colorful in the Early Phrygian period: red was a secondary color used sparingly, sometimes for no more than dots or tiny fillings (e.g., 127 [color pl. II \{1\}], 397).

The practice of ground-coat painting appears to have been more prevalent in contemporary centers of the eastern plateau than at Gordion. A few flaring-rimmed bowls so treated were probably imports from the east ( $\mathbf{1 0 0}, \mathbf{2 8 1}, \mathbf{4 8 5}$; p. 48), as may have been some other ground-coated vessels. At the same time, however, the use of ground-coats on the western plateau is indicated by their presence on such characteristically Phrygian shapes as large round-mouthed jugs (644) and askoi (813-814), and also in the TB 8 Group (806), presumably a Phrygian mode of painting. The technique may have spread westward as part of the general tradition of painting to which Phrygia subscribed (p. 135). On the evidence of 23 from EPB IIb, the practice would have been introduced relatively early.

Like mica films, ground-coats were not new to Anatolia in the Iron Age, since the technique-and its use in combination with a bright slip-saw much favor during the Old Assyrian Colony period of the early second millennium and continued into the Hittite era. ${ }^{14}$ If the ground-coats of post-Hittite times were part of an Anatolian continuum, the supporting evidence is lacking, both at Gordion and elsewhere.

## Pottery and the Great Fire

The fire that consumed buildings on the Terrace and in the Palace Area was responsible for a variety of ceramic alterations. Most dramatic are the numerous instances of vitrification, melting, and warping that resulted from heat so intense that the substance of the clay underwent physical change (e.g., 718, 820, 866, 868; pl. 51, P 4682). The temperature at which such alterations occurred was surely beyond the limit for successful firing and would have depended on the composition of individual clays. ${ }^{15}$

[^48]Refiring experiments (infra) suggest that $800^{\circ} \mathrm{C}$ was still a safe level for Phrygian potters, since at that temperature the tested pieces showed no signs of vitrification, melting, or even abnormal coloration. The point at which physical breakdown would have begun to occur in the pottery has not been demonstrated by testing. ${ }^{16}$ Yet a clue to the heats attainable in the burning buildings is perhaps given by an archaeological trial conducted in Denmark in the 1960s. A $6 \times 14 \mathrm{~m}$. Iron Age long house was replicated at full scale and set afire in order to analyze destruction patterns within so large a building. Although the walls

[^49]differed from those of Phrygian buildings in being of light wattle-and-daub construction, the heavy roof system, as restored, consisted of materials similar to those used at Gordion. In the course of the burning, temperatures at floor level along the main axis of the building reached $900^{\circ} \mathrm{C}$, while beside the walls heats of almost $700^{\circ} \mathrm{C}$ were recorded. ${ }^{17}$ The Phrygian buildings may have exceeded these figures, since in addition to their flammable roofs, the massive, half-timbered walls and the wooden upper galleries of many would have contributed significantly to the fuel sources.

The difference of over $200^{\circ} \mathrm{C}$ from one part of the Scandinavian house to another might explain why at Gordion a great many vessels suffered no physical breakdown. Even though the temperatures may have been generally higher than those recorded in Denmark, the lower range would still have been within the safe firing limits for the clays of most vessels. Only those exposed to the highest temperatures, and possibly some whose clays had relatively low points of vitrification, would have experienced compositional change.

Less severe degrees of actual fabric damage are apparent in the destroyed surfaces of many vessels. Often the damage is such that information regarding original finish is lost or retrievable only in patches. Analysis of finishing is further hampered by the frequent presence of staining and by calcined and crystalline deposits that seemingly resulted from contact with other materials during the course of the fire. It is notable that the mica film on the vessel subjected to refiring remained unchanged at $800^{\circ} \mathrm{C}$. Among painted vessels the commonest problem is an at least partial burning away of the paint. As a result, the decoration appears faded and is sometimes detectable only through "ghosts" marking the once painted areas (e.g., 789, 804, 834). Ground-coats seem to have been particularly susceptible to the heat, as indicated by the poor condition of many (e.g., 644, 751, 820, 926); some now bear little or no trace of painted decoration (e.g., 624-625, 813).

Although the lower temperatures attained in the burning buildings fell short of the point required for physical breakdown, they were sufficient for playing havoc with the original colors of the pottery. The effects are particularly vivid on vessels that now show a marked contrast of light and gray coloration, sometimes from sherd to sherd and in other cases from one large area to another (e.g., $516,627,787$ ). Most vessels, however, show less dramatic effects of secondary firing. A considerable number, both monochrome and painted, have various light tones, while others are mostly dark or light, but with patches of contrasting color. In these and various other combinations, it is often the case that neither the dark nor the light, nor the tones between, are accompanied by signs of bodily damage from the fire. Instead, each represents but one of a number of possible colors within the spectral potential of the clay. The color achieved in the original firing would have depended on temperature and/or the atmospheric conditions of the kiln. The conflagration at its non-damaging levels of heat served to test these potentials through the variable temperatures and atmospheres, from oxygen-rich to oxygen-starved, that were created in the burning structures.

It is assumed that the bulk of monochrome pottery from the Destruction Level was originally gray, and that light-fired monochrome wares were present as a stable minority, in spite of the fact that light-colored vessels now outnumber gray ones by a considerable margin ( pp . 34-36). To attempt distinctions between what was originally gray and what was light seems fruitless. Several painted vessels, surely fired light by their makers, are now largely or totally gray (e.g., 500, 640, 718, 808, 970), thus suggesting that light-ware monochrome vessels could have undergone similar transformations. Ambiguity also surrounds those vessels that are now light, either uniformly so or mottled in two or more colors: any of the light tones represented could have been that originally intended, but the possibility of an original dark-firing also exists.

## Modern Refiring

The refiring experiments on a carinated bowl from CC 2, conducted in 1955 by Marie Farnsworth, are informative in regard to certain aspects of color change. As retrieved, the fragmented vessel showed among its pieces a range of coloration extending from dark gray to very pale brown or buff in both surface and biscuit. The six sherds tested were each sawed in two, one piece left as a control ( $1-6$ ) and the other refired ( $1^{\prime}-6^{\prime}$ ). Half were heated in air to $800^{\circ} \mathrm{C}\left(1^{\prime}-3^{\prime}\right)$, and half to $650^{\circ} \mathrm{C}$, also in air ( $4^{\prime}-6^{\prime}$ ). Table 1 gives the results in terms of Munsell designations.

[^50]Sherds that were gray upon retrieval (3, 5-6) fired reddish yellow at $800^{\circ} \mathrm{C}\left(3^{\prime}\right)$ and buff at $650^{\circ} \mathrm{C}\left(5^{\prime}-6^{\prime}\right)$. A sherd that was buff before the test (4) showed no change in color at $650^{\circ} \mathrm{C}$, while another of practically the same tone (1) turned reddish yellow when fired to $800^{\circ} \mathrm{C}$, as did a specimen not far from buff (2). The experiment thus indicates that oxidizing heats affect not only gray but also certain light colors. Particularly instructive is the fact that the reddish sellow surface obtained on all three samples refired to $800^{\circ} \mathrm{C}$ is not represented in the range of the pre-testing colors, although similar tones occur on vessels from pre-destruction contexts (e.g., 262-263. 271). The implication is that the current range of coloration on a vessel need not necessaril include the original.

Table 1. Results of Refining Experiments

| Untested |  | Refired at $800^{\circ} \mathrm{C}$ |  |
| :---: | :---: | :---: | :---: |
| Surface | Biscuit | Surface | Biscuit |
| 1. $10 \mathrm{YR}: 7 / 3$ (very pale brown) | 10YR: 7/3 (very pale brown) | 1' 7.5YR: 7/6 (reddish yellow) | 7.5YR: $7 / 4$ (pink) |
| 2. $10 \mathrm{YR}: 6 / 2$ (light brownish gray) | 10YR: 6/3 (pale brown); thin gray core | 2'. 7.5YR: 7/6 (reddish yellow) | 10YR: $6.5 / 4$ (very pale brown/light reddish brown) |
| 3. $7.5 \mathrm{YR}: 3 / 0$ (very dark gray) | 10YR: 4/1 (dark gray); slightly lighter core | 3'. 7.5YR: 7/6 (reddish yellow) | 7.5YR: 6/4 (light brown) |
|  |  | Refired at $650^{\circ} \mathrm{C}$ |  |
| 4. 10YR: $7 / 4$ (very pale brown) | 10YR: 7/3.5 (very pale brown/ yellow) | $4^{\prime}$. no change | no change |
| 5. 10YR: $6 / 1$ (gray) | 7.5YR: 6/2 (pinkish gray) | 5'. 10YR: $7 / 4$ (very pale brown) | 7.5YR: $6 / 4$ (light brown) |
| 6. 7.5YR: 3.0 (very dark gray) | 10YR: 4/1 (dark gray); slightly lighter core | 6'. 10YR: $6.5 / 4$ (very pale <br> brown/ <br> light yel- <br> lowish <br> brown) | 10YR: 7/3 (very pale brown) |

# Wheelmade Pottery: Shapes 

## Introduction

The wheelmade shapes of Early Phrygian pottery constitute a rich and varied repertory that ranges from miniatures to enormous vessels approaching a meter in girth. Seven standard categories compose the core of the assemblage: bowls, round-mouthed jugs, trefoil jugs, side-spouted sieve jugs, one-handled utility pots, amphoras, and jars. All these are attested in one form or another by EPB V, but only in the Destruction Level does the full range of standard shapes come into good focus. The general repertory also includes a wide assortment of miscellaneous jugs (i.e., non-trefoils), as well as several odd vessels that do not conform to the designs of any of the standard categories. Non-vessels are relatively few, consisting primarily of stands and lids. Because of the fragmentary condition of a great many vessels, especially in pre-destruction contexts, "ambiguous" categories serve for items that contribute in some way to the corpus. Thus, narrow-necked jugs whose diagnostic mouths are missing compose an ambiguous group, as do fragmentary large vessels that are either amphoras or storage jars. Ambiguous vessels of smaller sizes, often represented only by body sherds, could belong to one of several shapes, and for this reason are classified as "ambiguous vessels, miscellaneous."

The standard categories often contain primary subdivisions based on form and/or size. Practically all bowls, for example, belong to one of three general types based on upper profile, while side-spouted sieve jugs also allow a tripartite division. Trefoil jugs are either narrow-necked or wide-mouthed, a formal distinction that can also be applied to amphoras and jars. Scale seems to be equally meaningful and in some cases reflects differences in function. Round-mouthed and narrow-necked trefoil jugs each occur in both small and large sizes. Amphoras and jars have great ranges of scale, from small vessels easily held in the hand to thick-walled containers of considerable size and weight.

These distinctions of basic design and scale were but the major guidelines within which Phrygian potters worked, for in the execution of their products, and with
few exceptions, the keynote was variety. Their creative approach to potting shows forth most clearly in the Destruction Level, where the variety within certain standard categories is extensive. The primary variable factors are overall form and the proportioning of parts, and also the choice of base, rim, and handle types. Beyond these purely formal elements lie various niceties of design, such as grooving, ridging, and banding for purposes of formal definition, and a series of more clearly decorative devices, including openwork, relief, and plastic attachments. Patterned incision, stamping, and painting extend still further the latitude for variety. In their use of formal variables, potters often made distinctions between monochrome and painted shapes. Monochrome vessels, by far the more numerous, often display elegant contours and a variety of crisply executed features, whereas painted vessels tend to be of plain line and devoid of accessory detail or adornment. Similarly, patterned incision and stamping are practically unknown on painted pottery. The difference in approach very likely stems from a well-established, considered tradition of monochrome pottery whose various means of enhancing vessels were deemed neither suitable nor necessary for painted shapes. An analogous distinction occurring in the finishing of vessels is the use of glittery mica films almost exclusively on monochrome wares (pp. 32-33).

The primary elements of form-base, body, neck, and handle-were to a great extent interchangeable among closed shapes, while bowls took on much the same base. and sometimes handle, types as those of closed shapes. Plain, flat bases occur in every shape and are most common among painted and large vessels. Of articulated bases, rings are prevalent and appear in a variety of forms ranging from very low "ridge-rings" to tall, spreading supports, often stemmed. Disk-shaped and raised bases occur with less frequency

The most favored type of body was ellipsoidal, with maximum diameter at or around mid-height (e.g., 645647). Ovoid forms are next in frequency ( 640,886 ), followed by spherical (674) and piriform, essentially an
inverted ovoid (684, 687). Modifications to these basic solid forms took several directions, and for descriptive purposes a sometimes cumbersome terminology is necessary. Thus, ellipsoidal bodies, while often fully rounded in the manner of a depressed sphere, can also be close to biconical in shape, hence the term "ellipsoidal-biconical" (e.g., 655, 728). For both ellipsoids and ovoids, a common practice of potters was to vary appreciably the degree of convexity between the upper and lower parts, resulting in a bicurved contour. For purposes of reference, "bicurved" denotes a more fully rounded lower body (e.g., 734-735), while "reverse-bicurved" bodies, the commoner of the two, are more fully convex above maximum diameter than below (e.g., 564, 585, 662, 738). Ellipsoids and ovoids can also be carinated, or nearly so, at maximum diameter, a somewhat rare practice that results in angular, essentially biconical forms (587, 596597, 669-670). Squat, sagging bodies are also generally unusual, and are confined for the most part to roundmouthed jugs (e.g., 578, 603). Common among such jugs, and found as well on other body types, are multiple contours that divide the body into three or more planes (e.g.. 577, 599, 605-606, 651).

Necks are either narrow or wide, tall or short, and in these relative variables lie the principal distinctions among the standard categories of shape and their subdivisions. A number of shapes share basic proportional models. Thus round-mouthed jugs, with tall, wide necks, are like Type 1 sieve jugs but for the absence of a spout (p. 68). Similarly, wide-necked trefoil jugs and most Type 2 sieve jugs are essentially the same in basic design, the former differing in the manipulation of the mouth and the absence of a spout (p. 68). Large round-mouthed jugs have much the same proportions and scale as a type of amphora here called the kantharos krater (p. 78). Large amphoras and storage jars can also be much alike in form; both incorporate narrow-necked varieties and others with tall, wide necks (pp. 79, 97-99).

Rims of flaring types are the most common among all but the largest shapes, and can be plain, thickened, or beveled, sometimes to a flat, band-like face. The last variation, a "beveled-band rim," was especially favored for large trefoil jugs and one-handled utility pots (e.g., 45, 839). True band rims, outward-thickened and articulated to serve as fascia-like crowning moldings, are also frequent (e.g., 529, 878). Everted rims, with a marked outward protrusion, seldom occur on smaller shapes, with the exception of jars. They are, however, the commonest type for both storage jars and large amphoras, and often a ledge is worked into the top interior (pp. 101-107). Direct rims, continuing the line of the neck without any articulation or change in contour, are generally rare (590. 858).

Although the handles on a few bowls are horizontal, those on closed shapes are so regularly vertical that horizontal placements attract special note (pp. 107-108).

Handles normally occur in one of three basic types classified according to cross-section: round or rolled, strap, and oval. The first is commonest among smaller shapes, while for large vessels potters preferred the wider and more durable forms of the other two. Double-round handles also appear on large shapes, as do straps that have been tooled to resemble true double-rounds. Trian-gular-sectioned handles, essentially heavily trimmed versions of the basic rolled variety, occur with limited frequency on small and medium-sized vessels. Rarest are twisted or rope handles, also modifications of the rolled type. Handles were often more than mere afterthoughts in Phrygian potting, as is clear from the variety that occurs in manner of attachment, decoration, and general detailing (pp. 107-110).
While indicating that potters shared a single vocabulary, the common aspects of form and proportion among shapes of all sizes also serve to impart a general unity to the corpus of Early Phrygian pottery. At the same time, however, the mutual traits are largely responsible for the difficulties of shape identification among fragments.
Although the pottery from the Destruction Level shows overall a strong degree of diversity, numerous cases exist in which two or more vessels are either identical or very close in form (e.g., 529-530, 731-732, 816). The correspondences often extend to specific shared details, such as base type, form and means of handle attachment, the treatment of various niceties of design, and the application of stamped or incised decoration. Fabric and finishing are sometimes consonant with the formal parallelisms, and, although hardly a safe criterion in the Destruction Level, coloration can also be similar. The greatest number of groupings occur within the monochrome corpus, yet close formal correspondences sometimes exist between unpainted and painted vessels (e.g., $\mathbf{8 7 8 - 8 8 0}$ ). The examples of a shape painted in an individual style can also show a high degree of formal coherence, as in the case of most round-mouthed jugs belonging to either the Wavy-Line or the Chevron-Triangle mode; many in the former style are paralleled by monochrome jugs (p. 56).
These correspondences in form are likely to reflect common sources of production, either individuals or communities of potters. ${ }^{1}$ That unity in design can in fact indicate a common source is supported by a series of pattern-banded storage jars from the Destruction Level, several of which seem to have been impressed by the same stamp (p. 100). A number of presumed production groups are represented in the TG depot (e.g., 552), where they were perhaps fresh from the pottery, while in some cases other group members had already gone into

[^51]service in the buildings (e.g., 454, 459). Moreover, in several instances two or more vessels belonging to a group occur in the same building, sometimes together, as though they had come in a single consignment to that hall (e.g., 540-541, 914-915). In early tumuli the formal evidence suggesting individual sources is also present, viz., certain sieve jugs (TumP 76-78, K-III 19 and 21), round-mouthed jugs (TumP 55-57), and geese (TumP 49-50). Although the clearest suggestions of common sources occur within individual shapes, specific traits of form sometimes exist among several shapes, and thus may point to the diversified repertories of single producers (pp. 59-60, 69-70, 87, 96).

In the following consideration of individual shapes, the
order of presentation is generally consistent. The wellpreserved pottery from the Destruction Level and Early Phrygian tumuli serves as the basis for an initial overview of each category, after which comes discussion of background and distribution, followed by a more detailed analysis of shape, beginning with the material (if any) from pre-destruction contexts. For categories well represented in the Destruction Level, e.g., round-mouthed and trefoil jugs, the order in the Catalogue, and in discussion under shape analysis, is arbitrarily by body form-ellipsoidal, spherical, ovoid, and piriform. The final section on shapes addresses ambiguous material and also examines the rims of large vessels, bases, and handles as they occur throughout the corpus.

## Bowls and Basins

(Figures 6-21, Plates 14-36)

On the basis of upper profile, bowls and basins can with very few exceptions be classified in one of three general categories: carinated, plain-rimmed, and those with articulated rims. The first two are the most frequent of Phrygian shapes in pre-destruction contexts, yet all three types are already present by EPB IIb. In the Destruction Level, bowls occur in great quantities, especially in the TB and CC service units, where they had often been placed in stacks on the floors (e.g., 435, 524). The TG pottery depot had an inventory of no fewer than 68 bowls at the time of the disaster, many of which sat in wicker baskets whose bottoms were still preserved (pls. D-E1). One such container (W 75) held at least 26 bowls, 16 inverted in a central stack and others stuffed on end around the sides. Ceramic bowls were generally not as common in early tombs. Tumulus III, with 13 of both carinated and plain types in the cauldron K-III 49, is the principal exception (K-III 13, 34-44, 46). Tumulus P contained a plain bowl and a second of unusual type (TumP 60-61), while others possessed none. In Tumulus MM, the great quantity of bronze bowls (121) may have obviated the need for ceramic counterparts; in similar manner, the occupant of Tumulus W had 16 bowls in bronze.

Early Phrygian bowls, regardless of type, show an overall homogeneity in fabric, scale, and proportions, and in these common aspects they can be discussed as a single unit.

Most bowls are 20 to 30 cm . in diameter, of fine or medium-fine clay, and polished to some degree on both exterior and interior surfaces. Coarse fabrics are usually reserved for basins, proportionally enlarged bowls with diameters ranging from ca. 35 to over 50 cm . Bowls appreciably less than 20 cm . in diameter are rare and are for the most part limited to pre-destruction contexts (30,

220, 265, 285-286), although a single small specimen is known from the burned citadel (522). The great majority of the bowls from pre-destruction strata are dark-fired, but a few of carinated type from as early as EPB V indicate production in mica-film light wares $(\mathbf{7 6}, \mathbf{9 0}-91$, $\mathbf{2 6 0 - 2 6 3}, \mathbf{2 7 1}, \mathbf{4 0 2}$ ). A few other light-ware examples, including one from EPB IIb, are without the telling film and thus may not be Phrygian (17, 75, 103, 179, 284. 403). Stamped decoration is unknown for the shape, and patterned or other incision done before firing is very rare (468, 482). ${ }^{2}$ Painting is infrequent, and except for a presumably imported series is best documented on plainrimmed bowls (p. 138).

Regardless of size or type, bowls are in general similarly proportioned and relatively shallow, interior depths being normally a third to a fourth of the diameter. Base types are interchangeable, as on other standard shapes. and tend to be sufficiently broad for good stabilits. A relatively small number of bowls, plain-rimmed except for a few carinated basins, have handles or lugs ( $\mathbf{1 0 2}, 469$. 475-476, 495-496, 499, 501, 505-506). Spouts occur only on some painted bowls, where they are accompanied by a handle or lugs ( $\mathbf{5 0 0}, 502,507$ ).

The great quantities of bowls in the Early Phrygian sequence indicate that the shape was important in daily life. They presumably saw wide use as serving and dining vessels, a view supported by the many bowls included in the "service" of the cauldron in Tumulus III. ${ }^{3}$ Bowls were also represented in the dining equipment of Mcg. 3 (p. 4). At the same time, other functions are reflected in

[^52]the Destruction Level. Those found inside large vessels perhaps served as scoops or dippers. The positions of certain others indicate use as lids, sometimes with a pot
resting inside the bowl (p. 5). Some bowls contained spindle whorls, cloth, or needles, while one lugged basin (495) held a collection of miniature jugs.

## Carinated Bowls

(Figures 6-15, Plates 14-24)

EPB IIb: 15-17
EPB III: 30-37
EPB V: 71-100
Meg. 10-1: 197-201
NCT IVa: 232-234
The carinated bowl was one of several ceramic types that Phrygian potters produced in a great variety of forms, so much so that the representational sampling has to be extensive in order to do justice to the range. As the many examples from the Destruction Level demonstrate, it is the upper profile-the combined rendering of carination, upper body, and rim-that provides the criteria for typology. Base types, as on bowls in general, seem interchangeable, while neither the contour of the lower body nor relative depth shows any patterns of occurrence with one upper profile or another. Lower bodies, in fact, tend to be more or less straight in line, in keeping with the usually angular contours above them. Since Phrygian potters normally followed one of three separate and very general approaches to upper formation, there are as many broad categories or "classes" that together account for practically all examples.

Class 1 bowls have upper bodies and rims that are broadly flaring directly above the carination. For this reason they are the most open and overall the shallowest of the three classes, their upper contours exhibiting little if any change in angle from the lower body (e.g., 435, 437, 439). Bowls of Class 2, the most numerous and varied, display prominent upper bodies that are generally at a marked angle to the lower. Rims are flaring to one degree or another and impart to many examples the appearance of a right-angled $Z$ in section. The greatest variable factor is the profile of the upper body, i.e., the segment directly above the carination, for it can be either inclined or vertical in attitude and either straight or shallowly concave in line (e.g., 442, 454, 459). Class 3 bowls share with those of Class 2 a sharp change of angle from lower to upper body, yet instead of a flaring rim they usually have articulated or direct ones. Upper bodies are in most cases vertical or slightly inclined (e.g., 470, 473, 480). Very few carinated bowls fall outside these three classes (e.g., 201, 483). At the same time, only a relative handful of specimens are intermediate between classes. In general, the emphasis on sharply contoured, often exaggerated profiles appears to have been a Phry-

EB Trench: $\mathbf{2 3 9}$
Terrace fill: 257-281
M4 I: 401-403
Destruction Level: 435-485
Tumulus III: K-III 34-36 (and possibly others)
gian characteristic of the time in Central Anatolia, or at least a trait of bowl production that was not shared by contemporary potters on the eastern plateau (p. 48).

Bowls of Class 1 first appear in EPB IIb, followed by Class 2 in EPB III. The two are joined by Class 3 in EPB V , and all are present in both the Terrace fill and the Destruction Level. Given their wide and well-represented stratigraphical distribution, carinated bowls lend themselves particularly well to an investigation of possible developmental patterns in the manners of forming.

## CLASS 1 CARINATED BOWLS

Two Class 1 bowls of gray ware come from a single context of EPB IIb (15-16). The latter is technically a basin, also the first known of its kind. A third bowl (17), semi-wheel-finished and of variegated light fabric, is similar to 15 but somewhat less flaring. Correspondences in Early Handmade allow the possibility that these earliest Class 1 bowls were derived from the handformed tradition. The handmade 6 from EPB IIa is especially close in form to the wheelmade class (pp. 23-24), while such bowls as $\mathbf{1 7 7}$ and 252 exhibit general features of Class 1 (cf. also 258-259, infra). The relatively simple forms of the bowls from EPB IIb may indicate an early stage in Phrygian wheelmade production, one that perhaps overlapped with the active period of Early Handmade. The subsequent course of Class 1 bowls could represent a direct lineage from such forms as 15-17. Yet there is little indication that these specific varieties in EPB IIb were of any great duration: 75, a red polished bowl from EPB $V$, is perhaps the closest in profile from a later context, but in the absence of a mica film the vessel might be pre-Phrygian. Most later specimens are nonetheless generally reminiscent of the earliest Class 1 bowls. The differences between them and their predecessors may result from little more than a move to crisper, more articulated contours.

By the time of the EPB III deposit, Class 1 bowls begin to show some variety in formation. The small 30, bearing a subtle, obtuse carination, is without close parallels and is also the smallest bowl in the Early Phrygian carinated series. 31, with a low yet distinct vertical band above the carinated edge, introduces a form that has a more broadly flaring version in 71 from EPB V. The mica-film red-ware 260 from the Terrace fill seems to be related, as do 401 from M4 I and 239 from the EB Trench. Furthermore, a distinctive series of pre-destruction bowls have protruding carinations that recall the profile initiated by 31 (infra). By the time of the destruction, Class 1 bowls executed in the manner of 31 may have passed their prime: 435 could be a modified version with wide, broadly flaring rim, while 458, whose vertical upper body is more prominent, seems intermediate between Class 1 and a variety of Class 2 bowls (infra). A third Class 1 bowl from EPB III, the thin-walled 32, has an upper body that flares in a more or less straight line to a markedly more flaring rim. In EPB V, this approach to forming is represented with a little modification by 72 and 74 . The former is closer to the bowl from EPB III, and may serve as a bridge to the more bluntly carinated 436 from the Destruction Level. A possible offshoot of this particular variety is the unique $\mathbf{2 5 7}$ from the Terrace fill, a bowl that differs primarily in the exaggerated overhang of the rim. $\mathbf{7 4}$, with less of a rim than 72 , may be a precursor of 437 from the burned citadel, an elegant, more crisply detailed bowl that was modified by a small, articulated rim, a rare feature on all but Class 3 carinated bowls.

Meg. 10-1 contributes to the range of pre-destruction Class 1 bowls through 197, a very broadly flaring form with practically direct rim that recurs virtually unchanged in 438 from the Destruction Level. Interplay among certain strains of Class 1 bowls may have occurred. Thus two very similar specimens, the mica-film red-ware 261 from the Terrace fill and 439 from TB 4, possibly reflect a merger between the varieties of 197 and 74 from EPB V.

Such interplay is also apparent in a distinctive series of Class 1 bowls from pre-destruction contexts. Characterized by markedly protruding, usually corner-like carinations and broadly flaring rims (e.g., 263), the type looks to be a hybrid combining features of $\mathbf{3 1}$ from EPB III and 197 from Meg. 10-1. With the possible exception of a discolored example from NCT IVa, the series is further united by production in mica-film light wares. Although best represented in the Terrace fill (262-263) and M4 I (402-403), the type is probably also attested in EPB V by a bowl that, while missing its rim, preserves the same kind of carination and is, moreover, of mica-film red ware (76). A bowl of gray ware from EPB $V(73)$ is a unique form that stands outside the series, yet the similarly protruding carination and general Class 1 profile indicate a related approach. Since this particular series is not known from the Destruction Level, it may well have a
certain chronological value through localization in relatively late pre-destruction contexts. On the basis of this distributional pattern, the single example from NCT I Va becomes one of the criteria for dating this context relatively late in the pre-destruction sequence (p. 187). 76 from EPB V, if in fact a member of the group, would be a close typological link with the Terrace fill and thus may help to support the view that the two contexts are not far removed in time (pp. 15, 182-186).

Two bowls from the Terrace fill are perhaps best considered with Class 1, even though they are not strictly in keeping with the class. 258-259, both relatively deep, exhibit no marked change in contour above the carination, and in this respect they are reminiscent of certain Early Handmade specimens. 258 in particular recalls such handmade bowls as 10 and 177, vessels whose trimmed upper interiors are also echoed in 258. Anomalous in their context, 258-259 are possibly residual from an earlier stage of wheel-production.

## CLASS 2 CARINATED BOWLS

When Class 2 bowls make their initial appearance in EPB III (33-37), they already give some indication of the variety that their large and diverse family was to assume. Since they also enter the record at an advanced stage of development, it is difficult to assess the role that Early Handmade might have played in the formulation of the class. In a handmade bowl such as $\mathbf{1 0}$ could lie the background of the characteristic right-angled $Z$-sections of many later examples. Moreover, this bowl along with 189 and 251 shows a kind of upper formation with high-flaring rim that could be related to the more refined wheelmade form of 33 from EPB III. At the same time, however, these manners of forming seen in Class 2 have Anatolian Late Bronze Age precursors, both at Gordion and elsewhere, that might figure in the general ancestry (pp. 23-24). ${ }^{4}$

33 has one of the simplest Class 2 contours and may represent an early core variety on which others in EPB III were based (e.g., 34, 36). In any event, the form of 33, with upper body and rim together making a shallowly concave profile, can be traced practically unchanged into EPB V (77) and the Terrace fill (264), each context providing a number of examples. In the Destruction Level, 440 is one of two bowls that are particularly close to 33 , while 441-442 seem to be slightly modified versions in which the high-flaring rim is maintained. ${ }^{5} 443$ appears
4. Gunter, nos. 226, 301. Thoy IV, 163 (Shape A 93) and Fig $2 \times 7$ \{35.631|. Fischer, pl. $981890,893,894,899,900 \mid$.
5. A fragmentary wooden bowl from the Heraion in Samos has a profile very similar to those of $\mathbf{3 3}$ and its direct descendants, and is perhaps a Phrygian import to that sanctuary: A/hMitt 82 (1967), 119. I thank E. L. Kohler for this reference.
to be an adaptation with oval-sectioned, thickened rim, a trait that is perhaps related to another Class 2 variety (34, infra). Examples in mica-film light ware from Meg. 10-1 (200) and the Terrace fill (271) may be earlier versions of 443, differing in having beveled rim-faces; their form is not attested in the burned buildings. 444-445 from the Destruction Level seem to belong to the same general line of development stemming from the type of 33. Nearly identical in form, except that one is footed and the other not, the bowls have markedly low points of carination that recall 264 from the Terrace fill; both bowls also have a neat wheel-groove at the interior respond to the carination, a detail that could have been the quirk of a single potter. More extreme variations based on the form of 33 might be difficult to detect in view of the simple starting-ground. The unique 78 from EPB $V$ is perhaps related, while the intended profile of the small 265 from the Terrace fill is obscured by uneven forming.

Other Class 2 bowls appearing with 33 in EPB III show a different approach to formation, with greater emphasis on upper body and rim as discrete elements of profile. They thus preview what was to be the commonest general practice among later producers of the class. On the well-preserved 34, the upper body inclines markedly above a peaked carination to be met at an angle by a high-flaring, thickened rim with lightly trimmed face. The upper interior, on the other hand, is gently convex and only mildly reflective of the exterior profile. Although the form of 34 does not find exact duplication, the manner of forming may well underlie a number of subsequent developments. 79 from EPB V is a close follower with a more generously trimmed rim-face; the form recurs virtually unchanged in the Destruction Level in 446 , while 447 from TB 4 appears to be an untrimmed version. From the Terrace fill, $\mathbf{2 6 6}$ seems to be a still more heavily trimmed variant on the form of 79. 80-81 from EPB $V$ also appear to be related to this general line of development. The former example, in having a flattened band around the upper interior, recalls a common feature of Early Handmade bowls (pp. 23-24).

A more divergent line of evolution from 34 may be represented in EPB $V$ by 82 , a bowl that differs from the basic design primarily in having an outturned, slightly overhanging rim. 83 from the same context is possibly related to the general developmental pattern. The vessel is a unique specimen bearing a subtly ledged rim, a feature that recurs on only two other bowls from Early Phrygian contexts, 84 from EPB V and 280 from the Terrace fill, a possible contaminant (infra). Although the exaggeratedly outturned form of $\mathbf{8 2}$ has no exact parallels, 267 from the Terrace fill is generally similar and is, in turn, a close antecedent to 448 from the Destruction Level. 82 also may represent the background of 449-451 from the burned citadel, bowls whose upper profiles suggest that they are crisper, more carefully articulated renditions of the earlier form. 452 from TB 7, with a rim prominently trimmed on the edge, may be a variation
on the same general idea. Of these bowls from the destruction period, 449-450, both found in TB 6, are enough alike in form to suggest a single source, while 45 I from the TG pottery depot has a twin in the same deposit. $\mathbf{4 5 1}$ is also akin in fabric and finish to a number of other groups in the TG depot, all of which may have come from a single establishment (infra, 453-455, 459, 462-463).

A Class 2 form simpler than that of $\mathbf{3 4}$ also occurs in EPB III, but is represented in the Catalogue by a better-preserved twin, 198 from Meg. 10-1. The profile of both bowls-an unexaggerated, angled carination, an upper body inclining in straight line, and a plain, flaring rim-survives with little or no change into the destruction period (453-455); 453 even maintains the distinct ridge at the angle between upper body and rim that occurs on the earlier examples. All three bowls are from the TG depot and may well be the products of a single source. $\mathbf{4 5 4}$ and a near-twin from the same unit possibly represent the basic issue of the series: they are two of a number of very similar bowls, some of which were also in the TG depot while others had gone into circulation in the buildings. Like 451 above, $\mathbf{4 5 3 - 4 5 5}$ are related through fabric and finishing to a larger circle of groups from the TG depot. 84 from EPB $V$ is generally reminiscent of 198 and its twin from EPB III; yet the bowl is a singular form with subtly ledged rim, a feature occurring also on 83 from the same context.

EPB III is also the initial context for Class 2 bowls with more or less vertically oriented, straight-line upper bodies and flaring rims. Somewhat loose, the category includes a number of seemingly individual, often unique forms. 35, with a markedly overhanging rim, is among the oddest. Although not known to recur, the form may in some way be ancestral to that of the equally singular 456 from the Destruction Level. Likewise, the very shallow 85 from EPB V might be a heavier version; the bowl is also reminiscent of 82 from the same context and could represent a merger of two approaches to formation. In the destroyed citadel, 457-458 are possibly derived from the form of 85 . As noted above, 458 also has affinities with certain Class 1 bowls. Less flamboyant than 35 from EPB III are its contextual mates 36-37, smallish, simply profiled bowls with vertical upper bodies and plain, flaring rims. The same basic profile recurs at a larger scale and along crisper lines in $\mathbf{8 6}$ from EPB V and 268 from the Terrace fill. 87 from EPB V, with an unusual faceted band replacing the carination, is a unique variant. The profile of $\mathbf{8 6}$ is faithfully repeated in a large group from the TG depot, here represented by 459. With members also in TB 4, the group is another whose fabric and finish suggest that it was one series of several from a single source (451, 453-455, 462-463). 460 from TB 6 likewise continues the earlier form, and it is also the closest of bowls from the Destruction Level to K-III 34.

In EPB V, the mica-film light-ware specimens 90-91
are similar to each other in form, yet their varieties are not known to recur. 232 from NCT IVa is also singular, and to an extent the bowl appears intermediate between Class 1 and Class 2 (cf. 73). The interior flattened band on 232 echoes Early Handmade carinated bowls, as does that on 80 , but in this case the band is neatly offset by a groove above and could thus be a refinement of the feature (pp. 23-24). The protruding carination and flaring, trimmed rim on 88 from EPB $V$ are recalled by 269 from the Terrace fill, where 270 represents an untrimmed version. These bowls, in turn, may well provide the typological background for $\mathbf{4 6 1 - 4 6 3}$ from the Destruction Level. 462-463 are related in form; each is one of a close pair from the TG depot, while aspects of technique suggest that they belong to the same large circle of production as $451,453-455,459$. Perhaps also part of this general line of development is 89 from EPB V, a bowl whose slightly flaring upper body places it close to Class 1 (cf. 74). The form of 89 can be traced with little modification to $\mathbf{4 6 4}$ from TB 4. The Destruction Level has also yielded a few Class 2 bowls that lack close antecedents: the neatly tooled 465 and 466 are each one-of-a-kind, while 467 , with a stubby rim, represents a small production group.

## CLASS 3 CARINATED BOWLS

Although Class 3 bowls are not attested in the EPB sequence until EPB V, their number and variety in this context suggest that the class had come to be well established by this time. Early Handmade provides no sure correspondences for Class 3, but a Late Bronze Age type, one attested at Gordion, at least prefigures the Phrygian class. ${ }^{6}$ Some Class 3 forms from EPB V occur beyond this context, while a few singular specimens, e.g., 92-93, may represent early, short-lived types. 93 is notable in having a tiny, inset rim, a detail unparalleled on Early Phrygian bowls. The idea might have come from another shape, perhaps the Type 2 sieve jug, an example of which was found with 93 (128). 94 is likewise without close parallels among carinated types, yet it may be related to certain quasi-carinated bowls with articulated rims (e.g., 235, 520; pp. 50-51).

Of the other Class 3 forms in EPB V, 95 has an analogue in a handmade bowl that may or may not be Iron Age (399; p. 23). Bearing an erect, outwardthickened rim, 95 finds an exaggerated counterpart in 272 from the Terrace fill, yet there is no indication that this particular variety survived into the destruction period. 96 from EPB V seems akin to 95 in manner of forming, the primary difference being a less prominently thickened rim. From the Terrace fill, 273 appears to be a crisper, more clearly articulated version of 96 in heavier format, while 274 is an inclining variation. 233 from NCT

[^53]IVa, not far removed from these specimens in the Terrace fill, differs principally in having a lightly beveled rim. In the Destruction Level, 468 continues the general form of 273 , as does the two-handled basin 469.

97 from EPB V, despite the slight flare of upper body and rim, most likely belongs to a developmental pattern of Class 3. In the sharp inset above the carination and the general aspect of the upper profile, the bowl has an inclined counterpart in the large, direct-rimmed 275 from the Terrace fill. The latter, in turn, is a close formal antecedent to 470-471 from the Destruction Level, bowls that maintain as well the large size of 275.471 , the closer of the two to 275, is one of three known from as many different units; all may well look to a common source. 472, a singular specimen from the TG depot, is possibly related to the same general line of development.

98, a large Class 3 basin from EPB V, introduces a profile that seems generally related to the preceding series. The principal difference is a small, outwardthickened rim with sharp offset that serves together with an inset above the carination to create articulated borders for the recessed, band-like upper body. 99, a somewhat smaller basin from EPB V, was formed in much the same manner but has a markedly convex upper body, while the still smaller bowl 234 from NCT IVa is very similar in approach to 98 . Although these related varieties in EPB V and NCT IVa are not attested in the Terrace fill, they can be traced to the Destruction Level. 234 closely anticipates 473 from TB 2, one of a group of three large bowls whose profile occurs also on a basin. $\mathbf{4 7 4}$ from CC 2, with a convex upper body, seems to preserve the variation of $\mathbf{9 9}$, whereas a few basins are modifications on the basic form of 98 . The profile of 482 , for example, is an adaptation with a prominent band rim that serves as a field for incised decoration, while 475-476 each have the addition of a sharp ridge at midway on the recessed upper body. The last two are so alike in form that they may be production mates. Their respective lugs and handles are unusual; such devices do not occur on carinated bowls of smaller size and are generally rare on carinated basins (cf. 469).

From the Terrace fill come a few Class 3 varieties that are not found in EPB V or other pre-destruction contexts. $\mathbf{2 7 6}$ is a unique form with an inset upper body inclining to a direct rim. 277, with angled carination and neatly trimmed rim-face, could be a modified version of 95 from EPB V; in any event, the general form of 277 is continued in a pair of bowls from the TG depot (477478). Another specimen from the Terrace fill (278) has an unusual profile with triangular-sectioned rim that recurs little changed on 479 from TB 6. The simpler form of 279 from the Terrace fill appears to underlie that of $\mathbf{4 8 0}$ from the TG depot, the closest parallel from the citadel for K-III 35. Only a single Class 3 variety from the Destruction Level has no apparent forebears. $\mathbf{4 8 1}$ is one of two coarse bowls bearing a slightly thickened rim offset by a shallow, unevenly worked channel whose lower edge
creates a kind of carination. The two could almost as well be classified as bowls with articulated rims (cf. 523).

## UNCLASSIFIABLE CARINATED BOWLS

Scattered through the sequence is a small number of carinated bowls that do not fit well into any of the three basic classes. 201 from Meg. 10-1 is a coarse, thick-walled basin whose carination was formed by means of a broad channel. The everted, ledged rim on 280 from the Terrace fill is equally anomalous. The bowl is possibly a contaminant, since similar profiles do occur in later periods. The Destruction Level contributes 483, a unique creation with straight, angled walls and a twice-pierced base. The contour is somewhat reminiscent of that of the bronze omphalos bowl TumW 11, and thus might indicate a general relationship with metal vessels.

## FLARING-RIMMED BOWLS

A small series of painted bowls also warrants consideration apart from the three carinated classes, although most can be placed within one or another subdivision (pl. 24). The dominant characteristic is a broadly flaring rim whose wide top surface serves as the only decorated field. With the possible exception of $\mathbf{1 0 0}$ from EPB V, where
little more than the rim itself is preserved, the bowls are also marked by indistinct carinations. 281 from the Terrace fill is basically a Class 1 bowl. 484 from the storeroom behind Meg. 4 is an extraordinary looplegged specimen with a fragmentary twin in TB 2; both could be placed in the Class 2 family with vertical upper body (cf. 459), yet close parallels are lacking at Gordion. Another fragment from TB 2 (485) barely has a carination and thus conforms least to local typology.
The bowls are the only painted examples of carinated type known from Early Phrygian strata. In considerable contrast is the proliferation of similarly decorated flaringrimmed bowls at contemporary sites on the eastern plateau, e.g., Alişar, Boğazköy and Kültepe. That those at Gordion were imports from the east, rather than local Phrygian products under influence from that region, is perhaps indicated by form. The subtle carinations of 281 and 484-485, while unusual at Gordion, are in good accord with forming practices in the Halys district, where the contours of carinated bowls are generally much simpler than those at Gordion and tend to be unpronounced or, as with 485 , very slightly angled. ${ }^{7}$ The Type 3A triangle row on 485 is also a common feature on flaring-rimmed bowls in the east (p. 141), yet the variety of cross-and-lozenge panel borne by 484 and its twin is not known beyond Gordion (pp. 151-152).

## Plain-Rimmed Bowls

(Figures 16-20, Plates 25-33)

EPB IIa: 7
EPB IIb: 18-20
EPB III: 38-39
EPB V: 101-108
EPB VI: 178-179
Meg. 10-2: 192
Meg. 10-1: 202-203
Plain-rimmed bowls ("plain bowls") are at least as common as carinated in the Early Phrygian sequence, yet because variety is relatively limited they can be represented by considerably fewer examples. At the same time, a general simplicity of contour reduces what can be said about typology and development to an exercise in making largely subtle distinctions in formation. As with carinated bowls, it is the rim that carries typological weight, allowing again a tripartite division, but here based on the attitude of the rim: vertical (Class 1), flaring (Class 2), inward-curving (Class 3). Bases, where preserved, are of doubtful typological value, but the contour

NCT IVb: 220-221
Terrace fill: 282-288
Destruction Level: 486-514
Post-destruction contexts: 1036-1037
Tumulus III: K-III 13, 44, 46
(and possibly others)
Tumulus P: TumP 60
of the lower body is to an extent consistent with certain rim forms, being straight-sided with some and fully convex with some others. All three classes of plain bowls are present by EPB V, as are the three classes of carinated bowls. Yet the first plain bowl to appear in the EPB sequence, a Class 1 specimen in EPB IIa, may be contextually earlier than the carinated types that begin in EPB IIb, while the plain bowls from NCT IVb might be earlier still (pp. 8-9, 14).

[^54]
## CLASS 1 PLAIN BOWLS

7 from EPB IIa presents a notable contrast with the first carinated forms in EPB IIb, since the bowl already represents an advanced, forward-looking stage of production. The fabric is standard mica-film gray, while the neatly trimmed ring foot is to be a common element of design (e.g., 450). 7 has the simplest type of profile in Class 1, a gradual, unbroken sweep from convex lower body into a plain, vertical rim free of any modification. This basic form was popular with potters throughout the remaining Early Phrygian sequence. 103 from EPB V may be a red-ware version, although in the absence of a mica film the vessel is possibly pre-Phrygian. Clearly Phrygian is 282 from the Terrace fill in House Y, a gray-ware bowl that, while shallower than its forebear in EPB IIa, is close in profile, base, and diameter. The currency of the form at the time of the destruction is here witnessed by 486-489 from the TG depot. 486-488, each with at least a single close match from the same deposit, are most faithful to the form of 7 , while 489 is a version with an unusual, reverse-curved profile. Whether all four bowls and their mates might be the products of a single establishment is difficult to judge on the basis of such simple contours. Yet similarities in fabric and finish allow the possibility that they are related, and also that these plain bowls may have emanated from the same source as a number of carinated groups from the TG depot (p. 46). 490 from CC 1 is a singular form that may be a shallower version of $\mathbf{4 8 6 - 4 8 7}$; it is at the same time particularly close in profile to K-III 44.

In EPB IIb, where plain bowls in general occur in some variety, $\mathbf{1 8}$ is of a Class 1 variation characterized by a flattened rim-top. 38, one of two related bowls from EPB III, seems to be a heavier version of 18 , with more of a bend between lower body and rim. Although such flattened rim-tops are not attested for plain bowls in subsequent pre-destruction contexts on the City Mound, they do occur on Brown-on-Buff bowls of Class 2 from Tumuli P and III (TumP 60, K-III 13). In the Destruction Level the feature appears on two Class 1 painted bowls: 500 from Meg. 4, an example with a vertical handle and a carefully executed trough spout, and 501 from the floor of Meg. 12. The Class 2 basin 507 and the Brown-on-Buff 1036-1037, Class 2 bowls from post-destruction contexts, also bear flattened rim-tops. On all but 501 the feature provides a field for ancillary painted decoration, and, whether related to an early monochrome form or not, was probably desirable for this reason.

39 from EPB III shows a different approach to Class 1 formation, one that can be traced without a break to the Destruction Level. Instead of the clean sweep of convex line displayed by 7 and 18 , the lower body is straight, or almost so, up to a marked, nearly angular bend in profile, above which the rim assumes a vertical attitude. On bowls with this kind of profile, the interior of the rim often
reflects the change of contour in being vertical and band-like, and in some instances is noticeably articulated from the floor. Such a "near-carination" occurs also on a number of bowls with articulated rims, a category closely tied to that of plain bowls (infra). In EPB V, a relatively subtle version of the form introduced by 39 appears in the large 101, with an inward-thickened rim, and in $\mathbf{1 0 2}$, the only Phrygian bowl with handles known on the City Mound before the destruction period. ${ }^{8}$ The Terrace fill contributes 283 and the light-ware 284 to the range of varieties. The latter has an inward-thickened rim similar to that on $\mathbf{1 0 1}$ from EPB V, but otherwise the form is not known to have continued in Class 1. 283, on the other hand, is a close antecedent to 491-493 from the Destruction Level, where several other bowls also exhibit the general manner of formation introduced by 39 (494498). Of particular note are 495, with lugs and multiple grooving, and 496, unusual in the combination of a handle and three lugs opposite. A similar approach to forming is seen in the high, vertical upper wall of the exceptional 502 from TB 1, a painted bowl with trumpet spout, a horizontal handle opposite, and, above the spout, a half-bolster whose form matches the spurred ends of the handle. The last feature recalls the bolsters on bronze ring-handled bowls (e.g., MM 55-69), while the overall shape has parallels in bronze (MM 49-50). 502 and 500 above may have been inspired by such metal vessels with handles and spouts, yet an influence from clay to bronze seems equally plausible, especially since the method of handle attachment on the bronze bowls recalls ceramic rather than bronze-working practice ( pp . 108-109).

## CLASS 2 PLAIN BOWLS

In the EPB sequence, wheelmade plain bowls with flaring rims first appear in EPB IIb (19-20). Yet the gray-ware 220 from NCT IVb may be contextually earlier (p. 14). 220 is remarkable for both its small size and hemispherical shape, a form not known to recur. These anomalies combined with a narrow, poorly defined base, rare among later bowls, and a fabric akin to that of Early Handmade (p. 34) may well indicate that the bowl belongs to an early stage in Phrygian wheelmade

[^55]production. Most Early Handmade plain bowls are flar-ing-rimmed, and thus could represent the immediate typological background of Class 2 (p. 24).

Of the specimens from EPB IIb, the basin 20 also may reflect an early stage in Phrygian wheelmade pottery. Beyond being coarse and summarily finished, the vessel show's a kind of fussy rim-planing that recalls Early Handmade practice (p. 24). The smaller 202 from Meg. $10-1$ is similar in form and fabric, and need not be as late as the five-letter Phrygian inscription scratched on the exterior after firing. The only good candidate for a survivor of this particular type is $\mathbf{5 0 8}$, an unusual painted bowl from a pocket of destruction debris to the SE of the TG. The other Class 2 bowl from EPB IIb (19) is the earliest example of its class in a standardized form that will continue. Having a subtly flaring profile close to that of 220 from NCT IVb, 19 anticipates 104 from EPB V, a bowl with a mildly angled contour and more pronounced flaring rim. This last form, in turn, recurs virtually unchanged in the Destruction Level, as shown by 503504. The former is one of an apparent production group of three from the TG depot, while 504, a flat-bottomed version from TB 4 , has a near-twin in CC 1 . Three basins from the burned citadel are similarly formed: 505-506, both two-handled, and 507, a unique painted example with spout and lugs from Meg. 3. The last follows a general fashion of painted plain bowls in having a flattened rim-top serving as a decorative field (supra).

Other varieties of Class 2 bowls from pre-destruction contexts are not known to have survived into the destruction period. 105 from EPB $V$ is analogous to 104 from the same context, yet is modified by a distinct, beveled rim. The feature also occurs on $\mathbf{2 8 6}$ from the Terrace fill, a small bowl, ca. 13 cm . in diameter, whose size and upper profile are closely matched in a tiny rim sherd from EPB V'. The pair provide one of the several typological links between the two contexts (p. 15). Unattested on plain bowls in the Destruction Level, marked rim-beveling may thus have a chronological importance similar to that of a special group of Class 1 carinated bowls (p. 45). Another small bowl, 285 from the Terrace fill, is a Class 2 variety not known beyond this context, although it could be a heavier, scaled-down version of $\mathbf{1 0 4}$. Also typologically part of Class 2 is $\mathbf{1 7 8}$ from EPB VI, a basin in
mica-film gray ware with broadly flaring, almost horizontal rim. 179 from the same context is a smaller counterpart in light ware. The variety appears and disappears with EPB VI.

## CLASS 3 PLAIN BOWLS

Class 3 bowls, with incurving rims, are the latest to appear in the EPB sequence, occurring in three versions in EPB V. As in Class 2, however, there is a possible forebear from NCT IVb in 221, a small and crudely finished light-ware bowl that may or may not be Phrygian (p. 36). A possible indication of a post- or sub-Bronze Age date is the similarity in both profile and size of 221 to $\mathbf{1 0 6}$ from EPB V, an assuredly Phrygian bowl in mica-film gray ware. The form of the latter, moreover, is not known to continue, and thus it may represent an early stage in wheelmade gray pottery. A second Class 3 bowl from EPB V, 107, is an unusual variety with low, sharply inturned rim that may anticipate the larger 512 from the Destruction Level. 108 from EPB V, a coarse bowl with neat wheel-grooving on the upper body, has a contour that appears again in combination with multiple grooving on 521 from CC 3, a variant that is typologically a bowl with articulated rim (infra). 203 from Meg. 10-1, hook-like in section, may represent a manner of upper formation that led to 509-510 from the Destruction Level. Also of similar profile is 511 from TB l, a bowl remarkable in having a set of three loop-legs; the same type of support occurs on presumably imported flaringrimmed bowls (e.g., 484).

The Terrace fill adds 287-288 to the Class 3 range. The former is a somewhat heavy, ridged bowl, sharply inturned, that lacks close parallels. 288, with an inwardthickened rim recalling those on the Class 1 bowls 101 and 284, anticipates the larger 513 from TB 8. The last bowl belongs to a production group of three, including one from the TG depot. The inward-thickened rims on these bowls are generally uncommon, and were possibly derived from an Early Handmade practice (p. 24). 514 from the TG depot seems related to $\mathbf{5 1 3}$, but is without the enlarged rim. The ridging on $\mathbf{5 1 4}$, a rare feature for bowls in general, recalls that on 287 from the Terrace fill.

## Bowls with Articulated Rims

(Figure 21, Plates 34-35)

EPB IIa: 8
FPB III 40
EPB III: 40
The bowls in this category are typologically related to plain bowls, but differ in having an offset, crowning element. The type possibly has its origins in the Early

NCT IVa: 235
Destruction Level: 515-526
Handmade practice of using grooving to offset a plain rim (p. 24). Although the least frequently occurring of the three standard categories of bowls, those with articu-
lated rims have a history extending back as far as that of plain bowls in the EPB sequence. Moreover, the earliest example, 8 from EPB IIa, introduces a form that is to be as long-lived as that of its contextual mate, the Class 1 plain bowl 7. 8 bears a small, outward-thickened and rounded rim, and in upper profile is vertical above a bend in contour, as are some contextually later Class 1 plain bowls (e.g., 39, 283). In EPB III, the variety of 8 recurs in larger and better-defined form with the wellpreserved 40, a bowl whose spreading ring foot has a close antecedent in EPB IIb. The type of 8 and 40 survived to the time of the destruction, as indicated by 515 from TB 6. Except for a ridge around the inner periphery, the bowl adheres faithfully to the design of its predecessors, even to the extent of having the same type of spreading foot found on $\mathbf{4 0}$. Variants of the type also occur in the Destruction Level, but not earlier. 516, with a near-twin from the TG depot, has an exaggerated, vertical upper body, while 517-518, the latter also from the TG depot, have bulbous-sectioned rims created by an inward as well as an outward thickening.

Other varieties of bowls with articulated rims are few and appear relatively late in the record. They thus have a pattern of distribution considerably different from that of plain or carinated bowls. The unique 235 from NCT IVa
may be an offshoot of the type of 40 in which the body has gained in height above a quasi-carination, while the rim has been neatly undercut to create a pointed, beak-like section. 520 from TB 4 appears to be a similar variation with unaltered, rounded rim. The beak-like form on 235 recurs on 519 from TB 6, a bowl that otherwise is close to 517 from the same TB unit. 521 from CC 3 looks to a quite different formal antecedent, the Class 3 plain bowl 108 from EPB V. Both have multiple grooving, and the former seems to be a variant of the latter through the addition of an articulated rim. Certain other varieties from the Destruction Level reflect a similar process of modification. 522-523 are essentially Class 2 plain bowls with indistinct rims lightly offset by shallow channels (cf. also 481). The former is the only bowl on so small a scale known from the Destruction Level. Less modified still are 524-526, Class 1 plain bowls whose otherwise simple rims are set off by single, neat grooves. They thus recall a feature in Early Handmade that could lie behind this category as a whole (p. 24). 193 from Meg. 10-2 is not surely a Phrygian product, but if in fact the bowl is Iron Age rather than earlier, the prominently grooved rim might provide a bridge between 524-526 and the similar articulation found in Early Handmade.

## Miscellaneous Bowls

(Figure 21, Plate 36)

EPB V: 109
Meg. 10-1: 204
Terrace fill: 289-291
A few miscellaneous items supplement the corpus of Early Phrygian bowls. Some painted body sherds, of value primarily for their decoration, are discussed elsewhere (290-291, 527).

A small number of bowl bases extends the range of pre-destruction types. 109 from EPB V is a heavy, otherwise unattested form that appears to be an adaptation of that introduced by 7 from EPB IIa. 204 from Meg. $10-1$ is a low, thick ring foot that anticipates the type on 516. 289 from the Terrace fill is one of the very few examples of a high, pedestaled foot from pre-destruction contexts. A more fragmentary specimen comes from EPB V, while a context of EPB IIb (Y-65-14) yielded sherds of an apparently similar form. The type continues into the destruction period, where it is closely followed on such bowls as $\mathbf{4 3 5}$ and 456 .

528 from Meg. 3 is an extraordinary large bowl or basin with an attached open-work stand. Since the upper body and rim are missing, the bowl cannot be classified. Found among sieve jugs, small trefoil jugs, and regular bowls, the vessel might have been an experimental fusion

Destruction Level: 527-528
Tumulus P: TumP 61
of two components, for which the lidded krater 929 from Meg. 3 provides an analogy. The type of stand is unattested as a separate entity, but it seems to combine aspects of the large open-work supports $867-868$, found not too far distant in Meg. 3, and little three-legged ring stands (e.g., 864). The association of an example of the latter type with a basin in Tumulus III gives an idea of the combination that may have led to $528 .{ }^{9}$
No less anomalous than 528 is TumP 61, a highpedestaled creation of bichrome ware that in general design seems to anticipate the common "fruit stands" of later Phrygian times. The flange-like rim surrounding the central bowl, unparalleled in pottery, finds its closest analogues in wooden bowls from Tumuli P and II' (TumP 131-135, TumW 75-79). Furthermore, the decorative cut-out work on the rims of several of the wooden bowls from Tumulus P may point to the source of inspiration

[^56]for the peculiar lunettes on TumP 61. Despite these correspondences with accompanying wooden types, the technique of painting on TumP 61, essentially a bi-
chrome version of Brown-on-Buff ware, is otherwise unknown for the period at Gordion and thus may indicate an import (p. 172). ${ }^{10}$

# Round-Mouthed Jugs 

(Figures 22-25, Plates 37-61)

EPB IIb: 21-22<br>large, ambiguous: 23<br>EPB III: 41<br>large, ambiguous: 42<br>EPB V: 110-114<br>large, ambiguous: 115-117<br>EPB VI: 180-181<br>PN 3: $\mathbf{2 4 0}$ (large, ambiguous)<br>Meg. 5, fill below floor: 248<br>Terrace fill: 292-295<br>large, ambiguous: 296-297

The basic design of the round-mouthed jug is simple and flexible: a closed vessel with a relatively tall and wide neck rising from a distinctly shouldered body; a single, high-swung handle, attached to body and to top of rim, that usually forms a loop large enough to admit three or four fingers.

Following its initial appearance in EPB IIb, the shape is present in most pre-destruction contexts. The numerous examples from the Destruction Level attest the popularity of the shape in both palatial and working settings, and they also demonstrate the great variety that Phrygian potters achieved within the formal design. The TG depot had at least 25 , and of other units well supplied with pottery only Meg. 4 has no known examples. The distribution among early tombs is somewhat uneven: the three and five from Tumuli III and P respectively mark the strongest representation; two from G and the single jug in Y are the only others in clay, although Tumuli W and III each had a bronze example (TumW 6, K-III 87). In the Great Tumulus at Ankara, generally contemporary with Tumuli III and P , the shape occurs, as in III, in both pottery and bronze. ${ }^{11}$

Round-mouthed jugs, regardless of size, are almost always of fine or medium-fine clay and are generally well finished; monochrome specimens usually have mica-film surfaces. The shape also shows a relatively high frequency of painting, and, as is true of certain other types (e.g., trefoil jugs), painted examples tend to be less elegant and detailed in form than their monochrome

[^57]Destruction Level: 529-626
large: 627-634, 637-640, 644
large, ambiguous: 635-636, 641-643
Post-destruction contexts: 1038-1040
Tumulus III: K-III 12, 24
large: K-III 23
Tumulus P: TumP 54
large: TumP 55-57, 66
Tumulus G: P 45 (pl. 61)
large: P 49 (pl. 61)
Tumulus Y: P 3160 (pl. 61)
counterparts. Stamped decoration is rare (597), and only a single instance of patterned incision is known, on the large 631. K-III 23 and a small jug from Tumulus $G$ ( $P$ 45 , pl. 61) are the sole examples bearing decorative relief work.
The great majority of round-mouthed jugs are of convenient scale for the hand, their heights-to-rim ranging between ca. 9 and 13 cm . (e.g., 529-563, 598-615). Maximum capacities among the relatively few of this size category that could be measured extend from 210 to 680 ml ., while most are between 290 and 530 ml . Appreciably smaller jugs are rare: $\mathbf{5 9 0}$ ( 6 cm .) seems on the verge between normal-scale production and an assortment of true miniatures whose heights are ca. 4 to 5 cm . ( 574 , $579,581,589,593-594)$. On the other hand, production on a scale larger than the $9-13 \mathrm{~cm}$. norm is amply attested. The biggest jugs range between $c a .18$ and 27 cm . in height-to-rim. i.e., an approximate doubling of that of the more popular small class (627-631, 634, 637-640, K-III 23, TumP $55-57$ and 66 ; p. 49 from Tumulus G). A relatively few round-mouthed jugs constitute what might have been an intentionally intermediate category, with heights-to-rim between $c a .14$ and 16 cm . ( $564-566,570,586,618,1038$, K-III 24, TumP 54). All these larger specimens retain the overall proportions and forms of their smaller counterparts, but it is unclear whether a change in purpose accompanied the increase in size. The biggest, here called "large round-mouthed jugs" (pls. 56-60), tend to be elegant in either form or decoration (p. 56). This suggests, as do the fine fabrics, that they were meant to be special enlargements of a common shape rather than heavy-duty vessels along the lines of large trefoil jugs (p. 58). Since large round-
mouthed jugs are generally of the same scale and form as a two-handled shape, the "kantharos krater," identification of one or the other in fragmentary form is usually impossible (infra, n. 12).

In the Destruction Level, the most common type of base is the ring foot, often spreading and sometimes provided with a short stem; the low ridge-ring foot also appears with some regularity. Raised bases, disks, and plain flat bases also occur, the last often on painted jugs of simple form. Great variety exists in the shape of the body. Ellipsoidal forms are the commonest (e.g., 540-579, 627-628), followed at a distance by ovoids (e.g., 580-586, 629). Spherical bodies were the least favored (e.g., 536, 542 ), while the most striking in contour are the carinated (e.g., 110, 587, 597). The neck usually approaches the height of the body, and only rarely is it markedly shorter or taller. As a rule, necks are either flaring or vertical; they often rise abruptly from the shoulder, and the transition between the two elements is frequently marked by a ridge or groove. In fewer cases, a shallow, continuous curve spans from body into neck. Rims are often plain, but banded and rounded forms also occur. Rolled handles prevail, although ovals, straps, and doublerounds are not rare. ${ }^{12}$

Insofar as they are preserved, the earliest examples of the shape, in EPB IIb, indicate that the round-mouthed jug was by this time already at an advanced stage of development, exhibiting proportions and features that were to continue (infra). The shape lacks correspondences in Early Handmade and has no likely ancestors in the Anatolian Late Bronze Age. Despite the absence of a kindred form in the local handmade tradition, the possibility of a European background exists. Similarly proportioned vessels of coarse black polished ware occur at the central Macedonian site of Vardarophtsa in a horizon dated to the later twelfth and early eleventh centuries. ${ }^{13}$ The general material assemblage to which the cups belong has been linked to the so-called Lausitz culture, which for N. G. L. Hammond is ultimately synonymous with Phrygian. ${ }^{14}$ Types seemingly akin to
12. Two difficulties in the identification of fragments deserve note, both stemming from the fact that the basic form and proportions of roundmouthed jugs were employed for other shapes. Type 1 sieve jugs (p. 68) differ from round-mouthed jugs of small size only in the presence of a spout. Sherds bearing the characteristic upper profile are here placed under round-mouthed jugs, but an ambiguity exists. That most were probably round-mouthed jugs rather than sieve jugs is suggested by the relative infrequency of the latter shape in Early Phrygian strata. Likewise, the close similarities of kantharos kraters and large round-mouthed jugs present uncertainties when the number of handles, one or two, cannot be ascertained (p. 78-79). As a consequence, neither shape is definitely attested in pre-destruction contexts. The ambiguous specimens are again placed with round-mouthed jugs (42, 115-117, 296-297, 641).
13. Heurtley, $P M, 98$ and 217 , nos. $411-412 ; 216$, fig. $87 \mathrm{~g}-\mathrm{k}$ may be fragmentary specimens. Cf. also ibid., p. 218, no. 419, a cup from a similar horizon at the nearby site of Vardina. Hammond, Macedonia, 305-307 for dating.
14. Hammond, Migratioms, 140-141.
the Vardarophtsa cups are among the new ceramic features of Troy VIIb 2, in both Knobbed Ware and gray Minyan imitations, while across the Propontis, in Turkish Thrace, similar vessels appeared in quantity in the small tumulus of Taslicabayır (Kırklareli), a burial that may belong to the same general period as Troy V'IIb. ${ }^{15}$ In Macedonia, related types continue into the Iron Age, and these sometimes approach more closely still the forms and proportions of the developed Phrygian design. Examples of gray ware from Vardarophtsa and Tsaoutsitza are particularly notable, for with their highcarinated bodies and very slight shoulders they are not far removed from a distinctive Phrygian variety that first appears in EPB V $(\mathbf{1 1 0}$; infra $) .{ }^{16}$ Moreover, the handles of the Macedonian jugs are now considerably high-swung, much in the manner of regular Phrygian practice. If a connection with southeastern Europe existed, the absence of the round-mouthed jug in Early Handmade might indicate that the shape arrived in Central Anatolia as part of a subsequent infusion of Balkan elements (pp. 124, 176). ${ }^{17}$

Regardless of its origin, the round-mouthed jug came to have a wide distribution in Central Anatolia during the Iron Age. Sites of the Alişar IV period in the Hals s region provide a rich assortment of varieties, some of which seem peculiar to the eastern plateau, while others have general parallels for their forms and proportions at Gordion. ${ }^{18}$ Of particular note is the apparent absence on the eastern plateau of large round-mouthed jugs. Their presence in Ankara as well as at Gordion, and perhaps also in Midas City, appears to indicate that these large jugs were a characteristically Phrygian type. ${ }^{19}$ In the primarily Cilician repertory of Porsuk IV on the far southeastern plateau, the round-mouthed jug occurs in forms that recall the cups at Vardarophtsa. ${ }^{20}$ In the subsequent Porsuk III, the shape shows much in common with material of the Alişar IV period, yet the

[^58]best-preserved specimen, modified by a built-in sipping device, has Phrvgian affinities (p. 155). ${ }^{21}$

## SH.APE ANALYSIS

In EPB IIb the distinctive form of the round-mouthed jug occurs in small size in two different contexts. 21, of fine mica-film gray ware, already has the formal nicety of a tooled ridge on mid-neck ( p . 117), and its profile anticipates the production group of 540-542 from the Destruction Level. 22 is among the earliest examples of Phrygian painted pottery in the EPB sequence. The simple decoration could be a sign of earliness, yet the identical shoulder scheme recurs on 619, one of a pair of round-mouthed jugs from the burned citadel (p. 140). From a third context of EPB IIb comes the groundcoated 23, the earliest recognizable example of the basic shape that was shared by large round-mouthed jugs and kantharos kraters. The plain rim, while unusual, does occur on a few examples of the one-handled shape (e.g., 637, TumP 55-57), and is within the normal range of diameters. The ambiguous 188 from Meg. 10-4, of similar scale but with an odd type of rim, might be an early version of the shape (p. 111).

In EPB III, the small jug 41 finds close matches for its profile and band rim in 529-530 from TB 7. The same refuse context also yielded 42, a fragmentary specimen of large size that could as well be a kantharos krater. Whichever, the ovoid body introduces what was to be a familiar contour for the type in general (infra).

It is not until EPB V that variety in the shape starts to become evident. The best-preserved, and also the most remarkable in appearance, is $\mathbf{1 1 0}$, of a type recalling a Macedonian form (supra). Although the relatively coarse fabric of $\mathbf{1 1 0}$ is unusual for the shape in general, the angular, carinated profile prefigures that of a number of jugs from the Destruction Level, especially 595-596. The heavy ridging on the neck, unknown on later specimens, may be a chronological factor. 111, also angular, looks generally to such jugs as 590 and 592 from the burned citadel. 112 is the first to show the continuous-curve profile, as recurs on examples from the Destruction Level (e.g., 599 and 605). Painted specimens of small scale are represented in EPB V by 113-114, in Fine-Line Buff and Brown-on-Buff ware respectively. No fewer than four examples from EPB V are of the form shared by large round-mouthed jugs and kantharos kraters. All have the band rims that are a recurring feature of the two shapes, particularly kantharos kraters, in the Destruction Level (p. 78). 115 bears an upper profile much like that of 630 from Meg. 3, a large jug especially close in shape to kantharos kraters (infra). The painted 117 has a close

[^59]match in the Terrace fill (297), while 116, in the Ladders-and-Zigzags style, may belong to the same vessel as 296 from the Terrace fill (p. 160).

Of two examples from EPB VI, the nearly complete 181 is closely antecedent to 548 from TB 4. 180, a fragmentary jug painted in the Ladders-and-Zigzags mode, is close in form to a group from the TG depot (559-560; infra). The Terrace fill contributes a few aspects to the history of the shape before the destruction period. On 292, the bulging profile of the neck is a feature that occurs with some frequency in the Destruction Level (e.g., 552, 557), while 293 is of value for documenting production of the shape in monochrome light ware, here mica-film red. In profile, the neck of 293 looks ahead to that of $\mathbf{5 6 4}$ from the TG depot. 294 is one of two jugs from the Terrace fill that alone attest decoration of the shape in the Wavy-Line style before the destruction period (infra). Contextually earlier than all these specimens is 248 from beneath the floor of Meg. 5 (p. 15). The short-necked jug anticipates such later forms as 572-573.

The numerous round-mouthed jugs from the Destruction Level provide particularly good evidence for individual sources of production. Many groups can be distinguished, while some grounds exist for suggesting extended relationships, both within the shape and with other types. At the same time, a large number of vessels are unique, although the absence of close parallels may result in part from selectivity in what was kept.

529-539, while displaying a variety of forms and representing a number of individual groups, compose nonetheless a broad series related through fine, particularly thin-walled fabrics. Most also have a heavily micaceous film that gives them a similar glittery appearance. 529-530, both from TB 7, belong to an elegant production group of five. Beyond close similarities in basic form, the jugs are alike in having markedly stemmed bases, band rims, and exaggeratedly high-swung handles that are side-attached below and slotted at the top to slip over the rim (p. 109). 531-532 from TB 4 also show strong indications of being from a single source; their differing bodies might illustrate the minor variations that could occur within such a group. The large 627 repeats the bicurved profile of 531 and thus may be from the same source. $\mathbf{5 3 4}$ represents a matching set of three jugs, while 535 is one of a nearly identical pair from Meg. 1. 537-538 from TB 4, although differing somewhat from each other in form, are closely related in finish; they also have uneven bases and tiny rims that could be the marks of a single source. 539 is the exemplar of a group of eight very similar jugs, at least seven of which were part of the $W$ corner deposit in TB 1 (p.5). In addition to having the same types of base, body, and rim, all show an intentional flattening of the handle at the point of upper attachment, as though the quirk of a single producer.

540-541 belong to a group of five jugs that are as much
alike in fine fabric and finishing as they are in form. Known only from the palatial halls Meg. 1 and Meg. 3, the vessels were closely duplicated even in such details as the shape of the loop and the triangular section of the handles. Another jug from Meg. 3, the somewhat larger 542, shares certain aspects of form with the group, as does 543 from the same unit, a jug of considerably different finish. Both, however, lack the triangularsectioned handle found on the others. The same type of handle looped in the same manner as on 540-541 does recur in the group of $\mathbf{5 4 4 - 5 4 6}$. This correspondence, and also general similarities in fabric, finish, and form, may indicate that both groups had a common source; a jug from Tumulus Y (pl. 61, P 3160) is perhaps related (p. 57). The same establishment might also have been responsible for 621 , a finely painted jug that is very close in form to the group of 544-546. Similarities in form and/or handle type could further imply that examples of other shapes belong to the same circle of production: e.g., the trefoil jugs 653, 755, and 762-763 (pp. 60, 63-64), as well as the sieve jugs 816, 822, and 831 (pp. 69-70).

547-549 have general similarities in form and finish, while the subtle constriction of the handles at the lower point of attachment might be indicative of a single source. 547 and 549 have a painted counterpart in 618 from Meg. 3, a vessel that is, in turn, closely matched by the Type 1 sieve jug 817 from the same hall (p. 69). $\mathbf{5 5 0 - 5 5 1}$ are two of a production group of five. $\mathbf{5 5 0}$ is now gray, whereas another member is now mica-film red. If the colors are original, they may imply that the jugs were not kiln mates and that producers did not always fire a particular model in the same way. The set of five represented by 552 , on the other hand, affords no such possible evidence, since the jugs are now mottled the entire range of colors. Although the group itself is not attested outside the TG depot, $\mathbf{5 5 2}$ and its mates belong to a large and somewhat varied series of jugs with bulging neck profiles, here represented by $553-558$; the contour also occurs on a number of large examples (627-631). 553-554 differ considerably from each other in fabric and finish, and also in present coloration, yet are close enough in form to suggest that a single source executed the same design in different techniques, and perhaps in different firings. 555-556, from the TG depot, may present a similar case in which the form of the body also differs, as in the group of 531-532. 557 could be a fancier version, again with technical differences.

559-560 belong to a group of six jugs that parallel $550-551$ in having what are now both gray and light members showing homogeneous fabric and finish. All are close in size and shape, and all bear heavy handles that are either spurred or side-attached. Five came from the TG depot, while at least one, from Meg. 3, had gone into use. Similarities in fabric and finish suggest that $\mathbf{5 6 1}$ may have been an issue from the same source, as was perhaps the trefoil jug 660 (p. 60).

562-572 are a miscellany of jugs, each either unique or one of a pair, with diverse forms of ellipsoidal bodies. 573 is one of the more interesting oddities within the shape. Belonging to a group of three nearly identical jugs, it is not far removed in form from such examples as 572; but the coarse fabric is essentially that of one-handled utility pots, and thus might indicate that the group was intended as a version of the coarse-ware shape modeled on the round-mouthed jug. That the lid 851 rests well on 573 (pl. 103) strengthens the possibility, since such covers, while not indicated for any other variety of round-mouthed jug, do seem to have been a regular complement of one-handled utility pots (pp. 73-74). The miniature 574 recalls 572-573 in overall proportions.
575-578 belong to a distinctive variety with squat. ellipsoidal body, usually of multiple contours. The miniature 579 , one of a pair from TB 7, may be related to the same series. The larger ones, at least, are suggestive of a single source, and may have a connection with similarly contoured round-mouthed jugs painted in the WaryLine style (598-600, 605-606; infra). The widemouthed trefoil jugs 764-765, again with similar contours, could belong to the same circle of production (p. 63).

Ovoid bodies, generally less frequent than ellipsoidal, occur on both small (580-586) and large jugs ( $\mathbf{6 2 9 - 6 3 0}$ ), while painted specimens increase the formal range at both scales (e.g., 608, 619, 624, 638-640). 580 has a near-twin in monochrome ware and is at the same time very close in basic form to the painted 610 ; the shape is also paralleled on a miniature scale by $\mathbf{5 8 1}$, one of four tiny jugs found in a basin in CC 2 (infra). The crisply articulated 582, with a rare twisted handle, has a close associate, and the form was also duplicated in the unusual 583, a round-mouthed jug modified to create a hybrid trefoil type.

Jugs with sharply carinated bodies are also relatively few. 587-588 and the miniature 589 are biconical, and have general parallels in some trefoil jugs (669-671). V'et most others show a high point of carination, creating a kind of angular ovoid that harks back to $\mathbf{1 1 0}$ from EPB V' and possibly to Macedonian models (p. 53). 590, practically a miniature, is perhaps the most eccentric of the lot in having an emphatically angular profile and oversize handle. 591-592 and the stamped 597 have miniature counterparts in 593-594. The last jug is remarkably well formed, and is also the smallest wheelmade vessel known in the Early Phrygian corpus. 593 was found with a near-twin in the same basin in CC 2 that contained the other miniatures 581 and 589 . Despite differences in basic form, all four jugs from the basin may look to a common source. Sizes and overall proportions are close, but more telling perhaps are the similar handles-poorly formed and awkwardly attached, as though by a consistently unattentive potter. A more straightforward case for a production group can be made for 595-596, two of
seven jugs that, while of varying size, are linked by fabric and overall form, and also by the particular types of foot, rim, and handle.
Large round-mouthed jugs have a variety of forms that to a great extent parallel those of their smaller counterparts. It is perhaps because of this echoing of small types that large jugs are less standardized than their twohandled cousins, the kantharos kraters, a shape that does not occur at a reduced scale (p. 78). 630 from Meg. 3 is among the closest in the one-handled shape to the amphora type. The ovoid body, vertical neck, and band rim are regular features of the kantharos krater, as is the prominent, spreading foot (cf. 878, 880, 882). 638-640 and the large jug from Tumulus $G$ (pl. 61, P 49), all painted specimens, are also close to the kantharos krater, although the flaring rims on $\mathbf{6 3 8}$ and $\mathbf{6 4 0}$ are a feature of round-mouthed jugs rather than the two-handled shape. Similarly, the handles on these jugs and others are not consistent in type, as they are among the amphoras. Many of the other large round-mouthed jugs conform less to this pattern and are closer to small forms, although a number have spreading ring feet as a kindred element. Such a foot occurs on 627 and 631 , yet both have subtly bulging necks and offset rims that recall small jugs (e.g., 553-556), while the ellipsoidal bodies are also paralleled in smaller forms (e.g., 531, 556). 628 seems to be a large version of such jugs as 545-546, and the contour of 629 is not far removed from that of 585 .

The formal variations of painted round-mouthed jugs both reflect and supplement those of the monochrome corpus. The shape is the principal carrier of the WavyLine style, in which it is represented by about twenty examples painted in the Pure mode (598-606, 632; pp. 155-156). 598-601 and 605-606 show the commonest form, with low, squat body of multiple contours and a smooth or continuous transition from body into neck. The parallels for the profile in monochrome ware are also close in size, and it is possible that all had a common source (575-577; supra). Subgroups within the painted series might indicate single hands, as with a set of four from Meg. 3 (e.g., 598) and a pair from TB 1 (605-606). Related to the latter subgroup is a cluster of vitrified and fused jugs whose context in the Destruction Level is not known (pl. 51, P 4682). The unusual decorative scheme of 605-606 is paralleled by another specimen from TB 1 , the large 632, yet the jug is not similar in form (p. 156). 602 is one of a pair of Wavy-Line jugs that differ in having carinated bodies, yet they seem close enough to the other squat jugs to have been perhaps an experimental form within the series. 603-604 are also somewhat removed from the common mold in having fuller ellipsoidal bodies; they are the closest in form and painted scheme to 294 from the Terrace fill (p. 156).

Four jugs painted in the Chevron-Triangle style are further linked by a standardized shape: flat bottom, ovoid body, lightly offset rim, and rolled, side-attached
handle (e.g., 608-609; p. 158). Minor variations in size, fabric, and decorative scheme do not detract from the strong possibility of a single source for all. TumP 54, the only round-mouthed jug in the style from an earlier context, is considerably larger than the others, and it also differs somewhat in both shape and decorative program (p. 158). 610 is related to the style, yet as with TumP 54 the vessel shows certain formal differences. It is possible that the two jugs represent other centers of production, although the earlier context of TumP 54 might indicate that a temporal factor is also involved.
The large 634, an exemplar of Fine-Line Buff ware, echoes in form and proportions the smaller 530 . The jug was found in TB 2 with 635, a fragmentary vessel of the same ware. As preserved, 635 is like 634 in form and close in painted program, but it could be a kantharos krater instead (p. 159). The earlier 165 from EPB V is also of Fine-Line Buff, and may have been of similar shape. 611 is the only round-mouthed jug of small size known in the Polychrome House style, yet the kantharos kraters 879-880 and a few ambiguous fragments indicate that the mode was used on the large-scale version of the basic form (p. 161). 612-615 belong to the TB 8 Group, a painted series whose decorative traits are somewhat less than homogeneous (p. 164). Yet the jugs are similar in fabric, while certain formal aspects, such as flat bases and a preference for ellipsoidal-biconical bodies, support the stylistic grouping.

Round-mouthed jugs that do not belong to one of the individual painting styles are overall fewer, most being ones-of-a-kind. Yet 619 has a near-twin in the Destruction Level and also a stylistic ancestor in EPB IIb (22). 621-622 are related in both form and design, and they also suggest a link with the monochrome group of 544-546. 618 seems to be a decorated counterpart of such jugs as 547 and 549 , and it is also not far removed in form from K-III 12.

Examples of the shape in Early Phrygian tumuli show an uneven pattern of associations with the citadel. Of those not previously cited, TumP 66 seems to be a large-scale counterpart of such small jugs as 553-555. K-III 24, a medium-sized, black polished example, finds its closest parallels in the larger Brown-on-Buff jugs TumP 55-57, probably all three from the same source. TumP 55 and 57 are particularly close to the jug from Tumulus III in their plump ovoid bodies and neck/rim contours, while all three parallel the monochrome example in type of base and the use of strap handles with bolsters. The Destruction Level has yielded nothing closely comparable, but the fragmentary Brown-on-Buff jug 1038 from a post-destruction context on the City Mound is close in size to K-III 24 and similar in contour to all four funereal examples. The handle on $\mathbf{1 0 3 9}$, another contextually late specimen of the same ware and probably a round-mouthed jug, closely recalls those on K-III 24 and TumP 55-57. K-III 23 is an extraordinary
medium-sized jug with an unusually short neck, unparalleled handle fixtures, and a unique scheme of relief embellishment (p. 121). Remarkable in a different way is the specimen from Tumulus Y (pl. 61, P 3160), a jug of low, wide proportions that are without parallel in the Early Phrygian citadel. Tumulus $G$ provides the closest formal comparison in a painted jug with relief petaling (pl. 61, P 45). Although this vessel was probably an
import from the eastern plateau (pp. 121, 159), certain aspects of the jug from Tumulus Y suggest a link with the groups 540-541 and 544-546 from the Destruction Level. Fabric and finish are very similar, yet more indicative of a connection is the triangular-sectioned handle (and the form of the loop), a feature that is otherwise not attested on the shape outside the two groups from the citadel (p. 55).
Trefoil Jugs
(Figure 26, Plates 62-85)

The standard Early Phrygian repertory included two distinct types of trefoil jug, each differing sufficiently from the other to be considered a separate shape or at least a subshape. The first is very much a closed vessel, with a narrow, often prominent neck whose diameter is
considerably less than that of the body. The second is the wide-mouthed trefoil jug, with low, open mouth. A few jugs waver between the two types (e.g., 653, 761, 775776 ), but for the most part the division is straightforward.

## Narrow-Necked Trefoil Jugs

(Figure 26, Plates 62-80)

| Small and medium-sized: | Large: |
| :--- | :--- |
| EPB III: $\mathbf{4 3}$ | EPB IIa: 9 |
| EPB V: 118-119 | EPB III: 44-48 |
| Terrace fill: 298 | EPB V: 120-123 |
| Destruction Level: 645-722 | Destruction Level: 723-751 |
| Post-destruction contexts: see |  |
| $\quad$ under 1041 |  |
| Tumulus P: TumP 64-65 (cf. also TumP 68) |  |

Variety in form is considerable among narrow-necked trefoil jugs, and is expressed within a set format of general proportions and parts. Bodies are capacious; the trefoil mouth itself is in almost all cases formed by a pinching-in of the rim to create a drop-shaped spout at the front (e.g., 43, 732, 745); the single handle spans from the body to the splayed-out rear of the trefoil. Whereas the difference in size among round-mouthed jugs seems to be one of degree rather than kind (p. 52), the gradations of narrow-necked trefoil jugs reflect a real distinction in the minds of potters between large and small. Small jugs are usually of fine ware and sometimes exhibit a certain elegance in form, while those of the largest category (pls. 76-80) are generally coarse and have modifications that are functionally appropriate for their scale and weight. Frequency of occurrence also indicates a dual standard of production, for unlike large round-mouthed jugs, which are relatively rare, large trefoil jugs are as numerous as their smaller counterparts. Jugs of a scale intermediate between these two categories are less common, and include vessels that correspond in fabric and shape to either small or large jugs.

In the EPB sequence, large trefoil jugs appear in EPB IIa, to be joined by the small size in EPB III. In the Destruction Level, narrow-necked trefoil jugs both large and small occur in every unit SW' of the central courts, except perhaps Meg. 4, where none was noted. The TG; depot housed no fewer than ten large jugs, at least some of which were in rows against the wall of the TG (p. 6). Only four smaller trefoil jugs are known from the unit, in marked contrast to about 25 round-mouthed jugs of less than large size. Narrow-necked trefoil jugs were not a regular ceramic item in Early Phrygian tumuli. Large jugs in clay are totally unknown, although the presence of ten bronze examples in MM shows an occasional desire for the shape (MM 16-25). Ceramic examples of the small size are represented only in Tumulus $P$, by two of regular shape and the unusual ring vase TumP 68 (p. 65); yet the same tomb also had two small jugs in bronze (TumP 6-7), and MM had 19 (MM 26-44). ${ }^{22}$

The fabric of small trefoil jugs is generally either fine or

[^60]medium-fine. Large jugs, although most often of coarse ware, occasionally have a finer fabric. Medium-sized jugs that reflect smaller forms are of fine quality, and those paralleling large trefoil jugs in shape tend to be coarse. Dica-film surfaces are common on jugs of all sizes. Painted decoration, proportionally less frequent than it is among round-mouthed jugs, is with very few exceptions (e.g., 751 ) limited to the small and medium sizecategories. Stamping is occasional (702-704; see also 796 ), and patterned incision does not occur outside a particular group of large jugs (745-746).
In the Destruction Level, small jugs are normally between ca. 11 and 15 cm . in height-to-rim. Smaller examples, including a few near-miniatures, are relatively infrequent (651-652, 659, 665, 685-686, 711-712). Within the normal range of small jugs, the capacities of measurable examples (23) are remarkably variable and not necessarily commensurate with height. A sizable cluster of jugs at the low end of the range ( $11-12 \mathrm{~cm}$.) has a relatively narrow span of $230-430 \mathrm{ml}$. to the base of the neck, yet it is the somewhat larger ones that provide the widest span of capacity in the category, 220-1200 ml. If the few extremes are ignored, the range is still considerable, between 260 and 650 ml . The most capacious specimens, $653-654$ ( 1200 and 1110 ml .), are good illustrations of the effects of form on volume, for their broad, full bodies allow them to hold over twice as much as some jugs of similar height (e.g., 648). At the same time, they hold considerably more than some mediumsized examples. Jugs of this intermediate category stand between ca. 16 and 26 cm . high to the rim. The capacities of six measurable vessels extend from 670 to 1660 ml ., but all, it should be noted, are jugs at the lower end of the range, between $c a .16$ and 18 cm . in height ( $675,689-690$, 694, 696, 701). Trefoil jugs of large size are mostly between 30 and 40 cm . high. A few slightly shorter specimens are known, but none taller. Most common are those between ca. 31 and 34 cm ., which include the two whose capacities could be tested: $10,810 \mathrm{ml}$. for 737 and 13,910 for 742 . The latter has a volume roughly thirty times greater than the median capacity of small trefoil jugs.

Size is also a factor in considering the elements of shape. Small trefoil jugs share several traits with roundmouthed jugs, and some formal grounds exist for suggesting common sources for both shapes. The types of base are on the whole similar. Small trefoil jugs less often have spreading forms and stems, and show a higher incidence of flat bases. Moreover, the ridge-ring foot, occurring with some regularity on round-mouthed jugs, is not attested. Ellipsoidal bodies of varied forms are again most common (e.g., 645-667), while biconical, spherical, and ovoid bodies are relatively infrequent (e.g., 668-673, 674-677, 678-682). A profile not encountered among round-mouthed jugs is the piriform, presumably because this form of body, with a long, markedly tapering shoulder, lent itself better to narrow-necked vessels (e.g.,

683-688, TumP 64). Necks, which tend to be prominent, are frequently set off from the body by a distinct ridge. The width of the neck in relation to the diameter of the body varies, but in general necks are distinctly narrow. Those on 653-654, 657, 686, and 711 are among the widest that can still be considered narrow-necked. Rims are often plain, but can instead be outward-thickened and either rounded or rendered as a band. Beveled rims occur frequently, including several instances of beveled bands. Handles generally parallel those on roundmouthed jugs, yet side-attachments are here less common, as are spurs, rotelles, and bolsters.

Large trefoil jugs have the general proportions of their smaller counterparts, and also show several of the same formal components, but certain differences exist, only some of which can be ascribed to practicality. Flat bases, usually wide and even, are universal. Bodies, which tend to be very broad and capacious, are generally of ellipsoidal form. A recurring variety rarely found among smaller trefoil jugs is the bicurved ellipsoidal (e.g., 734-735). Necks are usually short or abbreviated, and tend not to be markedly narrow; potters thus minimized the chances of breakage when the heavy jugs were lifted. A concomitant feature is a short, sturdy handle with a loop barely large enough to admit the fingers of a hand. Wide straps are prevalent, and they often bear a medial spine or rise that may have been viewed as a strengthening device ( $p$. 108). Double-rounds also occur, while ovals are the least frequent. Common to many large trefoil jugs is a "finger hollow" at the base of the handle, a feature seen also on large amphoras (p. 109). Large trefoil jugs often have band rims, either outward-thickened or of the beveledband variety (e.g., 45, fig. 26).

The design of trefoil jugs suggests that they were basically pouring vessels for liquids. This may well have been their original and primary function, yet evidence from the Destruction Level shows that trefoil jugs, like other shapes, were in practice multi-purpose containers. A number of large examples, none catalogued here, contained grain, while others found beside or close to grinding stands could have been used for pouring grain (see 689-690, p. 60). One large jug held lentils (see under 741), while 748 contained animal bones. The small 676-677 each housed a needle; inside 741 and another large trefoil jug were enormous caches of astragals. ${ }^{23}$

Like certain types of bowls and round-mouthed jugs, narrow-necked trefoil jugs are already at an advanced stage of development in EPB II and III. No parallels exist for the shape in Early Handmade, where narrownecked vessels of any sort are unknown, nor does a Balkan origin appear to be likely. Trefoil jugs were, however, a shape of second-millennium Anatolian pottery from as early as the Assyrian Colony period, and they are attested locally in the Late Bronze Age corpus,

[^61]where the form of the trefoil is similar to that on the Phrygian jugs. ${ }^{24}$ It is thus possible that the shape in Phrygian pottery continued earlier, indigenous forms. Yet trefoil jugs were also a standard component of the Iron Age repertories in Greece, Cilicia, and Cyprus, and there are no grounds for dismissing the possibility of a source in one of these regions. ${ }^{25}$

Regardless of its background, the narrow-necked trefoil jug appears to have been very much a Phrygian specialty of the period in Central Anatolia, an indication, perhaps, that it evolved locally. The shape is seemingly rare on the eastern plateau, and the varieties that do occur there have few correspondences with the jugs at Gordion. ${ }^{26}$

## SHAPE ANALYSIS

9, one of two large trefoil jugs known from EPB IIa, is of mica-film gray ware and has a beveled-band rim that anticipates later production. ${ }^{27}$ The probable jug 29 from EPB IIb, whether it had a trefoil mouth or not, is nonetheless of the medium size found later in the shape, and it also bears the commonest version of the Partial Wavy-Line style, as recurs on jugs at this scale in the Destruction Level (p. 157). The EPB III Latrine Deposit had no fewer than 13 large trefoil jugs, a good indication that the shape was being used, broken, and thrown away with some regularity during the life of the pit. All are of gray ware, as is $\mathbf{4 3}$, one of the few examples of small jugs from pre-destruction contexts. Even if small jugs were uncommon during these phases, $\mathbf{4 3}$ shows that a standard had already been set. Of fine fabric and finish, the jug has an articulating ridge at the base of the neck and a well-formed trefoil neatly beveled along the edgefeatures that can be matched almost precisely in the Destruction Level (cf., e.g., 645). The large specimens from EPB III also display forms and features that were to continue. 44, the only well-preserved example, introduces a distinctive variety with broad, ellipsoidal body (reverse-bicurved) and markedly narrow neck. The version recurs in EPB V (120), and in the Destruction Level it is known through many examples (e.g., 740-741; infra). The beveled-band rim on 44 , wide and prominent like

[^62]that on 45 (fig. 26), may be a development over the less emphatic rendering seen on 9 from EPB IIa: in any event, the type as it occurs in EPB III was to see wide use into the destruction period. The double-round handle borne by $\mathbf{4 4}$ was also to be a recurring feature ( 729,737 . 739, 742-746). ${ }^{28}$ The double-rounds on two other large jugs from EPB III are notable in having applied bosses, or "false rivet heads," at the upper attachments (p. 109). 46 bears an outward-thickened band rim, not fully articulated, while 47 gives the impression of a banded rim with concave face through the use of a broad ridge. 48 is essentially plain-rimmed, like many later jugs, and it also has a somewhat broad, tapering neck, as recurs in the Destruction Level (e.g., 738-739).

EPB V yielded two fairly complete large jugs of gray ware, both from the channel installed prior to the leveling operation (p. 110). 120, of the same type as 44 from EPB III, approaches more closely the examples from the Destruction Level in having the addition of an offsetting neck ridge (740-741). At the upper attachment of the double-round handle appears an oval furrow with raised margins, an unusual quirk of design that recurs on a group of large jugs from the burned citadel (744-746, fig. 26). The second jug from the channel (121) previews a body type that was to become standard for large trefoil jugs, the ellipsoidal-biconical, reverse-bicurved; the jug differs little in shape from such later examples as 746 from TB 8. Both jugs from EPB V, like $\mathbf{4 6}$ from EPB III, are of fine fabric, and thus set precedents for the occasional production of this large shape in well-refined clays (e.g., 734, 738, 744, 748). EPB V also yielded trefoil jugs in light wares, both monochrome on a large scale (122) and painted in all three sizes (118-119, 123). ${ }^{99}$ The bichrome 127, with rim missing, might have been trefoilmouthed.
Large monochrome jugs continue to be well represented in the Terrace fill, but they add nothing to the picture gained from the EPB sequence. 298, a fragment of a small, painted trefoil jug with wavy lines on the neck. anticipates at least in decoration such jugs as 705-708 from the burned citadel.

In the Destruction Level, narrow-necked trefoil jugs have a somewhat narrower range of variations than do round-mouthed jugs, and the evidence for production groups is less abundant. Small, medium, and large jugs are considered separately, except where formal correspondences cross the categories of scale.
Small trefoil jugs show a considerable variety of ellipsoidal forms (645-668, 702, 707-708, 711-713, 717). Among the more elegant is $\mathbf{6 4 5}$, one of a production group of

[^63]three. The stemmed base and high-swung, side-attached handle recall the round-mouthed jugs 529-530, and might be indicative of a common source for both groups. 646-647 and the painted 717 are like 645 in having carefully rounded, equicurved ellipsoidal bodies, as does the medium-sized 691.648 is remarkable for its continu-ous-loop handle, a device not known to recur in this manner on any shape.
The near-miniature 651, the small 652-654, and the medium-sized 697 have ellipsoidal, multiple-contoured bodies that recall those found in a class of roundmouthed jugs (e.g., 575-576, 598-599; p. 55). The body of 651 is particularly close in form to that of the miniature round-mouthed jug 579, and the two are also of similar fabric; a common source may be indicated. 653-654, while differing from each other in fabric, are similar in overall form; as noted above (p. 58), they also have the greatest capacities of measurable small trefoil jugs. The triangular-sectioned handle on 653, as well as the shape of the loop, could link the vessel by source to the two groups of round-mouthed jugs represented by 540-541 and 544-546 (pp. 54-55).
655 is similar in basic shape to 702 from TB 4, a stamped jug that has an apparent twin from the same unit. 659-660 are closely related in form, although there are differences in fabric. The latter, in turn, is close in both fabric and shape to two other jugs, thus suggesting a production group of at least these three. Moreover, their fabric bears close resemblance to that of the group of round-mouthed jugs represented by 559 (p. 55). The common traits of reverse-bicurved bodies and spurred handles further strengthen the possibility of a single source for the two groups. 661 also seems to be related, and is closer to 659 than to 660 in fabric. 662-664 have reverse-bicurved bodies similar to those of 659-660, yet in the absence of other formal correspondences the grounds appear to be insufficient for making an association. The same profile recurs on 665 , a rare example of a small trefoil jug of coarse fabric with minimal finishing. Both fabric and shape, including the detail of a ledge-like ridge offsetting the neck, suggest a link with the group of round-mouthed jugs represented by 573, and ultimately with one-handled utility pots (p. 55 ).
The exaggeratedly biconical jugs 669-672 bear enough general resemblance to postulate a common source. 669-670 have an even stronger case for association in their similar handles; that on the former is remarkable for a carefully placed series of tiny studs above the rim attachment (p. 109).
Spherical ( $674-677,703$ ), ovoid ( $678-682,718$ ), and piriform jugs (683-688, 705-706, 719) usually occur as singletons. The ovoid 678 is notable for the unique approach to the side-attachment of the handle. 680-681 are generally similar in shape; what may be a family resemblance is enhanced further by the prominent neck ridges on both. 682 , with a bicurved ovoid body, seems to mimic on a small scale such large trefoil jugs as 734-735.

Piriform jugs are particularly susceptible to modification of the body. The broad fluting on 685 is an unusual feature for the period, yet it anticipates a common element of later Phrygian design (p. 121). Other trefoil jugs of piriform shape have the analogous trait of bodyplaning: the near-miniature 686, the painted 705, and, less emphatically, TumP 64 . The jug 795 may or may not have had a trefoil mouth, but the shape can perhaps be considered a severely angular piriform, a stage beyond that seen in 705. TumP 65 represents a somewhat different approach in having a distinct raised band around the belly and a ledge halfway up the shoulder (p. 118).

Trefoil jugs of medium size do not constitute a formally homogeneous group. Some are larger-scale versions in fine ware of small types (e.g., 675, 688, 691, 700, 707, 709-710, 722); others are undersize renditions of large trefoil jugs (689-690, 694-695, 699, 716, 720); still others show forms that seem to be peculiar to the medium size-range (696, 698, 701, 704).
689-690, although their bodies differ, are representative of a special type of jug with relatively wide and prominent neck, horizontally aligned trefoil with band rim, and short strap handle bearing a medial spine. Also characteristic of the type is the shaping of the trefoil, pinched near the front rather than midway along the sides. Heights-to-rim among the four known examples vary no more than a centimeter, while the capacities of $\mathbf{6 8 9 - 6 9 0}$ are almost the same. In the course of volumetric testing, it was found that the type of spout lends itself particularly well to the pouring of dry substances (in this case, medium-fine sand). The design of 689-690 occurs again among the largest of trefoil jugs (747-748, infra), for which a special type of lid appears to have been made to fit the unusual mouth ( $855-856$; p. 74).
Few other medium-sized trefoil jugs offer evidence for associations. 697 is closely related in general form to the small jugs 653-654, while 699 from the TG depot has a large counterpart in 730 from the same unit. 698 , with a compounded handle, and the stamped 704, both from Meg. 3, are the most notable of the unique specimens. The latter, having an extraordinarily tall neck and a twisted rope handle with spool-rotelle, is easily the most extreme variation on the shape.
Large trefoil jugs show a range of variations that approaches that of the small size. Many are ones-of-a-kind, while others fall into at least general family groupings, some represented only by pairs (e.g., 725, 743, 749). Thus $747-748$ were seen above to be large versions of a type occurring in the medium size-category. Whether all had a common source is uncertain. Since the jugs seem to be more a special type than a variation, they may have had wider production. Little doubt surrounds the association of 731-732, two of a group of four nearly identical jugs. All are of the same general form, but the strongest bonds lie in the extensive use of multiple grooving on body and neck, and in the spurred rope handles ac-
cented by flattened studs at the upper attachments. Such detailing in the execution of large trefoil jugs is rare.

733-736 are representative of large trefoil jugs with bicurved bodies, an uncommon profile among jugs of smaller sizes (e.g., 710, 720). The exaggerated form of 734-735 occurs in a few other examples. Whether all stem from a single source is unclear, since the jugs differ in both fabric and details. Easier to view as a production group are the three jugs from TB 4 represented by 737. Virtually identical in form, one is now gray while the others are light in color.

738-739 are exceptionally broad-bodied jugs whose general resemblances might imply a common source. 738 is of particular note for its handle, decorated in a combination of incision and relief that includes knobs and handle trails (pl. 78). The last feature recurs in shortened form on 734, while a similar treatment is found on the ambiguous painted jugs 802-804. Otherwise, handle trails are primarily a device of large amphoras (e.g., 920; p. 109).

By far the most extensive series of large trefoil jugs from the Destruction Level is that represented by 740741, two of 12 that include three from the TG depot and four from CC 3. Since all continue the form of the earlier 44 and 120 from EPB III and V respectively (supra), they may have been the products of a single, conservative establishment that preserved a particular design. Alternatively, the jugs might represent a long-lived, standardized variety that was still being executed by more than one source at the time of the destruction.

743-746 belong to a series of seven large jugs that exhibit general similarities in form and detail, e.g., prominent neck ridges, double-round handles, and incision. All but 743 have as well the unusual feature of an oval finger hollow with raised margins at the upper handle attachment (fig. 26), as previewed by 120 from EPB V. Within this basic model of production, further details divide the jugs into smaller groups. 743 from TB 3 is like another from the same unit in having a neck ridge punctuated by notching, but it bears a pair of small knobs at the upper handle attachment instead of a finger hollow. Both have series of incised lines on the upper body, a feature shared by 744, one of a closely related
group of three. 745-746 differ from the others primarily in having incised wavy lines, rather than straight ones, on the shoulders. Patterned incision does not otherwise occur within the shape as a whole, but it is found on a jug-like jar that might be related to the series (979, p. 114).

The formal aspects of painted trefoil jugs to a great extent parallel those of the monochrome counterparts. As on painted round-mouthed jugs, formal elaboration is sparse. Such details as spurred or side-attached handles, for example, are not known, although the ambiguous jugs 802-804 do bear fancy handle trails.

In some cases, a link suggested by decoration is strengthened by parallels in form. Thus 705-706 are associated no less through shape than through the Wavy-Line style, as are many of the round-mouthed jugs painted in the same mode ( p .56 ). A pair of ambiguous jugs (797-798) painted in Wavy-Line, whether they had trefoil mouths or not, are similar in profile and offer another variation of form for the style among narrownecked jugs in general. Trefoil jugs in the TB 8 Group (709-710) are formally less homogeneous, although their closely commensurate medium size and distinct necks, as well as similar trefoils and handles, may point to a degree of formal standardization. The ambiguous jugs 805-806 belong to the same group. Similar in form, they are of much the same scale as 709-710, and each also approximates a bicurved profile, as occurs more distinctly in $\mathbf{7 1 0}$. Another group of ambiguous jugs, all painted in the Ladders-and-Zigzags style, are more conventionalized in the elements of form (802-804; p. 67).

The particularly small 711-712, found together in TB 2 , seem to have been the products of a single source. In this case, form and practically identical dimensions are somewhat more persuasive factors than decoration. The near-miniature $\mathbf{6 8 6}$ provides a close formal parallel in monochrome ware.

The painted 720 approaches the size and form of such large trefoil jugs as 733, but within the largest class itself 751 is one of only two painted examples known from the Destruction Level. Both, perhaps significantly, have ground-coats, as does the smaller 722, the only example of bichrome painting attested for the shape in the burned citadel.

## Wide-Mouthed Trefoil Jugs

(Figure 26, Plates 81-85)

## EPB V: 124

Terrace fill: 299-300
Destruction Level: 752-782
The wide-mouthed trefoil jug constitutes a class apart from the narrow-necked jugs considered above. The neck is proportionally about twice as wide and tends to be

Tumulus III: K-III 25
Tumulus X: P 3137
Tumulus I: P 3159
very low, often abbreviated. Thus the trefoil, itself characteristically low, often appears to rest directly atop the shoulder. Because of the wide mouth that it defines, the
trefoil also differs in formation, usually having been pinched in slightly on either side toward the front to form a broad spout opposite the handle. Because of these special features of design, and also the generally standardized forms of body and handle, most wide-mouthed trefoil jugs show an overall familial likeness. At the same time, however, the Phrygian predilection for variety does show forth, if only in restricted ways.

Few examples of the type are known from predestruction contexts on the City Mound, and these come from the relatively late EPB V and Terrace fill. In the Destruction Level, however, the shape occurs in abundance, although the actual frequency may have been somewhat less than that of small narrow-necked trefoil jugs. The type is represented in practically all the destroyed units, the exceptions being Meg. 4 and TB 2. Meg. 3 had no fewer than 16, while the TG depot housed at least 19, many of which appear to have come from a single source (infra). The rarity of the shape in Early Phrygian tombs matches that in pre-destruction contexts. Tumuli K-III, X, and Y each had a single example, while the generally contemporary Great Tumulus in Ankara contained two. ${ }^{30}$ Tumulus H , no earlier than the third quarter of the seventh century, continued this random practice, although the single example from the tomb represents a new variety, with higher, more prominent trefoil, that seems to have evolved from the Early Phrygian type. ${ }^{31}$

Wide-mouthed trefoil jugs are almost always of fine fabric, usually with a mica-film finish. The majority are markedly thin-walled and thus light in weight, and in this respect they parallel a series of round-mouthed jugs that stand out from the normal pattern of production (p. 54). Painting is rare on the shape (300, 778-782), while patterned incision and stamping are unknown.

The normal range of heights-to-rim is between ca. 8 and 14 cm . A few jugs are smaller (755-756, 764), and several in a range of $c a .15$ to 18 cm . are evenly proportioned enlargements ( $754,760,767,771,775$ ). Still larger jugs are rare (776, 780), and in their fine fabric, form, and embellishment they suggest much the same kind of overscale elaboration that marks large round-mouthed jugs (p. 56). The capacities of measurable jugs in the 8 to 14 cm . category are between 340 and 1120 ml ., a range that roughly parallels that of small narrow-necked trefoil jugs (p. 58). Most are under 1000 ml ., while six of the jugs tested are within a narrow 400 to 500 ml . span. The only larger jug measured, a 15 cm.-high enlarged form of 757-758, has a capacity of 1370 ml .

Wide-mouthed trefoil jugs are relatively plain and simple in comparison with other small shapes of fine
ware. Flat bases occur frequently, and are sometimes so uneven that the pots wobble or rest askew on a hard surface. Ring feet and other forms are less common, while the spreading types that can alone lend a sense of elegance to other shapes are rare $(\mathbf{7 5 9}, \mathbf{7 8 0})$. With few exceptions, bodies are of broad ellipsoidal form, the range of variety being much the same as that found among narrow-necked trefoil jugs. Although the neck is seldom a distinct component of profile, potters often placed an offsetting ridge at the base. Rims are usually plain. Lightly beveled and rounded types also occur, but the prominent bands found on narrow-necked trefoil jugs are rare. Rolled handles prevail, and the loops tend to be smaller and less high-swung than on narrownecked trefoil jugs of small size. Spurred handles are unknown; side-attachments are infrequent, as are bolsters and other kinds of special handle adornment (756-758, 775-776, K-III 25).
Whether the design of the wide-mouthed trefoil jug implies a function different from that of narrow-necked jugs is unclear. The choice of the shape over small narrow-necked trefoil jugs in certain tumuli at Gordion and in Ankara possibly indicates some distinction. The only documented uses of the wide-mouthed variety are as an astragal container (770) and a seed pot (see under 762).

The wide-mouthed trefoil jug appears to have been a ceramic invention of the Phrygians on the western plateau. The shape has no plausible antecedents, and it is not attested for the period in Anatolia beyond Phrygia. Yet the apparent successor to the type, present in Tumulus H (supra), did gain a broader popularity, as witnessed by the many examples from contexts later than the Alişar IV period on the eastern plateau. ${ }^{32}$

## SHAPE ANALYSIS

The few examples of the shape from EPB V (124) and the Terrace fill (299-300) are indistinguishable, insofar as preserved, from their descendants in the Destruction Level: all are of fine, thin-walled fabric, and the profiles find easy matches. ${ }^{33} 300$ also anticipates later jugs painted in the Wavy-Line style (778-779), and even appears to prefigure the multiple-contoured profile of 779 . Of the few examples from early tumuli, K-III 25 is close to a group known from the Palace Area (infra), while that from Tumulus Y is not far removed from 772.
The variety of wide-mouthed trefoil jugs in the Destruction Level, while not as extensive as that of narrownecked trefoil or round-mouthed jugs, is nonetheless considerable. As in these other shapes, certain patterns of

[^64][^65]production seem to be related to individual sources. Most prevalent is a particularly large group of at least 14 jugs from the TG depot, representing about $75 \%$ of the known stock in this shape from the unit. 752-754 stand for the group in terms of fabric, form, and size. Although coloration varies considerably, as it does in the accompanying and perhaps related group of round-mouthed jugs represented by 552 , the jugs are consistently of fine, thin-walled fabric and show much the same techniques of finishing. In form, they are among the plainest in the shape. Although slight differences occur in the profile of the body, these are subordinate to the overall similarities in the forms of base, neck-trefoil, and handle. In addition to composing one of the largest ceramic groups known at Gordion, these jugs also provide good evidence for intentional gradation in size, and thus volume, within a related series. $752-754$ represent small, medium, and large respectively. The scale of the last is otherwise unattested in the group; 752 has a few mates in size, while the intermediate scale of 753 is the most frequent. Two jugs of the smallest size have practically identical capacities of 440 and 450 ml . Of three jugs that could be tested from the intermediate class, the capacity of the exemplar (753) is the lowest ( 780 ml .), while those of the others ( 930 and 970 ml .) suggest that they were intended to hold tery roughly twice the volume of the smallest ones. 754 , the largest, could not be measured, but an uncatalogued jug of approximately the same height (but not in this group) has a capacity of 1370 ml ., close to three times the volume of the small 752.

Apart from this dominant group, the shape is represented by small series, with no more than half a dozen specimens each, and by such ones-of-a-kind as 756, among the smallest known. Some jugs (e.g., 766, 768) show similarities in fabric and form with the large group from the TG depot, to which they are possibly related.

757-758 are the only examples of the shape that have side-attached handles, also a rare feature on narrownecked trefoil jugs. The manner of attachment possibly reflects a single producer, since in other aspects of form the two jugs seem too closely parallel for coincidence. The potter of 759 likewise engaged in the unconventional by compressing his vessel into an oblong and appending a little spreading foot, one of the very few known on the shape. 760-761, each with at least a single close counterpart, share with certain other examples a relatively narrow neck (e.g., 771, 775-776), perhaps a compromise between the two types of trefoil jug.

762-763 represent a group of five jugs spread between the TG depot and Meg. 3. All have small, articulated bases and plump bodies of subtly multiple contours. They are further linked in having triangular-sectioned handles with loops of consistent size and shape, as occurs also on the narrow-necked 653 . The more fully rounded 778 , painted in the Wavy-Line style, has the same type of handle and, perhaps not by coincidence, the same capacity as 763 ( 1120 ml .). The triangular-sectioned handle
recurs in much the same form on the small 755. a jug that has a close formal match in the painted $\mathbf{7 8 1}$ from Meg. 3. Whether these jugs can be associated through their handles with the group of 762-763 is uncertain. Itself uncommon, the type of handle has elsewhere been used to suggest a production link between certain groups of round-mouthed jugs (540-541 and 544-546; pp. 54-55), and it may have been a distinguishing feature of a source engaged in producing more than one shape. 779, another wide-mouthed jug painted in the Wary-Line style, is much like 762 in form, but it has a plain rolled handle. 764-765 are particularly close to the squat, multiplecontoured bodies of a series of round-mouthed jugs (e.g., 576-577; p. 55); a common source for both shapes may be indicated.

766 represents a group of four small jugs, one from Meg. 3 and the others from the NW storeroom behind Meg. 1. An association with the large group of 752-754 from the TG depot is possible on the basis of similar fabric and certain aspects of form. The profile shared by the group of $\mathbf{7 6 6}$ is also the closest on the City Mound to that of K-III 25. 767 from CC 1 seems to be a considerably larger version of the group of 766, and thus may provide further evidence for gradation of size within a related series.

768-770 are generally similar in having reversebicurved bodies, but there are otherwise no compelling grounds for suggesting an association. The now gray 768 from Meg. 3 has an apparent shopmate from the same unit. Meg. 3 also yielded a closely related set of three jugs that show the reverse-bicurved form on a larger scale (e.g., 771). 772, a more angular version, is particularly close in profile to the wide-mouthed trefoil jug from Tumulus Y.

773-775 are rare biconical forms. 774 is the single known example of coarse ware within the shape, while 775 is distinguished by an uncommonly prominent neck and applied bosses in the pinches of the trefoil. The double-round handle on 775 is also unusual for the shape, yet more remarkable still is that borne by 776 from Meg. 3. Among the few large jugs in the shape, 776 is a unique creation on a par with such medium-sized narrow-necked jugs as 698 and 704, also from Meg. 3. The spherical body and the configuration of the trefoil are most unusual, while the handle, a strap with neatly cut-out, rectangular slots, is a marked rarity whose closest parallel occurs on a large round-mouthed jug from the Great Tumulus in Ankara (pp. 122-193).

The painted $\mathbf{7 8 0}$ is the largest known example of the shape. Evidently an instance of the elaborate enlarging of a small form, the jug has a spreading ring foot of a type common among large round-mouthed jugs (p. 56), while general form and size suggest the influence of dinoi. Although not reaching the size of large trefoil jugs with narrow necks, 780 nonetheless echoes its heavy-duty cousins in having a spined strap handle with a finger hollow at the base.

## Miscellaneous Jugs and Askoi

Phrygians at Gordion apparently had little interest in jugs other than those with trefoil mouths. Jugs bearing narrow necks and either round mouths or spouts are
uncommon, as are askoi and a few other types belonging to the extended family of narrow-necked jugs.

# Narrow-Necked Jugs with Round Mouths 

(Figure 27, Plate 86)

## EPB V: 125 <br> Destruction Level: 783-786

783, a large jug of coarse ware from TB 8, and the painted 785 from CC 3 are similar in scale and design. Of particular note are the prominent necks, strap handles, and the unusual upper attachment of the handles to the neck rather than to the rim. Both jugs, moreover, have a device topping the handles: an upright cylindrical knob on 783 and on 785 a false spool-rotelle. 784 from Meg. 3, a fragment of fine ware, now gray, has a rim diameter comparable to those of $\mathbf{7 8 3}$ and $\mathbf{7 8 5}$, and thus appears to have been of a similarly large scale. The handle, rolled rather than a strap, also hosts a fitting, in this case a carefully furrowed bolster. The attachment of the handle to the face of the rim, however, is a minor departure in design from the other two.

The only sure example of the type in pre-destruction contexts is 125 from EPB V, of fine gray ware. Rim diameter and preserved profile suggest that the vessel was a precursor in both scale and general form of the jugs in the Destruction Level. The rim-attached handle (not indicated in fig. 27) is paralleled on 784, as is the good

Tumulus P: TumP 45
fabric. The profile of the rim itself, however, has no close matches. The ambiguous 395 from the Terrace fill is possibly an example of the type on a small scale (p. 111).

The jugs evidently represent a rare type whose size and upper configuration were nonetheless fairly standardized from the time of EPB V. Although they are comparable in scale to larger trefoil jugs, only 783 stands out as a heavy-duty vessel, and it was, in fact, found among large trefoil jugs. The others, through fabric and/or embellishment, seem more to be examples of large-scale ceramic finery, yet in this case without clear counterparts of smaller size.

The juglets 786 from TB 4 and TumP 45 also fit within this general category, yet both are vitreous glazed and thus surely imports from the Near East, probably Syria or the Levant. ${ }^{34} 786$, with rounded underside, piriform body, and a sharply offset neck, has parallels both close and general in unglazed ceramic juglets from Palestine to Tarsus, while TumP 45 is a plainer form with less saliently diagnostic traits. ${ }^{35}$

Jugs with Spouted Mouths
(Figure 27, Plate 87)

## EPB V: 126

Terrace fill: $\mathbf{3 0 1}$
The painted 126 and 301, each a single sherd from a spout, constitute the only evidence for jugs with spouted mouths on the City Mound before the destruction period, but these are augmented by the three examples from Tumulus III. 126 reveals little about its form, but 301 may belong to a type of upright spout similar to that on the handmade 415. The last is one of the few spouted jugs known from the Destruction Level; the others include a second handmade specimen (414) and fewer than half a dozen wheelmade jugs.

Those from the City Mound are overall a disparate assortment. Of the handmade, 414 from Meg. 3 is possibly a Bronze Age curio (p. 29), while the enormous 415 suggests approximate contemporaneity with the

Destruction Level: 787-790
Tumulus III: K-III 3, 14-15
context because of its painted style, Chevron-Triangle (pp. 157-158). 787 from Meg. 3 and the painted 789 from TB 2 are the best-preserved wheelmade representatives of the shape in the citadel. The bodies of the two jugs are similar in form, and the spouts have a relatively low angle of incline, but the designs of both spouted mouth and

[^66]handle are notably different. 787 seems almost to be a modification of a trefoil jug, especially in having a rim broadly splaying around the handle attachment. The handle itself is analogous in form to that on the roundmouthed jug 531, while the furrowed bolster at the top recalls the one borne by the jug 784. The spout on 789 , longer and more prominent than that on 787, has a tiny bridge whose purpose, if any, is obscure. The painted K-III 3 combines features seen on 787 and 789 , and thus conforms reasonably well to them in basic typology. The spouts of these three vessels recall in attitude and general form a remarkable painted jug from Büyükkale II at Boğazköy. ${ }^{36}$ On two other jugs from the Destruction Level, spouts are indicated yet not preserved. $\mathbf{7 8 8}$ suggests such an appendage through the configuration of the line of break, while the strut rising from the shoulder on 790 makes little sense unless it supported a long spout.

The gray-ware K-III 14-15, sufficiently close in form to each other to suggest a common source, represent a design with long, steeply angled spout. That on the
handmade 415 is analogous. Of similar design, although with less exaggerated spouts, are a number of jugs from Alişar IV b-a. ${ }^{37}$ The type also recalls a common shape of Macedonian pottery, one that had appeared by the Middle to Late Bronze Age and that was to be among the most frequently recurring ceramic forms in the ninthcentury graves at Vergina. ${ }^{38}$ Moreover, the painted style shown by 415 finds parallels in northern Thessaly, at a time generally contemporary with the graves at Vergina (p. 158). A south Balkan ancestry for the type is thus a possibility.

Although a rare shape in pre-Kimmerian times, spouted jugs were to enjoy a considerable popularity among later Phrygians. Many examples of the Middle Phrygian period seem to be descended from the type of K-III 14-15. ${ }^{39}$ A jug portrayed on a fragment of late sixthcentury wall painting appears to be more closely related to the form of 789 and K-III $3 .{ }^{40}$ The jug in the painting is being used as a drinking vessel, as were perhaps the smaller examples belonging to the Early Phrygian period.

## Assorted Jugs

(Plate 88)

## Destruction Level: 791-793

791, a small, wheelmade jug with indications of two side-spouts, finds analogues in a few handmade, singlespouted examples of comparable size (e.g., 422). The only larger counterparts are side-spouted sieve jugs. The small forms differ, however, in having only single holes at the base of the spout. The double spouts on 791 are difficult to explain, yet this jug and the handmade specimens recall what are often regarded as "feeders," i.e., baby bottles. Such an interpretation in this case might be more compelling were the shape known in greater numbers.

## Tumulus P: TumP 68

792, close in form to a round-mouthed jug but with a proportionally lower neck, has the odd and otherwise unattested feature of double pour-channels opposite the handle. More peculiar is 793 from the anteroom of TB 4, a modified ring vase whose mouth is not preserved. The basic form without contortion may be seen in the trefoilmouthed TumP 68, but otherwise this sporadically recurring type in antiquity is not attested in the Early Phrygian repertory. ${ }^{41}$

## Askoi and Zoomorphic Vessels

(Figure 27, Plate 93)

## Destruction Level: 811-815 <br> (askoi) <br> Tumulus P: TumP 51-53 (askoi)

Askoi are considered under the general rubric of jugs since, whether intended for pouring or drinking, they are well designed for holding liquids. The major differ-

[^67]TumP 49-50, 58, 62-63
(zoomorphs)
ence in form is an off-center neck, to which an upright basket handle was usually affixed. Like spouted jugs, askoi are rare, and are not attested on the City Mound before the Destruction Level, although those from Tumu-

[^68]lus P bear witness to earlier production. In the citadel, the only known examples are from TB and CC units.
811 from TB 1 is the only real anomaly in the shape. The coarse fabric and lack of painted decoration help to set the vessel apart from the others, but it is primarily the design, with short trumpet spout and flanking strap handles, that makes 811 distinctive. The closest Anatolian parallel of generally contemporary date is a painted askos from Alişar, on which horizontal handles are combined with a vertical one of basket type. ${ }^{42}$ The same arrangement had occurred earlier on askoi in Beycesul$\tan$ II and Troy VI. ${ }^{43}$

The other askoi, all painted, form a homogeneous series in terms of basic design. With the possible exception of the fragmentary 815, the vessels rest on four little legs, have necks of considerable height (that of 813 was recut in Phrygian times), and are equipped with basket handles that show various combinations of side-attached and spurred ends. Moreover, at least five have a blanketing of painted checkerboard, an approach to decoration that is peculiar to the shape. Despite the similarities in morphology and decoration, the dissimilarities in detail among the vessels might argue against a common source for all and suggest instead a more widely held consensus of design for a rare Phrygian type. 812, with oblong body and blanketing checkerboard, is the closest of those from the City Mound to TumP 51-52; it is not, however, of their Brown-on-Buff fabric, and it also lacks their tapered "tails." These differences notwithstanding, the general similarities provide one of the more significant typological links between the tomb and the Destruction Level (p. 193). ${ }^{44}$ TumP 51-52 themselves exhibit certain differences of detail (e.g., in legs and handle attachments) that could imply either separate potters within the Brown-onBuff circle or a single craftsman who was given to minor
variations. 813-814 are the only ground-coated specimens. The technique of painting suggests a relationship, as do certain aspects of form, particularly the arched spanners between the legs, a feature that recurs on TumP 52. 813 may also have borne the same partial checkerboard as on 814, a decorative scheme paralleled on TumP 53. The principal difference between the two ground-coated askoi lies in scale, for 814 stands half a meter high and thus dwarfs its relative.

This particular type of askos has neither contemporary nor earlier parallels in Anatolia, while the extensive use of painted checkerboard is without correspondences in Iron Age Anatolian painting. The combination of askos and blanketing checkerboard does occur, however, in northern Thessaly in the ninth century, where it could be a clue to the ancestry of the Phrygian type (pp. 134, 140). ${ }^{45}$

The zoomorphic quality of these legged askoi may in some instances be questionable, but it is evident in TumP $51-52$, with their elongated bodies and tails, and in 812, which resembles something that waddles. Unequivocal zoomorphs are definitely attested for the Early Phrygian period only in Tumulus $P$, in a goose and her gander (TumP 49-50), and in a small herd of quadrupeds (TumP $58,62-63) .{ }^{46}$ Although differing considerably in form, all follow essentially the same concept of design: a pierced mouth (or bill) for pouring or drinking, and a filling hole centered on the back. The forms were perhaps inspired by askoi, the addition of a filling hole being necessitated by the small mouth openings. 1033 from TB 1, a painted sherd preserving a cloven hoof, possibly belongs to a zoomorphic vessel. If so, it would be the only one known from the Early Phrygian citadel, and also the only one of the period with such a naturalistic detailing of the supports; the quadrupeds from Tumulus $P$ all have stylized peg-legs.

## Ambiguous Jugs

(Figures 28-30, Plates 89-92)

## EPB IIb: 29

EPB V: 127
EPB VII: 184
A number of noteworthy jugs with narrow necks are typologically ambiguous because the mouths are missing. Given the proportional distribution of known types, most, if not all, probably had trefoils rather than round mouths or spouts. Many are of interest primarily for

[^69]
## Destruction Level: 794-810 <br> Post-destruction contexts: 1041

decoration, yet others are informative in shape and in their relationship to jugs of known types.

794 from CC 2 has an unusual type of piriform body, but the jug is notable primarily for its open-work handle (p. 122). 795 from TB 4 has a remarkable angular profile that recurs in a larger ambiguous jug from the same unit; the form seems to be an exaggerated version of the type of body found on the trefoil jug 705 (p. 60). 796, whether

[^70]it had a trefoil or not, augments the small assortment of stamped jugs (702-704) while paralleling them in the use of triangle-zigzag stamping. The emphatically broad, bicurved body recalls that of 704 .

797-798 are decorated in the Wavy-Line style, yet the profiles of their bodies are unattested among the known trefoil jugs painted in this mode (e.g., 705-706). 801, of Fine-Line Buff ware, is atypical among jugs in having a tall, tapering neck and a very high placement for the lower handle attachment. Since the painted ware itself may not be local (p. 159), 801 possibly represents a design at home in another Phrygian center.

It is through chance that all four members of a distinctive group of jugs are missing both necks and mouths. Represented by 802-804, the vessels are painted
in the formulaic Ladders-and-Zigzags style (pp. 160161), and they are also related in being of closely commensurate medium size and of similar, broad-bodied form. The handles, however, are equally divided between the spurred variety of 804 and that with faceted shaft and knobbed trailers on 802-803. The latter type also occurs on the Ladders-and-Zigzags krater 928 from TB 1. Since the vessels lack close parallels among trefoilmouthed and other narrow-necked jugs, they may represent a special variety issuing from a single source working in the style.

A few probable jugs from the Destruction Level, all painted, are classified under Ambiguous Vessels (1024, 1027-1029).

# Side-Spouted Sieve Jugs 

(Figure 30, Plates 94-100)

EPB V: 128-129
Terrace fill: 302
Destruction Level: 816-835
Post-destruction contexts: 10421046

One of the most distinctive shapes of Early Phrygian and later potters, the side-spouted sieve jug bears a prominent spout emerging from a sieved area on the body and a vertical handle placed $90^{\circ}$ or less to the right of the spout. Most examples from the City Mound are so balanced that they can stand alone (sometimes only barely) when empty. The basic design occurs in one of three types, each with a differing proportional relationship of neck to body.

The sieve jug occurs as a rarity in EPB V and the Terrace fill, and continues to be relatively uncommon in the Destruction Level, where about 25 examples are known. Of these, no fewer than seven belonged to the palatial Meg. 3, while the service building TB 4, notable for having a rich assortment of special ceramic designs (p. 5), contained at least the same number. Unlike other standard shapes, the sieve jug was not widely distributed within the burned citadel: none is attested from TB $1, \mathrm{~TB}$ 3, or Meg. 4, nor was the shape present in the TG depot, where exceptional vessels in general were not part of the inventory. The sieve jug thus seems to have been a luxury item of limited circulation rather than an essential component in the daily domestic routine. This view is supported by the prominence of the shape in wealthy burials. Tumulus III contained an assortment of 15 , over half the number known from the Destruction Level, while P had seven, and $W$ three. From the last came also an example in bronze (TumW 5), the same medium as that of the two

Tumulus III: K-III 4-11, 16-22
Tumulus W: TumW 61-63
Tumulus P: TumP 72-78
Tumulus X: P 3136 (fig. 30, pl. 100)
sieve jugs in Tumulus MM (MM 14-15). ${ }^{47}$ The single jug from Tumulus X , a more modest burial of the time, brings the total number from early tombs to roughly that of the entire representation from the Destruction Level. The Great Tumulus in Ankara contained two sieve jugs, both in clay. ${ }^{48}$

With a single exception (835), sieve jugs are of fine fabric and good finish, and monochrome examples frequently bear mica films. All unpainted jugs from tumuli are dark-fired, as are the two monochrome specimens from pre-destruction contexts $(128,302)$, whereas in the Destruction Level only a single jug is now gray (822). The Early Phrygian City Mound has yielded six painted examples (129, 820, 832-835), while about as many are known in Brown-on-Buff ware from post-destruction loci (1042-1046). Two of the three from Tumulus $W$ are painted, as are just over half of the 15 from III and the single jug from X . The sieve jug is the commonest shape in Brown-on-Buff ware (p. 167). Various types of nonpainted embellishment occur on jugs in Tumuli $P$ and III. On the contemporary City Mound, the only parallel in the shape for such work is 302 from the Terrace fill.

The three types of sieve jug are each related in scale and proportions to more common one-handled shapes.

[^71]Type 1, the least frequent, is essentially a small roundmouthed jug of standard form to which a spout has been added (816-817. pl. 100 [for P 3136]). Type 2 jugs, overall the most abundant at Gordion because of their high frequency in tumuli, have proportions generally like those of wide-mouthed trefoil jugs. Some are very close in form to the commoner shape, although their short necks are round rather than pinched (e.g., 822825, TumW 63). Others have no neck, and the rim rests directly atop the shoulder, a configuration unknown on other types of jug (e.g., 821, TumP 76-78). A third variety of Type 2 has a relatively tall and prominent neck (818-820), and thus could also be compared with certain round-mouthed jugs bearing short necks (e.g., 536, 578). Some Type 2 examples differ from wide-mouthed trefoil jugs in having shoulder handles (821-822, 824). Most prevalent in the Destruction Level are jugs of Type 3, which in form and proportions are comparable to narrownecked jugs, both with trefoil and with plain round mouths like their own (826-831). Included in Type 3 are the largest sieve jugs known (832-833), although most are within the $c a .11$ to 15 cm . height-to-rim range of small trefoil jugs with narrow necks. The upper attachment of handles can be below the rim, on the neck, or, as in Type 2, on the shoulder (e.g., 827, 831, 833-834). Of all sieve jugs from the Destruction Level, only 835, preserving no neck, is typologically ambiguous.

Spouts occur in only a few basic varieties, which were to a degree interchangeable among the types. All intact spouts are open or trough-shaped for at least a portion of the length. The simplest in form, occurring in Types 1 and 2 , is completely open, i.e., $U$-sectioned, from point of attachment to end (e.g., 817, 819, 821, TumP 72-74). More common, and found on all three types, are spouts with bridges that span over the sieved area so that it is completely surrounded by the base of the spout. The bridge itself may be short, usually with a worked lip (e.g., 816, 823, 826), or elongated and often preserving the original tubular shape of the spout before it was partially cut away along the top to form the trough $(828,1042$, K-III 4-9). The latter variation, a "tubular-trough spout," is probably also represented by the incomplete appendages on $818,827,831$, and perhaps 834 . Some jugs on which the spout was totally broken off indicate by the line of break that it was in some way bridged (e.g., 822, 833, 835). No sure evidence exists to indicate that any were entirely tubular from base to end.

Because of their spouts, sieve jugs were somewhat fragile vessels. That accidents occurred is indicated by a few recut spouts (831, K-III 7), while a type of horseshoeshaped clay stand known primarily from Meg. 3 seems to have been specially designed to cradle such jugs as 821 (pl. 106; p. 76). Several of the sieve jugs from Tumulus $P$ and also TumW 61 are of awkward design because the spouts were so affixed that the vessels could not have contained much liquid unless they were held in the hand
with the spout slanting upward. ${ }^{49}$ Seemingly the ideal type of spout was one whose position, angle, and length would have allowed the vessel to be adequately filled while standing. Jugs from the Destruction Level come close to meeting these standards, although none of the well-preserved examples could have been filled to the brim without an overflow through the spout. 816, for example, allowed filling to about mid-neck, while 821, 823 , and 826 would, if standing, have overflowed when the level of the liquid reached mid-shoulder. Many jugs from Tumulus III would have been equally practical in this regard.
An identification of sieve jugs as vessels for drinking coarse, grainy brews, particularly beer, has been suggested elsewhere, and it is thus unnecessary to reiterate either the physical or the literary evidence. ${ }^{50}$ If used as theorized, the design reflects a bias in favor of the right-handed.

The sieve jug seems to have been generally rare in Anatolia during the Early Phrygian period. Type 1 is unknown beyond Gordion. Type 2, however, occurs at Alişar and Boğazköy, and the former center also has Type 3 jugs. All show the same relationship of handle to spout that is standard at Gordion. ${ }^{51}$

In earlier Anatolia, jugs equipped with lateral spouts and sieves probably had the same function as those used in the Iron Age. ${ }^{52}$ Present by the Old Assyrian Colony period, side-spouted jugs continue to the end of the Empire, as now seems indicated by the evidence of Level I at Maşat Hüyük. ${ }^{53}$ Some have a handle opposite the spout, and sometimes a second of basket type; but on a few, including those from the Old Hittite cemetery at Gordion and Level I at Maşat, the vertical grip is at about $90^{\circ}$ to the right of the spout, in what was to be the regular arrangement in the Iron Age. ${ }^{54}$ Although these vessels attest the general type in second-millennium Anatolia, in form and proportions they bear little resemblance to the Iron Age varieties. Close formal correspondences do occur, however, between Type 3 jugs and a sieve-spouted shape common in Palestine and the Levant from the twelfth century through the Iron Age. ${ }^{55}$ The presence of

[^72]the type in the Yunus cemetery at Carchemish may well be significant, in light of the many cultural connections between North Syria and the plateau, and point to an introduction from this quarter into Central Anatolia. ${ }^{56}$ The other two types, which do not have good formal parallels in the southeast, are probably to be regarded as Anatolian developments. ${ }^{57}$ Type 2, given its distribution, could have arisen in either eastern or western parts of the plateau, but Type 1 seems to have been an exclusively Phrygian variety.

## SHAPE ANALYSIS

Although sieve jugs occur in early tumuli, predestruction contexts on the City Mound have yielded only three recognizable examples of the shape, all from the relatively late EPB V and Terrace fills, and all with advanced features. 128 from EPB V is the only one that can be typologically defined, a Type 2 jug with low rim set directly on the shoulder. Of examples from the Destruction Level, 821 is closest to this upper configuration, while TumP 78 has a very similar rim. Although the spout on 128 is not preserved, the painted 129 from the same context has a trough with a short bridge. 302 from the Terrace fill also has a bridge, but of unknown length; the small rectangle of clay set across it bears a pattern of tiny punched triangles, for which sieve jugs from Tumuli III and P provide analogues (pp. 121-122).

Several ambiguous vessels from pre-destruction contexts are possibly sieve jugs, yet none would alter the temporal span already known for the shape. In EPB V, 158 could be another Type 2 specimen, a wide-mouthed trefoil jug, or perhaps a small jar (p. 111). 157, a vessel of particularly fine quality from the same context, seems to have had a handle connected to the top of the rim. Not likely to have been a wide-mouthed trefoil jug because of the distinct vertical neck and the form of the rim, 157 may well be a Type 2 sieve jug. If so, the closest parallel is not in clay but rather bronze, TumW 5 from the earliest of the great tumuli. 377 from the Terrace fill may be a jar, but the profile is generally reminiscent of some sieve jugs from tumuli (e.g., TumP 73 and 75, K-III 6 and 9). 211 from Meg. $10-1$ would be a plausible candidate for a Type 1 jug were the single preserved aperture not so large ( $p$. 111). It is possible that some sherds with the characteristic upper profile of small round-mouthed jugs represent Type 1 sieve jugs (p. 53, n. 12).

[^73]Of seven Type 1 sieve jugs from the Destruction Level, three constitute a closely related production group, here represented by 816 . All were found near one another in Meg. 3, in the same general vicinity as the Type 2 jug 821 and the clay stands that seem well suited to support the shape (p. 4). A distinguishing feature of the group is a short, peaked bridge, as recurs on 826 of Type 3 and the Type 2 TumW 63. Equally characteristic are narrow strap handles with concave surfaces and small bolsters. In basic profile and size, $\mathbf{8 1 6}$ and its mates are very similar to 545, a round-mouthed jug belonging itself to a production group represented in Meg. 3 (p. 55). Insofar as it is preserved, the Type 1 sieve jug from Tumulus X ( pl . 100), painted in what seems to be a version of the Polychrome House Style, is also similar in profile and size to the group of 816 . The spout, however, is completely open, while the handle is triangular in section, like those in the group of 545 . All could be related by source (p. 55). 817, another Type 1 jug from Meg. 3, is similar to examples from TB 8, but there is no particularly strong suggestion of a production link. The closest parallel in basic form is the painted round-mouthed jug 618 from Meg. 3, a vessel that in turn seems related to the monochrome 547 and 549 (p. 55). Although details differ, the remarkably similar profiles and proportions again may point to a single source for both shapes. Also to be classified under Type 1 is the extraordinary TumW 62, whose design, bichrome-painted fabric, and style suggest an import. ${ }^{58}$ Yet since sieve jugs of Type 1 are not known beyond Gordion, TumW 62 may have at least some affinities with Phrygia (p. 165).

Although intermediate between Types 1 and 2, 818820 are placed in the latter category. 818 is reminiscent of K-III 6 and 16. 819 and the ground-coated 820 are similar in enough respects to imply a common source. The spouts on both are open troughs affixed in like manner, while the handles are wide straps topped by bolsters that show particularly careful detailing. The bronze TumW 5 is analogous to 819-820 in form and proportions.

Type 2 sieve jugs with very short or no necks are the least frequently occurring of the three types in the Destruction Level. The five known examples (821-825) are quite dissimilar, yet certain parallels in tumuli and also from outside the shape can be drawn. 821 from Meg. 3, a jug particularly well suited for the horseshoe stands found with it (pl. 106), has much the same type of low, shoulder-crowning rim as found on TumP 78 and K-III 11, vessels that otherwise differ considerably from it. 822-823, much akin in basic form to wide-mouthed trefoil jugs, are particularly close to TumP 72 and TumW 63. Various others from Tumuli P and III have analogous upper profiles. 822 from Mcg 3, moreover, sug-
58. TGET, 253-254.
gests a production link with the round-mouthed jugs $540-541$ and their extended circle, to which the Type 1 group of 816 from the same hall also may belong (p. 55). Particularly indicative of an association is the triangularsectioned handle on 822 , but the form of the body also corresponds closely, as do fabric and finish. 825 represents another approach to upper formation, with short, upright neck and slight rim. K-III 10 and 18 provide the closest parallels, while TumP 73 is of the same general sort.

Although Type 2 sieve jugs from early tumuli have general correspondences in the citadel, they the same time present certain differences. The seemingly impractical spouts of various examples from Tumuli $W$ and $P$ have been noted, as has the use of relief and other non-painted embellishment on several jugs from $P$ and III (pp. 67-68). The heavy rolled rims resting on the shoulders of TumP 76-77 and K-III 19 and 21 are also without parallel in the citadel; the type may be an individual trait, since the relief decoration on the handles and spouts of the jugs suggests a common source (pp. 121-122). ${ }^{59}$ TumP 72 and K-III 11 and 22 bear the otherwise unattested feature of a sieved disk set into the mouth. ${ }^{60}$ The stepped "waterfalls" worked into the floor of the spout on TumW 61 have correspondences in certain jugs from Tumuli P and III, but on the City Mound this detail occurs only in post-destruction contexts. ${ }^{61}$ One of the later specimens is the Brown-on-Buff 1046, possibly residual from earlier times. These several
points of disparity with what is known from the Early Phrygian citadel are as difficult to interpret as a number of other ceramic anomalies in early tumuli (p. 192). It is tempting to suggest that such goods were specially made for burials, yet the evidence does not sufficiently support the hypothesis.

Type 3 sieve jugs, the most frequent in the Destruction Level, are like those of Type 2 in showing little indication of common sources. Some, however, do share certain features of design, particularly in the forms of neck and rim, that allow a degree of internal sorting. 826 and the Brown-on-Buff 832 have markedly tall, narrow necks, while those on 827-828 are somewhat shorter. The neck on 829 is shorter still and flaring, much like those on the painted 833-834 and on K-III 5 and 17 from the only tumulus that has yielded the type. $\mathbf{8 3 0 - 8 3 1}$ represent another variation with moderately short neck and prominent, everted rim. Here also Tumulus III provides a good typological match in K-III 4. Other notable elements are the apparently spreading bases once shared by 827 and 834 , a form otherwise unattested for the general shape, and the very similar shoulder handles on 833-834. The triangular-sectioned handle on 831 possibly draws the jug into a larger production circle, one that also may include the Type 2 jug 822 (p. 55). 833, the largest sieve jug known from the Early Phrygian period, appears to belong to the general category of big forms that are based on smaller and more common models.

# One-Handled Utility Pots 

(Figure 31, Plates 101-102)

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EPB III: 49
EPB V: 130
Terrace fill: 303-304
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The design of the one-handled utility pot is highly practical in the combination of a capacious body, a low, wide neck that allows easy access to the contents, and a sturdy handle large enough to permit a grasp with at least two or three fingers. The shape is also the only standard wheelmade form in the small to medium range

[^74]Destruction Level: 836-850
Tumulus III: K-III 26-32 (pl. 102)
that was executed almost exclusively in coarse ware. The utility pot thus provided Phrygians with a durable, workaday vessel of easily portable size, one whose specific features were otherwise unmatched in their repertory. The type was apparently so prosaic that little creativity was exercised in its production. Subject to minimal variation, it received only the simplest of formal details and was almost never decorated.

The one-handled utility pot is present by EPB III, and in the Destruction Level the station of the shape in Phrygian life is indicated by its distribution. While found in every one of the TB and CC service units (TB 4 had at least 23, many along the SE wall), the shape is unknown in Meg. 3, Meg. 4, or TB 2, buildings that were not involved in food processing and other domestic indus-
try. ${ }^{62}$ The TG depot, ordinarily a good source for common smaller shapes, had only a single known example (850). Of Early Phrygian tombs, Tumulus III alone contained the type-a group of seven, all packed in the large cauldron K-III 49 as part of the "service" of 41 vessels and four lids. ${ }^{63}$ The lids were apparently intended for the utility pots. ${ }^{64}$

Utility pots are good witnesses of the Phrygian view that coarse fabric need not be synonymous with poor production (p.32). The clay is generally well compacted, hard-fired, and durable, while the forming exhibits the same high degree of expertise that characterizes other Phrygian shapes. Further indication of sturdiness lies in the fact that a considerable number are still intact. Few examples from the Destruction Level are now gray (838, 847, 850). Far more prevalent are vessels uniformly light in color, usually shades of $\tan$ (e.g., 836-837, 841, 849). Appropriate to the humble role of the shape in the Destruction Level is a total absence of polished surfaces. The vessels were often either wheel-finished or cursorily smoothed all over. Sometimes, however, potters smoothed only the lower body, or the body up to the base of the neck, and left the rest wheel-finished (e.g., 838-839, 842, 846-848). Mica-film surfaces have not been observed on any examples from the Destruction Level, and even regular clay slips are rare (848).The shape was never painted; stamped decoration is also absent, although a few vessels within the largest known production series do bear simple patterned incision ( 837 ; infra).

The utility pots from the burned citadel range in height-to-rim between 6 and 25 cm ., and as with most other shapes, potters appear to have worked with at least general categories of size in mind. Best represented are small pots with heights between $c a .10$ and 13 cm . (e.g., 836, 838). The only appreciably smaller vessel known from a service unit is also of an odd form (849). Of larger pots, most range from $c a .14$ to 18 cm . in height and constitute a medium size-class (e.g., 839, 843, 848), while a large category represented by only a few examples extends from $c a .21$ to 25 cm . (e.g., 837, 840). Capacity testings were not possible for the largest pots, although inference from the smaller categories suggests volumes well in excess of 3000 ml . The measures of five small pots range from 680 to 1450 ml . and show that, even within this narrow range of size, capacities can be more than doubled. 838, for example, is toward the lower end in height and holds 740 ml ., while 845 , of very similar proportions yet a little taller, is close to being twice as capacious at 1450 ml . Three pots of medium size could be tested: the 1550 ml . capacity of 839 is the lowest, and is
not far removed from that of 845 , but the volume of the larger 843 is 2400 ml . An uncatalogued specimen holding 2280 ml . is only slightly more than three times as capacious as the small 838 .

Potters tended to adhere strictly to the simple scheme of the shape. Flat bases predominate, and are usually of sufficient width for stability. Footed bases are unknown, although a few vessels have low, raised bases (e.g., 843). Unlike most other standard shapes, in which ellipsoidal bodies prevail, ovoid forms are here dominant (e.g., 836-844). Pots having ellipsoidal and other forms generally do not share the overall formal coherency of the ovoid specimens (845-850). This discrepancy is perhaps most evident in the form of the neck. Those on ovoid pots are usually short yet prominent, and are often articulated from the body by an offsetting device. The necks on others, however, tend to be less distinct and often abbreviated, as though copying wide-mouthed trefoil jugs ( $845,848-850$, K-III 29 and 31 ). The commonest type of rim, especially on ovoid forms, is the beveled band (e.g., 839-840), although plain flaring and rounded rims also occur. Strap handles are practically universal on examples from the Destruction Level. The handles on a few pots have low medial spines $(842,847)$ or basal finger hollows (846), but other kinds of handle adornment are absent. With two notable exceptions to be discussed below, the upper attachment of the handle was at the top of the rim. The shape seems to have been the only one on which separate lids were used with any regularity (pl. 103; infra). ${ }^{65}$

These common vessels have been generally regarded as cooking pots, although the identification stems in large part from assumptions based on form and fabric rather than on any decisive evidence. ${ }^{66}$ Examples from the Destruction Level bear no clear signs of prolonged exposure to cooking fires, such as blackened or otherwise discolored bottoms, nor have any been recorded in direct association with a cooking facility. A fair number, however, did come from the anterooms of service units, where the kitchen installations were located, while some likely examples of the shape from pre-destruction contexts show indications of burning (130, 303-304). Moreover, the lids that seem to have been used on the shape could have been for retaining heat during cooking, although they might have served equally well to keep the contents clean, over a fire or not. The seven pots from the cauldron in Tumulus III, with which four lids are associated, seem not to have been burned, although their context suggests some connection with eating or drink-

[^75][^76]ing, or both. ${ }^{67}$ As with other Phrygian shapes, the pots probably had more than a single function. Sometimes those from the citadel were found inside larger vessels, where they had perhaps been stored, but in at least one case a medium-sized pot was in a large vessel that contained grain, and thus may have been in use as a big scoop, or to carry measures to a grinding platform.
The one-handled utility pot possibly has a background in the Group 2 closed vessels of Early Handmade (pp. $25-26$ ). A link of some sort with handmade potting is indicated by 411-412 from the Destruction Level, handformed pots that adhere to the basic standards of the wheelmade shape while bearing certain traits of the Early Handmade idiom (p. 28). The handmade 68, although probably an amphora, is close in upper profile to the utility pot. The lugged 2 from EPB I is also plausible as an antecedent type, and in any event the vessel finds seemingly close approximation in the lugged, wheelmade specimen 27 from EPB IIb (p. 26). By EPB III, the utility pot in wheelmade form has entered the repertory (49). A local evolution may explain why the shape is not a widespread and regular feature on the eastern plateau during the Alişar IV period. Only from Boğazköy are there comparable, published examples, and these are noted as being uncommon at that site. ${ }^{68}$

## SHAPE ANALYSIS

In fabric, finish, general form, and proportions the gray-ware 49 from EPB III differs little from pots of the destruction period, and seems closest to such vessels as 844 and 846 . The scale is also generally commensurate, falling comfortably within the medium size-range. The only real difference between 49 and the pots known from the burned citadel lies in the rolled handle, a feature that may be chronologically significant in the history of the shape. Six of the seven specimens from Tumulus III have the same type of handle (K-III 27-32), a possible indication that rolled grips continued to be used on the shape until a relatively late pre-destruction stage. Yet since these funereal pots are unusual in other respects, they may not reflect the development of the standard type (infra). Other similarly contoured vessels from predestruction contexts preserve no traces of handles, and could conceivably be wide-necked jars not unlike such later specimens as $\mathbf{9 5 0}, \mathbf{9 5 5}$, and $\mathbf{9 7 8}$. They are nonethe-

[^77]less considered here, since in fabric, scale, and observable proportions they are at least comparable to the utility pot. The gray-ware $\mathbf{1 3 0}$ from EPB V, with a subtly offset neck and beveled rim, is a close predecessor in profile of a large group from the Destruction Level (e.g., 836-837). The diameter of the rim suggests that $\mathbf{1 3 0}$ was about the same size as 836 , i.e., of the small category known in abundance by the time of the disaster. 303 from the Terrace fill, on the other hand, matches the largest category. Thus, by the time of the Terrace all three gradations seem to be attested. The neck ridge on 303 previews a common feature of pots in the destruction period, but the notching on the ridge is not known to have continued on the wheelmade shape. The prominent beveled-band rim is antecedent to those on such specimens as $839-840$. 304, from the same unit of Terrace fill as 303, is of a somewhat thinner fabric than normal, while in profile it appears closest to the unusual specimen 847 from TB 6. Both vessels from the Terrace fill have mica films, a technical feature that sets them apart from the shape as known in the Destruction Level.

Many of the utility pots from the burned citadel belong to a large group of at least 14 vessels, here represented by 836-837. The salient features are a plump ovoid body and a neck crisply offset by a ledge-like ridge, as occurred earlier in less distinct form on 130 from EPB V. A single source seems to be indicated, and, if so, that establishment's products are attested in only two of the three sizes, small and large, the former of which is by far the better represented. Most of the large pots, including 837, bear the only real concession to adornment in the wheelmade shape, incised wavy lines on the shoulder. The source was evidently a major supplier of the shape to the citadel, and probably made accompanying lids as well (infra). Attributable to the same center are a few necked jars that duplicate, except for the handle, the large 837 (978; p. 97).

Another establishment may have been responsible for 838-840, graded pots that maintain fairly even proportioning from small to medium to large. Only one other vessel belonging to the group is known, a near-twin to the big 840. Capacity testings of the largest examples were not possible, but between the smaller two it appears that the producer sought to make a roughly twofold increase in going from 838 to 839 ( 740 to 1550 ml .). Typological traits include neatly executed neck ridges and prominent beveled-band rims, as well as the ovoid body generally favored for the shape.

Other utility pots from the Destruction Level present little evidence for associations. Such similarities as do exist among them may stem from widely held conventions rather than from the practices of individual sources. 841-850 give a sufficient indication of the formal range, and only two warrant special comment. 849 is unusual for both its small size and biconical form; the closest analogue is the handmade 413 from TB 7.

850, the sole example of the shape known from the TG
depot, is also the only utility pot in the Early Phrygian sequence that has a shoulder handle instead of one spanning from shoulder to rim top. Within the shape, the feature has but a single parallel before the destruction, on K-III 26, and the two vessels together preview the popularity of the handle setting on utility pots from later Phrygian times.

K-III 26 and the six other utility pots from Tumulus III present certain anomalies when compared with the shape as known from the Destruction Level. All are of gray ware, like 49 and possibly a few others from the City Mound, while most are described as "grob." Yet they also possess what G. Körte termed "Glasur,' perhaps implying mica film, but at any rate indicating a shiny surface. ${ }^{69}$ This finish, in marked contrast to the smoothed and wheel-finished surfaces that characterize the shape in the citadel, is particularly evident on K-III 29 (pl. 102). In
size, most of the pots from Tumulus III fall slightly below the normal range of the small category in the citadel (ca. 10 to 13 cm .). The handles, however, are the primary dissimilarity. That on K-III 26 has the match with $\mathbf{8 5 0}$. but as seen above, K-III 27-32 have rolled rather than strap handles, a feature whose only parallel from the Early Phrygian City Mound is in 49 from EPB III. Such vessels as K-III 29 and 31 (pl. 102) are closer in basic form to wide-mouthed trefoil jugs than they are to standard utility pots. Thus a rolled handle, the common type for that fine-ware shape, may have been thought more appropriate, especially since the Glasur finish already gave an appearance of better quality. In any event, the vessels seem to represent a special class of the shape without close parallel in the citadel. The possibility that they were specifically funerary arises, but at least one of the pots (K-III 29) shows what appear to be signs of wear.

## Lids

(Plate 103)

## Destruction Level: 851-857

Relatively few ceramic lids specially designed as such are attested. All but the type of 857 are essentially disks with an upright handle on top and a housing at the edge to accommodate the handle or spout of the host vessel. Many seem to have been designed for one-handled utility pots, although some were apparently made for a special type of large trefoil jug.

A burned sherd from EPB V (uncatalogued) is the only example of a lid from pre-destruction contexts on the City Mound. In the Destruction Level, the distribution parallels that of utility pots, in that the covers are known from service units but not from Meg. 3, Meg. 4, or TB 1-2. They are also absent from the TG depot, as is the type of utility pot with regular handle that many of them seem to have covered. There is no recorded instance of a specially made lid still in place on a vessel. The best direct evidence for association comes from the cauldron in Tumulus III, whose four lids were doubtless meant for the utility pots K-III 26-32.70 The tomb is the only early one that yielded ceramic covers, just as it is the only one with utility pots.

Either handmade or wheel-formed, lids are invariably of coarse fabric. Finishing is usually limited to smoothing on the top, although occasionally the underside received the same treatment. Decoration is non-existent.

Associations of lids and vessels within the citadel have

[^78]
## Tumulus III: K-III 33a-d

been made on the basis of empirical matching. In some cases, lids were found to fit best on vessels from different units, no doubt because of incomplete retrieval. Thus, types are being matched rather than the specific cover for a specific pot. $\mathbf{8 5 1}$, a lid from TB 5, rests comfortably on the coarse-ware round-mouthed jug 573 from TB 4, a vessel with group mates known only from TB 6 (pl. 103). Since this special type of jug has close affinities with utility pots ( $p .55$ ), it could reasonably have received a cover, but no other variety of round-mouthed jug can be matched with lids. As in certain other cases of well-fitting covers, it is likely that both pot and lid came from the same source. Other, somewhat larger lids from TB 5 are similar in type to $\mathbf{8 5 1}$, yet they fit best on small utility pots of standard form. Also of much the same variety is the one illustrated example from Tumulus III (K-III 33a), exceptional in having a small hole drilled in the center, under the handle.

852 represents a series of five similarly scaled lids that could, with their cut-out handle housings, serve fairly well on a number of small utility pots, yet they seem to be best suited for members of the large production group of $836-837$ (pl. 103). Three of the lids, including 852, did in fact come from the same unit (TB 3) as three of the pots in question (including 836), although it is not known whether any of the lids and pots were in proximity. It is again a likely assumption that vessels and covers were made by the same source.

Certain other lids that seem to have been intended for utility pots do not fit any particular specimen or group well enough to suggest a match made by the producer.

853 represents a somewhat different type for covering small pots, while 854, shown resting on the mediumsized 843 (pl. 103), is at once the largest ceramic lid known and the clumsiest in execution.

The only other type of vessel that seems to have received specially designed lids is a variety of large trefoil jug represented by 747-748. The jugs have a horizontal rim tapering to a $V$-shaped spout at the front, for which lids like 855-856, with housings appropriate for the configuration of the spouts, seem particularly suited ( pl . 103). 747 and 856 , both from the general SW-central area of the main room in TB 5 , may have been used together. Another type of device that might have served to close large trefoil jugs is represented by 857 , one of three crude "stoppers" of unbaked clay found outside TB 1.

Although pottery lids designed for other shapes are not known, pinch-pots, bowls, and other ceramic types were often used to stop the mouths of various mediumsized and large vessels. Sherds may also have been used
as stoppers for narrow-necked types, although none has been recorded in situ. The ledged rims on many large amphoras and storage jars seem ideal to receive lids, but the only real suggestion of such is found in the built-in partial lid on the krater 929. That large vessels did receive actual covers at least occasionally is indicated by the large bronze cauldron K-III 49. Its lid, also of bronze, parallels ceramic covers from the citadel in having cutout housings, in this case for the handle spools. ${ }^{71}$ The lid implies that larger ceramic vessels could have had covers made of a different material, bronze or perhaps even wood, on the analogy of the wooden handle on the lid of K-III 49. Yet the relatively high incidence of preserved metal and wooden items from the Destruction Level (and tumuli) and the absence of any discernible lids makes this possibility at best tenuous. The dinos 60 from EPB IV has a hole drilled through the rim, perhaps for securing a lid; the ornate small jar 949 from the burned citadel has vertically pierced lugs that might have served the same purpose.

## Miscellaneous Vessels

(Figures 32-33, Plates 104-105)

## Destruction Level: 858-863

A small and disparate assortment of Early Phrygian vessels are exceptional in that their designs do not conform well to any of the standard categories of shape. On the City Mound, these unusual and evidently nonessential creations are not definitely attested until the Destruction Level, but Tumulus $P$ contained almost a dozen of varying types. Composing the greatest single concentration known, those in the tomb of the important child may point to the level of Phrygian society for which such items were primarily intended.

Some of the vessels were evidently for drinking, while others seem generally to have been used for liquids. Of the latter, two ring vases (793, TumP 68) and the zoomorphs from Tumulus P (TumP 49-50, 58, 62-63) are discussed in connection with miscellaneous jugs (pp. 65-66). Jug-related askoi also constitute an uncommon lot, although they are somewhat less rare than the types here considered (pp. 65-66). A funnel-shaped variety of rhyton is known through a single fragmentary example from the Destruction Level (858). As reconstructed (fig. 32 ), the painted vessel is of a convenient size for holding and could easily have been used for drinking. Like certain sieve jugs, it had to be held when filled unless set in a stand of some sort. The curled handle may have housed a suspension cord for times when the vessel was not in use. Typologically related is the horn-shaped

Tumulus P: TumP 49-50, 58, 62-63, 68-71
rhyton TumP 67. Like 858, the vessel is unique in the Early Phrygian period, but the type does recur in post-destruction times. ${ }^{72}$

Surely intended for drinking, and among the more ingenious of Phrygian ceramic creations, were sipping vessels designed to allow beer or a similar grainy brew to be drawn from the bottom through built-in tubes or "straws," so that floating impurities were avoided. ${ }^{73}$ Perhaps novel substitutes for sieve jugs, these rare vessels are essentially ceramic embodiments of the simple picture of Anatolians drinking beer through straws given by Xenophon (Anab. IV.v.26-27). ${ }^{74}$ Through chance or possibly something more, the vessels perpetuate a type known roughly a millennium earlier during the Assyrian Colony period, although continued use across the intervening centuries cannot be documented. ${ }^{75}$

The most remarkable of the series is the unique

[^79]"sipping chalice" 859 from the anteroom of TB 4, a pattern-incised vessel with a tube extending the length of the body and opening at floor level (fig. 32). The durable, curved handle is well suited for grasping, while the bird finial looking forward from the handle lends an additional note of elegance (p. 122). Like most other vessels in the miscellaneous category, the shape of 859 , straightsided and cylindrical, is not paralleled in the standard repertory; nor do correspondences exist for its program of incised work (p. 16). The overall singularity of design might be taken to brand 859 as an import, yet the unexceptional fabric and the presence of a mica film, while not proof of a local origin, at least admit that possibility.

Although in itself singular, 859 has functional parallels in a small group of sipping bowls. A pair from Tumulus $P$ (TumP 70-71) provide the firmest evidence for use of the type in the Early Phrygian period. On the City Mound, the painted 860 was very likely a product of preKimmerian times, although the context, the gravelly fill to the SW of Meg. 12, may have been a post-destruction deposit (pp. 6-7). The only other known example of the type is contextually no earlier than the late fifth century. ${ }^{76}$ Although intended for the same purpose, the bowls show considerable variation in design and fixtures, an indication perhaps that production was too sporadic for standardization to have occurred. Particularly elaborate is TumP 71, on which a tube in the form of a schematized bird's head is connected to a sieved omphalos in the floor. The same vessel has a vertical handle whose relation to the mouthpiece parallels the scheme of sieve jugs; the fibula-like device opposite the tube may be a thumb-hold. TumP 70, with a plain, sieveless tube and no accessories, is notable for the hollow, raised center that no doubt served as a finger-hold from below. In function, this unusual device parallels the omphaloi of bronze bowls, while in method of manufacture it is analogous to the ring vase TumP 68 .

860 stands apart from the funerary examples in several respects. The tube is reminiscent of that on TumP 71 in leading to a sieved area, but it has strutted supports and also pierces the upper body rather than being attached wholly along the interior wall. More remarkable, however, is the shape. While TumP $70-71$ have the basic profile and proportions of plain bowls, $\mathbf{8 6 0}$ is of a deep, high-walled form alien to the normal production of bowls in clay. ${ }^{77}$ Since the vessel is closer in this regard to certain bronze bowls known from tumuli, it may have been derived from their kind. ${ }^{78}$ The influence of metalwork is further suggested by the rim, a high-flaring, offset type

[^80]that recalls in particular those on a number of petaled omphalos bowls from Tumulus P. ${ }^{79}$ The relief work on metal bowls like these could represent the general inspiration for the fluting on 860 , a feature closely paralleled by the small jar 949 from one of the storerooms behind Meg. l. The two vessels are also much alike in fabric and finish, and show a similar relationship between painted design and fluting. These correspondences, and the perhaps non-coincidental fact that each vessel has 12 flutes, are suggestive of a common source for both; the uncertainties caused by the ambiguous context of $\mathbf{8 6 0}$ might thus be mitigated.

Outside Gordion, the closest Iron Age analogues in Anatolia for these sipping vessels are at Porsuk and Kültepe. A round-mouthed jug from Porsuk III has a sipping tube running through the length of the handle to enter the body below midway. ${ }^{80}$ The type has no parallels in the Early Phrygian period at Gordion, but examples do occur in later contexts. Far more ambitious is a multiple vessel from Kültepe. ${ }^{81}$ Found in a building phase dated to the late seventh or early sixth century, the object uses the basic idea of a built-in sipping tube and combines it with a clever plumbing system that allows, as reconstructed, four sippers to partake at once. Recalling the ingenuity of a series of Old Hittite cult vessels, ${ }^{82}$ the concoction from Kültepe is at the same time reminiscent of the sipping of beer from a common container as described by Xenophon.

That same Xenophontic image can perhaps be applied to two of the more curious vessels from the Destruction Level, 861-862. One monochrome and the other painted in the Wavy-Line style, both are deep bowls, and both have built-in covers with circular perforations $1-2 \mathrm{~cm}$. in diameter. 861 bears opposing handles, while the fragmentary 862 preserves no traces of grips. The only local analogues are in the sieve jugs TumP 72 and K-III 11 and 22 , where a sieved disk covers the mouth opening. ${ }^{\text {.: }}$ Yet since the perforations on 861-862 are far larger than those on the sieve jugs, they could hardly have served to strain beer. Might the holes have been intended for straws through which beer or a related beverage could have been sipped by more than one drinker at a time? The number of holes on 861 , and presumably on 862 as well, is admittedly much in excess of the number of sippers that could be accommodated at any one session. let a proliferation beyond the requisite number could have made filling more convenient. There might also have been the desire to combine a practical feature with

[^81]an overall design in openwork (p. 122). ${ }^{84}$ The deep shape of the bowls may provide a final clue, for the closest parallel in clay is $\mathbf{8 6 0}$, itself a device for sipping grainy brews. $\mathbf{8 6 2}$ is particularly close to $\mathbf{8 6 0}$ in having an angled lower body, a feature of design that allows greater floor area than with conventional bowls and thus a greater volume of liquid at the bottom. The advantages for sipping beer with floating impurities are clear. The shallow forms of TumP 70-71 appear to belie the significance of a deep shape for beer sipping, yet these may, like other ceramic items in the tomb, have been special funereal goods made with less regard to practicality.

No less unusual than the above vessels is 863 , a shallow, three-legged pan whose flat bottom has numerous pitlike holes. Aside from a legless mate found leaning with 863 against a $W$ corner wall of Meg. 3, the shape is otherwise unattested in the Early Phrygian period, although two examples from later contexts on the City Mound could be residual. The purpose of this odd type is
uncertain. The design suggests that it may have been a kind of cooking device, with the numerous holes serving to increase the heating area. Yet the pans are of fine fabric and, except on the bottoms, have polished micafilm surfaces like many regular bowls. At the same time, the vessels show no clear signs of prolonged exposure to fire, while Meg. 3, although equipped with hearths, does not seem to have been a place for cooking.

TumP 69 consists of twin jars joined by horizontal struts and basket handles, from the latter of which descend vertical grips. The jars themselves are of dinos shape, but on a small scale that brings to mind widemouthed trefoil and Type 2 sieve jugs with similar contours (e.g., TumP 78). The purpose of TumP 69 is another minor mystery. Although found with other fine-ware vessels as part of the presumed dining service in Tumulus P , the double pot would have been an awkward device for either drinking or pouring; perhaps it was a container for solid food.

## Stands

(Figure 31, Plates 106-108)

## Destruction Level: 864-871

Ceramic stands are uncommon in the Early Phrygian period, perhaps because most vessels had resting surfaces sufficiently wide to allow them to stand alone. On the City Mound, stands are not attested until the Destruction Level, where about half of the roughly twenty inventoried examples are from Meg. 3. The same building also yielded a unique combination of basin and attached stand (528; p. 151). The single example in Tumulus III provides the only evidence for earlier use.

864 is one of five very similar stands found together behind the main grinding platform in TB 3. With three legs supporting a ring, the design is one that finds analogies in larger tripod stands of iron, as known from both the destroyed citadel and early tumuli. ${ }^{85}$ It is thus possible that the set in TB 3 represents a small-scale ceramic rendition of a metal type. The same interpretation would apply to K-III 45, a gray-ware specimen comparable in size and basic design to the group of $\mathbf{8 6 4}$ but differing in the shape of the legs and its finer quality. Found as part of the service in the cauldron K-III 49, the stand may have been used with the accompanying bowl K-III 46, a match that looks plausible. ${ }^{86} 864$ and its

[^82]
## Tumulus III: K-III 45

mates, unaccompanied by vessels likely to rest on them, could have supported bowls or certain medium-sized closed shapes, including utility pots. They seem too low, however, to have served as trivets in cooking.

865 is representative of another, markedly different design-an open, horseshoe shape with raised peaks on the top at back and ends. One of eight found together in the SE aisle of Meg. 3, 865 is of a type known otherwise through a single example in CC 2. These odd devices might have been specially designed supports for sieve jugs, of which no fewer than three were in the general company of the stands in Meg. 3; one of the jugs (821) fits particularly well (pl. 106), and illustrates how the peaks on the stand could have kept the vessel from tilting forward or shifting back. The support would perhaps have been most useful for empty jugs, when the volume of beer was no longer a stabilizing force. A number of sieve jugs barely stand alone when empty, while others (821 for example) fall over.

866 from TB 1, consisting of an elongated, tubular trunk that spreads at either end to form base and rim, seems in design to be a relatively small version of the largest pottery stands known at Gordion, 867-868 from Meg. 3. The two are so alike in form, size, and programs of stamping and openwork that a single hand or establishment probably made both (p. 123). The pair most likely stood side by side in the SE aisle of Meg. 3, but nowhere in the immediate vicinity were there vessels large enough
to rest in them. On analogy with 871 (infra), they could have been intended for big amphoras, although in this case the combined height of the two components might have been awkward. The stands would perhaps have been more accommodating for large dinoi such as $\mathbf{9 6 0}$ from the SW side of Meg. 3, and for related bronze cauldrons of less than the biggest size. ${ }^{87}$ Various shapes associated with drinking, including sieve jugs, were in the general area of the stands, while the combination of tall support and dinos or cauldron is a familiar picture from Assyria to Greece and beyond. ${ }^{88}$

869 from CC 2 represents another variety of hollow, cylindrical stand-a low, broad form of heavy construction that is also the general type of $870-871$ (infra). Like 867-868, 869 has both open-work and stamped decoration, a rare combination, and is also the only Early Phrygian item of pottery that shows stamping and painting together. The prominent notched ridges on the base and rim are another unusual feature, one that anticipates a post-destruction development in the rims of large
vessels. The rim itself is ledged, no doubt under the influence of big amphoras and storage jars, and seems to reflect the type on the pair of stamped kraters $\mathbf{9 2 0 - 9 2 1}$ (p. 105). Because of its relative lowness, 869 was perhaps not well suited as a support for large vessels with elongated and tapering lower bodies. Big dinoi would have rested fairly comfortably within it, as would have larger bowls and basins.

The large $\mathbf{8 7 0 - 8 7 1}$ indicate a common source no less through similarities of fabric, form, and scale than through painted decoration, which places them within the stylistic group named for the krater 932 . Another painted krater (930) was found directly beside 871 in TB 2 , and with little doubt once rested in the stand. The fit is good (pl. 108), allowing all the decoration on the krater to be seen, but in view of the different painting styles on the two pieces, it is likely that the match was random rather than the design of a single workshop. Furthermore, there are grounds for assuming that the Group of 932 did not emanate from a source around Gordion (pp. 162-163).

## Amphoras

(Figures 34-47, Plates 109-134)

Amphoras occur in a range of sizes so great and in an array of forms so disparate that they were perhaps regarded by Phrygians as more than a single shape, even though all are basically closed vessels with opposing handles. For this reason, the four general categories that are seen to constitute the basic typology are considered
separately: small amphoras, kantharos kraters, large narrow-necked amphoras, and large open-mouthed amphoras, the last including kraters. A few miscellaneous amphoras do not fit well into any of these subdivisions, while some others are too fragmentary to be classified.

## Small Amphoras

(Plate 109)

## Destruction Level: 872-876

Amphoras of small size, under $c a .15 \mathrm{~cm}$. in height-torim, are rare and comprise a mixed lot in terms of form, although most are wide-necked. Aside from a handmade, painted specimen from the Terrace fill (255), they are attested only in service units of the burned citadel. The distribution is weighted in favor of TB 4, with three small amphoras, while TB 3 and CC 2 each provide a single example.

In form, $\mathbf{8 7 2}$ is the most anomalous in that it has a narrow neck. Although conceivably modeled on such large amphoras as $\mathbf{8 8 6}-887,872$ could instead have been

[^83]influenced by the basic proportions of small trefoil jugs. In any event, the vessel bears an unusual kind of slip that might indicate an import.
The other small amphoras have short, wide necks and generally similar proportions, yet because of a lack of conformity in the types and settings of handles, the vessels convey no sense of a close familial relationship. That they were viewed as modified reductions of larger amphoras is suggested by certain components that are otherwise rare on small shapes. These include the shoulder handles and everted rim on 873 and the horizontal handles on 874 and 876 , all recurring features of large open-mouthed amphoras. 874 is also unusual for its small size in being of coarse ware, while 873 has only a smoothed surface, as do many larger amphoras.

The exteptional 875, found in a storage vessel in TB 4, seems in proportions and the use of high-swung handles to have been a cross between a kantharos krater and a regular krater, yet it was rendered at the scale of a small round-mouthed jug. The prominent spool-rotelles are no more than an occasional feature of larger amphoras ( $\mathbf{3 0 6}, 907,929$ ), and may instead owe their inspiration to other sources (e.g., 629-630, 704). Most remarkable, however, is the pair of circular loops dangling from the handles. The only Early Phrygian analogues in clay are on ring-handled dinoi (K-III 47-48, 1048-1049), where the
rings and their spool-shaped housings directly reflect bronzeworking (p. 110). ${ }^{89}$ They are, moreover, functional lifting devices, whereas the rings on 875 seem to have been purely decorative. Found near 875 was 876 , the only painted example of the category from the Destruction Level and one of the relatively few petaled vessels known from the Early Phrygian sequence. The amphora may be of Brown-on-Buff ware, and thus Phrygian (pp. 171-172), yet both the relief and the accompanying painted scheme suggest influence from the eastern plateau (pp. 121-122).

## Kantharos Kraters

(Figure 36, Plate 110)

## Destruction Level: 877-882

The term "kantharos krater" denotes a special type of amphora that is much like a large round-mouthed jug with a second handle. On the City Mound, the two shapes cannot be positively identified until the Destruction Level; ambiguous fragments from earlier contexts, extending back to EPB II and III, could belong to either shape, and have been entered under round-mouthed jugs (23, 42, 115-117, 296-297; p. 53, n. 12). In the destruction period, kantharos kraters are seemingly less frequent than their one-handled relatives, in a ratio of about $1: 2$, although the figures might be different were it possible to know the number of handles on a few fragmentary vessels, which are also included under round-mouthed jugs ( $635,641-643$ ). Only seven kantharos kraters can be identified, including three concentrated in the $S$ corner of Meg. 3 and two from the non-domestic TB 1. It is perhaps significant that Meg. 3 also stands as a major source of large round-mouthed jugs. Although the kantharos krater does not occur in early tumuli, III, P, and G, and also the Great Tumulus in Ankara, did contain the single-handled counterpart.

Like the large round-mouthed jug, the kantharos krater is exclusively a shape of fine ware, and is more often than not painted. Generally, the type tends to be slightly larger than the one-handled form, yet an overlap occurs in heights-to-rim between the two, ca. 19 to 27 cm . for the jugs vs. ca. 24 to 32 cm . for the amphoras.

Although large round-mouthed jugs do not make up a closely uniform series (p. 56), the known kantharos kraters are to a great extent formulaic in design. As on the one-handled shape, prominent, spreading bases were preferred. Bodies are invariably ovoid, while the tall necks maintain a fairly consistent proportional relationship to the body in terms of height and width. Whereas band rims are but one of several types found on large round-mouthed jugs, kantharos kraters show no other
variety, and it is notable that almost all of the ambiguous pre-destruction examples preserving rims have banded forms ( $115-117,297$ ). The uniform design of the shape is also seen in the handles. Either rolled or triangular in section, they tend to have a similar appearance imparted by a close-heeled rise to a consistent level above the rim. Side-attachments, not attested on large round-mouthed jugs, occur on three of the seven examples (e.g., 878, $\mathbf{8 8 1}$ ), yet none of the amphoras has bolsters or rotelles, as are found on the jugs.

Clear evidence for the function of kantharos kraters is non-existent. The limited distribution, with at least three in the palatial Meg. 3, and the tendency toward elegance suggest that they were a luxury item, like sieve jugs but more so. The examples in Meg. 3 were in the general company of fine-ware vessels, including trefoil jugs, both narrow-necked and wide, and round-mouthed jugs of small and large sizes. The two recorded examples from TB 1 belonged to a similar ceramic assemblage in the W corner of the main room. Kantharos kraters might have been drinking vessels of hearty proportions, as were perhaps their one-handled counterparts, but the suggestion is based on little more than guesswork.
The kantharos krater has no precedent in design in second-millennium Anatolia, while in the Iron Age the only sure documentation is at Gordion..$^{90}$ The type may have been a purely local formulation, one whose development was somehow related to that of the large round-

[^84]mouthed jug, which also seems to have been exclusively Phrygian. Yet since neither shape can be positively identified in pre-destruction contexts, it is impossible to assign priority. The presence of the one-handled form in pre-Kimmerian tumuli seems a weak basis upon which to judge, for the absence of kantharos kraters could reflect choice rather than chronology. The Early Handmade 253, a Group 2 closed vessel, has both an upper profile, with band rim, and a diameter that correspond to the kantharos krater and to some of its one-handled counterparts, yet not enough of the vessel is preserved to indicate whether the parallels extended further. To the west, the kantharos krater finds analogues for its design in both Macedonia and the Greek world. A type occurring with some frequency in the ninth-century necropolis at Vergina is usually much smaller than the Phrygian shape, although a few examples approach the scale of the kantharos krater and thus allow the possibility of a connection. ${ }^{91}$ The high-handled Greek kantharos, a variety new in Attic Middle Geometric II, has a fairly wide distribution in Late Geometric times. A particularly deep version that developed in Rhodes in the second half of the eighth century seems closest to the proportions of the Phrygian design. ${ }^{92}$ Yet the uncertain chronology of the kantharos krater at Gordion leaves open the question of possible derivation from a Greek type that is no earlier than about the mid-eighth century.

## SHAPE ANALYSIS

42 from EPB III previews the ovoid body that became standard for kantharos kraters, while-as noted abovethe pertinent rims from pre-destruction contexts are
mostly banded, another regular feature of the shape. 188 from Meg. 10-4 might be related to the general type (p. 111).

In the Destruction Level, 877, with a low ring foot and unusually slender handles, is the only real anomaly seen in the shape. 878-881 are of a standardized form, and show correspondences in detail and/or decoration that might indicate a common circle of production for all or most. 878 from Meg. 3 has a near-twin in shape, found in a disturbance over TB 8, from which the vessel most likely came. A noteworthy feature on both is the sideattached and triangular-sectioned handles with slight inward bows, the kind of treatment that might be the mark of a single potter. Whereas 878 is monochrome, the example from over TB 8 is painted in the Polychrome House style, as are the other kantharos kraters from Meg. 3 (879-880) and two ambiguous (either one- or two-handled) fragments from Meg. 3 and TB 7 (p. 161). 879-880, while related by painted mode, are hardly production twins in either form or decoration. The handles, however, are similar: although of a more straightforward variety than those on 878 and its painted mate, they do have much the same triangular sections, as does one of the ambiguous painted fragments. 881, painted but in no particular mode, bears handles that in contour and lower attachment are like those on 878 , but ther are faceted rather than triangular in section and placed on a body of plumper ovoid form. Different from this series, but still showing the same basic design, is the fragmentary 882 , with rolled handles connected by struts to the neck. The vessel is related through its semicircle panels to more fragmentary specimens of either kantharos kraters or large round-mouthed jugs (641-642). and it is possible that all look to a common source (p. 154).

## Large Amphoras

(Figures 34-35, 37-47; Plates 111-133)

Large, usually coarse-ware amphoras are considerably more numerous than the smaller types. Almost all belong to one of two broad categories, narrow-necked or openmouthed. As with small trefoil jugs, these two classifications are mutually distinctive, with few specimens of one category being close to the other in terms of relative neck width (e.g., 888, 891, 899). The dichotomy in basic design no doubt reflects a distinction between vessels that were to keep the contents relatively closed and those whose wide mouth openings afforded easier, and presum-

[^85]ably more frequent, access. A similar division occurs among storage jars, many of which are essentially handleless counterparts to amphoras (pp. 97-99). Because these two series of large shapes are similar in several respects, a great amount of fragmentary material is typologically ambiguous. Painted sherds and fragments belonging to large vessels are an exception, since big amphoras are known to have been painted, whereas there are no indications that storage jars ever were. On these grounds, a number of examples are classified as amphoras, even though they preserve no traces of handles (134-135, 241, 314-320). Similarly, storage jars bear certain features that are of aid in identifying fragmented material (p. 98).

## Narrow-Necked Amphoras

(Figures 34, 37-38; Plates 111-115)

## Neck-handled:

Destruction Level: 883-889
Tumulus W: TumW 65, 68, 70-71
Tumulus P: TumP 91-96, 98, 101
Tumulus MM: MM 372, 374-377
Tumulus G: P 179, P 249

## Shoulder-handled:

EPB VII: 185-186
Narrow-necked amphoras are divided on the basis of handle setting into neck-handled and shoulder-handled varieties. That this distinction has some validity in terms of the ancient view of the shape is indicated by certain differences between the two types in size and form. In the Destruction Level, neck amphoras are generally much larger than shoulder-handled ones, and they often have elongated bodies (e.g., 884-887), whereas those of shoul-der-handled type tend to be proportionally lower and broader (e.g., 892-895). These distinctions are not as much in evidence among the narrow-necked amphoras from tumuli, yet in itself this non-conformity with the vessels of living Phrygians might be significant.
In the Destruction Level, neck amphoras are known primarily from Megs. 3 and 4, whereas almost all the surviving shoulder-handled vessels come from service units. The distribution in early tumuli, whence all vessels were kept by the excavators, presents a different and perhaps more reliable picture. The narrow-necked amphora is the only ceramic shape found in all preKimmerian tombs. W and P each contained about equal numbers of both types. MM also had both, all of a relatively small size, while other tombs contained one or the other, usually the shoulder-handled variety. ${ }^{93}$ Since large narrow-necked amphoras are not definitely attested on the City Mound until the relatively late EPB V'II and M4 I deposits, those from early tumuli assume a particular importance in documenting the shape before the destruction period. In Ankara, the Great Tumulus had no fewer than eight narrow-necked amphoras of large size, all but one of which are neck-handled, while the less grand METU Tumulus II yielded six relatively small neck amphoras. ${ }^{94}$

In fabric and finish, no clear lines of separation exist between the two types. Narrow-necked amphoras from citadel and tumuli alike are generally of coarse ware, those from contexts of the living tending to be more substantial and durable. Notable exceptions are the six rather small amphoras of medium-fine ware from Tumu-

[^86]M4 I: 404
Destruction Level: 890-898
Tumulus III: K-III 1-2
Tumulus W: TumW 66-67, 69, 72
Tumulus P: TumP 97, 99-100, 102-104
Tumulus MM: MM 373
Tumulus KY: P 1350, P 1367
Tumulus X: P 3135
Tumulus Y: P 3163
lus MM. Aside from TumP 94 and TumW 72, the amphoras from tombs are dark-fired, as is $\mathbf{4 0 4}$ from M4 I, but of examples from the Destruction Level only 888 is now gray. Those from the citadel usually have smoothed or polished surfaces, and mica films are infrequent (404, 886), whereas funereal amphoras are regularly polished and often bear a mica film. Patterned incision ( $888-889$ ) and stamping (404, P 1350 from KY) are rare among narrow-necked amphoras. Painting is also infrequent, in marked contrast to open-mouthed amphoras, and is limited to vessels that show indications of being imports (185-186, 898; p. 82).
As indicated above, size is a differentiating factor in comparing the two narrow-necked types on the City Mound. Neck amphoras from the Destruction Level range in height from 50 to almost $70 \mathrm{~cm} .(\mathbf{8 8 4}, \mathbf{8 8 9})$; the tallest vary by no more than $4 \mathrm{~cm} .(885-886,889)$, and 887 was probably of about the same height before its neck was recut. Shoulder-handled amphoras, in contrast, fall as a rule within a considerably smaller ca. 20 to 40 cm . range ( $\mathbf{8 9 0 - 8 9 5}$ ). An apparent clustering occurs at the lower end of the scale, where several examples show less than a 6 cm . variance in height (e.g., 891-893). The relatively few shoulder-handled amphoras from the citadel that exceed the normal range are all fragmentary, but there is no doubt of their greater scale ( $\mathbf{1 8 5 - 1 8 6}, \mathbf{8 9 6}$ 898). 897, for example, had a height in excess of 75 cm . These are exceptional specimens on other counts as well: most are three- or four-handled; 897 bears unusual relief decoration; three are the above-mentioned painted examples that appear to have been imports.

Narrow-necked amphoras from early tumuli reveal a somewhat different pattern of scale. In W and P, no distinction in size was made between neck and shoulder varieties. Instead, both fall within a ca. 40 to 55 cm . bracket, most clustering in the upper half of the range. This range is intermediate between that of most shoulder amphoras and that of neck amphoras from the citadel, there being only slight overlaps at either end. The fragmentary amphoras from Tumuli X and Y also appear to have been of the same scale, as are K-III 2 and one each from Tumuli G (P 179) and KY (P 1367). The only real exceptions to this apparent norm for large
funereal amphoras are K-III 1 (H. 70 cm .), which matches in size the biggest specimens from the citadel, and, at the other extreme, the second amphora in Tumulus KY (P 1350, H. 34.5 cm .). Exceptional in another way are the six amphoras from MM: about half as big as the larger funereal examples, the vessels conform well with the lower range of shoulder amphoras from the citadel. ${ }^{95}$ All but one of the examples from MM, however, are neck amphoras, and are thus much underscale in comparison with the variety as it appears in the Destruction Level. Found in what is judged the latest of the wealthy series of Early Phrygian tombs at Gordion, these relatively small amphoras may introduce or preview a new trend in Phrygian funerary practice. ${ }^{96}$

As a rule, narrow-necked amphoras, like other large shapes, are flat-based and relatively stable. In the citadel, the neck-handled variety usually shows elongated bodies, either ellipsoidal or ovoid, while the lower shoulderhandled type suggests a preference for ellipsoidal forms. The bodies of the larger shoulder amphoras from Tumuli $P$ and III are also ellipsoidal, although those from W, judged earlier than $P$ or III, are ovoid. ${ }^{97}$ Neck amphoras from pre-Kimmerian tombs, unlike their counterparts on the City Mound, are rarely elongated (e.g., TumW 65 and P 179 from Tumulus G). Moreover, the bodies show little consistency in form, as seen best in Tumulus P , where ovoid, spherical, and ellipsoidal contours occur together. In both citadel and tumuli, necks vary considerably within each variety in regard to relative width and height. What does appear as a common aspect, however, is the prominence of the rim, whether broadly flaring or everted. In comparison with open-mouthed amphoras, the incidence of ledged types is relatively low, especially in the citadel (e.g., 885, 889, 897). With only one known exception (897), the rims of narrow-necked amphoras are not much in excess of $c a .20 \mathrm{~cm}$. in diameter. Strap handles, ordinarily short and durable, are usual on both varieties, although rolled and doubleround grips occasionally appear (e.g., 886, 893). The amphoras from Tumulus MM once again show independence from normal patterns in having a variety of handle types, including but a single instance of straps (MM 377). Basal finger hollows are common on both varieties, but other niceties of handle design, e.g., perching knobs and medial spines, seldom occur, and in most cases are reserved for neck amphoras ( $883,885,887$, TumW 65 , TumP 95-96). Neck amphoras from the citadel also tend to monopolize the more pronounced architectonic elements of design, including banding and prominent neck ridging (883, 885-886, 889).

[^87]That narrow-necked amphoras were used for storage seems evident from both design and context. Those from early tumuli most likely contained liquids or perishable foodstuffs. In W and $P$ the vessels were set upright on the floor, whereas the smaller amphoras from MM had been carefully placed with low-necked jars and dinoi in the three bronze cauldrons MM 1-3. ${ }^{9 \times}$ Many amphoras in the Destruction Level also rested on floors, often in clusters. The large 884 and 886 , for example, stood with other amphoras in a double row against the NW wall of Meg. 3 , while 883 and 889 belonged to a great concentration of at least a dozen large vessels in the E corner of Mcg. 4. Both arrangements recall those in Tumuli W and P . In only one instance are the contents of a narrow-necked amphora known: the shoulder-handled 894 in CC 3 was filled with wheat. Another of the same variety (891) was itself among the contents of a yet larger vessel placed in a corner of the anteroom of TB 1 .

Since large, narrow-necked amphoras were a component of many ancient repertories, the origins of those at Gordion are uncertain. Although neither variety is attested in local Late Bronze Age strata, ${ }^{99}$ the shoulderhandled amphora had earlier been a common feature across the plateau, including Gordion; it also occurs in Beycesultan II and in both Minyan and Tan wares in Troy VIIa-b. ${ }^{100}$ In VIIb 2 at Troy, a new type of shoulder amphora appears in Knobbed W'are, and is the most frequent shape in the intrusive repertory. ${ }^{101}$ In the Anatolian Iron Age, shoulder-handled amphoras appear occasionally at Alişar IV centers on the eastern plateau, and in this setting they could be related to a common North Syrian form. Gordion's few painted specimens admittedly look to the east, but it remains unclear whether these affinities imply a similar source for the Phrygian shape as a whole (infra). In Greece, a shoulder-handled variety appears in Athens at the end of Protogeometric, but goes out of use at the end of Late Geometric I. ${ }^{102}$

The distribution of the neck amphora is somewhat different. The variety was seemingly a stranger to Central Anatolia in the second millennium, in contrast to the frequency of shoulder amphoras. At Troy, however, neck amphoras had become popular by VIIa and continued into VIIb. At least one of these has a ledged rim, a feature that brings it closer to Phrygian examples. ${ }^{103}$ The tspe is apparently not represented in Knobbed Ware. Neck amphoras were also a favored shape in the Grech world, where the continuous series across Protogeometric and

[^88]Geometric seems dexended from twelfth-century Mycenaean types. ${ }^{114}$ If an external origin for the Phrygian shape is to be sought, these manifestations in the west and northwest-one or the other, or both-might be meaningful, since in Central Anatolia the neck amphora is not definitely attested at Alişar IV centers on the eastern plateau. ${ }^{105}$ Nor does the variety appear to have been an element of the North Syrian Iron Age, although neck amphoras are known throughout Cypro-Geometric. ${ }^{114 i}$

## SHAPE ANALYSIS

On the City Mound, only the shoulder-handled variety is attested before the destruction period. The painted 185. from the shed beside the Polychrome House (EPB V'II), is likely to be of foreign origin, as is with very little doubt 186 from the same unit, apparently of related shape and painted in the Alişar IV style (p. 163). $\mathbf{1 8 5}$ is reminiscent in form of a type that occurs in cremation graves at Carchemish and Hama, and occasionally at Alişar IV' centers. Moreover, the type is usually painted, in contrast to the principally monochrome shoulder amphoras at Gordion. ${ }^{107} 185$ is also unusual in local terms because of the painted scheme, while it shows a method of drafting lozenges that seems to have been peculiar to the eastern plateau. The latter trait occurs again on the four-handled 898 from Meg. 4, the only other painted shoulder amphora from the Early Phrygian citadel, and probably brands this vessel too as an import (p. 144, n. 137). The stamped fragment 404 from M4 I was most likely narrow-necked, since the broad shoulder and low-set handles would be unusual among open-mouthed types.

No other sure instances of narrow-necked amphoras are known from pre-destruction contexts on the City Mound. Even among large ambiguous vessels, few have rim diameters as narrow as the $c a .20 \mathrm{~cm}$. maximum of practically all narrow-necked amphoras from Destruction Level and tumuli. Moreover, of the specimens that do meet this criterion only one, $\mathbf{3 5 3}$ from the Terrace fill, seems to be a plausible candidate, and it could equally well be a narrow-necked storage jar (p. 100). In contrast, open-mouthed amphoras occur with some frequency, and it is likely that many ambiguous vessels with rims greater than ca. 20 cm . belong to this general type ( pp . 85-86). The seeming paucity of narrow-necked ampho-

[^89]ras in pre-destruction contexts is at odds with the evidence of the relatively early Tumulus $W$, where eight closed amphoras appear, to the exclusion of openmouthed varieties. This strong representation, and also that in Tumulus P, indicates that narrow-necked amphoras of both types had achieved a certain popularity, at least in funerary settings, in pre-destruction times.

Neck amphoras from the Destruction Level are each more or less of singular design, although similarities in general proportioning and the use of prominent bands and ridges on several examples imply a degree of consensus among potters. The architectonic devices are also notable components of design on both openmouthed amphoras and storage jars.

883 from Meg. 4 shows an unusual squat form that is more common among small shapes. 884-887, however, are elongated, and seem to be more typical of the variety as it appears in the citadel. TumW 65 and 70 are similarly proportioned, but in general such stretched contours are rare in early tumuli. 884 from Meg. 3, the plainest of the neck amphoras from the Destruction Level, has a general formal correspondence in TumW 70, while one of the examples in Tumulus G ( P 179) seems to be a more compacted version. Similar too, although somewhat broader, is the incised and three-handled 889. Despite their differences, 884 and 889 come closest of those from the citadel to being a pair. The bicurved profile of $\mathbf{8 8 5}$ is reminiscent of a contour often seen on amphoras in tumuli, although the latter tend to be broader shouldered. ${ }^{108} \mathbf{8 8 6 - 8 8 7}$ have well-formed ovoid bodies with high maximum diameters and a marked tapering toward the base, and could represent a stage of development beyond that of the slump-shouldered and relatively wide-bottomed TumW 65. $\mathbf{8 8 6}$ bears the uncommon feature of double-round instead of strap handles, yet the fragmentary TumP 93 provides a parallel. ${ }^{109}$ The same funerary amphora, in turn, is like 887 in having knobs flanking the handle attachments. TumW 70 and one of the amphoras from Tumulus G ( P 179 ) show modifications of this particular approach to handle design, which was probably inspired by the rivets on metal vessels (p. 109). On the other hand, the row of similar knobs around the neck of 887 hardly seem to be a direct translation from metal, and was instead probably intended to complement the knobs accenting the handles.

The fragmentary 888 is a technological oddity in the combination of hand-formed and wheelmade parts. The handles are also unusual in having prominent trails and indications of added components, possibly struts. The distinctive type of patterned incision borne by 888 has a few close, possibly significant parallels, including the open-mouthed amphora 311 from the Terrace fill (p. 115). The three-handled 889 from Meg. 4, similar in

[^90]form to $\mathbf{8 8 4}$, has pattern-incised banding much like that on 916, a wide-necked amphora from the same hall; the decoration might indicate a common source for both vessels (p. 115).

In comparison with neek amphoras, shoulder-handled amphoras generally have a greater degree of familial resemblance, imparted primarily by general similarities of form and by their relative plainness.
$890-891$ belong to a subvariety in which the upper handle attachment falls at the point of transition from shoulder to neck. The distinction receives some validity through its recurrence on amphoras from Tumuli $\mathrm{W}, \mathrm{X}$. and $Y$, and also in Ankara. ${ }^{110}$

892-894, all from CC 3, may represent a norm for shoulder amphoras in the citadel. 893 was found directly beside an apparent shopmate, and it is possible that all came from a single establishment. 893 is at the same time the closest link between the citadel and the six amphoras from Tumulus MM. Only MM 373 is shoulder-handled, yet all are of a scale closely commensurate with that of 893. Although MM 373 and 893 are hardly twins, they are generally similar and have much the same variety of unledged rim. The larger 894, in turn, finds a close match in scale and form in Tumulus KY (P 1350), as does 895.

895 and the three-handled 896 differ from the previous series in being larger and having handles placed markedly low, as on the presumably imported 185 and 898 (supra). 895 has a parallel in TB 3, and is at the same
time very close to 896 in the forms of neck and rim. A common source for all three might be indicated. Like 894 above, $\mathbf{8 9 5}$ is also paralleled in scale and form in Tumulus KY (P 1367). Shoulder amphoras from Tumuli III and P likewise favor handle settings that are clearly away from the neck (e.g., K-III 1, TumP 97, 99-100, 103-104). Yet the preferred type of body for these vessels. ellipsoidal and reverse-bicurved, is not attested among their counterparts in the citadel, while the high frequency of ledged rims on the funerary examples is also at variance with shoulder amphoras from the burned buildings. The somewhat elegant TumW 66 and TumW 72, the latter with horizontal shoulder handles, also lack good parallels in the Destruction Level. Their ovoid, reverse-bicurved forms possibly represent an earlier stage in the development of the shape. ${ }^{111}$

In a category by itself is the enormous, four-handled 897 from TB 4, by far the largest of the narrow-necked amphoras known at Gordion. 897 is typical of a class of sizable vessels, mostly kraters, in which careful execution and detailing are not forsaken in deference to scale. For so large a vessel, over 75 cm . high, the walls are remarkably thin ( 1.3 cm. ), while the finish approaches what might be expected on much smaller pots of fine ware. The carefully tooled base is also unusual on big containers. For the patterned ridgework on the shoulder, the closest analogues occur on 920-921, large kraters that are generally similar to 897 in workmanship; a common source might be indicated (pp. 88, 118).

## Open-Mouthed Amphoras

(Figures 34-35, 39-47; Plates 115-133)

EPB V: 131-135
PN 3: 241
Terrace fill: 305-320

Where distinctions can be made on the basis of the relative diameter of the neck, the vessels in this category are divided between wide-necked amphoras (e.g., 900, 914, 924-925) and a yet more open variety, the krater (e.g., 904-905, 908-909, 929-930). In practice, however, there are indications that Phrygians made no such hard-and-fast divisions, but instead thought in terms of a single shape with a latitude for variation, as they seem to have done with dinoi and low-necked jars (p. 91). Open-mouthed amphoras reflect more than any other large Phrygian shape the innate fondness for variety and elaboration that abounds among smaller forms.

Open-mouthed amphoras are well attested in predestruction contexts, and in the burned citadel they are

## Destruction Level: 899-935

Post-destruction contexts: 1062, 1064-1081, 1083, 1087, 1089
Tumulus P: TumP 88-90
known in greater quantity than their narrow-necked counterparts. The strongest representation is in the service units, of which only CC l has no inventoried examples. Meg. 4 contained at least three, while from Meg. 3 only one krater (929) now survives, although others were noted in the course of excavation. Of Early Phrygian tumuli, both here and in Ankara, onls $P$ bears witness to the use of the type in a funerary setting. This weak representation compared to that of narrow-necked amphoras in early tombs is at considerable variance with the distributional proportions of the two types on the City Mound (p. 80).

Wide-necked amphoras and kraters are generally of coarse or medium-coarse fabric, although some, and not

[^91]always the smallest, are finer. The category illustrates particularly well the Phrygian ability to construct big vessels as though they were small ones. Examples exceeding half a meter in both height and diameter often have notably thin walls of no more than 1 to 1.5 cm . (e.g., 908-909), thicknesses that are roughly proportionate to those of small, fine-ware shapes. The finishing on a considerable number of monochrome examples also recalls the practices of smaller-scale potting. Several were polished, but more notable is the relatively high incidence of mica films, often smoothed in a manner that has close parallels among smaller shapes (e.g., 901, 903-904; p. 33). Less frequent are the smoothed, plain surfaces often found on other large types ( 900,905 ). A fair number of examples from the Destruction Level are now light in color (e.g., 901, 906-910A-B), whereas only a few are now gray ( $899,911,918$ ). Pre-destruction monochrome specimens are with very few exceptions (132) of gray ware, as are the three from Tumulus $P$. The proportion of painted vessels is high; patterned incision and stamping are also relatively frequent.
The normal range of height for open-mouthed amphoras preserving this dimension is between ca. 40 and 60 cm . Some painted examples are smaller, a height of $c a .30$ cm . being the minimum (e.g., 925, 929). The krater 907 is the only well-preserved example that surpasses the normal range by an appreciable margin ( 70 cm .). Yet the estimated 90 cm . rim diameter of the fragmentary 911 is half again as great as those of the largest complete specimens. Judging by relative proportions (infra), the vessel could have been of a height at least equal to the diameter of the rim. Joining 911 in general scale is a series of enormous painted kraters found in later contexts but with little doubt belonging to the Early Phrygian period (pp. 88-90). Other open-mouthed amphoras with painted decoration do not exceed $c a .50 \mathrm{~cm}$. in height.

It is the combination of general proportioning and the form of the neck that invites a typological distinction between wide-necked amphoras and kraters. As here defined, the former class tends to be slightly taller than wide, yet a more telling trait is that the diameters of rims are ordinarily a quarter to a third less than either heights or maximum diameters (e.g., 902, 914, 926-927). Vessels classified as kraters, on the other hand, have relatively wider necks and rims, the latter approaching, and sometimes equaling, the maximum girth (e.g., 904-906, 908, 930 ). Moreover, the greatest diameter is often roughly commensurate with height, while a few specimens have almost a $1: 1: 1$ ratio of the three dimensions. The necks of kraters are often tall and pronounced, and in many cases are approximately vertical in profile (e.g., 904, 919, 929-930, TumP 88); those with this configuration might. be considered standard examples of the type. The necks of wide-necked amphoras, in contrast, can be either somewhat constricted (e.g., 914, 918, 924-925) or tall and tapering to relatively narrow mouths (e.g., 901, 926-
927). These distinctions admittedly draw from selected examples and ignore some vessels that are typologically poised between the two classes. Thus 902 has a neck like that of a standard krater yet a relatively narrow rim diameter, while 908, considered a krater because of proportioning, has a low, distinct neck. Such inconsistencies, combined with occurrences of both types within what seem to be individual production series (pp. 87-88), are the strongest indications that Phrygian potters thought in terms of a single, variable design.

The same attitude seems to be reflected in aspects of form and detail, since to a great extent both varieties have a common vocabulary. Flat bases prevail, and are usually of a relatively narrow width that might be more readily expected on far smaller vessels. Ovoid bodies of varying contours and proportions occur practically without exception, while ledged rims are almost universal. In only a few cases are rims less than ca. 30 cm . in diameter (914, 924-925). Handles generally form small loops, and either rest wholly on the shoulder or span from shoulder to some point on the neck. In contrast to narrow-necked amphoras, handle setting does not appear to be of any real typological significance. Horizontal handles sometimes occur, either by themselves ( 920 ) or in combination with verticals in four-handled arrangements (907-909). Finger hollows and medial spines are common, while spool-rotelles, bolsters, and perching knobs occasionally appear (e.g., 907, 913-914, 929, 932). Some of the larger examples have types of handles and refinements that seem to have been peculiar to the shape (e.g., 908-912, 922).

Open-mouthed amphoras were usually found upright on floors, sometimes in association with other large vessels and sometimes with bowls and utility pots close by. A few, including 900 from the storeroom behind Meg. 4, were partially sunk into the floor, while three from TB $3(\mathbf{9 1 4 - 9 1 5}, 921)$ were in front of the main grinding stand together with trefoil and round-mouthed jugs. At least three stood on the front steps of TB $8(\mathbf{8 9 9}, \mathbf{9 3 3}, \mathbf{9 3 5})$. Some found floating in destruction debris had probably been stored on balconies. A few uninventoried examples discovered upside down were perhaps drying out. 904 held grain when the destruction occurred, but no other observations on foodstuffs have been recorded. A specimen from CC 2, however, held a few smaller pots, and there are other indications that large vessels in general could serve as the ceramic equivalents of cupboards. Open to interpretation is the 1 cm . hole pierced in the bottom of 902 before firing, a feature shared by $\mathbf{3 0 8}$ from the Terrace fill. ${ }^{112}$ In a cemetery in the area of Tumulus

[^92]D, kraters that are Early Phrygian at least in type served as the burial containers for children. ${ }^{113}$

The background of Phrygian open-mouthed amphoras, like that of narrow-necked varieties, remains problematical, largely because the general design was so widely used in antiquity. Troy VI-VII provides some of the closest parallels in second-millennium Anatolia. Although all are classified as kraters, some lack handles, and thus are analogous to certain amphora-like storage jars at Gordion (e.g., 998-1001). ${ }^{114}$ In Central Anatolia, wide-necked amphoras generally similar in scale and proportions to those at Gordion occur as early as the Assyrian Colony period, and many also have ledged rims much like those that later accompany the Phrygian shape (p. 101). ${ }^{115}$ Some fragments at Boğazköy, ranging from Levels 4 to 2 in the Unterstadt, bear wide, vertical necks in the manner of Phrygian kraters, but it is uncertain whether the resemblances went further. ${ }^{116}$ The presence of open-mouthed types (at least one with handles) in Porsuk V suggests continuation into the Late Bronze Age. ${ }^{117}$

Among the Group 2 closed vessels of Early Handmade pottery are some whose scale and upper profiles are close to those of wheelmade open-mouthed amphoras (12, 68, 229; pp. 25-26). 68 was probably an amphora; the band rim is of a type that might have led to the ledged version on the likely krater 51 from EPB III (p. 102).

In Syria-Palestine, kraters and proportionally related types are common from the Late Bronze into the Iron Age. ${ }^{118}$ In the Yunus cemetery at Carchemish, kraters were among the most frequent shapes placed in cremation burials. Although they usually differ somewhat in form from those at Gordion and contemporary Anatolian centers (infra), particularly in the absence of a real shoulder, the schemes and motifs on the painted examples betray a close relationship with the decorative logic of Phrygia and the Alişar IV sphere (pp. 138139). ${ }^{119}$ A series of large painted vessels with krateroid upper profiles from Porsuk IV might reflect the same or a kindred stylisitic logic, but here the principal affinities seem to have been with Cilicia, in keeping with the general outlook of the pottery from that horizon. ${ }^{120}$ Kraters are also popular at centers of the Alişar IV period. Most are generally similar in form to those at Gordion, and many also have prominently everted, ledged rims that often parallel Phrygian types (p. 102).

[^93]Such rims are lacking among the krateroid vessels from Porsuk IN, but do occur regularly on kraters from the subsequent third period, whose pottery is generally within the Alişar IV sphere. ${ }^{121}$ The great majority of the typologically recognizable examples on the eastern plateau are kraters, as opposed to wide-necked amphoras, and it is thus possible that the latter type was primarily a Phrygian design. ${ }^{122}$ In any event, the affinities between kraters of the Alişar IV period and those at Gordion suggest a formal relationship existed. The bonds are underscored by a krater from TB 8 that follows closely the Alişar IV style ( 932 ) and, from later contexts, by open-mouthed amphoras painted fully in this mode and presumably imported from the eastern plateau (1083. 1087, 1089; pp. 162-163).

## SHAPE ANALYSIS

The evidence for open-mouthed amphoras in predestruction contexts is considerable, and includes two complete examples $(305,308)$ plus a few fragments well enough preserved to indicate at least general type (306307, 309). Other more fragmentary specimens with evidence of handles suggest open-mouthed rather than narrow-necked types: some by reason of a relatively wide neck (133-134, 311-313A-B) and others on the basis of estimated rim diameter (131-132, 310, 315-316). The latter have rims that are 30 cm . or more across, as do the great majority of open-mouthed amphoras, whereas the rims on narrow-necked amphoras, with but a single known exception (897), are no greater than ca. 20 cm . That these criteria, based largely on models from the burned citadel, can be applied with some validity to pre-destruction material seems indicated by the wellpreserved 305 and 308 from the Terrace fill and by TumP 88-90, for in general design, proportions, and rim diameters the vessels conform well to open-mouthed amphoras from the Destruction Level. Similarly, the narrow-necked amphoras from Tumulus IV suggest that the common scale and rim diameter (ca. 14 to 21 cm .) for these more closed varieties were already current at the time of this early burial. Several large vessels that are regarded as amphoras rather than storage jars because of painted decoration (p. 79) seem to have been of openmouthed types ( $135,241,314,317-320$ ).

Of the many ambiguous large vessels represented by rim fragments, most are 30 cm . or more in top diameter. Since they preserve no traces or clues of handles, identification as large amphora or storage jar cannot be defi-

[^94]nitely made. The uncertainties arise from the fact that the two shapes have much in common in terms of scale, design, and detail. Narrow-necked storage jars, for example, are in many cases essentially handleless versions of closed amphoras, yet the rim diameters of the former sometimes enter into the range of most open-mouthed amphoras (p. 100). Likewise, wide-necked storage jars and wide-necked amphoras differ primarily in the absence or presence of handles (p. 101). The former shape, moreover, is known to have had ledged rims (e.g., $\mathbf{1 0 0 0}-1001$ ), as do almost all the handled counterparts. Only a few of these ambiguous vessels are well enough preserved to minimize doubt. 51 and 142, from EPB III and $V$ respectively, are most likely kraters, since the upper profiles, of the standard form for the type, are not known to occur on wide-necked storage jars. 363 from the Terrace fill is also best viewed as a krater, despite the absence of a ledged rim. Although some others of the 30 cm.-and-over unledged category may represent exceptional amphoras, it is likely that most lacked handles (p. 100). Fabric also may indicate that a few ledge-rimmed vessels between 20 and 30 cm . in rim diameter are small open-mouthed amphoras similar in scale to 924-925. The fine clays of 326 and 348 from the Terrace fill are paralleled in a number of open-mouthed amphoras, whereas narrow-necked jars and amphoras with similar rim diameters are generally coarse.

In the EPB sequence, amphoras judged to be of open-mouthed types first occur in EPB V (131-135). Yet 51 from EPB III, if not a krater, at least provides earlier testimony for the distinctive type of neck that came to be associated with the variety. 131-132 bear a type of ledged rim that can be traced to the Destruction Level (pp. 103-104), while the tapered neck on 132 previews a contour found primarily on wide-necked amphoras in the burned citadel (e.g., 900-901, 926-927). 132 further indicates that amphoras were being produced in light monochrome ware with mica film by EPB V; a number of ambiguous ledge-rimmed vessels from the same context are also light (149-152). 133, with carefully executed triangle-zigzag stamping high on the shoulder, likewise anticipates later practice, as seen in a group of kraters from the Destruction Level represented by 919. 134-135 show that the painting of large amphoras had begun by EPB V. 135 also marks the appearance of a steepshouldered profile with gradual, continuous curve into the neck, and of prominent ridges to define nuances of contour. The painted 320 from the Terrace fill has similar ridging. Even though ridgework combined with painting in this manner seems to have been relatively short-lived (p. 118), the ridging itself, like the shallow contour it accompanies, previews such schemes as those on the related open-mouthed amphoras 901-904.

In the Terrace fill, the evidence for open-mouthed amphoras is greater. The wide-necked 305-307 are all of a variety with somewhat constricted neck, as may be the
ambiguous 348, and they have close analogues from the burned citadel (e.g., 900, 914, 918, 924) and Tumulus $P$ (TumP 89). 305 shows poor forming and, like the krater 308 found with it, is of a low-grade reduced fabric reminiscent of that of a number of large vessels in tumuli. The ovoid body, medial handle rises, and basal finger hollows are common features of the shape in the Destruction Level, but the form of the unledged rim is so far unique. 306 is a skillfully executed example of amphoras with a shallow, continuous curve from shoulder into neck (e.g., 915). The series of multiple ridges, placed to accentuate subtle changes in contour, recalls the single ridges on 135 and 320 . The imitation triple-round handle on 306 is unusual, while the crowning spoolrotelle recurs infrequently on kraters from the burned buildings ( 907,929 ).
The krater 308 differs little in form and size from TumP 88 and several examples from the destruction period (e.g., 905, 919, 929); all represent the standard variety, which was probably already present by EPB III (51), as may the ambiguous 333 and 337 from the Terrace fill. The ledged rim on $\mathbf{3 0 8}$ is also of a type that occurs in both Tumulus P and the burned citadel (p. 103); the patterned incision, however, is unusual ( p . 115). Apparently of similar krater design, yet somewhat larger than 308, is 316 , a painted specimen with an odd kind of decorative ridging (p. 118) and a handle that was perhaps akin to the platform type seen on 911-912 from the Destruction Level. The rim on 316 may be of chronological significance, since the variety is known only in relatively late pre-destruction contexts and in Tumulus $P$. Those crowning $\mathbf{3 1 0}$ and $\mathbf{3 1 4}$ seem related to that on 316, and have a similar distribution (p. 104). 309 is of a somewhat unusual, short-necked type that is otherwise unattested in pre-destruction contexts. The closest parallels lie with the four-handled kraters 908-909 from the Destruction Level.

A few fragmentary amphoras from the Terrace fill are of interest primarily because of incised or stamped decoration. The style of patterned incision on 311 has close and very likely significant parallels in large vessels from PN 3 and the Destruction Level (p. 115). 312 seems to have been impressed with the same stamp used on 918 from the anteroom of Meg. 4 (p. 131). 313B is the only Early Phrygian vessel known to have stampings on the handle.

Open-mouthed amphoras from the Destruction Level indicate through variety of formal expression and detail that potters viewed the shape as an outlet on a large scale for their creativity. The vessels also yield considerable evidence for the isolation of production groups, more so than any other large shape.

The three-handled 899 is one of the more peculiar in form, since it lacks parallels and seems to be almost a compromise between narrow- and wide-necked varieties. $\mathbf{9 0 0}$, on the other hand, is a wide-necked amphora of
fairly standard design with continuous-curve profile and tapering neck. Similar in a number of aspects to the bichrome 927, 900 is one of several monochrome examples that show formal bonds with painted amphoras.

901-904 seem to be related despite differences in contour and proportioning. The last has a near-twin and is very similar to yet another vessel. Common to all six is a pair of prominent, spaced ridges on the lower neck, these serving to articulate transitions that the continuouscurve profiles would otherwise blur. Seemingly prefigured by 135 from EPB V, the feature may indicate a single source for 901-904, especially since it does not recur in this particular way on other large vessels from the Destruction Level, except the very large 911 . Strengthening the case for a relationship is the fact that all are approximately the same size, while all but 902 have smoothed mica-film surfaces. On 903 and the closely related group of 904 , this rough, glittery finish is of much the same type and quality as that found on small vessels of fine ware (e.g., 529-530; p. 33). It also may be significant that four of the six, including 904 and its near-twin, come from the same hall (TB 6), since concentrations of production groups are familiar occurrences in the burned citadel (p. 42). The painted 926 from CC 3 could be related to the group. Although it lacks the ridgework and has higher handle settings, the vessel compares favorably in size and general form with 903. If all are the works of a single source, then that center was involved in the manufacture of both wide-necked amphoras (901-902) and kraters (904) as here distinguished. The common traits of both, and the fact that $\mathbf{9 0 3}$ seems to be intermediate between the two varieties, are compelling indications that a single shape was intended. As a caveat on the use of rim types in making such associations, those on 901-904 are as different as rims can be (fig. 39). This element of diversity perhaps resulted from individual potters executing a general workshop design while personalizing it through the type of rim that each preferred or had learned.

905 from CC 2, a krater of standard proportions, is similar in basic form to the pattern-incised 915 and the painted 931. Yet the grounds for a production link are not particularly strong, and it is possible that the three instead reflect a widely held concept of design that favored plump, rounded bodies and only moderately distinct necks. 906 shows somewhat crisper lines; in having a neatly articulated neck and ridgework, the vessel seems to be a moderately enlarged version of TumP 88 and 90.

The three kraters $907-909$ are alike in having four handles, in each case a combination of horizontals and verticals in opposing pairs. They are also linked by construction and fabric, all having relatively thin walls (ca. 1 cm .) for their considerable size and what are now light-colored mica-film finishes of the same type and quality found on many small shapes (p. 33). 907 is of
standard krater design like 905-906, but much larger. The spool-rotelles crowning the handles are uncommon on the shape $(306,929)$, while the curving handle trails have at least general correspondences on a few other examples (e.g., 912, 914, 920-921). 908-909 most likely came from a single source, yet whether 907 was the work of the same producer is unclear. The former two are both of an unusual, short-necked variety and seem, judging by rim diameters, to have been of quite similar scale. Their vertical strap handles, neatly trimmed to rectangular sections, are generally rare in Early Phrygian pottery, yet they preview a common feature of later production. The spurs flanking those on 908 recur on a number of other examples (e.g., 900, 911, 913, 922). On both kraters, the horizontal handles are remarkable in being side-attached, a method ordinarily reserved for smaller shapes. Those on 908 are single, but on 909 the loops are double with a side-attachment at the center. A third variation is represented by the double-loop handles on the fragments 910A-B from CC 3, where side-attachments very much like those on 908 -909 occur at all three points of contact. Moreover, the handles were given a quasizoomorphic appearance by the addition of eye-like pellets at the central attachment. Coming from a large vessel identical in fabric and (now) red mica-film finish to 909. 910A-B may well belong to the same circle of production as $908-909$. The horizontal handles on 909-910A-B find close parallels in Greek Protogeometric and Geometric pottery, yet the idea could have developed independently in the Greek and Phrygian spheres. ${ }^{123}$

Careful attention to handle design seems to have been particularly common among larger open-mouthed amphoras. The enormous 911 from Meg. 4, probably a wide-necked amphora because of the markedly tapering neck, has three massive handles of extraordinary composite form that rise to lunette platforms set flush with the rim. The thick basal spurs may have been intended as strengthening devices, but the curved, pendent bands beneath the handles are purely decorative. 912 preserves a handle whose basic structure is nearly identical, but the central strap section bears an open-work pattern, while prominent, trailing bands take the place of the spurs and pendent arc on 911 . Otherwise unattested, the handle design on 911-912 might well betray a single producer. In any case, the maker of 912 belongs to a select band of potters who provided their large works with neatly articulated, profiled bases (e.g., 897, 920-921). 913, another very large amphora, shows a different approach to the detailing of big handles. Along with 911-912, it is also representative of a considerably thicker-walled and

[^95]thereby heavier technique of construction than that used for 906-910A-B. As such, 911-913 afford good parallels in monochrome ware for the enormous painted kraters whose setting had probably once been the Destruction Level (infra).
The pattern-incised 914-915, found together in TB 3, are likely to be the products of a single source, despite somewhat different proportions and a few discrepancies in detail. Of essentially the same fabric and finish, both have much the same system of neck ridging, while the handles, albeit of different types, are topped by identical knobs. They also bear the same type and scheme of patterned incision, a feature that possibly links them with a group of large trefoil jugs (p. 115). In shape, 914 is a wide-necked amphora similar to 918 and the painted 924 , whereas 915 is close to kraters like 905 . The two amphoras thus recall the group of 901-904 in illustrating the elasticity of the basic design. Two other incised examples, the fragmentary 916-917, are of interest primarily for decoration. The former is banded, and may be from the same source as the narrow-necked amphora 889 found with it in Meg. 4 (p. 115).

Of stamped amphoras, $\mathbf{9 2 0 - 9 2 1}$ are the most remarkable. Comparable in scale, thin-walled construction, and mica-film finish to the group of 908-910A-B, the vessels represent variations on a single concept of design, and are ostensibly the works of one potter or workshop. Nearly identical in basic shape, which is itself of unusual contour, the two are also almost precisely commensurate in height and rim diameter. 920 has horizontal handles, 921 a pair of vertical double-rounds. Yet this difference, as well as that seen in the stamped banding, seems no more than the kind of internal variety displayed by such presumed groups as $908-910 \mathrm{~A}-\mathrm{B}$ and $\mathbf{9 1 4 - 9 1 5}$. Telling also are the similar use of neatly applied, matching bosses on handles and body, and the identical handle trails (terminating in more bosses) that accompany the different handle types. These fussy details, perhaps a single potter's idiosyncrasies, are similar in spirit to those on the large shoulder-handled amphora 897 , and conceivably point to a single source for all. The possibility is strengthened somewhat by the fact that the three vessels share the uncommon detail of articulated, profiled bases.

Both 918 and 919 have some precedents for their stamped arrangements in pre-destruction contexts (312 and 133 respectively). 919 , a krater of standard design, has a near-twin from the steps of TB 8, while a third example seems close enough in form and stamping to warrant inclusion in the group. 919 is also close in form and scale to the painted 930 , and if a connection exists the stamped kraters could by extension be related to a wide circle of painted vessels (infra).

The formal qualities of painted examples from the burned citadel on the whole correspond well to those of the monochrome series. 925 from TB 4 is an oddity largely because of the bichrome technique (p. 164), yet the design as well, especially the small handles set
squarely on the shoulder, is unusual and provides further grounds for assuming that the vessel was an import. The closest parallel is the small amphora 873 , itself unique. The extraordinary 929 from Meg. 3 defeats the purpose of a wide neck in having the singular feature of a built-in partial lid, yet the vessel is otherwise of standard krater type. The shoulder of steep, straight line may have been so formed to accommodate effectively the intended series of panel motifs. 930 from TB 2, close in form to the stamped group of 919 , might be from the same general source as the series of enormous painted kraters belonging to the stylistic circle of Brown-on-Buff ware (pp. 148, 167). The krater also provides rare evidence for associating a vessel with a stand, the painted 871 (pl. 108; p. 77). Although it is doubtful that the support was made expressly for $\mathbf{9 3 0}$, it and a second belong to the same stylistic group as 932 , a krater with silhouette animals of Alişar IV type (pp. 162-163). The group seems not to have been local, yet the krater is similar to such examples of standard design as TumP 88, while the variety of ledged rim has close parallels at Gordion (p. 105). 934 and the fragmentary 935 appear to belong to the TB 8 Group of painting, a mode consisting primarily of roundmouthed and narrow-necked jugs (p. 164).

## PAINTED KRATERS IN THE BROWN-ON-BUFF STYLISTIC CIRCLE

A series of enormous painted amphoras bears figural and geometric motifs that draw the vessels into the stylistic circle of Brown-on-Buff ware (pp. 165-173). Preserved as fragments from diverse contexts on the City Mound, mostly if not entirely post-destruction, they are assumed to have once stood in the Midean citadel (infra). Included among the roughly two dozen pieces from upper bodies and above ( $\mathbf{1 0 6 5}-1081$ ) are three separate rims and one sherd preserving traces of a handle (1069). The broad bodies, tall, wide necks, and ledged rims suggest that all are kraters. The rims $(\mathbf{1 0 7 0}, \mathbf{1 0 7 7}, \mathbf{1 0 8 1})$ are between ca. 70 and 80 cm . in diameter, and judging by the proportions of complete kraters, the heights would probably have been no less. Likewise, the 2 to 3 cm . thicknesses of walls, and also the size and shallow curvature of body fragments (e.g., 1067), indicate massive, substantial vessels roughly comparable in scale to 911 from Meg. 4.

Although three separate kraters are attested by rims alone, the total number of vessels is greater. 1073, 1079, and $\mathbf{1 0 8 0}$ preserve zones on the upper neck that differ in painted design and/or heights from those placed below two of the extant rims (1070, 1077). The minimum number is thus increased to five or six, depending on whether the rim 1081, preserving practically nothing of the upper neck zone, is from the same vessel as $\mathbf{1 0 7 3}$, 1079 , or 1080 .

Joins among the sherds are few, while associations are
somewhat limited by the overall homogeneity in fabric, form, and scale. The style and schemes of the painted programs also show a considerable degree of uniformity, but they nonetheless afford some grounds for suggesting groupings and associations. Particular importance is attached to the choice of either double or triple concentric circles as filling ornament, since the two are not known to have been combined on a single vessel in Early Phrygian painting. Thus, it is more than likely that 1065-1073, with double circles, represent vessels different from those with triple circles, 1074-1077. A few sherds preserving no circles at all cannot be aligned with the others (1078-1081). 1065A has on the upper shoulder a pattern of lozenges that seems to be the same as that on 1066, a sherd preserving the very top of a shoulder and a basal neck ridge. $\mathbf{1 0 6 5 B}$, providing more of the same shoulder design, contributes with $\mathbf{1 0 6 5 A}$ and 1066 to the composite shoulder profile in fig. 45.1067 bears double concentric circles of precisely the same diameter as those on 1065 A , and the two fragments also have identical compass rosettes and the same kind of large-dot stippling as a filling device for animals. On the other hand, 1068, although bearing double concentric circles, is from a different vessel: the figural scale is smaller, and the stippling of the animal's body is finer, but most telling is the fact that the lion panel climbs to the top of the shoulder without the intervening geometric field seen on $\mathbf{1 0 6 5 A}$. The handle sherd 1069 bears a double circle and a compass rosette, but the former is a little smaller and the latter a little bigger than those on 1065A.

The rim 1070 and the neck sherd 1071 may well belong to the same vessel, and it is possible that $\mathbf{1 0 7 2}$, from low on a neck, goes with them. The former two have double concentric circles of the same diameter, and it is perhaps more than coincidence that the diameter of the circles is also the same as those on 1065A-B and 1067. The three sherds together create the composite neck/rim profile in fig. 45 . This reconstruction and that of 1065A-B and $\mathbf{1 0 6 6}$ could, as suggested in the drawing, represent a single vessel, with $\mathbf{1 0 6 6}$ and $\mathbf{1 0 7 2}$ providing a slight overlap of level at the very base of the neck. In any event, the resulting impression of an upper body and neck is no doubt close to the actual configuration.

The triple-circle group, represented by fewer pieces, lends itself to similar exercises. The figural panel on the shoulder fragment 1074 comes below the same geometric zonal pattern as seen on 1075 . The triple circles, moreover, are of the same diameter, and match those on the lion sherd 1076. The circles also have a slightly messy overlap coming almost always at the same point in the outer circumference. This quirk, which might easily have been the habit of a single painter, occurs again on many of the triple circles adorning the neck/rim 1077. All could belong to the same vessel, although a single artist probably would not have changed his ways, or perhaps even his compass, in moving from one job to another.

The very elements of uniformity that make associations
tentative underscore the close interrelatedness of the vessels and point to the likelihood that all had a common source. Decorative style is the primary factor that brings the kraters together and links them to the broader circle of Brown-on-Buff painting (p. 169). Yet the three ledged rims ( $\mathbf{1 0 7 0}, \mathbf{1 0 7 7}, \mathbf{1 0 8 1}$ ) also suggest a relationship, and are at the same time the only components of shape that allow the kraters to be viewed within a broader perspective. The rims are of similar blocky design, sharing in particular high, vertical faces and the unusual feature of one or two broad ledges neatly stepped below a wide, flat top (figs. 45, 47). Providing three to four narrow fields, the design was perhaps intended expressly for the painted decoration that each surface received. The doublestepped rims on $\mathbf{1 0 7 7}$ and $\mathbf{1 0 8 1}$ are of unparalleled form, while the single-stepped version on $\mathbf{1 0 7 0}$ has a sole close correspondence, on a smaller scale, in the gray-ware 242 from the EB Trench. These last two rims, in turn, are related to a type that occurs in the Terrace fill, Meg. 10-1, and Tumulus P. The rims on $\mathbf{1 0 7 7}$ and $\mathbf{1 0 8 1}$ look more generally in the same direction, the blocky sections recalling a type best documented in the Terrace fill (p. 104).

That the original contextual setting of the kraters was the Early Phrygian citadel cannot be proven conclusively, yet it is strongly suggested by various formal and stylistic features whose closest affinities are in pre-Kimmerian Gordion. The same factors further imply that the vessels were already of some age when the citadel was destroyed. Of particular importance in this hypothesis are the close parallels with certain painted vessels of Brown-on-Buff ware from Tumulus P (pp. 169-172) and the correlations of rim typology with the same tomb and with predestruction material, as cited above.

In marked contrast to the affinities with the Early Phrygian period are the actual contexts of the fragments. To date, practically all have appeared in loci considerably later than the Destruction Level, perhaps the earliest being the thick layer of clay that buried the Midean citadel, probably sometime in the first half of the sixth century B.C. (a sherd of 1074). ${ }^{124}$ The South Cellar deposit, dating most likely to the first half of the fourth century b.C., yielded no fewer than six pieces, of which four belong to the five-sherd fragment 1065 A , while the others (1065B, 1066) may be from the same vessel. ${ }^{125}$ The roughly contemporary layers overlying the PPB ( p . 3 ), which also seem to have been cellar deposition, yielded seven sherds, including four in the neck/rim fragment 1077 and two that may belong to the body of the same vessel, 1075, and an uncatalogued sherd cited under 1074. These and most other find-spots are in an area corresponding to the earlier. NW portions of the

[^96]Midean citadel: from the vicinity of Meg. 5 and TB 8, across the NW enclosure wall, and on to the circuit wall beyond. Contrary to these post-destruction loci is the reported finding of the fifth sherd of 1065 A in the fill overlving the floor of Meg. 6, i.e., a unit of the Terrace fill. Yet contamination is indicated by the accompanying 291, a black-on-red bowl whose style of painting looks to the seventh century, after the destruction (p. 138). Moreover, it is quite unlikely that the sherd in question, if actually from the Terrace fill, should by coincidence join with others from the South Cellar, which was immediately adjacent to and higher than the early megaron and which was being excavated at the same time as Meg. 6. Seemingly the most reasonable explanation is that the sherd fell from the South Cellar into the pre-Terrace hall during excavation. ${ }^{126}$
Since a pre-Terrace context is unlikely, the most apparent home for the series is the destroyed citadel itself. R. S. Young once recalled in conversation an unspecified piece from the Destruction Level, although none has been inventoried, or mentioned in a field book, with this provenance. Two of the sherds, however, are without context $(\mathbf{1 0 6 8}, \mathbf{1 0 8 1})$, and one or the other could be that to which Young was referring. 1068 even shows signs of secondary firing, as do a number of other fragments in the series, yet the condition need not have resulted from the destruction of the citadel. Where the vessels might have stood is impossible to determine. The concentration of fragments outlined above suggests the inner Palace Area, an apt district for such grand creations, or the intramural region beyond it to the NW,
neither of which has been completely excavated. That so many of the fragments-at least half-should appear as refuse in the generally contemporary South Cellar and PPB deposits is perhaps more than coincidence, and may indicate that at least some of the vessels were retrieved from the Midean level and saved, either whole or in part, until their disposal in the cellars. Both deposits contained a great chronological cross-section of goods from ca. 700 through the late fifth or early fourth century, and might, as Young suggested for the assemblage in the South Cellar, represent collections of discarded relics. ${ }^{127}$ Such wholesale dumping of long-kept items might have been occasioned by an earthquake that appears to have beset Gordion around 400 or a little later. ${ }^{128}$ The fires known to have accompanied that event could be as likely an explanation for the burning on several pieces as the earlier conflagration of the citadel.
A few large vessels from post-destruction contexts are smaller in scale than the enormous kraters, $c a$. 1 to 1.5 cm . in thickness, but are related to the same stylistic circle. Two (1063-1064) came from the same PPB fills that yielded several sherds belonging to the largest vessels. 1061-1062 are fairly successful attempts at emulating both the coloration and finish of true Brown-onBuff ware through the use of a thick slip that was well polished after painting. 1061, with a neatly tooled strap handle, was surely an amphora. 1062-1063 were probably amphoras, the former at least being of an openmouthed variety. 1064 seems to have been a krater similar to its bigger relatives.

## Miscellaneous and Ambiguous Amphoras

(Plate 134)

## Miscellaneous amphoras:

Destruction Level: 936-937
Ambiguous amphoras:
EPB III: 50
A few amphoras are of odd types and thus fall outside the standard typology. Certain others too fragmentary to be classified are primarily of decorative worth.

50 from EPB III is the earliest definite example of a Phrygian amphora in the EPB sequence. Whether nar-row-necked or open-mouthed, the vessel is notable for both the extensive grooving on the body ( $p .114$ ) and the imitations of metalworking in the applied pellets or false rivet heads at the lower handle attachments (p. 109). The

[^97]
## Destruction Level: 938-939

Post-destruction contexts: 1061,
1063, 1082, 1084-1086, 1088
handles themselves, double-rounds, are of a type that recurs sporadically on later amphoras.

936-937, both from CC 3, are of unusual types. The former is a coarse vessel of an extraordinary, elongated and wide-necked form that prefigures a type of large jar common in later Phrygian times. The high ring foot, otherwise unattested on large amphoras, makes the vessel all the more a curio. The fragmentary 937 , with low rim set directly on the shoulder, seems to be a cross between an amphora and a low-necked storage jar (cf. 993). The button-like knob directly above the handle, matching one on the grip itself, is a kind of device

[^98]otherwise known only on storage jars (p. 98). The vessel may have a remote precursor in 223 from NCT IVb. On a smaller scale, "dinoid amphoras" seem to have been a feature of the eastern plateau, and it is possible that 937
looks in this direction (p. 94). An enormous, multihandled vessel from Porsuk III provides a parallel at an increased scale, and also has similar buttons on all its 18 handles (p. 109). ${ }^{129}$
Jars
(Figures 48-50, Plates 135-149)

As defined here, jars are closed, symmetrical vessels without handles. The primary division is between large storage jars, usually over half a meter high, and more portable vessels of considerably smaller size. Each of the broad groupings, in turn, allows subdivisions based on the relative proportions of neck or mouth opening, since Phrygian jars, like amphoras, show no single standard of
design. Two general classifications are used for small and medium-sized jars, one including examples with low or no necks, and the other an assortment of more prominently necked forms. Storage jars are divided between narrow-necked and wide-mouthed types, while the latter are further subdivided on the basis of upper configuration.

## Low-Necked Jars and Dinoi

(Figures 48-49, Plates 135-141)

## EPB IV: 60 <br> EPB V: 136-139

EPB VII: 183
Terrace fill: 321-322
Destruction Level: 940-974
Post-destruction contexts: 1048-1049
Most jars of less than large storage size have low, abbreviated, or no necks. Mouths tend to be relatively wide: rims are rarely less than about one-half the diameter of the body and can often be as great as three-fifths or two-thirds that dimension. Although the jars that adhere to this general design vary considerably in form and scale, there is reason to believe that potters thought in terms of a single, adaptable shape, as they apparently did with open-mouthed amphoras. Most are of a size that makes them readily portable with both hands, and are classified as either low-necked jars (952-958, 964-966) or dinoi, a variety with a particularly broad body and low $\operatorname{rim}(60,183,959-963,967-974)$. In the Destruction Level the two types also show certain differences in size and fabric. An assortment of small jars, easily held in one hand, generally reflect the larger ones, but at the same time they display a number of formal differences that indicate a separate subcategory ( $\mathbf{9 4 0 - 9 5 1}$ ).

Small jars are not attested before the Destruction Level. Their larger counterparts, however, appear in EPB IV and V, and are also present in the Terrace fill and other relatively late pre-destruction contexts, as well as in most early tumuli. In the burned citadel, small jars are known primarily from CC 1-2 and TB 2-3, whereas the larger ones are attested more widely among the CC and TB units. That none of large size is available from TB

Tumulus III: K-III 47-48
Tumulus P: TumP 79-87bis
Tumulus MM: MM 360-371
Tumulus X: P 3133, P 3134
Tumulus Y: P 3161, P 3162
Under Tumulus D: P 31, P 32 (pl. 141)
1 , 5 , or 6 is probably as fortuitous as the limited representation of small jars, but the absence of the shape at any scale in the TG depot may be significant. The only palatial hall attesting the shape is Meg. 3, from which three dinoi are known ( $960,963,967$ ), although the storerooms behind Megs. 1 and 4 each yielded a single example, small and large respectively $(\mathbf{9 4 9}, 970)$.

Tumuli W and G are the only early tombs not known to have included the large shape among their ceramic offerings. ${ }^{130}$ In Tumulus $P$, no fewer than ten dinoi stood underneath the bed, while in MM the three bronze cauldrons MM 1-3 held a total of 12 jars, all placed upright in the company of smallish amphoras. MM is exceptional among the early series of tombs in its combination of dinoi and low-necked jars. ${ }^{131}$ The more modest Tumuli X and Y each contained two dinoi, while Tumulus III had a pair of ring-handled examples. Another pair of dinoi, painted in the Ladders-and-Zigzags style and judged early because of the decoration (p. 160), came from a stone-lined grave on the site of the later Tumulus

[^99]D, and thus indicate that the shape as a burial gift was not reserved exclusively for tumuli. ${ }^{132}$ The Great Tumulus in Ankara, with at least 14 dinoi, parallels Tumulus $\mathbf{P}$ in both the quantity of this variety and the exclusion of low-necked jars. ${ }^{133}$ On the other hand, METU Tumulus I at Ankara recalls MM, since it had at least one dinos and three low-necked jars. METU Tumulus II seems to have had only the latter variety, no fewer than six. ${ }^{134}$

On the City Mound, fabrics tend to differ according to size and variety. Small jars are with few exceptions of medium-fine or fine fabric. Among the larger examples, dinoi are almost always of fine or medium-fine substance, while low-necked jars, whether painted or monochrome, are usually of medium-coarse ware. Examples from tumuli do not always conform to these distinctions. Although the dinoi from $X$ and $Y$ are of fine fabric like those from the citadel, those from P are at best mediumcoarse. The low-necked jars and dinoi from MM show no pattern, for both varieties run the gamut from fine to coarse. Like most other monochrome vessels from early tumuli, the funerary jars are of gray ware, with the exception of one in Y (P 3161). On the City Mound, however, dark-fired specimens are uncommon in predestruction contexts (136), where the majority are painted, while the Destruction Level has yielded two monochrome examples that are now gray, both dinoi and both from Meg. $3(\mathbf{9 6 0}, \mathbf{9 6 3})$. Jars from citadel and tombs alike are ordinarily polished to some extent. Dinoi, in keeping with their generally finer clays, tend to have markedly better finishing than low-necked jars. Noticeable on jars from the Destruction Level, regardless of variety, is the almost total absence of mica film, a puzzling aspect in light of the widespread use of the substance on other shapes. In contrast, most of the dinoi from Tumulus $P$ are so coated, as are a third of the jars from MM, both of those from X, and one of the two from Y. Several examples from the destroyed citadel are painted, as is the rule rather than the exception for jars from earlier strata. Patterned incision is unknown, as is stamping, with the possible exception of the ambiguous jar 986. A single, small specimen bears relief work (949). On the bottom of TumP 87 bis occurs the only instance of pattern-burnishing known from the Early Phrygian period (p. 32).
 height, and are divided fairly evenly between nearminiatures under ca. 8 cm . (940-944) and somewhat larger examples. The capacities of three within the smaller series extend from 100 to 220 ml . $(\mathbf{9 4 0}, \mathbf{9 4 2}, \mathbf{9 4 4})$, while among the slightly more sizable ones the 430 to 530 ml . range of four jars $(\mathbf{9 4 6}-947, \mathbf{9 5 0}-\mathbf{9 5 1})$ represents a twofold to a fivefold increase; the greater capacities are

[^100]within the normal range for small round-mouthed (290530 ml .) and trefoil jugs ( $260-650 \mathrm{ml}$.). Larger lownecked jars and dinoi extend generally from $c a .15 \mathrm{~cm}$. to at least 35 cm . in height, although some internal patterns are evident. Dinoi from both citadel and tombs tend to fall within a ca. 19 to 26 cm . range, whereas low-necked jars are usually between $c a .15$ and 21 cm . in height. In both varieties the primary exceptions are some painted examples of greater-than-average size (964, 966-967, 972). 970, a fragmentary painted dinos, is the largest of its type. With an estimated rim diameter of 31 cm ., it would, on the basis of comparative proportions, have had a maximum diameter of at least 60 cm . and a height that was perhaps as great as 50 cm . A capacity testing for $\mathbf{9 5 4}$ of 1940 ml . represents roughly a fourfold increase over the amounts held by larger specimens of the small subcategory, while the volume of an example similar to 952 is a little under twice as great ( 810 ml .).

Small jars show only limited consistency in form beyond the presence of low necks and flat bases. The latter are often poorly defined, and thus recall those on a number of wide-mouthed trefoil jugs (p. 62). Bodies are usually ellipsoidal or piriform, the latter being a profile not found on jars outside the small class. In contrast with other small shapes, everted rims prevail, and were often beveled on top to a sloping surface. The mouths of the smallest jars ( $\mathbf{9 4 0}-\mathbf{9 4 4}$ ) are relatively narrow, imparting to some the appearance of a bottle (e.g., 942, 944), whereas the slightly larger examples tend to have wider mouths, as though in emulation of more sizable jars (e.g., 946-949). The only attested use is as a stopper (942) for a larger jar.

Low-necked jars and dinoi of standard size bear formal differences that are to a great extent only nuances of design. In general, low-necked jars have flat bases, short necks and flaring rims. Dinoi, on the other hand, are normally footed, sometimes prominently so, and bear low, usually everted rims that in most cases rest directly on the shoulder. The bodies of low-necked jars include a variety of forms, whereas those of dinoi are generally broad and fully rounded ellipsoids or spheres (e.g., 959, 968). As with open-mouthed amphoras, the distinctions are not always firm, since general traits of one variety can occur on the other.
Like other shapes in the standard repertory, lownecked jars and dinoi probably had a number of functions, but the basic design seems directed to a certain range of services. The dinoi especially, but also lownecked jars, are capacious for their size, roughly an open-mouthed (and handleless) counterpart to medium and large trefoil jugs. This, and the fact that they are usually open enough for easy access, suggest contents that were kept readily available in fair quantity. The generally coarse fabric of low-necked jars from the Destruction Level is indicative of a workaday class, whereas the finer dinoi may have had less prosaic functions. That only the latter variety is attested in the
palatial Meg. 3 is perhaps more than coincidence, just as that hall seems not to have contained one-handled utility pots ( p .70 ). The jars and dinoi from MM contained organic matter, probably food and/or drink, and similar contents were presumably placed in the dinoi in Tumulus $P$ and other burials. ${ }^{135}$ No contents were noted in specimens from the Destruction Level, but for the three dinoi from the main room of Meg. 3 a connection with drinking is likely. All were found with sieve jugs close by, and were also in the general company of round-mouthed and trefoil jugs (p. 4). Although the last two shapes probably had functions in addition to drinking, the highly specialized sieve jugs were no doubt used solely for liquid consumption (p. 168). Whether the dinoi stood on large ceramic stands (pp. 76-77) and contained beer or some other drink, perhaps wine, is unknown, but the evidence for a general connection with liquid refreshment, at least in Meg. 3, is compelling. ${ }^{136}$ In Tumulus $P$, however, the dinoi were clearly separated from sieve jugs and most other vessels of fine ware, while the two ring-handled dinoi in Tumulus III were not part of the drinking service placed in the large bronze cauldron K-III 49. ${ }^{137}$

The background of Phrygian low-necked jars and dinoi, like that of certain types of amphoras, is problematical because of the widespread presence of similar forms. In second-millennium Anatolia, "hole-mouthed" containers and ones with low, wide necks, with and without handles, occur in a considerable range of sizes, from the approximate scale of Phrygian low-necked jars and dinoi to large storage vessels. ${ }^{138}$ The distribution includes Gordion, where the Old Hittite cemetery had both large and small specimens, while the Late Bronze layer NCT V yielded a number of large examples. ${ }^{139}$ Early Handmade Group 1 vessels reflect similar ideas of design, and occur in a range of sizes generally paralleling that of the Bronze Age (p. 24). The same latitude in scale is found in the wheelmade Phrygian repertory, where low-necked jars and dinoi have proportional analogues in a class of large storage jars (p. 98). The latter have possible links with the Bronze Age in 223-224 from NCT IVb , large wheelmade vessels that could be renditions in gray ware of a common Hittite type (p. 99). The wheelmade 225 from the same context might present a parallel case. The hole-mouthed vessel matches the dinos in scale,

[^101]yet differs in having a direct rim, a feature common on Bronze Age types. ${ }^{140}$ If 225 represents a combination of Bronze Age technique and intrusive dark-firing (p. 34), it could belong to an early stage in the cvolution from a Hittite to an Iron Age shape. The possibility of a local derivation, however, is not supported in the EPB sequence, where the earliest identifiable Phrygian dinos is from EPB IV ( 60 ). The absence of the type in EPB II-III might be fortuitous, but as the record stands the dinos is among the latest of standard Phrygian forms to appear. Low-necked jars, on the other hand, cannot be positively identified until the Destruction Level (infra).
In Cilicia, the Early and Middle Iron Age repertories at Tarsus contain quantities of "pithoid jars" that are analogous in form and scale to Gordion's dinoi. ${ }^{1+1}$ A considerable number, moreover, bear low, wide and everted rims that closely recall a form occurring on the Phrygian shape (e.g., 136, 960), yet they seem not to have parallels in second-millennium Anatolia. ${ }^{142}$ In Porsuk IV, where Cilician affinities are strong, a series of storage jars might be related to those at Tarsus, ${ }^{1+3}$ yet neither Porsuk IV nor the later Porsuk III shows indications of the smaller Cilician type with low, everted rim. The possibility of the introduction of the dinos into Central Anatolia from Cilicia thus may be weakened.
In the Greek world, the principal analogues for Phrygian low-necked jars and dinoi are full-bodied pyxides, with and without handles, and kraters with low lips. The former are among the earliest of Geometric shapes, while the kraters appear by Middle Geometric. Since both have a wide distribution that extends to East Greece, a connection with Iron Age Anatolia is possible. ${ }^{144}$

A different explanation of the Phrygian jars is that they were inspired by shapes in bronze, particularly cauldrons of varying sizes, as known best from tumuli at Gordion (TumW 1-4, TumP 1-5, MM 1-13, K-III 49-54). ${ }^{145}$ The ceramic ring-handled dinoi K-III 47-48, like the Brown-on-Buff 1048-1049 from post-destruction contexts, surely betray the influence of bronzeworking. ${ }^{146}$ Moreover, the rims on some clay dinoi parallel those on bronze cauldrons. A doubled-back, everted type, as on 136 and 960 , is closely matched in bronze by such cauldrons as $\$ M$ $4-5$, where the rims appear to have been separately added hoops. ${ }^{147}$ The simpler type of low, upright rim borne by the bronze TumP 3-4 is analogous to those on

[^102]321.959. and 969. As a further point of correspondence, the smaller bronze cauldrons from MM show much the same variation of dinoid and low-necked upper profiles that occurs among the tomb's ceramic jars (e.g., MM 4-5 vs. MM 9-10). The main issue in establishing a derivation from metalworking is that of chronological priority, i.e., whether bronze cauldrons existed at Gordion before EPB IV and the appearance of the Phrygian dinos in clay. The absence of bronze cauldrons in pre-destruction contexts on the City Mound may be fortuitous, especially since metalworking is implied as early as EPB III by the presence of imitative features in pottery (p. 181). Furthermore, the bronzes from Tumulus $W$ attest an already competent level of bronzeworking by the time of this early interment. That the same tomb lacks ceramic dinoi while including bronze cauldrons both big and small (TumW 1-4) need not necessarily imply the priority of one over the other (p. 96). Without clear evidence in either direction, it is perhaps best to view the pottery jars as stemming from a ceramic tradition and to interpret their points of correspondence with bronze vessels as one of several cases of interplay between clay and metal types.

On the eastern plateau during the general Alişar IV period, dinoi and related jars occur at several centers, although they might have been generally less common than at Gordion. The best and nearest showing is at Boğazköy, where gray-ware dinoi very much like those at Gordion and Ankara appear both in settlement contexts on Büyükkale and as ash urns for humble burials in the Unterstadt. ${ }^{148}$ A low-necked jar from the latter sector also served as an ash container, but it may be later than the Alişar IV period. ${ }^{149}$ It is perhaps significant that dinoi occur in funerary contexts both at Boğazköy and in Phrygia. The uses of the shape, however, as receptacles for human remains and foodstuffs respectively, were different. It is doubtful that the dinoi from the grave under Tumulus D were cremation urns. In Alişar IVb-a a coarse-ware version of the dinos occurs, as does a related two-handled form, here termed a "dinoid amphora." 150 The presence of a large number of similar coarse-ware vessels, at least some with handles, in Porsuk III suggests that the general type was fairly widespread on the eastern plateau. ${ }^{151}$ Some of the vessels from Porsuk are much like Gordion's low-necked jars in upper profile, but none bears the types of low, everted rim that elsewhere characterize dinoi. Dinoid amphoras occur also with painted decoration in Alişar $I{ }^{\boldsymbol{\gamma}}$ and in the earliest Iron

[^103]Age level at Kültepe. ${ }^{152}$ The Early Phrygian period at Gordion has yielded nothing closely comparable to the two-handled shape of the eastern plateau, although the unusual large amphora 937 may somehow be related (pp. 90-91). After the Early Phrygian-Alişar IV periods, dinoi and kindred forms continue to be a feature of Anatolian repertories. ${ }^{153}$

## SHAPE ANALYSIS

The Wavy-Line $\mathbf{6 0}$ from EPB IV introduces a balloonlike, nearly spherical form of dinos that is almost precisely antecedent in both shape and painted style to 968 from CC 1. The pierced rim, otherwise unknown on the shape, suggests use with a lid. In subsequent predestruction contexts, the shape is moderately well represented. 136, one of two gray-ware examples from EPB V, and the painted 321-322 from the Terrace fill show the broad shoulders that were to characterize the ellipsoidal dinos, as known through such examples as $\mathbf{9 5 9 - 9 6 1}$ from the Destruction Level. 183 from EPB VII is of much the same variety. The types of rim seen on these dinoi continue in use. That borne by 136, a doubled-back, everted form paralleled in metalworking (supra), recurs on $\mathbf{1 8 3}$ and on 960 from Meg. 3, and in a less pronounced form on 970 and TumP 79. The rim crowning 321, a non-everted type that is also reminiscent of bronze forms (supra), looks forward to those on 959, 969, and 972, while the general type of that on 322 recurs on 962 and MM 367, 370 . The painted $\mathbf{1 3 7}$-138 from EPB V, more steeply shouldered than 136 and 321-322, may have been spherical dinoi similar to 60 . The rims on both are triangular-sectioned types that rest directly on the shoulder in the manner of dinoi. In the Destruction Level the form appears on the small jar 941 , seemingly a miniaturized dinos, but not on larger jars. In Tumulus MM, however, the type occurs on MM 361 and 368 , both dinoi.

139 from EPB V also has a shoulder steeper than those on ellipsoidal dinoi. Unlike 137-138, however, the vessel bears a short neck that could mark it as a harbinger of such low-necked jars as 954 and 966 from the Destruction Level. Yet a form of dinos is perhaps more likely because of the strongly everted rim, and a few dinoi do have abbreviated necks. The closest match in profile for 139 is in fact a fairly standard dinos from Tumulus $P$ (TumP 83). At the same time, $\mathbf{1 3 9}$ is not far removed in upper profile from 961 , a dinos from CC 1 . The latter has the beginning of a neck, and is one of a few dinoi with a

[^104]ledged rim, a feature that could have developed from such widely everted forms as that on 139. Although the City Mound provides no sure evidence for low-necked jars, as opposed to dinoi, before the destruction period, two ambiguous vessels, smaller in scale than 139, might represent the type. 158 from EPB V, with a short, flaring rim, could be a low-necked jar similar to such later vessels as $951,956-958$, while 377 from the Terrace fill may have been a jar along the general lines of $\mathbf{9 5 0}$. For both vessels, however, other possibilities exist (p. 111).

Small jars from the Destruction Level are for the most part ones-of-a-kind, some appearing to be loosely scaleddown versions of larger forms. 940-941, for example, may have been intended as miniature dinoi, as perhaps were the slightly larger 946-947, while 950 seems to be a small counterpart to such low-necked jars as 964-965. These and other small jars, however, rarely follow closely the profiles of larger vessels, among which do not occur the reverse-bicurved shape of 941 , the multiple contours of $950-951$, or the piriform bodies of $942-944$ and 947 . Nor is the strongly biconical shape of 948 attested in a larger format, although inspiration from the basic design of the dinos is evident (cf. 962-963). The painted 949 is essentially a low-necked jar with the general proportions of a dinos. The vertical fluting that sets the course for the painted scheme has its closest parallel on the painted sipping bowl 860 , and could well point to a single source for both (pp. 75, 121). The pierced lugs might have served either for suspension or for affixing a lid.

Within the larger series, low-necked jars (952-958, 964-966) show a general diversity in form, although subgroups reflect some standardization within the type. 952-955 are four of five jars whose markedly bicurved bodies suggest a consensus of design, yet they bear no strong indications of having come from a single source. All have wide mouths commensurate with the norm for dinoi. 953 is further comparable with dinoi both in scale and in having a low, everted rim, perhaps a sign of interplay between the two varieties. This affinity is shown in a different manner by the large 967 , a painted jar on which the bicurved profile of $952-955$ was combined with a spreading foot and low rim, features common among dinoi, to create a seemingly hybrid form. The other bicurved jars are smaller than 953 , and have rims of types that are regular on low-necked jars. Those on 952 and 955 are flaring, the commonest variety, while 954 , in the combination of an articulated rim and a short, distinct neck, parallels the painted 966 and MM 365 .

956-957 may represent another subvariety of lownecked jar, with ellipsoidal body and flaring rim. 958, whose rim also flares, is larger and almost spherical, and is of particular interest in being, along with 966 (infra), one of the few close analogues from the Destruction Level for the low-necked jars from Tumulus MM (e.g., MM 360, 363-364, 371 ). 958 falls comfortably within the narrow height range of both the low-necked jars and the dinoi from the tomb, although the vessel differs in having
a relatively narrower mouth. Its low foot, unusual on low-necked jars, finds a parallel in MM 369. Unlike the jars in MM, which are polished, 958 has a smoothed surface.

The painted jars 964-965 are of a somewhat elongated variety with low neck. General similarities in form, combined with unevenness in throwing and careless painting, allow the possibility of a common source. The link would be particularly noteworthy for showing that producers of a distinctive painting style, here ChevronTriangle (964), also worked outside that mode (p. 158). 966 , close in size to 964 , may be a refined version of the design. The approximately spherical body and low. distinct neck with prominent rim invite comparison with the somewhat smaller MM 365, the only one of its kind from the tomb. ${ }^{154}$ As with 958 , the mouth of 966 is proportionally narrower than that of its funerary analogue. 966 also bears a ledged shoulder, a feature that recurs on other types (e.g., 980, 984-985) but not on the jars from MM.

Dinoi from the Destruction Level also show an inner range of variations, and find abundant formal parallels in early tumuli. 959-960 typify the broad and full ellipsoidal form attested as early as EPB $\backslash(\mathbf{1 3 6})$ and known also from Tumuli $P$ (TumP 79, 81) and $X$ ( P 3134 ). 960, now gray, is particularly close in form to TumP 79, even in such details as the low ring foot and doubled-back rim, but is larger. 961 seems to be a modified version of the variety. With a more compressed body, flat base, and abbreviated neck below a widely everted, ledged rim, the vessel finds its closest parallel in one of the dinoi from Tumulus Y (P 3161). Ledged rims also occur on dinoi from Tumulus $P$ (TumP 80, 87) and the Great Tumulus at Ankara; ${ }^{155}$ the feature was perhaps borrowed from large amphoras and storage jars.

968, painted in the Wavy-Line style, continues the balloon-like, nearly spherical form of 60 from EPB IV. The shape is well matched in TumP 82, the only one of its kind from this tomb, and by the nearly twin dinoi in Ladders-and-Zigzags style from under Tumulus D, ostensibly the works of a single source (pl. 141, P 32; p. 160). ${ }^{156}$ Like the other dinoi found with it, TumP 82 lacks the prominent spreading foot found on 968 and other specimens from the Destruction Level (e.g., 963, 967. 972). The feature may have been adopted from smaller shapes to create a more elegant vessel, as seems to have been the case with kantharos kraters and large roundmouthed jugs. 970 , judging from what is preserved, was perhaps of a form similar to 968 , yet considerably larger. The vessel seems to be comparable in size to the bronze cauldron TumW 1 and, as already noted, is the only evidence from the Early Phrygian period for the manufac-

[^105]ture of clay dinoi at such a scale. ${ }^{157}$ In having particularly wide mouths, 968,970 , and TumP 82, and also the ring-handled K-III 47-48, are the dinoi closest to bronze cauldrons both large and small. The relatively narrow mouths on such examples as 959-961 and TumP 79, 81 do not occur on the shape in bronze.

Only a few dinoi fall outside the common varieties. 967, with a portly, bicurved body, has already been seen to recall a variety of low-necked jar (supra). 962-963 have unusual ellipsoidal-biconical bodies, but nonetheless show the normal accoutrements of a foot and low rim. The closest analogue is P 3162 from Tumulus Y , while the maker of the small jar 948 may have had the larger forms in mind. The painted 973 has the same type of body as 962-963, and also bears a low rim characteristic of dinoi, yet the base seems to have been of an unusual type with cut-out sections. 972, steep-shouldered and relatively narrow-mouthed, might represent a modification of the balloon-like shape of 968 . The only radical departure from the design as known in Early Phrygian times is the spouted 974 from the gravelly fill beside Meg. 12 (pp. $6-7$ ). The vessel has a close parallel at Boğazköy, in an unpublished example of eighth- or seventh-century date from the Unterstadt. ${ }^{158}$

The jars from tumuli require some further consideration, especially in regard to correlations with the City Mound. The absence of ceramic dinoi in Tumulus W , judged the earliest of the great tombs, could be chronologically significant. ${ }^{159}$ The question is whether the lack implies a burial date anterior to the introduction of the shape or is instead related to a developmental pattern of tomb furnishing in which the dinos had not yet become
part of the standard ensemble. If the former, Tumulus $W$ would have to antedate EPB IV by more than a little, since 60 is a fully developed example of the shape. So relatively early a date for the tomb is possible, yet since the pottery in W does not begin to find good parallels on the City Mound until EPB V (pp. 192-193), it is perhaps preferable to argue from positive evidence rather than negative, and to assume that the suppliers of $W$ had a choice and chose not to include dinoi. Tumulus G, albeit looted, likewise contained neither dinoi nor low-necked jars. If the tomb dates to around the time of the installation of the Terrace, as suggested by rim typology (p. 104), it might provide an instance of disregard for an existing shape.

An analogous issue centers around the presence of both dinoi and low-necked jars in Tumulus MM, a combination that has elsewhere been examined in connection with the tomb's relative position at the end of the early series of wealthy burials. ${ }^{160}$ That the appearance of low-necked jars in MM is related to ceramic development rather than to choice is suggested by the record on the City Mound, but the evidence is hardly conclusive. Low-necked jars in general (as opposed to dinoi) are not definitely attested until the destruction period, and even then the analogues for the varieties in MM are few (958, 966). The evidence from pre-destruction contexts is ambiguous, and the examples with upper profiles closest to those in MM $(\mathbf{1 5 8}, \mathbf{3 7 7})$ are, at the greatest, half as large as the jars from the tomb. Thus, while low-necked jars as a general category may antedate the destruction period, the forms and scale of those in MM are known no earlier than the Destruction Level.

## Necked Jars

(Plates 142-143)

## Destruction Level: 975-985

The Destruction Level has yielded a small and, for the most part, disparate collection of necked jars, all stemming from TB and CC units. No sure evidence for the general variety exists from earlier contexts, except for the single example found in Tumulus C. Varying widely in fabric and finish, the vessels are, with the exclusion of 975, of sizes comparable to most low-necked jars and dinoi.

[^106]Tumulus G: P 141
975-977 appear to be a small production group of coarse-ware utility jars. Although the bodies differ somewhat in form, each vessel has a short, rather wide neck rising from a basal ledge and crowned by a prominent rim. 976-977, moreover, are close in height and have unevenly formed bodies, perhaps the sign of a careless or relatively inexperienced potter. Despite the similar scale of the last two, 976 holds about a third more than 977 ( 2050 vs. 1570 ml .) because of its broader body. The small 975, with a capacity roughly one-tenth that of 976 , may be at the lower end of a graded production series similar to those found among one-handled utility pots (e.g., 836-840; p. 72). 976-977 have a close parallel in a somewhat larger jar from Alişar IVb. ${ }^{161}$

A few necked jars are essentially handleless versions of

[^107]familiar types. Thus 978 from TB 4 and a twin from CC 3 are one-handled utility pots without grips. As though to compensate for the lack of handles, each has small lugs set flush with the rim. The vessels are evidently related to the large production group represented by 836-837 (p. 72 ), and are comparable in scale to the large pots in that series, matching them even to the extent of incised wavy lines on the shoulder. Fabric is also the same, while both jars are smoothed only on the lower body, a treatment common on the handled shape (p. 71). 979 from CC 2, on the other hand, seems to be a modification of a large trefoil jug, conforming closely to that shape in scale, form, and proportions (e.g., 743, 745), yet with a round instead of a pinched mouth. The patterned incision on the shoulder is reminiscent in idea rather than in kind of that on the large trefoil jugs 745-746, and might indicate a common source for the jar and the jugs ( p .115 ).

980 is one of the more notable oddities among Early Phrygian jars. The petaled body has its closest correspondence in the earlier 389 from the floor of Meg. 6. The markedly tapering neck crowned by a prominent rim also contributes to the extraordinary, and possibly alien, appearance (p. 120).

Typologically a jar but hardly comparable in purpose, 981 from TB 2 is a coarse vessel randomly riddled with holes over the entire body and base. Although the function remains unclear, a good Anatolian precedent
for the idea occurs in a more thoughtfully perforated shoulder amphora from Eskiyapar. ${ }^{162}$

Painted specimens increase the formal range. 982 , while similar to 976 , is more refined and broader-bodied. The ledged rim recalls those on a few dinoi. 983-985 appear to be variations on a single design with tall, wide neck and roughly uniform scale, each jar being a little over 25 cm . high. The most remarkable is 984 , whose wedge-shaped "feet" and belly appliqué with attendant trails are without parallel (p. 122). At the time of the destruction, the vessel seems to have been housing a kit of textile implements plus over a dozen astragals. 985 , with ovoid body and tapering neck, is reminiscent in basic form of the considerably larger painted amphora 927, and was perhaps inspired by the handled shape. The example from Tumulus G, with ground-coat painting, belongs typologically with these jars, but the thick. torus-like ridge around the belly is a feature of the eastern plateau on vessels of this size, and thus may betray the jar as an import (p. 117, n. 14).

The fragmentary 986 , an ambiguous jar from CC 2 , is of interest primarily for its stamped decoration, a feature otherwise unknown on jars of substorage scale (p. 125). The full shoulder and wide neck might be indicative of a dinos or low-necked jar, but it is also possible that $\mathbf{9 8 6}$ was a more prominently necked form along the lines of 983-985.

## Storage Jars

(Figure 50, Plates 144-149)

## Terrace fill: 323-325 <br> M4 II: 407

Destruction Level: 987-1009
Storage jars occur in three varieties in the Early Phrygian period. The typology to an extent parallels that of amphoras, and reflects a similar distinction between restricted containers and more open forms. Narrownecked storage jars, although diverse among themselves, are considered as a single class ( $987-992$ ), standing as handleless counterparts to narrow-necked amphoras. Wide-mouthed jars, on the other hand, are divided between low-necked forms (993-997), some suggestive of colossal dinoi, and more prominently necked containers that in form are essentially wide-necked amphoras without handles (998-1001). A number of fragments are classified as storage jars because they bear certain features that seem to have been peculiar to the shape (infra).

Almost all units in the Destruction Level appear to have contained storage jars. Meg. 4 was particularly well supplied with the shape: no fewer than eight, representing all three varieties, were found either within or associated with the building (990, 992, 996, 999-1004). Of other palatial units, Meg. 3 had at least one (989).

Tumulus W: TumW 64
Tumulus P: TumP 105 (pl. 144)
Tumulus G: P 180
while another stood in the $S$ corner of the main room in Meg. 2 (987). In the NW' storeroom behind Meg. 1, wo were set side by side at the far end ( $\mathrm{pl} . \mathrm{A)}$ ); one (994) was over half filled with grain, and, being of a wide-mouthed variety, the vessel also accommodated a wicker basket and a large trefoil jug containing hundreds of astragals (p. 3). Grain was noted in one other storage jar from the citadel (998), but contents are otherwise unknown. The jars seem in most cases to have been set directly on floors or sunk slightly into them. 993 apparently stood on an iron stand just beside the door leading from the main room in TB 2 . while $\mathbf{1 0 0 6}$ belongs to a vessel that would have been more noticeable still beside the central hearth in CC 1 . Tumuli $W$. P, and G each contained a single narrow-necked storage jar. The Grat Tumulus in Ankara had at least one large example of the same general

[^108]type and also a smaller specimen of similar form. ${ }^{163}$ Otherwise unattested in Early Phrygian burials, the shape was presumably less desirable than amphoras, whose handles no doubt made transport to the tombs easier.
Storage jars, like large amphoras, attest the skill and care with which big vessels were executed by Phrygian potters. Fabrics are coarse yet well compacted and durable, while apparent irregularities in form seem to be primarily the results of fire damage and modern mending (e.g., 993). Walls are generally thick, and thus the vessels are of considerable weight; only a single example (1003) shows the notably thin walls that occur on a number of large amphoras (p. 84). The jars from tumuli are all of gray ware, and a few from the citadel are now gray ( $988,990,993$ ). More of those caught in the destruction now have light surfaces, including some that are red (992, 996, 1009) and similar in coloration to large, unburned vessels from the Terrace fill (365-368). Others $(987,994)$ have mica-film surfaces, now light, that are much like those on some large amphoras (p. 84). The now-gray 993 also has a mica-film finish, and is with 1003 among the few storage jars that were polished. Ordinarily, surfaces were smoothed or wheel-finished. Storage jars, like one-handled utility pots, are not known to have been painted, a distinction that allows large and otherwise ambiguous painted vessels to be classed with amphoras (p. 79). Patterned incision is rare (991), but stamping occurs on many examples (e.g., 992, 997, 1000-1001, 1003-1004). A number of jars bear a kind of pattern-banding, always in combination with stamping, that seems to have been peculiar to the shape (p. 99).

With a single known exception (988), measurable storage jars from the Destruction Level are well over half a meter high, and thus are generally comparable in scale to neck amphoras and to the largest members of the open-mouthed amphora family. Most are between ca. 60 and 80 cm . in height, with no apparent distinction among varieties, but the largest recorded is 992 , a pattern-banded vessel that originally stood over a meter tall and had a girth almost as great. Fragments belonging to the same pattern-banded series as 992 imply a commensurate scale (1006-1009). In keeping with the general non-conformity of ceramic tomb furnishings, the storage jars found in Tumuli $W, P$, and $G$ are somewhat smaller than those from the citadel. TumW 64 and that from Tumulus G have the same height ( 42 cm .), while TumP 105 is only a little larger ( 49.5 cm .). The rims on two storage jars from Meg. $4(\mathbf{9 9 0}, 996)$ bear groups of lines incised after firing: the four marks on 990 and the seven on 996 could be appropriate to an incremental scale consistent with the different sizes of the jars. ${ }^{164}$

[^109]Beyond general similarities in scale and fabric, storage jars of all varieties are usually flat-based and broadbodied, the favored forms being ovoid and ellipsoidal, often with a marked taper toward the base. They share with large amphoras the architectonic elements of grooving, thick ridging, and banding at key points of profile, yet the last feature is here less prevalent $(987,997$, TumP 105) except in the pattern-banded series exemplified by 992. As on amphoras, everted rims are common on all varieties, yet only among narrow-necked jars do ledged forms occur with any regularity (988-989, 991, TumW 64 , TumP 105, and that from Tumulus G). Low-necked storage jars tend to have heavy, prominent rims, usually crowning an abbreviated neck, but at least one rests directly on the shoulder, in the manner of dinoi (993). Peculiar to storage jars, yet not universal within the shape, is the use of plastic devices, normally bolsters, set in twos or fours on the shoulder, almost always at or near the top (e.g., 991-995, 1000-1004, TumP 105). ${ }^{165}$ The attachments would not have been useful in lifting, given their positions and the great sizes of the vessels. If practical at all, the devices were perhaps hand-holds for tilting or lateral shifting. The bolsters, either of regular spool shape or with as many as four disks, might represent a free adaptation from bronzeworking, where such forms serve as the handle housings on ring-handled bowls (e.g., MM 55-69). Because of pattern-banding and bolsters, features unattested on large amphoras, a number of otherwise ambiguous fragments are classified as storage jars (323-325, 407, 1002-1004, 1006-1009).

Storage jars with narrow necks and those with prominent wide necks are so close in form to large amphoras that there is perhaps no need to look further for their immediate background. Neither type finds good precedents among the handleless storage containers of secondmillennium Anatolia, even though two-handled analogues are common (pp. 81, 85); ${ }^{166}$ nor are the two types represented in the published repertories of the Alişar IV period on the eastern plateau. A narrow-necked jar is known, however, from the Yunus cemetery at Carchemish, while farther south in Hama the type is common and often occurs painted, unlike the Phrygian version. ${ }^{167}$ Yet the absence of intervening examples between these centers and the western Anatolian plateau could point to an independent Syrian type that did not travel upland.

As implied in the consideration of low-necked jars and dinoi (p. 93), low-necked storage jars have a wide range of formal correspondences. Precedents for the general

[^110]design, both with and without handles, are abundant in second-millennium Anatolia through the end of the Hittite Empire, and occur in a similar range of sizes. ${ }^{168}$ Gordion also figures in the Bronze Age distribution, with examples from the Old Hittite cemetery and Layer V of the NCT sounding. ${ }^{169}$ The larger Group 1 vessels of Early Handmade possibly constitute a link between these second-millennium types and the wheelmade Phrygian shape. 228 closely recalls a Bronze Age profile (p. 26), and the large, blocky rim might represent the ancestry of a seemingly short-lived type in wheelmade gray ware (153; infra). Another transition from Bronze to Iron Age is possibly reflected by the wheelmade 223-224 from NCT IVb, large, cursorily finished vessels that could be fairly direct translations into gray ware of Fischer's Type A pithos; 223 may have had handles, as often do the Bronze Age pithoi. Common in Gordion's Old Hittite cemetery, this particularly steep-shouldered variety was to last through the Empire. ${ }^{170}$ NCT IVb also yielded the dinoid 225, another possible instance of a Bronze Age form executed in dark-fired ware (p. 93). 223-224 may have a few followers on a smaller scale in gray and variegated wares from Layers 2-1 in Meg. 10 (193, 210; infra), but otherwise the particular design is not known to occur in Early Phrygian potting. Meg. 10-2 also yielded 194, a less steeply shouldered specimen of variegated ware. The vessel has Late Bronze Age analogues, and could lie in the background of a developed Phrygian variety (infra). ${ }^{171}$

Upper profiles similar to those of 223-224 and 194 also occur in two related series of large, open-mouthed vessels from Porsuk IV. ${ }^{172}$ If the horizon is in fact no later than the ninth century, the vessels might represent another possible background for Gordion's low-necked storage jars. ${ }^{173}$ The specimens from Porsuk themselves perhaps look to a Cilician source, both in form and in the simple painted decoration that they regularly bear. ${ }^{174}$ The painting marks a considerable contrast with the exclusively monochrome storage jars at Gordion. The possibility of a link with Porsuk remains open, since temporal priority between the earliest specimens at both sites cannot be determined. During the general Alişar IV period on the eastern plateau, large vessels reminiscent of Gordion's low-necked storage jars, but with handles, are known through published examples from Alişar and

[^111]Porsuk. ${ }^{175}$ The combination of handles with holemouthed vessels of any size seems generally to have been a feature of the eastern plateau during the period (p. 94).

## SHAPE ANALYSIS

The single storage jars, all narrow-necked, from Tumuli $\mathrm{W}, \mathrm{P}$, and G are the only complete and totally verifiable examples of the shape before the destruction period. In pre-destruction contexts on the City Mound, it is difficult to distinguish storage jars from large amphoras, since the identification depends ultimately on the absence of handles, a factor that the available material is too fragmentary to reveal. Nonetheless, certain general traits among known jars and amphoras allow some steps toward the identification of storage jars in pre-destruction strata.

Among the surest candidates, and here included under the shape, are $323-325$ from the Terrace fill and 407 from M4 II. All stamped, the fragments bear the distinguishing features of either bolsters on the shoulder (323), pattern-banding (325), or a combination of the two (324, 407). 324-325 represent a style of pattern-banding that, while unattested in the EPB sequence, recurs in the Destruction Level on 992 and its associates, with 407 from M4 II providing continuity between Terrace fill and burned citadel. Moreover, the arrangement of the stamped bands on 324 and 407, and also the forms and position of the bolsters in relation to the banding, are essentially the same as on 992 and 1006 (p. 119). The jars from the Destruction Level may also be linked to the earlier ones by the common medium of red coarse ware, while those from the Terrace fill and M+ II, judging by the thickness of their walls, were of a large scale approaching that of the pattern-banded jars from the destroyed citadel. In contrast with these close correspondences is the fact that the stampings on the earlier examples for the most part differ in type from those on the jars found in the Destruction Level. At the same time, 324 represents a wide-necked variety, for which no sure evidence exists among the later jars in the series. The similarities between the earlier and later pattern-banded vessels are perhaps too precise for a widely practiced scheme, and may instead indicate a single establishment whose distinctive storage jars were produced from pre-Terrace times into the destruction period. The change in stamped motifs from the earlier to the later is probably a factor of time (p. 19).
A few large vessels from pre-destruction contexts are likely to be low-necked storage jars because their upper

[^112]profiles, with steeply sloping walls directly below the rim, rarely occur locally on large amphoras (937). 223 from NCT I'b may also have had handles; but this vessel and its contextual mate 224 , and also 193 and 210 from the Meg. 10 sounding, seem to belong to an early, short-lived shape that may have been modeled on a very widemouthed Bronze Age type (p. 93). 210 suggests an early date because of the variegated firing (p. 35). 194 from Meg. 10-2 is also variegated, yet the shoulder is somewhat less steep than those on the preceding vessels. Even though the specific upper profile of 194 is not known to continue, the dinoid storage jar 993 from the Destruction Level might perpetuate the general design; the almost identical rim diameters of the two vessels suggest a similar scale. The gray-ware 153 from EPB V may be a wheelmade carry-over of the type represented in Early Handmade by 228 from NCT IVa. Like 223-224 and their smaller associates, the profile of $\mathbf{1 5 3}$ seems not to have continued. The light-ware 364 from the Terrace fill, preserving only a trace of a tapering shoulder, could be either a low-necked form akin to $995-997$ from the Destruction Level or a narrow-necked type similar to 992 but considerably smaller. In either case, the large everted rim on $\mathbf{3 6 4}$ anticipates those on both 992 and 997 (p. 106).

Among prominently necked ambiguous vessels from pre-destruction contexts, a considerable number are suggestive of storage jars rather than amphoras on the basis of the form and diameter of the rim. In the Destruction Level and early tumuli, amphoras with rim diameters over ca. 30 cm . are almost invariably ledgerimmed, while all but the large 897 are open-mouthed. The same pattern holds true among identifiable amphoras from pre-destruction contexts on the City Mound (p. 85). It is thus likely that many, if not most, of the vessels bearing unledged rims over 30 cm . in diameter are storage jars rather than amphoras (e.g., 154-156, 354-363, 365368). ${ }^{176}$ A number of those from the Terrace fill (e.g., 360-361, 365-368) have prominent, often heavy, everted rims of types familiar on storage jars in the Destruction Level (e.g., 987, 992, 994, 996-997, 999; p. 106). Distinction between narrow- and wide-necked jars cannot be attempted without having more of the vessel, since the rims on narrow-necked storage jars in the Destruction Level can be as great as $c a .30$ to 50 cm . in diameter (e.g., 987, 992). Storage jars may also be represented among ambiguous ledge-rimmed vessels with diameters over 30 cm ., on the evidence of the wide-necked pair 1000-1001 from Meg. 4, but probability suggests that most of the examples in this category were open-mouthed amphoras (pp. 85-86).

In the Destruction Level, storage jars are represented by relatively few well-preserved examples. Several are ones-of-a-kind, and the grounds for attribution to individual sources are not as great as among large amphoras.

[^113]Narrow-necked storage jars and neck amphoras are often in close formal relationship. Thus 988 , and seemingly the fragmentary $990-991$ as well, have lengthy forms not unlike those of neck amphoras (e.g., 884-885, TumW 65, TumP 93). 988 is of particular note for the vertical attachments on the shoulder, each with a pair of curving trails that recall a familiar detail in the design of handles (p. 109). 989 from Meg. 3, although badly warped by fire, is also generally similar to neck amphoras in having a tall, prominently ridged neck (cf. 885, 889). The vessel has two other noteworthy features: a tooled disk foot that brings to mind the similar detailing on a few well-executed large amphoras (897, 920-921), and a rare double-ledged rim (p. 105).
987 and the pattern-banded 992 are of a broaderbodied narrow-necked type with relatively short neck. The amphora 897 seems to be a shoulder-handled counterpart in form and general large scale. Although 992 came from an area of disturbance over Meg. 4, the vessel can with little doubt be associated with that hall (p. 3 ). In any case, the jar's general bond with the destruction period seems to be secured by the similarly patternbanded 1006 and 1008 from CC units, since they and 1007 from an unrecorded context bear lozenges that were evidently impressed with the same stamp used on 992 (p. 131).
The single examples of narrow-necked storage jars from Tumuli $\mathrm{W}, \mathrm{P}$, and G not only are smaller than those from the Destruction Level but also lack close formal parallels in the known range of the shape. The exaggerated reverse-bicurved contour of TumW 64 recalls certain amphoras from Tumuli P and III (TumP 98, 101-102, K-III 2). ${ }^{177}$ That from Tumulus G, although fuller-bodied than TumW 64, matches it almost exactly in every dimension, and thus the two jars may reveal something about standards of size, as apparently do the small amphoras from MM (pp. 81, 83). TumP 105, perhaps the oddest of the funerary jars in form and proportioning, bears a set of unparalleled metallic fixtures on the shoulder: double-headed "bolts" rendered as though secured by pairs of clamps set just short of the heads (pl. 144). The device is somewhat reminiscent of the bands and spools affixed to bronze bowls (e.g., MM 60 and 69).
The general design of low-necked storage jars finds only a single correspondence among large amphoras in the Destruction Level (937). The torus-profiled base on 994 has the same parallels with certain large amphoras as does that on 989. $\mathbf{9 9 5}$ is notable in having a massive yet carefully tooled rim and, on the shoulder, unique triplets of "ears," no doubt a variation on the bolster.
Wide-necked storage jars, known through only four well-preserved examples, are like large narrow-necked

[^114]jars in having formal parallels with amphoras, the correspondences all being with wide-necked varieties as opposed to kraters. 998 from TB 3 is especially close to the wide-necked amphora 902 from the same unit, although the jar is somewhat larger. The case for associating the two with a single source is weakened only by the lack of ridging on 998, a feature that helps place 902 within a larger group of amphoras (p. 87). 999, the largest example of the wide-necked variety, is of much the same form as the richly stamped pair 1000-1001 from Meg. 4. In having ovoid bodies, relatively constricted necks, and broadly everted rims, the jars are essentially handleless versions of the wide-necked variety of amphora represented by 914 (p. 88). 1000-1001, with little doubt from the same source, differ primarily in the types of shoulder attachments (bolsters vs. flattened knobs) and in the
use of completely different sets of stamps for each (p. 126).

A few fragmentary examples from the Destruction Level preserve enough to indicate that they were widemouthed, but whether they bore low or prominent necks cannot be ascertained. 1003-1004, belonging to the inventory of stamped vessels from Meg. 4, are of value primarily for their impressions, although 1004 also has a notable combination of two- and three-disked bolsters, the latter with a knob on the central disk in a manner that recalls the treatment on certain bronze bowls (MM 55, 58,68 ). $\mathbf{1 0 0 2}$ bears the only example of an animal protome in Early Phrygian pottery. What was perhaps meant to be a lion appears high on the shoulder, and was somehow coordinated with bolsters. The device was possibly inspired by local sculpture (p. 122).

## Ambiguous Vessels and Details

This section addresses ambiguous material and incorporates the evidence into examinations of certain formal aspects that pertain to the general repertory. Consideration of the rims on large amphoras and storage jars would be somewhat limited were it not for the great number of unclassifiable specimens belonging to one or
the other shape. Similarly, isolated bases and handles, particularly from pre-destruction contexts, add much to the general picture. In addition, a miscellany of ambiguous vessels contributes some details to the ceramic assemblage as a whole.

## Rims on Large Amphoras and Storage Jars

(Figures 34-35, 38-42, 44-45, 47, 50-57)

Phrygian potters executed the rims on their largest vessels in a wide variety of forms, the principal division being between ledged and unledged, and often gave special attention to detail and finishing. Because such rims occur in great quantity in the Early Phrygian sequence, they allow an opportunity to consider evolutionary patterns that is paralleled only by carinated bowls. As with the bowls, the overall picture is not consistent. Methods of rim formation that seem to have been perpetuated and often modified provide the central threads, while forms of seemingly limited duration and singletons are scattered throughout.

## LEDGED RIMS

Ledged rims are present early in the Iron Age sequence and become one of the more regular features of Phrygian potting. Considerably more abundant than unledged types, they are for the most part restricted to large amphoras and storage jars. The occasional appearance of the type on smaller shapes, especially dinoi, may
reflect a borrowing from large vessels (e.g., 961). ${ }^{178}$ The purpose of the inner stepping is uncertain. It seems well suited to house a lid, but in the absence of any evidence to support this view ( p .74 ) the ledged rim may have been no more a practical feature than the finger hollows placed below handles (p. 109).

The idea of ledging rims in manners similar to Phrygian practice was not new to Anatolia in the Iron Age. Ledged rims occur sporadically in Troy VI-VIIb, ${ }^{179}$ and in Central Anatolia they are already present in the Assyrian Colony and Old Hittite periods. ${ }^{180}$ At Gordion, ledged rims much like later Phrygian ones occur in

[^115]Layers 7 and 5 of the Meg. 10 sounding, dated to the fourteenth and thirteenth centuries. ${ }^{181}$ If the element did somehow survive to be incorporated into Phrygian pottery, the evidence for the transmission is at best tenuous. 222 from NCI IVb, bearing an everted rim with a subtle ledge, is a possible link between the two ages. Fabric and finish place the wheelmade vessel in a small, enigmatic group that may have combined Late Bronze Age technique with attempts at dark-firing (p. 34), yet it is not until the Destruction Level and the rim of the storage jar 999 that a profile resembling that of 222 occurs. Early Handmade pottery does not include rim-ledging among its traits, but hand-forming may not have lent itself as well to the practice as wheel-production, where a ledged rim could be executed with thumb and fingers as the vessel was turned.

Beyond Phrygia, ledged rims are a common feature of contemporary potting on the eastern plateau, and stand as one of several ceramic traits that point to a close relationship between Gordion and Alişar IV centers. ${ }^{182}$ Many of the rims find close, if not exact, parallels at Gordion, where the matches are for the most part with material from EPB V, the Terrace fill, and the Destruction Level. A considerable number, and also that on the imported 1089 from a local post-destruction context, are parallel to the general type introduced by 52 from EPB III (infra). Yet certain other rims appearing early at Gordion, e.g., 25 from EPB IIb and 51 from EPB III, seem to have no correspondences on the eastern plateau. This might indicate a priority in Phrygia for ledged rims, yet the evidence is admittedly slim, and the grounds are presently insufficient for making detailed stratigraphical comparisons between Gordion and the early phases at Alisar IV' centers. The absence of ledged rims in Porsuk I $V$, in contrast with their appearance in the subsequent Iron Age period at the site, could reflect a relatively late introduction of ledged forms into the general area. Yet Porsuk is at some distance from the centers of the Halys, and because the site had close affinities with Cilicia during the fourth period its potters may have resisted Central Anatolian practices. Whether locally formulated or adopted, the ledged rims of the Early Phrygian period show certain evolutionary patterns that may prove to have some bearing on the eastern sequences.

By EPB IIb, unequivocal Phrygian use of the ledged rim is attested by $\mathbf{2 4}$, a vessel of mica-film gray ware. $\mathbf{2 5}$ from a different context of EPB IIb also has a mica-film finish, but was made by an unusual technique resulting in a light surface and a gray biscuit (p. 36). The rim has no close formal parallels in the later assemblage, but it is

[^116]possible that the type somehow led to the forms on the amphoras 131 and 132 from EPB V, the latter of which also combines a light surface with a gray biscuit (infra). The rim on 24 also lacks close parallels in later contexts, although the form is so simple and straightforward that any course of evolution might have become obscured by modification. Those on 205 and 207 from Meg. 10-1 might represent more outturned versions, but they too are unparalleled.

EPB III yielded three ledge-rimmed vessels, two gray with mica film (51-52) and one variegated (53). The rim on 51 , very likely a krater, has a sloping ledge and is of a somewhat large, blocky-sectioned type that could be derived from such Early Handmade forms as that on 228. The rim is closely matched in external form and diameter by the unledged 153 from EPB V, a probable storage jar whose tapering upper body puts it closer still to the handmade 228 (p. 100). The general type makes its final appearance with 153 . The variegated 53 could represent in technique another continuation from Early Handmade (p. 35). Its rim, indistinctly ledged and given a rounded head, might belong to the same early line of development as that on 52 , a form that is prospective of a number of subsequent developments. The type found on 53 may have a descendant in the unledged rim on $\mathbf{3 5 9}$ from the Terrace fill, and it could also figure in the ancestry of the heavy ledged rims on 344 and 351, again from the Terrace fill (infra). The rim on 52, a fairly plain type with rounded head and relatively well defined sloping ledge, introduces a manner of formation that, while continuing in the basic form through the Destruction Level, seems at the same time to underlie several later varieties. 52 thus parallels certain carinated bowls from the same deposit (pp. 45-46). The type recurs virtually unchanged on the light-ware 152 from EPB V and on the amphora 918 from Meg. 4, and it appears also on TumW 64, TumP 95, and MM 374. The full extent to which the form of $\mathbf{5 2}$ underlay later typology is perhaps camouflaged because of the latitude for modification in such a simple type. The rim on $\mathbf{2 0 6}$ from Meg. 10-1, for example, could have been an altered, trimmed version. Where relatively clear threads of evolution can be observed, the overall direction is toward crisper, more sharply defined lines, a pattern that also holds for certain other ledged types.

EPB V yielded what appear to be early variants of the type found on 52 , in both gray and light wares. That on 141 seems to be a simple modification with trimmed or heavily beveled head. The form occurs again in the Terrace fill (327), but cannot be traced to the Destruction Level or tumuli. The rim borne by 148 may be a simplified version with narrowed ledge. The only close match occurs on a shoulder-handled amphora from Tumulus Y (P 3163). 142 and 150, and perhaps 151, all from EPB V, seem to bear another modified version, with flattish face and clearly defined, sloping ledge. The
horizontally ledged rim crowning 213 from Meg. 10-1 may also figure in this general lineage. The form on the examples from EPB V, that on 150 in particular, recurs in the Terrace fill on 329, but is not known from the Destruction Level. That borne by the light-ware 149 from EPB V is also a likely descendant of the type on 52 . With its enlarged, rounded head and neatly offset ledge, the rim corresponds closely to that on a krater from TB 4 (919). The rim crowning 335 from the Terrace fill seems to be a modified version with horizontal ledge, as perhaps is that on 326, and may have been continued in heavier form on 913 from TB 2. The rim on 149 might also represent an intermediate developmental link between 52 and a distinctive family of rims known from the Terrace fill, Destruction Level, and certain tumuli. The core variety in the series is exemplified in the Terrace fill by the rim on the krater 308, a form with a broad ledge sloping beneath a low "cliff" and a rounded head that, while recalling 149 , is prominently knob-like in section. A number of close parallels from the Terrace fill indicate that the type had gained some popularity before the time of that major project. It also occurs in Tumulus P (TumP 89), while continuation into the destruction period is witnessed, inter alia, by the open-mouthed amphoras 902, 906, and 927. The absence of the type in EPB V is one of the typological factors that favor a pre-Terrace date for this leveling program (p. 185).

The Terrace fill also yielded several forms that appear to be variations on the type found on 308, none of which is known from EPB V. Those on the wide-necked amphora 306 and the ambiguous 340 seem to be exaggeratedly everted versions, while the rims borne by 307 and 345, not far removed from that on 928 from TB 1 , appear to be related, as perhaps is the rim on the red-ware 348.344 and 351 , gray and light ware respectively, have rims that may represent a heavier version of the type occurring on 308 , while that on $\mathbf{3 5 0}$ seems to be a blockier, angular rendition. The variety can be traced with a little modification to the rim on the shoulderhandled amphora 897 from the Destruction Level; that on the far smaller shoulder amphora 890 seems to emulate the larger forms. The rims borne by TumP 100, 912 , and 1000 represent the variety found on 344 and 351 in modified versions with narrowed ledges. That crowning 926 from CC 3 is essentially a scaled-down rendition of the rim on 912 . The type found on 53 from EPB III may lie in the background of those on 344 and 351, perhaps with influence coming as well from the type seen on 308. The rim borne by 359 from the Terrace fill is a related form that, except in the absence of a ledge, seems to be a fairly faithful descendant of the type occurring on 53. 907 from the Destruction Level may bear a variant of the type found on 308 , although the closeness of the former rim to an unledged one from the Terrace fill (357) could point to a different line of development. That on 909 from TB 7 is also somewhat
difficult to interpret: possibly derived from the family of 308 , it could instead be more directly related to 149 and 335. Such uncertainty is in itself perhaps revealing, for the manner of rim formation introduced by 52 could have undergone such extensive modification at the hands of later potters that separate lines of development become difficult to isolate.
In EPB V, ledged rims continue to increase in variety through both the modification of earlier forms and the introduction of new ones. At the same time, production in light wares of ledge-rimmed vessels is attested by several specimens (132, 150-152), most of which have typological matches for their rims in gray ware (131 and 132, 142 and 150, 149 and 152). Although certain new types occur also in other contexts, a few are known only in EPB V and thus may have had limited life spans. For example, that on 143 , with a bizarre rendition of a ledge, is unique in the record. The rim borne by the large 147 is also singular, although the ridge-formed ledge may somehow be related to a manner of forming seen in the Terrace fill and elsewhere (infra). The prominently faceted head has an analogue in a rim from the Terrace fill (346), but in general this kind of detailing is rare.

The rim on $\mathbf{1 4 0}$ from EPB V, evidently a narrownecked vessel, is of a broadly flaring form with undulating lines that seems related to the one borne by the light-ware 352 from the Terrace fill. That on another specimen from the Terrace fill (343) may belong to the same family. Whether akin or not, the forms are unknown in the Destruction Level and early tumuli. 146 from EPB V bears a rim that may represent a cleaner, modified version of the type found on $\mathbf{1 4 0}$. It is perhaps more than coincidence that both rims have fine grooving at the bases of the interior cliffs, a detail that might be indicative of a single source. The rim on 146 lacks close formal parallels, although that crowning the painted $\mathbf{3 1 5}$ from the Terrace fill could be a less well-articulated version.

The amphora 131 from EPB V has a type of rim distinguished by a broad, shallowly concave ledge that descends in unbroken line from the top of the rim to create a lipped channel around the mouth. The form recurs with little modification on the amphora 914 from the Destruction Level. That crowning a second amphora from EPB V (132) appears to be a related version in which the inner lip has been largely beveled away. The channeled ledge on 131 may look back to the type found on 25 from EPB IIb. Other rims appearing in EPB V and the Terrace fill reflect approaches to formation analogous to that shown by 131, and may belong to related stems of development. Yet unlike the rim on 131, none is attested in the Destruction Level. That on 145 from EPB $V$ represents the approach in a heavy, exaggerated format. On the other hand, $\mathbf{1 4 4}$ from the same context has a very shallow "ledge" worked into the top of an otherwise plain everted rim. Much the same kind of
ledge was created by a thick, protruding ridge on 334 and 338 from the Terrace fill; the rim on the larger 341 from the same general context has a similar ridge, supplemented by a more conventional ledge below. The rim crowning 328 from the Terrace fill also may be related to those on 131-132 from EPB V. Although it lacks the lipped channel found on 131, the clean sweep of the shallow ledge, and also general form, suggest a connection. The manner of ledging shown by 328 recurs in an enlarged format on 347, one of a group of large, light-ware vessels that have practically identical rims, but it is not known at any scale from the Destruction Level.

The Terrace fill provides the most abundant and varied assemblage of ledged rims from pre-destruction contexts. Although several forms appear to be related directly or indirectly to rims in the EPB sequence, in general the material from the Terrace fill seems to reflect a later evolutionary stage. The relative dating is suggested particularly by the variety of rim on 308 and its extended family (supra), yet a number of other forms from the Terrace fill also have correspondences in the Destruction Level but not in EPB V. At the same time, the Terrace fill has yielded some ledged varieties that lack close relationships in both the EPB sequence and the Destruction Level. As with a few types from EPB V, some may have had a limited period of use, e.g., those on 342 and the large 346 of light ware, both ones-of-a-kind in Early Phrygian contexts. 330 bears a rim with prominently flattened top that is without close analogues in EPB $V$, but it does seem related in idea to that on 206 from Meg. 10-1. The rim on 330 is also generally like that borne by one of the shoulder-handled amphoras from Tumulus KY (P 1367). The stamped 249, from beneath the hearth in Meg. 5 and thus contextually earlier than the Terrace fill (p. 15), has a rim with a crisp, angular profile that may somehow be related to that on 330 . The rim crowning 331 from the Terrace fill is essentially an outturned version of that on 330; the two are otherwise so similar in form (and diameter) that they could have been made by a single potter. Two other rims from the Terrace fill, on 336 and $\mathbf{3 3 7}$, also may bear a connection with 330 . The first has a squared, blocky section that recalls the neatly trimmed rims on the amphoras 310 and 314 from the same context. The rim borne by the storage jar in Tumulus G ( P 180 ) is similar to that on 310, while the rim crowning the amphora TumP 103 could well be an unledged counterpart (p. 106). None of these rims with blocky, angular sections has evident successors in the Destruction Level.

The rim on the painted krater 316 from the Terrace fill is also blocky in section, yet it has a particularly distinctive form with outward-canted face, a broad, flat top, and a narrow ledge formed by a thick, protruding ridge. The type parallels that on 330 in being unknown in the EPB sequence while having a correspondence in Meg. 10-1, through the more projecting and less blocky rim borne
by 209. The two typological links between the Terrace fill and Meg. 10-1 are among the clues suggesting that the first layer of the sounding in Meg. 10 postdates EPB V (pp. 11, 182-184). The type found on 316 and 209 recurs on a very piecemeal painted krater in the Ladders-andZigzags style from PN 3 (here uncatalogued), and is again a factor in judging the relative lateness of a predestruction context (pp. 14, 85). The appearance of the same type on the amphora TumP 99, where it is closer to the rim on 209 than to that on 316, suggests a similar terminus post quem for the child's tomb, as does the occurrence in the burial of rims belonging to the family of that on 308 from the Terrace fill (supra). Unlike the latter, however, the variety of rim on 316 and 209 is not known from the Destruction Level, and thus it may be a type whose production had ended by the final ceramic phase of the Early Phrygian sequence. The EB Trench, adjacent to PN 3 and presumably a continuation of the same Phrygian deposit (p.14), yielded 242, whose rim is a variation of the design with a broad ledge neatly stepped down from a prominent, flat top. 242 has a close parallel at a larger scale in $\mathbf{1 0 7 0}$, one of the three rims in the contextually post-destruction series of enormous painted kraters belonging to the stylistic circle of Brown-on-Buff ware (pp. 88-90).

Although the rim on 1070 is the only one in the series that has a ridge-formed ledge, it is nonetheless closely related in design to the two others known, those on 1077 and 1081. All have high, flat faces and one or two wide, shallowly stepped ledges below broad, flat tops. On the basis of the evidence just considered (310, 314, 316, 336), such crisply squared forms seem to have had their vogue subsequent to EPB V, around the time of the installation of the Terrace and perhaps continuing a little later if the Phrygian unit in EB-PN 3 is post-Terrace (p. 185). The unledged rims on a few large storage jars in the Destruction Level are similarly squared (e.g., 995, 997), but the treatment is not attested for ledged varieties. At the same time, the broad, terrace-like stepping on the rims of the painted kraters is best paralleled before the Destruction Level. Within the citadel, the sole recurrence of such stepping is on 242 from the EB Trench, the rim that closely matches $\mathbf{1 0 7 0}$. The only other instances are in Tumulus P , where the rims borne by the amphora TumP 92 and, to a lesser extent, the storage jar TumP 105 reflect much the same approach to ledging. 1070, 1077, and $\mathbf{1 0 8 1}$ thus appear on typological grounds to belong to a pre-destruction phase in the design of ledged rims, one that is close to the Terrace and EB-PN 3 deposits. The stylistic correlations of the painted kraters with Tumulus $P$ suggest a similar time frame, even though the vessels were probably still in use at the time of the destruction (pp. 89-90, 166-169).

Certain other ledged types that seem to be new in the Terrace fill do have successors in the Destruction Level. The rim on 332, with a kind of ridge-formed ledge
recalling that on 51 from EPB III, is virtually duplicated in a more outturned manner on 903 from TB 6 . Another new form, crowning 339, may be related to that on 332 , and, in turn, it seems to be antecedent to the rim borne by the neck amphora $\mathbf{8 8 5}$ from TB 8 . The type may have been modified on a second neck amphora, 889 from Meg. 4. The amphora 309 from the Terrace fill has a rim that, despite its simplicity, is without close parallel in the Early Phrygian record. That on 333, similar in external appearance to the one on 309 but with a flattened top and sloping ledge, is perhaps a variation on the same basic approach to formation; the type recurs practically unchanged on an open-mouthed amphora from TB 4, here uncatalogued ( P 1953). The rim on 349, a lightware vessel from the Terrace fill, is possibly a more projecting version of that on 309, in which the latter's shallow, unpronounced ledge is combined with a flattened face and top. In the Destruction Level, the nearly identical rims on the krater 932 and the storage jar 991 look back to 349 as their closest antecedent. For 932 the correspondences are notable, since it is likely that the painted vessel and its stylistically related group were not local products (pp. 162-163). The rim borne by the light-ware 243 from the PN 3 Trench might be related to the type on 349 , although the broadly projecting form could point equally well to the influence of unledged types (p. 106).

208 from Meg. 10-1 is an unusual double-ledged variety that recurs virtually unaltered in the Destruction Level on the storage jar 989 . Much the same basic profile, with canted face and flat top, appears in a single-ledged version on the wide-necked amphora 901 from TB 5. The rim borne by the krater TumP 88 indicates that other kinds of double ledging were used, in this case a version that looks to be an offshoot of the type on 308 from the Terrace fill. The broadly stepped double ledging on the enormous painted kraters 1077 and 1081 represents yet another approach (supra).

The ledged rims on vessels from the Destruction Level generally build on earlier manners of forming, as seen in the tracing of various types. Although a number of seemingly evolved forms are limited to this level, little that is totally new, or without clear precedent, appears. The rims on the open-mouthed amphoras 908, 911, and 924 are perhaps the oddest of the new forms, while those borne by 891 and $\mathbf{9 3 5}$ are, if not as remarkable, at least as novel. The stamped 922 has a projecting rim that is unusual among ledged types and more generally akin to unledged varieties (e.g., 368); the shallow ledge worked into the top may have been a compromise between the two. Similarly, the rims on 900,931 , and 988 , and also that borne by TumW 66, seem to be slightly ledged versions of such simple flaring types as those on 356 from the Terrace fill, 241 from PN 3, and 998 from TB 3. The rim on the bichrome amphora 925 , probably an import (p. 165), is similar on a smaller scale. Those crowning the
related kraters 920-921 may be descended from the type occurring on TumW 67, a rim that is close in general profile to that on 209 from Meg. 10-1 yet lacking the ridge-formed ledge of that specimen (supra). The unledged rims on $\mathbf{3 6 0 - 3 6 1}$ from the Terrace fill seem to be enlarged variations of the type borne by TumW 67.

The ledged rims on vessels from early tumuli conform generally to those from the City Mound, and in a few cases they can be correlated with what appear to be specific evolutionary phases. The storage jar in Tumulus $\mathrm{G}(\mathrm{P} 180)$ and an amphora in $\mathrm{KY}(\mathrm{P}$ 1367) have rims that lack close affinities in the Destruction Level, yet they correspond well to developments seen in the Terrace fill (supra). The rim crowning TumP 89 belongs to the family of that on 308 from the Terrace fill, seemingly a postEPB V series that is distributed across the Terrace fill and the Destruction Level (supra). The rims borne by the dinoi TumP 80 and 87 belong to the same family, and are closest in form and attitude to that on $\mathbf{3 4 0}$ from the Terrace fill. Apparently also related to this series are the rims on TumP 88 and 90 , vessels that are enough alike to imply a single source, despite the double ledging on the former. The general range from Terrace fill through Destruction Level for the stage of development in Tumulus $P$ can perhaps be narrowed somewhat by the amphoras TumP 99-100. The former has a specific type of rim with ridge-formed ledge that appears to have been no longer current by the time of the destruction (supra). The rim on TumP 100, on the other hand, is close to that borne by $\mathbf{1 0 0 0}$ from Meg. 4, and is not far removed from the rim on 912 from TB 7; both forms were probably derived from a type appearing in the Terrace fill (p. 103), yet neither is attested until the Destruction Level. In terms of the development of ledged rims, it is thus possible that Tumulus $P$ falls between Terrace fill and Destruction Level (p. 193).
TumW 64 has a rim of the type that begins with 52 from EPB III and continues through the destruction period, but none of the vessels in the tomb bears a rim of the more advanced variety found on 308 from the Terrace fill and in Tumulus P . Tumulus W also lacks ledged rims with crisp, squared sections, as occur in the Terrace fill. Both points of negative evidence may help to corroborate the view that $W$ was earlier than $P$, and they also might be indications that W was anterior to the Terrace fill, perhaps not far removed from EPB V (pp. 192-193). For Tumuli X, Y, and MM, ledged rims are not as helpful. The amphora in Tumulus X (P 3135) has a unique rim, while that on the amphora from Tumulus Y (P 3163) is generally reminiscent of the slightly ledged rim on 900 from the Destruction Level. The rim on MM 374 , belonging to the same family as that on 308 from the Terrace fill, suggests no more than a post-EPB $V$ date, but a few of the unledged rims in the tomb might allow a closer correlation with the citadel (infra).

## UNLEDGED RIMS

Unledged rims occur less frequently than ledged varieties in pre-destruction contexts. The earliest examples, 223-224 from NCT IVb and 193-194 from Meg. 10-2, and also 153 from EPB $V$, are discussed in connection with storage jars (p. 99).

EPB V provides the earliest instances of what were to be conventional approaches to the formation of unledged rims. 154 is the most unusual, but the profile is duplicated on a larger scale on an uninventoried specimen from the Terrace fill. Although the specific form is otherwise unattested, the broadly everted manner and flat, horizontal top may point to a relationship with rims like those on 364-365 from the Terrace fill and on TumP 98 and 101. That borne by $\mathbf{1 5 5}$ from EPB V is of a broadly flaring type with sloping top and rounded head that recurs with little alteration on a large ambiguous vessel found in CC 3 (P 4663), while the large neck amphora 886 from Meg. 3 has what appears to be a slightly modified version. A relationship similar to that of certain ledged forms may exist between the rims on 156 from EPB $V$ and 363 from the Terrace fill, the latter being a crisper, more neatly trimmed version of the former's squarish section. 358 from the Terrace fill has a rim that may be a variant with sloping top. As with analogous (and perhaps related) ledged rims (p. 103), such squared forms at this scale are not known from the Destruction Level. The rim on the shoulder-handled amphora 895 from CC 2 even seems to continue the type on 156 and 363 in a less blocky form. On the other hand, the rim crowning the amphora TumP 103 looks to be a close reflection of the form on 363 , and thus it may corroborate the general developmental stage suggested by the ledged rims in the tomb (p. 104).

In the Terrace fill, unledged rims occur in considerably greater numbers and varieties than in EPB $V$. Moreover, production in light wares is well attested, whereas the specimens from EPB $V$ are exclusively dark-fired. The differences might result from the presence of a more evolved stage of production in the Terrace fill, especially since several examples that are of forms not seen in EPB V have parallels in the Destruction Level. ${ }^{183}$
A few varieties are known only from the Terrace fill, including the unusual rims on the wide-necked amphora 305,355 , and 362 . Others have either close or general correspondences in the Destruction Level and/or tumuli. Thus the form of rim on the narrow-necked 353, with the hint of a ledge, recurs virtually unchanged on an uninventoried vessel from CC 3, while the rim on 354 differs little from that borne by 904 from TB 6, one of the few kraters

[^117]without a ledged rim. The latter two may look back to the earlier form on 51 from EPB III. The rim on 356 is of a simple flaring type that recurs with little change on 998, a wide-necked storage jar from TB 3; those on 900, 931, and 988 (from the Destruction Level) and TumW 66, each subtly ledged, reflect a similar approach to formation, and are reminders of the basic closeness that sometimes exists between ledged and unledged forms. A more pronounced case is that of the rim on 357 and its ledged counterpart crowning 907 from TB 3 (p. 103).

The unledged rims on vessels of light ware from the Terrace fill have little correspondence with those on dark-fired specimens in the same context, yet most are generally paralleled in either the Destruction Level or early tombs. Since the examples in question are without mica films, the matches with assuredly Phrygian vessels also serve to strengthen the possibility that they are Iron Age rather than earlier (p. 36). On 364 appears a large, roughly triangular form of everted rim with broad, flat top. $\mathbf{3 6 5}$ is generally similar, and has a gray-ware counterpart in M4 I. From the EB Trench comes a considerably less heavy version in medium-fine gray ware, on 245, yet this form may be more directly related to that on $\mathbf{1 5 4}$ from EPB V. In the Destruction Level, such unledged types at a large scale are found primarily on storage jars (p. 100). The rim on the pattern-banded 992, which probably once stood in Meg. 4, continues the general type seen on 364 , as do those on 987,994 , and 997 . On 993 from TB 2 the form seems to have been adapted to a dinos-like mouth. The type at the less massive scale of 245 also recurs in the burned citadel, on the threehandled shoulder amphora 896 , while the more conventional shoulder amphoras 892 and 894 and the painted jar 964 have similar everted rims. Those on TumW 72 and the nearly identical amphoras TumP 98 and 101 provide extramural examples of this adaptable form. 367 from the Terrace fill has a simple, approximately rectangular type of rim that is not far removed from the slightly ledged form on 349 from the same context. That crowning TumW 71 is similar, while the rim borne by 246, a light-ware vessel from a pit in the EB Trench (p. 14), seems to be a crisper version of the form on 367 , somewhat modified by the neat double beveling of the face. Although parallels at the large scale of 367 are not known from the Destruction Level, the rims on the shoulder amphora 893 and the painted fragment $\mathbf{1 0 3 0}$ are of much the same form in a hitherto unattested small format. The rims crowning the amphoras MM 373 and 376 are similar to that on 893 , and thus provide an additional bond with a vessel that in form and size is closely comparable to the series in Tumulus MM (p. 83). The rim borne by $\mathbf{3 6 6}$ from the Terrace fill, a large form with rounded head and broad, flat top, has a close counterpart on a large vessel from the SE storeroom behind Meg. 1. The stamped 368 has a broadly projecting rim of a type that is varied on 243 from PN 3 by a
flattened top and a shallow, channel-like ledge (p. 105). The cursorily ledged rim on 922 from TB 1 is not far removed in general form from that on 368 .

As with ledged rims, the Destruction Level yielded few unledged varieties that lack precedent in earlier contexts. That on the storage jar 990 , with a prominent vertical face, is possibly derived from simple flaring types
such as the one on 356 from the Terrace fill. Another large jar (995) bears a massive, angular form with marked, cavetto-like overhang. Although the rim has no close parallels in the Early Phrygian sequence, it is nonetheless possible to see in it a combination of those features (e.g., broad, flat top and high face) that were considered desirable for the rims of the largest vessels.

## Bases and Handles

## BASES

Bases for bowls first occur in EPB IIa-b, and those for closed vessels in EPB III. ${ }^{184} 54$ from the last context, a low ring foot for a small vessel of fine gray ware, is of a type well represented in the Destruction Level, primarily on bowls and round-mouthed jugs (e.g., 487, 489-490, 503,543 ). Such interchangeability of types among different shapes indicates, as do handles and rims, a certain modular approach in ceramic design. Thus $\mathbf{5 5}$, which may belong to the round-mouthed jug 41 found with it in EPB III, is essentially a modified, narrowed version of the foot on the bowl 40 from the same context, itself a long-lived type on bowls (p. 51). The conical form of 55, in turn, might underlie a variety of more refined types that appear in the Destruction Level (e.g., 529,570).

Two bases from EPB III belong to medium-sized, closed vessels of fine ware. 56, a broadly spreading ring foot, carefully tooled, appears to be related to a type of pedestaled foot that is best represented in pre-destruction contexts on the bowl 289 from the Terrace fill (p. 51). 57, the only vessel in light ware from EPB III, has a heavy, spreading ring foot, disk-like in external appearance, with a broad resting surface surrounding a deep, conical well on the underside. Both 56 and 57 anticipate the spreading bases that were popular on large roundmouthed jugs and kantharos kraters in the Destruction Level (e.g., 634, 638; 878-881). Some dinoi also bear this variety ( $963,967-968,972$ ), as does the large widemouthed trefoil jug 780. The later bases often show refined profiles that no doubt reflect improvement through time from EPB III: edges were often neatly trimmed to flat faces, while the sloping upper surface is in a number of instances bordered below by a peripheral, curb-like ridge (e.g., 638, 880), as it is on K-III 23 and 35-36. $\mathbf{1 6 0}$ from EPB V, another spreading form, most likely belongs to one of the shapes with which 56-57 and their descendants are associated, since other mediumsized vessels are not known to have been so footed. In morphology, with tapered edge and shallowly concave underside, $\mathbf{1 6 0}$ seems to be related to the type of foot known as early as EPB IIa on the bowl 7. A more

[^118]spreading version of the form continues into the Destruction Level, as witnessed by the large round-mouthed jug 630

A number of base types are not attested on the City Mound until the Destruction Level. These include the ridge-ring foot, pronounced disks, and various spreading types with distinct, articulated stems (e.g., 435, $529-530,645,876$ ). The last, however, are found on vessels in Tumuli III and P (K-III 23 and 34-36, TumP 49-50 and 61).

## HANDLES

(Plates 150-151)
Little evidence exists for the use of regular handles in Early Handmade pottery, where lugs seem to have been the primary lifting devices. 27 from EPB IIb, with a prominent lug on the shoulder, might represent a shortlived carry-over into wheel production (p. 26); lugs on later closed vessels are extremely rare ( 978 ). The bolsters and other attachments borne by storage jars seem to be different in idea, and in any case it is doubtful that they were used for lifting (p. 98). A few lugged bowls from the Destruction Level, however, possibly preserve that common feature of handmade pottery $(475,495,496,507)$. The handmade bowl 410 from the storeroom behind Meg. 4 might reveal how such an idea survived.

The large trefoil jug 9 from EPB IIa presupposes a regular handle, but it is not until the subsequent EPB IIb and III phases that handles appear in the EPB sequence. 28 from EPB IIb is basically a double-round treated to resemble rope (infra). By EPB III, all the basic types are present: single-round (49), regular double-rounds (44), ovals (59), and straps (58). The triangular-sectioned variety, basically a modified version of the single-round, does not appear on the City Mound until the Destruction Level. EPB V provides the only pre-destruction example of horizontal handles in the citadel, on the bowl 102, although those borne by the amphora Tumw 72 show that horizontals were applied at least occasionally to closed shapes before the destruction period. Even in the burned citadel such handles are uncommon, and in most cases are restricted to bowls ( $\mathbf{4 6 9} .496,499,502,505-506$ )
and amphoras of various sizes $(874,876,908-910,920-$ 921). The Terrace fill contributes an unusual tripleround handle, on the amphora 306, although the grip is really no more than a carefully tooled strap. A similar short-cut was used to create a double-round handle from EPB $\backslash^{\prime}$ (161), and the method finds some an analogue in the handles on large trefoil jugs in bronze from Tumulus MM. ${ }^{185}$

379 from the Terrace fill is the only example from the pre-destruction sequence on the City Mound of a compounded handle, a single-round nestled within a furrowed strap. Although this particular form is not known to recur, it anticipates the analogous combining of parts found on the kraters 911-912 from the burned citadel. The rarity of such compounded forms suggests that they were experimental. Equally novel but somewhat better represented are handles composed of various sectional combinations. In the citadel, such grips do not appear until the Destruction Level, although the handles on three sieve jugs from Tumulus III indicate earlier use. The trefoil jug 698 from Meg. 3, with a double-round shaft rising from a horseshoe-like segment, finds a reverse analogue in the handles on the sieve jugs K-III 18-19, where articulation of the parts is more pronounced. The fragment 1023, perhaps similar to these examples in design, provides the only other evidence for such a complex form in the burned citadel. On the sieve jug K-III 20, a rolled shaft gives way to a thick, cut-out strap at the point of descent to the rim. The latter segment, in itself, recalls the cut-out handles on 776 and 794 from the Destruction Level and that preserved by a sherd of Brown-on-Buff ware included under 1041 from a later context on the City Mound (p. 122). At Boğazköy, a spouted, bichrome jug from Büyükkale II bears a multi-sectioned handle that generally echoes those at Gordion. ${ }^{186}$ Since the decoration could reflect Phrygian influence (p. 152, n. 198), it is possible that the handle does too.

Shafts are usually plain. Rope handles, while uncommon, appear as early as EPB IIb (28). In the citadel, they are not seen again until the Destruction Level (583, 704, 731-732), but the gap is partly filled by the handles on TumW 72. The feature recalls the subtle, oblique furrowing on the handle of the Early Handmade cup 215 from NCT IVb (p. 24). Similar furrowing occurs on sieve jugs from Tumuli III and P (K-III 19 and 21, TumP 78), where the treatment is limited to the length from bolster to upper attachment.

A more common aspect in the design of handles is medial ridges or spines, usually on the straps and ovals of large trefoil jugs and amphoras. Perhaps conceived as a strengthening device, the feature first appears on some large trefoil jugs from EPB III (p. 59, n. 28), and
185. TGET, 224-227.
186. MDOG 89 (1957), 64-65, fig. 55.
thereafter it is present in both EPB V and the Terrace fill (e.g., 380). The amphoras TumW 67 and 69 also have medial ridges, as do several from Tumulus P (TumP 95, 97, 99, 104). In the Destruction Level the detail recurs with some frequency, and in varying degrees of prominence (e.g., 728, 730, 883, 887, 918).

The attachment of handles was not always routine and unimaginative. An interest in devising unconventional means of affixing a grip is attested as early as EPB III in 58 , a well-tooled strap that was attached to the body by a pair of foot-like struts or consoles. This particular configuration is otherwise unknown in pottery or other materials, yet the additional feature of struts on the back of the handle, as indicated by scars, anticipates the occasional use of such strengthening devices in the Destruction Level (e.g., 698, 882). The extraordinary bowl 102 from EPB V bears a scheme of double handle-struts that, while unparalleled, has general analogues in 698 and the supports for the sipping tube on 860 .

The side-attached handle, in which the shaft laterally adjoins the wall of a vessel rather than meet it headlong, occurs first in EPB V, and is a frequent feature in the Destruction Level. The horizontal versions on the bowl 102 prefigure the similar forms on the painted bowl 499 from Meg. 3 (infra). The vertical handle on an uninventoried sherd from a small shape in EPB V has the kind of neatly squared-off lower end that occurs later on such vessels as $499,529-530,608,645,757-758$, while on the painted 165 , a medium-sized vase, the handle terminates in an articulated, rounded knob. Related to the last is that on 391 from the Terrace fill, with an enlarged, flattened finial of a sort that recurs in the burned citadel on the horizontal handles of the large open-mouthed amphoras 908-910. Other types of side-attachments, and also basal spurs used to create a similar appearance, are not attested before the destruction period (e.g., 502, 531, 559, 649, 659-660, 731-732, 787, 804). For the period in Anatolia, side-attached handles seem to have been a distinctive feature of Phrygian pottery, since the only other known occurrence is from the Great Tumulus in Ankara. ${ }^{187}$

The general method of side-attaching might be compared with metalworking practice where, of necessity, handles stand out as discrete elements, but the only good parallels in bronze for the clay attachments are on the bowls MM 49-51. Here the shafts are squared off, as in pottery, and attached by means of plain dowels that are not readily noticeable. The normal procedure for attaching bronze handles, as seen in the earlier Tumuli W and P , and also in MM , is by headed rivets set through flattened tabs or plates that facilitate a snug join (e.g., TumW 5-6, TumP 6, MM 14-15, 27, 52). Given the relatively early appearance of side-attachments in pottery and the lack of bronze counterparts until Tumulus

[^119]MM, it is conceivable that the handles on MM 49-5l imitate ceramic practice, which was itself perhaps remotely inspired by the idea of separately joined elements in metal. Supporting the hypothesis is the fact that side-attachments in clay are never known to have been combined with simulated rivet heads or any other metallic joining device. The bowls 102 and 499 afford close parallels for the manner of attachment seen on MM 50 . The same clay vessels may represent the immediate source for TumP 142, a wooden bowl whose body and "side-attached" handle were carved from a single piece of pine.

A rare method of joining to the rim seems more clearly to have been borrowed from metalworking. The handles on the group of round-mouthed jugs represented by 529 from TB 7 show a slotted attachment that is known as early as EPB V, on an uninventoried sherd. Otherwise unattested in pottery, the technique is closely paralleled in bronze on TumW 6 and 8. The former, a roundmouthed jug, has pins holding the two halves of the hollow handle to either side of the rim. In different manner on the ladle TumW 8, a stylized animal head bites the projecting tang of the bowl; the two pieces were apparently joined by solder.

Although Early Phrygian potters seem not to have duplicated the common rivet-and-tab arrangement for affixing handles in bronze, they did on occasion use added pellets of clay or "false rivet heads" alone to suggest a metallic type of join. The imitative feature first appears in EPB III at the upper attachments on a few large trefoil jugs and at the lower handle attachments on the amphora 50 and the ambiguous 59. The examples, as perhaps 58, are important in providing good indirect evidence for the production of metal vessels as early as the time of the Latrine Deposit. 161 from EPB V has a false rivet head at the upper attachment, a placement repeated on the large trefoil jugs 731-732 from the Destruction Level. Another large trefoil jug (738) bears a rivet head at each joining point, while 743 has a pair at the upper attachment. The last is truest to bronzeworking practice, in which a pair of rivets were regularly inserted at each join on large trefoil jugs (e.g., MM 23-25). The influence of metalwork also seems to be evident in the knobs that flank the handle attachments on some large neck amphoras, including 887 (p.82). On 378 from the Terrace fill and the trefoil jug 669 from TB 7, the multiplicity of little studs on the shafts assumes an abstract, decorative character, as is no less apparent on the bronze jug MM 44.

Certain other aspects of attachment seem to have had no connection with metalworking. Curving handle trails, perhaps related to a rare feature of Early Handmade pottery (p. 28), appear on 59 from EPB III and TumW 70 , and recur on a number of vessels, principally openmouthed amphoras, in the Destruction Level (e.g., 734, $738,802,907,914,920-921$ ). The basin 476 and the storage jar 988 have similar, and perhaps imitative,
features. Like side-attached handles, handle trails occur in Ankara, on a neck amphora, but were apparently not a trait of the eastern plateau. ${ }^{188}$ No less curious than handle trails are the finger hollows made at or below the lower attachments on large vessels. In pre-destruction contexts on the City Mound the feature is not attested until the Terrace fill $(\mathbf{3 0 5}, 312)$, although its occurrence on amphoras from Tumulus $W$ is probably contextually earlier (TumW 67, 69-70). In the Destruction Level, finger hollows appear primarily, and with some frequency, on large trefoil jugs and amphoras (e.g., 735. 737, 884-885, 901-902), and they occur on slightly over half the amphoras from Tumulus P. Although usually single, pairs and even trios of hollows can occur (e.g., TumP 93, 899). The neck amphora with handle trails from Ankara also bears this feature, as does a large, multi-handled vessel from Porsuk III. ${ }^{189}$

The topping of handles with various devices begins relatively early and continues through the destruction period and beyond. 195 from Meg. 10-2, possibly an Early Handmade vessel, has a partial and unusual buttonlike addition that may have been a thumb-rest. A similar function might be assumed for the flattened knob centered on the handle 381 from the Terrace fill (a similar example is known from EPB V) and for the more rounded forms on the handles of the neck amphora TumW 65. A single instance is known from Tumulus P (TumP 96), and in the Destruction Level such devices appear occasionally on amphoras (885, 896, 914-915. 937 ) and medium-sized vessels $(628,783)$. Similar elements occur on handles in Macedonian pottery of the Early Iron Age, and it is possible that a connection exists. ${ }^{190}$ On the eastern plateau, similar devices occur on handles at Alişar and Porsuk. At the latter site, cylindrical buttons first appear in stratum IV, on round-mouthed jugs that may, like those at Gordion, have a Balkan ancestry (p. 53), while in Porsuk III similar devices top the handles of large storage vessels, in a manner like that seen on the large dinoid amphora 937 (pp. 90-91). ${ }^{191}$

More frequent as handle crowns are bolsters and spool-shaped rotelles, plastic devices set across the shaft. ${ }^{192}$

[^120]Bolsters are the first to appear on the City Mound. The earliest example, belonging to a small vessel from EPB 1II, is a low form with tapering ends that can be traced to the Terrace fill ( $\mathbf{3 8 5}$ ) and to Tumulus $P$ in the reeded version on the sieve jug TumP 78. ${ }^{193}$ The more familiar cylindrical bolster with squared-off ends is not attested in pre-destruction contexts on the City Mound, but the absence is surely fortuitous since the type appears prominently on TumW 61 and somewhat less so on TumW 62, and it also occurs in Tumuli P (TumP 55-56), III (K-III 7, 9, 19, 24-25), and G (pl. 61 (P 45〉). In the Destruction Level, cylindrical bolsters, although far from abundant, are found on a number of small to moderately large vessels (e.g., 618, 698, 784, 787, 816, 819, 932). Several of the examples from tombs are of Brown-on-Buff ware, as is $\mathbf{1 0 3 9}$ from a post-destruction context on the City Mound. On a few vessels, what look like regular bolsters are actually flattened knobs or horns set flanking the handle (e.g., 832, TumP 57, K-III 8). The practice is curious, since it was seemingly more time-consuming than laying a simple roll of clay across the top of the handle.

The difference between cylindrical bolsters and spoolshaped rotelles is one of degree rather than kind, since the latter is a version of the former modified by enlarged, disk-like ends. The relationship of the two types is best seen in a few examples of intermediate form: bolsters with slightly enlarged, unpronounced ends that suggest a spool shape only slightly (e.g., 776, P 3160 from Tumulus Y, pl. 61), and forms with articulated ends that are barely larger than the shaft of the bolster (e.g., 784, 820, K-III 21). Spool-rotelles with markedly enlarged, pronounced heads do not occur in the EPB sequence until EPB V, where that on 161 , with a weakly simulated cross-shaft, already seems to be a step removed from the idea of a separately added spool. In metal the device and the handle also were treated as a single unit relatively early, as shown by the casting together in a single piece of the grip and the bolster on the sieve jug TumW 5. Although the fixture is one of the more prominent details of Phrygian pottery, it never achieved real popularity in Early Phrygian times. Two examples are known from the Terrace fill, on the amphora 306 and the odd 396 with plastic appliqué, while the Destruction Level provides about half a dozen instances. That the majority are on extraordinary vessels suggests that spool-rotelles were usually reserved for special creations: the exceptional trefoil jug 704, the small ring-handled amphora 875 , the four-handled krater 907 , and the lidded krater 929 . In the citadel the only other shape with a rotelle is a large round-mouthed jug (629), but in Tumuli P and III a number of sieve jugs have them (TumP 75-77, K-III

[^121]16-17), as does a Brown-on-Buff sherd included under 1041 from a post-destruction context. There are also a few instances of false rotelles, disks applied directly to either side of a handle without a connecting shaft (630, 785, K-III 6). The idea is related to that of phony bolsters.

Ceramic bolsters and rotelles can hardly be divorced from metalworking, although use of the devices in bronze rarely parallels that in clay. As handle crowns, bolsters are known to occur only on ladles (MM 47-48, K-IV 4), a type not found in pottery, while TumW 5 provides a rare instance in bronze of a spool-rotelle in the position familiar from ceramic vessels. In metalworking, bolsters and rotelles are best known in quite different roles, as the handle housings and uprights on distinctive bowls with ring handles and braced rims. Occurring in quantity in Tumulus MM (MM 55-69), the type has counterparts in wood from Tumulus P (TumP 144-146) and probably also from $W$ (TumW 24). ${ }^{194}$ The only known copy in pottery from the Early Phrygian period is K-III 46, although the housings on the ceramic ringhandled dinoi K-III 47-48 and 1048-1049 recall those on the bronze bowls. The nature of the relationship between the bronze and clay fixtures is thus uncertain. The evidence from tombs may be misleading in suggesting that bolsters and rotelles rarely topped bronze handles. It is also possible that the knobs on the rotelles of the sieve jugs TumP 76-77 simulate the headed rivets expected on bronze attachments. On the other hand, the uses in clay could represent free adaptation of such bronze components as those found on the ring-handled bowls. Thus the bolsters on ladles and the rotelle on the bronze TumW 5 might reflect influence from what was primarily ceramic practice. The possibility is perhaps supported by the bolster on TumW 5, cast with the handle as though in imitation of the clay parts that were fused in firing. Whatever the connection may have been between the two media, there are no grounds for assuming that the concept of these ceramic handle crowns originated in Phrygia. Bolsters are a common feature of the Alişar IV period on the eastern plateau, and at Alişar itself they are considerably more abundant than at Gordion. ${ }^{195}$ Spool-shaped rotelles, however, seem to have been rare in the east, and although they are hardly numerous at Gordion, it is possible that the variety was primarily Phrygian, in use if not also in inspiration. ${ }^{196}$

[^122]
## Ambiguous Vessels, Miscellaneous

(Figures 58-59, Plates 150-167)

A large number of ambiguous vessels compose a generally miscellaneous lot. Many are notable primarily for decoration. Others complement the information about form gained from identifiable shapes, and a few may represent uncommon types. Some others contribute technical evidence in terms of wares and finishing processes.

188 from Meg. 10-4, of fine gray ware, has an upper profile that lacks close parallels in either the wheelmade repertory or Early Handmade. In the orientation of the wide neck, however, 188 recalls large round-mouthed jugs and kantharos kraters, and thus may be prospective of these formally related shapes. The diameter of the rim supports the possibility.

EPB IIb may have a wheelmade successor of an Early Handmade type in the lugged 27, of coarse gray ware (pp. 26, 107). The very large 26, also from a context of EPB IIb, is the earliest example of pattern-banding in an Iron Age context, but it is uncertain whether the vessel is Phrygian (p. 119).

In EPB V, 158 could be a wide-mouthed trefoil jug, a Type 2 sieve jug, or possibly a low-necked jar. 157, on the other hand, is perhaps best interpreted as a sieve jug, although it could conceivably be an odd type of roundmouthed jug ( p .69 ). 159, a multiply grooved vessel, might represent an extraordinary type of bowl or perhaps an amphora of fine ware. The rim diameter (ca. 25 cm .) is a quarter again greater than those of the largest kantharos kraters, and is considerably less than those of all but the smallest open-mouthed amphoras (e.g., 924925). 163-164 are of interest primarily for stamped decoration, although the former also documents the use of horizontal bands on large vessels by the time of EPB V (p. 118). The Brown-on-Buff 167 has a kind of relief petaling that recurs in the Destruction Level and Tumulus G (pp. 120-121), while the handle on 176 is attached to the face of an everted rim, a rare feature on pots so small (e.g., 875).

From the Terrace fill, 377 might be a jar or a sieve jug
(pp. 69, 95). The large, painted $\mathbf{3 8 9}$ has an unusual type of vertical ribbing or petaling for which no parallels exist at such a scale (p. 120). 395, a complete, circular rim barely 3 cm . in diameter, is possibly the mouth of either an askos or a small amphora comparable to 872 . Yet because the rim is close in form to that on the narrownecked jug 784, the vessel might more likely be an otherwise unknown small-scale version of that shape (p.64).
211 from Meg. 10-1 is a wheel-finished vessel of gray ware whose size, profile, and circular aperture at the base of the neck may mark it as a Type 1 sieve jug (p. 69), but the opening is considerably larger than a normal sieve hole, and no trace of a spout is preserved.

Ambiguous vessels from the Destruction Level are no doubt the result of incomplete retrieval and the activities of ancient intruders. The handle 1023 is unique (p. 108), while 1033 represents a painted vessel that stood on hoofed legs (p. 66). Most of the incised and stamped pieces come from large or very large vessels whose walls are in several instances between 1.5 and 3 cm . thick (1010-1014, 1016-1019, 1022). Thus, they add both to the known stock of large amphoras and/or storage jars and to the range of embellishment on these shapes. The incised 1012 from Meg. 4 may belong to a narrow-necked amphora or jar generally similar to 895-896 or 990, while the stamped 1013 from the same unit has a short neck reminiscent of that on the three-handled 897 . Most of the painted specimens probably represent common shapes. 1024 and 1027-1029 are in all likelihood from narrownecked jugs, the odds favoring trefoil type; amphoras are the only reasonable alternatives. 1025 is probably a round-mouthed jug with short neck (cf. 578), but it could also have been a sieve jug similar to 818-819. 1035 may represent a small amphora not unlike 891. 1030 from Meg. 3 is perhaps best viewed as a somewhat enlarged version of the jar 983; both have similar panels of Oblique Checkerboard 2, which might imply a common source. As an open-mouthed amphora, 1030 would be by far the smallest known.

# Wheelmade Pottery: Embellishment 

## Non-Painted Embellishment

Non-painted decoration includes a wide variety of techniques, from incised horizontal grooving to elaborate programs of stamping. In between are patterned incision, ridging, banding, openwork, modeled relief, and plastic adornment. Most occur primarily, if not exclusively, on monochrome pottery, and thus seem to complement the mica films and clean, crisp contours that also help to set unpainted apart from painted as a ceramic expression (p.41).

As a general rule, only a single variety of simple non-
painted embellishment, e.g., multiple grooving or ridging, occurs on a vessel, although the more decorative types often appear in combination with the simpler. Stamping, for example, occurs frequently on raised bands (e.g., 323, 404, 597), while stamping and patterned incision, themselves hardly ever found together ( $244,922,1022$ ), may each occur in combination with prominent ridging (e.g., 704, 859, 889, 914-915, 997). A few vessels show a proliferation of decorative devices (e.g., 920-921, K-III 18-21, TumP 76-78).

## Incision

Incision before firing was a recurring practice in the Early Phrygian period, although its use does not appear to have been widespread. ${ }^{1}$ Two sorts occur: multiple grooving in sets of up to half a dozen closely spaced, horizontal lines; and patterned incision, which consists of more elaborate, rectilinear and curvilinear designs. The former, simpler type is in evidence by EPB III, whereas patterned incision may have been introduced relatively late. Neither type of incised work appears in early tumuli.

## MULTIPLE GROOVING

The relatively early appearance of multiple grooving suggests that it might have continued a practice of Early Handmade pottery (e.g., 67, 190, 226). After EPB III (45, 50 ), the technique can be sketchily traced across EPB V (108, 142, 159), the Terrace fill (383), and into the Destruction Level, where the great majority of examples occur. Round-mouthed and trefoil jugs of various sizes were the principal recipients $(45,181,559,566,569-570$,

[^123]$588,629,678,684,697,729$ ). Other shapes so decorated include bowls ( $108,495,521$ ), jars ( $954,957,964,976$ ), and a spouted jug (788). Large amphoras and storage jars seem to have been less favored: a few ambiguous specimens from pre-destruction contexts bear multiple grooving (142, 213), while in the Destruction Level it occurs on large shapes only in connection with patterned incision (991, 1012). Multiple grooving rarely accompanies painting ( $\mathbf{9 6 4}$ ).

Formed in at least some cases by a tined instrument ( 695 [pl. 69], 991 [pl.144]), multiple grooving is most often neatly executed, prominent, and meant to catch the eye at key points of contour, usually on shoulder or neck. A single set per vessel was the rule, and to a degree the placement seems to have been determined by shape, as on bowls, where the grooving occurs at maximum diameter and above ( 108 [fig. 17], 495 [pl. 27], 521 [pl. 35]). On trefoil jugs, the lower shoulder was favored (e.g., 678 [pl. 67], 697 [pl. 70], 729 [pl. 77], 739 [pl. 78]), while on round-mouthed jugs multiple grooving can form a kind of collar around the lower neck ( $\mathbf{1 8 1}$ [pl. 38], 559 [pl. 44], 569 [pl. 45]) or emphasize the midsection of the neck ( $\mathbf{5 6 6}$ [pl. 45], 570 [pl. 46], 588 [pl. 49], 629 [pl. 57]). A few trefoil jugs have grooving on the neck ( 45 [fig. 26], 684
[ pl .68 ]), including one instance in which the entire height is so decorated ( 671 [pl. 66]). Such extensive grooving as on the last example is otherwise rare, yet it does occur as early as EPB III, on an amphora ( 50 [pl. 134]) whose shoulder is totally grooved. On a few other specimens from pre-destruction contexts the full extent of the grooved area is unknown ( $\mathbf{1 5 9}$ [fig. 58], $\mathbf{3 8 3}$ [pl. 155]). Relatively few vessels are known to have more than a single set of multiple grooves. Of these, a number are medium or large trefoil jugs with two sets placed low and high on the shoulder ( 695 [pl. 69], 743-744 [pl. 79]). In a production group of large jugs with twisted handles, three sets emphasize the lower shoulder, transition to neck, and mid-neck (731-732 [pl. 77]). The spouted jug 788 (pl. 87) bears a similar scheme, although on the lower and upper neck the technique is actually grooving on relief bands to create raised multiple ridges instead of regular grooving, as occurs on the shoulder. In other cases of two or more sets, the grooving is ancillary to patterned incision ( $\mathbf{9 7 9}$ [pl. 142], 991 [pl. 144]).

## PATTERNED INCISION

Patterned incision, like multiple grooving, might be thought to have had its roots in Early Handmade pottery, where designs similar to those in the wheelmade assemblage occur (p. 26). Yet the only possible evidence for the early use of patterned incision on wheelmade Phrygian pottery lies with two handle sherds, both of gray ware and both from Meg. 10-2 (195-196 [pl. 151]). With nothing of the bodies preserved, either or both might belong to Early Handmade rather than wheelmade vessels (p. 27). The absence of mica film, although hardly conclusive, allows the possibility, while the use of patterned incision for handles is exceptional on wheelmade pottery ( 738 [pl. 78]). The button attachment with chevron pattern on 195 is unique, but the design of stacked chevrons on 196 has a few parallels in painting in EPB V and the Destruction Level ( 607 [pl. 51]). ${ }^{2}$ The normal Phrygian use of patterned incision on the bodies of vessels, as seen in the Destruction Level, is limited in earlier contexts on the City Mound to the Terrace fill (308, 311, 369-371), the subsequent M4 I (405), and PN 3 (244). That from the last context is one of the typological clues that the unit is relatively late (infra), while the absence of patterned incision in EPB $V$ may be connected with the priority of this context over the Terrace fill (p. 15). The only instance known from an Early Phrygian tomb is on the shoulder-handled amphora P 1367 from Tumulus KY, a burial judged to be close in time to the Destruction Level. Regular patterned incision thus seems to have been a relative newcomer to the decorative repertory of wheelmade Phrygian pottery, having little or nothing to do with Early Handmade. That the uses of

[^124]the technique are generally different in the two traditions might be a further argument for discontinuity (infra).
Patterned incision appears to have been essentially a Phrygian feature during the general period in Central Anatolia. Beyond Gordion, the technique occurs at Midas City, where certain motifs parallel those at the Phrygian capital, but at Alişar IV centers on the eastern plateau such decoration was apparently not practiced. ${ }^{3}$ To the west, patterned incision is characteristic of Aeolic Geometric pottery, and, in the opposite direction, it is a principal feature of the Syro-Hittite Level II at Malatya, where Urartian influence was possibly at play. ${ }^{4}$ Whether either area contributed to Phrygian patterned incision is uncertain. A frequent design of Aeolic pottery, the meander, is not found incised on Early Phrygian vessels at Gordion. ${ }^{5}$ The other motifs to both east and west are, like those at Gordion, generally too simple in character to argue for connections. Alternative to external influence is the possibility that Phrygian patterned incision developed locally, perhaps under the general influence of vase painting (infra).

Patterned incision occurs almost exclusively on larger vessels, the principal and virtually only exception being the sipping chalice 859 ( pl . 104) from TB 4. It is perhaps significant that this pattern of use marks a departure from Early Handmade, where bowls of regular size often have incised decoration (pp. 26-27). Large amphoras of varying types most frequently bear pattern-incised work (308, 311, 888-889, 914-917, 922). Of generally similar size are a narrow-necked storage jar from TB 6 (991) and a number of large ambiguous vessels, either amphoras or storage jars (244, 369-371, 405, 1010-1012, 1022). Other, somewhat smaller shapes with patterned incision are considerably fewer in number: a pair of large trefoil jugs (745-746) and a necked jar of comparable scale and form (979), a group of large one-handled utility pots (837) and related jars (978), a large round-mouthed jug (631), and a carinated basin (482).

Rarely does more than a single incised design occur on a vessel (482 [pl. 23], $\mathbf{1 0 2 2}$ [pl. 153]), and normal practice dictated that the design be used only once, usually in a narrow zone defined by incised lines or in an open field at some point on the shoulder (e.g., 745-746 [pl. 79], 837 [pl. 101], 888 [pl. 112], 914-915 [pl. 120], 978 [pl. 142]). Patterned incision seldom appears on the neck ( 308 [pl. 116], 917 [pl. 120]). The design was on occasion augmented by multiple grooving ( 979 [pl. 142], 991 [pl. 144], 1012 [pl. 153]) and in a few cases combined with stamping ( $\mathbf{2 4 4}$ [pl. 152], 922 [pl. 121]), 1022 [pl. 153]), but it never occurs as an adjunct to painting. On the largest vessels the incised work was often limited to raised bands, in a manner paralleled in stamped decoration

[^125](e.g., 369-371 [pl. 152], $\mathbf{4 0 5}$ [pl. 153], $\mathbf{8 8 9}$ [pl. 112], $\mathbf{9 1 6}$ [pl. 120], 922 [pl. 121], $\mathbf{1 0 1 0}$ [pl. 153]); in connection with banding the design was sometimes repeated ( 369 , $\mathbf{8 8 9}, 916$ ). Classified technically as patterned incision, but considered here under relief work, is the reeding on the sieve jug TumP 78 (p. 121).

The motifs used in patterned incision were few and usually simple. Those occurring with greatest and practically equal frequency are wavy lines and herringbone, while zigzags, chevrons, triangles, and a few unique designs complete the vocabulary.

Wavy lines were usually rendered as closely spaced, multi-line sets; single wavy lines occur only on a series of one-handled utility pots and jars from the Destruction Level, vessels that appear to have come from a single source ( 837 [pl. 101], 978 [pl. 142]; p. 72). A krater from the Terrace fill ( $\mathbf{3 0 8}$ [pl. 116]) has on the lower neck, and perhaps the upper, a six-line version made with a tined instrument, of the sort used also for multiple grooving. The vessel thus sets a precedent in type and technique of decoration for programs of incision occurring in the Destruction Level, on the wide-necked amphora 917 (pl. 120) and on 991, a narrow-necked storage jar (pl. 144). ${ }^{6}$ The later vessels provide exceptions to the rule of narrow fields, since the multiple wavy lines on neck (917) and shoulder (991) are large and prominent. On 991 in particular a full upper shoulder zone, emphasizing the position of the lugs, is created by bordering sets of multiple grooves, formed by the same instrument that produced the wavy design. A scheme in which two or three wavy lines occur within a narrow zone formed by straight lines, all rather lightly incised, is known only from the Destruction Level, on two large trefoil jugs (745-746 [fig. 26, pl. 79]) and two amphoras (914-915 [pl. 120]). For each shape a common source is suggested primarily by aspects of form and detail (pp. 61, 88), while the similarity of the patterned incision and its placement, at a level corresponding to the lower handle attachments, may indicate that both the jugs and the amphoras were from the same establishment. The wavy line is the most familiar device in Phrygian painting, and its use in incised work might reflect inspiration from that quarter. The last vessels in particular recall a subvariety of the Wavy-Line style in having the motif repeated two or three times within a narrow zone (p. 156). The same general style of painting might be echoed on the amphora P 1367 from Tumulus KY, where three stacked zones of single wavy lines adorn the shoulder.

Herringbone is also a design of painting (p. 154), yet in that medium it is generally restricted to panels whereas in incision the motif is most often found in a continuous horizontal strip. In the Terrace fill, the incised design occurs, inter alia, on two large vessels in connection with an unusual system of decorative banding (369-370 [pl. 152]; p. 119). Herringbone on plain bands also occurs in

[^126]the Terrace fill, and continues into the destruction period, as witnessed by two large amphoras from Meg. 4 ( 889 [pl. 112], 916 [pl. 120]). Although differing considerably in type, the two vessels have a similar version of herringbone and thus might have come from the same source. On a band of a different sort, herringbone decorates the flattened resting ring on the underside of the carinated basin 482 (pl. 23) from CC 2, a vessel that has more visible patterned incision on the face of the rim. Incised decoration on bases is otherwise unattested, but a few parallels exist in stamping ( 702 [pl. 71]) and painting (e.g., 1034 [pl. 167], TumW' 61, K-III 8 and 10). Herringbone enclosed by sets of multiple grooving occurs on the lower shoulder of $979(\mathrm{pl} .142)$ from CC 2, a necked jar that parallels large trefoil jugs in scale and form. The disposition of the incised design is much the same as that of the zones of wavy lines on the large jugs 745-746. and might point to a connection with them (p. 97). The sipping chalice 859 (fig. 32, pl. 104) bears the most ornate rendering of incised herringbone. Here, in a program that is as singular as the shape itself (p. 75), carefully executed herringbone fills the blocks of a laterally elongated checkerboard pattern. Defined by a lattice of ridges and covering the body of the chalice in seven tiers, the design is analogous to the painted checkerboard blanketing on askoi from the Destruction Level and Tumulus $\mathrm{P}(812,814$ [pl. 93], TumP 51-53).

Chevrons and zigzags occur less frequently. The carinated basin 482 (pl. 23) from CC 2 has chevrons in their simplest form on the face of the rim, where they alternate with panels of lozenges. Chevrons occur in a somewhat more elaborate rendition on an amphora from the Terrace fill (311 [pl. 116]) and on a large vessel from PN 3, the latter also bearing a zone of triangle-zigzag stamping ( $\mathbf{2 4 4}$ [pl. 152]). On both, the incised motif is virtually the same, consisting of left-pointing, evenly spaced chevrons, rather deeply cut, with a row of punctate dots between every third or second pair. 244 has the addition of a fringed border below the design. The decoration suggests that the two vessels may have been the products of a single source, and is one of the criteria for placing the Phrygian unit in PN 3 relatively late in the predestruction sequence (p. 187). Perhaps related to 244 and 311 are 888 (pl. 112), a narrow-necked amphora from Meg. 4, and the large 1011 (pl. 153), found in burned debris to the NW' of that hall. Each has a variety of multi-line zigzag in free field on the upper shoulder, a placement that recalls 311 in particular. Although differing in form, the two zigzags are related to each other and to the chevrons of the earlier vessels by deep cutting and prominent punctate dots that complement the linear incision. Punctate work is otherwise not known to have been used in this particular manner. The similarities in technique, placement, and approach to patterned incision might indicate a single source for all. If so, the source may have been active from before the installation of the Terrace into the destruction period, although it is also possible that the ceramic inventories in the Destruction

Level included a number of already old vessels (p. 15). The motifs find some analogy in painting, as in a unique zigzag variation on a round-mouthed jug from the Destruction Level ( 617 [fig. 23, pl. 53]), and in a dot-filled chevron pattern that seems to have been peculiar to Brown-on-Buff ware (TumW 61, K-III 10, TumP 49-50; pp. 170-171).

Other instances of incised zigzags are few. A simple, single-line version occurs on a large banded vessel from the Terrace fill (uncatalogued), but more ambitious renderings appear no earlier than the Destruction Level. On 1012 (fig. 59, pl. 153) a badly burned and warped fragment from Meg. 4, the motif occurs neatly incised below multiple grooving on the upper shoulder. Here, punctation was used in a fashion different from that discussed above, to fill and lend definition to the pendent triangles formed by the zigzag. ${ }^{7}$ Analogous is the alternating punctate filling of lozenges in elongated panels on the rim of the basin 482 (pl. 23). This is the only known occurrence of that incised motif in the local repertory, unless the maker of $\mathbf{3 7 1}$ (pl. 152) from the Terrace fill was attempting a simple lozenge row. ${ }^{8}$ The designs on both 1012 and 482 are reminiscent of stippled patterns found in Brown-on-Buff painting (e.g., 832 [pl. 97], 876 [pl. 109], TumP 57, K-III 10). Painting also provides a parallel for the incised double-line zigzag within a panel on 1022 (pl. 153) from TB 4, where all the resultant triangles were presumably crosshatched. ${ }^{9}$ The scheme recalls, but does not duplicate, the Type 3 zigzag row, while the petaled round-mouthed jug from Tumulus $G$ (pl. 61, P 45), presumably an import, bears a related design on the neck (p. 142). The incised panel of crosshatching on 1022, separated from the zigzag and another panel by triangle-zigzag stamping, does not differ from one of the commonest motifs found in painting (pp. 148-149), but it is the only known occurrence in Early Phrygian patterned incision.
Related in formation to simple zigzags are triangles and basket-weave. Triangles occur on a large roundmouthed jug and a large ambiguous vessel from the Destruction Level ( $\mathbf{6 3 1}$ [pl. 57], 1010 [pl. 153]), both having a hatched variety unattested among the popular
triangle motifs of painting (pp. 140-142). ${ }^{10}$ The step from this incised design to basket-weave is a simple one of changing the direction of hatching in the pendent triangular fields, as seen on the raised band on 405 (pl. 153) from the post-Terrace M4 I, the sole occurrence of the motif in the sequence. Like hatched triangles, the row design is not found in local painting.

The possibility that Phrygian patterned incision was generally inspired by vase painting seems to be tenable. Thus, certain painted motifs would have been borrowed or modified, while others, such as hatched triangles, may have been invented for the incised repertory. The traits observed in the use and application of patterned incision indicate that it was not, however, purely imitative of the other and far more popular decorative medium, but stood as a separate tradition. The great emphasis on large shapes in patterned incision is one differing aspect, but the dichotomy is most evident in a comparison of the approaches to programmatic design in the two media. While incisers ordinarily chose a single motif, rendering it at only one point on a vessel, painters commonly used a variety of designs, sometimes repeating one or more at different levels. Painters also preferred the decorative filling of entire fields, usually shoulder and neck, rather than parts thereof, as was the common practice in incision (pp. 138-140). Moreover, the range of painted designs is extensive, and individual motifs are often complex in composition, whereas patterned incision has a limited repertory of comparatively simple forms. Notable exceptions are the sipping chalice 859 (pl. 104) and the fragment 1022 (pl. 153). The program on the former may owe something to painted checkerboard askoi, while that on 1022 appears to be a direct and conscious imitation of a common painting scheme. The panels in the large shoulder zone, a remarkable format for patterned incision, are very likely derived from vase painting, while the use of spacer designs, in this case trianglezigzag stamping, might have stemmed from the narrow devices that sometimes separate painted panels (e.g., 183 [pl. 135], $\mathbf{8 8 0}$ [pl. 110], $\mathbf{1 0 3 0}$ [pl. 165], K-III 13). Similar reflections of painted schemes are found on carved wooden artifacts from the Destruction Level. ${ }^{11}$

## Ridging

Ridging, one of the commonest devices on Phrygian pottery, was used in a variety of ways to articulate, define and decorate. Most frequent by far are horizontal ridges set prominently at one or more levels and often neatly trimmed to angled or pointed sections.

[^127]From at least as early as EPB IIb, single ridges were commonly used as a simple architectonic device to articulate neck from shoulder on vessels of various shapes and sizes (e.g., 22, 43, 120-121, 550-551, 775, 825, 830, 878, 884, 976-977, 995). Some vessels from the Destruction Level, mostly trefoil jugs, have a pair or more at this position, giving still greater emphasis to the division of

[^128]parts (e.g., 683 [pl. 68], 698 [pl. 70], 701 [pl. 71], 704 [pl. 72], $\mathbf{7 4 6}$ [pl. 79], $\mathbf{7 8 4}$ [pl. 86], $\mathbf{8 8 7}$ [pl. 111]). In bronzeworking, single basal neck ridges occur on large and some small trefoil jugs from Tumulus MM, but here the ridge masks and often helps to secure a joining seam, and thus is as much functional as aesthetic. ${ }^{12}$ The double ridging found in pottery occurs only once among the bronze counterparts in MM (MM 31). Since the metal jugs may imitate the common ceramic shape, and since they are the only known bearers of the feature in bronze, it is possible that the idea of neck ridging also crossed over from pottery. ${ }^{13}$ The hypothesis is strengthened by the relatively long history of basal neck ridging in pottery, as compared with its appearance in bronze in what is judged the latest of the great Early Phrygian tumuli.

Horizontal ridges placed at a point away from the base of the neck or set at a number of levels constitute a somewhat more decorative element. Like multiple grooving and certain other types of non-painted embellishment, such ridging is almost exclusively a feature of monochrome pottery, where it occurs frequently on a variety of shapes, particularly round-mouthed and nar-row-necked trefoil jugs, large amphoras, and storage jars. On practically all, the focus was the neck, the ridgework serving to accent and define various elements of form. ${ }^{14}$ Schemes composed of single ridges are the most common. Considerably less frequent are series of closely set ridges, sometimes resembling multiple grooving but differing in having been formed by incision on raised bands (e.g., 306 [pl. 116]). The single ridges on large vessels occasionally received added emphasis through oblique notching ( 912 [pl. 119], 916 [pl. 120], $\mathbf{9 1 8}$ [pl. 120], 1000-1001 [pl. 147], 1004 [pl. 148]).

In the simplest application, a single, usually prominent ridge occurs at some point along the height of the neck, often at midway, and is frequently accompanied by a basal ridge as well. The scheme is attested as early as EPB IIb, on a round-mouthed jug (21 [fig. 22]), and in EPB III it appears on large trefoil jugs (47-48 [fig. 26]) and large amphoras or storage jars (51-52 [fig. 51]). Thereafter, examples from EPB V ( $\mathbf{1 1 0}$ [pl. 37]), the Terrace fill
12. Cf. TGET, MM 16-25, MM 30, MM 32-33, and pp. 224-225. Cf. also K-III 89.
13. R. S. Young already suggested that the double-round handles on several of the jugs in MM were in imitation of pottery: TGET, 297.
14. On the eastern plateau, the application of ridges can differ somewhat. Thus a large storage jar from Porsuk III bears a series of thick, prominent ridges over the entire height of the body: Porsuk I, 90-92 and pls. 89, 96 \{231\}. Furthermore, thick ridges and narrow raised bands occur with some regularity on variously scaled painted vessels, where they usually receive ancillary decoration: cf. OIP 29,351 and 363 , fig. $412\{3244\}: 365$, figs. 414 \{c2743\}, 423 \{c1694\}; 375, fig. 424 |e1338, e2319\}; Killtepe in I.A., pl. 31 \{4\} (from Kululu); Bayburtluoglu, "Eskiyapar," pl. 175. At Gordion, the mannerism occurs on the imported 186, while on the necked jar from Tumulus $\mathbf{G}$ ( $\mathbf{P}$ 141) the presence of a thick ridge at mid-belly might betray the vessel as foreign (p. 97).
(307-308 [fig. 34, pl. 116]), and early tumuli (TumW 67. 70,72 ; TumP 65, 68, 89) serve as a bridge to the Destruction Level, where round-mouthed jugs ( 534 [pl. 39], 540-541 [pl. 41], 543 [pl. 41 ]), trefoil jugs ( 654 [pl. 64], $\mathbf{6 7 8}$ [pl. 67], 695 [pl. 69], 716 [pl. 74]), and amphoras ( 894 [pl. 114], 905 [pl. 118], 918 [pl. 120]) attest the relative popularity of the scheme. In an arrangement on some open-mouthed amphoras and storage jars, a ridge at the base of the neck and a second placed slightly above create a narrow belt or strip that serves as an articulating device (901-904 [pl. 118], 911-912 [pl. 119], 1000-1001 [pl. 147]). In a few instances, such pairs of ridges define narrow stamped zones ( $\mathbf{3 6 8}$ [pl. 154], 372 [pl. 154], 919 [pl. 120]). Closely spaced ridges, a pair or more, were sometimes used in manners similar to those above, and in appearance they resemble multiple grooving ( 564 [pl. 45], $\mathbf{6 2 7}$ [pl. 57], $\mathbf{6 7 7}$ [pl. 67], $\mathbf{6 8 1}$ [pl. 67], 783 [pl. 86], 788 [pl. 87], 909 [pl. 119]); on a few storage jars they occur exceptionally off the neck ( 989 [pl. 144]. 997 [pl. 145]). The bronze sieve jug MM 14, in having a prominent and purely decorative ridge at mid-neck, might imitate ceramic practice, as may the elaborate small trefoil jug MM 44, with ridges on the neck at base and top (cf. 48, 680, 703).

Schemes with a greater number of ridges at spaced intervals, again mostly on the neck, occur almost exclusively on large amphoras and storage jars, where the overall visual effect is often one of horizontal straking or paneling. Before the destruction period on the City Mound, the Terrace fill provides the best examples of this pattern in the wide-necked amphoras 305-306 (fig. 34 , pl. 116). The latter is exceptional in having a variation with closely spaced groups of ridges, yet their placement at three points, from high on shoulder to mid-neck, is generally consonant with regular practice. 305 is more normal in approach, with three single ridges spaced from the base of the neck to just below the rim. Large vessels from Tumuli $W$ and $P$ supplement the earlier evidence from the citadel, and for the most part show three-ridge schemes much like that on 305 (TumW 66, 69, 71; TumP 88, 90). All these examples, and also the storage jar TumW 64 with four ridges on the neck, are closely antecedent to the ridgework on many vessels from the Destruction Level, where the three-ridge scheme is commonest ( 889 [pl. 112], 899 [pl. 118], 906 [pl. 118]. $\mathbf{9 1 3 - 9 1 4}$ [pls. 119-120], $\mathbf{9 2 1 - 9 2 2}$ [pl. 121], 989 [pl. 144]), while four or even five on the neck appear occasionally (885-886 [pl. 111], 915 [pl. 120]). Very few vessels of small and medium size are similarly ridged, and they may in this respect have been imitating larger shapes ( 628 [ pl . $57], 680$ [pl. 67]). On the large vessels, neck ridging is sometimes combined with banding, plain or decorated, on the body, perhaps as a relief from otherwise plain surfaces (e.g., 886, 889, 921-922). Ridging also occurs sometimes on the body ( 916 [pl. 120], 1002 [pl. 146], 1004 [pl. 148]). On two large painted amphoras from EPB V and the Terrace fill ( $\mathbf{1 3 5}$ [pl. 115], $\mathbf{3 2 0}$ [pl. 117])
prominent ridging was used to define decorative shoulder zones. Analogous is 316 (fig. 35 , pl. 117) from the Terrace fill, a large krater whose painted neck zones are divided by prominent, closely set ridges that have been rounded off short of the handles. Too little of the vessel is preserved to indicate the full extent of the ridgework. These combinations of ridging with painting are otherwise unattested in the Early Phrygian period, and thus may indicate experimental approaches that had been abandoned by the destruction period. A few parallels do exist, however, in stamped work ( 368 [pl. 154], 372 [pl. 154], 919 [pl. 120], 922 [pl. 121]), while the pattern-incised sipping chalice 859 (pl. 104), with a design incorporating ridging, is generally similar in idea.

The only other ridging that occurs with any frequency is the curving trails extending from handles and lugs on a number of large vessels (p. 109). Perhaps inspired by
these is the only known example of true patterned ridging in Early Phrygian wheelmade pottery, the prominent wavy line or curvilinear zigzag enclosed within groups of multiple ridges on the shoulder of the large narrow-necked amphora 897 (pl. 114) from TB 4. The pendent tails of the design, each terminating in a flattened knob, are reminiscent of the elaborate handle trails on the related kraters $\mathbf{9 2 0 - 9 2 1}$ (pl. 121) and may point to a common source (p. 188). The curvilinear ridging seen occasionally on Early Handmade pottery might lie in the background of curving handle trails (p. 127), but it is unlikely that the decorative ridgework on 897 , given its late and singular appearance, continues a feature of the handmade tradition. For the same reason, it is doubtful that the program on 897 bears any connection with a similar Late Bronze Age practice. ${ }^{15}$

## Banding

Raised bands, usually prominent and sometimes neatly trimmed, occur most frequently on the bodies of large amphoras and storage jars, where they are normally seen as simple horizontal fascias, often like barrel hoops in appearance. In the Destruction Level, as many as four, amply spaced, can occur on a vessel. A few varieties of pattern-banding are also attested, one of which has a considerable number of examples. The bands themselves can be unadorned, but they often provide fields for stamping or patterned incision. Their occasional use in forming groups of closely spaced ridges by incision has already been cited (pp. 113-114). Although Phrygian potters possibly used the bands as a strengthening measure, it is perhaps more likely that the devices were purely decorative, with an architectonic role analogous to that of the neck ridges that they usually complement (e.g., 889 [pl. 112], 920-921 [pl. 121]).

## HORIZONTAL BANDING

Horizontal banding had been widely used on large vessels in the Anatolian Bronze Age, and there are good, if temporally remote, local precedents in burial pithoi from Gordion's Old Hittite cemetery. ${ }^{16}$ Beycesultan II provides particularly close antecedents in that the bands on large storage vessels are often accompanied by patterned incision and stamping. ${ }^{17}$ Although Iron Age banding at Gordion may perpetuate earlier Anatolian practice, the record is not supportive. Regular banding is absent in NCT IVb, and in the EPB sequence it does not appear until EPB V, where the large 163 (pl. 154), with

[^129]stamped banding, is the only example. From the Terrace fill, however, a considerable number of large banded vessels are known, all with stamping or incision on the bands ( $\mathbf{3 2 3}$ [pl. 144], $\mathbf{3 7 1}$ [pl. 152], 373-375 [pl. 155]). Similarly decorated examples also occur in M4 I (404405 [pls. 113, 153]). In all these instances a single band appears on belly or shoulder, yet because the material is fragmentary it is impossible to know whether any or all were parts of multi-banded schemes like those seen later in the Destruction Level. The shoulder amphora TumW 72 augments the evidence. The vessel has three bands, two defining the belly and one on the shoulder, and sets a close precedent for later schemes. TumW 72 also attests the early use of undecorated bands, for which evidence is lacking (probably because of chance) in pre-destruction contexts on the City Mound. Furthermore, the combination of prominent neck ridging and bands on TumW 72 demonstrates the relatively early formulation of an idiom that is well represented in the destruction period. Tumulus $P$ provides further evidence for multiple banding. On the storage jar TumP 105, a pair define the level of the lugs on the shoulder. The amphora TumP 91 has a similar pair encircling the lower neck, a placement that is unusual but not without parallel ( 988 [pl. 144]). The trefoil jug TumP 65 documents the rare practice of banding on small vessels, otherwise known only in the Destruction Level, yet the placement of the prominent band directly on the belly is quite unlike the few other instances (infra), and may reflect influence from the regular banding of large shapes.

In the Destruction Level, horizontal banding occurs less frequently than neck ridging on large vessels, and as a rule it appears on the body in combination with that commoner convention. Bands seem to have been particularly favored for large neck amphoras ( 883 [pl. 111], $\mathbf{8 8 5 - 8 8 6}$ [pl. 111], $\mathbf{8 8 9}$ [pl. 112]), while on other large types of amphoras and on storage jars no consistency in
use is apparent. Varying from one to four in number, bands are most often found on belly and/or shoulder, as on the earlier TumW 72 (883, 885, 889, 987 [pl. 144], 997 [pl. 145]); in a few cases, the banding extends onto the lower body as well $(886,920-921)$. On some vessels the bands are all plain (883, 885-886, 987); on others, one or two placed no lower than the belly bear stamping or patterned incision, and sometimes plain bands are set further down (889, 920-922, 939 [pl. 134], 997). In conjunction with decoration, usually triangle-zigzag stamping, bands occasionally appear on smaller shapes ( 597 [pl. 49], 704 [pl. 72]), and also on some open-work stands (867-869 [pl. 107]).

## PATTERN-BANDING

Phrygian pattern-banding is not definitely attested until the Terrace fill; whether it can be dated earlier depends on the cultural affinities of 26 (pl. 150), a fragment of a large vessel from a context in the Polychrome House associated with EPB IIb (p. 2). Of red ware and without the mica film that might identify it as Phrygian, the vessel could be a product of the Bronze Age, although in either local horizon 26 would stand out as a singular creation. ${ }^{18}$ The multi-zoned program of latticing and curious split "horseshoes" is far removed from what is known of later pattern-banding, and any connection would have to be general rather than specific. The closest parallel for $\mathbf{2 6}$ is a sherd from an equally enigmatic vessel of large size from Büyükkale II at Boğazköy. Judged by E.-M. Bossert to be an import because of its singularity at that site, the light-ware sherd has an unclear program of hatched bands and applied bosses, including an internally divided horseshoe(?) recalling those on 26. ${ }^{19}$ Similar horseshoe or semicircular designs occur in woodworking at Gordion (TumP 159), and are also found in the unusual cut relief on the spouts of sieve jugs from Tumuli P and III, essentially patternbanding in miniature ( p .12 ). These may be the strongest points for bringing 26 into the Iron Age.

The Terrace fill has yielded two unequivocally Phrygian types of pattern-banding. One is attested only here, through single body sherds belonging to two large grayware vessels with patterned incision (369-370 [pl. 152]). Neither piece has enough preserved to indicate the overall program of banded decoration, but on 369, and probably 370 as well, horizontal bands are linked by a curving element, slightly raised and incised together with the bands, to form a recessed strip with semicircular end.

A distinctive and better-documented series of patternbanded vessels, all stamped and all assumed to be storage jars, occurs in the Terrace fill (324-325), M4 II (407), and

[^130]the Destruction Level (992, 1006-1009 [pl. 149]). The vessels may be the products of a single establishment that was active from pre-Terrace times into the destruction period (p. 99). A span of time in manufacture is suggested by the different types of stamps used on those from pre-destruction and destruction contexts: small rectangular and triangular stamps on the earlier-and larger-types, concentric circles and diminishing lozenges on the later. In the Destruction Level, the same lozenge stamp appears to have been used on four separate vessels, and thus would link at least these to a common source (p. 131). The only example from the Destruction Level without these larger stampings is 1009, yet since its triangular impressions seem to have been made with the same stamp as that used on a vessel from the Terrace fill, $\mathbf{1 0 0 9}$ may have survived from the earlier phase of production (p. 129). The strongest indication of a diachronic association lies with the patternbanding itself, which seems in most cases to have followed or closely approximated the scheme on 992 . On the upper shoulder, applied bars of clay were used to create a large zigzag whose every apex is marked by a big, three-disked bolster, four in all, equally spaced. Beneath each bolster, a vertical band descends to the lower banded border of the zone. 324 from the Terrace fill and 407 from M4 II show bolsters and bands in the same arrangement as on 992, as does $\mathbf{1 0 0 6}$ from CC 1, while 1008-1009 from the Destruction Level seem to preserve parts of the lower sections of similar zones. A variation on the pattern occurs on 1007, where an oblique band rises from beside a vertical one, perhaps to form a large chevron between two bolster settings. Seemingly also different is 325 from the Terrace fill, on which an obliquely rising band is not met at the base by either a vertical or another slanting bar.

This style of pattern-banding, with large, bold designs, is reminiscent in form and spirit of the thick-line painted decoration seen on a class of large vessels belonging to the Assyrian Colony period, ${ }^{20}$ yet the resemblances are no doubt as fortuitous as those between Wellenlmienkeramik and the Phrygian Wavy-Line style (p. 155). It is also unlikely that the somewhat similar designs in Late Bronze Age pattern-ridging have any connection with the Phrygian series of banded vessels (p. 118). If the series at Gordion were somehow descended from such earlier types, Phrygia was the only apparent heir, for elsewhere in Central Anatolia this type of pattern-banding is not attested for the Iron Age, just as elaborate pottery stamping is not known beyond Phrygia (p. 124). Close to the Phrygian style of pattern-banding is the decoration on a fragmentary large basin, ca. 85 cm . in diameter, from Zincirli in North Syria. ${ }^{11}$ The vessel has a patternbanded zone of $X$-pancls much in the spirit of what occurs at Gordion. Moreover, the bands and the rim bear

[^131]small circular stampings that correspond in approach rather than kind to the Phrygian practice. The date of the vessel, found 3 m . deep near the inner citadel gate, is uncertain, yet it could be Syro-Hittite and thus have some connection with Phrygian pattern-banding. Alternatively, the possibility of a purely Phrygian formulation might be entertained, one inspired perhaps by vase painting. Despite the absence of similarly large and simple patterns in the painted repertory, the schemes of the huge vessels nonetheless reflect closely the standard attitudes of painters toward placement and design, i.e., a sizable shoulder zone with a pointed motif that comple-
ments the tapering contour (p. 138). The translation of lines into bands and the decision to add stamping could be seen as logical steps in the adaptation to a monochrome vocabulary.

The uses of bands in such decorative ways are otherwise very few. On the kraters 911-912 (pl. 119) from the Destruction Level curvilinear banding was used probably as a substitute for trails at the lower handle attachments (p. 87). The pattern-banding in miniature on sieve jugs from Tumuli III and P constitutes a separate class and, like the series exemplified by 992 , was probably the design of a single source (p. 122).

## Special Types of Relief Work

In addition to grooves, ridges and bands, the Early Phrygian corpus contains a number of other decorative techniques in relief, each represented by no more than a few examples. Such work in general appears to have been a relatively late development, for on the City Mound none is attested before EPB V, while most are from Tumuli III and P and the Destruction Level.

## VERTICAL RIBBING AND OTHER BODY RELIEF

Vertical ribbing (petaling, gadrooning) of the body, formed by pushing out the wall with a finger from the interior, occurs on a small example of Brown-on-Buff ware from EPB V ( $\mathbf{1 6 7}$ [pl. 158]). Insofar as it is preserved, the sherd matches in both technique and decoration, if not also fabric, the small amphora $\mathbf{8 7 6}$ (pl. 109) from TB 4, and is one of the few links between EPB V and the Destruction Level without a representative in the Terrace fill (p. 15). The ribs on $\mathbf{8 7 6}$, limited to belly and shoulder, are broad and tongue-like with rounded tops, each emphasized by a painted outline of dots-betweenlines that forms an arcading pattern. The small roundmouthed jug from Tumulus G ( pl .61 , P 45) bears similar ribbing, here covering the entire body, and also has the same sort of painted dot outline for the ribs as seen on 167 and 876. A Brown-on-Buff specimen and a sherd of related fabric and style from post-destruction contexts (1057-1058 [pl. 160]) show much the same kind of ribbing (insofar as preserved), but except for the outline on 1057 the painted scheme on both differs considerably from the others. Outside this small assortment, but generally related in idea, are the large $\mathbf{3 8 9}$ (pl. 163) from the floor of Meg. 6, a dark-on-red fragment with numerous tapering ribs, and the medium-sized, necked jar 980 (pl. 142) from TB 4, a possibly imported vessel whose wide, elongated ribs resemble melon lobes (p. 97). The latter is also the only known example of the relief technique that is not painted, a point worth noting in light of the general tendency to reserve non-painted embellishment for monochrome vessels. Painting is also a
normal accompaniment of similar vertical ribbing in Alişar IV, some of the examples even having the same kind of dotted outline seen at Gordion. Where enough is preserved to tell, the ribs are downward-tapering and petal-like, and, as on the round-mouthed jug from Tumulus $G$, they cover the entire height of the body. ${ }^{22}$ The arcaded outline of dots-between-lines also occurs on non-ribbed vessels from Alişar, Kültepe, and Eskiyapar, while at Alişar, Maşat, and Porsuk various other arcading patterns no doubt recall genuine ribbing. ${ }^{23}$ A blackpolished cup from an Iron Age context at Sultanhan Hüyük bears petal-like ribbing similar to that on 876 , and is not far removed in basic shape from that small amphora. ${ }^{24}$ As though in substitution for painting, the ribs on the cup are incised with horizontal and vertical grooves. The vessel may reflect an Achaemenid type, but it could also be coeval with the Early Phrygian period and thus stand as a rare instance of this earlier kind of ribbing in polished dark ware.

Such ribbed vessels no doubt owe their ultimate inspiration to the relief petaling commonly used in contemporary metalworking. The technique of formation in itself suggests the derivation, since the pushing out of the petals from within is essentially the ceramic equivalent of hammered repoussé. Yet the types of petaled bronze bowls seen in Tumuli W and MM are improbable models, since their complex systems of petals are quite unlike the plain rows of singles found in clay. ${ }^{25}$ The Near East provides far more direct candidates for prototypes in the so-called Zungenphialen and other shapes on which swelling petals are arranged in single rows to create the overall effect of a large, simple rosette engulfing the

[^132]body. ${ }^{26} 980$, the jug from Tumulus G, and the examples at Alişar are closest, with petals radiating from low on the body to shoulder, while $\mathbf{3 8 9}$ seems to have been similar, although the ribs may be tapering toward the top. On the other hand, 876, with petals beginning at belly level, is a step removed. Most of the ceramic examples have petals with rounded tops, as is common on Zungenphialen and kindred types. Those with painted arcading may even recall the tiny astragal outlines found on some bronze specimens. ${ }^{27}$ In Phrygia, this type of petaling in bronze is poorly, if at all, attested, ${ }^{28}$ but it is reflected by the glass bowl TumP 48, generally regarded as a product of Sargonid Assyria. ${ }^{29}$ Local models are thus rare, and in any event bowls are not among the ceramic shapes known to have been so adapted by Early Phrygian potters. It seems likely that the idea of emulating bronze petaling in clay developed not in Phrygia but on the eastern or southeastern plateau, to be transmitted west as a ceramic feature. The main support for the hypothesis is that the examples from Alişar, with upward-swelling petals, seem closer to bronze types than do most specimens at Gordion. Also present in these regions, but not at Gordion, is painted arcading without relief. Seemingly twice removed from metalworking, the practice may be indicative of direct influence from a relief technique in clay that had become well established in the Alişar IV sphere. Some examples at Gordion may in fact have been imports, particularly the round-mouthed jug from Tumulus $G$ (p. 152), but the Brown-on-Buff fabric of others, including the earliest specimen (167), indicates a Phrygian source, while 876 is likely to be of the same distinctive ware (p. 166).

Certain other types of relief, occurring mostly on vessels from tumuli, also may derive ultimately from bronzeworking. The sieve jug K-III 18 bears what could be an abstracted rendition of the kind of petaling discussed above, here created less by relief and modeling than by the bold vertical furrows that segment the entire height of the body into a series of wide lobes. The effect is quite similar to that seen on representations of petaled vessels in relief sculpture at Karatepe and on stone bowls from Tell Halaf that presumably recall bronze petaling. ${ }^{30}$ The round-mouthed jug K-III 23 has relief decoration

[^133]similar to that on K-III 18, but in a slightly twisted rendition. Like many other features of the pottery from tumuli, neither type is otherwise attested in the Early Phrygian period. Pushing out walls from within to create ribbing may have inspired attempting the reverse, the result being the spaced, vertical flutes on 860 (fig. 33, pl. 105) and 949 (fig. 48, pl. 136), painted vessels that might well have come from the same source (p.75).

The sieve jug K-III 21 bears a carefully executed program of oblique, finger-width channels or flutes that change direction from one side of the body to the other. The handle follows suit with a series of transverse channels of the same width. A similar pattern, but with more varied and narrower groove-like lines, often termed reeding, occurs on the upper body of the sieve jug TumP 78 , whose handle and even the bolster complement the corrugated texture of the body. These parallels in approach and pattern, but more importantly the cut relief on the bridges, suggest a single source for both jugs (infra). The inspiration for the relief on the bodies may have come from metalworking, for the reeding on TumP 78 is reminiscent of that in horizontal and vertical zones on the bronze sieve jug MM 15 . The ceramic technique, however, is essentially that of patterned incision, not unlike basket-weave, yet applied to an entire section of the body rather than to a narrow zone or band, as was normal practice. The broader channeling on K-III 21, which has its closest ceramic analogy in the curvilinear channels on the lower handle attachments of the amphora 922 (pl. 121) from TB 1, also may have been primarily a technique of pottery. Stacked horizontal or continuous vertical fluting, which might have been a source of inspiration, is rare on bronze or pottery in Early Phrygian times, although the feature does start to become popular in the post-Kimmerian seventh century. ${ }^{31}$ The bronze bowl MM 124 has a series of indistinct, horizontal flutes on the exterior, and thus anticipates subsequent developments. The subtle horizontal fluting on a few ceramic trefoil jugs from the Destruction Level ( 685 [pl. 68], 708 [pl. 72]) may be related to such procedures in bronze.

Among the most unusual examples of relief work are the prominent garlanding and arcading on the nearly identical sieve jugs TumP 76-77. The technique, a combination of modeling and pushing out from within, is a cross between decorative ceramic ridging and the repoussé of hammered bronzework. The designs themselves lack parallels in the local bronze repertory and may derive from painted garlanding (p. 147), although the final result is quite different in form and arrangement from anything known in painting.

[^134]
## CUT RELIEF

TumP 76-77 also have on bridges and handles a distinctive type of cut relief, essentially pattern-banding on a miniature scale. They share this feature with TumP 78 and K-III 19 and 21, where it occurs only on the bridges of the spouts ( pl .100 ). The work is characterized by various combinations of semicircles and bars, each adorned with rows of tiny punched squares. As suggested elsewhere, all five vessels could well be the products of a single potter or workshop involved in making unusual sieve jugs and marking each with the same type of cut relief. ${ }^{32}$ The inspiration for this "trademark" perhaps came from contemporary bronzework, where similar
designs appear on the disk of the ladle TumP 9 and also on the ends and catch-plates of the belts TumP 34-36. The open-work catch-plate on TumP 34 is particularly notable, since the tiny punched triangles in two rows on the bars closely approximate the punching on the ceramic bands. ${ }^{33}$ The sieve jug 302 (pl. 94) from the Terrace fill is even more reminiscent of TumP 34 in this regard, for it has rows of minuscule triangles punched on a rectangular bar set across the bridge. Whether the bar belonged to a relief program similar to those on the jugs in III and P cannot be ascertained, but in any event 302 provides the closest parallel for such work on the City Mound.

## Plastic Attachments

Plastic attachments are most common in connection with handles, usually either topping them, as do bolsters and rotelles, or simulating rivet heads at the joining points (pp. 109-110). Second in frequency are the halfbolsters that occur on a few bowls $(\mathbf{1 0 2}, \mathbf{5 0 2})$ and with some regularity as one of a number of related devices on storage jars (p. 98). Other kinds of plastic attachments are few and rare. Thus the little bosses set in the pinches on the wide-mouthed trefoil jug 775 (pl. 83) have no local parallels, although they do recall the equally singular compass-drawn "eyes" on the painted 708 (pl. 72). Bosses were also used, but more lavishly, on the handles and shoulders of the large kraters $920-921$ (pl. 121), while the neck amphora 887 (pl. 111) has a "necklace" of large pointed knobs that match the smaller ones flanking all the handle attachments.

Plastic figures occur on only a few vessels of the Early Phrygian period, in considerable contrast to the later interest in such forms. A small, delicately modeled bird terminates the handle of the sipping chalice $\mathbf{8 5 9}$ (fig. 32, pl. 104) from TB 4, and may take its inspiration from
other media. ${ }^{34}$ Very different is the lion(?) protome on the fragmentary storage jar 1002 from CC 3 (fig. 50, pl. 146). Reminiscent of stone lion protomes that once adorned a structure in the citadel, the device might have been directly inspired by these sculptures. ${ }^{35}$ CC 3 also yielded the large amphora handles 910A-B (pl. 119), double horizontals that become abstract antelopes(?) with the addition of tiny pellet eyes (p. 87). The odd painted jar 984 (pl. 143) from the same unit clearly had something applied to the belly, perhaps in connection with the unusual "feet." The most whimsical of Early Phrygian plastic attachments is the bird of prey, perched and peering down, on the bridge of the sieve jug K-III 20. Whether humorous or serious, the creature anticipates in spirit rather than kind such later creations as the animals that peek over the rim of an elaborate dinos from the seventh-century Tumulus $\mathrm{J}{ }^{36}$ Plastic in formation but functional are the animal-headed spouts on TumP 58 and 62-63-ram, goat, and bull respectively. Although lacking parallels from the Early Phrygian citadel, the spouts, like the bird on K-III 20, preview a later trend.

## Openwork

Decorative openwork occurs infrequently in Early Phrygian pottery, and is confined primarily to handles and stands. In the citadel, the technique is attested no earlier than the Destruction Level, unless the handle fragment 58 from EPB III is to be counted, while of early tumuli only III provides examples. It is likely that this occasional ceramic practice was inspired by other media, particularly bronze and wood, where decoration in openwork is more common.

Technically of openwork, but essentially functional rather than decorative, are the cut-out circles on the covers of the special bowls 861-862 (fig. 33, pl. 105) and the holes that riddle the body of the jar 981 (pl. 142). On 862 function was combined to a degree with decoration,
32. TGET, 253.
as seen in the little cut-out triangle(s) along the edge. Seeming to be purely decorative, on the other hand, is the elongated rectangular slotting, neatly cut out with a sharp tool, on the handles of the jugs 776 (pl. 84) and 794 (pl. 89) and that on a Brown-on-Buff sherd included under 1041 (pl. 92). The upper segment of the handle on the sieve jug K-III 20 is similar. Closely parallel to the

[^135]handle borne by 776 is that on a large round-mouthed jug from the Great Tumulus in Ankara. ${ }^{37}$ On the tall stand for the bowl 528 (pl. 36), plain, cut-out rectangles are staggered above the similarly shaped intervals between the four legs of the support.

More ambitious decorative openwork is based largely on cut-out triangles, a motif that also occurs in bronze and wooden counterparts of the technique. ${ }^{38}$ On the single preserved handle of the large amphora 912 (pl. 119), four such cutouts leave a large, fat-legged $X$, in essence a panel like those familiar from painting (p. 152). Analogous in approach and technique, but more intricate, are the cut-out row designs appearing on the handle and bridge of the sieve jug K-III 16. The bridge has two opposed rows of tiny triangles that form a solid lozenge row, while on the somewhat roomier handle the pattern is further developed in having the lozenges themselves cut through by smaller, centrally placed ones. Both versions of the design have basic parallels in vase painting (p. 143), while that on the handle of K-III 16 is precisely the motif found on the borders of the inlaid wooden screen TumP 151. On the last, the inlays of lozenges and triangles, resting in the wells cut for them, even correspond to the cutouts on the sieve jug. ${ }^{39}$ In pottery stamping, $\mathbf{3 8 3}$ (pl. 155) from the Terrace fill has a three-stamp lozenge design that also recalls the procedures of openwork and wooden inlay (p. 128). The closest technical parallel, however, is on an $\grave{a}$ jour bronze
plaque from Tumulus S (B 709), where the cut-out design of lozenges and triangles would be an exact match for those on the handle of K-III 16 were it not for the addition of circles and bosses at points where the lozenges join one another. The only other find from the tomb is a Type XII, 7a fibula, which could indicate contemporaneity with the Early Phrygian citadel. ${ }^{40}$ The kind of openwork represented by the plaque seems the likeliest source of direct influence for the cut-out designs on K-III 16.

The pair of tall stands $867-868$ (pl. 107) from Meg. 3 exhibit the most extensive use of ceramic openwork known in Early Phrygian pottery. Each has three large zones of cut-out work divided by bands of triangle-zigzag stamping, the kind of scheme that a vase painter might have devised (cf. the painted stands 870-871 [pl. 108]). The motifs, $X$-panels and zigzags, also recall painting, especially the spaced $\mathrm{X}_{\mathrm{s}}$, which are formed in the same cut-out manner as on the amphora 912. The zigzags of the middle zones, again the result of cut-out triangles, have close technical parallels in the handles on the wooden bowls TumP 121-122; they also echo on a large scale the triangle-zigzag stamping on the bands dividing the zones. On the painted stand 869 (fig. 31, pl. 107) from CC 2, a support considerably lower than those from Meg. 3, a similarly formed zone of zigzag is the sole open-work design, again accompanied by triangle-zigzag stamping.

# Stamped Pottery 

EPB V: 133, 163-164
NCT IVa: 236
PN 3: 244
Below floor of Meg. 5: $\mathbf{2 4 9}$
Terrace fill: 312-313A-B, 323-325,
368, 372-376, 383
M4 I: $\mathbf{4 0 4}$

Pottery stamping was second only to painting as a technique of patterned decoration. It was not, however, a very close second, since from all contexts in the Early Phrygian citadel only about 65 stamped vessels are known, roughly two-thirds of them from the Destruction Level. Approximately thirty separate stamp types are represented, ranging from simple triangles and circles to more elaborate forms of rectilinear or curvilinear design (figs. 60-61, pls. 168-170); a single figural stamp is attested for the period (the goat on 1000, fig. 61). EPB V

[^136]M4 II: $\mathbf{4 0 7}$
Destruction Level: 597, 702-704, 796,
867-869, 918-922, 938-939, 986, 992,
997, 1000-1001, 1003-1009, 1013-1022
Tumulus IV: K-IV 10
Tumulus P: TumP 62
Tumulus KY: P 1350
is the earliest context in this sequence that yielded stamping, with three examples representing two types, the common triangle-zigzag pattern ( 133 [pl. 115]) and the S-spiral (163-164 [pl. 154]). The Terrace fill, with about four times as many stamped vessels attesting slightly over a dozen stamp types, previews the variety found in the Destruction Level. The disparity in quantity and kind between EPB V' and the Terrace fill may be related to the chronological priority of the former context (p. 15). The single stamped specimen from beneath the floor of Meg. 5 is also taken to be contextually earlier than the Terrace (p. 15). Subsequent to the Terrace fill are the single examples from M+I and II, while a few other stamped pieces come from contexts judged rela-

[^137]tively late on typological grounds $(236,244)$. In the Destruction Level, which provides the only good evidence for overall programs of stamping, most buildings have vielded at least a single example. Meg. 4, however, stands out with no fewer than ten stamped vessels, including some of the most remarkable known (918, 938-939, 992, 1000-1001, 1003-1004, 1013-1014). In early tombs, pottery stamping is attested only by the goat jug TumP 62, an amphora from Tumulus KY, and the rim of a large vessel from the ransacked Tumulus IV. The implication is that stamped pottery was primarily for the living. In later Phrygian times the practice continued with no apparent decline in popularity.

In broader perspective, pottery stamping in a wide variety of decorative types stands out as a Phrygian specialty in Iron Age Anatolia. Beyond Gordion, such impressed work is well attested at Midas City, wheredespite problems of chronology-both the types and the manner of stamping have much in common with what occurs at the Early Phrygian capital. ${ }^{41}$ Farther abroad in contemporary Anatolia, and in the Syro-Hittite sphere, pottery stamping seems to have been at best occasional and sporadic, yet the types, while very few and simple, find some parallels at Gordion (infra). The situation is much the same in Greece, where, before the seventh century, the types that do occur are small and mostly reduced to geometric minimums of plain triangles, squares, and lozenges. ${ }^{42}$ Ornamental designs more in the spirit of Phrygian stamping became a widespread part of pithos-amphora production in the Greek Orientalizing period, ${ }^{+3}$ Phrygia might have been the source of inspiration.

That stamping in an array of patterns was a salient characteristic of Phrygian pottery may be significant beyond itself, since the major precedents for Gordion's repertory of impressed decoration are found in the Balkans, the Thracian Plain in particular. There, stamped pottery showing a variety of motifs is a new feature of Late Bronze Age horizons at such sites as Pshenichevo and Razkopanitza, and continues into the Early Iron Age, where it is found from the Rhodopes in the west to the Black Sea in the east. ${ }^{4+}$ Beyond setting a general background for elaborate pottery stamping, the Thra-

[^138]cian corpus also contains a number of specific designs that find either close parallels or analogues in the Phrygian repertory. Some, e.g., single circles, are admittedly simple motifs that could surface independently almost anywhere (p. 129), but others of a more complex nature correspond so well to designs at Gordion that coincidence is unlikely. Included are diminishing triangles and lozenges, S-spirals and morphologically related designs, motifs that seem to be akin to S-curls, and perhaps concentric circles (pp. 129-133). Except for the last, none occurs in Early Phrygian vase painting, many of whose motifs look to a Syro-Anatolian tradition. Another design, the spectacle-spiral, is remarkably close in form to a Balkan jewelry type (p. 133). In Knobbed Ware of Troy VIIb 2, the only stamped motif is the single circle, which most likely stems from the Balkan repertory (p. 129). In Early Handmade pottery at Gordion, the devices closest to stamping are little impressed ovals and punched dots, themselves perhaps reflecting Balkan practice but hardly qualifying as real stamping (p. 26). This negative evidence and the relatively late appearance of stamped pottery at Gordion might indicate that potterystamping came to Phrygia as part of a second and later Balkan influx, for which some further evidence may exist in vase painting (pp. 134-135). Several stamped motifs that lack European parallels could well reflect continued development of the repertory in Phrygia.

It is also possible that Phrygian pottery-stamping owed some debt to earlier Anatolian practice, even though the absence of stamping before EPB V creates a major gap. Furthermore, although a few Hittite seals and sealings are known from Gordion, decoratively stamped pottery appears not to have been a feature of the local Late Bronze Age. ${ }^{45}$ Stamped pottery occurs as early as the Assyrian Colony period, and is still to be seen in contexts of the Empire at Boğazköy. ${ }^{46}$ Yet aside from seal and pictographic impressions, and medallion-like devices that include the so-called signe royale, the repertory of Central Anatolian stamp types on pottery is small and for the most part restricted to such plain designs as triangles and circles. Although these two motifs in particular, and even the triangle-zigzag formation of the former, recur in Phrygian stamping (pp. 127, 129), the designs are too simple to indicate any connection. In Western Anatolia, stamping appears to have been a fairly regular practice on large vessels in Beycesultan II. The motifs are again limited in variety, mostly if not entirely to circular forms, and occur frequently on raised bands, as was commonplace in later Phrygian stamping. ${ }^{47}$
The strong representation of stamped pottery in Meg. 4 is consistent with the high number of large vessels in

[^139]the building, for stamping, like patterned incision, was primarily a feature of large amphoras (133, 312-313, 404, 918-922, 938-939) and storage jars (323-325, 407, 992, 997, 1000-1001, 1003-1009); a considerable number of large ambiguous specimens represent one or the other shape (163-164, 236, 244, 249, 368, 372-376, 383, 10131022). Stamping on smaller shapes was at best occasional, and perhaps reflects influence from large vessels. Aside from the goat jug in Tumulus P (TumP 62), smaller pots so decorated are known only from the Destruction Level: a few round-mouthed (597) and trefoil jugs (702-704), an ambiguous jug (796), and a medium-sized jar (986). On three open-work stands, stamping is ancillary to the openwork ( $867-869$ ); the last example bears the only known combination of stamping with painting. On all the smaller-scale forms, the impressed decoration was limited to two simple motifs made with little stamps, trianglezigzag and single circles. On amphoras and storage jars, however, the large, shallowly curving surfaces could accommodate a variety of motifs, many made from stamps as much as $3-5 \mathrm{~cm}$. across.

On shapes of all sizes, the stampings regularly occur in narrow, isolated zones, often on bands or defined by ridges or grooves, and are set at one or more points on belly and shoulder, less frequently on the neck. Stamped decoration thus parallels the normal arrangements seen in patterned incision, both techniques reflecting an overall programmatic approach that was peculiar to monochrome pottery and for the most part uninfluenced by
painting (p. 114). Stamping was also a regular feature on pattern-banded storage jars, where it occurs on bands of every direction (p. 119). Only once is it found on a handle (313B [pl. 116]).

The stamps themselves had several basic shapes or outlines, including triangular, square/rectangular, circular, and lozenge-shaped. A number of "free-form" designs also exist, most of which incorporate spirals. With the principal exceptions of small, single-circle stamps and the plain triangles used for triangle-zigzag, the stamps were normally patterned. Some motifs have parallels in contemporary painting, e.g., $X$-panels and certain types of triangles, and, although used differently, they were perhaps inspired by painters' vocabularies. No strict rules seem to have governed the orientation of certain stamps, not even on the same vessel (e.g., 922 [pl. 121], 1018 [pl. 157]) or when the same stamp was used on different vessels ( $\mathbf{1 0 0 5}$ [pl. 148] and 1019 [pl. 157]).
Stamps that might have been used by potters are unknown from Early Phrygian contexts, an absence that is perhaps to be expected in light of the general lack of evidence on the actual production of pottery during the period. A few stamps from later contexts may have been potters' implements, two of terracotta and one of stone, yet none is known through an impression. ${ }^{48}$ Similar materials, and perhaps wood as well, may have been used for Early Phrygian potters' stamps, while metal tools could have made small plain forms, such as triangles and circles.

## Composition

The number of individual stamps used on a single vessel ranges from one to a maximum of seven on the storage jar 1000 (pl. 147). The fragment 323 (pl. 144) from the Terrace fill preserves four, the second-highest number known. In most cases of combined stamping, however, two stamps seem to have been the rule (407, $702,918,939,992,1004,1015,1018$ ), while on a few vessels three were used (313A-B, 383, 1001, 1003).

The arrangements within zones include a wide variety of schemes, more than one of which can occur on the same vessel. The simplest is the repeated impressing of a single stamp in one or more rows across an entire zone. This is the normal pattern for small, single-circle stamps (e.g., 702 [pl. 71$], 997$ [pl. 145], 1015 [pl. 156], 1021 [pl. 157]), and it also occurs with some other types (e.g., 323 [pl. 144], 922 [pl. 121], 938 [pl. 134]). Several fragmentary vessels that preserve only a single stamped design (e.g., 163-164 [pl. 154], 376 [pl. 155], 404 [pl. 113], 938 [pl. 134]) may originally have had more, since other examples show that a second stamp was sometimes used sparingly (e.g., 1003-1005 [pl. 148]). Triangle-zigzag stamping is also repetitious, but in opposed, staggered rows of triangular impressions that form a continuous
motif (e.g., 1013, pl. 169). Larger, decorated triangles were sometimes stamped repeatedly in similar manner ( $\mathbf{3 6 8}$ [pl. 154], $\mathbf{1 0 0 9}$ [pl. 149], $\mathbf{1 0 1 5}$ [pl. 156]), while on the big krater 920 (pl. 121) a small, plain rectangular stamp was impressed hundreds of times to create a band of relief checkerboard. The use of a single little stamp as the basic component in a larger, continuous design is also seen on 374 (pl. 155) and 986 (pl. 143), where dotted lozenges and X s respectively were stamped repeatedly in multiple rows, the latter stamp forming a lozenge design. Other such continuous stamped patterns are rare and involve more than a single stamp: three formed the lozenge row on 383 (pl. 155) from the Terrace fill (p. 128), while two seem to have been used for the quasiguilloche design on the rim of K-IV 10 .

Other combinations of two or more stamps within a zone were made without the intention of creating a continuous pattern. These can follow a number of ap-

[^140]proaches, and sometimes no clear scheme is evident. A few specimens are too fragmentary to allow even a rough idea of the arrangement of the stamping (e.g., 407 [pl. 149], 1019 [pl. 157]), whereas others preserve just enough to reveal some kind of scheme. On the lowest of the three stamped zones on $1003(\mathrm{pl} .148)$, rows of a circular stamped motif are interrupted at least twice by stylized tree stampings. 1004 (pl. 148) has between every pair of bolsters in its single preserved zone a preponderance of one of two $X$-stampings, the other being relegated to the far right and impressed fewer times. More rhythmic systems of alternation, however, seem to have been the rule, although none is more popular than others. On the lower neck of 313A (pl. 116) from the Terrace fill is a simple yet otherwise unattested scheme wherein nearly mirror-image stamps ("spiral fans") were impressed in opposing, spaced pairs (pl. 170); a third stamp was used on the handle ( $\mathbf{3 1 3 B}$ ). The alternation of two unlike stamps in single impressions is almost as rare ( 939 [pl. 134], 992 [pl. 149]), although the lower shoulder of $\mathbf{3 2 3}$ (pl. 144) from the Terrace fill may have had a consistent pattern of upright pairs of rectangular stampings alternating with two other designs. On some vessels two or more different stamps were alternated in groups or series, with varying degrees of consistency. On the shoulder of the amphora 918 (pl. 120), for example, pairs of S-spirals seem to have alternated with at least the same number of hourglasses (pl. 170). 1018 (pl. 157) preserves in two fragments a band on which groups of as many as 11 impressions of one stamp were separated by no fewer than seven of another, all in single file (pl. 169). For some reason, the potter impressed the former stamp, a concentric horseshoe design, in at least three directions, all the same in one stretch yet alternating in two other directions at another point. Seemingly haphazard as well is the single file of stampings on 1005 (pl. 148), where one to eight triangles alternate with one to three concentric circles (pl. 169). No more than two stamps are ever represented on pattern-banded storage jars (pl. 149). 407 from M4 II has an unclear arrangement of feather trees and diminishing triangles, while the exemplar of the series (992) bears what is for the most part a regular, alternating pattern of diminishing lozenges and concentric circles on all bands. What looks to have been the same lozenge stamp as on 992 was used in a different combination with concentric circles on 1007.

## STORAGE JARS 1000-1001

The most elaborate programs preserved in Early Phrygian pottery stamping occur on the storage jars 1000 1001 from Meg. 4 (figs. $60-61$; pls. 147, 168, 170 ). Bearing two and three stamped zones respectively, the vessels probably came from the same source, even though
not a single stamp was shared between them (p. 101). On 1000, seven different stamps are represented among a hundred preserved impressions (pl. 168), while 1001 now has 65 stampings made with two stamps, plus a considerable number of plain triangles ( 59 impressions extant) done with a third. Although both vessels have gaps, it is perhaps unlikely that any additional stamps were used. Except for a row of repeated S-spirals on the lower body of $\mathbf{1 0 0 1}$, the schemes on the jars are very similar, consisting with little variance of groups of one stamping one or two rows high in close alternation with others. On both, the number of impressions in a group varies, two to eight on $\mathbf{1 0 0 0}$ and three to 12 on 1001, not counting the plain triangles on the latter, about thirty of which occur in the only intact group. The betterpreserved $\mathbf{1 0 0 0}$ shows some consistency in the arrangement of stamps within a group. Thus goats are usually impressed four in a file, S-spirals are set five or six across, X-panels are more often than not in single or double rows of three, and concentric horseshoes appear in double rows of three or four. The last two stamps were used in a double row at one point on the shoulder, directly beneath a bolster ( pl .168 G ). In the intact groups on 1001, S-spirals occur in threes and fours, while concentric horseshoes are once in a file of five and again in a double row of six each.

The only intact zone is that on the shoulder of $\mathbf{1 0 0 0}$, where six of the seven stamps were used for 11 groups with four to eight impressions in each (pl. 168). Two of the stamps were each impressed in an equal number of groups: spectacle-spirals and little Ss were used once, goats and S-spirals twice, and X-panels and concentric horseshoes three times, including their presence together in one group. No straightforward rhythmical pattern seems to have governed placement. Nor is there any starting point around the zone from which all six stamps occur in unrepeated succession; the two stamps used singly are opposite each other. As many as five stamps, however, appear in successive, unrepeated groups, and this limit occurs three times, moving to the right from points 2,3 , and 9 as presented in the catalogue entry (or to the left from points 2,6 , and 7 ). If one or both of the stamps in the mixed group at point 8 should be included, there are three more such unrepeated sequences (to the right from points 4-6). Following any one of these series of five, a partial or total breakdown in the order occurs, the closest to a regular pattern being points $7-9$, which repeat the first four stamps of the sequence beginning with the goats at point 2. Yet this repetition includes the two stamps used in the mixed group at point 8 , and thus it is not quite the same as the succession of single-stamp groups that it follows.

If the stamper had an overall scheme, it may have started with the S-spirals at point $9(\mathrm{pl} .168 \mathrm{H})$, directly to the right of the group combining two stamps below a bolster. Point 9 begins a sequence of five groups that ends
with the goats at point 2 . This group, in turn, marks the beginning of a second, differently arranged succession of five separate groups, including three from the preceding sequence and terminating with the little Ss at point 6. Starting again with this last group and moving back to, and including, the postulated beginning of the program at point 9 , it is perhaps significant that a third instance of five unrepeated stamps occurs, counting both those in the mixed group at point 8 . This odd group might indicate a shortage of space as the stamper neared the end: wanting three unrepeated sequences of five in which the last of one was also to be the first of the next, he would have had to double up at this point so that the scheme would not be broken. ${ }^{49}$ In the lower zone, where
a big gap occurs, the same approach may have been followed. Point $l$ is the beginning of an unrepeated sequence of five, whose last group begins a different sequence of at least the same number before the gap.

On 1001, where a number of gaps now interrupt the stamping of the two upper zones, no more than five groups occur in any one preserved stretch, thus making it difficult to detect a possible method in the use of the three stamps. In three sections all the stamps appear in a sequence, while in two of these that sequence is followed by its first stamp (points 1-4). The plain triangle stampings are either all upright or all inverted in any one group.

## Stamped Motifs

## TRIANGLE-ZIGZAG AND OTHER CONTINUOUS DESIGNS

The use of small, plain triangles stamped in opposing, staggered rows to form a relief zigzag has antecedents in second-millennium Anatolia from as early as the end of the Assyrian Colony period. ${ }^{50}$ In Greece, triangle-zigzag is one of the very few stamped patterns known during the Dark Age, appearing, for example, on kalathoi in tenthand ninth-century Lefkandi, and on later Geometric pottery from Acolis, whence it no doubt made its way with Acolian settlers to Troy. ${ }^{51}$ To the north, single rows of plain triangles, half the design, occur in the Balkan repertory. ${ }^{52}$ Whether derived or independently formulated, triangle-zigzag is one of the earliest stampings to appear at Gordion, in EPB V ( $\mathbf{1 3 3}$ [pl. 115]). After a few other occurrences in pre-destruction contexts ( 244 [pl. 152], 372 [pl. 154]), it is the commonest single variety of stamping in the burned citadel, known on about twenty vessels (e.g., $\mathbf{5 9 7}$ [pl. 49], 702-704 [pls. 71-72], 796 [pl. 89], 867-869 [pl. 107], $\mathbf{9 1 9}$ [pl. 120], 921 [pl. 121], 1013 [pl. 156], $\mathbf{1 0 2 1}$ [pl. 157], $\mathbf{1 0 2 2}$ [pl. 153]). The pattern occurs also on an amphora from Tumulus KY (P 1350), and it continues to be a device of later Phrygian stamped

[^141]pottery. In Central Anatolia beyond Gordion, the design is found at Midas City, ${ }^{53}$ but not on the eastern plateau. ${ }^{54}$

At Gordion, the design has parallels in painting and bronzeworking (p. 142), ${ }^{55}$ but the closest correspondences in both pattern and technique are in woodworking. On the base of the horse TumP 106 a relief zigzag was formed in a manner like that of the stamped design, the tiny triangles having been cut out. ${ }^{56}$ On the half circles above the "rose windows" of the inlaid screens MM 378-379, the method used to create the zigzag motif also differs little from that followed by potters, since the tiny triangular inlays that define the zigzag of the matrix wood are set in cut-out recesses corresponding to the stamped impressions in clay. ${ }^{57}$ The continuous design on 383 (infra) also has parallels in wooden inlay.

The examples of triangle-zigzag stamping from EPB $\backslash$ and the Terrace fill $(\mathbf{1 3 3}, \mathbf{3 7 2})$ are somewhat unusual in having a double row of the design instead of the preferred single strips seen most often in the burned citadel (yet cf. 796). $\mathbf{2 4 4}$ from PN 3 is closer to the later practice. although the combination of stamping with patterned incision is rare (p. 114). The placement of the rows at or just below the base of the neck on 133,244 , and 372 looks forward to a fairly regular use of the motif in the Destruction Level (e.g., 597, 919, 1013 [pl. 169], 1021); the same setting occurs on the amphora from Tumulus KY. Different settings occur primarily among small vessels, on which the design is not known to have been

[^142]used before the Destruction Level. On two pairs of small jugs the motif is carried low on the shoulder (702-703), a location also chosen for the large krater 921, where the pattern was neatly stamped on a prominent band. The exceptional trefoil jug 704 from Meg. 3 bears two strips of triangle-zigzag, one each at mid-shoulder and mid-neck, the relief being complemented at the base of the neck by a series of precise ridges roughly equal in height to the zones of stamping. Such repeated use of the design is found on one other vessel, the ambiguous jug 796, where carefully executed double rows on lower and upper shoulder are separated by a texturally contrasting "reserved" strip, of a height equal to one of the zones. On the stands 867-868 from Meg. 3, multiple zones were used in a different way, to define larger and analogously formed zones of open-work zigzag (p. 123); the single strip of triangle-zigzag on the stand 869 serves a similar purpose. A particularly odd application of the motif, one otherwise unattested, is its placement in vertical panels, and in combination with patterned incision, on the shoulder of the ambiguous 1022 from TB 4; the potter may have been inspired by painted schemes (p. 116). Ordinarily, triangle-zigzag occurs as the only stamped design on a vessel, yet in a few instances it was combined with small, single circles $(\mathbf{7 0 2}, \mathbf{1 0 2 1})$, the only other stamped motif known to have been used on small pots. The combination of the two is found also on Hittite pottery and in Troy VIII. ${ }^{58}$

With the exception of the plain triangular stampings on the storage jar 1001 (supra), this small motif is not known to have been used for purposes other than triangle-zigzag in the Early Phrygian period at Gordion, although in other locales differing schemes occur. ${ }^{59}$ Also exceptional is the use of embossed triangles to create the design on 1013 from Meg. 4 (pl. 169), although larger, more decorative triangular stamps were occasionally impressed in the general manner of triangle-zigzag (e.g., 368, 1009; infra). Reminiscent of the tiny embossed lozenges seen in profusion on 374 (pl. 155) from the Terrace fill, the variation on 1013 recurs on later Phrygian pottery at Gordion, while a similar stamp is attested at Midas City. ${ }^{\text {bi }}$

Similar to triangle-zigzag in both formation and the continuous nature of the design is the lozenge zone stamped on the upper shoulder of 383 ( pl . 155) from the Terrace fill. Three separate stamps were used for this neatly executed pattern, a plain lozenge and two small triangles in opposing rows, the lower of which is filled with chevrons. A parallel for the stamped design occurs at Bogazköy, on a sherd from the destruction debris of Temple I, and sets a temporally isolated precedent for

[^143]this manner of stamping. ${ }^{61}$ Like triangle-zigzag, the basic motif of the lozenge row is common in Phrygian painting (p. 143-144). The version on 383 is also a stamped counterpart to the open-work design on the handle of the sieve jug K-III 16 (p. 123) and to inlaid borders such as those on the screen TumP 151. As with triangle-zigzag, discrete components were used to form the design. In vase painting, however, the approach was different, for the painter relied on drawn zigzags, single or intersecting, to create the lozenges and triangles of the same patterns; the same holds true for an engraver in bronze or an etcher in wood. A special relationship thus seems to have existed between these bands of stamping on the one hand and openwork and wooden inlay on the other, but any possible patterns of influence between or among them cannot be unraveled. Similar associations can be made for the band of checkerboard on the krater 920 , where the relief design was achieved with an oblong rectangular stamp, impressed numerous times and not always with care (pl. 121). Checkerboard is again a motif popular in vase painting, where it sometimes occurs in continuous rows (pp. 149-150), yet that on 920 can perhaps be more effectively compared with wooden inlay, as seen, inter alia, on the screen TumP 151, and with the open-work panels on the presumed screen TumW 80. If the checkerboard carved on pieces of the bed TumP 155 in fact had no inlays, it is a yet closer parallel for the stamped treatment on 920. ${ }^{62}$ At Antissa in Lesbos, an Aeolian pottery stamper working in the eighth century made a design much like that on 920 , yet as with triangles and single circles the stamp type is a simple one whose parallels need not imply a real connection. ${ }^{63}$
A continuous stamped pattern of a markedly different sort occurs on the rim of the large K-IV 10 from the chamber of Tumulus IV, a burial whose bronze goods suggest a pre-Kimmerian date. ${ }^{64}$ The design was apparently made with a single stamp, a circle half engulfed by two larger semicircles, impressed alternately upright and inverted to create a kind of curvilinear key meander. Unattested in Early Phrygian vase painting, the motif has a close parallel in the delicately carved borders of a wooden relief panel from Meg. $3 .{ }^{65}$ Since the design is likely to have been conceived in a medium that allowed for continuous execution, the stamped version on K-IV 10 may have derived from such renditions as that on the wooden panel.

[^144]
## OTHER TRIANGULAR STAMPS

Triangular stamps generally larger than those used for triangle-zigzag, and with the addition of decorative filling, are of two basic types, diminishing triangles and chevron-triangles (fig. 60, pl. 169). The former is a standardized pattern whereas chevron-triangles show variety in both size and filling.

Diminishing triangles are one of the motifs paralleled in the stamped repertory of the Thracian Plain, where the design occurs in a form very much like those at Gordion but within an ovoid frame. ${ }^{66}$ Locally, the motif is attested in the Terrace fill ( $\mathbf{3 2 5}$ [pl. 149], 368 [pl. 154]), in M4 II ( 407 [pl. 149]), and by a single vessel from the Destruction Level ( $\mathbf{1 0 0 9}$ [pl. 149]), and it is primarily a design of pattern-banded storage jars. The only known occurrence in a different format is on 368 , where the stampings occupy a zone enclosed by ridges low on the neck. The stamps, all about one and a quarter centimeters long, had two or three triangles carved within the larger form, the tiny triangular centers being either hollowed out ( $\mathbf{1 0 0 9}$ [pl. 169]) or left solid (368, $\mathbf{4 0 7}$ [pl. 169]). Nothing closely comparable is known in vase painting. Only once is the motif seen in combination with another stamp (407). On the pattern-banded 325 from the Terrace fill, two even rows were impressed on the horizontal band, the triangles pointing to the right like arrows on most of the preserved stretch, but reversing direction at the left-hand break; those on the oblique band, in turn, are perpendicular to it. On 368 and on the oblique band of 1009 the stampings form a kind of triangle-zigzag, as sometimes do small chevron-triangle stamps ( $\mathbf{1 0 1 5}$, infra), ${ }^{67}$ while those on the horizontal band of $\mathbf{1 0 0 9}$ are in two opposing rows. The stamp used on 1009 seems to have been the same as that impressed on a small, uncatalogued sherd with pattern-banding from the Terrace fill. Although the stamp may have continued to be used into the destruction period, it is perhaps more likely that $\mathbf{1 0 0 9}$ was already of some age when it came to this final context. The view is suggested by the absence in the Destruction Level of other vessels with diminishing triangles, as though the source of pattern-banded storage jars had ceased to use this and certain other motifs in favor of larger stamps, diminishing lozenges and concentric circles (pp. 99, 119).

Chevron-triangle stampings first appear in the Terrace fill, on the multi-stamped storage jar 323 ( pl . 144). The stamp used was fairly large, 2 cm . high, and the repetitive impressions made in a neat row on the upper shoulder suggest influence from vase painting, where triangles are the commonest motif in this position. The row of tiny impressed squares below the triangles is most unusual in regular stamping, and may have been influ-

[^145]enced by the borders of painted zones, e.g., dots-betweenlines. The triangle itself, however, with chevrons one within the other filling the entire surface of the stamp and not criss-crossing in a lozenge below the apex, is quite unlike the chevron-triangle known in painting (fig. 62). The variety recurs in similar form and size, but made with a different stamp, on the amphora 918 from Meg. 4 (fig. $60, \mathrm{pl} .170$ ), where it was used to form "hourglasses." A smaller version (fig. 60, P 1740), about the size of diminishing-triangle stamps, is found no earlier than the Destruction Level, where 1015 (pl. 156) carries one of the two occurrences. Here, on a band below a row of small, single-circle stampings, the triangles alternate direction to form a zigzag pattern, in the manner of some diminishing triangles. Closer than these to the painted motif because it has an open center is the chevron-triangle stamp impressed upside down on the storage jar 1005 from a storeroom behind Meg. 1 (pls. 148, 169). About 2.5 cm . long, the same stamp was used sideways on the sherd 1019 ( pl .157 ). In both cases the motif appears with concentric circles, perhaps also made by a single stamp.

## CIRCULAR STAMPS

Circular stamps occur in several varieties, and can be classified as single and concentric circles on the one hand and, on the other, those that have diverse filling ornaments within a circular frame (fig. 60, pl. 169).

Stamped circles and concentric multiples of them find antecedents in both the Balkans and earlier Anatolia. In the European setting, the types often appear with incised tangents to form a false running spiral, and thus recur in the Knobbed Ware of Troy VIIb 2, where they constitute one of the more salient affinities between this pottery and that of the Balkans (p. 21). ${ }^{68}$ Similarly tangented forms, single or concentric, appear in second-millennium Anatolia, ${ }^{69}$ but the commonest type is a plain, single circle stamped in rows or fields without any incised connectors. ${ }^{70}$ The single-circle stamps at Gordion are most like the earlier Anatolian ones, but the simple device could have arisen independently in the Iron Age. About half a centimeter in diameter and looking as though they were made with the end of a hollow tube, such stampings appear in the Terrace fill ( 373 [ pl . 155]), in Tumulus P (TumP 62), and on about half a dozen vessels from the Destruction Level, all but one from TB 4 ( 702 [pl. 71], 997 [pl. 145], 1015 [pl. 156], 1021 [pl. 157]). Elsewhere in Phrygian times the type occurs as close to Gordion as

[^146]Midas City, ${ }^{71}$ while to the northwest it makes occasional appearances in the gray ware of Troy VIII. ${ }^{72}$ In North Siria, where pottery stamping is generally rare, circle stamps are known from Malatya and Zincirli, occurring at the latter site in connection with pattern-banding ( p . 119). ${ }^{73}$

At Gordion, these small stampings usually appear in single, horizontal rows, although on the large 373 from the Terrace fill they form a zigzag on a raised band. Equally singular is their proliferation in several rows on bands of the storage jar 997 from TB 4, while on the small jug 702 and its near-twin from the same hall the stampings form a border around the edge of the base, a rare location. The jugs also bear regular rows of the motif on the shoulders, in combination with triangle-zigzag. The two stamped types again occur together on another vessel from TB 4, the large 1021, and might point to a common source for this vessel and the jugs. ${ }^{74}$ The only other vessel on which single-circle stampings appear with another motif is $\mathbf{1 0 1 5}$ from TB 5. Here the circles seem to be ancillary to the band below them, on which small chevron-triangles form a zigzag pattern. On the goat jug TumP 62 tiny circles make a collar around the animal's neck.

Concentric-circle stamps, $2-2.5 \mathrm{~cm}$. in diameter and made with the aid of a compass, occur in sets of five or more diminishing rings. In the Balkans and earlier Anatolia, the motif consists of fewer circles, ${ }^{75}$ as it does in Phrygian vase painting. Before the destruction period, concentric circles make a timid, and for any stamped design unparalleled, appearance on the interior neck of the large vessel 249 (pl. 154) from beneath the floor of Meg. 5. Since the context is taken to antedate the Terrace fill (p. 15), the stamping may be considered among the earliest to occur at Gordion. The Terrace fill itself yielded no concentric-circle stampings, although the spiral on 313B is reminiscent of the design (infra). In the burned citadel, concentric circles are known on about half a dozen vessels. On the pattern-banded storage jar 992 (fig. 60, pl. 149) they occur on all bands in combination with diminishing lozenges. The latter, in their corrugated texturing, are a good match for the circles, and appear with them again on the pattern-banded 1007 (pl. 149). The lozenge stamp seems to be the same as that used on 992, as is perhaps the circle. A similar case may

[^147]be present with 1005 (pl. 169) and 1019 (pl. 157), on which concentric circles alternate with chevron-triangles. The latter were made by the same stamp, yet on 1019 too little of the circle stamping is preserved to indicate whether the stamp was that used on $\mathbf{1 0 0 5}$.

Other stamps of circular shape are few and for the most part singular in design. The handle of the amphora 313B from the Terrace fill bears the impressions of a tightly wound and well-executed spiral stamp (pl. 169). In the Destruction Level, a less careful version was stamped in groups alternating with concentric horseshoes on 1018 (pl. 169). An X within a circular frame occurs once in the Early Phrygian sequence, in two rows on the upper shoulder band of the amphora 404 from M4 I (fig. 60, pl. 169). To each of the resultant "triangular" fields of the stamp was added a small chevron, thus making the design essentially a circular version of a rectangular type of X -stamp, as occurs on 1000 (infra). ${ }^{76}$ The eight-spoked wagon-wheel stamping on 1014 from Meg. 4 (fig. 60, pl. 156) recalls the ends of the odd S-spiral on 938 (pl. 170), but is otherwise unattested in the sequence. A similar stamp is known, however, from Midas City. ${ }^{77}$ The motif does not occur in local painting, although on the eastern plateau and as far away as Malatya such wheel designs are a common painted device. ${ }^{78}$ Equally singular is the randomly hatched (herringbone? tree?) circular stamp that dominates two bands on the storage jar 1003 (fig. 60; pls. 148, 169).

## QUADRANGULAR STAMPS: SQUARES, RECTANGLES, LOZENGES

Among the some dozen quadrangular stamps represented in the Early Phrygian period, the most frequently recurring is the $X$-panel, found in two basic types. The motif is also common in vase painting, from which the stamped version may have been derived. Those on 236 (pl. 154) from NCT IVa and 376 (pl. 155) from the Terrace fill, both of essentially the same type, are the only examples known before the destruction period. Although the latter's stamping is only partially preserved, enough is there to see that the motif differs little, if at all, in form from that found on the multi-stamped $\mathbf{1 0 0 0}$ from Meg. 4: a corner-to-corner $X$ whose triangular fields each have a chevron, the whole surrounded by a neat border (pl. 168A). In the Destruction Level the type is not known outside Meg. 4, where it occurs on two other storage jars: one of the two X -stamps used on 1004 (fig. 60, $L ; \mathrm{pl}$. 169, $L$ ) was executed in a manner like that on $\mathbf{1 0 0 0}$, but with

[^148]wider lines made by a flat-headed instrument, while one of the three stampings on 1003 is a version in which two chevrons, one within the other, fill the triangular fields (fig. 60). The last stamp has a precedent in 236 from NCT IVa, an oblong form with rounded corners and three chevrons within each field. The version on 1003 recurs at Midas City, and is the only one of Gordion's Early Phrygian X-panels so paralleled. ${ }^{79}$

A second type of $X$-panel appears no earlier than the Destruction Level. On 1004 (fig. 60, R; pl. 169, $R$ ) and a second vessel, the four triangles resulting from an inscribed $X$ are hatched in alternating directions to create a kind of basket-weave design. The motif has no parallels in vase painting, but is possibly related to painted X-panels with crosshatched triangular fields (p. 153).

Other rectangular stamps, mostly narrow oblongs, are few. On the multi-stamped 323 (pl. 144) from the Terrace fill, a peculiar form with zigzag and a toothed margin was impressed in upright pairs in alternation with other designs. One of these others is a partially preserved, elongated oval stamping that bears a similar motif. The earlier generation of pattern-banded storage jars includes two other rectangular types, neither of which is known to have survived into the destruction period. 324 ( pl . 149) from the Terrace fill has a small stamping with hatching divided by a vertical line, while on $\mathbf{4 0 7}$ from M4 II a stamp with one-row herringbone (fig. 60, pl. 169) was used with another bearing diminishing triangles. On a band of the amphora 939 from Meg. 4 , S-curls alternate with a 4.5 cm .-long rectangular stamping of chevrons or single-row herringbone set in two opposing groups that point to the center (fig. 60, pl. 170). A still larger rectangular stamp, one of the biggest known in the repertory, was impressed on 1017 (pl. 157) from TB 4, an enormous vessel with walls ca. 3 cm . thick. Two partially preserved stampings together represent the entire design, measuring ca. $3.5 \times 5.5 \mathrm{~cm}$., of two handmade concentric semicircles, one standing and the other pendent, within chevron borders (fig. 60). The decorative frames, otherwise unattested in Early Phrygian pottery stamping, might have been inspired by vase painting, where ancillary designs often serve as borders. Semicircles, however, are somewhat uncommon in contemporary painting, where they are not known to have been used in the manner seen on 1017 (p. 147).

Lozenge-shaped stamps occur in two varieties in the Terrace fill and in a third from the Destruction Level. The plain lozenge used as one of three stamps for the continuous design on $\mathbf{3 8 3}$ (p. 128) is a form otherwise

[^149]unattested. Equally singular are the small ( $c a .1 \mathrm{~cm}$. long) dotted lozenges stamped hundreds of times on the shoulder of 374 (pl. 155) from the Terrace fill, although the embossed triangles on 1013 (pl. 169) are similar in idea. The pattern of diminishing lozenges occurs no earlier than the Destruction Level, where two stamps are known: on the storage jar $\mathbf{1 0 0 0}$ from Meg. 4 (fig. 60) the motif occurs in triple form on the lower stamped band, while a somewhat larger stamp with quadruple lozenges was used on 992 (fig. 60) and apparently on three other pattern-banded storage jars (1006-1008 [pl. 169]; p. 100). Lozenges are common in local vase painting, yet the diminishing design found in stamping does not occur in that medium, nor was it used by stampers in the continuous row formations familiar from painting. The motif does, however, have a close parallel in the Thracian stamped repertory, ${ }^{80}$ and a transmission from the Balkans as purely a device of pottery stamping might explain the lack of correspondences in painting, just as S-spirals and S-curls are not found in that medium (infra).

## FREE-FORM DESIGNS

The repertory of Early Phrygian pottery stamps contains a wide variety of free-form types, designs that are not contained within geometric or circular fields. The great majority are curvilinear, and some have spiraliform elements that place them outside the standard vocabulary of contemporary vase painters.

The most recurring free-form type, known on about ten vessels from Early Phrygian contexts, is the S-spiral (fig. 61, pl. 170), with impressions between 3 and 5 cm . long. Two different stampings come from EPB V (163$\mathbf{1 6 4}$ [pl. 154]), where aside from triangle-zigzag they are the only stamped motif represented in the context and thus the earliest of the more decorative Phrygian impressed designs to appear. A single example is known from the Terrace fill ( 312 [pl. 116]), where the related S-curl (323; infra) and certain other spiraliform types first occur ( $\mathbf{3 1 3 A} \mathbf{A}$ - ). The remaining instances are from the Destruction Level, the greatest concentration having been in Meg. 4 (Meg. 4: 918, 938, 1000-1001; others: 922,1016 ). Of those from that hall, the amphora 918 was impressed with what seems to have been the same S-spiral stamp (fig. 60, pl. 170) as that used on 312 from the Terrace fill. As with $\mathbf{1 0 0 9}$ ( $p .129$ ), it was perhaps the vessel rather than the stamp that saw continued use into the destruction period. The other stamping on 918, a large chevron-triangle, has its only close parallel in the Terrace fill (p. 129).

For the period in Anatolia, the S-spiral in any medium appears to have been primarily a Phrygian feature.

[^150]Outside Gordion, the motif itself is not known on pottery, although an unstratified bronze example occurs at Boğazkoyr, while at the same site the outline of the design appears in openwork on a bronze belt dated to the end of the eighth or the first half of the seventh century. ${ }^{81}$ Exact antecedents within Anatolia are removed in time, ${ }^{82}$ yet running spirals, to which S -spirals are morphologically related as a disconnected pair joined by a tangent, are relatively common, occurring as late as the Empire. ${ }^{83}$ The running design was also standard in Aegean art, where it occurs as early as the Early Bronze Age in stamped and incised forms, ${ }^{84}$ and it may have been from this quarter that the early Anatolian versions ultimately derived. Certainly by the time of Troy VIIa northwest Anatolians were making ample use of the motif in local imitations of Mycenaean pottery. ${ }^{85}$

Although the Phrygian S-spiral could conceivably have been a descendant of such earlier forms, a more compelling ancestry lies in the stamped pottery of the Thracian Plain, where both S-spirals and morphologically related spiral hooks with curved "pennants" occur. ${ }^{86}$ The S-spiral as a design had also come by the Early Iron Age to be a familiar Balkan feature through the well-known class of spectacle fibulae and other types of wire-formed jewelry. ${ }^{87}$ The type is morphologically akin to the European spectacle-spiral, whose design also occurs in Phrygian stamping (infra). Thracian S-spirals and spiral hooks, like all other Balkan stamp types except circles, do not appear in the Knobbed Ware of Troy VIIb 2, although at least one example of incised running spirals occurs. ${ }^{88}$

Phrygian S-spirals occur in no fewer than three varieties based on the method of formation. The most
81. Rainer Michael Boehmer, Die Klemfunde aus der Unterstadt won Boğazköy, Grabungskampagnen 1970-1978 (Berlin, 1979), 7 and pl. 5 \{2562\}; 33-34 and pl. 21 (3461).
82. Cf. the painted motif on a vessel from Karum Level II at Kültepe, there accompanied by rows of pendent spiral hooks, a related motif: Kultepe 1949, pl. 43 |345\}. For S-spirals in Colony period and Old Hittite glyptic: Nimet Özgüs. "A Stamp Seal from Niğde Region and Four Seal Impressions Found in Acemhöyük," Anadolu 15 (1971) 17-19, with references, and fig. 1.
83. Running spirals were particularly favored on Old Hittite stamp seals: cf. Kültepe 1948, pl. 67 |436|; Bittel, figs. 150-152, 154. A good indication of the continued use of the motif into the Empire is provided by the ornament incised on the kilt of the god who flanks the King's Gate at Boğazkoy: ibrd., fig. 268 (note also the simple spiral hooks used in profusion to suggest chest hair). Use of the running motif in pottery, incised or stamped, seems to have been rare: Fischer, pl. 127 \{1196\} from Unterstadt II at Bogazkoy; cf. also a false running spiral consisting of stamped concentric circles and incised tangents, ibud., pl. 128 \{1177\}.
84. See E.-M Bossert, "Die gestempelten Verzierungen auf frühbronzezeitlichen Gefässen der Ägäis," $J d J 75$ (1960), 1-16.
85. Troy IV, 46-47 and inter aha, fig. 248 \{2\}.
86. S-spirals: Dimco Aladzov and Dikran Balabanijan, "Pametnitsi ot starozel'aznata epokha v Khaskovski okrg," Thracia 6 (Sofia, 1984), pl. 30 $\{5,7\}$ (related), from L'ubenovo; pls. $35\{10\}$ and 36 \{3\}, from Ovcarovo. Spiral hooks: Detev, 78 and fig. 28; Hoddinott, 70-71, fig. 61, from Pshenichevo.
87. I'ergina 1, 297-230, 238-240.
88. Troy IV, fig. $282\{15 \mid$ (general V1Ib).
straightforward, and, with three different stampings from the Destruction Level, the best attested, was executed in a single, continuous line from the hooked center of one spiral to that of the other (922, 1000-1001; fig. 61, pl. 170). The most carefully done, that on $1000(\mathrm{pl}$. 168D), has a full four turns at either end. 163 from EPB V , although preserving no complete impression, appears to prefigure this approach. What is left suggests a continuous, single-line S-spiral encased within an outline of the motif. 164 from the same context preserves too little of the impressions to determine the method used. Related to the S-spirals on 922 and 1000-1001 is the long-tangented stamp used on the amphora 312 from the Terrace fill and 918 from Meg. 4 (fig. 61, pl. 170). Here, as a second method of formation, an attempt was made at parallel, interlocking S-spirals, successful at one end (the lower in fig. 61), but not so at the other, where there was not enough room for the ends to interlock. On the fragment 1016 (fig. 61), found near Meg. 2, occurs a third variety, consisting of two spiral hooks with parallel stems. At least one stamp-maker used the basic outline of the S-spiral to create the odd form impressed repeatedly on 938 from Meg. 4: encircled $X_{s}$ replace the spiraled ends, while the tangent has a series of cross-ties (pl. 170).
S-spirals in other media at Gordion are few. The closest local parallel for the stamped design is carved on a wooden artifact, perhaps a box, from Meg. 3 (W 88). The bronze and leather belt TumW 25 has crossed S-spiral forms, as does an inlaid panel on the table MM 388. ${ }^{89}$ The same piece of furniture also shows two other uses of the design. ${ }^{90}$ The absence of S-spirals, or of anything vaguely resembling them, in local vase painting again may stem from an ancestry in Balkan stamped work (p. 124).

S -spirals usually appear obliquely in single rows (e.g., 163, 918, 1000, 1016) and tend not to be accompanied in the zone by other stampings. The most lavish use of the motif occurs on the amphora 922 (pl. 121), where it is the exclusive design in each of three zones. The stamper varied the usual scheme by combining horizontally and vertically set impressions, all closely spaced as though to suggest a continuous pattern. A similar effect but with all the stampings horizontal occurs on the lowest band of the storage jar 1001 (pl. 147); the intention might have been an approximation of guilloche.

Related in form to the S-spiral, and perhaps with a common ancestry, is the S-curl, a motif with relatively limp ends that may be likened to the beginnings of spirals (fig. 61, pl. 170). The design occurs in its simplest form on the storage jar 1000, as no more than a small $S$ of single outline (fig. 61, pl. 168E). This version in particular has Balkan correspondents: a small stamp much the same in configuration but solidly impressed, and a

[^151]larger, outlined type stamped in overlapping manner to form a wave pattern. ${ }^{91}$ Other Early Phrygian S-curls at Gordion are multi-line, and, if they are Balkan in origin, should perhaps be interpreted as local developments from a simple type. The design is one of the four that occurs on 323 from the Terrace fill, as a three-line version with markedly curling ends (pl. 170). The amphora 939 from Meg. 4 bears a thin, cursory rendition whose lines do not fill the entire frame of the stamp (fig. 61 , pl. 170). Both stamps are true, parallel Ss with open ends, and thus can be distinguished from another variety of S-curl that is essentially a partially unwound S-spiral consisting of diminishing loops. The type is attested no earlier than the Destruction Level, where one of the two known stamps was impressed on the large 1020 (pl. 170). S-curls were always stamped horizontally, thus differing in orientation from most S -spirals.

Spiraliform designs other than the S-spiral and the simple spiral within a circular field (313B, 1018) are rare. 313A from the Terrace fill has two nearly mirrorimage "spiral fans" impressed side by side in symmetrical pairs, possibly two faces of a single stamp (pls. 116, 170). The motif is a combination of two components known separately in stamping, the spiral, as found on the associated handle 313B, and the chevron-triangle. One of the most elegant stamped designs in the repertory is the spectacle-spiral that occurs only on $\mathbf{1 0 0 0}$ from Meg. 4 (fig. 61, pl. 168J). Mirror-image spirals of three and a half turns are joined by a high, central loop, the entire design formed in a single continuous line from center to center of the spirals. The specific motif, like the S -spiral, suggests a European connection, since it is almost exactly matched in wire-formed jewelry that is generally thought to be of Balkan or Central European origin. Such pieces are not known at Gordion or elsewhere in contemporary Anatolia, but they do occur in Early Iron Age cemeteries at Lefkandi in Euboea and at Vergina in Macedonia, where their European affinities have been noted. ${ }^{92}$ The design on $\mathbf{1 0 0 0}$ looks at first sight as though it could have been impressed with such a piece of jewelry, but closer inspection shows that it was made with an actual stamp. It is nonetheless possible that the stamp itself, if of clay, was impressed with a wire design, as could have been the stamp that made the fine S-spirals on $\mathbf{1 0 0 0}$. The closest correspondents to spectacle-spirals in other media at Gordion are the repeated inlaid devices within the medallions on the screens MM 378-379. ${ }^{93}$

A different kind of curvilinear stamp is termed here "concentric horseshoes," an unusual motif without parallels in the general repertory of Phrygian ceramic pat-

[^152]terns. After S-spirals and S-curls, it is the only design of the free-form category appearing with any frequency, on a total of three vessels, all from the Destruction Level. The motif occurs in a separate stamp on each of the related storage jars 1000-1001 (fig. 61; pls. 1681, 170). Similar, but enclosed within an oval frame, is the stamp used repeatedly on 1018 (pls. 157, 169) in combination with circular spirals. If the stampings on 1000-1001 indicate a standard orientation for the motif, and some sense of what it might have represented, the convention was not followed by the stamper of 1018, where the design assumes three different directions (p.126).

A few other free-form types are unique. The largest stamp known from the period, a four line $W c a .8 \mathrm{~cm}$. across and stamped repeatedly on a band of $\mathbf{3 7 5}$ (pl. 155) from the Terrace fill, might be compared to unwound spectacle-spirals placed parallel. It also recalls the continuous, undulating pattern found on the rim of K-IV 10 and on wood from Meg. 3 (p. 128). One of the three stamps used on 1003 from Meg. 4 was perhaps intended to be a stylized tree or bush with close-set, slanting branches to either side of a central trunk (fig. 61).

The goats impressed in little herds on $\mathbf{1 0 0 0}$ represent the only figural stamp known in the Early Phrygian sequence (fig. 61, pl. 168B). Although lacking inner detail, the animal is somewhat more than a stick figure, as the stiff legs might suggest. The body has volume and, with the horns, a curve. The head, although marred by an apparent chip in the stamp, shows some attempt at definition through the long line of the nose. The outline of the stamp face itself is a rough approximation of the shape of the goat, except at the bottom where it forms the ground line. The animal may have been inspired by the Alişar IV figural style, of which several examples are known at Gordion (p. 163). The source is suggested by the overall form, especially the combination of stiff legs with curvilinear body and horns, and also by the goat's "windswept" attitude created by the backward slant of the legs (cf. 186 [pl. 113], 932 [pl. 126]). The latter feature is a principal characteristic of the Alişar style, not to be seen in Phrygian linear painting. ${ }^{94}$ The effect was heightened by consistently impressing the stamp obliquely, as though to show the animals rearing up, a pose encountered in the Alişar IV style, but in connection with trees (cf. 932). The goats on 1000 anticipate later Phrygian pottery stamping, where animals are more frequent, usually occurring in square panels. ${ }^{95}$

[^153]
## Painted Pottery

EPB IIb: 22-23, 29<br>EPB IV: 60<br>EPB V: 100, 113-114, 116-119, 123,<br>126-127, 129, 134-135, 137-139, 165-176<br>EPB VI: 180, $\mathbf{1 8 2}$<br>EPB VII: 183-186<br>PN 3: 240-241, 247<br>Below floor of Meg. 5: $\mathbf{2 5 0}$<br>Terrace fill: 255, 281, 290-291, 294-<br>errace fill: 255, 281, 290-291, 294 298, 300-301, 314-322, 384-398<br>M4 I: 406<br>M4 III: 408-409

Destruction Level: 415, 484-485, 499-502, 507-508, 527, 598-626, 632-644, 705-722, 751, 778-782, 785, 789-790, 793, 797-810, 812-815, 820, 832-835, 858, 860, 862, 869871, 876, 879-882, 898, 923-935, 949, 964974, 982-985, 1024-1035
Post-destruction contexts: 1036-1089
Tumulus III: K-III 3-13
Tumulus W: TumW 61-62
Tumulus P: TumP 49-61
Tumulus G: P 45 (pl. 61), P 49 (pl. 61), P 141
Tumulus X: P 3136 (fig. 30, pl. 100)
Grave under Tumulus D: P 31-32 (pl. 141)

## Introduction

If early Phrygians had a real liking for painted pottery it was a conceit enjoyed in relatively limited measure. The estimated $1: 15$ proportions of painted to monochrome pottery can hardly be appreciated in the ceramically wealthy Tumuli III and P, where painting occurs in force. A more realistic picture is gained from the Destruction Level and the earlier contexts of EPB V and the Terrace fill, in which painted pottery is a minority presence. This overall limited showing notwithstanding, those potters who did engage in painting tended to do so in manners that were far from being timid or perfunctory. They worked on all standard shapes except utility pots and storage jars, and painted in a broad range of schemes and motifs, in general keeping with the Phrygian penchant for diversity. Many creations are known only as ones- or twos-of-a-kind. A considerable number of others, however, fall within larger groups that are closely integrated by style or fabric, sometimes by both.

It is unlikely that Anatolia provided the background for the painted pottery of either Gordion or contemporary centers on the plateau. Although painting was common in the Assyrian Colony and Old Hittite periods, there are no real indications that such traditions continued in Central Anatolia during the Hittite Empire. ${ }^{96}$ It is also evident that Phrygian painting did not have a beginning in Early Handmade pottery, which, like Coarse and Knobbed Wares at Troy, is exclusively monochrome. Only two handmade painted vessels are known at Gordion, both from relatively late contexts, the Terrace fill (255 [pl. 8]) and the Destruction Level (415 [fig. 5, pl. 9]). The former, a small amphora, is probably an import
96. Fischer. 33-34.
from somewhere to the east of Gordion (p. 165). 415, a large spouted jug, is painted in the Chevron-Triangle style, a mode that occurs in Tumuli III and P and on the City Mound no earlier than the Destruction Level. The same mode, however, finds close parallels at Marmariani in northern Thessaly, while the shape of 415 and that of the round-mouthed jug, the most common vehicle for the Chevron-Triangle style, also may look to northern Greece (pp. 28, 53, 65, 158). Another aspect of Early Phrygian painting, the blanketing of askoi with checkerboard, is matched at the same Thessalian site (pp. 66, 140 ), and is perhaps difficult to interpret as coincidence. Both approaches to painting appear to have been exclusively Phrygian within their Anatolian setting.

The correspondences with Marmariani were found by the author before he was aware of the importance attached to the site by N. G. L. Hammond, as a center for the Phrygians of Europe before they crossed over into Anatolia. ${ }^{97}$ Although Hammond's total reconstruction of the Phrygians' pre-Asiatic history may have its critics, the parallels with northern Thessaly might be significant, and Phrygian painting, as practiced in Anatolia, could preserve at least some European elements. ${ }^{98}$

The material at Marmariani seems to be a manifestation of the so-called Northwestern Geometric Pottery of Albania, Epiros, and western Macedonia, a tradition that has a chronological range extending from the Late Bronze well into the Iron Age. ${ }^{99}$ As with Phrygian

[^154]painting, the class as a whole shows a strong sense of relationship between horizontally aligned decoration and shape, but in various respects the compositional logic differs from what occurs at Gordion. ${ }^{100}$ The motifs include many that recur in Early Phrygian painting, yet several are designs basic to practically any geometric tradition. Thus simple checkerboard, crosshatching, and plain lozenge rows, each easily drafted, might occur anywhere and at any time. Similarly, crosshatched triangles are a common pattern of the geometric mentality, and it is notable that in northern Greece they often occur pendent and thus $180^{\circ}$ removed from Phrygian practice (p. 140-141). It is, instead, with more particularized patterns that valid connections may lie and, in turn, supplement the correspondences with Marmariani. Oblique checkerboard occurs in the same varieties at Gordion and in northern Greece, and is, moreover, a rare pattern on the eastern Anatolian plateau (p. 150). Similarly, a type of X-panel used at Gordion is paralleled in the European tradition but not elsewhere in Anatolia. The same pattern is also found in Phrygian woodworking, which might reflect an alternative means for the transmission of a design (p. 153). Painters in the Northwestern Geometric style also used a variety of meander designs, some of which recall types found at Gordion. Although the Phrygian fondness for such intricate, wandering patterns may somehow be Balkan in spirit, it is perhaps better to view Greek Geometric pottery as the immediate source of inspiration for such motifs (infra).

If any of the correspondences with Northwestern Geometric painting are meaningful, they would imply an infiltration of Balkan elements that was later than that represented by the exclusively monochrome tradition of Early Handmade. A similar case arises in connection with Phrygian pottery stamping, yet the affinities of this approach to decoration lie with a Balkan cultural element separate from the one that produced Northwestern Geometric Pottery (pp. 124, 176).

Although certain motifs and schemes at Gordion may have a European connection, it is doubtful that the principal impetus for painting pottery came from this quarter. Fundamental differences exist in compositional approach and the use of designs. Furthermore, while some Phrygian shapes may be of Balkan origin, the overall range of forms, beginning relatively early, is at considerable variance with Balkan repertories.

Similarly, there are no compelling reasons for assuming that Greek Geometric pottery was the major inspirational source behind Phrygian painting. It is possible, however, that Early Phrygian potters had seen imported Greek vessels at Gordion, since several that are earlier in manufacture than $c a .700$ are known from later contexts

[^155]on the City Mound. ${ }^{101}$ The similarities between Phrygian and Greek painting, like those with Northwestern Gicometric, appear to stem largely from analogous concepts of decoration and from the overall effect of rich geometric ornament. In the philosophy of design, however, certain basic differences cannot easily be reconciled with the theories of a Greek derivation. ${ }^{102}$ Early Phrygian painting is generally more open and light than is customary in most Greck schools, where total coverage of surfaces with either painted designs or dark paint is commonplace. Aside from the Ornate Class of Brown-onBuff ware, Phrygian vessels are almost always left completely in reserve below the belly, and most exceptions involve decorative treatments that are unlike Greek work (pp. 138, 167-169). A few have solidly painted bases that recall Greek practice (TumP 49, 60-61), but otherwise Early Phrygian artists made no use of the wide, solid bands or totally dark areas (e.g., necks, handles, panel surrounds) that are integral to Greek compositional logic. As implied above, these Anatolian painters do seem to have been familiar with the premiere motif of Greek Geometric, the meander, but their limited use of the design, in both Greek forms and adaptations, suggests no more than a type that was borrowed from Greece and incorporated within an essentially non-Greek decorative environment (pp. 144-147).

Although Phrygian painting thus may contain both Balkan and Greek elements, the immediate tradition to which it belongs, and from which it very likely received its principal impetus, is a "koine" of painted pottery that extended from Central Anatolia into North Syria, where it is best represented at Carchemish, Malatya, and Hama. The Phrygians' adoption of this widely practiced tradition is indicated primarily in compositional approach and in the use of a considerable number of geometric motifs that recur within the koine, some being of a complex nature and thus unlikely as coincidences. ${ }^{103}$ Imports to Gordion from the Alişar IV' sphere provide the direct threads of evidence for contact with that branch of the koine (pp. 163-164), while some apparently conscious imitations of eastern features, such as the sharing of a number of shapes, are also indicative of the interchange. In some cases, direct lines of communication seem to have existed between Phrygia and the southeast, bypassing the Alişar IV centers of the Halys region.

It is difficult to view Phrygia as a leader within the koine. Far more likely is that inspiration came to the western plateau from eastern and southeastern quarters, and that the ultimate source lay in long-established

[^156]geometric traditions in Syria. This is perhaps most strongly indicated by the distinctive and popular silhouette figural style of Alişar IV' centers. Clearly exotic at Gordion, the mode with little doubt represents a highland version of a Syro-Palestinian figural style whose history extends from the Iron Age back into the second millennium. ${ }^{104}$ Cultural ties between the eastern plateau and North Syria were generally close and strong, viz., hieroglyphic Luwian, and thus it is reasonable to view the painted pottery of the Halys region as an extensionmodified, to be sure-of Syrian tradition. The Phrygians, in turn, were presumably receptive to the idea of painted pottery as practiced by their neighbors, and developed a third principal branch, or school, of the koine, after those in North Syria and the Alişar IV region. The technical aspects of painting (e.g., the preparation of paints, use of straight edges and multiple compasses) also may have traveled westward.

Phrygians adapted and to a degree redefined the essentials of the koine, and in so doing attained a notable individuality while paying general allegiance to the broader tradition. The Phrygian character is felt most strongly in certain approaches that look away from Syro-Anatolian conventions and that no doubt represent independently formulated concepts of decoration. Thus, for example, the Wavy-Line style and the Ornate Class of Brown-on-Buff ware, each sui generis, stand together with elaborate pottery stamping as among the most distinctive and characteristic traits of Phrygian material culture (pp. 139, 167-170). These same styles, and also the ChevronTriangle mode with its possible Macedonian affinities, have distributions farther afield in Phrygia, and thus may represent widely held traditions on the western plateau. Most painted styles, however, and also a great many singular creations, are known only at Gordion. The diversity of the painted assemblage prompts the question of whether so many differing expressions were practiced in or around the site, or whether they represent instead a cross-section of ceramic artistry within Phrygia; yet at present the evidence is insufficient to allow more than speculation about what might have been the products of other Phrygian centers.

Phrygians at Gordion had begun to use painted pottery by EPB IIb, a phase of ceramic development that is generally progressive (pp. 8-9, 179-180). A sliver of a painted vessel from beneath the interior floor of the EPB itself may be earlier (p. 8), but the absence of Phrygian painted wares in NCT IVb, a context that is perhaps intermediate between EPB I and II, possibly indicates that the unit predates their introduction (p. 14). 23 (pl. 56) from EPB IIb, a competently executed example of ground-coat painting, suggests in both technique and

[^157]decoration (insofar as preserved) that contact with the broader koine had begun. The vessel is unlikely to have been a direct import from the east, since the shape is assumed to be either a large round-mouthed jug or a kantharos krater, neither of which is attested beyond Phrygia (pp. 53, 78-79). Another painted specimen from EPB IIb, the probable jug 29 (pl. 89), is the first to bear the commonest variation on the indigenous Wavy-Line style, an indication that Phrygian potters began relatively early to express themselves in an individual manner ( $p$. 155). The thick-line and none-too-deftly executed concentric circles are unusual, possibly because they were done by a painter not thoroughly accustomed to using a compass. Otherwise, the limited painted lot from EPB Ilb shows no clear signs of incipiency. 22 (pl. 37) might easily be taken for crude beginner's work in comparison with later painting, but the simple shoulder scheme of straight and wavy lines has exact matches in the Destruction Level ( 619 [pl. 53]).

That painted wares were slow in gaining momentum at Gordion is perhaps indicated by their absence from the domestic Latrine Deposit of EPB III. The Wavy-Line dinos $\mathbf{6 0}$ (pl. 135), the sole item of pottery from EPB IV (p. 9), provides the first good look at a painted shape. EPB V yielded about thirty painted vessels, and a roughly equal number come from the Terrace fill. In each of these major contexts the entire range of basic categories of painted wares is attested: buff, red, tan, and groundcoating with both single-color and bichrome designs. The contexts together also include most of the painted shapes and approaches to decoration, as well as many of the individual styles and motifs that were to occur in the Destruction Level. The elements of the koine have been fully absorbed, and Phrygians had begun to receive vessels that were apparently made in Alişar IV centers ( $\mathbf{1 0 0}$ [pl. 24], 169-171 [pl. 161], 281 [pl. 24]), and to imitate, by EPB V, at least one painted type that was distinctively eastern ( $\mathbf{1 6 7}$ [pl. 158]). Some features are shared by both EPB V and the Terrace fill, while some are found in one or the other and also in the Destruction Level-indications perhaps that the installation of the Terrace was not far removed from EPB V (pp. 15, 185-186). Other contexts make modest contributions to the pre-destruction-period assemblage. From the Destruction Level, about two hundred painted vessels are known, distributed in varying proportions among all the major burned units except the TG depot. ${ }^{105} \mathrm{Meg}$. 3 had a particularly high concentration, over twenty, while other units seem to have contained at most about a dozen. Virtually no building was without at least one exceptional example of painted pottery.

Early Phrygian tombs show an uneven spread of painted vases, from none at all in MM, Y, and KY, the

[^158]only ones so lacking, to the rich collections in Tumuli $P$ and III, where, with 13 and 11 examples respectively, painted wares account for a little over a fifth of the total. ${ }^{106}$ Tumulus G , looted in antiquity, had two painted vessels as the only preserved ceramic offerings within the chamber (P 45 [pl. 61], P 141), while the adjacent Southwest Deposit yielded a third (P 49 [pl. 61]) among the four vessels found there. A painted sieve jug from Tumulus X (P 3136 [fig. 30, pl. 100]) is one of five pots from that tomb, more proportionally than the two of 13 contained in Tumulus W. If any overall pattern exists in the funerary distribution, it is perhaps a weak beginning in W , followed by the proportionally higher showings in

P, III, G, and $X$. The absence of painted wares in the relatively late MM, as perhaps in Y and KY , may be connected with a move toward frugality in ceramic furnishings for the tomb. ${ }^{107}$ A similar trend may be apparent in Ankara: the Great Tumulus, which seems to have been generally contemporary with III and P, contained four painted vessels, ${ }^{108}$ whereas in METU ${ }^{\top}$ Tumuli I and II, which have typological affinities in MM, and in the tumuli on the site of the Ant Kabir, painted pottery is absent. Humbler graves of the Early Phrygian period occasionally had painted vessels, as shown by the nearly twin dinoi of Ladders-and-Zigzags style from the burial under the sixth-century Tumulus D (pl. 141).

## Shapes

The most frequently painted shape in the Early Phrygian repertory was the round-mouthed jug, which appears so decorated already in EPB IIb (22) and also in EPB V-VI (113-114, 180) and the Terrace fill (294-295). About forty painted examples are known from the Destruction Level (e.g., 598-626), and the shape is also represented in Brown-on-Buff ware from later contexts on the City Mound (1038-1040). In early tumuli painted round-mouthed jugs occur in P (TumP 54), III ( K -III 12), and G (P 45). Sure examples of large roundmouthed jugs bearing painted decoration are known only in the Destruction Level (632-634, 637-640, 644) and in Tumuli P (TumP 55-57) and G (P 49); but ambiguous painted specimens, which could belong to either this shape or kantharos kraters, have a stratigraphical distribution paralleling that of smaller roundmouthed jugs (23, 116-117, 240, 296-297, 635, 641-643). Narrow-necked trefoil jugs of small and medium size are next in frequency of painting. They are attested no earlier than EPB V (118-119), although 29 from EPB IIb possibly represents the painted shape. The painted trefoil jug also occurs in the Terrace fill (298), while the burned citadel has yielded nearly twenty (e.g., 705-722). The total number can probably be increased considerably by ambiguous jugs, most of which are likely to have had trefoil mouths $(\mathbf{1 2 7}, \mathbf{1 8 4}, \mathbf{7 9 7 - 8 1 0})$. The large trefoil jug was rarely painted (751), although the practice had begun by EPB V (123). Wide-mouthed trefoil jugs were being painted by the time of the Terrace installation (300), and about half a dozen are known from the Destruction Level (778-782). Jugs of miscellaneous types include a few painted examples (126, 415, 785, 789-790, K-III 3). Side-spouted sieve jugs, although appearing in overall limited numbers, are proportionally well represented. The shape had begun to be painted by EPB V (129), and in the burned citadel the five known painted examples constitute about a fifth of the total from this
106. TGET, 33-38, 46-51.
level (820, 832-835). Two were placed in Tumulus 11 (TumW 61-62) and at least one in X (P 3136), while the eight from Tumulus III (K-III 4-11) contrast with the seven in monochrome ware from $P$. Of those from tombs, all but TumW 62 and that from X belong to the Ornate Class of Brown-on-Buff ware, as do 832 from the citadel and a number from post-destruction contexts (10421046), thus making the shape the most popular within the mode (p. 167).

Amphoras and jars of less than large storage size are the only other standard shapes that were painted with any regularity, and it is evident that painters favored certain varieties. Almost all painted amphoras are either kantharos kraters or larger open-mouthed forms, including regular kraters. The former type is definitely attested only in the Destruction Level (879-882), but it may be represented in pre-destruction contexts by those painted vessels that could alternatively be large round-mouthed jugs (supra). Open-mouthed amphoras occur painted in EPB V (134-135) and the Terrace fill (315-320), and other examples come from the relatively late PN 3 (e.g., 241). The burned citadel has yielded over a dozen so decorated, with kraters being slightly more numerous than wide-necked amphoras ( $923-935$ ). To this number can most likely be added the series of enormous painted kraters found scattered in fragmentary form in later contexts on the City Mound (1065-1081; pp. 8s-90). Painted amphoras of other varieties are rare, e.g., the petaled 876. Of three large shoulder-handled amphoras from EPB VII and the Destruction Level, one definitely and very possibly all three were imported (185-186. 898). as seems to have been the small handmade 255 (p. 165). Among jars the favored varieties for painting were the dinos and related low-necked jar. The former is attested in EPB IV (60), the Terrace fill (321-322), and EPB \'II (183), while in EPB V 137-139 could be instead low-
107. Ibid., 176.
108. Buluç, pls. 16-17\{BT 14-17\}.
necked jars (p. 94). The Destruction Level yielded both varieties in limited but fairly equal numbers ( 949 and 964-967. 968-972), and at least two Brown-on-Buff dinoi come from later contexts (1048-1049). Although the grave under Tumulus D had a pair of painted dinoi, in tumuli of the Early Phrygian period at Gordion the shape is invariably monochrome, in contrast to the Great Tumulus in Ankara, where the dinos was the only painted shape. ${ }^{1199}$ A few necked jars with painted decoration are known from CC 1 and $2(982-985)$; another from Tumulus G (P141) may be an import (p. 117, n. 14).

Despite the great abundance of bowls in the Early Phrygian period, only about a dozen bear painted decoration. In contrast, the painted shape was one of the most popular at contemporary centers on the eastern plateau. A limited number of flaring-rimmed bowls from EPB V (100), the Terrace fill (281), and the Destruction Level (484-485) were probably imports from the east (p. 48), while another bowl from the Terrace fill (291) may be a contaminant, since the only close parallels for the manner of painting are from post-destruction, seventh-
century contexts. ${ }^{110}$ With the possible exception of a few ambiguous specimens from the Terrace fill (290) and Destruction Level (527), most other painted bowls are of Class 1 or 2 plain-rimmed varieties. Those from the final Early Phrygian level (499-502, 507-508) are practically all exceptional in having handles and/or spouts (pp. 49-50), while some others of Class 2 from tumuli and post-destruction contexts are of Brown-on-Buff ware (p. 167). The "fruit stand" TumP 61, painted in what seems to be a bichrome variation of Brown-on-Buff, is typologically unique for the period (pp. 51-52).

Other painted shapes belong to rare categories. A particular model of askos, known from the Destruction Level and Tumulus $P$, is invariably painted (812-814, TumP 51-53), as is an example of somewhat different form from TB 4 (815). Most of the zoomorphs from $P$ (TumP 49-50,58) and a probable example of the general type from the citadel (862) likewise have painted decoration. By the time of the destruction, painters had also worked on a few large stands (869-871) and an assortment of unusual pots $(858,860,862)$.

## Decorative Schemes

In the decoration of the above shapes, painters showed considerable variation in both composition and choice of motifs. Most, however, viewed the decoration of a vessel as a straightforward definition of the principal parts through the use of horizontal zones with row or panel designs. For these painters, the shoulder was an essential element in their schemes and, depending on the shape, the neck and/or the belly could also be primary decorative fields. Normally, a single zone was used for each part, but some painters divided a field into two, very rarely three separate registers (e.g., 316 [pl. 117], 712 [pl. 73], 714 [pl. 74], $\mathbf{7 8 5}$ [pl. 86], 789 [pl. 87], 805-807 [pl. 91], $\mathbf{8 0 9 - 8 1 0}$ [pl. 92], $\mathbf{8 3 3}$ [pl. 98], $\mathbf{9 2 7}$ [pl. 123], $\mathbf{9 2 8}$ [pl. 125], $\mathbf{9 3 2}$ [pl. 126], $\mathbf{9 3 4}$ [pl. 127]). The lower body and the foot or base were seldom painted ( 862 [fig. 33, pl. 105], 1034 [pl. 167], 1038 [pl. 55], TumW 61, K-III 8 and 10), a major conceptual difference between Phrygian and most styles of contemporary Greek painting (p. 135). This simple tectonic approach to decoration, represented by well over half of the painted vessels known from the period, was a fundamental element of the broader Syro-Anatolian koine. The formula was flexible in terms of how individual fields were to be treated, and it was this

[^159]flexibility along with the preference for motifs that together accounted for the variation among regions. ${ }^{11}$

A particularly good example of the Phrygian interpretation of the basic formula is found in the extensive use of triangles, usually crosshatched, on shoulders. The Catalogue contains about sixty instances on a variety of shapes, yet painters on the eastern plateau were not fond of the design in this position. In North Syria, however, the triangle appears with seemingly greater regularity as a shoulder device, especially at Hama, and is one of a number of indications that a direct ceramic link (i.e., bypassing the Halys region) existed between this area and Phrygia (p. 141). Where triangles were not used on the shoulder by the painters represented at Gordion, some other tapering motif, usually a zigzag or lozenge row, often appears as a complement to the curvature of the field (e.g., 619 [pl. 53], 623 [pl. 54], 626 [pl. 54], 716 [pl. 74], 720 [pl. 75], 835 [pl. 98], 965-966 [pl. 139]). Both zigzags and lozenges occur frequently in this position in the Alişar IV sphere (pp. 142, 144). Panels were less common as shoulder decoration, no doubt because of the difficulties involved in adapting them to the curving field (e.g., 719 [pl. 74], 721-722 [pl. 75]). On 1028 (pl. 164) the painter may have tried to overcome this problem by treating his panels as though they were the legs of a zigzag. When, however, the shoulder is steep and straight, as it often is on kraters, the panels conform reasonably well to the pitch and show a minimum of distortion (e.g., 882 [pl. 110], 929-931 [pls. 124-125]). On necks that were

[^160]of sufficient height to receive a primary zone, as on round-mouthed jugs, kantharos kraters, and openmouthed amphoras, panels were particularly suitable; in general they are found here slightly more often than row designs. The field that least frequently received primary decoration was the belly, and it did so principally on such full-bodied shapes as dinoi and jugs large enough to allow ample space. In most cases, paneled zones were chosen for this gently curving field that often slips onto the lower shoulder (e.g., $\mathbf{1 8 3}$ [pl. 135], 803-804 [pl. 91], 971 [pl. 140], and pl. 141 [for P 32]). Handles and side-spouts were generally respected by the zonal schemes and set off in their own paneled fields. On rare occasions, painters tried unusual approaches in relating zones to handles ( 720 [pl. 75], 927 [pl. 123], 974 [pl. 141]).

A general rule observed by most painters was that a single zone should contain either an unchanging row motif or panels, and that the two types not be mixed together. The panels, however, could be of a variety of types within a zone, and be closely spaced or set wide apart, sometimes with ancillary dividers between them. Another principle of this decorative logic was that the same primary designs should not be repeated from zone to zone, although exceptions do occur ( 626 [pl. 54], 639 [pl. 60], $\mathbf{7 8 5}$ [pl. 86], 801 [pl. 90]). One of the most non-conforming vessels in this regard is the lidded krater 929 (pl. 124) from Meg. 3, which bears 11 separate panel designs in 45 positions over three principal fields, including the lid. The arrangement seems to have been random, in contrast to the thoughtful order of three panel types on either side of the shoulder on the krater $\mathbf{9 3 0}$ (pl. 125). So highly reasoned a program is unusual for pottery, and may stem from the same artistic mentality that gave order to certain stamped compositions (pp. 125-126) and to the inlaid panels on wooden screens. ${ }^{112}$

Various ancillary devices contribute much to the sense of richness that often marks Phrygian vase painting. Narrow zones of simple patterns-e.g., wavy lines, lozenges, and plain zigzag-often divide or border larger zones and also serve to decorate rims, to accent the points of greatest diameter, and to mark subtle transitions from shoulder to neck. On large vessels, and others not so large, the tops of rims were often banded or otherwise decorated, in accord with a more general trait of the koine (e.g., 137-139 [pl. 135], 315-316 [pl. 117], 321-322 [pl. 135], 500 [fig. 19, pl. 28], 876 [pl. 109], 930-932 [pls. 125-126]). ${ }^{113}$ The interiors of rims, especially at handle attachments, were also occasionally embellished ( 113 [pl. 37], $\mathbf{1 1 9}$ [pl. 62], $\mathbf{4 0 6}$ [pl. 158], 613-616 [pls. 52-53], 709-710 [pl. 73], 718 [pl. 74], 720 [pl. 75], 876 [pl. 109]). Motifs on handles range from simple lines, bars, or

[^161]slashes to panels and other more considered designs on wide straps ( $\mathbf{1 6 5}$ [pl. 158], $\mathbf{1 7 6}$ [pl. 166], $\mathbf{3 8 5}$ [pl. 158], $\mathbf{3 9 6}$ [pl. 166], $\mathbf{4 0 6}$ [pl. 158], 612-614 [pl. 52], 618 [pl. 53], 634 [pl. 58], 709-710 [pl. 73], 719 [pl. 74]. 720 [pl. 75]. 882 [pl. 110], 923 [pl. 122], 930 [pl. 125], 932 [pl. 126]).

The basic approach to decoration was being followed by EPB V, while the paneled neck zone with bordering zigzag on 23 ( pl .56 ) from EPB IIb suggests that there had been at least some precedent ( p .136 ). The degree to which the conventions were followed varied considerably, and it seems that those painters who worked outside the individual groups or styles were the ones most given to upholding the tenets (e.g., 620 [pl. 53], 621 [pl. 54], 638 [pl. 59], 640 [pl. 60], 713 [pl. 73], 718 [pl. 74], 751 [pl. 80], $\mathbf{7 8 1}$ [fig. 26], $\mathbf{8 0 7}$ [pl. 91], $\mathbf{8 8 1}$ [pl. 110]). On the other hand, the separate painting styles exhibit a variety of compositional approaches, some closely adhering to the common principles and others almost totally ignoring them. The Ladders-and-Zigzags and Polychrome House styles, for example, were quite faithful to the conventions, particularly in the use of shoulder triangles (pp. 160-162). Fine-Line Buff ware and the TB 8 Group also generally conformed to the standard, although each has some eccentricities (pp. 159-160, 164). The ChevronTriangle style followed the common tradition in having the namesake motif on the shoulder, but the blank or largely reserved neck that helps to characterize the mode, especially on round-mouthed jugs, seems to have been a reasoned countermeasure to normal practice (pp. 157-158).

Most divergent of all, however, were the Wavy-Line style and the Ornate Class of Brown-on-Buff ware, for the schematic approaches seen in these modes are well outside the general conventions of the koine. Each attests a philosophy of vase decoration in which the parts were redefined in reference to the whole. Pure Wavy-Line and non-figural Brown-on-Buff have a shared emphasis on a multiplicity of narrow zones, as opposed to large ones that occupy clear-cut fields, and they thus reflect what seems to have been a distinctively Phrygian approach to painted design (pp. 155-157, 167-169). The variation of Wavy-Line with triangles on the shoulder reveals an occasional merger with common practice, but Brown-onBuff painters never placed that design by itself in that position. The combination of wavy lines and concentric circles, already in evidence by EPB IIb, is a variation of the Phrygian rhythmic approach, and with the Pure Wavy-Line style it seems to have influenced some painters working outside the general mode (pp. 155-156).

Other deviations from the conventional approach are not connected with the known modes of painting. Prominent ridges used to define painted zones, as seen in EPB V (135 [pl. 115]) and the Terrace fill (316 and 320 [pl. 117]), may have chronological implications, since they are not found in the Destruction Level (pp. 117-118). 134 (pl. 115) from EPB $\backslash$ is possibly in a parallel category, given what survives of the unusual decoration. The
combination of simple straight and wavy lines on the shoulder of 22 (pl. 37) from EPB IIb is also unusual, yet in this case the scheme continued into the destruction period ( 619 [pl. 53]). A few other vessels from predestruction contexts seem, on the basis of what little is preserved, to have been compositionally odd ( $\mathbf{1 7 4}[\mathrm{pl}$. 162]. 409 [pl. 164]). In the burned citadel, the amphora 924 (pl. 122) shows a sparse scheme in which the unusual motif of pendent concentric semicircles on the upper shoulder is the only primary design (see also 392 [pl. 163]). The sizable neck is conspicuous for its blankness, and thus recalls the Chevron-Triangle style. A krater from the Destruction Level ( 933 [fig. 43, pl. 127]) is no less remarkable in the use on the neck of wavy lines (not in the manner of the style) instead of panels or a row design. Some vessels are unusual more for their motifs than for the compositional format in which the designs occur (e.g., 398 [pl. 167], 637 [pl. 59], 782 [pl. 85]).

A few painted vessels are outside the common mold because they are themselves extraordinary. For example,
painting was sometimes used to complement relief decoration, as on the fluted 860 (fig. 33, pl. 105) and 949 (fig. $48, \mathrm{pl} .136$ ) and several ribbed or petaled vases with affinities on the eastern plateau ( $\mathbf{1 6 7}$ [pl. 158], $\mathbf{3 8 9}$ [pl. 163], $\mathbf{8 7 6}$ [pl. 109], 1057, 1058 [pl. 160]; pp. 120-121). Zoomorphic vessels also received special decoration, viz., the geese from Tumulus P (TumP 49-50), although the goat jug TumP 58 from the same tomb is decorated much like a pot. ${ }^{114}$ The checkerboard askoi from the Destruction Level and Tumulus P (812 and $\mathbf{8 1 4}$ [pl. 93], TumP 51-53) indicate through the blanketing coverage of their shared motif a concept of design that has no real equal at Gordion or elsewhere in contemporary Anatolia. On some (814, TumP 53), the checkerboard stops short of the lower body, as though in concession to customary practice, but on the others the treatment is total, except for feet and handles. As observed above, the closest roughly contemporary parallel is an askos from Marmariani in northern Thessaly. ${ }^{115}$

The painters represented at Gordion drew from a repertory of geometric designs that, while limited in basic types, was open to extensive variation and combination, as tends to be true of geometric traditions in general. As painters in the Syro-Anatolian koine, the Phrygians had access to the broader stock of patterns, which they took and rejected as they pleased while adding new or modified designs. As with the principles of composition that guided much of their work, so too the basic typology in the repertory of designs had largely come to be established by the time the Terrace was installed. Yet only in the Destruction Level does the wide range of varieties within particular categories of motifs become apparent. The cause may be the imbalance of the evidence in terms of quantities represented, but it is also possible that the repertory had undergone growth and expansion.

Of row designs used as primary decoration, triangles, lozenges, zigzags, and meanders (as a somewhat distant fourth) are the commonest, while principal panel types include lozenges, X s, lattices, and oblique checkerboard. Two popular motifs, regular checkerboard and crosshatching, served as either panel or continuous zonal patterns, although both are generally more frequent as panels. The variety within the basic categories is considerable. Thus, three differently formed types of triangles were used, each with subvarieties, while almost twenty variations on the zigzag, and slightly fewer for the lozenge row, are attested in the Early Phrygian repertory. A number of specific varieties of motifs, particularly the simpler ones, occur with some regularity. Others,
however, are seemingly the exclusive designs of a particular style or group, while still others, often complex, occur only once or twice. Ancillary designs are sometimes taken from the primary row categories, e.g., lozenges and zigzags, but by far the commonest of the secondary designs is the wavy line. Of single elements used in a variety of ways-as fillers, spacers, or repeated in rowsconcentric circles (almost invariably compass-drawn) were the favorite of Phrygian painters, and only on the imported Alişar IV amphora 186 (pl. 113) do sets with differing numbers of circles occur on the same vessel. Rectilinear designs tend to be precisely executed with the aid of straight edges.

## TRIANGLES

Of the three principal varieties, the most popular was the crosshatched, Type 1 triangle, used almost exclusively as shoulder ornament (fig. 62). Although the commonest of the principal motifs at Gordion, crosshatched triangles were, as noted above, a rarity on shoulders in the Alişar IV region, where zigzags were

[^162]favored. ${ }^{116}$ In North Syria, however, the triangle type appears with some frequency, especially at Hama, and seems to have been a trait shared by this branch of the koine and Phrygia. ${ }^{117}$ The most frequently recurring subvariety at Gordion, the straightforward Type 1A, has nothing in the fields between the triangles except occasional concentric circles, and is the same as that found in the southeast. At Gordion it occurs on shoulders by the time of EPB V ( $\mathbf{1 6 8}$ [pl. 161], 172-173 [pl. 162], $\mathbf{1 7 5}$ [pl. 166]), and is commonly found in this position in the Destruction Level (e.g., 620 [pl. 53], 638 [pl. 59], 639 [pl. 60], 751 [pl. 80], 881 [pl. 110], 923 [pl. 122], 972 [pl. 140]). The only other subvariety of Type 1 occurring with any regularity is 1 B , in which laddered chevrons span from triangle to triangle, sometimes accompanied by smaller chevrons (fig. 62). Unattested beyond Gordion, the variation appears to have been peculiarly Phrygian. The 1B triangle row is the hallmark of the Polychrome House style, which had come into being by the time of the Terrace (p. 161), and it also occurs on a few specimens from the Destruction Level that are not directly in the style (e.g., 640 [pl. 60], 715 [pl. 74]). On 639 (pl. 60) the motif makes a rare appearance on the neck, above a shoulder of 1 A triangles. A version with small pendent chevrons that do not touch the triangles seems to have been preferred by Ladders-and-Zigzags painters for their large amphoras (e.g., 928 [pl. 125]), and may have been so used by them before the Terrace was installed ( 317 [pl. 117]; pp. 160-161). Other variations of Type 1 triangle rows are rare. On a kantharos krater painted in the Polychrome House style ( 879 [pl. 110]), a row with wavy lines connecting the triangles occurs on one side of the shoulder, opposite a 1B zone, and the variety also appears on the large round-mouthed jug from Tumulus G ( $\mathbf{P} 49, \mathrm{pl} .61$ ). 714 ( pl .74 ) has the only known occurrence of a row with smaller pendent triangles between the large ones, although the design is somewhat inconspicuous, appearing as one of two zones in a panel.

Crosshatched triangles outside of row formations are generally infrequent. Pendent singletons with dotted crosshatching were favored as filling ornament by some linear animal painters, practically the only ones in the Brown-on-Buff circle who used the motif. A few isolated instances of single triangles are known from the Destruction Level. On the jar 983 (pl. 143) triangles in panels sprout little trees that recall Alişar IV vegetation. The eastern overtones are stronger in the large compounded triangle appearing as part of the odd shoulder composition on 1032 (pl. 165), for the type has very close parallels

[^163]at Alişar itself, albeit in row formations. ${ }^{118}$ The variety of zigzag directly above on 1032, and the feather trees that flank the showy triangle, also have good eastern correspondences, and might, along with the triangle itself, indicate an import (infra).

The Type 2 or chevron-triangle (fig. 62) is discussed in connection with the Phrygian style that bears its name (pp. 157-158). Neither of the two subvarieties, $A$ and B, is found outside the style at Gordion, and in only one other instance are triangles formed by chevrons, in the somewhat non-conformist TB 8 Group ( 613 [pl. 52]). A few chevron-triangles do occur, however, as stamped motifs (p. 129).

Type 3 triangles (fig. 62) make a single appearance in pre-destruction contexts, on an uninventoried roundmouthed jug from the relatively late Phrygian layer in the EB Trench. In the Destruction Level they occur on almost a dozen vessels. The design was formed by the horizontal bisection of a zigzag, resulting in a row of standing and a row of pendent triangles, both with a common base line. The triangles themselves are usually solid, as on the example from the EB Trench (Type 3A: 485 [pl. 24], 635 [pl. 59], 932 [pl. 126], 982 [pl. 143]), but in a few cases the upper, standing row is crosshatched (3B: 612 [pl. 52], $\mathbf{7 2 0}$ [pl. 75]). One 3A specimen has red-filled upper triangles ( 626 [ pl .54 ]). The trapezoidal fields between sometimes bear concentric circles (485, 626,932 ) and, on one occasion, additional triangles (720). In almost all instances, the motif is primary, yet unlike the other types of triangle, it occurs with some frequency on necks as well as on shoulders (635, 932. 982); on one exceptional vessel it is repeated in both fields ( 626 ). Fine-Line Buff painters are the only ones known to have used the design in secondary roles, below the handle on 801 (pl.90) and as one of several strips in the unusual multi-patterned panels on 634 (pl.58). The 3 A triangle on the rim of the presumably imported flaring-rimmed bowl 485 (p. 48) is a recurring device on such bowls on the eastern plateau; this position seems, in fact, to have been the only regular one in which Type 3 triangles had primary status in Alişar IV' centers. ${ }^{119}$ The use of the design as a principal one on various shapes at Gordion thus might be a Phrygian predilection. Whether the occasional use of the motif in Greek Geometric

[^164]painting has any connection with Phrygian work is unclear, as is the case with other parallel designs. Deserving of mention is the use in Naxian Late Geometric of 3 A triangles with circles in the trapezoids, an Anatolian flavor if only by chance. ${ }^{120}$

## ZIGZAGS

Of about a dozen and a half varieties of zigzag, most occur only once or twice. The simplest and commonest is the single-line zigzag, perhaps a rectilinear alternative to the wavy line as an ancillary device. Careful drawing of the one or sloppy execution of the other can sometimes obscure the painter's intent. The type appears in EPB IIb ( 23 [pl. 56]), and continues across EPB V ( 116 [pl. 56], 137 [pl. 135]) and the Terrace fill ( 322 [pl. 135], 391 [pl. 163]) to the Destruction Level, where it occurs as secondary decoration on a number of vessels (e.g., 710 [pl. 73], 718-719 [pl. 74], 927 [pl. 123], 1032 [pl. 165]). It was perhaps a single Fine-Line Buff painter who made the neat, double-line version on the rims of 634-635 (pls. 58-59). As with certain other motifs, the simple zigzag can also be a component in a more complex design, as in the ladders-and-zigzags panels in the style of the same name (p. 160).

More ambitious zigzags serve exclusively as primary decoration on shoulder or neck. Their legs are either of double line, usually filled in, or of several lines, while the triangular fields formed by them can be handled in a number of ways, or left empty (fig. 62). The use of complex zigzags is a particularly distinguishing feature of the Syro-Anatolian koine, and it stands as one of the principal cohesive elements within the tradition. ${ }^{121}$ In this light, it is no doubt significant that the earliest example at Gordion, on the round-mouthed jug 113 (pl. 37) from EPB V, is of a variety (Type 3, fig. 62) whose distribution extends to the eastern plateau and on to Malatya and the Yunus cemetery at Carchemish. ${ }^{122}$ Since the vessel from EPB V is of Fine-Line Buff ware, it is doubtless Phrygian rather than an import from another region of the koine. With crosshatched triangles complementing both the lower and upper fields, the Type 3 zigzag is among the richer variations. It recurs in the

[^165]Destruction Level on the neck of another roundmouthed jug ( 618 [pl. 53]), and is here made more elaborate by the addition of concentric circles. The circles are possibly a Phrygian touch, judging by their absence in occurrences of the motif elsewhere. The Brown-onBuff 1060 (pl. 160) from a post-destruction context also bears the variety, and may be late only in terms of its context (p. 166). The petaled round-mouthed jug from Tumulus G (P 45, pl. 61) has on the neck a variant of the type with crosshatched rather than solid bars in the zigzag (cf. also TumP 57, infra). Although the vessel is likely to have been an import from the eastern plateau (pp. 120-121), the motif has no exact parallels there.

Other zigzags on vessels from pre-destruction contexts include the simplest and one of the most complex. The bichrome 295 (pl. 38) from the Terrace fill bears a carefully drafted and intricate design that lacks parallels at Gordion or elsewhere, although certain varieties on the eastern plateau are of analogous complexity. ${ }^{123}$ On the other hand, the Alişar IV amphora 186 (pl. 113) from EPB VII is contextually the earliest to display a plain, solid-barred variety with nothing more than concentric circles in the fields (Type 1, fig. 62). This large counterpart to the common ancillary zigzag is, at least typologically, the basic version on which others, such as Type 3, depend. Although so simple a design can appear in practically any geometric tradition, its uses throughout the koine are no doubt related. ${ }^{124}$ In the Destruction Level the Type 1 zigzag occurs as primary decoration on about half a dozen vessels, and it seems to have been particularly favored by painters in the TB 8 Group ( 613 [pl. 52], $\mathbf{7 1 0}$ [pl. 73], 806 [pl. 91], 1035 [pl. 167]). Also earlier than the Destruction Level are the unique zigzags on K-III 12-13 and TumP 57, all Brown-on-Buff vessels belonging to the Ornate Class. Along with that on 1036 (pl. 32) from a post-destruction context, the triangles show an interest in dots, stippling, or laddered components that is consistent with the general style (p. 171). The zigzag on TumP 57, with stippled triangles, seems to be a variation on Type 3.

Complex zigzags occurring no earlier than the Destruction Level include Type 2 (fig. 62), with crosshatched triangles in the lower field and triads of concentric circles in the upper. The variety is found here only within the Group of 932 , a series that may have its origin somewhere to the east of Gordion (pp. 162-163). The type, with or without the circles, also appears on the eastern plateau and perhaps at Malatya. ${ }^{125}$ Another variety, Type 4 (fig. 62), occurs on some members of the same group

[^166](807 [pl. 91], 932 [pl. 126]), but it has a broader distribution in the Destruction Level ( 618 [pl. 53], 935 [pl. 127], 983 [pl. 143]). With its multi-line legs, sometimes as numerous as about twenty to a side (618), Type 4 is common in the koine, from the eastern plateau to Hama. ${ }^{126}$ A related form is the zigzag on the jar 966 (pl. 139), made of lines intersecting at top and bottom to create small crosshatched triangles; in each interval is a concentric circle. With or without circles, the variety recurs on the eastern plateau, but apparently not in the southeast. ${ }^{127} 1032$ (pl. 165), thought to be an import from the Alişar IV region, has basically the same type of zigzag on the upper shoulder, but the outer intervals between the lines forming the legs are solidly filled. A close parallel exists on the rim of a bowl from Alişar. ${ }^{128}$ Another type with affinities on the eastern plateau is a laddered zigzag occurring on a few vessels within the TB 8 Group ( 612 [pl. 52], p. 164). ${ }^{129}$ The only variety from the Destruction Level that lacks close parallels is that formed of numerous dots and lines on the neck of 617 (fig. 23).

## LOZENGE ROWS

Lozenge rows, formed by two intersecting zigzags, are classified as simple or complex depending on whether the main lines are single or double. In both, variety was obtained primarily in the filling of the lozenges, while in some complex types attention was also given to the resultant triangular fields. Like zigzags, lozenge rows are a general feature of the koine, although some types are so simple that they might occur anywhere.

Most simple lozenge rows are ancillary, used where wavy lines or simple zigzags might as readily occur. This is particularly true of the Type 1 or solid lozenge row (fig 62 ), which, with over a dozen instances, is the most frequent variety in the Early Phrygian period. The type appears in an ancillary zone in both EPB V ( 134 [pl. 115]) and the Terrace fill ( $\mathbf{3 1 8}$ [pl. 117], $\mathbf{3 8 4}$ [pl. 161], $\mathbf{3 9 4}$ [pl. 163]), on K-III 12, and in the Destruction Level ( 621 [pl 54], $\mathbf{6 4 0}$ [fig. 24, pl. 60], 880 [pl. 110], $\mathbf{1 0 2 4}$ [pl. 161]). Solid and various other simple lozenge rows were used in the same way in the east. ${ }^{130}$ At Gordion, however, Type 1 was also a panel device, particularly in certain Phrygian

[^167]painting modes. Fine-Line Buff and the Ladders-andZigzags style used solid lozenges in the multi-strip panels peculiar to these modes (pp. 159-160), while the Polychrome House style, in which the design frequently formed an ancillary zone, often has narrow uprights of solid lozenges as spacers between larger panels (p. 161). Vertical strips of the motif also occur as panels on 949 (fig. 48, pl. 136) and K-III 12.

Simple Type 2 or crosshatched lozenges (fig. 62) occur by EPB V ( $\mathbf{1 3 5}$ [pl. 115]) and in EPB VI adorn the shoulder of a round-mouthed jug ( $\mathbf{1 8 0}$ [pl. 38]). The variety is infrequent in the Destruction Level, with some examples appearing in Fine-Line Buff panels ( 634 [pl. 58], $\mathbf{8 0 1}$ [pl. 90], $\mathbf{9 8 2}$ [pl. 143], $\mathbf{1 0 2 6}$ [pl. 164]). Like the Type 1 lozenge to which it is a distant second in frequency at Gordion, Type 2 was a motif of the koine. ${ }^{131}$ On the other hand, a third variety that occurs relatively early, the stippled-lozenge row seen on Tumll 61, appears to have been peculiarly Phrygian. Except perhaps for its use on the small petaled amphora 876 (pl. 109) from the Destruction Level, the design is exclusively one of Brown-on-Buff painters, seen beyond Gordion only at Konya (p. 171).

Of simple lozenge-row varieties that appear no earlier than the Destruction Level, the most notable is the alternately solid and crosshatched type on 618 (pl. 53) and 967 (pl. 139), both from Meg. 3. Although rare at Gordion, the motif had considerable popularity at Alişar and is also found at other centers in the region. ${ }^{132}$ A somewhat similar distribution accompanies the open variety on the neck of $\mathbf{7 1 5}$ (pl. 74). ${ }^{133}$ A few remaining odd types are likely to be Phrygian in inspiration, to judge from the lack of parallels elsewhere. A reserved variety appears on 134 (pl. 115) from EPB V and again on 714 (pl. 74), but here in panels of mixed zonal motifs. On 835 (pl. 98) and 965 (pl. 139), unusual forms are the sole and primary shoulder devices; such use of simple lozenges is rare at Gordion (cf. also $\mathbf{1 8 0}$ [pl. 38]), and may reflect influence from other branches of the koine. ${ }^{134}$

Complex lozenge rows are, like complex zigzags, a particularly distinguishing feature of the koine, at least as it is represented in Anatolia and at Carchemish. ${ }^{135}$ Gordion and Alişar IV centers have together yielded a considerable range of varieties. Yet only two are attested in both east and west, and they are also the only two

[^168]known from pre-destruction contexts in the Phrygian citadel. 320 (pl. 117) from the Terrace fill bears a straightforward and, at Gordion, otherwise unattested variety with solid, double-line bars (except for reserved intersections); the resultant lozenges and triangles each contain no more than a centrally placed dot. This open type occurs at Alişar with either concentric circles or nothing in the fields, and has an analogue at Boğazköy, formed in a different manner. ${ }^{136}$ The elaborate lozenge row on the bichrome amphora 927 (pl. 123) is perhaps a variation on the type borne by $\mathbf{3 2 0}$, with half red and half dark bars, and with alternate lozenges containing small compounded ones. That on 241 (pl. 116) from PN 3 is the earliest known example of the only complex type seen repeatedly at Gordion; all other instances come from the Destruction Level and the Group of 932 . The design is carefully drafted and close, with reserved bars, solidly filled intersections, and lozenges alternating solid and crosshatched (fig. 62). The motif does not have exact parallels on the eastern plateau, but a number of types are closely similar. ${ }^{137}$ The lack of precise correspondences for the design may help to remove the Group of 932 from a purely Halys milieu, despite the animals of Alişar IV type on 932 itself (p. 162).

Other complex lozenge rows at Gordion lack external parallels, yet some are such predictable variations on the basic format that the absence of close matches may be fortuitous and of no significance for isolating purely Phrygian types. For example, on $\mathbf{1 0 2 5}$ (pl. 164) from the Destruction Level the solid lozenges and crosshatched triangles are not surprising, nor is the version on the neck of the Fine-Line Buff 634 (pl.58), with all elements blank except for the solid triangles. ${ }^{138}$ On the other hand, the laddered row with laddered Xs on the sieve jug from Tumulus X (P 3136, fig. 30) seems to be related to designs in the Polychrome House style (p. 161), while the intricate lozenge row on the neck of the Brown-on-Buff

[^169]1038 (pl. 55) from a post-destruction context is the kind of work that might be expected from a painter in the Ornate Class. On a bowl of the same ware from Tumulus III (K-III 13) and on 1064 (pl. 128) occurs a variety with stippled elements related in both spirit and execution to other Brown-on-Buff designs, including the multiplelozenge patterns that are peculiar to the mode (p. 171). On K-III 13, however, the motif appears in elongated panels rather than as a continuous zone. Such "lozengerow panels" are rare at Gordion, otherwise occurring in two varieties on a jar that may belong to the Early Phrygian period ( 973 [pl. 141), and in a particularly inept form on the neck of 607 (pl. 51).

Lozenge rows recur in stamping and openwork, and occasionally in wooden inlay, and in all cases the technique of formation differs from that seen in painting (p. 128). Nonetheless, the general inspiration may have come from pottery. A series of inlaid wooden strips from Tumulus P (TumP 164) bears a delicate, compounded design that finds its closest parallel not in Phrygian painting but on the lower neck of a krater from Alişar. ${ }^{139}$

## MEANDERS

Meanders and a few meandroid (i.e., non-continuous) designs are of limited frequency in the Early Phrygian painted corpus, and if a recurring variety in the Brown-on-Buff circle is excepted, a few types on about a half-dozen vessels remain. The ceramic representation is, however, a misleading reflection of general Phrygian attitudes toward such designs, since the wealth of varieties in other media, e.g., bronze and wood, point to a genuine interest in mazes and related motifs of similar complexity, in which Anatolians on the eastern plateau shared. In North Syria, and in Cilicia and Cyprus, however, the meander seems to have been a rarity in the native repertories. ${ }^{140}$ To the west, meanders were among the principal designs of Greek Geometric pottery, where they help to define its beginnings $c a .900$ B.c. and continue to have strong representation throughout the period. Certain types in the Greek repertory also occur at Gordion and other Anatolian centers. The correspondences are difficult to interpret as coincidental because of the complexities of some of the motifs involved, and because of the parallel time frames. It thus seems probable that the immediate source of inspiration for Anatolian meanders was the Greek world, and that highland painters combined adopted types with formulations of their own. At present, such a stand is preferable to one that advocates a direct connection with Balkan

[^170]meanders of the Bronze Age and later, although they might be the ultimate source of the Graeco-Anatolian family of designs. ${ }^{141}$

From pre-destruction contexts on the City Mound the evidence for meanders is scant. 174 (pl. 162) from EPB V has an unclear pattern of lines and dots that could form a meander. A zone on 320 (pl. 117) from the Terrace fill bears an odd, unparalleled pattern of single-line Ts and Ls that create a maze of the surrounding void. In Tumuli $P$ and III together, however, three painted types and a variation on one of them occur, while these tombs and MM also contain meanders in other media. Neither meanders nor related designs occur in any material in Tumulus W , a fact that may be of some chronological significance in view of the relatively early dating of the tomb (pp. 192-193). A few types from the Destruction Level complete the assortment.

The most frequently recurring meander at Gordion is a single-line key variety used exclusively as an ancillary device in the Ornate Class of Brown-on-Buff ware and its extended stylistic circle (Type 1: fig. 63). The design appears in Tumuli $P$ and III, once in the Destruction Level, and on a number of vessels from later contexts on the City Mound. It also occurs in other media (p. 170). A double or stacked version of the motif was used on the bowl K-III 13, and it is possible that a curious block-C design found on a few Brown-on-Buff vessels is related (p. 170). The basic motif had a similar secondary function in Greek Late Geometric pottery, and survived for long afterward in this capacity. What is for Coldstream the "single line meander" seems not to have been a widely used Geometric motif, since the more notable occurrences are in Boeotian Late Geometric and a particular Corinthian workshop. ${ }^{142}$ Within Anatolia, Type 1 meanders are not known from the Halys region, but to the south they are one of the more frequently occurring designs in Porsuk III. ${ }^{143}$ Here, they are often closed at top and/or bottom, as they never are at Gordion, and thus the pattern loses somewhat the continuous, unbroken effect. At the same time, the line of paint tends to be thicker than at Gordion, so that the design is not as delicate and clean. These are possibly the traits of potters who adopted a motif current in Phrygia, where the drafting and linear effect of the type are the same as in Greece. That these painters on the southeastern plateau had a direct connection with Phrygia is also suggested by a vessel at Porsuk that echoes the Wavy-Line style (p. 155).

In the Greek setting, the Type 1 meander is a simplified version of Coldstream's "orthodox meander," a

[^171]double-line, usually hatched variety that was a mainstay of Greek Geometric throughout its history. ${ }^{1+4}$ This richer type is not to be seen in its pure form in the Early Phrygian period at Gordion, but a unique doubled or mirror-image version appears with crosshatched filling on the neck of 640 from TB 3 (fig. 24). ${ }^{145}$ In the Greek world the design has a close analogue in the upright "meander trees" of Late Geometric in Rhodes, a region noted for odd meanders beginning late in the Middle Geometric period. ${ }^{146}$ The Rhodian pattern, essentially meander hooks to either side of a central stem, all hatched, is less complex than the motif on 640 , and it seems to be connected with a local goldworking design that runs horizontally. ${ }^{147}$ A Rhodian kantharos bears what might be a related motif, but not enough is preserved to determine the entire pattern. ${ }^{148}$ The meander on 640 probably reflects awareness of the Greek orthodox type, but it remains open whether the Phrygian pattern derived from something like the Rhodian version or was instead a hybridized, Anatolian adaptation, one that could, in turn, have inspired Dodecanesian artists. Close analogues for both the Phrygian meander on 640 and the Rhodian type appear in wooden inlay designs from Gordion; these are also based on simpler meander schemes, and are part of the more general Anatolian interest in highly intricate maze patterns, for which the Greek world has no real equivalent (infra). ${ }^{149}$

Easier to view as a straightforward derivation from Greece are the meander hooks (Type 2: fig. 63) on 712 (pl. 73), 882 (fig. 36, pl. 110), 927 (pl. 123), and 1027 (pl. 164). The motif is essentially a negative version of the orthodox type, with the emphasis given to the hooks or Ls instead of to the meander itself. In Greece, the design occurs no earlier than Attic and Argive Middle Geometric II, i.e., the first half of the eighth century, and by Late Geometric times it had spread to other regions, including East Greece. ${ }^{150}$ The meander hooks on 927 and 1027

[^172]have crosshatched filling, a trait they share with the version on 640 and certain other meander types at Cordion and elsewhere in Central Anatolia. The filler contrasts with the normal hatching used for Greek Ceometric meanders, and it is perhaps significant that an exception to the western convention is found in crosshatched forms of Late Geometric styles in East Greece, particularly the Rhodian school. ${ }^{151}$ Since Phrygians and their Anatolian contemporaries seldom used hatching for any painted designs, meanders could have been made crosshatched without external influence, yet the correspondence with East Greece might nonetheless indicate the immediate source. ${ }^{152}$ Beyond Gordion, the use of meander hooks extended as far as Boğazköy, where, in an early context of Büyükkale II, they occur with the added Anatolian twist of bichrome crosshatching. ${ }^{153}$

The two related meandroids on the spouted bowl 502 (pl. 29) from TB 1 constitute a different sort of hooked design in that they do not form a continuous, unbroken pattern either of themselves or of the surrounding void (Type 3A-B: fig. 63). One (3A) is essentially a crosshatched meander hook with two extra inward turns, while the other (3B) is a doubled version looking somewhat like an unfinished or disjointed orthodox meander. 1031 (pl. 165) bears a second instance of Type 3A. In the west, the simpler 3A variety on $\mathbf{5 0 2}$ and $\mathbf{1 0 3 1}$ occurs as part of what could be termed a "dead-end" meander on a late Middle Geometric cup from Rhodes, another pattern that belongs to the island's collection of unusual maze types. ${ }^{154}$ Related is the intricate scheme on a Geometric pyxis from Samos, with hatched hooks of several inward turns affixed to either side of a central beam. ${ }^{155}$ The design on the pyxis also recalls the double meandroid borne by 502, but a closer parallel comes with the components of a swastika motif carved on a wooden stand of Greek style from the Heraion in Samos. ${ }^{156}$ Coldstream and Schweitzer have noted the general affinities of such designs with Phrygian marquetry, and Coldstream, without the benefit of $T G E T$, went further to suggest Phrygian influence. ${ }^{157}$ Like the meander on $\mathbf{6 4 0}$ above, those on 502 fit within a broader spectrum of Phrygian, if not more generally Anatolian, meander designs. Both similar and identical forms occur locally in bronze engraving, wooden inlay, and weaving, but it is

[^173]notable that they belong to more complex meander schemes, for which parallels are lacking in the Early Phrygian painted repertory at Gordion. ${ }^{158}$ On the eastern plateau, types that either parallel or closely recall those on 502 occur at a number of sites. Most differ in having a greater number of inward turns, and some are labyrinthine in composition. At Boğazköy in particular they can occur in upright or diagonal complex schemes that parallel at least in spirit the engraved panels on the belt TumP $35 .{ }^{159}$ Just as such intricate patterns are absent in Early Phrygian painted pottery, so too is a related design, the hooked swastika, which is also alien to vase painting in the contemporary east. In woodworking, however, several variations on the design occur locally as a major component of inlaid screens, and on the eastern plateau hooked swastikas adorned at least two regal outfits of Warpalawas of Tuhana. ${ }^{160}$

The sieve jug K-III 11 bears the only painted example of a battlement meander in the local Early Phrygian repertory. ${ }^{161}$ If a connection exists with the Greek type known as early as Early Geometric, it is apparent only in basic outline, for the design on the jug is a remarkable combination of solid lozenges filling the meander and wiggly lines fringing the whole. ${ }^{162}$ In contrast with this single, bizarre appearance of the type at Gordion are occurrences in several varieties, including crosshatched, on the eastern plateau. ${ }^{163}$ A scheme that is peculiarly eastern consists of a large battlement whose upright bars are often narrower and filled differently (if at all) from the horizontals. In turn, the square intervals formed by

[^174]the design contain rectilinear motifs, usually panels. ${ }^{164}$ The treatment is no doubt related to a more general fondness in the east for enframed panel designs, an element of syntax that constitutes one of the major differences between Alişar IV and Phrygian painting. ${ }^{165}$ A seemingly Phrygian variety of battlement is attested in the Great Tumulus at Ankara and at Konya, but not at Gordion. Either solid-barred or crosshatched, it differs from others in having indented crenelations. ${ }^{166}$ An ancillary motif related to the battlement, the "gear pattern," is not found in Early Phrygian pottery, but occurs frequently at Boğazköy. ${ }^{167}$

## GARLANDS AND SEMICIRCLES

Other row motifs had limited use as primary decoration. Pendent garlands, although fairly frequent on interior rims and in other ancillary roles (e.g., $\mathbf{1 1 3}[\mathrm{pl}$. 37], 127 [pl. 89], 709-710 [pl. 73] 923 [pl. 122]), seldom occur as a prominent design in principal fields, and when they do they are accompanied by small circles in differing arrangements ( $\mathbf{6 1 5}$ [pl. 52], 637 [pl. 59], 966 [pl. 139]). The most elaborate is that on the neck of 637 , where slack garlands envelop clusters of concentric circles and form curvilinear triangles below, these crosshatched. The relief garlanding on TumP 76-77 might be connected with the painted motif (p. 121). On the eastern plateau, garlands are a common ancillary feature on flaring-rimmed bowls and rim interiors, but seem to have been as rare as a primary design as they are at Gordion. ${ }^{168}$

Related in appearance to garlands are the large concentric semicircles, compass-drawn, that occur on a few big vessels from the Terrace fill and Destruction Level (392 [pl. 163], $\mathbf{9 2 4}$ [pl. 122]). The semicircles are larger than any full concentric circles known in Early Phrygian painting, and thus they would have required special compasses. ${ }^{169}$ In the Halys region, concentric semicircles

[^175]seem in most cases to have been made by hand, and, although rare as a primary design on closed shapes, are about as popular as garlands on flaring-rimmed bowls. ${ }^{170}$ A dinos from the Great Tumulus in Ankara shows a different approach in having two narrow pendent rows one above the other; the scheme is paralleled on an unpublished bichrome specimen from Boğazköy. ${ }^{171}$ The pendent semicircles recall a feature of Greek Geometric pottery as seen in Euboea and the Cyclades from as early as the ninth century, and it is notable that vessels so decorated were familiar imports in Cilicia and the Levant, particularly at Tarsus. ${ }^{172}$ The Greek semicircles usually overlap or intersect one another as a standard part of the scheme, and if a connection is to be made, it is curious that Anatolian painters did not follow through with this detail. To the west of Phrygia, compass-drawn concentric semicircles were common in Lydian geometric painting of the eighth and seventh centuries. ${ }^{173}$ Their appearance on the rims of bowls is particularly reminiscent of the fashion seen in the Halys region, yet any link that might have existed somehow bypassed Gordion. On the other hand, the Lydian use of full circles on bowls does have parallels at Gordion, and may reflect interaction between the non-Greek west and Phrygia (p. 157). On the Ladders-and-Zigzags jugs 802-803 (fig. 28, pl. 91 ), a different use of semicircles is found in the large, hand-drawn sets occurring upright and singly below the handles (p. 161).

## RAYS

Decidedly Anatolian is the ray, a device very much at home on the eastern plateau, where it often occurs in connection with the Alişar IV' figural style. At Alişar itself, the design is already in evidence in IV'c, while at Boğazköy, Kültepe, and Maşat Hüyük rays are present from the earliest contexts of the Iron Age. ${ }^{17+}$ The motif makes a few appearances at Malatya, and is one of the more telling signs of the site's affinities with the eastern pla-

[^176]teau. ${ }^{175}$ From the Y'unus cemetery at Carchemish a single example is known, on a round-mouthed jug often thought to have been an import from Central Anatolia. ${ }^{176}$ Generally occurring as an unbroken, repetitious design within a zone, the rays usually show a standardized form, with solid triangular base, often right-angled, and a thin, usually needle-like "antenna" rising from the apex. Phrygian potters were surely aware of this favored motif of their neighbors through imports (e.g., 1089 [pl. 133]). The eastern fondness for the pattern, however, did not spread westward, for Phrygians tended to avoid rays and the tight, simple monotony that the device created. Rays of Alişar IV type are, in fact, found only once on an unequivocally Phrygian vessel, the Brown-on-Buff sieve jug 832 (pl. 97) from the Destruction Level, where they occur inconspicuously on the bridge of the spout, and nowhere else. The rays on the neck of the small bichrome-on-ground amphora 255 ( pl .8 ) from the Terrace fill are also of eastern type, and are a factor in considering this handmade vessel to be non-local (p. 165). Conversely, the absence of rays on 932 ( pl .126 ) is one of the points suggesting that the krater was not an import from the immediate Halys sphere, despite the painter's good understanding of the Alişar IV figural style (p. 162).

A few Phrygian painters used forms and schemes of rays that would no doubt have appeared eccentric to an Alişar IV artist. On the krater 931 (fig. 42, pl. 125) from TB 7, rays occur on the neck, as they often do in the east, and are even of an outline that has eastern parallels. ${ }^{177}$ Yet the bases are either hollow or crosshatched, while the wiggly lines between the rays are a detail unknown in the Halys region. Less playful are the tall, stalagmitic rays, solidly filled and often right-angled, that occur on a few vessels from the Destruction Level ( 930 [pl. 125], 1030 [pl. 165]). The type is a recurring feature on the enormous kraters belonging to the stylistic circle of Brown-onBuff painting ( $\mathbf{1 0 7 0}$ [pl. 129], $\mathbf{1 0 7 3}$ [pl. 130], $\mathbf{1 0 7 7}$ [pl. 131], $\mathbf{1 0 7 9}$ [pl. 132]). Unlike eastern rays, which almost always form an unbroken series (except on flaringrimmed bowls), these at Gordion are in groups in relatively low zones, and they alternate on all but perhaps the fragmentary 1030 with panels, the intervals having concentric circles or Maltese crosses. The basic consistency of the scheme suggests that 930 and 1030 were somehow connected with the series of large kraters (p. 169).

A rare motif, perhaps inspired by eastern rays, is the "hooked lambda," which occurs twice as a row device within the Polychrome House style (e.g., 1024 [pl. 161]) and again in a sloppy version on the large trefoil jug 751 (pl. 80), all from the Destruction Level. A partially

[^177]preserved motif from Alişar may be a variant with crosshatched base. ${ }^{178}$ Resemblances to a wave pattern in Early Protoattic painting are probably fortuitous. ${ }^{179}$

## RUNNING DOG

The simple pattern of "running dog" or interlocked Ss appears once in Early Phrygian pottery, on the neck of jug 721 (pl. 75) from the Destruction Level. Intended perhaps as a rough approximation of guilloche, the design occurs with some frequency at Alişar, and also in various Greek Geometric schools of the eighth century, including East Greek. ${ }^{180}$ The design on 721 was most likely a derivation from the Alişar IV branch of the koine.

## CROSSHATCHING

While serving as the commonest filling element for triangles and other designs, crosshatching stands on its own as one of the most popular motifs in Early Phrygian painting, and it is also found throughout the SyroAnatolian koine. Like checkerboard (infra), crosshatching was used as either a row or a panel design, and in the former role it is usually ancillary. Plain crosshatching, often tightly knit, is most frequent (Type 1: fig. 65), while a dotted version (Type 2: fig. 65) is far from rare. The latter, judging from its very few occurrences outside Gordion, appears to have been primarily a Phrygian type. ${ }^{181}$ Present by EPB IIb ( 23 [pl. 56]), panels of Type 1 crosshatching occur in steadily increasing numbers in EPB V (114 [pl. 37], 117 [pl. 56]) and the Terrace fill (296-297 [pl. 56], $\mathbf{3 1 6}$ [pl. 117], $\mathbf{3 9 1}$ [pl. 163]), and in the Destruction Level the motif is among the commonest of panel types (e.g., 619 [pl. 53], $\mathbf{6 3 8}$ [pl. 59], $\mathbf{7 8 9}$ [pl. 87], 929 [pl. 124], $\mathbf{9 3 0 - 9 3 1}$ [pl. 125], 967 [pl. 139]). The Polychrome House style, in evidence since the Terrace fill, used Type 1 crosshatching both as a standard panel design and in narrow, continuous zones, a characteristic feature of the mode (183-184, 384; p. 161). $\mathbf{3 2 0}$ (pl. 117) from the Terrace fill and K-III 7-8 bear other early examples of continuous plain crosshatching, which in the burned citadel is rare outside the Polychrome House style. As in the mode, these occurrences are for the most part in ancillary positions ( $\mathbf{6 2 3}$ [pl. 54], $\mathbf{7 8 5}[\mathrm{pl} .86], \mathbf{8 1 0}$ [pl. 92]). Exceptions are the large and somewhat un-

[^178]gainly zone of open netting around the belly of the dinos 972 (pl. 140) and that covering the shoulder of 643 (pl. 60 ), a kantharos krater or large round-mouthed jug. On the amphora 923 (pl. 122), the same device adorns the length of a strap handle, in a manner recalling Brown-onBuff practice (p. 170).

Type 2 or dotted crosshatching is a characteristic design of the Ornate Class of Brown-on-Buff ware and its extended circle, and in fact very few instances of the plain Type 1 variety are found in the mode. Within Brown-onBuff ware itself, Type 2 occurs in both continuous zones and panels, while in the related series of large kraters only panels occur (p. 170). Outside this circle, dotted crosshatching is rare and restricted to panels. It does, however, appear as early as EPB V on the neck of a bichrome jug ( $\mathbf{1 2 7}$ [pl. 89]), where the scheme of red dots within a dark netting is paralleled on another early vessel, the bichrome-on-ground sieve jug TumW 62, likely an import (p. 165). On the City Mound, there are no further occurrences until the Destruction Level (929 [pl. 124], 949 [fig. 48, pl. 136], 1034 [pl. 167]).

## CHECKERBOARD

Checkerboard occurs in a number of varieties in the Early Phrygian repertory, some elaborate, but by far the most popular is the basic design in which solid and blank squares alternate (Type 1: fig. 64). ${ }^{182}$ Like Type 1 crosshatching, Type 1 checkerboard is a universal geometric design, yet within the context of the koine its wide and abundant distribution across Anatolia and into Syria is no doubt significant. At Gordion, the basic and commonest version ( 1 A ) is joined by two others, an infrequent variety with singly dotted blanks (1B) and an elongated one (1C) that is found almost exclusively in Brown-on-Buff painting (p. 170). The last is not known outside Gordion, but Type 1B occurs at Alişar and on a likely Anatolian import in pre-Assyrian-period Tarsus. ${ }^{183}$ It also came to Gordion from somewhere to the east on the Alisar-style amphora 186 (pl. 113), an indication of how such designs could travel. Earlier than the Destruction Level, panels of Type 1 A checkerboard occur in both EPB V ( $\mathbf{1 7 3}$ [pl. 162]) and the Terrace fill (316 and $\mathbf{3 1 9}$ [pl. 117]), while $\mathbf{1 8 0}$ (pl. 38) from EPB VI bears an example of its frequent use in the Ladders-and-Zigzags style (p. 160). Beginning in early

[^179]tumuli, Type 1 A checkerboard is also a recurring motif in Brown-on-Buff painting, where it serves primarily as a panel design, but occasionally as a narrow row pattern or as a covering for handles (e.g., K-III 7 and 10, TumP 55-56). Its exceptional use as a blanketing for askoi had begun by the time of Tumulus P (p. 66, 134). Type 1 B or dotted checkerboard appears first on the City Mound on the imported 186 from EPB VII, and occurs also on the spouted jug K-III 3. In the Destruction Level, 1A checkerboard panels are present on over a dozen vessels (e.g., $\mathbf{6 2 0}$ [pl. 53], 710 [pl. 73], 714 [pl. 74], 789 [pl. 87], $\mathbf{8 0 2}$ [pl. 91 ], $\mathbf{8 5 8}$ [pl. 104], $\mathbf{8 8 1}$ [pl. 110], $\mathbf{9 4 9}$ [fig. 48 , pl. 136]); Type 1B, in contrast, is found only twice ( 879 [pl. 110], $\mathbf{9 2 7}$ [pl.123]). In bichrome wares, both varieties can have alternating black and red solid squares (722 [pl. 75], 927 [pl. 123]), as on the eastern plateau and at Tarsus, while 644 bears a closely latticed hybrid (fig. 25). ${ }^{184}$ Outside Brown-on-Buff ware, the only vessel with plain checkerboard as a continuous row pattern, in a large zone that recalls checkerboard askoi, is the ambiguous jug 809 (pl. 92). Likewise, the only use of Checkerboard 1 C outside Brown-on-Buff ware is on the roundmouthed jug 607 (pl. 51), a vessel with an unusual blend of motifs.

The only other checkerboard that appears with any frequency is Type 2, with alternating squares crosshatched (or occasionally latticed) instead of solid (fig. 64). In a few instances, the blanks are dotted, recalling Type 1B. Type 2 has a geographic distribution similar to that of Type 1A, and as at Gordion it seems generally to have been less popular; the dotted version occurs only at Malatya. ${ }^{185}$ The dinos 322 (pl. 135) from the Terrace fill bears the only definite example of Type 2 on the City Mound before the destruction period, and is one of two vessels on which the blanks are dotted, the other being the large round-mouthed jug from Tumulus G (P 49, pl. 61). The Fine-Line Buff 165 (pl. 158) from EPB V' probably also has a Checkerboard 2, as occurs in a large panel on another vessel of the same ware, 634 (pl. 58) from the Destruction Level. Other instances from the destruction period are relatively few ( $\mathbf{7 1 9}$ [pl. 74], 808 [fig. 29]). ${ }^{186}$ Of particular note is the type's only known appearance in a continuous zone ( 933 [pl. 197]), and its use in the filled squares in the large checkerboard frames set between the handles on the amphora 898 (fig. 37 , pl. 115), a likely import (pp. 82, 152). The painter of the

[^180]bichrome 644, just as he devised an intricate twist on a Type 1 checkerboard. likewise drew on Type 2 in his variation with crosshatched and stippled squares (fig. 25). Some other complex checkerboards from the Destruction Level also may have had Type 2 as the point of departure. The lower neck of the krater 930 (pl. 125) has a continuous zone in which squares of Checkerboard 1A and crosshatching alternate in staggered pairs with circlefilled blanks. The motif could also be interpreted as two rows of small spaced panels were it not for the basic checkerboard rhythm. The large round-mouthed jug 638 ( pl .59 ) bears a related pattern in a panel of checks and crosshatching, but these alternate with each other in the absence of intervening blanks. The design is made richer by having a double-line grid with solid intersections, and thus it also recalls Latticed Panel 2 (infra). The version on 638 is otherwise unknown in the Early Phrygian period, but it survived unchanged into later times, when it is a recurring device on the necks of large amphoras. ${ }^{187}$ The basket-weave checkerboard on the spout sherd 126 (pl. 87) from EPB $V$ is also singular in the early painted corpus, but it finds a close parallel in woodwork in Tumulus III. ${ }^{188}$

## OBLIQUE CHECKERBOARD

Oblique checkerboard, like the more common upright type, appears in two basic varieties, solid Type 1 and crosshatched Type 2 (fig. 64). Both are rare on the eastern plateau, but they seem to have been popular in the Northwest Geometric Pottery of the Balkans (p. 135). ${ }^{189}$ Type 1 has a single pre-destruction-period occurrence on the City Mound, on a Brown-on-Buff vessel from the relatively late M4 III ( 408 [pl. 158]), and in the Destruction Level it appears as a panel design on about half a dozen vessels ( $\mathbf{6 1 4}$ [pl. 52], 719 [pl. 74], 929 [pl. 124], $\mathbf{9 6 7}$ [pl. 139], $\mathbf{1 0 3 4}$ [pl. 167]). Type 2 occurs in the citadel no earlier than the Destruction Level ( 808 [fig. 29], $\mathbf{9 2 9}, \mathbf{9 8 3}$ [pl. 143], $\mathbf{1 0 3 0}$ [pl. 165]), although it is also present on the large round-mouthed jug from Tumulus G (P 49, pl. 61).

A few rare or unique designs are essentially oblique checkerboards, yet in treatment they recall multiplelozenge patterns. The bichrome and dotted panel motif on the trefoil jug 722 (pl. 75) could even have been intended as lozenges rather than an alternating check pattern. In the Brown-on-Buff circle, the design with stippled components occurring as a shoulder zone on the enormous 1074-1075 (pl. 131), and also the related

[^181]checkerboard motif on 1052 (pl. 159) and 1078 (pl. 132), are akin to Multiple-Lozenge Panel 1 (fig. 64; p. 171). 1063 (pl. 128), a large vessel within the same stylistic circle, bears an intricate design that is composed of rows of solid, stippled, and blank lozenges in alternation.

## LATTICING

Latticed panels, formed like upright checkerboard but with all squares treated the same, are generally infrequent, occurring on about a dozen Early Phrygian vessels. The simplest variety, Type 1 , is an open, singleline grid with all squares blank (fig. 64). On the City Mound, it is found once before the destruction period, on the Polychrome House dinos 183 (pl. 135) from EPB VII, and in the Destruction Level it occurs twice ( 616 [pl. 53], 709 [pl. 73]). Surely earlier, however, is a dotted variety on the Brown-on-Buff sieve jug TumW 61, in a small panel between handle and spout. Both versions, particularly the dotted one, occur at Alişar, and are, in fact, the only ones of Gordion's latticed types known elsewhere in Central Anatolia. ${ }^{190}$ Another open variety, with laddered grid and some squares randomly dotted, makes its sole appearance on the neck of the large round-mouthed jug from Tumulus G ( P 49 , pl. 61). Lattices with uniformly filled blocks also occur sporadically, and in almost all cases they have a double-line grid whose tiny square intersections contrast with the bars in being either solid or reserved. In this regard, the designs parallel various other double-line motifs, particularly certain multiple-lozenge patterns, to which they are the orthogonal counterparts (infra). A version with crosshatched squares (Type 2: fig. 64) appears on the bichrome 397 (pl. 167) from the Terrace fill, with the little intersecting squares in red, and the same design in monochrome was one of eleven panel types used on 929 (pl. 124) from Meg. 3. With latticed rather than crosshatched squares, the type occurs in elongated panels on either side of the ram jug TumP 58. Tumulus P also provides, on the Brown-on-Buff TumP 55-56, a solidbarred lattice panel with stippled, "coffered" squares (Type 3: fig. 64). Recurring on the enormous 1074 (pl. 131), the design is peculiar to the Brown-on-Buff circle (p. 171). K-III 6 has beneath the handle a latticed pattern of simple $X_{s}$. with a grid of dots-between-lines. In the Destruction Level, a panel on 714 (pl. 74) is similar, but with a single-line grid and the addition of dots in the fields around the tiny $X$ s. The same design occurs in stamped form at Midas City. ${ }^{191}$

[^182]
## LOZENGE PANELS

With almost a dozen and a half varieties, lozenge panels form the largest and most varied family of motifs in Early Phrygian painting, not including some lozengerow designs in a panel frame (p. 143). Painters used one of two standard approaches to formation: a multiple lozenge scheme much like oblique checkerboard but with all the diamonds the same, and a far more common method here called the "cross-and-lozenge." In the latter, a large $X$ and lozenge together subdivide a panel into four smaller whole lozenges and a pair of halflozenges or triangles on each of the four sides (fig. 63). Variety is imparted by the treatment of the subdivisions and also by the form, single- or double-line, of the two geometric elements that create the design. Although the cross-and-lozenge panel seems to have been particularly favored by Phrygian painters, it also belongs to the general koine, occurring on the eastern plateau, at Carchemish, and as far afield as Hama. ${ }^{192}$ Most of the specific varieties seen at Gordion are not attested beyond the site. In the Greek world, Coldstream's "lozenge-cross" is the same basic design, but it seems to have been rare. ${ }^{193}$

In pre-destruction contexts on the City Mound, cross-and-lozenge panels are attested in the Terrace fill ( $\mathbf{3 8 4}$ [pl. 161]) and in EPB VII ( $\mathbf{1 8 3}$ [pl. 135], $\mathbf{1 8 4}$ [pl. 89], $\mathbf{1 8 5}$ [pl. 112]). All but 185 are in the Polychrome House style and bear a variety of the motif (Type 1: fig. 63) that is as characteristic of that mode as the Type 1B triangle row (p. 161). The central stacked lozenges are crosshatched, while the flanking triangles are developed into laddered chevrons, sometimes compounded by smaller ones within. 184 also has a completely open form (Type 2: fig. 63) with cross and lozenge both laddered, a common feature used in many elements of the style. Type 2 occurs on a few other vessels painted in the Polychrome House style (e.g., 611 [pl. 52]) and, outside the mode, on 607 ( pl .51 ) and the large round-mouthed jug from Tumulus G (P 49, pl. 61 ), where the lozenges and triangles each contain a single dot. In the TB 8 Group, the round-mouthed jug 614 (pl. 52) has an open variety formed of unladdered parallel lines of varying thickness and not very carefully aligned. Within the Polychrome House style, Type 2 was perhaps the design on which a more elaborate version was based, Type 3 (fig. 63), with fillings of laddered $X_{s}$ and chevrons, as seen on $\mathbf{8 8 0}$ (pl. 110) from the Destruction Level.

The shoulder-handled amphora 185 (pl. 112) from EPB VII adds two more cross-and-lozenge varieties from pre-destruction contexts. One, not known to recur lo-
192. Hama 1I/3, 91, fig. 126. For the motif in wooden inlay at Gordion: TGET 63, fig. $33\{\mathrm{TumP}$ 151\}, two corner panels of the upper section and, with circled intersections, at lower center.
193. Coldstream, $G G P, 396$.
cally, consists of central lozenges crosshatched, as in Type 1 , and solidly filled flanking triangles. The design is essentially single-line in formation, with inscribed lozenges and lateral triangles whose legs are extended to create tiny diamonds (filled) at all the corners. This method of drafting, as opposed to a double-line approach, is like that often used on the eastern plateau for complex lozenge rows (p. 144, n. 137), and is one of the points favoring the vessel as an import (p. 182). ${ }^{194}$ Similarly formed, and carrying the same implication, is the unclear multiple-lozenge design on another shoulder amphora, 898 (fig. 37, pl. 115) from Meg. 4 (infra). The second cross-and-lozenge panel on 185 (Type 4: fig. 63) is morphologically akin to Type 1 in having stacked central lozenges filled with crosshatching, but the flanking triangles are single-line. This type also has parallels on the eastern plateau and in North Siria, and at Gordion it continues into the Destruction Level ( 616 [ pl . 53], 709-710 [pl. 73], 933 [fig. 43, pl. 127]). ${ }^{195}$ Two of the occurrences are in the TB 8 Group (709-710), while on 933 the motif is accompanied by silhouctte figural painting that recalls Alişar IV style. A version with single-line chevrons inside the lateral triangles occurs on 607 (pl. 51 ), 619 ( pl .53 ), and 643 ( pl .60 ), and is perhaps in imitation of the more refined Type 1 panel in the Polychrome House style. A variety of panel only a step removed from Type 4 is Type 5, with flanking triangles also crosshatched (fig. 63). This version does not appear locally until the Destruction Level (881-882 [fig. 36, pl. 110], $\mathbf{9 8 2}$ [pl. 143]) and, like Type 4, it is also found on the eastern plateau and at Carchemish. ${ }^{196}$ Another variety first occurring in the destruction period is Type 6 (fig. 63), a design in which all lozenges and marginal triangles are crosshatched ( $\mathbf{6 1 4}$ [pl. 52], 722 [pl. 75], 927 [pl. 123]). Unattested beyond Gordion, this close variety required double lines for the cross and lozenge so that the components would not be obscured, and in customary Phrygian fashion the tiny intersections were filled (in red on 927). The well-drafted multiple-lozenge panel on the Fine-Line Buff 634 (pl. 58), essentially the same design with elongated lozenges, is likewise not found elsewhere within the koine.

A few other cross-and-lozenge types from the Destruction Level have solidly filled rather than crosshatched components. That on the neck of 619 (pl. 53) is essentially a solid version of Type 4, whereas those on the flaring-rimmed bowl 484 (pl. 24) and its mate are oblique checkerboards drafted in the cross-and-lozenge method (Type 7: fig. 63). Although the bowls are likely to have been imports from the east, where the shape is common

[^183](p. 48), the variety of panel is not attested outside Gordion. A double-line version with the same pattern of filling occurs on 931 (fig. 42, pl. 125).

Multiple-lozenge panels are considerably rarer than cross-and-lozenge types, but their scarcity elsewhere suggests that they were largely a Phrygian specialty, and one not limited to vase painting. ${ }^{197}$ Painters working in the Brown-on-Buff circle made the most frequent use of multiple lozenges, with some preference for a single-line variety with inscribed, stippled diamonds (Type 1: fig. 64; p. 171). Variations on the pattern could result in oblique checkerboards (p. 150). A double-line version, with solid bars and reserved intersections, occurs as a dividing panel on the large 1065 (pl. 129). While not known to recur at Gordion, the variety has close analogues in Büyükkale II and Maşat III, possibly under Phrygian influence. ${ }^{198}$ An open variation, without the inner lozenges, occurs once within Brown-on-Buff, between handle and spout on the sieve jug 832 (pl. 97), and again on the large round-mouthed jug 638 from Meg. 3 (fig. 24, pl. 59). Of the few other types of multiplelozenge panel from the Destruction Level, that on 634 has already been noted as a morphological relative of Cross-and-Lozenge 6. The bichrome trefoil jug 722 ( pl . 75) bears a panel that is similarly executed but with stippled lozenges and red-filled intersections. Such stippled elements are rare outside the Brown-on-Buff circle, and may reflect the influence of the style. The shoulder amphora 898 from Meg. 4 (fig. 37) has a partially preserved multiple-lozenge design that was formed by a method of inscribing common on the eastern plateau (p. 144, n. 137). The possibility that the vessel was an import is strengthened by close analogues in the east for the general kind of lozenge pattern that it seems to bear. ${ }^{199}$

## X-PANELS

X-panels occur in a considerable number of varieties at Gordion, but most are found no more than once or twice. ${ }^{200}$ Formed by either single or double lines, the motif is varied by the treatment of both the $X$ itself and the four resulting triangles. $X$-panels also occur in other branches of the koine, but the varieties represented outside Gordion are relatively few. On the eastern plateau, the motif often appears on or above handles (cf. 186 [pl. 113], $\mathbf{1 0 8 9}$ [pl. 133]), and is an alternative to butterfly panels in these positions (infra). At Gordion, however,

[^184]the uses are less localized, and the instances of Xs on handles are few. Certain types also find parallels in Northwest Geometric painting (p. 135).
EPB V has a single example of an X-panel on the Brown-on-Buff 114 (pl. 37), a form composed of dots-between-lines with a double concentric circle in each triangular field. The last feature also occurs with a solid-barred type both locally and on the eastern plateau (infra, 930, 1030), but the form of of the X itself appears again only on 710 (pl.73) in the TB 8 Group, where a circle marks the central intersection. From the Terrace fill come two examples of the commonest type of $X$-panel in Early Phrygian painting, a solid-barred variety with thick single lines or double lines filled between ( $315[\mathrm{pl}$. 117], 385 [pl. 158]). The latter version occurs as a repeated handle device on $\mathbf{3 8 5}$ and may reflect influence from the eastern plateau, where Xs and handles often go together. 385 has, in fact, a particularly close parallel for the overall scheme at Alissar. ${ }^{201}$ The only other instance at Gordion of an X-panel adorning a handle is on the petaled round-mouthed jug from Tumulus G (P 45, pl. 61 ), where both the specific variety-an open, doubleline $X$ with solid flanking triangles-and the placement between bolster and rim have their sole exact parallels in the east. ${ }^{202}$ The vessel has other close parallels in the east, including the $X$ of a different variety on the base, and was most likely an import from Alişar IV territory (pp. 120-121 and infra).
The solid-barred $X$ appears in a large, awkward form in a regular panel on the neck of the krater 315 (pl. 117) from the Terrace fill. Although not above a handle, the design nonetheless recalls the use of the same type on Alişar IV kraters. ${ }^{203}$ A heavier form, of double lines with carefully reserved intersection, occurs over a handle on the imported Alişar-style amphora 186 (pl. 113) from EPB VII. This version and the totally solid one on 315 are each known on a few vessels from the Destruction Level (709 [pl. 73], 789 [pl. 87], 930 [pl. 125], 1030 [pl. $165])$. Those with reserved centers $(\mathbf{9 3 0}, \mathbf{1 0 3 0})$ also have a set of concentric circles in each field, a detail that helps in viewing the two vessels as stylistically related works ( p . 148). ${ }^{204}$ On the sieve jug TumW 62, a double-line $X$ with red filling and reserved intersection bears sloppily executed dotted chevrons in the triangular fields, a feature that brings the panel close to being a cross-and-lozenge. This approach to the design of an $X$-panel is unique at Gordion, and thus may aid in identifying the vessel as an import (p. 165). In a different use of the simple $X$, one

[^185]without external parallels, a single-line form is repeated in tangent panels as a kind of ancillary row device. The scheme occurs with singly dotted fields on a sherd from EPB VI, on 250 (pl. 162) from beneath the floor of Meg. 5 (i.e., pre-Terrace), and on 247 (pl. 166) from the PN 3 Trench; in the Destruction Level it is an occasional feature of the Ladders-and-Zigzags style (802 and 804 [fig. 29, pl. 91]). Analogous are the stacked, simple $\mathrm{Xs}_{\mathrm{s}}$ on the small fluted jar 949 (fig. $48, \mathrm{pl} .136$ ) and those occurring in what are technically lattice patterns on 714 (pl. 74) and K-III 6 (p. 150).

The presumably imported amphora 185 (pl. 112) from EPB VII bears the only other X-panel from a predestruction context, a double-line, crosshatched variety with reserved center. The type occurs again, in twinpanel format, on the jar 982 (pl. 143) from the Destruction Level, and as the base decoration on another presumed import, the petaled round-mouthed jug from Tumulus $G$ ( $\mathbf{P} 45, \mathrm{pl} .61$ ). The latter has an exact parallel on a petaled vessel from Alişar. ${ }^{205}$

In the Destruction Level, several types of X-panel occur once or twice. On 621 (pl.54), a double-line, open variety with solid center and thick outlining was used repeatedly as the sole panel type on the neck; a plainer version occurs at both Alişar and Carchemish. ${ }^{206}$ Panels with crosshatched triangular fields appear on 721 (pl. $75), 882$ (fig. 36, pl. 110), and 929 (pl. 124), while the last also has a variation in which only the lateral triangles are so filled. That on 721, the only one with a double-line $X$, looks to an exact parallel on an incised wooden box from CC 3 (W 119), a container that generally reflects the influence of vase painting, while the same manner of drafting and filling appears in Northwest Geometric. ${ }^{207}$ On the eastern plateau, the identical form is not attested, but a related pattern with solid-barred $X$ occurs at Boğazköy, while the Yunus cemetery at Carchemish has parallels for the bow-tie version on 929. ${ }^{208}$ Such forms are predictable variations on the X -panel, but a few eccentric plays on the motif also occur. The painter of the jar 967 (pl. 139) drafted a large, multi-line $X$ whose legs are alternately filled and reserved bars; in turn, the large central intersection of the lines becomes a checkerboard lozenge. Carchemish provides a plain, unfilled analogue of fewer lines, and, closer to home, a painter represented at Alişar also had the idea of a checkerboard center. ${ }^{209}$ Apparently sui generis are the totally checkerboard $X$ on 711 (pl. 73) and the quilt-like pattern of checkerboard

[^186]and crosshatching in the center and end panels on both sides of the shoulder on 930 (pl. 125).

The Alişar-style amphora 1089 (pl. 133) from a postdestruction context bears a type of X-panel that, while common on the eastern plateau, is not known to have been executed by Early Phrygian painters. The artist used a large, single-line $X$ intersected at quarter and three-quarters height by horizontal lines; filling then created a central hourglass and triangles in each of the corners. On 1089 the panel is very likely set above a handle, the regular position for the design on amphoras in the east. ${ }^{210}$

Akin to the X -panel is the butterfly, a solid design with inward-curving sides (fig. 65). On the eastern plateau, and from as early as Alişar IVc, the motif is common on amphora handles and in the field on the neck directly above..$^{211}$ On the City Mound, butterfly panels appear no earlier than EPB VII, on the likely import 185 (pl. 112), while K-III 8 bears the only other instances of the motif before the Destruction Level. The occurrences are generally sporadic, and sometimes in positions or attitudes that are not attested at Alişar IV centers. As a handle motif paralleling the Halys fashion they occur on the kraters 930 and 932 (pls. 125-126) from the burned citadel. The latter is a close adherent to the Alişar IV style, and is consistent with eastern practice in the use of butterflies (p. 162). 930, on the other hand, seems to be allied with the series of enormous painted kraters belonging to the stylistic circle of Brown-on-Buff ware. That a Phrygian was here experimenting with an eastern pattern might be suggested by the position of the butterflies on their sides, but the same placement occurs two out of three times on the presumably imported shoulder amphora 185. On the last, moreover, the panels are disassociated from handles, appearing within a zone on the body. A similar use is found in the Destruction Level, on the neck of the TB 8 Group trefoil jug 710 (pl. 73) and in one of the 12 narrow fields on the fluted jar 949 (pl. 136). The painter of the Brown-on-Buff sieve jug K-III 8 seems to have been aware of the design's eastern affiliation with handles, but lowered the butterflies to a field below the base of the grip, where two appear side by side. The last three vessels show a further departure from eastern practice in the use of the motif on small shapes.

## SEMICIRCLE PANELS

Panels incorporating semicircles occur on about half a dozen vessels, with the Terrace fill providing the only

[^187]instance ( 386 [pl. 162]) before the destruction period. Although rare at Gordion, such designs are elsewhere even rarer, and thus appear to have been primarily Phrygian. Their use as both a wooden inlay and an open-work motif on the screen TumP 151 helps to broaden the local base, as do the cut relief patterns on the spouts of sieve jugs from Tumuli $P$ and III (p. 122). 386 bears what would be a crosshatched panel were it not for the intrusion of a pair of small reserved semicircles, compass-drawn, at either side. The version (Type 1: fig. 65) recurs without change on the neck of the kantharos krater 882 (fig. 36, pl. 110) from TB 1 and again in this position on 642 (pl. 60), the same shape or a large round-mouthed jug. 882 has as its other preserved neck motif a kind of reverse version of Type 1 , with crosshatched semicircles flanking a narrow, vertical strip containing the same filling. 642 bears two more varieties on the neck. One is structured similarly to Type 1 but with concentric half-circles flanking a blank field. In the other (Type 2: fig. 65), a large double-line half-circle was attached to each of the four sides, that rising from the base solid and the others filled between with dots. The last type also occurs on the shoulder of a third vessel in the same shape category, 641 (pl. 60) from TB 1, and it is the painted analogue for the inlaid panels on TumP 151. At Alişar, a hand-drawn version is generally similar. ${ }^{212}$ The concentration of semicircle panels on examples of the large round-mouthed jug-kantharos krater shape is perhaps more than coincidence, and, despite the absence of other stylistic affinities, may point to a common source for 641-642 and 882 .

A final variety (Type 3: fig. 65) consists of hand-drawn concentric semicircles or arcs with reserved cores flanking a crosshatched center. On the lidded krater 929 (pl. 124) from Meg. 3, it is the premiere design, with 11 instances comprising a quarter of the panels. The only other occurrence of the type at Gordion is as one of four large panels on the shoulder of the jug 808 (fig. 29) from CC 3. Since the other two panel types on the jug, Latticing 2 and Oblique Checkerboard 9 , also occur on 929, a common source might be indicated. A krater from the l'unus cemetery at Carchemish has a visually related design of tall panels of crosshatched hourglasses (essentially an $X$ form) with flanking concentric arcs. ${ }^{213}$

## HERRINGBONE

By EPB $\backslash$ ', the simple pattern of herringbone appears in narrow vertical strips on 134 (pl. 115), where it also serves as an ancillary zone. The latter use is not known to have been repeated in the Early Phrygian sequence, but the vertical arrangement recurs in the Destruction Level ( $\mathbf{7 1 1}$ [pl. 73], 806 [pl. 91 ], 929 [pl. 124], 934 [pl. 127], 967

[^188][pl. 139]), while herringbone is also one of the motifs in a multi-strip panel on 634 (pl. 58). Panels of horizontal herringbone (fig. 65) appear on the neck of the krater 930 ( pl .125 ); they and the solid rays accompanying them suggest a link with the series of enormous painted kraters belonging to the Brown-on-Buff circle, on which the same combination occurs (p. 169). That herringbone had a wider base in Phrygian art is indicated by its use as an incised design on both pottery (p.115) and wood. ${ }^{214}$ The design is also one that Phrygians shared with their neighbors on the eastern plateau, where again both upright and horizontal versions occur. ${ }^{215}$ The relation of the pattern to the isolated motif of the "feather tree" (fig. 65 ) is best seen on a dinoid amphora from the earliest Iron Age level at Kültepe, where the solitary form shares a zone with a wide panel of vertical herringbone. ${ }^{216}$ The feather tree also appears at Alişar, and is here generally reminiscent of the vegetal forms accompanying silhouette animals. ${ }^{217}$ The few occurrences of feather trees in the Early Phrygian sequence seem to be linked to the east. The krater 931 (fig. 42, pl. 125), with a single instance of the motif, reflects Alişar IV practice in its use of rays (pp. 147-148). On 1032 (pl. 165), feather trees flank a composite triangle whose close affinities with the eastern plateau suggest that the vessel was imported (p. 141).

## CIRCULAR DESIGNS

Circular motifs other than plain single and concentric circles are rare in painting. On the shoulder of the small trefoil jug 719 (pl. 74) from CC 2 are two prominent, compass-drawn rosettes of six petals each, with crosshatching in the interstices. Their closest and only real parallels in painting are the rosettes used as panel fillers on the enormous kraters 1065 and 1067 (pl. 129), and as a device beneath the handle on 1069 (fig. 46, pl. 130) from the same series. Similar compass flowers also occur in bronze engraving and woodworking. That at one end of the belt TumP 36 has a particularly close match in the painted type on the large kraters. ${ }^{218}$ A hand-drawn rosette with spined leaves and a stippled center appears as a rare instance of base decoration on the groundcoated 1034 (pl. 167); it is the only other such floral type known in Early Phrygian painting. A laddered circle serves as a large panel-spacer on the shoulder of $\mathbf{8 8 2}$ (fig. 36 ), and occurs in smaller size on the spout of K-III 4 and the neck of the ram jug TumP 58. On the eastern plateau,

[^189]this ring-like type is about as frequent as at Gordion. ${ }^{219}$ Common in those parts, however, is a wagon-wheel device that occurs in Early Phrygian pottery only as a stamped pattern ( 1014 [fig. 60]). ${ }^{220}$

## MISCELLANEOUS DESIGNS

A few motifs are largely or totally peculiar to certain painting styles. Ladders-and-zigzags panels (fig. 65), for example, are not found outside that mode (p. 160), while
the Maltese cross (fig. 65) occurs only in the Brown-onBuff circle, as a filling element (p. 171). Almost exclusive to the latter style are chevron rows, either solid-barred or dotted (pp. 170-171), yet a simple, single-line version does appear a few times as a handle device outside that stylistic circle ( 406 [pl. 158], 607 [pl. 51]). A Brown-onBuff painter at least once executed solidly filled panels as a shoulder motif (K-III 12), and others in his circle used closely set vertical lines or bars as a zonal pattern (K-HII 6 and 9).

## Painting Styles

## THE WAVY-LINE STYLE

## EPB Ilb: 29

EPB IV: 60

## Terrace fill: 294, $\mathbf{3 0 0}$

Destruction Level: 499-501, 598-607, 632, 705-708, 778-780, 790, 797-800, 862, 968-969

The Pure Wavy-Line style, with a decorative scheme consisting entirely of multiple zones of the motif (e.g., $\mathbf{5 9 8}$ [pl. 50$]$ ), is the commonest and simplest of painting modes in Early Phrygian pottery, and at the same time it is the most non-conforming in terms of the SyroAnatolian koine. Related schemes incorporate certain other motifs (e.g., concentric circles, triangles) while still using the namesake design generously, and are considered collectively as Partial Wavy-Line. The Wavy-Line style has a remote precedent in the so-called Wellenlinienkeramik of the early second millennium, but the similarities probably indicate no more than that such simple manners of painting can recur independently across time. ${ }^{221}$ Wavy-Line is the earliest of the distinctive Phrygian styles to emerge at Gordion, appearing in the Partial mode with concentric circles in EPB IIb ( 29 [pl. 89]), and in the Pure form by EPB IV ( 60 [pl. 135]). A few occurrences in EPB V and the Terrace fill ( 294 [pl. 38], 300 [pl. 81]) serve as a bridge to the Destruction Level, where practically every unit caught in the fire yielded at least one example of the Pure style or a related mode. Plainness of design might explain the absence of the style in early tumuli at Gordion, although other, more elaborate modes are also not represented in tombs. In Ankara, however, an example of the Partial style was among the furnishings of the generally contemporary Great Tumu-

[^190]lus. ${ }^{222}$ Although grounds exist for suggesting production links within the contemporary assemblage of the Destruction Level, the fact that both Pure Wavy-Line and the version with concentric circles begin relatively early points to a tradition continuing over a number of generations.

That Wavy-Line was essentially a Phrygian approach to decoration is indicated by distribution. The version with concentric circles recurs in Ankara and at Midas City, and the latter site may also have the Pure form. ${ }^{223}$ Some evidence suggests that the style had a circle of influence or associations extending to other parts of West Anatolia. A dinoid amphora from an Iron Age burial in the vicinity of Elmalı recalls the Phrygian mode. ${ }^{224}$ In Troy VIII, which begins $c a .750$, there is no firm evidence for a similar manner of painting, but certain types of patterned incision are at least in the general spirit of Phrygian Wavy-Line. ${ }^{2+3}$ To the east, the style is notably absent in the contemporary centers of the Halys, Tabal, and North Syria, except for a sipping vessel from Porsuk III, thought on good grounds by Dupré to reflect Phrygian influence. ${ }^{226}$

## THE PURE STYLE

At Gordion, the shape most favored for the Pure style was the round-mouthed jug, seen earliest in the Terrace

[^191]fill (294 [pl. 38]) and with no fewer than twenty examples from the Destruction Level (598-606 [pls. 50-51], 632 [fig. $2^{4}$, pl. 58 ]). Each of the TB units yielded at least one, while Meg. 3 had a set of four, here represented by 598. Host examples of the shape in Wavy-Line are characterized by squat profiles that might indicate a formal model peculiar to a single source or community of potters (598-601, 605-606; p. 56). Various other types of jug, primarily trefoil-mouthed, are together the second most frequent carriers of the style ( $\mathbf{3 0 0}$ [pl. 81], 705-706 [pl. 72], 778-779 [pl. 85], 790 [pl. 87], 797-798 [pl. 90]). The only other standard closed shape to bear Pure Wavy-Line was the dinos, in EPB IV ( 60 ) and the Destruction Level ( 968 [pl. 140]), while the only bowl of normal type known to bear the Pure style is 499 (pl. 28) from Meg. 3. At least one ceramic oddity was so painted, the bowl 862 (fig. 33, pl. 105) with built-in, perforated cover.

The commonest scheme of the Pure style, known no earlier than the Terrace fill (294), consists of single, spaced zones beginning on belly or lower shoulder, or, in the case of the bowl 499, on the interior in concentric arrangement. The set of four round-mouthed jugs from Meg. 3 (598) and 599 from TB 3 have four such zones, executed in relatively fine line and placed identically at belly, shoulder, transition to neck, and rim. Given their close similarities in form, it seems possible that all were the products of a single potter, working perhaps within a larger circle. The carinated 602, one of a formal pair, differs in having spacer lines between the four zones, while its twin does not and is thus like 598-599 in scheme Despite their differing contour, the two jugs may belong to the same general line of production as those with regular squat forms (p. 56). The round-mouthed jug 603 from TB 7 has a similar four-zone scheme, but the painted line is thicker than that on 598-599 and the shape is different. 604 from the same unit, with only three painted zones, is close in form to 603, and may be a production mate. Both, in turn, recall the fragmentary 294 from the Terrace fill.

The scheme of spaced, single zones also occurs on other shapes. The wide-mouthed trefoil jugs 778-779 have six and four zones respectively, while their forebear 300 from the Terrace fill may have had a similar arrangement. 779 also shares certain aspects of form with such round-mouthed jugs as $\mathbf{5 9 8 - 5 9 9}$, and may have come from the same source. The dinos 968 is generally similar in painted scheme but larger in format, with seven evenly spaced zones covering over half the body. The ambiguous jug 797 reflects this basic approach, but has a series of straight lines at the belly and, more unusual, a row of sloppy dashes at the base of the neck. The influence of this simple, rhythmic scheme might be seen on the trefoil jug 717 (pl. 74), with five narrow zones of oblique lines set in W'ary-Line manner. The sherd 1026 (pl. 164) is similar in its succession of narrow lozenge zones. The decorative logic of these vessels, with careful alternation
of painted strips and voids, finds good analogy with the Brown-on-Buff sieve jugs 832 (pl. 97), TumW 61, and K-III 10, vessels that may represent an early expression of the Ornate Class (pp. 168, 173).
In a different approach to design, painters in the Pure style left no intervals but blanketed the vessel with stacked, i.e., tangent, wavy-line zones from the belly up. Seen already on the dinos 60 from EPB IV, the scheme recurs in the Destruction Level on the round-mouthed jug 601 and the ambiguous jug 798. 601, one of two so painted within the shape, is of the same squat type as 598-599, and perhaps comes from the same general source. Also in this formal group is $\mathbf{6 0 0}$, one of three round-mouthed jugs that combine stacked and spaced zones, the latter of which have intermediate spacer lines as on 602. The trefoil jugs 705-706 have a similar mix, and are themselves enough alike in shape to suggest a common source.
At variance with all these uses of single wavy lines within a zone is the grouping of three to four wavy lines as a decorative unit. ${ }^{227}$ The round-mouthed jugs 605-606 from TB 1 both bear such groupings, the former without enclosing lines for the wavy ones. The jugs are also very close in shape and could well represent a subgroup of production within the larger circle of 598-601 (p. 56). Three more of their kind from an unrecorded context of the Destruction Level are now fused together in a cluster as a result of the great fire ( $\mathrm{P} 4682, \mathrm{pl} .51$ ). These also may have come from TB 1 , since no other unit is known to have contained multiple wavy-line decoration. In addition to 605-606, the multiple scheme also occurs on the large round-mouthed jug 632 and the odd jug 790. Whether one or both are related by source to 605-606 is unclear. 632 has no formal traits corresponding to its smaller Wavy-Line counterparts. 390 (pl. 163) from the Terrace fill, preserving a zone with two wavy lines on the shoulder, may anticipate the scheme found in the Destruction Level.

## PARTIAL WAVY-LINE

For those schemes that combine wavy-line zones in quantity with other motifs, primarily concentric circles or triangles, the grounds are insufficient for suggesting production links with Pure Wavy-Line. This is particularly clear for round-mouthed jugs, since the very few known in the Partial style ( 607 [pl. 51], 633 [pl. 58]) have little or no formal resemblance to the commonest variety painted in the Pure style. At the same time, it cannot be demonstrated that Pure Wavy-Line was indeed the source of inspiration, since in the EPB sequence the version with concentric circles (29 [pl. 89]) occurs earlier than the

[^192]Pure style (60). A degree of interplay between the two approaches to Wavy-Line decoration is indicated by a similar range of painted shapes and by the fact that the Partial modes have much the same arrangements of spaced and stacked zones of wavy lines as the Pure style. Moreover, sometimes the zones cover major portions of the surface, in a manner recalling Pure Wavy-Line (e.g., 607, 707 [pl. 72], 780 [pl. 85]).

The commonest expression of Partial Wavy-Line, and the only one definitely attested earlier than the Destruction Level, is that with concentric circles. On the probable jug 29 from EPB IIb, rows of circles alternate with wavy-line zones in a scheme that recurs unchanged in the Destruction Level on the dinos 969 (pl. 140) from TB 7. This vessel, in turn, is the closest parallel at Gordion for the Wavy-Line dinos in the Great Tumulus at Ankara. ${ }^{228}$ Another dinos from the Destruction Level ( 970 [pl. 140]) probably shows influence from the style in the substitution of series of straight lines for wavy ones in a similar alternating pattern. ${ }^{229}$ The jugs 707 and 799 (pl. 90) bear single rows of concentric circles on the shoulders. On the former, the circles are heavily engulfed by zones of single and double wavy lines, very much in the spirit of the Pure style. The combination also occurs on the two-handled, spouted bowl 500 (fig. 19, pl. 28) from Meg. 4, with stacked wavy lines at the top both inside and out. Those on the interior form an annular border for the pattern of radiating circles on the floor. Another two-handled bowl, 501 (pl. 28) from Meg. 12, has similar zones of multiple wavy lines, while on the floor is a cross of circles. The fluted sipping bowl 860 (fig. 33, pl. 105) bears another variation, with circles on the floor and sets of both wavy and straight lines complementing the relief. The bowl may be by the same hand as the jar 949, a vessel painted in an entirely different manner (p. 75). A sherd of a bowl from the Terrace fill ( $\mathbf{2 9 0}$ [pl. 36]) preserves a cluster of concentric circles on the floor, and these were perhaps combined with wavy lines. At the very least, 290 offers a precedent for the use of circles inside a bowl. As noted above, the Partial Wavy-Line style with concentric circles occurs again in a Phrygian setting at Midas City. ${ }^{230}$ Farther west, the concentric circles on the floors of Sardian bowls belonging to the eighth or seventh century recall 290 and $\mathbf{5 0 0 - 5 0 1}$, but semicircles instead of wavy lines are the accompanying motif ( p .147 ). ${ }^{231}$ A connection with Lydia may exist, and point to a general West Anatolian fashion of adorning the floors of bowls with circles. Bowls in Brown-on-Buff ware show a similar

[^193]interest in interiors (pp. 168-169), one not shared by painters in the Alişar IV sphere.

The combination of triangles and wavy lines, sometimes with concentric circles as well, is the only other recurring scheme of Partial Wavy-Line. The triangles are of standard Type 1A, and the placement on the upper shoulder follows one of the commonest practices in Phrygian painting (p. 140). On the large wide-mouthed trefoil jug 780 (pl. 85; one of two) and the somewhat smaller ambiguous jug $800(\mathrm{pl} .90$ ) the programs are very similar, with double- and triple-stacked zones of wary lines below the triangles, in an area where other painters might have placed a prominent zone of panels (e.g., 802-804 [pl. 91]). The triangles themselves are of the same form, with single outline, and it is possible that the jugs were the products of a single source. The small trefoil jug 708 (pl. 72) appears to have a scaled-down version of the same scheme, with the addition of tiny concentric circles accenting the pinches. Concentric circles occur prominently in a row at mid-neck on the large round-mouthed jug 633 (pl. 58), and along with the shoulder triangles they give the accompanying zones of wavy lines the effect of being almost ancillary, as they usually are in local painting (e.g., 638 [fig. 24, pl. 59]). The choice of dominant motifs is, however, consistent with Partial Wavy-Line, and probably reflects a merger of the two principal approaches.

An entirely different and singular scheme is that on the round-mouthed jug 607 (pl. 51) from TB 8. Wavy lines in stacked zones cover most of the body in a manner reminiscent of the Pure style, and they even appear on the foot and interior rim. The neck, however, bears a series of panel designs, as is common in this field outside the Wavy-Line style.

## THE CHEVRON-TRIANGLE STYLE

## Destruction Level: 415, 608-609, 964

Tumulus III: K-III 4-5
Tumulus P: TumP 54
Like Wavy-Line in both simplicity and individuality, the Chevron-Triangle style is so named because of the particular type of triangle (2A-B: fig. 62) used here but, significantly, nowhere else within the local painted repertory. Type 2A consists of three to five closely spaced lines per leg, with the intersections at the apex creating a crosshatched lozenge; 2B differs in having doubleladdered legs. Both occur in roughly equal numbers. Set on shoulders in accordance with conventional practice. the namesake motif is unaccompanied by other primary designs, even on vessels with necks large enough to allow a major zone. Instead, and counter to normal decorative logic, the neck is usually left blank, its void emphasized,
as is the zone of triangles, by standing and pendent wavy lincs (e.g., $608[\mathrm{pl} .51]$ ).
The basic scheme is not attested on the City Mound before the Destruction Level, and even there it occurs on no more than about half a dozen vessels. The corpus is supplemented, however, by the examples from Tumuli III and P. While probably a sign that the tombs are relatively close in date to the destruction period, the presence of Chevron-Triangle in these extramural contexts also implies that the style was not totally new when the disaster occurred. ${ }^{232}$

A dinos from the Great Tumulus in Ankara bears the closest correspondent in Anatolia to the style at Gordion. ${ }^{233}$ Although the motif itself occurs sporadically in the Alişar IV region, the Chevron-Triangle style seems not to have existed there. ${ }^{234}$ Beyond Anatolia, however, parallels are to be found in the so-called Rectilinear Style of Marmariani in northern Thessaly. This was a general mode of painting that arose during the ninth century, at a time when Attic influence in the north was at an ebb, thus leaving local potters much to their own devices in formulating a successor to Protogeometric. ${ }^{235}$ Two vessels, a neck amphora and a hydria, bear chevrontriangles of Type 2A on the shoulder. ${ }^{236}$ The amphora has other primary motifs on the neck, in narrow vertical strips characteristic of the style, and is almost solidly glazed below the shoulder. The hydria, on the other hand, is largely unglazed, and, by having as its only primary motif the chevron-triangles on the shoulder, it is strongly reminiscent of the Phrygian style in general openness and simplicity. Not a stock item of Greek repertories to the south, the motif itself appears to have been local or generally northern. ${ }^{237}$ A similar approach is seen on a kantharos in local, i.e., non-Protogeometric, style from the necropolis at Vergina. ${ }^{238}$ The primary motif is a multi-line zigzag instead of triangles, but in the use of small zigzags to frame an empty neck the vessel shows a general scheme that recalls the decorative logic of Phrygian Chevron-Triangle. The correspondence, like that of checkerboard askoi (p. 134), might be related to the Phrygians' European ties, as appears to be the case with pottery stamping (p. 124). A stamp similar to the painted chevron-triangle motif was used on vessels from the Destruction Level $(1005,1019)$, while the largest

[^194]example of the local style is a handmade spouted jug ( $\mathbf{4 1 5}$ [fig. 5, pl. 9]) of a type with possible Balkan affinities (pp. 28, 65).

The principal carrier of the Chevron-Triangle style at Gordion is the round-mouthed jug, with four known from three TB units (e.g., 608-609 [pl. 51]) and a fifth from Tumulus $P$ (TumP 54). The formal qualities of the jugs from the Destruction Level, when combined with their systematic decorative scheme, suggest a common source (p. 56). The Type 3 sieve jugs K-III 4-5 are the only other shape on which the style occurs more than once, and they too, despite some formal disparities, may be production mates. The jar 964 (pl. 139) and the large handmade jug 415 add single examples to the limited range of forms, while in Ankara the dinos from the Great Tumulus is the only example of the shape known to have been so decorated.
The round-mouthed jugs 608-609 and their mates present what might be considered the essence of the style, with blank necks and general openness of painted design. The only real difference among them is in the type of triangle, for both 2A and 2B occur within the group. The sieve jugs K-III 4-5 follow much the same scheme, and are alike in their use of 2B triangles; on both, supplementary motifs were added to the spouts. A slight variation occurs on the round-mouthed jug TumP 54 , where the void of the neck is somewhat relieved by an additional series of straight and wavy lines just above midway. The jug is also considerably larger than its counterparts in the Destruction Level, and does not share certain formal features with them. Seemingly related to this variation is the scheme on the small round-mouthed jug 610 (pl. 51) from CC 3. Although regular crosshatched triangles appear on the shoulder, the neck bears groups of straight and wavy lines in a manner much like that of TumP 54.
The jar 964 bears a sloppy rendition of ChevronTriangle, and may be one painter's attempt to emulate on a fairly large scale the neatly executed style on smaller vessels. The overall effect is not the same, however, because the neck is too low to afford a contrasting blank field. Another example of this painter's handiwork, but not in the Chevron-Triangle mode, may appear on the similarly formed jar 965 (pl. 139; p. 95). The most divergent expression of Chevron-Triangle occurs on the handmade spouted jug 415. Two zones of Type 2A triangles occupy the broad shoulder, these bordered and interspersed with little rows of pendent garlands, close substitutes for the regular wavy lines. The same ancillary design fills the entire neck and spout in a series of closely set rows, thereby breaking the customary pattern of an empty field above the triangles.

## FINE-LINE BUFF WARE

## EPB V: 113, 165-166

EPB VI: 182
M4 I: 406
Destruction Level: 634-636, 801
Fine-Line Buff pottery comprises a small yet highly distinctive group that is characterized initially by fabric. The clay, often free of readily visible mica, is invariably fine and well fired throughout to very pale tones of yellow or brown. Because of a somewhat spongy consistency, the surfaces are finely pitted, and it is perhaps for this same reason that, while remarkably smooth and even from polishing, the vessels show little or no luster. The paints, applied after polishing, are usually very dark or dusky red (e.g., $\mathbf{1 6 5}$ [color pl. I \{2\}]). The group also exhibits a generally individual approach to decoration, but it is not as regimented as, for example, Wavy-Line or Chevron-Triangle. Designs are consistently executed in a fine, precise line, and have a clean, crisp appearance. Interest in minute detail is also evident: in the careful linear edging of zones, panels, and motifs; in the tiny checkerboards sometimes created from the intersection of multi-line zonal borders; and in tightly crosshatched fillings. These distinctive qualities, particularly the fabric, are unusual among Gordion's painted wares, and may point to an outside supplier working in another quarter of Phrygia, although nothing resembling Fine-Line Buff is known outside the Early Phrygian capital.

First occurring in EPB V, Fine-Line Buff is one of the few typological links between this context and the Destruction Level that is not shared by the Terrace fill (p. 15). Since so much of the evidence is from pre-destruction contexts and fragmentary, the range of shapes for the ware is not well known. 113 (pl. 37) from EPB V has the profile of a small round-mouthed jug, and possibly belongs to the same vessel as 406 (pl. 158) from M4 I. The shape occurs in large format with $\mathbf{6 3 4}(\mathrm{pl} .58)$ from TB 2, taken to be an exemplary specimen of the style. TB 2 also yielded 635 (pl. 59), a fragmentary vessel that appears to have come from the same source as 634 , although it could be a kantharos krater instead of a one-handled jug; 636 from the same hall may belong to the shoulder of 635. 165 (pl. 158) from EPB V, most likely representing one of these two related shapes, seems to have been decorated in a manner similar to that of 634 (infra). 166 (pl. 158), another example from EPB V, also may belong to this general shape category, as might 182 (pl. 158) from EPB VI. The ambiguous jug 801 (pl. 90) from CC 2 is the only sure instance in the ware of a narrow-necked shape.

634 and 801, the most informative examples for the treatment of painted design, show that there was some stylistic flexibility within the ware. Both vessels have large shoulder zones that dip to mid-belly and contain sizable
panels. The two also bear narrow, vertical strips set side by side to form panels, a practice that seems to have been an occasional characteristic of the style (cf. 165, infra). On 801 the painter made exclusive use of such panels on both shoulder and neck, and limited himself to lozenge strips either crosshatched or solid. These were set in a considered scheme of a pair each within each of the shoulder panels, with no variation in their order from one panel to the next. On the neck, the order was reversed, a solid beside two crosshatched, again in monotonous repetition. 634, on the other hand, combines vertical strip panels with other panel designs on the shoulder, while the neck bears a large zone of complex lozenges. The last design has a close analogue in drafting and filling in the Type 3 triangle pattern occupying the same position on the fragmentary 635. The strip panels on 634 differ from those on 801 in having a wide variety of motifs. A large gap beside the handle reduces the impact of one of the panels; but the other, with all eight strips preserved (and only one motif repeated), well demonstrates the characteristic richness and precision of Fine-Line Buff (pl. 58). The sherd 165 from EPB V, insofar as it is preserved, appears to have come from a similar mold: to one side of the handle, in a zone beginning at about mid-belly, is part of a vertical strip of solid lozenges that could belong to a panel like those on 634; to the other side of the handle is what appears to be the edge of a large Type 2 checkerboard, a motif again found on 634. The two vessels also have much the same zonal borders of neat, multiple lines and broad, solid bands across the handles, the latter feature recurring on 635. The interpretation of these close similarities is difficult, especially since the interval of absolute time separating EPB V and the Destruction Level cannot be gauged with any accuracy (p. 195). Were 634 already old in its context, which was apparently a storage facility (pp. $5-6$ ), it could have been a contemporary of 165; yet it is also possible that the vocabulary and syntax of at least one particular variety of Fine-Line Buff had some duration within a single unit or community of potters.

Different approaches to Fine-Line Buff design are represented by fragmentary material whose overall programs are unknown. If the two sherds from EPB \I composing 182 are in fact from the same vessel, they convey a scheme with a belly zone of panels, one of which was Type 1A checkerboard, and a shoulder of Type 1A triangles. Such a program is common for certain shapes in the painted repertory, e.g., dinoi, and that on 182 may have been similar in appearance to schemes in the Ladders-and-Zigzags and Polychrome House styles (infra). Type 1 A shoulder triangles also appear in Fine-Line Buff in EPB V, where a sherd cited under $\mathbf{1 6 6}$ could be from the same vessel as $\mathbf{1 8 2}$, and in the Destruction Level (636). If the last is from the same vessel as 635 found with it, the conventional Phrygian shoulder pattern would have been combined with a neck design much like that on

634 in basic concept, and thus indicate another degree of flexibility within the style. Representing another approach, the small round-mouthed jug 113 from EPB $V$ has a neatly drafted Zigzag 3 on the neck, while around the top interior is a fringe of double garlands, a continuous pattern seen again in this position on the Fine-Line Buff 406 from M4 I. This rim-handle sherd, possibly from the same vessel as 113 , shows another aspect of the delicacy of the style in the tiny zones of hatching and herringbone on the shaft.

## THE LADDERS-AND-ZIGZAGS STYLE

## EPB V: 116, 168

EPB VI: 180
PN 3: see under 928
Terrace fill: $\mathbf{2 9 6}$
Destruction Level: 802-804, 928
Grave under Tumulus D: P 31, P 32 (pl. 141)
So named because of a distinctive type of panel that is universal within and peculiar to the style (fig. 65), Ladders-and-Zigzags is represented by about a dozen vessels, a quantity similar to that of the Polychrome House style (infra). Where discernible, vessels in the mode usually have tan surfaces with micaceous slips or mica films, but overall design rather than fabric is the principal distinguishing factor (e.g., 116, 296 [color pl. II $[2-3]]]$. The namesake motif, a panel of upright ladders and zigzag zones in alternation, appears with other panels in large zones on belly, lower shoulder, or neck, while the shoulder proper ordinarily bears Type 1 triangles (e.g., 802-804 [figs. 28-29, pl. 91], P 31 [pl. 141]). In the paneled zones, the range of other motifs is limited: large-blocked checkerboards of Type 1A are common, as are lozenge-row panels containing two or three horizontal strips of simple, solid diamonds (e.g., 802-804, 928 [fig. 41, pl. 125]). Peculiar to Ladders-andZigzags is an odd and seldom-used panel of wavy-line zones set horizontally (e.g., 168 [pl. 161], 802).

In pre-destruction contexts, the Ladders-and-Zigzags style is among the best represented of distinctive painted modes, with examples from EPB V-VI, the Terrace fill, and PN 3.296 (pl. 56) from the Terrace fill may belong to the same vessel as 116 (pl. 56) from EPB V. The Destruction Level contributes five, all from TB and CC service units. The absence of the style in the Palace Area is matched by its exclusion from the known wealthy tombs, yet the burial that underlay Tumulus D contained nearly twin dinoi painted in the mode (P 31-32, pl. 141). Since there are no indications that the style continued beyond the time of the destruction, the grave can probably be assigned to the Early Phrygian period. Like several
other styles of painting at Gordion, Ladders-and-Zigzags is not known elsewhere.
The occurrences of the style in EPB V and the Terrace fill on large round-mouthed jugs or kantharos kraters $(116,296)$ and also on a small round-mouthed jug from EPB VI ( $\mathbf{1 8 0}$ [pl. 38]) have no parallels in the Destruction Level. Here, the principal shape is a medium-sized and full-bodied jug with narrow neck, the last in all four instances broken away (e.g., 802-804). Similarities in scale, form, and design point to the strong likelihood of a single source for all (p. 67). The knobbed handle trails on 802-803 are closely paralleled on the Ladders-andZigzags krater 928 from TB 1, the only other shape to bear the style in the Destruction Level, and may indicate a production link. A piecemeal krater from PN 3 sets a precedent for the use of the shape with the style. 317 (pl. 117) from the Terrace fill may also represent the style and the shape, as possibly do $318-319$ (pl. 117; infra). The dinoi from under Tumulus D (pl. 141) seem in form and decoration to be as much production mates as the narrow-necked jugs from the Destruction Level. The ambiguous 168 from EPB $V$ may also be a dinos; the estimated maximum diameter of 35 cm . agrees with larger examples of the shape and is considerably greater than those of the narrow-necked jugs.
Although Ladders-and-Zigzags is for the most part a regular, formulaic style, some anomalies do occur. Thus the round-mouthed jug 180 from EPB VI has crosshatched panels and lozenges on the shoulder instead of triangles, while the former motif appears in the same field on 296 from the Terrace fill. Since the use of such shoulder patterns is otherwise unattested, it could represent either an early stage in the development of the style or an individual approach. 168 from EPB V, contextually earlier than 180, is already painted in the standard scheme. The krater 928 accommodated three paneled zones instead of the regular single one, at belly and one above another on the tall neck. The fragmentary krater from PN 3 shows the same scheme, and is like 928 in having shoulder triangles with dangling chevrons between them. Scars on the vessel from PN 3 suggest that it may also have had the same kind of knobbed handle trails as on 928 and the jugs 802-803. Counter to these similarities, however, the contextually earlier krater bears a distinctive type of ledged rim that is not attested as late as the Destruction Level (p. 104). The type of triangle row found on both vessels, related to the 1B triangles of the Polychrome House style (infra), is otherwise known only on 317 from the Terrace fill, a large vessel whose wide neck suggests that it belongs to a krater. The micaceous slip on 317, recalling those favored within the style as a whole, strengthens the possibility of a third Ladders-andZigzags krater. A fourth might be represented by 318319 from the same general context, although the namesake motif again does not occur, nor is enough preserved
to indicate whether the triangle row on the shoulder of 318 had dangling chevrons. Yet if 318-319 are from the same open-mouthed amphora, the scheme of three paneled zones would be like that on 928 and the krater from PN 3. Furthermore, on the belly of 318 is part of a panel with horizontal lozenges and zigzag that recalls a common, albeit not exclusive, motif of the style. The narrow-necked jugs $802-803$ both have the additional feature of hand-drawn concentric semicircles below the handle trails, each set composing essentially a further motif within the paneled zone. On 803, the painter developed the arcs into a curving set of ladders and zigzags, thus complementing the basic panel type that was apparently for him, as now, the sine qua non of the style.

Ladders-and-Zigzags shares certain general similarities of approach with the Polychrome House style, and may have been part of the latter's background.

## THE POLYCHROME HOUSE STYLE

## EPB VII: 183-184

## Terrace fill: 384 <br> Destruction Level: 611, 879-880, 971, 1024

With about a dozen examples known, including two from the namesake building, the Polychrome House style is numerically as well represented in the Early Phrygian sequence as the Ladders-and-Zigzags mode, although its contextual distribution is not as wide. Since most examples are from the Destruction Level and have undergone color alteration, it is impossible to judge the full extent to which the style may have been characterized by fabric. Nonetheless, micaceous slips are common, as are paints that have been thickly applied, often achieving a relieflike quality, over polished surfaces. Polychrome House vessels also tend to be neatly and precisely decorated, and thus they recall in spirit Fine-Line Buff ware. The primary distinguishing aspect, however, is the use of certain recurring motifs in a fairly standardized decorative scheme. A shoulder zone of Type 1B triangles was an essential part of the formula, occurring on every specimen with the possible exception of the fragmentary 384, where the upper portion of the triangle row is missing. Combined with the triangles in the great majority of cases is a large paneled zone on belly or neck, depending on the shape (e.g., $\mathbf{1 8 3}$ [pl. 135], $\mathbf{8 8 0}$ [pl. 110]). Recurring panel designs in this second major field are cross-andlozenges of Types 1-3 (fig. 63), all related through the common use of laddered components. Type 1 is almost universal and is also peculiar to the style, although a few painters working outside the mode used a modified Type 4 panel that resembles Type 1 (p. 151). Other large panel designs are few and relatively simple, the only one
occurring with any frequency being plain, Type 1 crosshatching. Narrow vertical panels of simple lozenges sometimes alternate with the broader ones, and all types frequently have laddered borders, as though to complement the internal components of the standard lozenge panels (e.g., $\mathbf{1 8 3}$ [pl. 135], $\mathbf{1 8 4}$ [pl. 89], $\mathbf{6 1 1}[\mathrm{pl} .52], \mathbf{8 8 0}$ [pl. 110]). Narrow horizontal strips of simple Type 1 lozenges or crosshatching often serve as ancillary spacers or borders for the larger zones (e.g., 183, 384 [pl. 161], 880, 971 [pl. 140], 1024 [pl. 161]); on a few examples the two motifs convert to the other or to a different pattern in an idiosyncratic manner that is otherwise unattested $(183,384)$.

The style first appears in the Terrace fill, followed by the two examples from the EPB VII unit in the Polychrome House. Six other vessels are from sure sources in the Destruction Level, Meg. 3 for half of them, while 971 was found in a layer of burning that seems to have been contemporary (p. 6). Two others are from areas of disturbance over TB 8 , very likely their original home (see under 878 and 971). Nothing resembling the Polychrome House style is known beyond Gordion.

The range of shapes that bear the style is limited, dinoi and kantharos kraters being most frequent. Of the former there are three definite examples, the earliest of which is from the Polychrome House itself (183, 971); yet the ambiguous 384 from the Terrace fill, the earliest example of the style, probably also represents the shape, to judge by dimensions. Kantharos kraters are represented by as many sure specimens as dinoi and occur no earlier than the Destruction Level (879-880). A few ambiguous vessels could be either kantharos kraters or round-mouthed jugs (see 880 ), and it is noteworthy that at least three specimens of the same style and general form, one- or two-handled, should have been in Meg. 3. A kantharos krater from over TB 8 has close formal ties with both monochrome and differently painted examples (p. 79). $\mathbf{1 8 4}$ from the Polychrome House and $\mathbf{1 0 2 4}$ from TB 2 are probably narrow-necked jugs of medium size. The small round-mouthed jug 611 from TB 2 is the only other attested shape, and it also represents the sole appearance of the style at this scale. However, a few possible variants or derivatives of the mode incorporate other shapes, including small ones (infra).

Polychrome House has some general affinities with the less careful Ladders-and Zigzags style, and appears to have been the formulation of a similar decorative mentality. Of particular note are the parallel organizing of triangle rows and paneled zones, and, in the latter fields, repertories of motifs that include distinctive, recurring panel types. A design that might reveal a connection is the triangle row with dangling chevrons on Ladders-andZigzags kraters (e.g., 928 [fig. 41]), a form that can hardly be independent of the recurring Type $1 B$ triangles found in Polychrome House. The two modes also occur on a
similar range of shapes. The fact that Ladders-andZigzags appears in both EPB $V$ and the Terrace fill, whereas Polychrome House is attested only in the latter, may indicate its priority and possible influence on the more refined style. In any event, Polychrome House appears fully evolved in its namesake context, if not already with $\mathbf{3 8 4}$ from the Terrace fill, and like certain other styles it continues essentially unchanged into the destruction period. In the burned citadel, however, the formula is modified on a few vessels that substitute a row of hooked lambdas for the regular paneled zone (e.g., 1024); other aspects of the style, such as $1 B$ triangles and the use of narrow ancillary strips, remain the same on these examples. The large Type 3 sieve jug 833 (pl. 98) from C.C: 3 is possibly an offshoot of the style. Although not as neatly executed as Polychrome House, and with 1A instead of 1B triangles on the shoulder, the vessel seems to reflect the pure mode in the large belly zone of Cross-and-Lozenge 1 panels with laddered borders.

Certain vessels bearing 1B triangles but not other decorative traits of Polychrome House may somehow be related to the mode. The small trefoil jug 713 (pl. 73) from TB 3, which could hardly have carried a second paneled zone, might represent a simplified version of the style for smaller, low-necked shapes. Along different lines, the large round-mouthed jug 640 (fig. 24, pl. 60), from the same unit as $\mathbf{7 1 3}$, bears an elaborate meander design on the tall neck, yet Type 1B shoulder triangles coupled with solid lozenge rows to enclose the neck design may point to a variant scheme not far removed in idea from the hooked lambdas on 1024. A compelling case for a variation is presented by the Type 1 sieve jug from Tumulus X (P 3136, fig. 30 and pl. 100), a vessel with close formal parallels in the Destruction Level (pp. 69-70). Like 640, the jug bears a continuous row motif instead of a paneled zone on the neck, a unique complex lozenge row of laddered lines with laddered $X_{s}$ within the lozenges. The pattern is strongly reminiscent of the laddered cross-and-lozenge panels in Polychrome House, especially Type 3 (fig. 63), and is perhaps a derivative from these stock designs of the style.

## THE GROUP OF 932

## PN 3: 241

Destruction Level: 807, 870-871, 932
Four vessels from the Destruction Level coming from as many separate units are closely related by the type and combination of specific row motifs: the krater 932 (pl. 126) with silhouette animals of Alişar IV type, the ambiguous jug 807 (pl. 91), and the stands $\mathbf{8 7 0 - 8 7 1}$ (pl. 108). Insofar as it is preserved, the amphora 241 (pl. 116) from the earlier PN 3 parallels the group. Common to all is a complex lozenge row (fig. 62) that is otherwise not
attested at Gordion (p. 143). Examples from the Destruction Level also have Zigzag 2 (fig. 62), another pattern found locally only within the group. The concentric circles used in this motif and those elsewhere on the vessels are always double. The krater and the stands are also linked by a somewhat sloppy dot row as spacer between zones, and it is probably significant that the same feature occurs twice on the example from PN 3. A Zigzag 4 of many lines appears on both the krater 932 and the jug 807, and in fact the only primary geometric design that is not repeated at least once within the group is the Type 3 triangle row on one side of 932 . The indications are strong that all are the products of a single source, one with a limited yet distinctive repertory of abstract designs.

The most remarkable feature of the group is the appearance on the krater 932 of silhouette animals rendered in the distinctive style of Alişar IV. On either side of the shoulder the scene is the same: a stag and a goat rearing upon and eating from a centrally planted tree, while seconds of their kinds watch. The animals show all the general characteristics of the Alişar figural style, including the familiar standing-against-the-wind pose, and they are also engaged in the pursuit of nourishment, an activity that occupies some of their eastern cousins. ${ }^{239}$ The concentric circles in the fields around them are no less a trait of Alişar IV practice. Although the basic form of 932 is fairly standard for kraters in both east and west, the cylindrical bolsters on the handles are a common feature of the shape only in Alişar IV territory (p. 110); the ends of the bolsters are even painted with $X s$ in characteristic eastern manner, while the handle shafts have butterfly panels that recall a typical practice of Alişar IV painters (p. 153). ${ }^{240}$

Despite these close conformities to the Alişar IV style, certain aspects of 932 separate the vessel from the pure eastern idiom. Most notable is the absence of rays on the neck, an omission shared by the other members of the group. Although not universal on the eastern plateau, the motif is extremely common there, and is, in fact, as much a characteristic of general Alişar IV style as the silhouette animals that it frequently accompanies (pp. 147-148). The lack of rays on 932 could in itself perhaps be overlooked on the grounds that not all Alişar vessels with animals have them, ${ }^{241}$ yet further anomalies arise with the designs that occur instead on 932 and its associates. The combination of particular lozenge and zigzag rows appearing with prominent spacer dots on the krater and the stands $870-871$ is a formulaic scheme without close parallel in the known repertories of eastern

[^195]centers, although Zigzags 2 and 4 are motifs of the koine (pp. 142-143). The complex lozenge row finds general parallels in the east, but it is perhaps significant that these are drafted in a different manner (p. 144, n. 137). A minor and perhaps specious distinction is the fact that most Alişar kraters with animals are three- or fourhandled, whereas 932 has only a pair.

These discrepancies appear to constitute sufficient grounds for doubting that 932 and, by extension, the small group to which it belongs came to Gordion from a center that was fully within the Alişar IV sphere. A local origin, in or around Gordion, also seems to be unlikely. The recurring geometric motifs are otherwise not attested at the site, and, furthermore, their scheme is almost as unusual at Gordion as it is on the eastern plateau. ${ }^{242}$ The painter of 932 was to be sure well versed in the Alişar IV figural style. His work reflects nothing of a derivative or imitative nature, but is instead as unhesitating and graceful of line, and also as rehearsed in conventional minutiae, as the products of his Alişar IV contemporaries. This in itself might suggest a source that was closer than Gordion to the Halys centers, in an area perhaps affected by the Alişar figural style while being distant enough to maintain individuality. Were Ankara, or the region between that Phrygian center and the Halys, better known in the Early Phrygian period, the Group of $\mathbf{9 3 2}$ might not appear so problematical.

## ALIŞAR IV POTTERY AT GORDION

## EPB V: 169-171

EPB VII: 186

## Post-destruction contexts: 1082-1089

That Alişar IV pottery was being imported to Gordion in Early Phrygian times is most clearly attested by the large, fragmentary amphora 186 (pl. 113, color pl. III \{1\}) from EPB VII, among the very latest of predestruction contexts (p. 13). 186 is not of the familiar krateroid variety seen at eastern centers, but is instead a long and steep-shouldered form with low-set handles and apparently a narrow neck (fig. 34). It is, in other words, not far removed in general form from the amphora 185 (pl. 112), its contextual mate and a vessel thought to be an import (pp. 82, 151). ${ }^{243}$ Aside from its silhouette animals and a fabric that appears to be alien, 186 has other features that may help to mark it as a foreign product. The painted ridges and bands used to separate zones, while common in this and other styles on

[^196]the eastern plateau, are conspicuously absent in Early Phrygian painting (p. 117, n. 14). Similarly, the use of two different compasses for the concentric circles (double and quadruple) is otherwise not attested by any vessel in the local sequence.

Contextually earlier than 186 are a few fragments of small fine-ware vessels showing parts of silhouette animals or Alişar IV-type vegetation from EPB V', but too little is preserved of each to indicate either shape or painted program (169-171 [pl. 161]). Nonetheless, the synchronistic value of the fragments is considerable, for they allow EPB V to be brought within the general temporal sphere of the eastern figural style, which at Alişar itself is present from the beginning of the Iron Age sequence (IVc), just as $\mathbf{1 8 6}$ and $\mathbf{9 3 2}$ place the later phases of the Early Phrygian citadel within the same time frame. The small birds on the krater 933 (fig. 43, pl. 127) from the front steps of TB 8 are the only other silhouette figures from pre-Kimmerian contexts. Although the vessel is somewhat odd in painted design (p. 140), there are no compelling reasons to assume that it was imported from the Halys region. Instead, the birds might reflect familiarity with the Alişar IV style.

Several large vessels of Alişar IV style, seemingly imported and all probably amphoras, come from later contexts on the City Mound (pl. 133). How long the Alişar IV style survived in the east after the destruction of Gordion is uncertain, but it is possible that most, if not all, of these contextually later examples are residual from the Early Phrygian period ${ }^{2+4} \mathbf{1 0 8 2}$ preserves most of a goat, including the tips of the back-swept horns, and the tail on $\mathbf{1 0 8 3}$ probably belongs to the same kind of animal. 1084 shows a goat rearing onto a tree, much in the manner of the animals on 932 , while $\mathbf{1 0 8 6}$ from the fill of Tumulus H preserves part of a similar plant. The animals on $\mathbf{1 0 8 5}$ and 1087-1088 are probably deer; the latter two have red filling, a feature that at Alişar seems to occur no earlier than $\mathrm{IVb} .{ }^{245}$ Another bichrome specimen, the openmouthed amphora 1089, preserves no animals, but it does have rays of eastern type on the upper neck and a variety of $X$-panel that is at home, usually over handles, on the eastern plateau (p. 152). That at least one other Early Phrygian center besides Gordion was receiving pottery of Alişar IV' type is demonstrated bv Alâeddin Tepe in Konya. ${ }^{246}$

Several non-figural vessels from the Early Phrygian

[^197]period bear traits suggesting that they too were imported from the eastern plateau. Flaring-rimmed bowls (pl. 24), a common feature at Halys centers, occur in limited numbers from EPB V through the Destruction Level (100, 281, 484-485; p. 48). The shoulder-handled amphora 185 found with 186 in EPB VII may have come from the east, as perhaps did a third painted example of the shape, 898 (fig. 37, pl. 115) from the Destruction Level (p. 82). Two other amphoras, the handmade 255 (pl. 8) from the Terrace fill and 925 (pl. 122) from TB 4, suggest through bichrome painted technique and decoration a similar origin (infra). The petaled round-mouthed jug from Tumulus G (P 45, pl. 61), although having parallels in Brown-on-Buff ware, is with little doubt an eastern import (pp. 120-121), as is possibly the necked jar P 141 from the same tomb, a vessel with a prominent, thick ridge, similar to those on 186, around the belly ( p . 117, n. 14). The fragmentary 1032 (pl. 165) from the Destruction Level bears a combination of motifs that closely ally the vessel with the Halys region (p. 141).

## THE TB 8 GROUP

## Destruction Level: 612-615, 709-710, 805-806, 934935

About a dozen vessels from the Destruction Level are taken to compose not so much a style as an interrelated series in which certain preferred or customary features were used without a rigid, conventional scheme. The group is named for the TB unit that housed eight of its members, including seven in a loose concentration in the W' quarter of the main room. The principal shapes are round-mouthed jugs (612-615 [pl. 52]) and mediumsized, narrow-necked jugs, at least some with trefoil mouths (709-710 [pl. 73], 805-806 [pl. 91]). Two kraters ( 934 - 935 (fig. 44, pl. 127]) that seem to belong to the group represent production at a larger scale. Because of the fire, it is impossible to know whether the vessels originally had a similar coloration. Two, however, are clearly different from the others in being ground-coated (e.g., 806). The smaller shapes are almost invariably of medium-fine clay, while unpolished paints seem to have been the rule. Each of the two principal shapes bears some indications of formal unity that support the stylistic associations (pp. 56-61). Beyond the absence of a closely unified program of design, the vessels of the TB 8 Group do not show any specific primary motifs that recur throughout. For each shape, however, the basic decorative format is the same, and a few seemingly significant tendencies in decoration are also evident. Roundmouthed jugs bear a single primary zone each on shoulder and neck, the latter usually above a narrow strip of clay ground or ancillary filling. The narrownecked jugs show two major zones of roughly equal height on the shoulder, the lower often triangles, and,
where necks are preserved, a third one of panels (709710). On the kraters, primary zones appear on shoulder and upper neck, while the mid- and lower neck bears lines and circles. The kinds of motifs within a given zone can vary considerably from one vessel to the next (cf., e.g., the shoulder zones on $612-615$ ), and, with the exception of panels on the narrow necks of jugs, no strict set of rules dictated that a particular zone should have row motifs or panels (e.g., 612-613 and 615 vs. 614; 709 vs. $\mathbf{7 1 0}$ ). Especially notable are the extraordinary combination of triangles and panels on the shoulder of 614 and the otherwise unparalleled use of three different types of triangles on the shoulder of 613 .
These disparities notwithstanding, two distinctive features of design, if not together, occur one or the other on every example. The first and more significant is the exclusive use of single compass-drawn circles, which stand out as a clear anomaly in a painted repertory otherwise characterized by concentric forms. Used in a variety of ways, single circles appear on all but two of the smaller vessels (612, 614-615, 709-710 [in the X-panels], 805806). Their presence as a row design on the neck of the krater 934, and perhaps on the fragmentary 935, draws at least one of the large vessels into the group. The second key feature is the consistent use of outlines for triangles. So ordinary a detail as the single outlines on 613, 709, and 806 is, in fact, generally uncommon in Early Phrygian painting, while the multiple outlines (between two and five in number) found on 615 (and a close mate), 805, and the kraters 934-935 occur nowhere outside the group. These two traits, especially the single circle, come closest to being trademarks, but there are also other features that, while not peculiar to the group, are nonetheless used with at least fair regularity. Included are large zigzags ( $612-613,710,806$ ), Cross-andLozenge Panel 4 (709-710, 805), interior rim decoration of garlands or lines (613-615, 709-710), and wholly or partially banded handles ( $\mathbf{6 1 2 - 6 1 5}, \mathbf{7 0 9 - 7 1 0}$ ). Also notable are the garland rows used in similar manner on the upper exterior necks of such disparate shapes as 615 and 934. A motif of limited occurrence, the laddered zigzag on 612 and a second specimen, is not encountered locally outside the group.
Whether the TB 8 Group was produced in the immediate vicinity of Gordion cannot as yet be determined. The mixing of triangle types on 613 is particularly unusual in normal decorative schemes, as is to a lesser degree the combination of triangles and panels on the shoulder of 614. Yet the feature that stands out most is the regular use of single circles. While possibly no more than the idiosyncrasy of a local source, the type might also point to an area not accustomed to the multiple compass.

# BICHROME PAINTING ON CLAY GROUND 

## Terrace fill: $\mathbf{2 5 5}$

Destruction Level: 925
Tumulus W: TumW 62
Bichrome painting directly on a clay surface instead of on a ground-coat is attested by only a few vessels in the Early Phrygian sequence. Included are some examples of Brown-on-Buff ware to be considered separately (pp. 165-166, 172). Three other vessels are not of that fine painted fabric: the small amphora 255 (pl. 8) from the Terrace fill, the wide-necked amphora 925 (pl. 122) from the Destruction Level, and the sieve jug TumW 62. On all, the paints are matte over polished or smoothed surfaces, but in other respects the amphoras are considerably different from the sieve jug.

The amphoras are of coarse clay, and seem to have made sparing use of red paint, but because of the fire it is impossible to know whether 925 was of the same tan coloration as 255. Beyond their unusual forms and the fact that 255 is handmade (p. 28), both amphoras have what would be in Early Phrygian painting an odd and otherwise undocumented approach to decoration. On the shoulder of 255-a zone that normally bears either triangles, a continuous row motif, or panels-occur spaced pairs of vertical lines flanked by tangent wavy ones. At the same level on $\mathbf{9 2 5}$ is a related design consisting of oblique straight with pendent wavy lines. For these simple, basically ancillary motifs in primary positions, close if not exact parallels exist on the eastern plateau, Alişar IV in particular providing a number of good examples. ${ }^{947}$ The handmade 255 bears a further link with the east in the plain rays of essentially Alişar IV type on the neck (p. 148). Beyond the stylistic affinities with the eastern plateau, the very technique of bichrome-on-ground painting seems to have been at least an occasional practice in these parts, occurring as an alternative to the more regular use of ground-coats. At Alişar, the technique may not have begun until IVb, while at Bogazköy it appears in the earliest contexts of the Iron Age. ${ }^{248}$ That the amphoras 255 and 925 originated somewhere to the east of Gordion, perhaps as far distant as the Halys bend, seems likely.

TumW 62 is a fine-ware vessel whose clear, pale yellow

[^198]surface is almost as unusual at Gordion as the shape and decoration. The vessel also shows a relatively lavish application of red paint, an aspect that sets it apart not only from 255 and 925 but also from bichrome painting as otherwise known for the period (p. 38). The use of the lighter color in broad stripes for the zone and panel borders, these in turn overpainted with dark brown lines, even suggests that red might not have been viewed as the secondary color. Other factors also set the jug apart. The arrangement of the spout, while highly practical, is unparalleled on Early Phrygian sieve jugs,, ${ }^{4+9}$ while the $X$-panel is unique in composition (p. 152). Similarly, the narrow isosceles triangles with wavy lines used to adjust panels to the curvature of the shoulder could be no more than a painter's quirk, but such a device has no match in the Early Phrygian assemblage. These criteria suggest that TumW 62 came from a center otherwise not represented at Gordion. The bichrome-on-ground technique might imply the eastern plateau, yet the vessel does not have any other traits that point persuasively in this direction. Certain features, however, may link the vessel to Phrygia. Despite the unique spout, TumW 62 is essentially a variant of the Type 1 sieve jug, a variety for which no parallels exist outside Gordion (p. 69). At the same time, the panels of upright and horizontal wavy lines, although without exact parallel at the site, recall the frames of zoned wavy lines seen occasionally in the Ladders-and-Zigzags style (p. 160), and may reflect the general Phrygian fondness for the motif. TumW 62 could thus be similar to the Group of 932 in representing an eastern Phrygian center that had ties with the traditions of the Halys region (pp. 162-163).

## BROWN-ON-BUFF WARE AND ITS STYLISTIC CIRCLE

## EPB V: 114, 167

Terrace fill: 385
M4 III: 408
Destruction Level: 527, 832
Post-destruction contexts: 1036-1060
Large, related: 1061-1081
Tumulus III: K-III 3, 6-10, 12-13
Tumulus W: TumW 61
Tumulus P: TumP 49-52, 55-57, 60
After a particular type of ornately decorated buff ware first came to light in the Körtes' excavation of Tumulus III, it was taken to represent the essence of Phrygian vase painting in the general period of Midas. When the pottery could later be compared with the excavated Iron Age material from sites in the Halys region, the contrasts were pronounced, and the ware came even more to be the

[^199]measure of Phrygian painted pottery on the western plateau. Since 1955. however, work at Gordion has steadil revealed the broad scope of Early Phrygian painting and its general connections with the SyroAnatolian koine. Thus the ware here labeled Brown-onBuff can be seen in the clearer perspective of one distinctive Phrygian line among many.

With over forty examples known, Brown-on-Buff is in the first instance a particularly distinctive painted ware, not unlike Fine-Line Buff in showing a fairly sustained uniformity in production (e.g., 114, 167 [color pl. I \{2\}]; TumP 57 [color pl. III \{2\}]). Clays are invariably of the finest grade, obviating the need for a slip, and are usually free of any mica observable to the naked eye. Biscuits, which often have a powdery consistency, were fired very pale brown, pink, or pinkish white. The predominant surface color is very pale brown, Munsell's $10 \mathrm{YR} 8 / 3$; but somewhat darker tones of pink also occur, in the 5YR and 7.5 YR ranges (e.g., 408, 1041, 1043-1045, 1049, 1055,1059 ); at the other extreme, a few vessels are pinkish white, $7.5 \mathrm{YR} 8 / 2(\mathbf{1 0 4 7}, \mathbf{1 0 5 7})$. A few others show a mixed coloration of pink and very pale brown (1038, 1048 ), and thus indicate that these varying colors could ensue from the same clay. Paints range in color from medium to very dark brown, and were always applied prior to a careful, intense polishing. On some examples the finishing results in a lustrous surface resembling porcelain or polished stone (e.g., 1041), and occasionally the polishing was so vigorous that it slightly blurred painted features around the edges (e.g., 1054). In rare instances, a second, lighter color was added subsequent to polishing, the result being both bichromy and a textural contrast between the matte light and lustrous dark paints (1060, TumP 49). Two specimens (1056, 1058) should be considered technical variants, since they differ from the others in having darker, tan or red, biscuits and slips in the regular light tones of Brown-onBuff. Otherwise, they were painted and finished in the conventional manner of the ware, and, when whole and unworn, they would not have differed from Brown-onBuff in appearance. Within this technical format, Brown-on-Buff painters adhered with relatively few exceptions to a general and somewhat flexible mode of decoration, the Ornate Class, which is characterized by a particular schematic logic and choice of motifs. Much the same style was used on larger amphoras of different fabric, the best represented being the series of enormous kraters 1065 1081.

Production of Brown-on-Buff ware had already started by the time of EPB V, where two specimens are among the four known from pre-destruction contexts on the City Mound. In the Destruction Level, only two others can be positively identified as Brown-on-Buff, although a few vessels with color alteration from the fire may have been of the same ware (e.g., 876). The relatively meager sampling from the pre-Kimmerian citadel is increased
nearly threefold by examples from early tumuli. To the eight already known from Tumulus III can be added an equal number from Tumulus $P$ and one of the two painted vessels from the earlier Tumulus $W$. In the former two chambers, the ware outnumbered other painted fabrics by a wide margin: Tumulus III had only three that are not Brown-on-Buff (K-III 4-5, 11); in P there were five others, but these included, in addition to TumP 53-54 and 58, a clearly foreign jug (TumP 59) and a bichrome "fruit stand" that seems to be technically related to Brown-on-Buff (TumP 61; p. 172).
This imbalance between Early Phrygian tombs and citadel could be taken to indicate that the ware was principally funerary and thus like certain other furnishings from tumuli that have few or no parallels on the City Mound. Yet while such a view may be correct for some categories, Brown-on-Buff appears to have seen more than limited use among the living. The recut spout on a sieve jug from Tumulus III (K-III 7), done after firing, could imply prior use. However, a far more persuasive case lies with the numerous Brown-on-Buff vessels from later, post-destruction contexts on the City Mound. Although problematical in some regards, the pots can hardly have been furnishings for the dead. Showing close stylistic correspondences with the contextually earlier material, the examples could be residual from the Early Phrygian period or represent continued production after the fall of Gordion. If the latter, it is notable that the ware is absent from later seventh- and sixth-century tumuli-a possible chronological control for its lower terminus. If residual, it is difficult to understand why so very few examples occur in the Midean level from which they presumably would have come. None is firedarkened, but the few with mixed light coloration (e.g., 1038,1048 ) recall vessels similarly mottled, ostensibly by the fire, from the Destruction Level (e.g., 876). A similar problem occurs with the enormous painted kraters that are related closely in style to Brown-on-Buff (pp. 88-90), and with contextually late Greek pottery whose dates of manufacture are within the Early Phrygian period (p. 135). Although these queries must remain unanswered, a few observations are worth recapitulating. Given that the Midean citadel is far from being completely recovered, it is conceivable that certain ceramic types, perhaps the more precious ones, were concentrated in places yet unknown. Indeed, they could have originally been within the excavated sector, since all the buildings of the outer palace court and Megs. 5, 11, and 12 were largely empty upon discovery; Megs. 1 and 2 were apparently so at the time of the destruction. Regardless of their relation to the Early Phrygian citadel, the Brown-on-Buff vessels from post-Kimmerian layers, and the larger amphoras linked stylistically to the ware, stand with a selection of Alissar IV specimens as exceptions to the contextual limits of the present study.

Outside Gordion, the distribution of Brown-on-Buff
ware is scant and apparently limited to Phrygia. A few sherds are known from the vicinity of Ankara, ${ }^{250}$ and at Alâeddin Tepe in Konya the ware appears with stylistically related larger types of differing buff fabrics. ${ }^{251}$ At Midas City the linear animal style of Brown-on-Buff may be represented in a tan ware with matte paint. ${ }^{252}$ To the east, at the eighth-century mountaintop fortress of Göllüdağ near Niğde, a seemingly related figural style occurs within what is essentially an Alişar IV format, and may reflect Phrygian influence in that region. ${ }^{253}$ From Boğazköy and Maşat come multiple-lozenge designs that are closely reminiscent of a type found at Gordion only within the Brown-on-Buff circle; a western outlook is again possible (p. 152).

The most frequent shape in Brown-on-Buff ware is the sieve jug, known through about a dozen examples in tumuli, Destruction Level, and later contexts (K-III 6-10, TumW 61, 832 [pl. 97], 1042-1046, and perhaps $\mathbf{1 0 4 7}$ [pl. 99]). Where discernible, all are of Type 2 except for the Type $3 \mathbf{8 3 2}$ from the Destruction Level. Spouts of tubular-trough variety are most common, and tend to be of considerable length, probably to maximize the area available for decoration. The same concern for painted space is also evident with handles, for on sieve jugs and other closed shapes strap handles allowing additional planes for painting are universal, while prominent rotelles or bolsters almost invariably add yet more room for decoration. Round-mouthed jugs are next in frequency, represented by over half a dozen examples of varying scale. The most familiar are the elaborate trio of large size from Tumulus P (TumP 55-57). The fragmentary 1038 (pl. 55) from a post-destruction context is of medium size and related in style to those in P, as may be 1039 (pl. 55). The small version of the shape occurs in EPB V (114 [pl. 37]) and Tumulus III (K-III 12), and it is notable that the painted schemes are different from those on the larger jugs. Bowls are attested by almost as many examples as round-mouthed jugs. Tumuli P and III each contained one (TumP 60, K-III 13), while the City Mound has yielded a sherd from the Destruction Level ( 527 [pl. 36]) and two examples from later contexts (1036-1037 [pl. 32]). The nearly complete 1036 is similar in form to K-III 13, and all except perhaps 527 are plain bowls of Class 2. Other shapes are less well represented, e.g., narrownecked jugs (K-III 3, 1041 [fig. 30, pl. 92]) and the geese from Tumulus P (TumP 49-50). The two askoi TumP 51-52 are much like 812 (pl.93) from the burned citadel in appearance, but the paint of the last is unpolished,

[^200]thus removing it from the category, even if it had been fired buff originally. 1048-1049 (pl. 141) from later contexts are the only dinoi attested in Brown-on-Buff. Both once had ring handles in spool-shaped housings, and thus they were painted counterparts to the grayware K-HII 47-48. 1053 ( pl .159 ) might belong to the same shape, since the estimated diameter ( 29 cm .) corresponds with those of dinoi. The petaled amphora 876 (pl. 109) from the Destruction Level may well be of Brown-onBuff, and in any event the same kind of petaling occurs within the ware, on 167 (pI. 158) from EPB $V^{\prime}$ and 1057-1058 (pl. 160) from post-destruction contexts, the last being a technical variant.

Although Brown-on-Buff vessels were not decorated in a single, narrowly defined manner, the majority of them, about three-quarters of the total corpus, show an overall decorative richness that is otherwise rare in the local assemblage, and they are also related by common traits of design that mark their class of painting as distinctive. The special qualities of the "Ornate Class" derive from several factors, beginning with a compositional logic that is unlike that of most other approaches to painting. Surfaces are generally covered more by painting than is customary, with the decorative program often extending well below maximum diameter and sometimes even onto the base. Handles and spouts were never left plain, and the latter were usually decorated both inside and out. Furthermore, the body is routinely divided into a greater number of zones than is normal in Early Phrygian painting, and thus there is a greater latitude for the display of motifs. The repertory of geometric designs also contributes to the sense of richness, since most are closely filled types, e.g., crosshatching and checkerboard, with a minimum of open spaces. The zones themselves were treated differently than in regular practice, for on closed shapes geometric panels were never the primary decoration, but served instead as ancillary devices in narrow frames, to flank handles and spouts and to divide the panels of linear animals that are the focal points on the vessels they inhabit. The animals are a particularly distinguishing feature of the class, as are a number of geometric motifs that do not otherwise occur in Early Phrygian painting. Many of these general traits of the Ornate Class recur on the series of enormous kraters 1065-1081 (figs. 45-46, pls. 129-132; pp. 88-90). The correspondences are such that these works, although of coarser fabric, can be viewed as the stylistic counterparts to Brown-on-Buff at a greatly increased scale; a few related amphoras of somewhat smaller size even emulate the fine finishing of Brown-on-Buff ware (1061-1062 [pl. 128]).

Compositional schemes allow the vessels of the Ornate Class to be divided into two general groups. The first and better represented has as the basis of its decorative programs a multiplicity of zones that can be either purely geometric or integrated with figural panels of small size.

The possibilities for variety in arrangements are therefore great. The sieve jugs TumW 61 and K-III 10 bear related schemes with two narrow row patterns (one of which is the same on both vessels) alternating in regular, spaced succession from low on the body onto the neck. K-III 10 has a third zonal type lower down, while on both jugs lattice patterns envelop the underside like supporting nets (cf. also K-III 6). The vessels are also parallel in that appendages are not set off by special paneled fields. Instead, the zones on the body run behind or barely under handles and come headlong at varying angles against painted rings encircling the bases of the spouts. On TumW 61 there was some attempt at demarcation by means of a small panel, a zone and an interval high, between handle and spout. Although this overall approach to decoration is singular within the Ornate Class, the two sieve jugs do conform to more widely held conventions in the treatment of handles and spouts. The handles are decorated to the centimeter, as is customary for the class in general. The transverse geometric strips on the exterior spouts of both are also normal, although the number and variety of motifs can differ considerably (e.g., K-III 6-9, 832, 1042-1045). On K-III 10, the interior of the spout follows the common scheme of either three (as here) or a single longitudinal zone running the length (K-III 7-8, 1042-1045). Since the spout on TumW 61 has a "waterfalls" interior, the decoration takes its lead from the half-dozen steps in consisting of more transverse patterns, as on the similarly stepped 1046, but longitudinal zones run along the sides, as on K-III 10. The array of geometric work might at first glance have camouflaged a notable feature on one of the jugs, the substitution of a little animal scene for a geometric design on the spout bridge of K-III 10 . Such placement of a figural panel is not known to recur, and it is curious that the bird with its catch would have appeared upside down to the drinker.

The purely geometric sieve jugs K-III 7-8 are practically identical in basic scheme, and represent an approach to design that differs in certain notable respects from that of TumW 61 and K-III 10. In the first instance, the zones on the body are tightly concentrated at the level of spout attachment spanning belly and shoulder. An ancillary strip below this level (reserved on K-III 8) and another with geometric design at the top of the shoulder are continuous and serve to define the principal horizontal field. Within, both spout and handle are prominently set off in separate fields by flanking geometric panels that extend from the lower continuous zone to the upper. These same uprights are also the lateral frames for the three zones that compose the remainder of the principal field: dotted crosshatching (Type 2) on belly and lower shoulder with an intervening and much narrower zone of Crosshatching 1 , more tightly rendered. This scheme may lie at the core of other arrangements, and in any event the setting off of appendages within their own
frames, noticeably absent on TumW 61 and K-III 10, was standard practice in the class. K-III 9, a compositional oddity, might be a less ambitious variant of the arrangement on K-III 7-8, but clearly related is the program on the spouted jug K-III 3. The vessel maintains the basic, ordered scheme found on K-III 7-8, and certain motifs are even repeated in the same places, but on the shoulder K-III 3 has instead of a continuous geometric zone a series of practically identical hawk panels with checkerboard dividers. A similar shoulder arrangement occurs on the fragmentary round-mouthed jug 1038 from a post-destruction context. Here, the overall scheme into which the panels fit is different from that on K-III 3, yet a narrow, presumably continuous zone again runs along the top of the shoulder. Of stylistically related larger vessels not in true Brown-on-Buff ware, $\mathbf{1 0 6 4}$ and perhaps 1063 (pl. 128) are similar to K-III 3 in having relatively small figural panels on the shoulder. The painter of K-III 6 seems to have adapted the basic format of K-III 3 and $7-8$ by replacing the zones of the principal field with two large panels, each consisting of a cross of geometric ornament that provided four frames for small figural panels. 1051 (pl. 159) from a post-destruction context may have had a similar scheme.
The elaborate Type 3 sieve jug 832 from the Destruction Level recalls these compositional approaches. Two staggered tiers of small figural panels and an intervening ancillary zone correspond to the level of spout attachment, and continuous zones again run below and above. Unlike the schemes on K-III 3 and 7-8, however, there are no single, tall panels to stop the principal zones beside handle and spout. Instead, the terminations of the zones are unaligned, while the metopal procession of animals in the lower zone is continued directly beneath the handle by a somewhat larger creature that shares the ground line with the others. In this regard, 832 is somewhat like TumW 61 and K-III 10, and it recalls the scheme on these vessels even more closely in the rhythmic succession of spaced zones on the tall neck.

A few miscellaneous pieces from post-destruction contexts provide further information about the treatment of closed vessels in this group of the Ornate Class. 1047, probably from a Type 2 sieve jug, preserves enough to reveal an unparalleled zonal scheme on the body. 1053, on the other hand, shows that small figural panels could occur on larger Brown-on-Buff vessels, in this case perhaps a dinos.

The bowls 527, 1036, and K-III 13 demonstrate how the decorative logic of the group was expressed on this shape, in concentric zones on the interior. These ornate, annular strips contrast greatly with the plain lines or bands on the exterior, and they also leave no doubt as to which surface was considered the more important; on the exterior of the sherd 1037, however, occurs at least one row of concentric circles in addition to the bands. $\mathbf{1 0 3 6}$ and K-III 13 also have solid stripes on the flattened tops
of the rims, a detail that makes them overall quite similar in appearance. Yet K-III 13 and the sherd 527 differ from 1036 in having geometric panels instead of continuous row designs in the zones, the only exceptions to the general rule of the Ornate Class that such panels should be subservient to appendages or animals.

The second group of the Ornate Class regularly has animals, and is distinguished from the first in the prominent display of the creatures in relatively large panels. TumP 55-57 are exemplary of the group, and are joined by three fragmentary specimens from later contexts on the City Mound ( $\mathbf{1 0 4 1}$ [pl. 92], 1056 [pl. 160]). Few though they are, these vessels exhibit much more of a standardized schematic approach than do those of the other group. On TumP 55-57 and 1041, a zone of large figural panels extends from low on the belly to about mid-shoulder, above which comes a continuous ancillary zone. The others, insofar as they are preserved, seem to have been similar. Although different from the smallpaneled series in the greater attention given to the linear animals, the scheme is nonetheless closely related to that of the first group, and it appears to be essentially another variation on the basic organizational concept of K-III 7-8. The overall decorative field occupies the same level as on the vessels from Tumulus III, similarly respects the handle, and maintains the narrow geometric strip running unbroken around the top of the shoulder. It is, in one view, as though the small hawk panels on K-III 3 were enlarged to fill the maximum height of the principal field. TumP 55 bears a second tier of animals on the neck, these placed directly above the ones below. On the necks of TumP 56-57, however, occurs a succession of geometric row designs that, in their alternating rhythm and use of lateral panel frames, correspond precisely to the schemes on the bodies of K-III 7-8. In terms of composition, the step from these large-paneled examples to the enormous painted kraters from post-destruction contexts is primarily one of degree. On these largest of Early Phrygian painted vessels, panels containing scenes as much as 50 cm . wide (e.g., 1067) span bellies and shoulders, are separated by narrow geometric uprights, and are bordered above, on the upper shoulders, by continuous geometric ornament-all in a manner similar to that of the small jugs but adapted to the greatly increased scale (e.g., 1065, 1074). At least one krater had figural panels of single animals on the neck (1071-1072), as apparently did a somewhat smaller amphora (1062), while purely geometric zones appear on the necks of others (e.g., 1077). Both variations for the neck recall TumP 55-57.

A notable schematic departure on these larger vessels is the use of geometric panels as principal motifs, within narrow zones high on necks and on both the faces and the tops of massive rims (e.g., 1070, 1077). In the first position, on no fewer than four of the vessels, appears a standardized rhythmic pattern in which geometric pan-
els alternate with groups of narrow, triangular rays. while either concentric circles or Maltese crosses serve as spacers (1070, 1073, 1077, 1079). The recurrence of the same scheme on the krater 930 from the Destruction Level may bring this vessel, and perhaps the fragmentary 1030, within the extended circle of Brown-on-Buff ( $p$. 148).

The decoration on the geese TumP 49-50 is of an interesting blend. The multiplicity of narrow zones repeating the same conventionalized feather motif on wings, tails, and necks recalls the close approach of the first group of the Ornate Class, while the banded rims are paralleled on the bowls 1036 and K-III 13. When viewed on the whole, however, the birds look to be the threedimensional counterparts to the animals occurring in large panels, which they resemble in wealth of detail and stylized conventions. ${ }^{254}$

More difficult to quantify than basic composition is the sense of harmony and rhythm often apparent in the arrangement of motifs. This can be as straightforward as the simple alternation of zones on TumW 61 and K-III 10 , or as complicated and carefully planned as the balanced, complementary arrangement of panels in the annular zones on K-III 13. On K-III 7-8, the motif in the panels flanking handle and spout is repeated as a continuous zone on the neck, and it recurs on the spout, as though to relate the appendage through decoration to the body. Similar in idea is the arrangement on the otherwise unassuming K-III 9, where the spout echoes the ancillary zones of vertical lines on lower body and neck, while on 832 the long spout and tall neck are similarly related by decoration. The hawks on K-III 3 are separated by the same panel design used to flank the overall scheme on the body, and the figural zone has below it a repetition of the row motif running around the upper shoulder, as on 1041. On TumP 55-57 and 1038, the design on the upper shoulder of each is duplicated on the rim, and on 1038 the motif appears again on the belly, below the figural zone.

Beyond having related compositional traits, the two groups of the Ornate Class and their larger kin share a common language in terms of their geometric and figural vocabularies. Some of the favored motifs saw broader use in Early Phrygian painting, but others are peculiar to the circle of Brown-on-Buff and therefore help to distinguish it, as does the negative evidence provided by what was not taken from the general repertory. The almost constant use of geometric panels as narrow, secondary devices may explain why such standard square types as cross-and-lozenge and single $X$-panels are not seen in Brown-on-Buff, although on the larger, stylistically related kraters, where geometric paneled zones do occur, these otherwise stock designs are

[^201]also virtually absent (1064). ${ }^{555}$ Even more indicative of an independent attitude is the fact that the triangle row, the standby of many Phrygian painters, does not occur as a design in itself in either Brown-on-Buff ware or related categories. Compositional logic again may have been a factor in the absence of the motif, for the idiosyncratic division of the shoulder, where triangles very often occur on other vessels, could have obviated their use. On the other hand, this notable omission might instead be related to preference of a different kind, for Brown-onBuff painters almost invariably shunned any geometric row design that did not have vertical symmetry. ${ }^{256}$ Certain other stock motifs from the Phrygian repertory had limited use, including both plain and elaborate zigzags and complex lozenge rows (1036, 1038, 1058, 1060 [pl. 160], TumP 57, K-III 13). Particularly conspicuous in its extreme rarity is the wavy line, the single most frequently occurring motif outside the Brown-on-Buff circle (1053, K-III 13).
The standard Phrygian designs that do occur regularly are at the same time among the simplest. Plain, Type 1A checkerboard appears often in both panels and continuous zones (e.g., 832, 1041, 1077, 1079-1080, TumP 55-57, K-III 3 and 6-8), and occasionally on handles (TumP 55-56, K-III 10). The "stretched" variety with elongated checks (Type 1C) is virtually an exclusive pattern of Brown-on-Buff painters (TumP 57, K-III 8 and 13). The design was particularly suited for the spouts of sieve jugs, where it was often oriented longitudinally, as though to complement the length of the appendage (1042, K-III 6-8 and 10; cf. also the variant with dots on 1046 and TumW 61). Crosshatching is also common as a panel, zone, or handle design, but in all but a few cases it is the dotted variety, Type $2(1036,1041,1044,1047-$ 1048, 1053, 1070-1073, 1077, TumP 55-57, TumW 61, K-III 3, 6-10, and 13). Concentric circles appear most regularly in ancillary rows below the principal decoration on the body ( $832, \mathbf{1 0 3 8}$, TumP 55-57, K-III 3 and 7) and as a filler around linear animals. The latter use possibly reflects influence from the Alişar IV figural style. Dots-between-lines, although not an exclusive ancillary device of Brown-on-Buff, nonetheless comes closest to being a universal feature of the style. The design was used regularly as a border for zones and panels, and as edging for spouts and rims. Its similarly generous application on the larger amphoras is one of the fundamental stylistic links with true Brown-on-Buff ware (1062, 1065, 10701074, 1077, 1080). The design was in fact so thoroughly a part of the decorative mentality that it was used to form chevrons and as an internal component for certain larger motifs (e.g., 1036, 1038). In a narrow, transverse zone on

[^202]the exterior of a spout (1044), and in the uppermost interior zone on the bowl 1037, it is itself the featured motif, in addition to serving as the border device. The overall function of this much-used and simple pattern, when seen within the broader decorative context, was no doubt to enhance an already strong appearance of close and intricate richness.

While making selective use of designs common to the general repertory, Brown-on-Buff also incorporated a variety of patterns that are not found beyond its circle. Foremost is the linear animal style seen on about a dozen vessels in both groups of the Ornate Class (832, 1038, 1041, 1051, $\mathbf{1 0 5 3}$ [pl. 159], 1056, TumP 55-57, K-III 3, 6, and 10) and also on larger amphoras (1061, 1063-1065, 1067-1068, 1071-1072, 1074, 1076). ${ }^{257}$ As it pertains to broader issues, the figural mode has an important role, for whether in small- or large-paneled format the animals show an overall homogeneity that is among the strongest links between Brown-on-Buff ware and its larger kin.

Of geometric designs that saw exclusive use within the Brown-on-Buff circle, the most frequently recurring is the simple key meander of single line (Type 1), known on about a dozen vessels from all categories. Always ancillary, the motif can occur in a number of positions (e.g., 1036, 1045, 1047, 1050 [pl. 159], K-III 10), including the tops and ledges of massive rims on kraters (1070, 1077). It was used with some regularity as a horizontal border, sometimes repeated, for larger zones (1041, 1056, TumP 56 , K-III 3 and 8), an application that is no doubt reflected on the large 1066, where a narrow strip comes at the very top of the shoulder (cf. also 1062, 1080). On 832, the design alternates in broken stretches with chevrons in one zone, and, in no less eccentric fashion, once becomes a vertical panel divider; but it appears again, in normal fashion, near the top of the neck. Although the Type 1 meander does not occur on local pottery outside the Brown-on-Buff circle, it is a component in wooden inlay work and bronze engraving from Tumuli P and MM. ${ }^{258}$ The bowl K-III 13 has a unique, double-tiered variation of the meander type, while an odd, block-C motif occurring rarely and exclusively within Brown-on-Buff seems somehow to be related to the basic form ( $\mathbf{1 0 4 4}, \mathbf{1 0 4 7}$, K-III 10). A design that approaches the frequency of the Type 1 meander is the dotted-chevron row, set horizontally or vertically in narrow strips on bodies and along the interiors of spouts

[^203](832, 1042-1044, TumW 61, K-III 6-8 and 10). The motif is the only common one of Brown-on-Buff ware that does not occur on the enormous kraters, although laddered chevrons adorn the handle of the smaller amphora 1061. Rows of dotted chevrons appear as vertical wing dividers on the geese TumP 49-50, and it is likely that the laddered herringbone used generously as a feather convention on the two birds was inspired by the same motif. A more direct variation of the dotted chevron is a rare $W$ pattern known only on the spouts of 1046 and TumW 61.

A number of interrelated lozenge designs, most with internal stippled components, are a further distinguishing feature of the Brown-on-Buff circle; like the Type 1 meander, they occur in all categories. The basic design is that of Multiple-Lozenge Panel 1 (fig. 64), in which small stippled lozenges were separately placed within the single-line, criss-crossed frames of a larger net. The method of formation is itself unusual, since in regular practice the diamonds formed by the intersecting lines of both multiple lozenges and complex lozenge rows were not further compounded by separately drawn smaller ones inside (pp. 151-152). Like crosshatching and checkerboard, the motif can appear either in panels (10691070, TumP 55, K-III 8) or in zones, although the latter are known to occur only as sizable fields on the shoulders or necks of large kraters (1065, 1077). K-III 6 has a variant in which the smaller, inner lozenges are blank, while in a dividing panel on 1065 the criss-cross bars are of double line and solidly filled except at the points of intersection. ${ }^{259}$ A lozenge design similar in formation to the latter occurs on the neck of the amphora 1064, as either a multiple pattern or a complex row. On the bowl K-III 13 the basic design appears in the middle zone as four elongated panels of complex lozenge rows, as may have been the incompletely preserved transverse design on the exterior spout of 1043. On 1052, 1074-1075 (probably from the same vessel), and $\mathbf{1 0 7 8}$, the design was modified to create oblique checkerboards in zones. A plainer echo of the basic design is the row of simple stippled lozenges on $832,1038,1045$, and the spout of TumW 61. Outside the Ornate Class, the motif recurs locally on the small petaled amphora 876, which may be of Brown-on-Buff ware (infra), while beyond Gordion it appears at Konya, in connection with the linear animal style. ${ }^{260}$ A related design, attested only once, is the simple row of alternating stippled and solid lozenges on the body of K-III 10 .
These stippled-lozenge motifs help to underscore the great popularity of dots in general in the Ornate Class, and it is probably significant that such wholesale dotting is not widely encountered outside the circle. The almost

[^204]constant use of dots-between-lines has already been cited, as has the frequency of dotted crosshatching and chevrons. Stippling occurs again in a few occasional designs, such as the device within the ring handle on the dinos 1048, the rows of zigzag on the neck of TumP 57 (and perhaps on that of $\mathbf{1 0 4 0}$ ), and the inner frames of Latticed Panel 3 (fig. 64), a motif shared by TumP 55-56 and the large 1074. The last, in fact, seems to be an upright, squared version of the stippled-lozenge pattern used to flank the figural panels on the large $1065 .{ }^{261}$ It was perhaps to be expected that when Brown-on-Buff artists formulated a linear animal style based on foreign models they used both stippling and dots-between-lines as their primary fillers (e.g., TumP 55-57, K-III 6 and 10; 1067, 1071).
A minor motif that helps to unite the vessels is the solid Maltese cross, known locally only within the Brown-onBuff circle. The design was used occasionally as a filler for animal panels ( $\mathbf{1 0 3 8}, \mathbf{1 0 5 3}, \mathbf{1 0 7 2}$ ), and it also appears in a number of other roles as a substitute or complement for concentric circles (832, 1077, 1079). On TumP 55-56 and a fragment included under 1041, it decorates the ends of bolsters, while on the bowl 527 big single crosses of a unique variant with stippled filling occupy the panels of an annular zone.
A relatively small number of vessels in Brown-on-Buff ware differ in decoration from the Ornate Class, but some have at least a degree of kinship with the style. The plain bowl TumP 60, without any geometric ornament, nonetheless has both inside and out groups of lines of varying thickness that recall those on the exteriors of K-III 13 and 1036. The round-mouthed jug K-III 12 , early recognized by G. Körte as stylistically different from the other examples in the tomb, departs from the custom of the Ornate Class in having spaced panels of simple or no design on the shoulder and a large, somewhat awkward zigzag around the neck, with no separate treatment of the rim. ${ }^{262}$ On the other hand, the strap handle is painted and, more significant, a row of concentric circles girds the lower belly (cf. TumP 55-57, K-III 3 and 7), while a cross of them adorns the base in a manner paralleled on 1038 of the Ornate Class. Another roundmouthed jug, 114 from EPB V, preserves too little to reveal the overall scheme, but the geometric panels serving as primary decoration on the neck are as much an anomaly in Brown-on-Buff as those on the shoulder of K-III 12. 167 from EPB $\mathrm{V}^{\prime}$ and the small amphora 876 from the Destruction Level, the latter possibly of Bromn-on-Buff ware, have a program of relief petaling and painted decoration that seems to have been derived from the eastern plateau (pp. 120-I21). That thev are Phrygian imitations, unlike a similarly decorated vessel from Tumulus G that seems be an import ( $\mathrm{P} 45, \mathrm{pl} .61$ ), is suggested

[^205]primarily by fabric, at least for $\mathbf{1 6 7} . \mathbf{8 7 6}$, however, has a stippled-lozenge row on the neck, a motif that, as noted above, is with this one possible exception peculiar to the Ornate Class. Similarly, the broad stripes on the rim of 876 are paralleled on Brown-on-Buff bowls and the geese TumP 49-50. Two other petaled vessels, from postdestruction contexts (1057-1058), are more richly decorated, with geometric motifs on the petals, and may have been fully within the Ornate Class. The Brown-on-Buff askoi TumP 51-52, with bodies and necks totally covered by checkerboard, probably reflect a more widespread convention for the decoration of the shape (pp. 65-66). They would thus parallel 167 and perhaps 876 in demonstrating the occasional use of Brown-on-Buff ware for other modes of painting. The unusual bichrome fruit stand TumP 61 has been cited as a possible import, but the extensive polishing over the black and red paints recalls Brown-on-Buff technique, while in the coloration of the ground the vessel differs hardly at all. ${ }^{263}$ The abundant triangles, on the other hand, are much out of character with Brown-on-Buff painting. The piece remains an enigma.
The Ornate Class of Brown-on-Buff ware and its close stylistic relatives parallel the Wavy-Line and ChevronTriangle styles in being among those painted modes that most clearly distinguish Phrygian work within the broader Anatolian context. The comparable material from Alâeddin Tepe in Konya, including both Brown-on-Buff itself and stylistically related larger vessels, has a range paralleling that at Gordion except for the seeming absence of truly enormous types. The linear animals are in the same general style as at Gordion, and they appear within similar formats of either small or large panels framed by geometric uprights. ${ }^{264}$ At the same time, however, there are what appear to be some significant differences. Beyond the somewhat subjective observation that the work here is overall less careful and precise than is customary at Gordion, the geometric motifs constitute a more limited and simpler range of types. For example, dotted crosshatching, a favorite of the Brown-on-Buff painters represented at Gordion, is not in evidence, while dots-between-lines are not as common as at the Early Phrygian capital. Although the material in Konya is admittedly scant and fragmentary, the implication of these contrasts is that Brown-on-Buff ware and related groups were produced in more than one center, each having its regional nuances. The high degree of stylistic relationships within the corpus at Gordion might thus be viewed as the result of production within a limited sphere where painters were directly familiar with one another's work.

Whether Gordion or its environs had such a community of potters is an issue that remains open. The series of
263. TGET, 48
264. Akurgal, $P K$, pls. 21 b and 22.
enormous painted kraters might have been produced locally, since their great size and heaviness could have presented problems of transport over any distance. Their many similarities suggest that they come from a single source, while their closest stylistic affinities within true Brown-on-Buff are with TumP 55-57, vessels also thought to have a common origin. It is likely that all belong to the same circle of production, whether based at Gordion or at another Phrygian center that perhaps used traveling potters for doing large vessels on the spot. ${ }^{265}$ The principal criteria for associating the jugs from $P$ with the enormous kraters are the rendition of animals and the use of a few specific geometric motifs that do not otherwise occur. Among the latter, pendent triangles with dotted crosshatching are found only in the animal panels on TumP 55-56 and the large kraters (1065, 1068, 1074). TumP 55-56 and $\mathbf{1 0 7 4}$ also make exclusive use of Latticed Panel 3, and this occurs in a unique diagonal version on 1065. Furthermore, there appears to have been some interest in combining these last two designs with the pattern of Multiple-Lozenge Panel 1 (fig. 64) or a variant (TumP 55, 1065, 1074). More compelling than these shared geometric forms are the close correspondences in detail among the linear figures. It seems, for example, to be beyond coincidence that the lions and bulls on TumP 55 and 57 bear the same type of stylized cheek convention, an intricately detailed arc, that occurs on the lions of the large 1074 and 1076 (cf. the lion on 1041, where the device was not used). The lion's mane on 1076 consists of the same motif in repeated rows, and the parallel use of the device on the breasts of the geese TumP 49-50, its only other instances, also may link them to the circle of production. Likewise, the lions on TumP 55 and that on 1068 bear tails that are precisely identical, including attitude, filling, and the three-pronged convention used to indicate the bushy end (cf. the different tail of the lion on 1065). Strong similarities also exist between the stylized trees in the goat panels on TumP 56 and the one being nibbled on the large 1067.

That at least some of these were traits shared by a group of painters rather than the work of a single hand is suggested by a few minor differences in the figural drawing. The bulls on TumP 55, for example, have shoulders and tails unlike those seen on the bull of TumP 57. The tails of the former, which appear to be braided, are probably repeated on $\mathbf{1 0 6 5} .{ }^{266}$ The manes of lions might also indicate that a group of painters is represented. On TumP 55 dots-between-lines are used, on 1065 and 1068 herringbone, and on 1076, as seen above, occurs an almost reptilian arc device. On the large vessels it is conceivable that colleagues collaborated. Such a team effort might explain, for example, why the lions on 1074

[^206]and 1076, if indeed from the same vessel (p. 89), show minor differences in the rendering of cheek-arcs and mouth-edgings.

Further distinctions within Brown-on-Buff also may be significant for patterns of production. The sieve jugs K-III 7-8, seen to be very much alike in every respect, could have been a production pair, while the related compositions of the figural K-III 3 and 6 might draw them also into the group. Here too more than a single hand may have been at work in the differing renditions of the hawks on K-III 3 and 6, particularly in regard to the wings (seemingly none on K-III 3!) and tail feathers. Whether any connection exists between these vessels and the schematically related TumP 55-57 is unclear. The goats on K-III 6 have much the same filling devices as on the quadrupeds of the jugs from Tumulus $P$, while the same distinctions are made between single-sweep and double-curved horns as appear on the goats of TumP 55-56. In contrast with the animals on K-III 3 and 6 are those on the generally exceptional sieve jug 832 from the Destruction Level. Here, the bodies of all creatures but a lion are filled entirely by stippling, with no internal divisions, except for the reserved shoulder that is universal in the style. The same method is found on some specimens from Konya. ${ }^{267}$ Of contextually later vessels, the round-mouthed jug 1038 seems to be related to the amphora 1064 in much the same way that TumP 55-57 are related to the series of enormous kraters. This is suggested solely by the very similar renditions of the spread-winged hawks-their filling conventions and the eccentricity of wings that seem to extend beyond the confines of the panels (contrast 1053). The overlapping arcs on the bodies and necks of the birds recall the more ornate convention used for the geese TumP 49-50.

The length of time over which Brown-on-Buff ware and its extended stylistic circle were produced is unknown. The ware itself occurs in relatively late predestruction contexts on the City Mound, including EPB $V$ and the Terrace fill, but because of the fragmentary nature of the vessels it is not until the Destruction Level that the Ornate Class is definitely attested in the citadel (527, 832). Tumuli W, P, and III, however, suggest that the evidence from the City Mound is misleading, and that the Ornate Class had been in production for some period of time before the destruction. The Brown-on-Buff ware from later contexts could indicate a post-Midean survival, but if such were the case there is some negative evidence to suggest that production of the ware had ceased by the second half of the seventh century ( p .166 ).

Stylistic and typological considerations may reveal something about relative stages of development. It had been thought by R. S. Y'oung that chronological significance might be attached to the absence or presence of

[^207]figural drawing and, in the case of the latter, whether the animals occurred in small or large panels. The basis for his view lay in the purely geometric decoration of TumW 61 , from what is judged on other grounds the earliest of the tumuli, as opposed to the figures seen in the later Tumuli III and P. His assumption that time saw a shift from the small animal panels of III to the large ones of $P$ now gains some support in the direction of development suggested by the bronzes from the two tombs. ${ }^{268}$ Another aspect of development might lie in the schematic approach of TumW 61 and K-III 10. Their narrow, spaced zones have practically no parallels ( $\mathbf{1 0 5 9}$ [pl. 160]), but more unusual still is the lack of separate, blocked-off fields for handles and spouts (p. 168). The relative date of Tumulus W might indicate that the absence of such demarcation points to an early stage in the formulation of the Ornate Class rather than to the quirk of a particular painter. K-III 10 could already have been of some age when placed in Tumulus III. The limiting of figural painting to the bridge of the spout, as though not to disrupt the geometric rhythm of the body, is perhaps also related to development, but Phrygian potters of all periods can be eccentric. If the compositional logic of TumW 61 and K-III 10 can be thus explained, then 832 from the Destruction Level might not be far ahead, despite its context, since both the spaced zones on the neck and the limited definition of fields for the appendages recall the schemes on TumW 61 and K-III 10 (p. 168). At the same time, the simple filling of the animals on 832 with dots might indicate an early date, but the tiny panels themselves, with limited scope for decoration, could alone have been responsible for the lack of greater detailing. Like K-III 10, 832 was perhaps made some years before its final deposition.

If such an evolution did occur within the Ornate Class, the result was surely cumulative. Most of the Brown-onBuff ware from Tumulus III, for example, is non-figural, while the small-paneled 832 is considered to be at least contextually later than the large-paneled TumP 55-57 from the child's tomb. If the evidence of style and comparative rim typology can be accepted, the production of the enormous painted kraters also may have belonged to a phase earlier than the Destruction Level, contemporary with Tumulus P and perhaps not far removed from the installation of the Terrace (pp. 89105). The many examples of Brown-on-Buff ware from later contexts represent a mix of large and small or no animal panels. Whether residual from the destruction period or made later, they too would demonstrate that the three approaches were eventually used simultaneously.
268. R. S. Young, Gordon: A Gude to the Excanatoms and Muspum (Ankara, 1975), 47 and 52. TGFT, 49-51 and 216.

# Early Phrygian Wheelmade Pottery: Summary 

## Background and Character

The beginnings of Phrygian wheelmade pottery remain vague, primarily because it is unclear whether a chronological or cultural relationship existed with the Early Handmade and Late Bronze Age traditions (see Postscript). After EPB I, where Bronze Age and Early Handmade ceramic types occur together, wheelmade Phrygian wares appear for the first time with these others in the fills composing EPB IIa-b, while in EPB III, a domestic deposit rather than a fill, the yield is exclusively Phrygian wheelmade (pp. 8-9, 19-21). The evidence of this sequence in itself thus might be taken to suggest that wheelmade Phrygian pottery came to Gordion as an already developed tradition, having little or no connection with Early Handmade and local Late Bronze Age pottery. In such an event, the likeliest source would have been Western Anatolia, where dark-fired, wheel-thrown wares are common in both the Bronze and the Iron Ages. Moreover, Troy VI-VII and Level II at Beycesultan show features of monochrome ceramic design-e.g., crisp contours, fine detailing, and devices imitative of metalwork-ing-that are prospective at least in spirit of the Phrygian idiom, while at the latter site the use of "micaceous washes" prefigures the ubiquitous mica films in Phrygian pottery (pp. 32-33).

Although elements of the Anatolian west may be present in the Iron Age assemblage at Gordion, other circumstantial evidence allows the perhaps likelier possibility that Phrygian wheelmade pottery was basically a local development, resulting from a cultural intermingling of native Central Anatolians and the Europeans who with little doubt introduced handmade pottery to the site. The most fundamental Anatolian contribution may have been the technology of wheel-production, and from the European side the practice of dark-firing, absent in the local Late Bronze Age, could have set the course for the gray wares that were long to be an integral component of Phrygian pottery (pp. 19, 33-35). Wheel-
made vessels from NCT IVb, a context that perhaps antedates EPB Ila, might bear witness to such a merger: 222 and 225, both echoed by later Phrygian forms, are possibly dark-fired renditions of Bronze Age shapes (p. 34), while 223-224, unequivocally of gray ware, seem to be pithoi of a Hittite variety that could underlie a type of Phrygian storage jar (p. 99).

If Phrygian wheelmade pottery did evolve locally, the intermediate or transitional steps that led to the developed tradition, as begins to appear in EPB II, are elusive, perhaps because a considerable gap in time separated EPB I and II. The possibly intermediate NCT IVb yielded a gray wheelmade bowl whose fabric and finish closely recall Early Handmade (220). The vessel is also of unusual proportions in comparison with gray-ware bowls from EPB II and later contexts, and thus it could belong to an incipient stage of Phrygian wheel-production ( p . 49), as may a number of other specimens that seem anomalous in the developed repertory. For example, 27 from EPB Ilb might be a wheelmade version in gray ware of an Early Handmade lugged type (p. 26), while the rims on the large 51 and 153, from EPB III and $V$, could have been modeled on an Early Handmade form (pp. 100,102 ). A few wheelmade vessels, mostly from relatively early contexts, show variegated firing similar to that found in Early Handmade, and may represent a technical overlap between the two traditions (p. 35). A vessel so fired from the EPB Ill Latrine Deposit (53) suggests that the practice continued for a while into the period of developed Phrygian potting. The Early Handmade bowl 177 might reflect another aspect of overlapping, for the mica-film surface is unique in this tradition and may derive from wheelmade Phrygian pottery, where mica films are already present by NCT IVb (p. 14).

Several aspects of the developed repertory also might be explained through a local evolution from earlier traditions. Wheelmade carinated bowls of Class 1. known
as early as EPB IIb, correspond generally well in shape to the commonest carinated type in Early Handmade; Class 2 carinated bowls have parallels in both Early Handmade and Late Bronze Age wares, while those of Class 3 have Late Bronze antecedents (pp. 44-45, 47). It is perhaps more than coincidence that some Phrygian carinated bowls from pre-destruction contexts have bands around the upper interior, as though preserving a fairly common feature of their handmade counterparts (p. 23). That Phrygian plain bowls also might look to Early Handmade is suggested by a few Class 2 wheelmade specimens ( $\mathbf{2 0}$. 202) whose unusually thick walls and aspects of detailing are particularly reminiscent of the hand-formed series (p. 50). The one-handled utility pot, primarily a Phrygian shape in its Anatolian context, may have developed locally from Early Handmade closed vessels of Group 2, where similar contours occur (p. 72), and it is possible that the same handmade series lay in the background of Phrygian open-mouthed amphoras and formally related storage jars ( p .85 ). The band rims often borne by these handmade vessels might be ancestral to a common feature of Phrygian ceramic design (pp. 25-26). Certain other components of the developed repertory may look ultimately to indigenous antecedents. Trefoil jugs, for example, are common in local Late Bronze Age strata (pp. 58-59), and from the same period come ledged rims, some of which are close in form to Phrygian types (pp. 101-102). Low-necked jars and dinoi, and larger storage jars of similar profile, might be descended from Bronze Age types, or from Early Handmade Group 1 vessels, or from a combination of the two; yet the possibility of an external source also exists (pp. 93-94, 98-99).

Although local evolution from an Early HandmadeLate Bronze Age horizon could account in large part for the beginnings of Phrygian wheelmade pottery, other influences surely contributed to the fully developed corpus. The round-mouthed jug, among the commonest of Phrygian shapes, lacks parallels in either Early Handmade or the local Late Bronze assemblage, yet it has good correspondences in Late Bronze and Early Iron Age Macedonia (p. 53). Present by EPB IIb, the shape may reflect a continued infusion of Balkan elements arriving after that responsible for the Early Handmade tradition. The characteristically Phrygian kantharos krater, although not definitely attested until the Destruction Level, also has analogues in Macedonia, and thus could have come to Phrygia under similar circumstances, although the upper profile, like that of the large round-mouthed jug, is previewed in Early Handmade (pp. 26, 78-79). Some of the relatively few spouted jugs known in Early Phrygian pottery also may look to a Macedonian origin (p. 65), while checkerboard askoi, a distinctively Phrygian type in Anatolia, have their closest match in Thessaly, in the ninth-century necropolis at Marmariani (pp. 65-66). The same site provides the closest external parallels for the Chevron-Triangle style of painting, which,
like checkerboard askoi, seems to have been peculiarly Phrygian in Central Anatolia (p. 158). Both correspondences with Thessaly are perhaps too close to be coincidental, regardless of whether N. G. L. Hammond is correct in viewing Marmariani as a center for the Phrygians of Europe (p. 134). A case of reverse influence, from Phrygia to Thessaly, cannot be supported by the evidence at Gordion, where the askoi and the painted style occur in relatively late tombs and the Destruction Level. Certain motifs of Northwest Geometric Pottery, whose range includes parts of Thessaly, also have parallels in Phrygian vase painting, and it is possible that some connections existed (pp. 134-135). The elaborate pottery stamping of Phrygia is with little doubt essentially a Balkan feature that was introduced at Gordion sometime after Early Handmade, in which such impressed work does not occur. Entering the corpus by the time of EPB V , the stamping has affinities not in Northern Greece, but to the east in Thrace, where from the Late Bronze into the Iron Age stamped motifs and programs similar to those in Phrygia help to distinguish the wares of the Thracian Plain (p. 124). The region is within the general sphere of Thracian culture that earlier seems to have been the source of Coarse and Knobbed Wares in Troy VIIb, and to which Gordion's Early Handmade pottery also probably looks (pp. 20-22). The appearance of stamped pottery at Gordion would thus represent a subsequent influx of specifically Thracian elements, possibly related in culture to the first. Should any of the above correspondences with Macedonia and Thessaly be significant, then the influences coming to Phrygia from the Balkans were diversified geographically as well as temporally. If those who brought the Early Handmade tradition to Gordion were not linguistic Phrygians, their followers from one or another Balkan district may have been, unless the language itself developed within Anatolia as a fusion of more than one southeast European dialect (p. 21).

When Phrygian comes to be written, it is in an alphabet most likely derived from the Greek. ${ }^{1}$ Yet influences from Greece on Early Phrygian pottery seem to have been few, even though Greek wares may have come to Gordion before the Kimmerian disaster (p. 135). ${ }^{2}$ It is possible that the narrow-necked amphora was ultimately derived from Greece (p. 82), but what appears to have been the major contribution, probably from East Greece, was the meander. Varieties of the design occur in the Destruction Level and in Tumuli III and P, a distribution that suggests a relatively late introduction (p. 145). Although the Phrygians appear to have had direct contact with the Greek world, it was perhaps through Lydia that the meander was transmitted to the plateau, and judging

[^208]from the interests that this West Anatolian kingdom later had in Phrygia, it is likely that regular lines of communication existed during the Early Phrygian period. From the Anatolian west, Lydia or elsewhere, may have come the practice of making surfaces glittery with mica films, a technique at home there as early as Level II at Beycesul$\tan$ (p. 33). If mica films were introduced from the west, the transmission was relatively early, since they occur on gray wares in the earliest strata containing wheelmade Phrygian pottery: NCT IVb, EPB IIa, and Meg. 10-4. A few unusual bowls with heavily micaceous surfaces (not appearing as a film) from among these contexts and also in EPB I are considered by Gunter to have possible West Anatolian affinities, and thus the vessels may represent the immediate background of Phrygian mica-film wares. ${ }^{3}$
The remaining major sources of external influence lie with Phrygia's neighbors on the eastern Anatolian plateau and in North Syria. Phrygian connections with the latter area are documented both historically and archaeologically in the general period of Midas, while earlier, at some time preceding the interment in Tumulus W , bronze cauldrons of apparently Syrian style had come to Gordion. ${ }^{4}$ Pottery from the Alişar IV region, including specimens with the distinctive silhouette animals of that area, began to arrive at Gordion before EPB V, and thereafter both evident and suspected imports occur ( pp . 163-164).
Through this general network of cultural communications with the east and southeast, Early Phrygian pottery was drawn into a broader Syro-Anatolian context. The assimilation is perhaps most apparent in painted decoration, where in composition and designs much Phrygian work seems to represent a response of the western plateau to an artistic koine spreading from Syria into Anatolia (p. 135). Iron Age painted pottery begins to appear at Gordion in certain contexts of EPB IIb (p. 179), and was to be generally less popular than it was in Alisar IV centers. The Halys region might have been the principal source of inspiration, but some direct links also appear to have existed between Phrygia and North Syria, where the painted tradition probably had its origins. The linear animal style occurring in the Ornate Class of Brown-on-Buff ware and its circle, modeled on North Syrian art other than vase painting, represents a quite different process of influence. ${ }^{5}$

Vessels related in function to the side-spouted sieve jug had existed in Bronze Age Anatolia, but it is likely that the shape at Gordion, present by EPB V, also came to Central Anatolia from Syria (p. 69), and a similar source is possible for Anatolian kraters, a shape that had probably begun to be produced locally by EPB III (p. 85).

[^209]Low-necked jars and dinoi could have evolved in Phrygia from local models, but an alternative source is Cilicia and the southeastern plateau (pp. 93, 99). The patternbanding on a series of storage jars that begins to appear in the Terrace fill also may have been an internal Phrygian development, yet a parallel from Zincirli allows the possibility of Syrian influence (p. 119). Patterned incision might owe its inspiration to Phrygian vase painting, although generally the same kind of decoration occurs in some quantity at Malatya (p. 114). A surer case of external influence is present in a number of petaled vessels that begin to occur in EPB V, for with little doubt they look to ceramic models in the Alişar IV sphere; an example in Tumulus G (P 45, pl. 61) was probably imported from that region and thus would serve to demonstrate how source material could have become available to Phrygian potters (pp. 120-121). It is also possible that the detail of bolsters on handles, first appearing in EPB III, was borrowed from the eastern plateau (p. 110).

By the time of the Kimmerian attack, Phrygian pottery had also come to exhibit much that sets it apart as a distinctive ceramic corpus within the Syro-Anatolian sphere. Some of the special traits may stem from the differing ethnicity and associations of the Phrygians. Surely this was the case with elaborate pottery stamping, as though a practice that had been introduced from Thrace stayed localized in an area with a European background. Perhaps to be explained in a somewhat similar manner is the limited presence of gray wares at most sites of the period to the east and southeast of Phrygia. Whether descended from Early Handmade or introduced from West Anatolia, the gray pottery of Gordion has a generally westward orientation. The darkfired pottery that does occur to the east, especially at Bogazköy, could well reflect influence from the western plateau. A Balkan or Early Handmade source for the kantharos krater might account for the absence of this shape, and the formally related large round-mouthed jug, on the eastern plateau, although the small roundmouthed jug, which may have a similar origin, figures prominently in Alişar IV repertories. The common onehandled utility pot, with few parallels in the Halys region, might have been locally formulated from Early Handmade (p. 72), while the popularity of narrow-necked trefoil jugs at Gordion, in contrast to their scarcity on the eastern plateau, possibly stems from the regional survival of an Anatolian Bronze Age shape (pp. $58-59$ ).

Several aspects of Early Phrygian wheelmade pottery have no probable antecedents or external contemporary parallels to suggest either inheritance or borrowing, and thus it is likely that they bear witness to Phrygian originality. Such seems to have been the case with the wide-mouthed trefoil jug, a shape that came to be one of the most popular types in Phrygian pottery (p. 62). The shape's absence on the eastern plateau during the pe-
riod, and the general disinterest there in trefoil types of any sort, might be explained by differing customs and preferences. Phrygians and their eastern neighbors did share, however, the practice of drinking beer from sieve jugs, yet Gordion has a variety, Type 1, that does not occur in the east (p. 68). Vessels with built-in sipping tubes also appear to have been Phrygian in idea, although remote precursors in Anatolia indicate that such types could materialize wherever novel ways of drinking beer were sought ( p .75 ). Much the same inclination might explain the curious design of a rare form of deep bowl with built-in, perforated cover (pp. 75-76). Other oddities of Early Phrygian pottery are also probably to be interpreted as independent formulations, even though some represent types or ceramic concepts that can occur widely in space and time. Thus the zoomorphic vessels from Tumulus P , including the geese TumP 49-50, may have been the ceramic counterparts to animals in other Phrygian media, and were perhaps specially designed for the important child buried in the tomb (p. 66). Similarly, ring vases from the same burial and the Destruction Level were perhaps the experimental works of inventive potters (p. 65), as seems to have been the peculiar set of twin jars TumP 69 (p. 76).
The general Phrygian approach to ceramic design also reveals qualities that are distinctive within the SyroAnatolian setting. The ubiquitous carinated bowl, for example, shows a much greater range of variety than is seen at Alişar IV centers, where the type was equally popular, and it also tends to have more emphatically angular upper profiles, often crisply and precisely rendered (pp. 44, 48). Such attention to contour and detail extends to other shapes, as seems not to have been the case in the east, and should probably be viewed as a general characteristic of Early Phrygian pottery. Similarly, the great variety in form displayed by most shapes suggests a dynamic and fluid approach to potting, sometimes with a flair for the extraordinary, that may be innately Phrygian (pp. 41-42). These qualities pertain primarily to unpainted pottery, by far the dominant element in the corpus, and this emphasis on monochrome production might in itself have a local basis, since
painting is alien to Early Handmade and seems to have been generally rare in the Central Anatolian Late Bronze Age (p. 134). Other traits of Phrygian monochrome pottery, in addition to stamping, are likewise poorly documented, if at all, on the eastern plateau. Thus patterned incision and pattern-banding, whether borrowed or locally formulated, appear to have been primarily Phrygian practices in Central Anatolia (pp. 114, 119-120), as do most types of relief and plastic adornment (pp. 120-122) and certain devices that imitate or recall metalworking, e.g., false rivet heads and sideattached handles (pp. 108-109).
Early Phrygian vase painting contains several elements that seem to be characteristically Phrygian. Perhaps the most original components are the common Wavy-Line style and the Ornate Class of Brown-on-Buff ware, especially those examples whose narrow zonal systems of decoration, as that of Wavy-Line, are alien to the compositional logic of the Syro-Anatolian koine (p. 139). Brown-on-Buff itself seems to have been an exclusively Phrygian ware, while several motifs, including linear animals, are generally limited to the Ornate Class and its extended circle (pp. 170-171). The Chevron-Triangle style, with possible Balkan affinities, is almost as unusual as WavyLine and the Ornate Class within the broader perspective of the koine (p. 158). Parallels for these three styles at other sites in Phrygia may indicate more than one center of production, but other individual modes of painting found at Gordion are not attested beyond the site, e.g., Fine-Line Buff (pp. 159-160), Ladders-and-Zigzags (pp. 160-161), Polychrome House (pp. 161-162), and the TB 8 Group (p. 164).
The Group of $\mathbf{9 3 2}$ possibly stems from a Phrygian area toward the Halys (pp. 162-163), and thus may be an indication that other painted styles need not have been practiced actually at Gordion or in the immediate vicinity. As with the Ornate Class, a number of specific motifs occurring in these modes are not attested beyond Gordion, even though the general types to which they belong sometimes have a broader distribution; the same is true of many designs found elsewhere in the corpus of Early Phrygian painting. ${ }^{6}$

## The Ceramic Sequence and Relative Chronology

The developmental course of Early Phrygian wheelmade pottery can be ascertained only in limited ways because of various restrictions imposed by the evidence. Since a great proportion of the material from predestruction contexts on the City Mound is fragmentary, formal analysis is generally limited to diagnostic parts, e.g., rims, while overall programs of decoration are usually unknowable. Furthermore, most of the pottery
comes from fills rather than contexts of use; hence the uncertainty in knowing what might be closest in date to the time of the deposition. Additionally, since some of the excavated units were relatively small (e.g., EPB IIa, infra), their yields are no doubt representative to only a limited

[^210]degree of the ceramic corpus in existence when the deposit was made. The following summary account emphasizes the pottery from those contexts that can be placed in sequential order, from EPB IIa through the Destruction Level. The evidence for the relative place-
ment of other pottery-bearing contexts on the City Mound is also reviewed, as are the grounds for the synchronization of Early Phrygian tumuli with the core sequence in the citadel.

## EPB IIa

In EPB IIa (pp. 8-9), examples of Phrygian wheelmade pottery are few, yet they indicate that by the time of the first reflooring to the W of the EPB a new ceramic direction at Gordion had begun to solidify in both technique and shape. The Class 1 plain bowl 7 , the bowl 8 with an articulated rim, and the large trefoil jug 9 are all of mica-film gray ware, the commonest medium in later pre-destruction contexts, and the bowls further show the polishing that is to be a regular feature for their general kind and other small shapes. While belonging to lasting general types, the three vessels also point to a decidedly conservative element in Phrygian potting, since each has
a variety of upper profile that is to continue in the shape, with little or no change, into the destruction period (pp. $49,51,59$ ). The ring foot associated with the bowl 7 heralds a common form on small shapes in general. In the Meg. 10 sounding to the immediate N, Meg. 10-4 may be equatable with EPB IIa (p. 12). In addition to a small sherd of mica-film gray ware that might belong to a krater, the context yielded 188 , a competently executed vessel of fine, dark-fired fabric; the unusual profile suggests an early, short-lived type, yet one that was perhaps prospective of large round-mouthed jugs and/or kantharos kraters (p. 111).

## EPB IIb

EPB IIb, a multi-context grouping that may incorporate some material from EPB IIa (pp. 8-9), shows overall a much-expanded repertory of wheelmade Phrygian shapes and techniques. The pivotal contexts, representing the substratum of the cobbled Floor 2 in front of the EPB, yielded only gray pottery; but if units farther $W$ and in the area of the Polychrome House are correctly associated with EPB IIb (p. 12), light-fired wares, both plain (17,25) and painted (22-23, 29), are also present by this time. The Class 3 plain bowl 221 from NCT IVb (p. 50) may be a contextually earlier example of light-firing in Phrygian wheelmade pottery, a practice that was to be considerably less frequent than gray-ware production in succeeding pre-destruction contexts. The mica film on the tan-ware 25 introduces the application of this substance to light-fired monochrome pottery (p.33).

Standard shapes and varieties thereof that occur in EPB IIb include Class 1 carinated bowls (15-17), Class 1 and 2 plain bowls (18-20), and small round-mouthed jugs both monochrome and painted (21-22). The groundcoated 23 represents either a large round-mouthed jug or a kantharos krater, neither of which is definitely attested on the City Mound until the Destruction Level, although the one-handled version occurs in Tumuli III, $G$, and $P(p .53, \mathrm{n} .12 ; \mathrm{p} .78)$. The painted 29 is probably a medium-sized, narrow-necked jug and thus the earliest known at this intermediate scale, whether trefoilmouthed or not. 24-25, be they large amphoras or storage jars, are the first assuredly Phrygian vessels to
bear ledged rims, a particularly common trait of openmouthed amphoras (p. 102). 194 from Meg. 10-2, a unit that seems to be the N continuation of EPB IIb (p. 11), may anticipate a type of low-necked storage jar known from the Destruction Level (p. 100).

The wheelmade pottery from EPB IIb shows an interesting combination of progressive features and those that may belong to early developmental stages. The lugged 27, as noted above (p. 175), may be a fairly direct translation from an Early Handmade type. Similarly, the Class 1 carinated bowls $\mathbf{1 5}$ and $\mathbf{1 7}$ recall a common form in the handmade tradition and at the same time seem to be prospective of subsequent developments within the class, yet the specific profiles are not known to continue (p. 44). The heavy fabric of the bowls is also in some contrast with later production, and it is perhaps significant that neither they nor the lugged 27 has a mica-film finish. The heary Class 2 plain basin 20, although bearing a mica film, likewise suggests an early stage in wheel-production (p. 50). In contrast, the other Class 2 plain bowl from EPB IIb ( 19 ) is of fine, thin-walled gray fabric and introduces a variety that can be followed with little modification into the destruction period (p. 50); the unusual hemispherical bowl 220 from NC.T IN'b may lie in the background. The Class 1 plain bowl 18, although like 19 in having a technicalls advanced fabric, shows a profile that recurs only in EPB III (p. 49). The roundmouthed jugs 21-22 together indicate that the basic contour of this common shape had become standardized
by EPB IIb, and they also preview the Phrygian penchant for both articulative and decorative ridges on vessels of all sizes ( $\mathrm{pp} .116-117$ ). The ledged rims on 24-25 are like the Class 1 carinated bowls from EPB IIb in possibly underlying subsequent developments while having no close successors in form (p. 102). Another large vessel (26) is perhaps the most enigmatic specimen from EPB IIb: in the absence of a mica film the container cannot definitely be called Phrygian, yet the unusual program of pattern-banding is reminiscent in design of elements in later Phrygian art and may somehow be ancestral to the pattern-banding that begins to appear on storage jars in the Terrace fill (p. 119). The double rope handle 28 looks more directly forward to subsequent occurrences of this particular treatment (p. 108). From Meg. 10-2, the pattern-incised handles 195-196 are problematical, since it is uncertain whether they belong to Early Handmade vessels, on which incised decoration often occurs, or are instead relatively early, and isolated, examples of the technique in wheelmade Phrygian pottery (pp. 114, 185).

Of the three painted vessels from EPB IIb, the groundcoated 23 is probably an indication that Phrygia has entered the broader Syro-Anatolian koine of painting (pp. 136, 139). The vessel reflects an advanced level of
expertise in technique and drafting, and thus may be at some distance from the beginning of Phrygian painted work. On the other hand, the simple painted scheme on the shoulder of 22 , generally out of character with standard decorative principles, might represent an incipient stage of Phrygian painted expression; yet whether it does or not, the mannerism was to survive unchanged into the destruction period (p. 140). 29 bears what was to be the commonest version of the Partial Wavy-Line style, that with compass-drawn concentric circles (p. 157), and thus indicates that already by EPB IIb Phrygians had begun to develop their own distinctive approaches to painting. The vessel might presuppose the existence of the Pure Wavy-Line style, which does not appear in the record until EPB IV ( 60 ). The zonal rhythm of WavyLine has some close analogues in another characteristically Phrygian mode, the Ornate Class of Brown-on-Buff ware, particularly TumW 61 and K-III 10 (p. 139). It is perhaps significant that 29 shares with these examples a disregard for marking off handles within separate, paneled fields, a feature that may indicate an early, experimental stage in relating decoration to shape (p. 173). Furthermore, the somewhat clumsily executed concentric circles on 29 possibly reflect early trials with an unfamiliar instrument (p. 136).

## EPB III

The Latrine Deposit and associated material from the EPB SW Room, together composing EPB III, are of particular importance in tracing the course of Phrygian pottery on the City Mound, since no other context until the Destruction Level yields a plentiful amount of ceramic material belonging to a single period of use (p. 9). The unit therefore serves to a degree as a signpost of ceramic trends, albeit within what appears to have been a mundane setting. The fact that all the vessels, no fewer than 34 , are wheelmade carries the implication that Early Handmade pottery had by this phase largely, if not completely, run its course (p. 21). Furthermore, the assemblage is entirely monochrome, suggesting that at least within the area served by the Latrine painted pottery had no place, and with the exception of the tan 57 and the dark-light variegated 53 the vessels are of customary gray ware. Many have mica films, and some show that the practice of using a heavy coating of the substance as a substitute for polishing had begun (p. 33). The bi-coloration of 53 possibly looks back to the Early Handmade tradition (p. 35), as may the rim on 51 (infra), but otherwise the pottery shows no signs of formative stages in wheelmade development.

EPB III provides the earliest indications of the extensive variety in form and detail that was to characterize

Phrygian monochrome production. Class 2 carinated bowls (33-37) now appear with those of Class 1 (30-32) and are already present in the dominant proportions that were to continue through the destruction period. Two of the Class 1 bowls (31-32) seem to have modified successors, but none in the category is of a form known to survive unchanged beyond EPB III (pp. 44-45). The Class 130 previews the occasional appearance of small bowls, both carinated and plain, in later pre-destruction contexts, yet there is little evidence for the need of such "saucers" in the Destruction Level (p. 43). The Class 2 carinated bowls from EPB III include two (33, see under 198) whose upper profiles continue virtually unaltered into the destruction period, and they also appear to represent the background of a wide variety of modified forms occurring across the later sequence (p. 45). 34 and 36-37, although lacking exact successors, nonetheless closely preview manners of upper forming that were to be common in Class 2 production (p. 46). Even the unusual 35 has echoes as late as the Destruction Level (p. 46). The Class 1 plain bowl 39 represents a particular approach to forming that was followed with little modification throughout the sequence (p. 49), while 40, with an articulated rim, has a virtual duplicate in the Destruction Level (p. 51).

The closed shapes from EPB III are also generally forward-looking and include some forms that were to be as conservatively maintained as a number of the bowls. Thus the round-mouthed jug 41 has close parallels in the Destruction Level, and it also introduces the banded rim, a type that became popular on this and other shapes, while 42 shows the basic profile for body and neck that was to characterize large round-mouthed jugs and kantharos kraters (p. 54). The ring bases 56-57, the former a finely tooled specimen, are of a particular type that often accompanies the last two shapes and other elegant forms in the Destruction Level (p. 107).

With at least 13 examples, narrow-necked trefoil jugs of large size are the best-represented shape in EPB III (e.g., 44-48), and in their numbers they preview the great demand for this workaday type in the destruction period. The well-preserved 44 introduces a specific variety that was still being used at the time of the destruction (p.59); the vessel's prominently beveled band rim and doubleround handle became frequent features on large trefoil jugs, while the bicurved body is the earliest attested example of a recurring form for this and other shapes. EPB III also yielded the small trefoil jug 43, the first known at this scale and one of the few from predestruction contexts. As preserved, the jug differs little from examples in the Destruction Level, where the type in general is present in great quantity (p. 59). 49 introduces the one-handled utility pot, a working type like the large trefoil jug and about as well represented as that shape in the Destruction Level. Of medium size for the type, 49 already shows the standardized techniques and general form of its successors, and even has some close correspondents in the Destruction Level, yet the rolled handle apparently did not continue so late on the shape (p.72).

50 is the earliest sure example of an amphora in the EBP sequence, although not enough is preserved to indicate the type. The extensive grooving on the shoulder seems to have been a relatively early and short-lived trait (p. 114). The ledge-rimmed vessels 51-53 are probably either open-mouthed amphoras or wide-necked storage jars. 51 most likely introduces what was to be a standard type of krater, with tall, vertical neck (p. 86). The rim, of a particular form not known to survive, has a possibly significant parallel in Early Handmade pottery
(p. 102). The rim on 52, in contrast, marks the initial appearance of a conventional approach to the formation of ledged types. The basic form continues with practically no alteration through the destruction period and may underlie a wide range of subsequent varieties, many of which show sharper definition of the parts (pp. 102-103). In being of a relatively fine fabric for so large a vessel, 52 also previews the qualitative standards of some later potters working at this general scale (p. 83).
Several formal details that help to define the general character of Phrygian pottery also appear initially in EPB III. Thus the set of multiple grooves on the large trefoil jug 45 introduces a recurring method for accentuating points of contour (pp. 113-114), while the prominent single ridges at mid-neck on 51-52 mark the beginning in the record of this common decorative feature on large vessels (p. 117). All the basic types of handles occur in EPB III (p. 107), and some show that Phrygian potters had begun what was to be the frequent practice of giving special attention to grips. The medial ridges or spines on some of the larger handles preview the fairly popular use of these devices on large trefoil jugs and amphoras ( p . 108), and the curving handle trail on 59 was also to be a recurring feature on the same range of shapes (p. 109). The bolster crowning the handle of a small vessel of fine ware from EPB III is the earliest example of what was to be an occasional device in Phrygian potting. The version found here, with tapered ends, is less frequent than the cylindrical type, which probably makes its first appearance in Tumulus W , and may not have survived into the destruction period (p. 110). The nature of the relationship between metalworking and clay bolsters or spoolrotelles, the latter of which begin to appear in EPB $V$, is unclear, but it is nonetheless likely that vessels in bronze were current by EPB III. The false rivet heads on the handles of $\mathbf{5 0}, \mathbf{5 9}$, and some uncatalogued large trefoil jugs are perhaps the strongest indications in the context that practical features in bronzeworking were being imitated by potters. The practice continues, with varying degrees of closeness to the use of actual bronze rivets, throughout the Early Phrygian period (p. 109). The unique, strutted handle 58 might also reflect the influence of metalworking, and in any event the grip is generally prospective of the eccentricities that can occur in the design of handles (p.108). ${ }^{7}$

## EPB IV

In EPB IV (p. 9), 60 introduces at once the standard dinos, here in a spherical form that continues into the destruction period (p.94), and the Pure Wavy-Line style. The pure mode is rare in subsequent pre-destruction contexts, but in the burned citadel it is the commonest of
painting styles and appears on a variety of shapes, including the dinos ( p .156 ).

[^211]
## EPB V

In EPB I' (pp. 9-10), the formal repertory of Phrygian pottery shows further increase, while practically the full range of wares is present, as are pottery stamping and a wide variety of painted schemes.

A notable technical aspect of the assemblage is the considerable increase in the quantity and range of coloration of light-fired monochrome vessels, including several with mica film. Although a problem exists in distinguishing light from gray pottery in the Destruction Level, the evidence from EPB V, the subsequent Terrace fill, and the post-Terrace M4 I indicates that clear-fired wares were somewhat less than rare as an alternative to gray in Early Phrygian potting (p. 36). Developed skill in forming by EPB V' probably accounts for the fine, particularly thin-walled 124 and 128 . small, fragile vessels that anticipate many of similar quality from the Destruction Level (e.g., 529-539, 752-754).

With the appearance of Class 3 carinated (92-99) and plain bowls (106-108) in EPB V, the basic categories of these common open shapes are complete. The Class 1 carinated 76 seems to be the earliest in a distinctive series of mica-film light-ware bowls whose distribution includes the Terrace fill and M4 I but not the Destruction Level, as though production of the type, perhaps by a single source, had ceased sometime short of the disaster (p. 45). 82, a Class 2 carinated bowl from EPB $V$, is one of several possible modifications on the manner of forming introduced by $\mathbf{3 4}$ from EPB III; although the specific form of $\mathbf{8 2}$, like those of several others (e.g., 90-91), is not known to continue, it may be in the ancestry of a Class 2 variety attested in the Destruction Level (p. 46). Here, and in other cases as well, the principal difference seems to lie in a gradual move toward sharper, better-articulated contours. Of other Class 2 carinated bowls appearing in EPB $V, 88$ might represent the typological underpinning in a chain of development extending by way of the Terrace fill to the destruction period, while the possibly related 89, an unusually variegated specimen, is of a form that recurs largely unchanged in the Destruction Level (p. 47). The absence of Class 3 carinated bowls before EPB V is perhaps fortuitous, since in both quantity and variety the category is by now well entrenched in the repertory. Although some forms seem to have little or no future ( $92-95$ ), others can be traced directly ( $\mathbf{9 8 - 9 9}$ ) or indirectly through the Terrace fill (96-97) to the Destruction Level (p. 47). Since the direct links between EPB V and the destruction period involve distinctively profiled bowls, a single, continuing center of production may be represented.

Of the plain bowls occurring in EPB V, the Class 1102 anticipates the occasional presence of handles on the shape in the Destruction Level and may reflect bronze bowls in having bolsters beside the grips (p. 49, n. 8). The Class 2105 is one of three plain bowls from EPB V and
the Terrace fill that have beveled rims, a feature not known to have survived into the destruction period ( p . 50). The Class 3 plain bowls now appearing for the first time in the EPB sequence include both short-lived and progressive forms. 106, with no known successors, has a possible forebear in light fabric from NCT IVb (221) and thus might belong to a relatively early period in the production of wheelmade gray wares (p. 50 ). 107 may lie in the background of a variety known from the Destruction Level, while 108, with multiple grooving, looks more directly to a modified type with articulated rim (p. 50). $E P B V$ is also the premiere context for the flaringrimmed painted bowl (100), a type that recurs sporadically in both the Terrace fill and the Destruction Level. Presumably imported from the eastern plateau, the series is one of several indicators of the direct ceramic contacts with this region that had begun before EPB V (p. 48 and infra).

Small round-mouthed jugs (110-114) and vessels that are either the large version of this shape or kantharos kraters (115-117) occur now in some quantity (p. 54). Although the carinated $\mathbf{1 1 0}$ may represent an early type with Balkan affinities, the basic angular contour survives into the Destruction Level, as do that of 111 and the continuous-curve profile introduced by 112. The large ambiguous specimens all have the banded rims that were to be particularly a trait of kantharos kraters in the destroyed citadel (p. 78).

Narrow-necked trefoil jugs, with the appearance of the medium-scale category (118-119), are by now present in the three general sizes known from the Destruction Level; included among them are both light and painted examples (118-119, 122-123). Of two large, well-preserved jugs that may have been in use just prior to the EPB V operation, 120 is a somewhat refined bridge between 44 from EPB III and a distinctive series occurring in the destruction period, while 121 introduces what was to be a common biconical version of the bicurved body (p. 59). New types of jugs are also present in EPB V. 124 and a second example introduce the wide-mouthed trefoil jug, seemingly a Phrygian invention, and already show the characteristic upper contour, fine fabric, and thin-walled construction of their numerous successors in the Destruction Level (p. 62). 125, with narrow neck and round mouth, attests the production by EPB V of a somewhat rare type of large jug appearing in the Destruction Level (p. 64), while the painted 126 may belong to a small yet varied series of Early Phrygian jugs with prominently spouted mouths (p. 64). The side-spouted sieve jug, seemingly a luxury item in Phrygian life, is also known no earlier than EPB V on the City Mound (p. 69). 128, a Type 2 jug, has close parallels in upper profile from Tumulus $P$ and the Destruction Level. 157-158 may also be Type 2 jugs; the former is particularly close in
upper configuration to the bronze specimen TumW 5. The bridged trough spout on the painted 129 , presumably a sieve jug, was to see common use on the shape (p. 68 ). Although Types 1 and 3 are not attested in the citadel before the Destruction Level, sieve jugs from early tumuli include all three types (p. 68).

The probable utility pot 130 from EPB V is close in upper profile to a series well represented in the Destruction Level and thus seems to be another example of a conservative, enduring type. In scale, the vessel introduces the smallest of the three regular sizes found in the shape in the destruction period (p.72). Equally prospective is the gray-ware dinos 136 , seemingly of the capacious ellipsoidal variety that recurs in the Terrace fill, Tumulus P, and the Destruction Level; the type of rim, suggestive of a connection with bronzeworking, was to be a continuing feature on the shape ( p .94 ). The painted 137-139 are probably also dinoi, as opposed to lownecked jars, a variety that is not definitely attested on the City Mound until the destruction period (p. 94).

The evidence for large vessels, both dark- and lightfired, begins to be abundant by EPB V, primarily because of the many ambiguous specimens representing either amphoras or storage jars (140-156). 131-135, all amphoras and all presumed to be open-mouthed, show a number of features that are to recur within the general type, including the tapering neck on 132, the type and placement of the stamping borne by 133 , and the accentuating ridgework in combination with a shallow, continu-ous-curve profile on 135 (p.86). The painted 134-135 are the earliest large amphoras in the record to be so decorated, and they also anticipate the general limiting of painted embellishment within the category to openmouthed varieties (p. 80). The combination of painting and ridgework found on 135 recurs in the Terrace fill, but seems not to have survived into the destruction period (p. 86). Of the large ambiguous vessels represented by rims, it is doubtful that any, with the possible exception of $\mathbf{1 4 0}$, are narrow-necked amphoras, yet the presence in quantity of these closed types in Tumuli $W$ and $P$ indicates that the picture gained from EPB V, and also the generally weak showing in the Terrace fill and other pre-destruction contexts in the citadel, may be fortuitous (p. 80). It is probable that the ledge-rimmed vessels 141-152, like the majority of those from other pre-destruction contexts, attest primarily open-mouthed amphoras, although some could be wide-necked storage jars, a type not definitely known until the Destruction Level (pp. 85-86, 100). On the other hand, the unledged specimens 153-156 are likely to represent primarily storage jars rather than amphoras (p. 100). Banding, a recurring feature on both large amphoras and storage jars, is introduced in EPB V by 163 (p. 118), while the same vessel stands with 155 and 164 in attesting the production of relatively massive, thick-walled containers, as continue across the Terrace fill and into the destruction period.

The ledged rims from EPB V' include several that seem to be modifications on the manner of forming introduced by 52 in EPB III. Most of these derived forms are not known to recur beyond the Terrace fill, but that on the mica-film buff 149 is traceable to the Destruction Level, with possible variants appearing along the wav, and may also serve as a typological bridge from 52 to a distinctive family of rims first occurring in the Terrace fill (pp. 103, 185). Of new ledged types in EPB $V$, some are limited to that context (e.g., 143, 147), while two others ( 140,146 ), possibly from the same source, have correspondences in the Terrace fill but none later (p. 103). That on the amphora 131 recurs in the Destruction Level, but a number of others that seem to be related in forming to the rim on 131 seem not to have survived so late ( pp . 103-104). With the exception of 153 (p. 100), the unledged rims crowning large vessels in EPB V introduce what were to be standard manners of forming for these varieties, and it is possible that the relatively weak showing here, in comparison with the greatly increased numbers in the Terrace fill, has chronological implications ( $p .106$ ). The rims on 154 and 156 have correspondents in the Terrace fill and Tumulus $P$, while that borne by $\mathbf{1 5 5}$ has a close follower in the Destruction Level.

The decorative repertory of Phrygian pottery has by now entered an advanced stage of maturity, and the only major component yet to appear on the scene is patterned incision. The prominent spool-rotelle crowning the handle $\mathbf{1 6 1}$ introduces a distinctive albeit occasional feature; like the bolster known since EPB III, the device poses the question of the direction of influence between clay and bronze (p. ll0). Pottery stamping, one of the more characteristic traits of Phrygian material culture, enters the record with a weak and limited showing in EPB 1 The triangle-zigzag in narrow rows on the amphora 133 previews what was to be the commonest of Phrygian stamped patterns by the time of the destruction; it is also one of the very few local motifs that has a wide distribution in space and time (p. 127). The S-spirals on the large 163-164, however, introduce a more particularized type that stands as one of the strongest indicators of a Balkan origin for the elaborate pottery stamping of Phrygia ( p . 132).

Painted pottery now begins to occur in the scope and variety that were to characterize this strong minority presence through the destruction period and on into later times. All the basic wares and techniques are in evidence, including bichrome painting on a ground-coat (127; p. 37) and two other particularly distinctive painted fabrics, Brown-on-Buff (114, 167: pp. 165-166) and Fine-Line Buff wares (113, 165-166; p. 159). Also attested are many of the standard motifs of the repertory, along with the decorative principles that guide their placement. The use of Type 1 triangles on the shoulder, for example, was to be one of the most routine compositional traits in Early Phrygian painting (e.g., 172-173, 175; pp. $140-$
141), and at the same time the practice helps to distinguish the assemblage at Gordion from contemporary painted pottery on the eastern plateau (p. 138). On the other hand, the use of a zigzag, here Type 3, on the neck of the Fine-Line Buff 113 is a common trait of the Syro-Anatolian koine, in which the specific motif is also shared (p. 142). Similarly, the placement of garlands on the interior neck ( $\mathbf{1 1 3}$ ) is a recurring practice at Gordion and on the eastern plateau (p. 147), as is the decorating of the tops of broad rims with bars and/or lines, introduced by the probable dinoi 137-139 (p. 139). Other common motifs first occurring in EPB V include Type 1 and 2 simple lozenges (p. 143), Crosshatching 2 (p. 148), Type 1A checkerboard (p. 149), and narrow panels of herringbone (p.154). The X-panel on 114 introduces this general pattern and is of a type that reappears in the Destruction Level (p. 152). EPB V is also the initial context for the Ladders-and-Zigzags style (116, 168), a formulaic mode of painting that can be traced across the later sequence and into the destruction period (p. 160). Like the possibly related Polychrome House style and other distinctive modes, Ladders-and-Zigzags poses the question of the circumstances under which such conventionalized work was produced, especially when styles appear to have had some longevity. Were they widely
practiced modes with no particular base of operations, or was production localized within a single establishment or community of potters? Fine-Line Buff and Brown-onBuff wares prompt much the same query also in technical terms, since each is a highly standardized painted medium in addition to showing overall a considerable degree of stylistic homogeneity (pp. 159, 166). The Fine-Line Buff 165-166 conform closely in aspects of design to examples of the ware from the Destruction Level (p. 159), yet neither of the Brown-on-Buff vessels occurring in EPB V $(114,167)$ bears features of the prevailing Ornate Class, as is documented before the destruction only in Tumuli W, III, and P (pp. 171-172). 167 is nonetheless of particular interest in attesting the Phrygian adoption by EPB V of a distinctive type of relief petaling that seems to have been native to the eastern plateau (pp. 120-121). 169-171, preserving parts of Alişar IV figural elements, are probably imports from the Halys region rather than Phrygian imitations. Beyond their chronological worth in relating Gordion to sequences farther east, these vessels and the flaring-rimmed bowl 100 initiate a stream of likely Alişar IV imported goods that, while continuing at least into the destruction period, provide a concrete basis for the ceramic ties between Phrygia and the Halys region (pp. 163-164).

## The Terrace Fill

The fill constituting the Terrace to the SW of the Palace Area stands with EPB V as one of the two most productive pre-destruction contexts for Early Phrygian pottery. Topographical considerations suggest that the Terrace is later than EPB V, and the comparative typology between the two contexts, with reference to the Destruction Level, is in general agreement with the relative order (p. 15).

The carinated and plain bowls from the Terrace fill in many cases continue developments already documented in the EPB sequence and often serve as typological bridges to the Destruction Level. The Class 2 carinated 271, for example, seems to be a modified version of 33 from EPB III and, in turn, may underlie a form known in the destruction period (p. 45). Other Class 2 carinated types from the Terrace fill $(\mathbf{2 6 7}, \mathbf{2 6 9 - 2 7 0})$, while recalling forms found in EPB V, look fairly directly to specimens from the burned buildings (pp. 46-47). The Class 3 carinated bowls 277-279 are of varieties that do not occur in other pre-destruction contexts on the City Mound, yet each has close typological correspondences in the destruction period (p. 47). 283, a Class 1 plain bowl sharing the general form of 39 from EPB III, has close successors in the destroyed citadel (p.49), as does the Class 3288 , a plain bowl of an unprecedented variety (p. 50). The painted 290 previews later bowls in the Partial Wavy-Line style in having concentric circles on the floor (p. 157).

Closed shapes from the Terrace fill also point to a stage of evolution that is closer than EPB V to the inventories of the Destruction Level. Thus the round-mouthed jugs 292-294 each show aspects of form that are to recur, e.g., the bulging neck on 292 , while 294 prefigures the frequent use of the shape for the Pure Wavy-Line style (pp. 155-156). The same mode also now occurs for the first time on the wide-mouthed trefoil jug (300) and perhaps on the narrow-necked variety (298) as well (pp. 59,62 ). $\mathbf{3 0 1}$ may represent a spouted jug similar in general design to K-III 14-15 and the large 415 from the Destruction Level (p. 64). The probable one-handled utility pot $\mathbf{3 0 3}$ corresponds in scale to the largest of the three sizes documented in the destroyed citadel, and in certain aspects of detail the vessel also looks forward to subsequent production (p. 72). The multi-studded handle on the small 378 has close followers in the Destruction Level and, in bronze, in Tumulus MM (p. 109).
Large vessels are well attested in the Terrace fill and include, with reasonable certainty, the earliest identifiable examples of storage jars on the City Mound (323325 ). The wide-mouthed amphoras 305-307 belong to a variety that recurs in the burned citadel and Tumulus P (p. 86). $\mathbf{3 0 5}$ is also among the first vessels on the City Mound to bear finger hollows at the bases of the handles, although the debut here is probably preempted by occurrences in Tumulus W ; in the Destruction Level the
feature appears with some frequency on amphoras and large trefoil jugs (p. 109). 308 provides the first good view in the citadel of a standard Phrygian krater, and is closely matched in design by TumP 88 and examples from the Destruction Level; the painted 316 seems to represent the type on a larger scale (p. 86). 309, on the other hand, introduces a profile that anticipates an unusual variety of short-necked krater known from the destruction period (p. 86). The stamp used on 312 appears to have been the same as that impressed on a wide-necked amphora from the destroyed citadel and thus would point to a single source for the two vessels ( $p$. 131).

The presumed storage jars 323-325, all stamped, bear bolsters and/or pattern-banding, features that are peculiar to the shape in the Destruction Level (p. 99). The large and prominent programs of pattern-banding on $324-325$, and on 407 from the subsequent M4 II, are so much like those on later jars that it is reasonable to postulate a single, continuing source for the series, with a move to different stamps having occurred by the time of the destruction (p. 119).

The rims on large vessels from the Terrace fill include several varieties that suggest a stage of development advanced beyond EPB V, such as the ledged forms with broadly flattened tops or prominent, blocky sections on $310,314,330-331$, and 336, and that borne by 316, a blocky variety in which the ledge was formed by a thick ridge. Unattested in EPB V, these types recur in relatively late pre-destruction contexts, while that on 316 is also paralleled in Tumulus $P$, yet none is known from the Destruction Level (p. 104). The ledged rim on the krater 308 represents a distinctive type that may stem from that introduced in EPB III by 52, with 149 from EPB V perhaps supplying an intermediate form. Unattested in EPB V, the variety borne by 308 occurs repeatedly in the Terrace fill and Destruction Level, and it is also present in Tumulus P , while several apparent variations on the type have a similar distribution (p. 103). A number of other ledged forms not known to occur earlier than the Terrace fill also have successors, some hardly changed, in the Destruction Level (p. 105).

Unledged rims crown large vessels with considerably greater frequency in the Terrace fill than in EPB V, and such containers now often occur in light as well as gray wares. Some rims are known only here and thus may represent short-lived types (e.g., 305, 355), yet several others in both gray and light fabrics anticipate at least in a general way forms occurring in the Destruction Level. Those on 353-354 and 356, for example, look directly to rims found on vessels in the burned buildings, while the massive forms borne by 364-365 introduce a general type that appears primarily on storage jars in the destroyed citadel. The last two specimens also have a smaller counterpart in the rim on 245 from the EB Trench, a somewhat flexible form with examples known from Tumuli W and P and from the destruction period (p.
106). The type crowning $\mathbf{3 6 7}$ is not known to recur at so large a scale in the Destruction Level, but the form may underlie a smaller version that appears in both the destroyed citadel and Tumulus MM (p. 106).

The decorative repertory shows considerable expansion in the Terrace fill, and, as in other categories, much looks forward to the Destruction Level. Among the more notable aspects of decoration that now appear is patterned incision, a technique that seems not to have emerged in wheelmade pottery until after EPB $V$, perhaps under the general inspiration of vase painting (pp. 114-116). The decorative logic that helps to characterize patterned incision in the destruction period is present in several aspects by the time of the Terrace, including the general limiting of the designs to narrow, horizontal fields, while the motifs found here are also generally consonant with the later vocabulary. The frequency of the technique on large amphoras and storage jars in the burned citadel is foreshadowed by all the examples known from the Terrace fill ( $\mathbf{3 0 8}, 311,369-371$ ), and on 369-371 the incised patterns occur on raised bands, as was to be a familiar practice (pp. 114-115). The multiple wavy lines executed with a tined instrument on the krater 308 have close followers from the destroyed citadel, while the herringbone adorning the bands on 369-370 also continues (p. 115). The incised chevrons accentuated by punctation on the amphora 311 and a vessel from PN 3 (244) might be the work of a single source represented also in the Destruction Level, by vessels with similarly detailed zigzags (p. 115).

Other new types of embellishment also occur in the Terrace fill. The large $\mathbf{3 8 9}$ bears a peculiar system of vertical ribbing that is unlike the relief petaling introduced by 167 from EPB V (p. 120). The tiny punched triangles on the bridge of the sieve jug 302 have no parallels in the Early Phrygian citadel, yet they and the applied bar that they decorate closely recall a distinctive type of cut relief found on examples of the same shape in Tumuli III and P (p. 122). Although the pattern-banding on 324-325 introduces a regularized decorative idiom that continues, the design of the banding on 369-370, while unclear, is not paralleled beyond the Terrace fill (p. 119).

The stamped pottery from the Terrace fill shows a marked increase over the weak representation in EPB V in both quantity and the variety of stamp types (p. 123). Circular, triangular, and rectangular forms are all present, while vessels bearing impressions of two or more stamps (e.g., 313A-B, 323) prefigure the several instances of such multiple stamping known from the Destruction Level (p. 125). The range of stamped motifs is almost equally divided between designs known only from the Terrace fill and others that recur in the destruction period, where more new types appear. Thus the threestamp lozenge row borne by 383 (p. 128), the numerous dotted lozenges on 374 (p. 131), and both the zigzag motif and the oval design adorning 323 (p. 131) are
unique, as are the large Ws on 375 (p. 133) and the pair of spiral fans on 313A (p. 133). The pattern-banded storage jars from the Terrace fill and M4 II show small stampings, diminishing triangles and rectangular forms, that are replaced in the Destruction Level by larger, different types. A single example in the series from the burned citadel (1009) bears the triangular type, apparently the same stamp that was used on a specimen from the Terrace fill, and may have survived from the earlier generation (pp. 119, 129). Similarly, among continuing stamp types the S-spirals on 312, as already noted, look to have been impressed with the stamp used on 918 from the Destruction Level (p. 131). Other designs that are to recur, as different stamps, in the burned citadel include: the single circles on 373 (p. 129); the circular spirals on 313B (p. 130); the earlier of two varieties of X-panel (376), for which a unique circular analogue exists on 404 from M4 I (p. 130); and the chevron-triangles and S-curls borne by 323 (pp. 129, 133). Although concentric-circle stampings as known from the Destruction Level are not attested in the Terrace fill, they do occur on 249 from the pre-Terrace unit beneath the floor of Meg. 5 (p. 130).

The painted pottery from the Terrace fill complements that from EPB V in documenting the range of vase painting before the destruction period, and, in concert with the general picture, the material seems overall to represent a more advanced stage. $\mathbf{3 8 4}$ is the earliest example of the Polychrome House style, a mode that recurs in EPB VII and the Destruction Level and that may somehow be laterally descendent from the Ladders-and-Zigzags style first appearing in EPB V (p. 160). 317-319 from the Terrace fill might represent the latter mode in the large format of kraters, as occur in PN 3 and
the destruction period (pp. 160-161). Of particular motifs appearing in these styles, the triangle row with pendent chevrons on 317 might presuppose Type 1B triangles, a distinctively Phrygian pattern that is characteristic of the Polychrome House mode and first attested in EPB VII (p. 141). Whether 384 bore 1B triangles is uncertain, but the vessel does preserve a Type 1 cross-andlozenge panel, a favored motif of Polychrome House and the earliest example at Gordion in any variety of this versatile design of the koine (p. 151).

Of several other new motifs in the Terrace fill, some have affinities with the broader koine and others appear to be purely Phrygian conceptions. The complex lozenge row borne by 320 introduces a kind of motif that is found widely spread in the koine; the specific variety finds parallels on the eastern plateau and may have a modified version in the Destruction Level, where other types of complex lozenges also occur (p. 144). The solid-barred $X$-panels on 315 and 385, another design of the koine, were to be the most frequently recurring variety of this motif by the time of the destruction, and in each case the use of the design has parallels in the Halys region (p. 152). Not so paralleled is the row of tangent $X$-panels on 250 from the pre-Terrace unit within Meg. 5 , a seemingly Phrygian scheme that can be traced to PN 3 and the Destruction Level (p. 153). The large sets of concentric semicircles on 392 also appear again; although rare, they may be related to a broader distribution of the design across Anatolia (p. 147). Motifs lacking external correspondents include the Type 2 latticed panel borne by 397 (p. 150) and the Type 1 semicircle panel, the first of its general kind, on 386 (pp. 153-154); both designs recur in the Destruction Level.

## M4 I-III

The post-Terrace units connected with Meg. 4 and its platform (pp. 15-16) make a few contributions to the sequence, some of which have already been noted. The large shoulder-handled amphora $\mathbf{4 0 4}$ from M4 I seems to be the earliest of this general type on the City Mound, although the shape occurs in Tumulus $W$ and has a wide distribution among other pre-Kimmerian tombs (pp. 80, 82). The pattern-incised 405, also from M4 I, bears a
unique basket-weave design that is only a step removed from an incised triangle pattern found in the Destruction Level (p. 116). The Brown-on-Buff 408 from M4 III bears the City Mound's earliest example of an oblique checkerboard, here Type 2 (p. 149); too little of the vessel is preserved to know whether it was painted in the Ornate Class.

## EPB VII

Presumably later still than the Meg. 4 terrace, and perhaps closely anterior to the destruction, are the contexts that compose EPB VII in and beside the by-nowdemolished Polychrome House (p. 13). The dinos 183 and $\mathbf{1 8 4}$ provide the first good views of the painting style that takes its name from the building ( $p .161$ ), and their well-preserved states may indicate that they had only
recently been discarded. The shoulder-handled amphoras 185-186 from the adjacent shed were perhaps in storage there when the EPB VII operation occurred. The figural 186 is with little doubt an import from Alişar IV territory, while $\mathbf{1 8 5}$ carries the strong suspicion of being alien (p. 82).

## Other Pre-Destruction Contexts in the Citadel

Other contexts on the City Mound add in relatively minor ways to the sum of the evidence preceding the Destruction Level. EPB VI, probably following soon upon EPB V (p. 13), yielded a strange and otherwise unattested type of Class 2 plain bowl (178-179; p. 50), while the round-mouthed jug 180 bears an unusual and perhaps early version of the Ladders-and-Zigzags style (p. 160). From Meg. 10-1, the inscribed 202 is the only such Phrygian ostrakon known from the Early Phrygian citadel. Since this problematic context (pp. 10-11) has a Class 2 carinated bowl (200) and ledged rims (206, 209) with close parallels in the Terrace fill (pp. 46, 104), it is possible that the inscription also is as late, even though the Class 2 plain bowl that carries it may be an incipient wheelmade type (p.56).

NCT IVa and the Phrygian material from the PN 3-EB Trenches also appear on typological grounds to be relatively late in the sequence (pp. 13-14). A Class 1 carinated bowl from NCT IVa belongs to a distinctive series attested from EPB V into M4 I (p. 45). The Class 3 carinated bowl 234 from the same context is related to a variety occurring in EPB V and has close followers in the Destruction Level, while another of the same class (233) has its most direct affinities in the Terrace fill (p. 47). 235, a bowl with articulated rim from NCT IVa, is closest in form to specimens from the burned citadel (p. 51). The X-panel stamped on $\mathbf{2 3 6}$, in being of a type that occurs in both the Terrace fill and the destruction period, also suggests a low date for NCT IVa (pp. 130-131).

The pottery from PN 3 and the EB Trench in front of Meg. 12 includes vessels that look no earlier than the Terrace fill for their closest correspondents, and some
specimens may represent post-Terrace developments. The pattern-incised and stamped 244 is perhaps the product of a source that was active from pre-Terrace times into the destruction period (p. 15). A poorly preserved krater painted in the Ladders-and-Zigzags style looks to a similar pattern of affinities and appears to have a particularly close follower in the Destruction Level (p. 160); the rim, however, is of a special type (with ridge-formed ledge) that is known from the Terrace fill and Tumulus P but not from the Destruction Level ( p . 104). The broadly stepped variation on the type borne by 242 from the EB Trench is not attested in the Terrace fill or other Early Phrygian contexts on the City Mound. Closely analogous forms do occur, however, in Tumulus P , while the rim has a nearly exact counterpart at a greatly increased scale in 1070, one of the enormous painted kraters whose style is most directly matched by Brown-on-Buff vessels from the same tomb (p. 104). Although the evidence is admittedly somewhat meager, the rims on $\mathbf{2 4 2}$ and $\mathbf{1 0 7 0}$ might represent a short-lived type that was current in the interval between the installation of the Terrace and the destruction period. So late a date for the PN 3-EB Phrygian material is perhaps supported by the painted amphora 241 , since it seems to belong to the Group of 932 , a presumably imported series that is otherwise not attested until the Destruction Level (p. 162). Similarly, the Type 3A triangle on the neck of an uncatalogued round-mouthed jug from the EB Trench is the only known example of this motif before the Destruction Level, where it occurs on a number of vessels (p. 141).

## The Destruction Level

The Early Phrygian ceramic sequence on the City Mound culminates with the great inventories of the Destruction Level (pp. 2-6), where the broadest range of types and decoration occur, and where the extensive variety of Phrygian pottery is most apparent (p. 41). The material also provides an abundance of evidence for the isolation of pottery by source (p. 42). The potting establishments themselves, however, remain elusive, and the closest link to them comes perhaps with the consignments of bowls and other shapes, including several production groups, that seem to have been brought to the TG depot but never distributed further because of the disaster (p. 6).

Relatively few shapes are without precedent either on the City Mound or in tumuli judged earlier than the destruction. The kantharos krater (877-882) is now seen for the first time, although its earlier presence might lie
undetected among the fragmented vessels here grouped with the shape's formal relative, the large roundmouthed jug (p. 78). Small jars are also documented no earlier than the Destruction Level (940-951; p. 91), while the case is the same with cylindrical stands (866-871) and a curious type of support (e.g., 865) that looks to have been designed for sieve jugs ( $p .76$ ). The tew small amphoras of disparate form from the Destruction Level (872-876) are also unprecedented if the handmade and presumably imported 255 from the Terrace fill is excluded (p. 77). Similarly, necked jars (975-985) would be without known antecedents were it not for P 141 from Tumulus G, another likely import ( p .97 ). Unique shapes and rare ones now first attested include the small sidespouted jug 791. the duofoil jug 792, the theton 858 , the sipping chalice 859, two bowls bearing perforated covers (861-862), and 863 , one of two odd pans with pitted
bottoms (pp. 65, 74-76). Also singular are the many holes that impart a special function to the necked jar 981 (p. 97). The ring vase 793 is unique in being contorted, but TumP 68 affords an unmodified version ( p . 65).

For some other shapes not definitely attested on the City Mound until the Destruction Level, tumuli provide earlier documentation. Thus the large round-mouthed jug (627-634, 637-640, 644), sharing the same problem of identification as kantharos kraters in earlier contexts, occurs in Tumuli III, P, and G (p. 56). The askoi 811-815 are new in the citadel, yet the basic design common to all but the first, a large, coarse-ware specimen, also occurs in Tumulus $P$ (pp. 65-66), as do general parallels for the sipping bowl 860 (p. 75). 1033 seems to be the Early Phrygian citadel's sole possible counterpart to the quadrupeds TumP 58 and 62-63 (p. 66). Tumulus P also contributes a few unusual types that would otherwise be unknown for the pre-Kimmerian period: the geese TumP 49-50, the horn-shaped rhyton TumP 67 (p. 74), and the Siamese jars TumP 69 (p. 76). Low-necked jars (952-958, 964-966) are otherwise surely attested for the Early Phrygian period only in Tumulus MM (p. 96).

Most of the carinated bowls from the Destruction Level, including a considerable number of production groups, have either evident or likely antecedents in pre-destruction contexts, even though several of the evolved or modified forms appearing here may be at some distance from the earlier expressions (e.g., 435437, 449-452, 456-458, 472). Few carinated bowls are totally unprecedented, among them being the Class 2 465-467 (p. 47) and the Class 3481 (pp. 47-48). Doubtless the most peculiar of the new forms is the singular (and unclassifiable) 483 (p. 48). The flaring-rimmed bowls 484-485 probably represent the continued importation of this type from the eastern plateau since before EPB V' (p. 48). Plain bowls show a similar relationship to earlier forms, and in fact the principal innovations now observable lie in trappings rather than basic shape. Several bear handles (e.g., 499, 501, 505-506), for which 102 from EPB V provides the sole precedent in clay, while 495 has lugs, and 496 both lugs and a handle. On 500,502 , and 507 handles or lugs are combined with spouts, and it is likely that the bowls point to an interplay with bronzeworking (p. 49). The triple loop-legs on the Class 3511 are unique among plain bowls and may reflect influence from imported flaring-rimmed types (p. 50). Several production groups of plain bowls are in evidence, while fabric and finish may indicate that some of these come from the same source that was supplying a number of carinated types to the citadel (p. 49). Neither the Destruction Level nor earlier contexts on the City Mound offer parallels for K-III 46, an imitation in clay of bronze, ring-handled plain bowls with braces (e.g., MM 55-69). Of bowls with articulated rims, 516-520 all seem to be modifications of a conservative type surviving since

EPB IIa in 515 (p. 51). 521 looks back to a Class 3 plain form occurring in EPB V; 522-526, close to Class 1 and 2 plain bowls, may preserve a feature of Early Handmade, although no sure intervening examples exist (p.51). The ambiguous 528 is the sole witness in the sequence to the production of a vessel (bowl or otherwise) and large stand as a single piece; the unique TumP 61, with an exceptionally high pedestaled base, provides the closest analogue (p. 51).

Round-mouthed and trefoil jugs are generally the best represented of standard closed shapes from the Destruction Level. Production groups are particularly abundant within the former shape, and some evidence exists for linking round-mouthed and trefoil types to the same source. A new aspect of production comes with miniature and near-miniature versions, possibly toys or vessels for limited measures of substances (e.g., 574, 579, 581, $589-590,593-594,651,686$ ). A particular type of body for which there is scant evidence before the destruction period (300)-ellipsoidal (usually squat) with multiple contours-is now attested by round-mouthed jugs (575578, 598-600, 605-606) and trefoil jugs both narrownecked (651-654) and wide-mouthed (764-765, 779); it is possible that most, if not all, are related by source (pp. 55,59 ). The sharply angular, biconical bodies of some round-mouthed and trefoil jugs are now seen for the first time (587-589, 669-672; cf. also 795), as would be the piriform bodies of several narrow-necked jugs (e.g., 683-688) were it not for TumP 64-65 (p. 60).

Less common types of jugs occurring in the burned citadel include a few with spouted mouths (787-790), and a limited series of large jugs with narrow necks and round mouths (783-785); the latter and perhaps the former are previewed in EPB V, while the spouted forms also have general parallels in K-III 3 and 14-15 (pp. 64-65). The glazed juglet 786, along with TumP 45 and 59 , no doubt came from the general Syro-Levantine sphere (p. 64); they have the distinction of being the only recognizable ceramic vessels from this quarter in the Early Phrygian period, yet they are fully consonant with the overall pattern of connections between Phrygia and the southeast before the Kimmerian invasion.

It is not until the Destruction Level that the full typological range of side-spouted sieve jugs is attested on the City Mound (p. 67); only Type 2 jugs (818-825) are known earlier both in the citadel and in tumuli. Type 1 (816-817), previewed in body form by the odd TumW 62, might have been a Phrygian invention (p. 68). Beyond the citadel, the regular Type 1 occurs again only in Tumulus X, a burial that may be particularly close in time to the destruction (p. 194). Type 3 jugs ( $\mathbf{8 2 6} \mathbf{- 8 3 4}$, p. 68), the commonest of the three varieties from the burned buildings, are otherwise attested for the period only in Tumulus III (K-III 4-5 and 17); their relatively late appearance may well be fortuitous, especially if it was via this type that the basic ceramic design was introduced to
the plateau from North Syria (pp. 68-69). 832 is the sole Brown-on-Buff sieve jug known from the Early Phrygian citadel, whereas in tombs and later contexts on the City Mound the shape is the most frequently recurring in the ware (p. 167). The gradation in size of one-handled utility pots-small, medium, and large-seems already to have been devised by the time of the Terrace, but it is only in the destroyed citadel that such distinctions in scale and, more to the point, capacity can be readily appreciated for this and other shapes (e.g., 838-840; pp. 71, 72). Lids, for which there is little evidence before the destruction period outside Tumulus III, now occur in some abundance, and most seem to be best suited as covers for the utility pots (pp. 73-74).

The low-necked jars now appearing in the citadel show a number of subgroups that suggest some standardization (e.g., 952-955 and 956-957; p. 95), while dinoi, already well known from pre-destruction contexts and early tumuli, include both continuing, established varieties (959-961, 968-970) and ones that may represent new developments ( $\mathbf{9 6 2 - 9 6 3}, \mathbf{9 6 7}, \mathbf{9 7 2 - 9 7 3}$; p. 96). $\mathbf{9 7 0}$ is the only evidence in the sequence for the execution of ceramic dinoi at the scale of large bronze cauldrons. Also singular are the unusual cut-out base on 973 and the spout that modifies the function of 974 . Neither the Destruction Level nor earlier strata offer parallels for K-III 47-48, ring-handled dinoi in imitation of bronze cauldrons, although the similarly equipped Brown-onBuff dinoi 1048-1049 from later contexts on the City Mound may have originated in the Early Phrygian citadel. Necked jars show a considerably diverse range of varieties, including at least one likely production group (975-977). A few others appear to have been modeled on commoner one-handled shapes (978-979), and the category also contains such general oddities as the petaled and tapering-necked 980 and the unusually footed 984 , which once bore some kind of attached device on the belly (p. 97).

Large amphoras and storage jars were among the ceramic mainstays of the burned buildings. The amphoras generally represent a continuation of the varieties attested in pre-destruction contexts and early tumuli, and the only really new types are singular occurrences, the nearly cylindrical 936 and the dinoid 937 (p. 90). Also known no earlier, although perhaps by chance, is the multiplicity of handles, three or four, that makes some amphoras etymological misnomers (889, 896-899, 907909, 911). Neck-handled amphoras (883-889) are not definitely attested on the City Mound until the destruction period, but their presence in early tumuli is widespread, and it is possible that some examples from the citadel (e.g., 886-887) represent formal developments beyond what is seen in the tombs (pp. 80, 82). The shoulder-handled amphoras from the burned buildings (890-898) also may incorporate advancements: some have good parallels in Tumuli MM and KY', but none shows
certain profiles that occur on the shape in $\mathrm{I}, \mathrm{III}$, and P (p. 83). The four-handled 897, the largest known of Early Phrygian narrow-necked amphoras, is also notable for mastery of execution and careful detailing (p.83). The painted 898, like examples of the type from EPB VII, looks to be an import from the eastern plateau (p.82).

Open-mouthed amphoras from the destroved citadel (899-935), in contrast to the narrow-necked categories, look back to an abundant documentation in predestruction contexts on the City Mound, but Tumulus P is the only early tomb known to have contained them ( p . 83). Both wide-necked amphoras and kraters are well attested, and a few mixed production groups (901-904, 914-915) may imply that Phrygian potters would not have taken very seriously the modern typology ( pp . 87-88). Although the open-mouthed amphoras show great variety in form, detailing, and decoration, the only radical departure in basic design is the lidded krater 929 (p. 88). Notable details include the combination of vertical and horizontal, side-attached handles on 908909, the massive composite handles on 911-912, and the various trappings borne by the ornate $920-921$, seemingly from the same source (pp. 87-88). The unusual bichrome amphora 925 was probably an import, as seems to have been the figural 932 (p. 88). The massive 911-913 are good testimony for the Early Phrygian production of open-mouthed amphoras at the general scale of the painted kraters 1065-1081, vessels that probably once stood in the Midean citadel (pp. 89-90).

The typological range of storage jars does not come into focus until the Destruction Level. The narrownecked variety ( $987-992$ ) occurs sporadically in early tombs (e.g., TumW 64, TumP 105), but for the lownecked type (993-997) and that with prominent wide neck (998-1001) the burned buildings offer the earliest sure documentation. Both the narrow-necked and the wide-necked varieties bear strong resemblances to similarly proportioned amphoras and thus may have been inspired by the handled shapes ( p .98 ). All three types as well as some unclassifiable examples show a wide selection of the bolsters and related attachments that are generally characteristic of the large jars (p. 99). The rims on storage jars and large amphoras from the destroyed citadel include relatively few types that are without precedent on the City Mound or in early tombs (pp. 105, 107).

In the non-painted embellishment of pottery, the material from the Destruction Level builds on earlier developments and adds relatively little to the basic repertory of techniques. Several motifs in patterned incision and stamping now occur for the first time, while a few rare approaches to decoration are also present. With whole or largely preserved programs by which to judge, it is now easier to appreciate the fundamental differences in composition that exist between patterned incision and stamping on the one hand and vase painting
on the other (pp. 114, 124-195). Among the new designs in patterned incision are the single wavy lines that appear in a seeming production series of one-handled utility pots (837) and necked jars ( 978 ), and the same motif as it occurs in groups of two or three to a zone on possibly related large trefoil jugs (745-746) and open-mouthed amphoras (914-915; p. 115). Zigzags other than the plain, single-line type are also unprecedented. Those on 888 and 1011 may have been made by the same source that had executed chevrons in a similar manner before the Terrace project ( p .115 ). The zigzag borne by $\mathbf{1 0 2 2}$ is particularly reminiscent of painted work, as are the incised panel of crosshatching (also new) in the same zone and the general composition (p. 116). The basin 482 carries the only sure instance of incised lozenges in the early repertory, and the large round-mouthed jug 631 the only row of standing triangles, here hatched ( $p$. 116). The sipping chalice 859 received a unique program of herringbone set into a checkerboard scheme, and is at the same time a rare example of patterned incision on a small vessel (p. 116).
The patterned ridgework on the large amphora 897 marks the only occurrence of this technique in the Early Phrygian wheelmade corpus; the inspiration may have come from elaborate handle trails like those on the kraters $\mathbf{9 2 0 - 9 2 1}$, possibly from the same source as 897 (p. 118). Equally novel, and perhaps also indicative of a common source, is the fluting on the sipping bowl 860 and the small jar 949 (p. 121). Tumuli III and P reveal that several other kinds of relief decoration, including a distinctive type of cut work, had also been practiced in pre-Kimmerian times (p. 122). The plastic bird perched on the handle of the sipping chalice 859 has a parallel in general kind on the sieve jug K-III 20, but otherwise such figural attachments as these are not attested until later, post-Kimmerian Phrygian times, when they enjoyed considerable popularity. The unique protome on the storage jar $\mathbf{1 0 0 2}$ is quite different in idea, as are the handles-turned-antelopes(?) on 910A-B (p. 122). Decorative openwork, a rare ceramic technique that may owe its inspiration to bronzeworking, also occurs no earlier than the Destruction Level on the City Mound, although the lozenge rows on the sieve jug K-III 16 set a precedent for à jour patterns in clay while constituting the only instance of such work on a small vessel (p. 123). The nearly twin stands 867-868 are the most impressive bearers of openwork from the Early Phrygian citadel. 869, a third, shorter example of the shape, shows similar technique; as on the others, the openwork appears in conjunction with triangle-zigzag stamping, but 869 is unique for the period in combining these decorative features of monochrome pottery with painting (p. 123). The cut-out X-panel on the surviving handle of the amphora 912 is the only other instance of such patterned openwork, unless the plain "windows" on the support for the bowl 528 be counted (p. 123). Slotted handles, representing
another simple version of the technique, likewise do not appear in the citadel until the Destruction Level (776, 794), although the sieve jug K-III 20, as with its plastic bird, affords an extramural parallel (p. 122).

The stamped pottery from the Destruction Level incorporates both continuing stamp types and new ones, while the absence of others known earlier might imply discontinuation (p. 185). The corpus is also instrumental in allowing the first extensive view of the sometimes ambitious programs of stamping, as glimpsed earlier by 323 from the Terrace fill. Easily the most remarkable examples of Early Phrygian pottery stamping are the storage jars 1000-1001, evidently from the same source although completely different sets of stamps were used for each (pp. 101-126). New varieties of basic stamp types attested earlier include: the "basket-weave X" panels on 1004 (p. 131); the chevron or herringbone in a long rectangular frame on 939 (p. 131); the version of an S-spiral borne by 1016 and also the spiralless modification of that motif on 938 (p. 133); and the S-curl adorning 1020 (p. 133). On the krater 920 , the prominent zone of relief checkerboard made with a plain rectangular stamp is singular, as is the lozenge design created by impressed $X_{s}$ on 986 , although other repeated stampings used to form a larger pattern, e.g., triangle-zigzag, are attested earlier (pp. 125, 128). Five of the seven stamps used on 1000 are of new types: the diminishing-lozenge design, as occurs in a different stamp on pattern-banded storage jars (p. 131); the S-curl in its simplest form, a design that is like the S-spiral in having Balkan affinities (p. 132); the spectaclespiral, also looking to southeastern Europe (p. 132); "concentric horseshoes," a peculiar motif known by two other stamps on 1001 and 1018 (p. 133); and the goats made by the only figural stamp attested from Early Phrygian times (p. 133). Other unprecedented types include the wagon-wheel motif on 1014 (p. 130), the pair of concentric semicircles in a large frame on 1017 ( $p$. 131), and the stylized plant $(?$ ) appearing on 1003 (p. 133).

As with pottery stamping, the painted pottery from the destroyed citadel incorporates earlier developments, and because of the large number of whole vessels the material allows a welcome opportunity for examining full compositional schemes, especially those on large amphoras (e.g., 927, 929-930). The Pure Wavy-Line style, predominant among painted modes in the Destruction Level, now includes a version in which groups of the namesake motif occur either in a zone or floating free (p. 156). A few vessels outside the style $(717,1026)$ show in their repetition of narrow zones what might be conscious imitations of the regular Wavy-Line rhythm (p. 156). The version of Partial Wavy-Line with triangles occurs for the first time, and shows some signs of interplay with that incorporating concentric circles, known since EPB IIb (p. 157). The latter, more common version probably inspired the scheme of straight lines and circles on the
large dinos 970 (p. 157). The only really new style of painting, if such it can be called, is the TB 8 Group, a perhaps imported series that reflects an eccentric approach to composition while making use of a few motifs otherwise not attested, e.g., the laddered zigzag on 612 and some of the triangles occupying the shoulder of 613. The Group also shows a curious penchant for single, compass-drawn circles (p. 164). The Group of 932, for which a source to the east of Gordion is likely, would also be new were it perhaps not for 241 from PN 3 (p. 187). The figural scenes of Alişar IV type borne by the namesake piece have precedents in imports, while the variety of complex lozenge row peculiar to the group (fig. 62) occurs earlier only on 241, as do the messy rows of dots found on several examples. Zigzag 2, like the lozenge row in being a motif of the koine, is shared by all the examples from the Destruction Level, but is otherwise not attested for the period at Gordion (p. 162).

The Chevron-Triangle style and the motif that identifies it are not found in the citadel until the Destruction Level, but Tumuli III and P provide earlier examples of this distinctively Phrygian mode with its possible Macedonian background (p. 158). Looking perhaps to the same general area is the enveloping of askoi with Type 1A checkerboard $(812,814)$, again unprecedented on the City Mound for any shape but occurring on askoi from Tumulus P (p. 149). The large zone of the same motif on 809 may be a direct reflection of the practice for askoi; Checkerboard 1 A is otherwise not used in this manner outside the Ornate Class of Brown-on-Buff ware, just as the stretched 1 C variety, except for its appearance on 607 , is peculiar to the mode (p. 170).

The bowl 527 and the Type 3 sieve jug 832 are the earliest examples of the Ornate Class known from the citadel, although the mode occurs in Tumulus W and is well represented in III and $P$. The three tombs are together instrumental in providing a broad, earlier view of the schemes and motifs in Brown-on-Buff painting. Both groups of the Ornate Class, with its rich corpus of designs, are represented, the one in W and III (and also by 832) and the other in P (pp. 168-169), while other approaches to the decoration of the ware are also in evidence, as on the City Mound since EPB V (pp. 171-172). The Brown-on-Buff ware from early tumuli may reveal some signs of internal development (infra), and it is possible that 832 recalls a formative stage in that process (pp. 168, 173). The many examples of the Ornate Class from post-destruction contexts on the City Mound (1036-1060) show a strong degree of stylistic uniformity with the Brown-on-Buff from Early Phrygian contexts and may, at least in part, stem originally from the pre-Kimmerian citadel. Even if production did continue beyond the disaster, the negative evidence from later tombs may point to the cessation of the ware during the course of the seventh century (p. 166). The contextually post-destruction amphoras related to the Ornate Class
(1061-1081) also may have come from the Early Phrygian citadel (pp. 88-90). Of these, the enormous kraters show what appear to be significant stylistic bonds with TumP 55-57 (p. 172), while the unusual zonal scheme of rays and panels that the kraters share with 930 from the Destruction Level might provide another close link with the Early Phrygian period (p. 169).

Meanders are the only significant family of motifs that lacks sure attestation on the City Mound before the Destruction Level (p. 145). The Type 1 or single-line key meander occurs widely in Brown-on-Buff ware, including 832 and examples from Tumuli III and $P$ (p. I70), yet the others found in the burned citadel, all crosshatched designs, have no local precedents. All appear to be connected, either directly or obliquely, with the meanders of Greek Geometric pottery, but at the same time certain varieties, particularly those on 502 and 640 , are perhaps best explained as Phrygian or more generally Central Anatolian adaptations, with affinities in other media (pp. 145-146). The battlement meander on the sieve jug K-III 11 is unique in Early Phrygian painting (p. 146).

A few rare motifs also appear for the first time in the Destruction Level. The running dog on 721 is singular for the period, while the hooked lambdas on 751 and 1024 are perhaps a mutant form of ray (p. 148). The feather trees borne by 931 and 1032 look to the eastern plateau, whence the latter vessel may have come (p. 154). Rosettes, as occur compass-drawn on 719 and freehand on the base of $\mathbf{1 0 3 4}$, are also unprecedented in the sequence, although those on the enormous kraters $\mathbf{1 0 6 5}$, 1067 , and 1069 would assume priority if these vessels are in fact generally contemporary with Tumulus P (p. 154).

Many varieties of previously attested basic patterns occur no earlier than the Destruction Level, as, for example, the Type 2 complex zigzag in the Group of 932 . Within the same group and on some other vessels as well, including one suspected import (1032), the Type 4 zigzag is also new and, like Type 2, is a design of the koine (pp. 142-143). In contrast, the large, dotted zigzag borne by 617 is singular. Type 3B triangles now join the 3A version known earlier from the EB Trench. Their relatively frequent use as primary designs is in some contrast with the ancillary role of the motif in the Halys region (p. 141). The simple lozenge row with alternating solid and crosshatched diamonds on 618 and 967 , and also that with blank lozenges on 715 , introduce to Gordion types that appear to have been more common on the eastern plateau, while the unparalleled simple rows occupying primary fields on 835 and 965 may be purely Phrygian designs ( p .143 ). The simple, stippled lozenges borne by 832 and the petaled amphora 876 are essentially a design of Brown-on-Buff ware ( $p .171$ ). Complex lozenge rows, which afford a considerable latitude for variation, occur in unmatched forms on 634, 927, and 1025 (p. 144). Of other designs used exclusively in rows, garlands now
appear for the first time as primary decoration (615, 637, 966 ), although their service in ancillary roles can be traced back to EPB V (p. 147). Rays, a favored design of Alisar IV painters, occur earlier only once, in eastern form on the presumably imported 255 from the Terrace fill, and in the Destruction Level much the same type reappears on the bridge of the Brown-on-Buff 832 . Other varieties from the burned citadel, such as that on 931, are unusual and probably represent Phrygian adaptations of the design. As already noted, it may be significant that the rays borne by 930 and $\mathbf{1 0 3 0}$ recur on the enormous kraters related to the Ornate Class of Brown-on-Buff ware (p. 148).
Painters represented in the Destruction Level also made use of unusual checkerboard patterns that are attested no earlier at Gordion. The bichrome 644 has variations on both Types 1 and 2, while those on 638 and 930, a panel and a zone respectively, are likewise based on the commoner types (p. 150). Oblique Checkerboard 2 is also new in the citadel, yet the design occurs in Tumulus G (p. 150). The bichrome 722 bears a unique variation of the basic motif and, like the orthogonal versions on 644, illustrates the increased latitude for variety in two-color work.
The versatile cross-and-lozenge panel occurs in several new varieties in the Destruction Level. Type 3, appearing on the Polychrome House 880, may be a fancier form of Type 2 (p. 151). Type 5, one of the few versions found beyond Gordion, is morphologically close to Type 4, which also has a wide distribution in the koine (p. 151). Types 6 and 7 lack external parallels, even though the latter design occurs on flaring-rimmed bowls (e.g., 484) presumed to have come from the eastern plateau (pp. 151-152). Type 6 has an expanded and again unprec-
edented relative in the multiple-lozenge panel borne by the Fine-Line Buff 634. The frame of stippled multiple lozenges on the bichrome $\mathbf{7 2 2}$ may reflect influence from the Type 1 and related multiple patterns found in the Brown-on-Buff circle. The latter designs are not attested in the Destruction Level, but Type 1 occurs in Tumuli III and P , while a double-line version appears on the enormous krater 1065, possibly contemporary with P . The panels of blank multiple lozenges on 638 and the Brown-on-Buff 832, otherwise unattested in the sequence, recall in manner of basic formation the pattern on 1065 (p. 152). The method of drafting used for the multiple-lozenge pattern on the shoulder amphora 898 might well brand the vessel as an import from the east ( p . 152).

Several new variations of the X-panel appear in the destroyed citadel, each limited to one or two vessels. The Xs range from the relatively straightforward varieties on 621,721, and 929 , all with affinities abroad, to the showy, unparalleled forms borne by 711 and 930 (pp. 152-153). The X-panel of different configuration on the Alişar-type amphora 1089 from a post-destruction context represents a popular eastern type in which Phrygian painters apparently had no interest (p. 153). Semicircle panels, on the other hand, seem to have been primarily Phrygian devices. A number of them now supplement the single Type 1 example known earlier from the Terrace fill. Most, including Type 2 and some apparent variations on Type 1, are concentrated on the basic shape common to kantharos kraters and large round-mouthed jugs (641-642, 882) and thus might be the designs of a single source. The Type 3 panels on $\mathbf{8 0 8}$ and the lidded krater 929 also may indicate a production link (p. 154).

## Early Phrygian Tumuli

The ceramic furnishings of Early Phrygian tombs have been seen to contribute substantially to the range of shapes and decoration present at Gordion before the destruction. Although much of the funereal pottery can be related to the typologies in the citadel, a considerable number of vessels are in form or decoration, or both, either rare or unattested beyond the grave. Conversely, several elements of the corpus from the City Mound are absent in the early tombs, e.g., small amphoras and jars, kantharos kraters, cylindrical stands, and large trefoil jugs, although bronze examples of the last shape are abundant in Tumulus MM. Carinated bowls and onehandled utility pots are known only from Tumulus III. Patterned incision is unattested, while stamped pottery is generally rare (K-IV 10, TumP 62, P 1350 from KY). Of the several painting styles known on the City Mound, only the Chevron-Triangle mode and Brown-on-Buff ware occur in tombs (pp. 158, 166), but a simple grave
later disturbed by Tumulus D contained dinoi in the Ladders-and-Zigzags style (p. 160), and the Great Tumulus excavated by METU in Ankara yielded another dinos painted in Partial Wavy-Line (p. 157). Tumulus X contained what looks to be a variant of Polychrome House (p. 162).

Of the wealthy early tumuli at Gordion, the relative order based on typological grounds, primarily bronzes, appears to have been W, III, P, and MM. Possible ceramic indications, largely negative, of the seniority of Tumulus W include the absence of dinoi, perhaps because of choice rather than non-existence of the shape at the time ( p .96 ), and the form of the amphoras in comparison with those from III and P. ${ }^{8}$ The lack of meanders on pottery and other media also may point to

[^212]an early date ( p .145 ), as possibly does the tomb's limited ceramic finery in relation to III and P. The absence on large vessels of a particular type of ledged rim that occurs in Tumulus P could also be significant in the relative placement of $W$. The same variety first appears on the City Mound in the Terrace fill (e.g., 308), as do other ledged forms lacking in W , and the distribution may indicate that the tomb in question belongs to an earlier temporal milieu than the installation of the Terrace (p. 105). The rim on TumW 64 is of a type known as early as EPB III (p. 105); but it is not until EPB V that other correspondences with the tomb, both general and specific, begin to appear in the citadel, including sieve jugs, Brown-on-Buff ware, and a close parallel in 157 for the upper profile of the bronze sieve jug TumW 5 (pp. 69, 182). The interment in Tumulus $W$ thus may have been made around the time of EPB V, when a series of major changes were occurring in the citadel (pp. 9-10).

The Type 2 sieve jug TumW 61 stands to be contextually the earliest example of the Ornate Class of Brown-onBuff ware, and in composition the vessel may, with K-III 10 , reflect an early stage in the development of the mode (p. 173). The bichrome TumW 62 anticipates the design of the Type 1 sieve jug as found in the Destruction Level; several aspects of the vessel from Tumulus $W$ suggest an import, perhaps from another part of Phrygia (pp. 69, 165). The large vessels from Tumulus W , like those from other early tumuli, add to the pre-destruction evidence from the City Mound in closely previewing the considered programs of ridgework and banding that accompany amphoras and storage jars in the destruction period (pp. 116-118).

Tumuli III and P appear to be close to each other in time because of certain shared traits. A distinctive type of cut relief that might be the mark of a single source is not found in other tombs (p. 122), nor are various other kinds of relief decoration (p. 121) or sieve jugs with strainer tops (K-III 11, TumP 72). The two are also the only burials at Gordion to have yielded examples of the Chevron-Triangle style (p. 158), while close formal correspondences exist between the round-mouthed jugs TumP 55-57 and K-III 24 (p. 56). Furthermore, III and P provide the largest stocks of Brown-on-Buff ware known from primary contexts, as though the period of the tombs saw a vogue in supplying the deceased with this elegant pottery (p. 166). The presence of painted animals on Brown-on-Buff vessels in III and P may indicate advancement beyond the non-figural TumW 61, while the exclusive occurrence of animals in small panels on vessels from III (K-III 3, 6, and 10), as opposed to the large-panel formats in P (TumP 55-57), is a possible ceramic clue that III is the earlier of the two (p. 173). The synchronistic evidence from the City Mound suggests a relative date for Tumuli III and P around the time of the installation of the Terrace or perhaps a little later. Both tombs have a possibly significant link with the Terrace fill in 302, a sieve jug whose punched decoration may be related to
the cut relief peculiar to III and $P$ (p. 122). The rims on large vessels from Tumulus $P$ include types that occur in the Terrace fill but not in EPB V. Some of these forms, as that on TumP 89, span from Terrace fill into the Destruction Level, yet those borne by TumP 99 and 103 are of types not known to continue so late. The rim on TumP 100 may be particularly significant in representing a post-Terrace development with close followers in the Destruction Level (p. 105). That crowning TumP 92 also might point to a date later than the Terrace fill for the tomb, since the manner of ledging reflects that on 242 from the EB Trench, a unit that may be intermediate between Terrace fill and Destruction Level (p. 187). Tumulus P also has some exclusive typological links with the Destruction Level, including the checkerboard askoi TumP 51-53 (p. 166), the ring vase TumP 68 (p.65), and the sipping bowls TumP 70-71 (p. 75). These could be further indications of a date approaching the destruction period, and it may not be far from the truth to view the interment in P as following closely the installation of the Terrace.
Tumulus MM is ceramically poor compared to III and $P$, and this condition in itself may be an indication of the tomb's relative lateness in the series, even though a similar qualitative comparison is used in viewing W as the earliest in the series. ${ }^{9}$ Of the two basic shapes represented, the smallish amphoras MM 372-377 have their earliest match in scale on the City Mound in 893 from the Destruction Level, a shoulder-handled example that is not far removed in form from MM 373; both vessels and MM 376 bear a type of rim attested no earlier than the destruction period in the citadel (pp. 83, 106). The combination of low-necked jars and dinoi also may be a factor of time in judging the relative placement of MM. The low-necked jars have close correspondents no earlier than the Destruction Level and, with the amphoras, help in a limited way to suggest that the tomb is close in date to the time of the disaster (p.96).

Of less opulent tumuli, $G$ appears to have been the richest in terms of pottery, even though the burial had been looted in antiquity. Cross-and-lozenge panels, such as that of Type 2 on the large round-mouthed jug P 49 (pl. 61), are known no earlier than the Terrace fill (p. 151), while the ledged rim borne by the storage jar P 180 may help to narrow the relative placement of $G$ to the general time of the Terrace project (p. 104). Whether or not Tumulus G is close in date to III and P , the tomb is notable in being the only Early Phrygian burial to contain likely imports from the eastern plateau: the petaled jug $P$ 45 (p. 121) and the necked jar P 141 (p. 197). Tumulus G was, for its time, also somewhat isolated from the major concentration of Early Phrygian tombs, standing alone near the W end of the NE Ridge, where all the neighboring tumuli are post-Kimmerian. ${ }^{10}$ The monument may

[^213]have been the focal point of an Early Phrygian cemetery of simple graves. One such interment just to the NE of G contained the Ladders-and-Zigzags dinoi mentioned above, while elsewhere in the vicinity children had been buried in gray-ware kraters of Early Phrygian type (pp. 84-85).
The tomb under Tumulus KY yielded only two vessels, the shoulder-handled amphoras P 1350 and P 1367. Both have general parallels in the Destruction Level, and in form they are generally unlike their counterparts from III and P (p. 83). The ledged rim on P 1367, however, is of much the same general type as that borne by the storage jar from Tumulus G (p. 104) and thus might imply that KY is not necessarily as late as the destruction period.

Tumuli X and Y , each ransacked and each preserving five vessels, may have been general contemporaries dating to around the time of the destruction. The painted Type 1 sieve jug from X (P 3136, fig. 30 and pl . 100)
closely echoes the Polychrome House style, as begins to occur in the Terrace fill, and the vessel is similar in form to a production group of sieve jugs from Meg. 3 (pp. 69, 162). In Tumulus Y, the unusually proportioned roundmouthed jug $\mathbf{P} 3160(\mathrm{pl} .61)$ may be related to production groups of the shape from the Destruction Level, Meg. 3 in particular (pp. 55,57), and it is perhaps more than coincidence that the sieve jugs from Meg. 3 that correspond to the one in Tumulus X show formal affinities with the same groups of round-mouthed jugs. Both P 3136 and P 3160 share with the round-mouthed jugs triangular-sectioned handles, a feature attested on the City Mound no earlier than the Destruction Level, where its presence on trefoil jugs may link them to the same source as the round-mouthed ones (pp. 55, 63). It is thus possible that the two funereal vessels represent this supplier of small shapes to the Midean citadel. The dinoi from Tumulus Y (P 3161, P 3162) also look to the burned buildings for their closest parallels (pp. 95-96).

## Absolute Chronology

The absolute chronology of the Early Phrygian period at Gordion is anchored by the $c a .700$ b.c. Destruction Level (p. 1), while a date of $c a .1200$ might stand as the extreme upper limit for the arrival of Europeans and their handmade pottery (pp. 20-21). The evidence for assigning absolute dates within the sequence is sorely meager in the absence of historical landmarks and closely datable imported goods.

For the construction of the Polychrome House and the cobbled Floor 2 extending from it to the EPB (pp. 8-9, 12), evidence that is admittedly indirect and circumstantial may nonetheless allow a degree of chronological footing. The Polychrome House itself appears to follow an ancient gateway plan, with rectangular chamber enclosed by doors at either end, that was still current in North Syria during the Syro-Hittite period. ${ }^{11}$ Similarly, the intentional use of differently colored stones, which prompted the building's modern name, recalls a practice of stone-setters in North Syria, as seen in the alternating dark-light sculpted orthostates of the Processional Way and Herald's Wall at Carchemish. ${ }^{12}$ Post-destruction contexts on the City Mound, primarily those connected with the rebuilding of the citadel at a higher level in the sixth century, have yielded a series of fragmented relief orthostates in soft limestone or poros. Apparently reused from the Early Phrygian period, the sculptures have

[^214]close stylistic and iconographical affinities with North Syrian work of the later tenth and ninth centuries, particularly at Carchemish and Zincirli, and it is possible that the Phrygian series is generally contemporary rather than a later copying of an old sculptural style. ${ }^{13}$ Given the correspondences of the Polychrome House with North Syrian architecture, the building may have been the setting for the poros orthostates, as sometimes are the gate houses of comparable plan in the Syro-Hittite sphere, ${ }^{14}$ and thus represent a manifold, not to say profound, cultural transfer to Phrygia. Since the building was apparently demolished soon before the destruction (p. 2), it is possible that the sculpted slabs were conveniently available for reuse by the later builders. The association of the orthostates with the Polychrome House receives some support from numerous poros architectural elements found reused in the structure and general underpinning of Meg. 9, a part of the EPB V project. ${ }^{15}$ These membra, including a large, winged akroterion (A 247), show aspects of technique, especially tooling, that correspond closely with the sculpted slabs, and they presumably came from one or more buildings that had stood at the immediately preceding cobbled Floor 2 level, i.e., generally contemporary with the Polychrome House.

[^215]If the orthostates are at all close in time to their North Syrian counterparts, and if they are correctly placed in the Polychrome House, then that building and the cobbled Floor 2 with its EPB IIb substratum should be no later than the ninth century, while the accumulation in the EPB III Latrine, which saw use during the life of Floor 2, could have begun also before ca. 800. The ceramic implications would be several. Advanced Phrygian monochrome pottery, as begins to emerge in EPB IIa-b, could be viewed as a development that transpired well within the Anatolian Dark Age. Similarly, the limited amount of painted pottery associated with EPB IIb ( $\mathbf{2 2}-\mathbf{2 3}, \mathbf{2 9}$ ) would point to an earlier Iron Age beginning for this art than has generally been entertained. 23, seeming to conform to the general tenets of the SyroAnatolian koine, may thus come to have broader ramifications for the chronology of Halys centers in the east, where a date no earlier than $c a .800$ has usually been suggested for the initial Iron Age settlements and the appearance of painted pottery at sites like Alişar and Boğazköy. ${ }^{16}$ Furthermore, 29, in the Partial Wavy-Line style, would imply that Phrygian painters had begun before the eighth century to express themselves in a distinctive and original way.

The distance in time that separates these developments from Early Handmade pottery and EPB I cannot be gauged, but it is possible that the floruit of the earlier tradition was no later than the tenth century, i.e., perhaps not greatly removed in time from the Coarse and Knobbed Wares of Troy VIIb. If EPB I was in fact contemporary with the period of Early Handmade, the EPB itself, and the ECW, also might be no later than the beginning of the first millennium. NCT IVb may antedate EPB II (p. 14).

Subsequent Early Phrygian contexts leading to the Destruction Level, and the projects to which they belong, are perhaps all to be placed between $c a .800$ and 700 , with the relative order as follows: EPB IV, EPB $V$ and the major renewal program that it accompanies, EPB VI, the Terrace, Meg. 4 and M4 I-III, and EPB VII. Meg. 10-1, PN 3-EB Trench, and NCT IVa appear to have been no earlier than the Terrace fill, while the pre-Terrace context in Meg. 5 may not antedate EPB V. Few grounds exist for judging the spans of time that separated most of these activities. EPB VII, given the nature of the operation, may have been immediately anterior to the destruction, and EPB VI probably belonged to the same general project as EPB V (p. 13). Aspects of ceramic evolution might in some cases allude to the intervals involved, unless the pace of dynamism was deceptively rapid. Thus EPB V and the Terrace fill share a number of features suggesting that the contexts were at no lengthy remove from each other, but for the seemingly new elements
16. See, e.g.. Muscarella, "Tumulus," 9.
occurring in the latter, e.g., patterned incision, the Polychrome House style, and the type of ledged rim borne by 308, some lapse of time may have been necessary. Similarly, the Destruction Level has several direct links with the Terrace fill, and at least a few vessels seem to have survived from pre-Terrace days; yet a passage of perhaps no more than a few decades might be postulated to accommodate the intermediate Meg. 4 project, which was clearly an afterthought to the Terrace. Such an interval could also account for the apparent phasing out of some elements before the destruction, e.g., a particular series of carinated bowls found as late as M4 I, and for the introduction of new ones, as with the different stamp types that accompany pattern-banded storage jars in the Destruction Level.

The program incorporating EPB V might tentatively be assigned to the mid-eighth century, with the EPB III Latrine perhaps continuing to receive discarded pottery into the first half, where EPB IV possibly falls. Tumulus W, sharing both general and specific features with EPB V , could have a similar date, and in any event the tomb seems to have been earlier than the Terrace fill. ${ }^{17}$ The stamped pottery from EPB V implies a new Balkanspecifically Thracian-element by this time, and it is perhaps more than coincidence that the earliest known tumulus at Gordion, W, is seemingly contemporary. The installation of the Terrace and the construction of the TB-CC Buildings can perhaps be placed early in the last third or quarter of the eighth century, and the Meg. 4 project somewhat later, approaching the end of the century. Typological correspondences for the ceramic material from the Terrace fill in Tumuli III, P, and G may point to much the same chronological range for these burials. III and P probably cannot be divorced too much in time from each other, and at least $P$, seemingly the later of the two, might postdate the Terrace and be generally contemporary with the construction of Meg. 4, as may be the enormous painted kraters from postdestruction contexts. The suggested Sargonid date for the glass bowl TumP 48 would thus be consonant with the tentative scheme here presented, although it is perhaps risky to allow the vessel itself to serve as a chronological pivot. ${ }^{18}$ Tumulus KY may be close to P or somewhat later, while X and Y might not be far from the $c a .700$ destruction. Whether the chamber under Tumulus MM was the final resting place of the Midas known to

[^216]Sargon II remains a question that the archaeological evidence cannot conclusively answer, although typological considerations do point to an interment generally close in time to the Kimmerian onslaught in which Midas was said to have lost his life (p. 1). The issue of the occupant's identity thus comes to have a necessarily subjective element, whether the greatness of the tomb tempts an association with Midas, or whether the execu-
tion of so grand a burial in the wake of a major catastrophe seems improbable. ${ }^{19}$

[^217]Table 2. Tentative Chronology of the Early Phrygian Period at Gordion, Relative and Absolute

|  |  | City Mound |  |  | Tumuli |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\pm 1000$ в.С. | (Early Handmade Pottery) | $\underset{\uparrow}{\mathrm{EPB}} \mathrm{I}$ |  |  |  |
|  | (Phrygian Wheelmade Pottery) |  |  |  |  |
| 900 | (Painted Pottery) | EPB IIa | $\uparrow$ | Meg. 10-4 |  |
|  |  | EPB IIb | EPB III | Meg. 10-2 |  |
| 800 |  | EPB IV |  |  |  |
| 750 | (Pottery Stamping) | EPB V | (Gate Building, new |  | W |
|  |  | EPB VI | citadel wall) |  |  |
| 725 |  |  | pre-Meg. 5 context |  |  |
|  | (Patterned Incision) | Terrace | NCT IVa | Meg. 10-1 | G |
|  |  | $\uparrow$ |  |  | III |
|  |  | Meg. 4 | EB-PN 3 |  | P |
|  |  | $\downarrow$ |  |  | $\uparrow$ |
|  |  | EPB VII |  |  | KY |
| 700 |  | Destruction Level |  |  | X, Y, MM |

## Postscript

Excavations were resumed at Gordion in 1988, after a hiatus of 15 years. The program received generous financial support from the National Endowment for the Humanities, the National Geographic Society, and private donors. Among the most important aspects of the new work has been the isolation of original contexts, in association with architecture, for Early Handmade pottery. The level overlay a habitation level of the Late Bronze Age and apparently preceded a domestic complex characterized by Early Phrygian wheelmade pot-
tery. This discovery is the only major way in which the results of the new excavations might alter the views and conclusions set forth in the present study. ${ }^{20}$

Chapel Hill, April 1991
20. At this writing, only preliminary reports on the recent excavations have appeared: G. Kenneth Sams and Mary M. Voigt, "Work at Gordion in 1988," XI. Kaze Sonuslan Toplantust II (Ankara, 1990), 77-105; "Work at Gordion in 1989," XII. Kazı Sonuçlar Toplantist I (Ankara, 1991), 455-470.

## VII

## Catalogue

ABBREVIATIONS. Abbreviations in the Catalogue, in addition to those already used in TGET, are as follows:

| Capac.-neck | Capacity to base of neck |
| :--- | :--- |
| Capac.-top | Capacity to brim |
| CC (CCs) | Concentric Circle(s) |
| Est. D. rim, | Estimated diameters, to the nearest |
| Est. max. D., etc. $\quad$ whole centimeter |  |
| ext. | exterior |
| GPD. | greatest preserved diameter |
| indet. | indeterminable (for coloration) |
| int. | interior |
| mf | mica film |
| ml. | milliliter |
| predom. | predominantly |
| rb | reddish brown |
| ry | reddish yellow |
| yr | yellowish red |

Fig. refers to a profile or drawing. Pl. refers to a photograph. Page references are to places in the text where the item is discussed. All measurements are given in meters.

TERMINOLOGY. A "sherd" is a single, unjoined piece. A "fragment" consists of two or more joined sherds. "Associated" sherds and/or fragments do not join but seem in all likelihood to belong to the same vessel. For better-preserved specimens, the emphasis is on what is missing, e.g., "gaps," "gap in neck," etc. A "complete" vessel is all there, mended. An "intact" vessel is completely preserved and unbroken.

For describing the quality of clays, the following terms see regular use: very fine, fine, medium-fine, medium-coarse, coarse, very coarse. These gradations consider the concentration and size of inclusions, and also the degree of a clay's compaction, but not the presence of mica (p. 31). For surface finishing, "cursory" and "cursorily" are used regularly to denote superficial efforts at smoothing or polishing. With
polishing, the degree of luster is generally difficult to qualify. "Low," "medium," and "high" luster are thus relative, although the last (together with "very high") is reserved for surfaces that approach the sheen of finely polished leather or stone.

The basic terminology for describing aspects of form is presented elsewhere (pp. 41-43), yet two further qualifying terms deserve some explanation. "Plump" and "very plump" are used in reference to particularly full, rotund bodies that might be likened to inflated versions of their basic forms (e.g., "plump ovoid"). "Abbreviated," as in the case of a neck or the stem of a foot, implies an under-emphasized, sometimes almost non-existent element, yet one that the potter has evidently made some efforts to incorporate.

Comparative terms for vessels noted yet not included as Catalogue entries (here given by their $P$ or pottery inventory numbers) likewise aim at consistency. "Similar" and "very similar" indicate specimens that bear one or the other degree of general resemblance to a Catalogue entry in overall form. "Identical" vessels are like an entry in every major respect of form, while those that are "nearly" or "practically" identical differ little from the entry (e.g., a slightly different form of base, rim, or handle). A "group" of vessels generally implies these latter, close degrees of formal correspondence.

The regular application of "ambiguous" throughout this study may not conform to common usage, but the word has nonetheless been adopted as a handy means for classifying fragmentary material whose shape or variety within a shape cannot be determined (pp. 42-43).

PAINTED MOTIFS. Recurring painted designs are given in the Catalogue by motif name and number (e.g., Triangle 1A). Figures 62-65 show the geometric structure of these patterns in idealized drawings, i.e., they do not attempt to copy a particular instance of a design.

# Pre-Destruction Level Contexts <br> (1-409) 

## The Early Phrygian Building (1-186)

# THE EARLY PHRYGIAN BUILDING SEQUENCE: EPB I <br> (1-4) p. 8 

HANDMADE POTTERY

## GROUP 1 CLOSED VESSEL

1 Group 1 vessel with lug; gray ware
P 5675 EPB I: Y-65-21
GPH. 0.079; Est. D. rim 0.13: Th. 0.008
Fig. 3; Pl. 4; pp. 8, 19, 21, 22, 25, 26
Upper body fragment, including rim and lug. Mediumcoarse, micaceous clay, poorly prepared, fired dark gray; surface, including int. neck, polished yet uneven and practically matte, and fired clay color with lighter, brownish blushes.

Upper body tapering gradually to a wide mouth; outwardthickened, rounded rim, set off below by a shallow groove. Lug, now mostly broken away, attached just below rim.

## GROUP 2 CLOSED VESSELS

## 2 Group 2 vessel, lugged; tan ware

P 5676 EPB I: Y-65-21
GPH. 0.097; Est. D. rim 0.15; Th. 0.009
Fig. 4; Pl. 5; pp. 8, 19, 21, 22, 23, 25, 26, 72
Upper body fragment, including rim and lug. Very coarse, poorly prepared clay, fired yr; surfaces cursorily polished and fired $r b$ with darker areas that appear to have resulted from secondary firing; much fine mica on surface, but without appearance of a film.

Continuous curve from steep shoulder into short, wide neck; upright rim with flattened face and top. Triangular lug attached to neck. Two incised parallel lines on shoulder at $R$.

3 Group 2 lugged vessel with incised rim; tan ware
P 5677 EPB I: Y-65-21
GPH. 0.050; Est. D. rim 0.25
Fig. 4; Pl. 5; pp. 8, 19, 21, 22, 23, 25, 26
Neck/rim fragment, including lug. Coarse clay with heavy concentration of coarse golden mica flakes, poorly prepared and fired ry; rough surfaces, fired light rb and darker.

Wide neck; incised oblique dashes on rim. Thick, triangular lug placed just below rim.
Cf. 4 ff .
4 Group 2 vessel with incised rim; variegated ware(?)
P 5678 EPB I: Y-65-21
GPH. 0.028; Est. D. rim 0.25; Th. 0.010
Fig. 4; Pl. 5; pp. 8, 19, 21, 22, 23, 25, 26
Rim sherd. Fabric and finish like 3; ext. fired gray while int. is rb .

Outward-thickened rim, trimmed to a band face and decorated with deeply incised, near-vertical dashes.

Despite the differences in coloration between this piece and 3, the two may be from the same vessel, some of its sherds having been secondarily fired.

## THE EARLY PHRYGIAN BUILDING SEQUENCE: EPB IIA (5-9) p. 8 <br> HANDMADE POTTERY

## CARINATED BOWLS

5 Carinated bowl; gray ware
P 5679 EPB IIa: Y-65-19
GPH. 0.030; Est. D. rim 0.21
Fig. 1; pp. 19, 22, 23, 26
Rim sherd. Medium-fine clay, fired light brown with very thick, dark gray core; dark gray, somewhat streaky surfaces, polished to medium luster.

Rim high flaring above carination; flattened on top; oblique notching on edge.

NCT IVa yielded a similar bowl in gray ware, with a slightly less flaring rim.

6 Carinated bowl with faceted interior; tan ware
P 5680 EPB IIa: Y-65-20
GPH. 0.040; Est. D. rim 0.35
Fig. 1; Pl. 1; pp. 19, 23, 24, 26, 44
Body/rim sherd of large, heavy bowl. Medium-coarse yr clay; surfaces burnished to medium luster and fired predom. light brown.

Slightly protruding carination above three shallow grooves; broadly flaring rim with obliquely notched edge; int. above carination trimmed to three broad facets.

## WHEELMADE POTTERY

## PLAIN BOWL

## 7 Płain bowl, Class 1; gray ware

 EPB IIa (Y-65-15: 1)GPH. largest body frag. 0.050; Est. D. rim 0.20
Fig. 16; pp. 34, 48, 49, 51, 179
Nine sherds, some joining, including foot. Medium-fine clay, fired light brown with thin gray core and very slight reduction penetration; polished surfaces, dark gray with heavily concentrated, light gray mf.

Low ring foot with beveled edge. Shallowly convex lower body, merging smoothly into plain, vertical rim.

## BOWL WITH ARTICULATED RIM

## 8 Bowl with articulated rim; gray ware

EPB IIa (Y-65-15: 2)
GPH. 0.023; Est. D. rim 0.23
Fig. 21; pp. 33, 34, 50, 51, 179
Sherd. Fine, heavily micaceous clay, fired dark gray; rb mf, well polished over dark gray ground to create mottled surface with medium luster.

Vertical upper body; outward-thickened, rounded rim.

## TREFOIL JUG

## 9 Large trefoil jug; gray ware

EPB IIa (Y-65-15: 3)
GPH. 0.061
Fig. 26; pp. 34, 57, 59, 107, 179
Neck/rim sherd. Medium-coarse, heavily micaceous clay, fired very dark gray; cursorily polished surface, dark gray with rb mf.

Beveled-band rim.
One other trefoil jug is represented in EPB IIa, from context Y-65-20.

## THE EARLY PHRYGIAN BUILDING SEQUENCE: EPB IIB <br> (10-29) pp. 8-9, 13

## HANDMADE POTTERY

## CARINATED BOWL

10 Carinated bowl; gray ware
P 5688 EPB IIb: Y-63-6
GPH. 0.044; Est. D. rim 0.24
Fig. 1; pp. 9, 19, 22, 23, 24, 26, 45
Sherd. Very coarse clay, fired rb with thick, dark gray core; surfaces slipped, polished, and fired gray to black with lighter brown blushes.

Unpronounced carination; high flaring rim; top int. planed to a flat band.

## GROUP 1 CLOSED VESSEL

## 11 Group 1 vessel with impressed decoration; light

 variegated wareP 5689 EPB IIb in area of Polychrome House: Y-63-4 GPH. 0.046; Est. D. rim 0.24
Fig. 3; Pl. 4; pp. 9, 13 ,19, 22, 23, 25, 26
Upper body/rim sherd. Coarse clay, fired red; slipped and cursorily smoothed surfaces, fired rb on ext. (except for darkened rim-face) and yr on int.

Upper body gradually tapering to wide mouth; outwardthickened band rim with a row of drop-shaped impressions on face.

## GROUP 2 CLOSED VESSELS

12 Group 2 lugged vessel with incision; variegated ware
P 5690 EPB IIb in area of Polychrome House: Y-63-4 GPH. 0.104; Est. D. rim 0.26
Fig. 4; Pl. 5; pp. 9, 13, 19, 22, 23, 25, 26, 85
Neck/rim sherd. Coarse clay, fired rb with dark gray core
and slight reduction penetration from ext.; cursorily smoothed surfaces, fired very dark gray to black on ext., light rb on int.; high concentration of fine mica on surface, but without appearance of a film.

Wide neck, rising in continuous curve from steep shoulder; plain, vertical rim with flattened, sloping top. Below rim, a low, imprecise band with deeply cut oblique slashes. Triangular lug set at level of band.

13 Group 2 vessel with impressed decoration; gray ware P 5681 EPB IIb inside Polychrome House: Y-63-1 GPH. 0.046; too little of rim for Est. D.
Fig. 4; Pl. 6; pp. 9, 13, 19, 22, 25, 26,27
Rim sherd. Very coarse, gritty clay, fired dark rb with slight reduction penetration; smoothed, dark gray surfaces.

Wide neck; everted rim, broad and flattened on top.
At base of rim, row of small oval impressions.

## CRUDE HANDMADE POTTERY

## 14 Trefoil jug; tan-slipped ware

P 3203 EPB IIb, storage bin on Floor 4, below EPB SW Room: Y-65-13
H.-rim 0.072; Max. D. 0.064

Pl. 10; pp. 9, 29
Intact piece with chips in rim; handle missing. Coarse clay, fired grayish brown; traces of ry slip, cursorily smoothed.

Uneven, flat bottom. Lopsided ovoid body; wide neck with simple pinching at front to form trefoil. Vertical handle from lower shoulder to top of rim.

## WHEELMADE POTTERY

## CARINATED BOWLS

15 Carinated bowl, Class 1; gray ware
EPB IIb (Y-65-13: 1)
GPH. 0.040; Est. D. rim 0.30
Fig. 6; pp. 9, 24, 32, 34, 44, 179
Fragment. Medium-fine gray clay; very dark gray surfaces, polished to medium luster.

Thick-walled and heavy. Blunt, slightly protruding carination; broadly flaring rim.

16 Carinated basin, Class 1; gray ware
EPB IIb (Y-65-13: 2)
GPH. 0.049 ; Est. D. rim 0.40
Fig. 6; pp. 9, 32, 34, 44, 179
Rim sherd, Coarse clay, fired rb; surfaces slipped, left wheel-finished and fired black.

Very thick-walled and heavy. Rim broadly flaring above carination.

17 Carinated bowl, Class 1 ; light variegated ware
EPB IIb (Y-63-6: 2)
GPH. 0.044; Est. D. rim 0.31
Fig. 6; pp. 9, 36, 43, 44, 179
Rim sherd. Fine, ry clay; clay-colored ext., left wheelfinished from a point below carination to top, smoothed below; int. cursorily polished and fired red.

Blunt carination; flaring rim.

## PLAIN BOWLS

18 Plain bowl, Class 1 ; gray ware
EPB IIb (Y-65-13: 8)
GPH. 0.029; Est. D. rim 0.23
Fig. 16; pp. 9, 33. 48, 49, 179
Rim sherd. Medium-fine, dark gray clay; gray surface, with pink mf of uneven thickness, well polished.

Vertical rim, flattened on top.
19 Plain bowl, Class 2; gray ware
EPB IIb (Y-63-6: 3)
GPH. 0.047; Est. D. rim 0.20
Fig. 16; pp. 9, 24, 33, 34, 48, 49, 50, 179
Rim sherd. Very fine clay, fired rb with very slight reduction penetration; very dark gray surface, with patchy, rb mf, polished.

Shallowly convex lower body, merging smoothly into slightly flaring rim.

## 20 Plain bowl or basin, Class 2; gray ware

EPB IIb (Y-65-13: 4)
GPH. 0.037; Est. D. rim 0.37
Fig. 16; pp. 9, 24, 35, 48, 49, 50, 176, 179
Rim sherd. Medium-coarse, heavily micaceous clay, fired brown with slight reduction penetration; cursorily polished surfaces, gray with light gray, silvery mf.

Thick-walled and heavy. Flaring rim, trimmed to flattish surfaces on face and top.

## ROUND-MOUTHED JUGS

## 21 Round-mouthed jug; gray ware

EPB IIb (Y-65-13: 3)
GPH. 0.052; Est. D. rim 0.10
Fig. 22; pp. 9, 33, 34, 35, 52, 54, 71, 179-180
Neck/rim sherd. Fine, dark gray clay; black surface, well polished over rb mf to create a richly mottled effect with high luster.

Wide, flaring neck with sharply tooled ridge at about midway.

## 22 Round-mouthed jug; painted dark-on-buff

P 5691 EPB IIb in area of Polychrome House: NB 92, Bag 14A
Est. max. D. 0.11
P1. 37; pp. 9, 13, 37, 52, 54, 56, 116, 134, 136, 137, 140, 179-180, 195
Belly/shoulder sherd. Fine clay, fired ry; smoothed surface, light brown; black paint.

Steep shoulder with ridge at base of neck.
Thick-line decoration. Wavy-line zone on shoulder, above lines spanning to below max. D.
23 Large round-mouthed jug or kantharos krater; painted dark-on-ground-coat
P 2969 EPB IIb: Y-63-6
GPH. 0.033; Est. D. rim 0.19; Th. 0.006
Pl. 56; Color Pl. II; pp. 9, 38, 52, 54, 78, 134, 136, 137, 139, $142,148,179,180,195$
Rim sherd. Fine red clay; white ground-coat, smoothed; dark red slip, overlapping ground-coat, polished to high luster; dark paint, worn.

Wide, flaring neck; plain rim.
Ground-coat on neck; red slip on rim and int. Neat, careful line of painting: zone preserving part of a panel of Crosshatching 1 ; above, just below rim, a narrow zone of simple zigzag.

## LARGE AMPHORAS OR STORAGE JARS

## 24 Ledged rim; gray ware

EPB IIb (NB 92, Bag 14A:1)
GPH. 0.031; Est. D. rim 0.35
Fig. 51; pp. 9, 13, 102, 179, 180
Sherd. Medium-coarse gray clay; cursorily smoothed surface, gray with light gray, silvery mf.

## 25 Ledged rim; tan ware

EPB IIb (Y-63-6: 4)
GPH. 0.024; too little for Est. D. rim
Fig. 51; pp. 9, 32, 33, 36, 102, 103, 179, 180
Sherd. Coarse clay, fired very dark gray with slight oxidation penetration; largely wheel-finished surface, rb with mf .

## 26 Large vessel with pattern-banding; red ware

P 3100 EPB IIb inside Polychrome House: X-63-1
GPH. 0.250; Max. dim. 0.380; Th. 0.019
Pl. 150; pp. 9, 13, 36, 111, 119, 180
Shoulder fragment. Coarse clay, fired red with thick gray core; slipped surface, smoothed and fired different tone of clay color.

Long shoulder, sloping at $c a .45^{\circ}$.
Program of narrow, raised bands in three zones. In the lowest and highest, a semicircular or horseshoe design, each component divided vertically; between them, a large zone of latticing, two squares high.

## AMBIGUOUS VESSELS, MISCELLANEOUS

## 27 Medium-sized vessel with lug; gray ware

EPB IIb (Y-65-14: 1)
GPH. 0.110; Th. 0.009
Fig. 58; pp. 9, 26, 34, 72, 107, 111, 175, 179
Shoulder sherd. Coarse, heavily micaceous clay, fired rb with reduction penetration; cursorily smoothed surface, very dark gray.

Steep shoulder; blunt ridge at base of wide neck. Thin, triangular lug with trimmed edges, set at top of shoulder.

## 28 Double rope handle of large vessel; gray ware

EPB IIb in area of Polychrome House (Y-63-4: 3)
W. 0.054; Th. body 0.012

Pl. 150; pp. 9, 13, 27 (n. 44), 107, 108, 179, 180
Sherd preserving segment of handle attachment to body. Medium-coarse clay, fired pale brown with thick, light gray core and very slight reduction penetration; polished surface, gray with light gray, silvery mf.

Vertical, double rolled handle, each half obliquely channeled so as to resemble rope.

## 29A-C Probable jug, medium-sized; Partial Wavy-Line with

 CCs, dark-on-redP 1091, P 55432a-c EPB IIb inside Polychrome House: Y-63-1
GPH.(B) 0.084 ; Th. 0.006 m .
Pl. 89; pp. 9, 13, 37, 59, 66, 134, 136, 155, 156-157, 179, 180, 195
Three fragments preserving sections of belly and shoulder, including lower handle attachment and beginning of neck. Fine clay, fired ry; surface polished over dark paint to at least medium luster and fired light red.

Full-bodied vessel with narrow neck. Handle rising from low on shoulder.

On belly, two stacked zones of wavy line; above, on shoulder, two zones of quadruple CCs divided by a wavy-line zone that runs headlong against handle base; upper row of

CCs bordered above by a wavy-line zone that meets itself awkwardly behind the handle. The lines of the CCs are particularly thick, some practically touching one another, and innermost circles that are solid around the compass prick.

## THE EARLY PHRYGIAN BUILDING SEQUENCE: EPB III <br> (30-59) p. 9 <br> WHEELMADE POTTERY

## CARINATED BOWLS

30 Carinated bowl, Class 1; gray ware
EPB III (Latrine Deposit: 17)
GPH. 0.023; Est. D. rim 0.12
Fig. 6; pp. 43, 44, 45, 180
Sherd. Medium-fine, heavily micaceous clay, fired brown; very dark gray surface with high mica content that could come from either film or fabric.

Subtle carination; broadly flaring rim.
31 Carinated bowl, Class 1, with vase mark; gray ware
EPB III (Latrine Deposit: 4)
Est. H. 0.078; Est. D. rim 0.26
Fig. 6; pp. 32, 33, 44, 45, 180
Rim sherd with associated lower body/base; yellowish staining over much of surface. Fine gray clay; slipped gray surfaces, coated with silvery mf and polished to medium, glittery luster.

Low, spreading ring foot. Angled carination; short, flaring rim.

On int. floor, ray design incised after firing.
32 Carinated bowl, Class 1; gray ware
EPB III (Y-65-12: 2)
GPH. 0.033; Est. D. rim 0.21
Fig. 6; pp. 33, 44, 45, 180
Sherd. Fine clay, fired rb; dark gray surfaces with rb mf well polished to a medium luster.

Above carination, wall straight and flaring to a more broadly flaring rim.
33 Carinated bowl, Class 2; gray ware
EPB III (Latrine Deposit: 5)
GPH. 0.063; Est. D. rim 0.26
Fig. 6; pp. 24, 44, 45 (n.5), 46, 180, 184
Sherd. Rust-colored with dark red staining. Medium-fine, gray clay; polished surfaces, dark gray with light gray, silvery mf .

Body shallowly concave above carination; high flaring rim.

34 Carinated bowl, Class 2; gray ware
P 3365 EPB III: Latrine Deposit
Rest. H.-rim 0.083; Est. D. rim 0.27
Fig. 6; Pl. 15; pp. 44, 45-46, 180, 182
Fragment including base, with restored gaps; yellow staining. Medium-coarse, light-colored clay; polished surfaces, dark gray with patches of mf .

Flat bottom. Peaked carination; tapering, shallowly concave upper body; flaring rim, trimmed to a flattish face.

35 Carinated bowl, Class 2; gray ware
EPB III (Latrine Deposit: 1)
GPH. 0.028; Est. D. rim 0.23
Fig. 6; pp. 35, 44, 45, 46, 180
Sherd. Fine clay, soft and crumbly, fired rb with slight reduction penetration; glittery, rb mf , applied to wheelfinished, black surfaces and cursorily polished.

Upper body vertical above carination; broadly outturned and overhanging rim.

## 36 Carinated bowl, Class 2; gray ware

EPB III (Y-65-12: 1)
GPH. 0.038; Est. D. rim 0.18
Fig. 6; pp. 32, 35, 44, 45, 46, 180
Fragment. Fine, rb clay; surfaces polished, except ext.
above carination, and fired dark gray to gray with mf .
Angled carination; vertical upper body; plain flaring rim.
37 Carinated bowl, Class 2; gray ware
EPB III (Latrine Deposit: 2)
GPH. 0.045; Est. D. rim 0.20
Fig. 6; pp. 44, 45, 46, 180
Sherd. Medium-fine clay, fired pinkish gray; cursorily
polished surfaces, dark gray with mf .
Body nearly vertical above angled carination; flaring rim.

## PLAIN BOWLS

38 Plain bowl, Class 1; gray ware
EPB III (Latrine Deposit: 8)
GPH. 0.051; Est. D. rim 0.23
Fig. 16; pp. 35, 48, 49
Sherd, stained. Medium-fine gray clay, heavily micaceous; black surfaces, polished and then coated with rb mf, largegrained and glittery.

Relatively thick-walled. Approximately vertical rim, trimmed to flattish top.

A second bowl from the Latrine Deposit is very similar in both thickness and profile.

39 Plain bowl, Class 1 ; gray ware
EPB III, Latrine Deposit and EPB SW Room fireplace ( $\mathrm{X}-65-12: 3$ )
GPH. 0.050 ; Est. D. rim 0.23
Fig. 16; pp. 48, 49, 51, 184
Associated sherds; those from Latrine stained. Fine clay, fired light rb; black surfaces, well polished and then overlaid with rb mf .

Rim vertical above sharp bend in profile.

## BOWL WITH ARTICULATED RIM

## 40 Bowl with articulated rim; gray ware

P 3364 EPB III: Latrine Deposit and Y-65-12
Rest. H.-rim 0.069-0.088; Est. D. rim 0.28
Fig. 21; Pl. 34; pp. 50, 51, 107, 180
Large gaps. Fine gray clay; very dark gray surfaces with rb mf well polished to medium luster.

Spreading ring foot with abbreviated stem. Vertical upper wall; rounded rim, offset by groove at base.

## ROUND-MOUTHED JUGS

## 41 Round-mouthed jug; gray ware

EPB III (Latrine Deposit: 16)
GPH. 0.057; Est. D. rim 0.09
Fig. 22; pp. 52, 54, 107, 181
Sherd; stained and encrusted. Fine clay, fired rb; surface polished to low luster and fired black with glittery mf overlay. Straight, flaring neck; small, outward-thickened band rim.
The conical foot 55 may be from the same vessel.
42 Large round-mouthed jug or kantharos krater; gray ware EPB III (Latrine Deposit: 31)
GPH. 0.143; Est. max. D. 0.22; Est. D. neck 0.17
Fig. 23; pp. 52, 53 (n. 12), 54, 78, 79, 181
Fragment preserving profile of most of body and beginning of neck; stained and encrusted. Fine clay, fired reddish gray; polished surface, black with light gray, silvery mf .

Well-formed ovoid body; wide vertical neck with thick, prominent ridge at base.

## TREFOIL JUGS

## 43 Small trefoil jug; gray ware

P 3371 EPB III: Latrine Deposit
GPH. 0.036; D. neck 0.030
Pl. 62; pp. 57, 59, 116, 181
Sherd preserving complete neck/trefoil; stained. Fine, dark gray clay; dark gray surface with mf, polished to medium, glittery luster.

Narrow neck with ridge at base; small, outward-thickened rim, neatly beveled to flattish face. The clean, even break at the neck line suggests that it was a separate piece added to the body.

## 44 Large trefoil jug; gray ware

P 3367 EPB III: Latrine Deposit
H.-rim 0.342; Max. D. 0.340

Pl. 76; pp. 59, 61, 107, 181, 182
Several gaps, including much of body and lower part of handle; stained and worn. Medium-coarse gray clay; polished surface, fired dark gray.

Narrow, flat bottom. Full, ellipsoidal body, reversebicurved; short, very narrow neck; beveled-band rim. Doubleround handle.

## 45 Large trefoil jug with multiple grooving; gray ware

EPB III (Latrine Deposit: 22)
GPH. 0.054; Est. D. neck 0.08
Fig. 26; pp. 42, 57, 59, 113-114, 181
Neck/rim sherd; stained and discolored. Medium-fine, dark gray clay; gray surface with traces of mf.

Narrow neck with series of precise, distinct grooves at base; rim similar to that of 44.

## 46 Large trefoil jug; gray ware

EPB III (Latrine Deposit: 25)
GPH. 0.045 ; Est. D. neck 0.075
Fig. 26; pp. 57, 59, 181
Neck/rim sherd. Fine gray clay; smoothed surface, fired darker gray.

Outward-thickened, flattened band rim.

## 47 Large trefoil jug; gray ware

EPB III (Latrine Deposit: 26)

## GPH. 0.032

Fig. 26; pp. 57, 59, 117, 181
Sherd from spout of trefoil. Coarse, light gray clay; dark
gray surface with silvery mf.
Plain rim above a wide, blunt ridge.

## 48 Large trefoil jug; gray ware

EPB III (Latrine Deposit: 26A)
GPH. ca. 0.090 ; Est. D. base of neck 0.10
Fig. 26; pp. 32, 57, 59, 117, 181
Fragment preserving profile from upper body to top; stained. Coarse, gritty clay, fired dark brown with deep reduction penetration; slipped surface, gray with possible mf.

Tapering neck with offsetting ridge at base and a second at beginning of trefoil; plain rim.

The Latrine Deposit had at least eight other large trefoil jugs in gray ware.

## ONE-HANDLED UTILITY POT

## 49 One-handled utility pot; gray ware

EPB III (Latrine Deposit: 27)
GPH.-rim 0.108; Est. D. rim 0.16
Fig. 31; pp. 26, 32, 70, 72, 73, 107, 181
Fragment preserving section of body from below max. D. to top, including handle; heavily encrusted. Coarse, dark gray clay; dark gray surface, largely wheel-finished.

Steep shoulder with continuous curve into short, wide neck; slightly outward-thickened band rim. Rolled handle.

## AMBIGUOUS AMPHORA

50A-B Ambiguous amphora with multiple grooving; gray ware P 3366a-b EPB III: Latrine Deposit
Max. D. (A) 0.185; Est. GPD. lower shoulder 0.29
Pl. 134; pp. 90, 109, 113, 114, 181
Fragment and sherd of upper body, including one handle and the lower attachment of another; stained. Mediumcoarse, dark gray clay; dark gray surface with traces of mf.

Broad shoulder with continuous curve into moderately wide neck; stacked grooves cover entire area from lower shoulder up, except behind handle. Double-round handle rising from low on shoulder; at lower attachments (on both A and B), an applied pellet or false rivet head set at center.

## LARGE AMPHORAS OR STORAGE JARS

## 51 Large vessel with ledged rim; gray ware

EPB III (Latrine Deposit: 19)
GPH. 0.134; Est. D. rim 0.34
Fig. 51; pp. 26, 33, 85, 86, 102, 104-105, 117, 175, 180, 181
Neck/rim sherd. Medium-coarse, gritty clay, fired pinkish gray; very dark gray surface, smoothed with some polishing and overlain by a light gray, glittery mf.

Tall, wide neck with distinct, flattened ridge just below midway; subtly ledged rim.

52 Large vessel with ledged rim; gray ware
EPB III (Latrine Deposit: 20)
GPH. 0.065 ; Est. D. rim 0.41
Fig. 51; pp. 102, 103, 105, 117, 181, 183, 185
Neck/rim sherd. Medium-fine gray clay; dark gray to black surface, finished like $\mathbf{5 1}$.

Wide neck with ridge at perhaps midway.

53 Large vessel with semi-ledged rim; variegated gray and $\tan$
EPB III (Latrine Deposit: 18)
GPH. 0.044; Est. D. rim 0.32
Fig. 51; pp. 35, 102, 103, 175, 180, 181
Sherd. Coarse, gritty clay, fired dark gray with thick strip of red at int.; ext. surface gray and largely wheel-finished; int. smoothed and fired predom. rb.

## AMBIGUOUS VESSELS, MISCELLANEOUS

## 54 Foot of small vessel; gray ware

EPB III (Latrine Deposit: 29)
GPH. 0.025; D. foot 0.053
Fig. 58; p. 107
Sherd. Fine, heavily micaceous clay, fired gray to light gray; smoothed, dark gray surface, with very pale brown mf. Low ring foot.

55 Foot of small vessel; gray ware
EPB III (Latrine Deposit: 21)
GPH. 0.021; D. foot 0.047
Fig. 58; p. 107
Sherd. Fabric and finish like 41.
Spreading, conical ring foot with neatly trimmed surfaces.
Possibly the base of the round-mouthed jug 41.

## 56 Foot; gray ware

EPB III (Latrine Deposit: 28)
GPH. 0.036; Est. D. foot 0.09
Fig. 58; pp. 107, 181
Sherd. Fine gray clay; smoothed surface covered by light gray, silvery mf, now largely worn.

Spreading ring foot, very finely tooled and finished; precise ridges and grooves on lower body.
57 Foot of medium-sized vessel; tan ware
EPB III (Latrine Deposit: 30)
GPH. 0.029 ; D. foot 0.086
Fig. 58; pp. 36, 107, 180, 181
Sherd; surface stained almost totally dark red. Fine clay, fired ry; the absence of both reduction penetration and any surface gray indicates an original light fabric.

Heavy ring foot with broad resting surface and conical depression on underside.

58 Handle, perhaps of a large trefoil jug; gray ware
P 3368 EPB III: Latrine Deposit
GPH. 0.084; W. 0.065; Th. body 0.007
Pl. 150; pp. 107, 108, 109, 122, 181
Sherd preserving lower handle attachment; rb staining. Coarse, dark gray clay; slipped, smoothed surface, dark gray with mf .

Wide, well-tooled strap handle connected to lower shoulder by a pair of foot-shaped struts, also well tooled; scars on back of handle suggest additional struts, square in section, across to body.

## 59 Handle; gray ware

P 3370 EPB IIL: Latrine Deposit
GPH. ca. 0.08
Pl. 150; pp. 107, 109, 181
Sherd preserving lower handle attachment and surrounding wall. Medium-fine gray clay; polished surface, light gray.

Vertical, oval handle with applied pellet or false rivet head at base; handle trail curving away from pellet.

# THE EARLY PHRYGIAN BL'ILDING <br> SEQUENCE: EPB IV' <br> (60) p. 9 

WHEELMADE POTTERY

60 Dinos; Wavy-Line style, dark-on-red
P 3183 EPB NV: under earth floor leading up to diagonal wall across EPB SW Room; other pieces in fill behind wall
Rest. H. 0.198; Max. D. 0.240; D. rim 0.142
Pl. 135; pp. 10, 37, 74, 91, 93, 94, 95, 134, 136, 137-138, 155, 156-157, 180, 181
Gaps, including base. Fine clay, fired yr; surface well polished over black paint to medium luster and fired red.

Well-formed spherical body; low rim, trimmed to wide, sloping surface on top; small hole drilled through rim.

Parallel lines spanning belly; stacked wavy-line zones, nine altogether, from low on shoulder top.

## THE EARLY PHRYGIAN BUILDING SEQUENCE: EPB V (61-176) p. 10 <br> HANDMADE POTTERY <br> CARINATED BOWL

## 61 Carinated bow, fluted and faceted; gray ware

 P 5708 EPB V: Y-63-7 GPH. 0.057; Est. D. rim 0.34Fig. 1; Pl. 1; pp. 19, 20, 22, 23, 26, 27
Sherd. Medium-coarse clay, light rb with thick, dark gray core and no reduction penetration; polished surfaces, fired predom. black.

Deep bowl. Narrow, horizontal flutes on ext. below carination; flaring rim with obliquely furrowed edge; top int. worked to three broad facets.

## PLAIN BOWLS

## 62 Plain bowl with incised decoration; gray ware

P 5006 EPB V: EPB-69-1/2
GPH. 0.031; Est. D. rim 0.22
Fig. 2; Pl. 2; pp. 19, 22, 24, 26, 27
Sherd. Coarse clay, rb with thick gray core and very slight reduction penetration; unevenly polished surfaces, streaky dark gray to gray with medium luster.

Flaring rim, vertically notched on edge.
Incised below rim, double wavy line.

## 63 Plain bowl with incised decoration; gray ware

P 5711 EPB V: EPB-69-1/2
GPH. 0.033; Est. D. rim 0.24
Fig. 2; Pl. 2; pp. 19, 22, 24, 26, 27
Sherd. Medium-coarse, dark gray clay; very dark gray surfaces, polished to low luster.

Flaring rim, inward-thickened and convex; oblique notching on edge. Tiny hole drilled through body below rim. at level of a series of uneven, incised lines.

64 Plain bowl, lugged, with punched and incised
decoration; gray ware
P 5005 EPB V: EPB-69-1/2
GPH. 0.034; Est. D. rim 0.28-0.30
Fig. 2; Pl. 2; pp. 19, 20, 22, 24, 26, 27
Sherd. Medium-fine clay, fired rb with thin gray core and slight reduction penetration; surfaces polished to low luster and fired predom. dark gray.

Deep bowl. Rim obliquely notched on edge, flat on top, and inward-thickened. Below rim, small lug in form of truncated cone.

Tiny, pricked ovals encircle lug and go off in a line to $R$; beside lug, parts of four horizontal incised lines and an oblique one.

## 65 Plain bowl; gray ware

## P 5710 EPB V: Y-63-7

GPH. 0.039 ; Est. D. rim 0.31
Fig. 2; pp. 19, 22, 24, 26
Sherd. Medium-coarse gray clay with light concentration of silvery mica; unevenly polished surfaces fired streaky black and dark gray, the former with medium luster.

Deep bowl. Inward-thickened rim trimmed to flattish surfaces on edge, top, and int.

## 66 Plain bowl; tan ware

P5744 EPV: EPB-69-1/2
GPH. 0.041 ; too little for Est. D. rim; Th. 0.008
Fig. 2; pp. 19, 22, 23, 24, 26
Rim sherd. Medium-fine clay with scattered fine mica, fired ry with thick gray core; surfaces polished, perhaps over slip, to low luster and fired ry.

Flaring rim with very shallow channel below top; obliquely furrowed on edge; inward-thickened and lightly flattened around top int.

## GROUP 1 CLOSED VESSEL

67 Group 1 vessel with incision and punched decoration; gray ware
P 3946 EPB V: Y-65-17
GPH. 0.032 ; Est. D. rim 0.10
Fig. 3; Pl. 4; pp. 19, 22, 25, 26, 113
Upper body/rim sherd. Medium-fine gray clay; surfaces
polished to high luster and fired very dark gray.
Gradually tapering upper body; wide mouth; outward-
thickened band rim, flat on top, with incised lines on face.
Directly below rim, a row of very small punched circles.

## GROUP 2 CLOSED VESSEL

68 Group 2 vessel (amphora?) with impressed decoration; red ware
P 5712 EPB V: NB 107 , Bag 6
GPH. 0.078 ; Est. D. rim 0.21
Fig. 4; Pl. 6; pp. 19, 22, 23, 25, 26, 72, 85
Sherd preserving segment of upper body and rim, and attachment scar. Coarse clay, fired red with dark rb core; smoothed, light red surface with fine mica.

Continuous curve from steep shoulder into short, wide neck; low, indistinct band rim. Circular scar on neck at $R$ probably comes from a vertical handle rather than a lug, since the surface below is rougher than elsewhere.

Elongated, oblique ovals impressed on mid-neck.

## AMBIGUOUS CLOSED VESSELS

69 Vessel with handle and incised decoration; gray ware P 5003 EPB V: Y-65-6
GPH. 0.072; Th. 0.009
Pl. 7; pp. 19, 22, 25, 27
Sherd preserving segment of shoulder and lower neck, including handle stump, of large vessel. Medium-coarse, somewhat gritty clay, fired dark gray; very dark gray surface, polished to moderately smooth finish with low luster in places.

Steep shoulder; tapering neck rises from shallow, inset ledge. Strap handle rising from top of shoulder; below, a raised, approximately semicircular area.

On shoulder, oblique lines below horizontal ones; oblique slashes below inset ledge. Under semicircular area, top of an unclear motif; on raised area, oblique slashes in an arc below horizontal ones; beginning of a pattern on handle proper.

## 70 Vessel with incised decoration; variegated ware

P 5747 EPV V: EPB-69-1/2
GPH. 0.095 ; Th. 0.012
Pl. 7; pp. 19, 23, 25, 27
Shoulder sherd. Coarse, micaceous clay with high concentration of white bits, fired rb with thick gray core; surface well polished to medium luster, probably over slip, and fired gray to grayish brown; int. unevenly finished, with low luster in places, and fired light red.

Steep shoulder; at upper break, a ledge-like groove, probably marking transition to neck.

On upper shoulder, a row of oblique dashes below three wide and deeply incised lines.

Were the int. more evenly finished, the piece would perhaps make better sense as a bowl; the ledge-like groove would become the edge of the bottom, with the incised decoration occurring immediately above.

## WHEELMADE POTTERY

## CARINATED BOWLS

## 71 Carinated bowl, Class 1; gray ware

EPB V (Y-65-7/8: 15)
GPH. 0.040; Est. D. rim 0.25
Fig. 7; pp. 44, 45
Sherd. Medium fine clay, fired light gray with dark gray core; smooth, polished surfaces, dark gray with overlay of silvery mf .

Corner-like carination; straight, broadly flaring rim, maintaining approximately the angle of the lower body.
72 Carinated bowl, Class 1; gray ware
EPB V (Y-63-X: 4)
GPH. 0.033; Est. D. rim 0.20
Fig. 7; pp. 33, 34, 44, 45
Sherd. Fine clay, fired rb with dark gray core; dark gray surfaces, evenly coated with light rb mf and polished to medium luster.

Blunt carination; broadly flaring rim.

73 Carinated bowl, Class 1; gray ware
EPB V (Y-65-7/8: 16)
GPH. 0.049; Est. D. rim 0.21
Fig. 7; pp. 32, 35, 44, 45, 47
Fragment and nonjoining sherd. Fine, heavily micaceous clay, fired light gray with dark gray core; slipped and polished surfaces, ext. gray and int. very dark gray; traces of mf.

Blunt, protruding carination; broadly outturned rim, trimmed to flat edge.
74 Carinated bowl, Class 1; variegated gray and tan EPB V (Y-63-X: 6)
GPH. 0.045 ; Est. D. rim 0.22
Fig. 7; pp. 35, 44, 45
Sherd. Fine clay, fired reddish gray with dark gray core; smoothed surfaces, fired rb on ext. below carination and gray elsewhere.

Blunt, protruding carination, above which body flares into a still more flaring rim.

75 Carinated bowl, Class 1; red ware
EPB V (Y-65-10: 4)
GPH. 0.048 ; Est. D. rim 0.26
Fig. 7; pp. 36, 43, 44
Sherd. Fine clay, fired light rb with gray core; surfaces unevenly polished to medium luster and fired streaky red to light red; much fine mica on surface, but not as a film.

Similar in form to 74, but somewhat thicker-walled and with a less-flaring rim.

76 Carinated bowl, Class 1; red ware
EPB V (Y-65-28: 2)
GPH. 0.037
Fig. 7; pp. 33, 36, 43, 44, 45, 182
Sherd missing end of rim. Medium-fine, light red clay; polished surfaces, red with dense mf overlay.

Protruding, corner-like carination; flaring upper body.
77 Carinated bowl, Class 2; gray ware
EPB V (Y-65-10: 2)
GPH. 0.048 ; Est. D. rim 0.18
Fig. 7; pp. 44, 45
Sherd. Fine clay, fired brown; dark gray surfaces, partially overlain by brown mf, polished to medium luster.

Shallowly concave upper body, merging smoothly into high flaring rim.

## 78 Carinated bowl, Class 2; gray ware

EPB V (Y-65-9: 1)
GPH. 0.045 ; Est. D. rim 0.27
Fig. 7; pp. 44, 46
Sherd. Medium-fine gray clay with very high concentration of mica; smooth, polished surfaces, dark gray with silvery mf in patches.

Broad, relatively shallow bowl. Body shallowly concave above carination; short, flaring rim.

## 79 Carinated bowl, Class 2; gray ware

EPB V (Y-65-11: 1)
GPH. 0.050 ; Est. D. rim 0.25
Fig. 7; pp. 33, 44, 46
Sharp carination; tapering upper body; high flaring, thickened rim, trimmed to a flat face.

80 Carinated bowl, Class 2; gray ware
EPB V (Y-63-X: 3)
GPH. 0.059 ; Est. D. rim 0.19
Fig. 7; pp. 24, 44, 46, 47
Sherd. Medium-fine, light rb clay; cursorily smoothed
surfaces, dark gray with traces of mf.
Similar to 79; upper int. worked to flattened band.
81 Carinated bowl, Class 2; gray ware
EPB V (EPB-69-1 /2: 15)
GPH. 0.044; Est. D. rim 0.27
Fig. 7; pp. 33, 34, 44, 46
Sherd. Medium-fine clay, fired light brownish gray with dark gray core; polished surfaces, dark gray mottled with light gray, silvery mf.

Lightly trimmed carinated edge; tapering upper body; high flaring rim.

## 82 Carinated bowl, Class 2; gray ware

EPB V (Y-63-X: 5)
GPH. 0.041 ; Est. D. rim 0.23
Fig. 7; pp. 44, 46, 182
Sherd. Medium-fine, light brown clay; wheel-finished, dark gray surfaces with light rb mf , lightly polished.

Peaked carination; tapering, shallowly concave upper body; thickened, broadly outturned rim, slightly overhanging.

## 83 Carinated bowl, Class 2; gray ware

EPB V (Y-65-9: 5)
GPH. 0.032; Est. D. rim 0.21
Fig. 7; pp. 33, 44, 46
Sherd. Medium-fine clay, fired light rb with gray core; polished surfaces, dark gray under almost total cover of brown to pale brown mf.

Peaked carination; tapering upper body; broadly flaring rim, slightly ledged on int.

84 Carinated bowl, Class 2; gray ware
EPB V (EPB-69-1/2: 11)
GPH. 0.039 ; Est. D. rim 0.25
Fig. 7; pp. 35, 44, 46
Sherd. Medium-fine clay, fired very dark gray; cursorily polished surfaces, black with uneven overlay of light rb mf .

Sharp carination; tapering upper body; broadly flaring rim, lightly faceted on face and slightly ledged on top; distinct ridge on int., just above carinated level.

## 85 Carinated bowl, Class 2; gray ware

EPB V (Y-65-6: 1)
GPH. 0.044 ; Est. D. rim 0.25
Fig. 7; pp. 44, 46
Sherd. Medium-fine gray clay; lightly polished surfaces, gray with brownish gray mf.

Body very shallow below protruding carination; approximately vertical upper body; thickened, broadly outturned rim.

86 Carinated bowl, Class 2; gray ware
EPB V (Y-65-7/8: 13)
GPH. 0.036 ; Est. D. rim 0.25
Fig. 7; pp. 44,46
Sherd. Fine, dark gray clay; polished surfaces, gray with silvery mf.

Upper body vertical above angled carination; plain, flaring rim.

87 Carinated bowl, Class 2; gray ware
EPB V (Y-65-10: 1)
GPH, 0.034; Est. D. rim 0.25
Fig. 8; pp. 33, 44, 46
Sherd. Fine clay, very dark gray; smoothed surface, gray with silvery mf.

Level of carination carefully trimmed to a flat band; vertical upper body; plain, flaring rim.

88 Carinated bowl, Class 2; gray ware
EPB V' ( $\mathrm{Y}^{-65-17: 1 \text { ) }) ~}$
GPH. 0.055 ; Est. D. rim 0.27
Fig. X; pp. 32, 33, 44, 47, 182
Sherd. Medium-fine, heavily micaceous clay, fired rb with gray core; dark gray surfaces, wheel-finished except for some polishing on rim, with dense, very pale brown mf .

Protruding carination below vertical upper body; flaring rim trimmed to flattish face; on int., fine ridges at level of carination.

## 89 Carinated bowl, Class 2; variegated gray and brown

 EPB V (Y-65-11: 2)GPH. 0.040; Est. D. rim 0.29
Fig. 8; pp. 33, 35, 44, 47, 182
Sherd. Medium-fine clay, brown with thick, dark gray core; ext. cursorily smoothed and fired brown below carination, gray above; int. gray with dense, very pale brown mf.

Protruding carination; slightly flaring upper body; flaring rim.

## 90 Carinated bowl, Class 2; red ware

EPB V ${ }^{\prime}$ (Y-65-28: 1)
GPH. 0.040; Est. D. rim 0.31
Fig. 8; pp. 33, 36, 43, 44, 45-46, 182
Sherd. Fine red clay, heavily micaceous; lightly polished surfaces, red with dense mf.

Angled carination; vertical upper body; short, flaring rim, trimmed on edge to a flattish face.

## 91 Carinated bowl, Class 2; tan ware

EPB V (Y-65-9: 3)
GPH. 0.045; too little for Est. D. rim
Fig. 8; pp. 36, 43, 44, 45-46, 182
Sherd. Fine clay, fired brown; lightly polished surfaces, light brown with dense overlay of brown mf.

Flute-like channel on lower body; vertical upper body; flaring rim with wheel-grooves on flat face; ridge on int. rim.
92 Carinated bowl, Class 3; gray ware
EPB V (Y-65-4/5: 4)
GPH. 0.048; Est. D. rim 0.27
Fig. 8; pp. 44, 47, 82
Sherd. Fine clay, fired light rb with thick, dark gray core; polished surfaces, gray with silvery mf.

Carinated edge accentuated by wheel-groove; plain rim, nearly vertical in attitude.

93 Carinated bowl, Class 3; gray ware
EPB V (Y-63-5: 6)
GPH. 0.033; Est. D. rim 0.21
Fig. 8; pp. 44, 47, 182
Sherd. Fine gray clay; surfaces very well polished over mf to high luster and fired dark gray.

Small, rounded rim, sharply inset directly above carination.

94 Carinated bowl, Class 3; gray ware
EPB V (EPB-69-1/2: 20)
GPH. 0.060 ; Est. D. rim 0.26
Fig. 8; pp. 44, 47, 182
Sherd. Coarse gray clay, heavily micaceous; cursorily polished surfaces, uneven from inclusions, fired gray with light rb mf.

Body nearly vertical above obtuse carination; small, outward-thickened rim set off by groove at base.
95 Carinated bowl, Class 3; gray ware
EPB V (Y-65-9: 2)
GPH. 0.045; Est. D. rim 0.29
Fig. 8; pp. 24, 35, 44, 47, 182
Sherd. Coarse, somewhat crumbly clay, fired light brown-
ish gray; cursorily polished surfaces, uneven and bumpy from inclusions, fired gray to dark gray.

Sharp carination; tapering upper body; erect rim, out-ward-thickened and rounded.

## 96 Carinated bowl, Class 3; gray ware

EPB V (Y-65-10: 3)
GPH. 0.043; Est. D. rim 0.25
Fig. 8; pp. 44, 47, 182
Sherd. Medium-fine, dark gray clay; surfaces polished to low luster and fired gray with traces of mf .

Sharp carination; tapering upper body; erect rim, less prominent than that on 95 .
97 Carinated bowl, Class 3; gray ware
EPB V (EPB-69-1/2: 13)
GPH. 0.033; Est. D. rim 0.23
Fig. 8; pp. 33, 44, 47, 182
Sherd. Medium-fine clay, fired rb with gray core; largely wheel-finished surface, gray with mf.

Upper body sharply inset above carination; slightly flaring, plain rim.

## 98 Carinated basin, Class 3; gray ware

EPB V (Y-63-5: 2)
GPH. 0.051; Est. D. rim 0.54
Fig. 8; pp. 32, 35, 44, 47, 182
Sherd. Coarse, dark gray clay; slipped surfaces, well polished to medium luster and fired light gray.

Straight-lined, inclining upper body, slightly inset from carination; small, offset rim. Cf. 99 ff .

99 Carinated basin, Class 3; gray ware
EPB V (Y-65-7/8: 20)
GPH. 0.050; Est. D. rim ca. 0.40
Fig. 8; pp. 32, 44, 47, 182
Sherd. Medium-coarse gray clay; gray surfaces polished to medium luster, uniform on ext. but in alternation with wheel-finished strips on int.

Similar to 98 , but with shallowly convex upper body.

## FLARING-RIMMED BOWL

100 Flaring-rimmed bowi; red ware with ground coat
P 5745 EPB V: EPB-69-1/2
GPH. 0.021; Est. D. rim 0.21
Pl. 24; pp. 38, 44, 48, 134, 136, 138, 164, 182, 184
Sherd, preserving very little of body below rim. Mediumfine ry clay; slipped surfaces, polished and fired streaky red; matte, very pale brown ground-coat, largely worn; no traces of paint.

Broadly flaring rim.
Red-slipped on ext. wall, underside of rim, and int. Ground-coat on broad top-surface of rim.

## PLAIN BOWLS

## 101 Plain bowl, Class 1; gray ware

EPB V (Y-63-7: 14)
GPH. 0.039; Est. D. rim 0.32
Fig. 16; pp. 24, 48, 49, 50
Sherd. Coarse, dark gray clay; dark gray surfaces, polished to medium luster over rb mf .

Vertical rim above bend in contour; inward-thickened.

102A-C Plain bowl, Class 1, with handles; gray ware P 5542a-c EPB V: Y-63-7
GPH. 0.072; Est. D. rim 0.21
Fig. 16; Pl. 25; pp. 10, 43, 48, 49 (n. 8), 107, 108, 109, 122, 182, 188
Two fragments and a sherd, together preserving sections of body and rim, plus parts of two handles. Fine gray clay; polished surfaces, dark gray with mf .

Plain, vertical rim, articulated on int. Set nearly flush with rim, on A, a horizontal rolled handle with elongated sideattachment; a strut, rolled and almost as thick as the handle, extends from rim to meet handle at mid-bow, while the stump of a vertical shaft directly below the strut probably rose to join the handle as well; spaced to $R$ and almost flush with rim, a small half-bolster. B preserves the $R$-hand sideattachment of a second handle with half-bolster again to the $R$. C could belong to either handle, since it is the beginning of a $L$-hand side-attachment with handle broken away at base.

103 Plain bowl, Class 1 ; red ware
EPB V (Y-65-11: 6)
GPH. 0.045; Est. D. rim 0.24
Fig. 16; pp. 36, 43, 48, 49
Fragment. Fine, light red clay; polished surfaces, streakily fired red to light red; much fine mica in surface, but without appearance of film.

Plain, vertical rim.
104 Plain bowl, Class 2; gray ware
EPB V (Y-65-9: 6)
GPH. 0.043; Est. D. rim 0.25
Fig. 16; pp. 48, 50
Sherd. Fine, heavily micaceous clay, fired brown; very dark gray surfaces, polished to medium luster, with patchy, brown mf .

Slightly angled body; flaring rim.
105 Plain bowl, Class 2, with beveled rim; gray ware
EPB V (Y-65-11: 4)
GPH. 0.040; Est. D. rim 0.27
Fig. 16; pp. 35, 48, 50, 182
Sherd. Fine gray clay; surfaces polished to medium luster and fired black to dark gray with traces of mf .

Flaring rim, neatly beveled on ext. edge.
106 Plain bowl, Class 3; gray ware
EPB V (Y-65-7/8: 19)
GPH. 0.043 ; Est. D. rim 0.17
Fig. 17; pp. 48, 50, 182
Sherd. Fine clay, fired gray with dark gray core; polished surfaces, dark gray with uneven, glittery overlay of rb mf .

Relatively thick-walled and swelling in section; incurved rim.
107 Plain bowl, Class 3; gray ware
EPB V (Y-65-10: 5)
GPH. 0.049; Est. D. rim 0.19
Fig. 17; pp. 48, 50, 182
Sherd. Fine, dark gray clay; polished surfaces, dark gray with dense, silvery mf .

Low, sharply inturned rim.
108 Plain bowl, Class 3, with multiple grooving; gray ware EPB V (Y-63-5: 3)
GPH. 0.052; Est. max. D. 0.24
Fig. 17; pp. 48, 113, 182
Sherd. Coarse gray clay; cursorily polished surfaces, gray with uneven overlay of rb mf .

Smoothly inturned rim; series of four prominent grooves on upper body.

## AMBIGUOUS BOWL

## 109 Bowl foot; gray ware

EPB V (EPB-69-1/2: 21)
GPH. 0.020; D. foot 0.072
Fig. 21; p. 51
Sherd. Medium-fine, heavily micaceous clay, fired brownish gray with dark gray core; largely wheel-finished surface, dark gray with brown mf.

Spreading foot with shallowly convex underside and reverse-curved profile.

## ROUND-MOUTHED JUGS

## 110 Round-mouthed jug; gray ware

## P 3873 EPB V: EPB-69-1/2

GPH. 0.107; Max. D. 0.114; D. rim 0.094
Fig. 22; Pl. 37; pp. 52, 53, 54, 55, 182
Gaps, including base and most of handle. Medium-coarse gray clay; cursorily polished surface, pocked and bumpy from inclusions, fired dark gray with uneven, glittery mf .

Body sharply carinated above midway to form short shoulder; wide neck with heavy ridges at base and above midway; plain rim, slightly flaring. Oval handle rising from shoulder.

## 111 Round-mouthed jug; gray ware

EPB V (Y-65-7/8: 26)
GPH. 0.067; Est. D. rim 0.10
Fig. 22; pp. 52, 54, 182
Fragment. Very fine brown clay; polished surface, dark gray with glittery, rb mf.

Biconical body; wide, flaring neck with slight ridge at base.

## 112 Round-mouthed jug; gray ware

EPB V (EPB-69-1/2: 34)
GPH. 0.074; Est. D. rim 0.11
Fig. 22; pp. 10, 34, 52, 54, 182
Sherd, including handle stubs. Medium-fine clay, fired rb with gray core; unevenly polished surface, gray with streaks of brown.

Shallow, continuous curve from steep shoulder into wide neck, a pair of shallow grooves set at the transition. Handle from top of shoulder to rim.
113 Round-mouthed jug; Fine-Line Buff ware
P 5715 EPB V: Y-65-7/8
GPH. 0.030; Est. D. rim
Pl. 37; pp. 37, 52, 54, 134, 137, 139, 142, 147, 159, 160, 182 , 183, 184
Neck/rim fragment. Fine ry clay, spongy; slipped, very pale brown surface, polished and smooth yet pitted and practically matte; dusky red paint.

Flaring neck; direct rim.
On ext. neck, Zigzag Row 3; on int., pendent garlands, larger hatched ones enveloping smaller solid ones.

Perhaps the same vessel as 406 from 144 I.
114 Round-mouthed jug; Brown-on-Buff ware
P 3036 EPB V: - $-63-5$
GPH. 0.036; Est. D. rim 0.11
Pl. 37; Color Pl. I; pp. 37, 52, 54, 134, 137, 148, 152, 165, 166, $167,171,182,183,184$
Neck/rim sherd. Fine clay, fired very pale brown throughout; surface well polished over dark brown paint to medium luster.

Plain, flaring rim.
On neck, two tangent panels: Crosshatching 1; an $X$ of dots-between-lines with a double CC in each triangular field.

## 115 Large round-mouthed jug or kantharos krater; gray

 wareEPB \' (Y-63-7: 16)
GPH. 0.12; Est. D. rim 0.19
Fig. 23; pp. 52, 53 (n. 12), 54, 78, 182
Fragment preserving profile from shoulder to rim. Medium fine clay, fired brownish gray with light gray core; very dark gray surface, polished over uneven, silvery mf.

Wide, vertical neck with sharp ridge at base; band rim.
116A-B Large round-mouthed jug or kantharos krater; Ladders-and-Zigzags style, dark-on-tan
P 5716a-b EPB V: Y-65-7/8
GPH.(B) 0.041 ; Est. D. rim 0.25
Fig. 23; Pl. 56; Color Pl. II; pp. 37, 52, 53 (n. 12), 54, 78, 134, 137, 142, 160, 182, 184
Two associated sherds, from belly (A) and neck/rim (B). Medium-fine red clay; unevenly slipped surface, polished to low luster and streakily fired various shades of yr and red; much fine mica in surface, with appearance of a film; dark paint.

Band rim.
On belly and neck, panels of ladders-and-zigzags; on rim, simple zigzag with dots in the standing triangles.

Another sherd of the same shape category from EPB V ( P 3904) has the same neck motif, but is of a coarse, light brown-slipped fabric. 296 from the Terrace fill may belong to the same vessel as 116 .

## 117 Large round-mouthed jug or kantharos krater; painted

 dark-on-redP 3910 EPB V: EPB-69-1/2
GPH. 0.052; Est. D. rim 0.13
Pl. 56; Color Pl. I; pp. 33 (n. 4), 37, 52, , 53 (n. 12), 54, 78, 134, 137, 148, 182
Neck/rim sherd. Fine clay, fired red with thin gray core; darker red surface, slipped and polished to low luster; matte paint, dark reddish gray.

Low band rim.
Panel of Crosshatching 1 on neck; wavy line on rim.

## TREFOIL JUGS

$\mathrm{Y}-65-7 / 8$ yielded a neck/rim sherd of a small trefoil jug painted dark-on-red, its decoration now illegible.
118 Medium-sized trefoil jug; painted dark-on-buff P 5709 EPB V: Y-63-7
GPH. 0.060 ; Th. 0.005
Pl. 62; pp. 37, 57, 59, 134, 137, 182
Neck/rim sherd. Medium-fine ry clay; pink slip, smoothed; dark paint, worn.

Plain rim with ridge below.
Pendent garland(?) on neck; thick lines above to rim.
119 Medium-sized trefoil jug; painted dark-on-red P 5717 EPB V: Y-65-7/8
GPH. 0.065
Fig. 26; Pl. 62; pp. 37, 57, 59, 134, 137, 139, 182
Neck/rim sherd. Fine, light red clay; apparently doubleslipped, very pale brown under an unevenly applied red coating; polished to low luster; matte black paint.

Narrow neck; low band rim.
On neck, a double CC, perhaps hand-drawn, below a series of thick, roughly parallel lines; on int., part of a pendent garland, presumably outlining the pinch.

120 Large trefoil jug; gray ware
P 3170 EPB V: water channel beside Meg. 10
H. 0.370; Max. D. 0.335

Pl. 76 ; pp. 10, $35,57,59,61,116$
Gaps. Fine clay; polished surface, gray with areas of pale brown.

Flat base. Plump ellipsoidal body, reverse-bicurved; neck offset by ridge at base; beveled band rim. Double-round handle with deep, oval furrow at attachment to rim.
121 Large trefoil jug; gray ware
P 3171 EPB V: same context as 120
H.-rim 0.303; Max. D. 0.280

Pl. 76; pp. 10, 57, 59, 116
Gaps, including most of handle. Fine, very dark gray clay; surface polished in strokes to medium-fine luster and fired very dark gray with rb mf.

Flat base. Broad, ellipsoidal-biconical body, reversebicurved; separately added neck (joining seam on int.) with thick ridge at base; plain rim; very small hole bored through each pinch. Restored with double-round handle, perhaps incorrectly.
122 Large trefoil jug; red ware with mf
EPB V (Y-65-4/5: 10)
GPH. 0.055
Fig. 26; pp. 32, 33, 36, 57, 59, 182
Neck/rim sherd. Medium-coarse red clay; wheel-finished surface, red with patchy, very pale brown mf.

Band rim.
Another large trefoil jug of similar fabric comes from the EPB $V$ unit $\mathrm{Y}-65-8$.

123 Large trefoil jug; painted dark-on-tan
P 5713 EPB V: Y-65-4/5
GPH. 0.047
Fig. 26; pp. 37, 57, 59, 134, 137, 182
Neck/rim sherd. Fine, light red clay; polished surface, smooth yet matte, fired ry; matte dark paint.

Plain rim.
On upper neck, sloppy zone of simple zigzag in thick line.
Another EPB V unit (Y-65-28) yielded a second painted example of a large trefoil jug: dark-on-buff and badly worn, with a zone of large, simple lozenges on the neck.

## WIDE-MOUTHED TREFOIL JUG

## 124 Wide-mouthed trefoil jug; gray ware

EPB V (Y-63-7: 15)
GPH. 0.035; Th. 0.003
Pl. 81; pp. 61, 62, 182
Fragment preserving section of shoulder and mouth, including one pinch. Very fine clay, fired gray; surface well polished over mf to medium luster and finely mottled dark gray to gray.

Thin-walled. Abbreviated neck; plain rim.
From the same EPB V unit: a gray-ware sherd preserving the oval handle attachment and rear rim of a second widemouthed trefoil jug, comparatively inferior in quality of finishing to 124.

## MISCELLANEOUS JUGS

125 Narrow-necked jug; gray ware
P 3830 EPB V: fill under Meg. 9
GPH. 0.057; D. xim 0.075
Fig. 27; Pl. 86; pp. 32, 64, 182
Single piece preserving entire neck/rim, with handle scar.

Fine gray clay; surface polished to medium luster (in vertical strokes on neck) and fired predom. black with patches of gray.

Steep shoulder angling into narrow neck; carefully tooled rim with flange-like, overhanging projection. Vertical handle, attaching to rim.

## 126 Probable spouted jug; painted dark-on-red

P 5718 EPB V: Y-65-7/8
GPL. 0.029
Pl. 87; pp. 64, 134, 137, 150, 182
Sherd preserving segment of spout; edges missing. Fine clay, red with thin gray core; micaceous surface, polished over dark paint and fired red; int. smoothed.

Flaring; perhaps a type of beaked spout.
On ext., a checkerboard pattern in which the checks are filled with multiple lines that alternate vertical and horizontal, in a manner recalling weaving.

## AMBIGUOUS JUG

127 Ambiguous jug; painted bichrome-on-ground coat P 3175 EPB V: Y-65-11
GPH. 0.058 ; Est. D. neck 0.05
Pl. 89; Color Pl. II; pp. 38, 59, 66, 134, 137, 147, 149, 183
Neck fragment. Medium-fine clay, light red with thick gray core; thick, white ground-coat, now dingy, polished to low luster; matte paints, black and red.

Narrow, slightly tapering neck; curve at top suggests beginning of trefoil mouth, or possibly spout.

Dots-between-lines at base of neck; panel of Crosshatching 2 in zone on neck; above, a garland with dotted filling. Red used only for dots of crosshatching and garland.

## SIDE-SPOUTED SIEVE JUGS

128 Sieve jug, Type 2; gray ware
EPB V (Y-63-5:9)
GPH. 0.020 ; Est. D. rim 0.06
Fig. 30 ; pp. 47, 67, 69, 182
Shoulder/rim sherd. Fine, dark gray clay; gray surface, well polished over rb mf to medium luster.

Small convex rim set directly on shoulder; spout scar and sieved area within indicate that spout would have been set flush with rim.

129 Probable sieve-jug spout; painted dark-on-red
P3917 EPB V: EPB-69-1/2
GPL. 0.046
Pl. 94; pp. 37, 67, 69, 182-183
Sherd preserving section of spout; paint largely worn. Fine clay, light red with gray core; red surface, polished to medium luster; matte black paint.

Bridged trough spout.
Narrow ladder surrounding base of spout; longitudinally on spout ext., at least one narrow strip of dots-between-lines.

## ONE-HANDLED UTILITY POT

[^218]Steep shoulder; slight offset at base of short, wide neck: lightly beveled rim.

## AMPHORAS

(all apparently open-mouthed)

## 131 Probable open-mouthed amphora; gray ware

EPB V (Y-65-7/8: 22)
GPH. 0.035 ; Est. D. rim 0.35
Fig. 34; pp. 83, 85, 86, 102, 103, 104, 183
Sherd. Coarse rb clay; surface polished on rim and int. neck, and fired gray with overlay of silvery mf.

Rim flattened on face; concave ledge with raised lip. Rise on neck for upper handle attachment.

132 Probable open-mouthed amphora; tan-slipped gray ware
EPB V (Y-65-4/5: 6)
GPH. 0.060 ; Est. D. rim 0.30
Fig. 34; pp. 36, 83, 84, 85, 86, 102, 103, 104, 183
Sherd. Medium-coarse, very dark gray clay; heavily micaceous slip, fired ry.

Rim with shallow, concave ledge. Rise at lower break for upper handle attachment.
133 Probable open-mouthed amphora, stamped decoration; gray ware
P 5719 EPB V: Y-65-9
GPH. 0.090 ; Max. Th. 0.009
Pl. 115; pp. $34,83,85,86,88,123,124-125,127,183$
Sherd preserving segment of upper shoulder and lower neck, plus upper handle attachment. Fine clay, fired light brown with thick gray core; polished surface, black with patches of thin mf .

Continuous curve from shoulder into wide neck. Doubleround handle extending down from lower neck.

On upper shoulder and stopping short of handle, a double row of neatly executed triangle-zigzag stamping.

134 Probable open-mouthed amphora; painted dark-onred
P 5720 EPB V: Y-65-7/8
GPH. largest sherd 0.075 ; Max. Th. 0.012
Pl. 115; pp. $79,83,85,86,134,137,139-140,143,154,183$
Three nonjoining sherds, two from shoulder and one from neck; one of the former preserves rise for handle or possibly a handle trail. Coarse clay, fired light red with a gray core; heavily micaceous slip or film, smoothed and fired light red; dark paint, worn.

Neck apparently wide.
On shoulder, a row of Type 1 simple lozenges serve as the lower border for a zone containing narrow, upright panels of herringbone, these perhaps flanking $X$-panels. On neck, a row of reserved, simple lozenges spaced below a zone of herringbone.

135 Probable open-mouthed amphora; painted dark-onred
P 3181 EPB V: $1-65-4 / 5$
GPH. 0.054; Th. 0.008
Pl. 115; Color Pl. I; pp. 37, 79, 83, 85, 86. 87, 117-118, 134, $137,139-140,143,183$
Sherd from high on shoulder and beginning of neck. Fine clay, fired red throughout; surface well polished to high luster over dark paint.

Verv shallow, continuous curve from steep shoulder into
wide neck; thick, prominent ridges on upper shoulder and at base of neck.

Between ridges, a Simple Lozenge Row 2.

## LOW-NECKED JARS AND DINOI

136 Dinos; gray ware
EPB V (Y-65-10: 8)
GPH. 0.033; Est. D. rim 0.19
Fig. 48; pp. 91, 92, 93, 94, 95, 183
Sherd. Fine gray clay; polished surface, predom. gray with darker areas on rim; overlay of very fine-grained mf .

Broad shoulder; low, everted rim, flat and inward-sloping on top.

Unit Y-65-9 of EPB V yielded a second gray-ware dinos, its rim profile incompletely preserved.

## 137 Low-necked jar or dinos; painted dark-on-buff

P 5721 EPB V: Y-65-7/8
GPH. 0.033; Est. D. rim 0.15
Fig. 48; Pl. 135; pp. 37, 91, 94, 134, 137-138, 139, 142, 183, 184
Shoulder/rim sherd. Medium-fine clay, fired red with brownish gray core; light brown slip, well polished to medium luster; matte black paint.

Wide-mouthed vessel with steep shoulder; outwardthickened rim, flattened on top.

At transition from shoulder to rim, narrow zone of simple zigzag; on top of rim, solid bar flanked by transverse lines.

138 Low-necked jar or dinos; painted dark-on-red P 5714 EPB V: EPB-69-1/2
GPH. 0.029; Est. D. rim 0.13
Fig. 48; Pl. 135; pp. 37, 91, 94, 134, 137-138, 139, 183, 184
Sherd. Fine red clay; smooth, matte surface, red with traces of mf; dark paint, worn.

Small, everted rim, flat on top.
Thick-line painting. On upper shoulder, narrow zone of simple zigzag above an obscure design; on rim-top, evenly spaced oblique lines.

## 139 Low-necked jar or dinos; painted dark-on-tan

P 5723 EPB V: Y-65-7/8
GPH. 0.035 ; Est. D. rim 0.19
Fig. 48; Pl. 135; pp. 37, 91, 94, 95, 134, 137-138, 139, 183, 184
Shoulder/rim sherd. Fine red clay; surface polished over dark rb paint to medium luster and fired lightish rb.

Short, wide neck; everted rim, slightly overhanging.
On upper shoulder, straight and shallowly wavy lines of varying thickness; on rim-top, edging of dots and part of a solid bar flanked by transverse lines.

## LARGE AMPHORAS OR STORAGE JARS WITH LEDGED RIMS

140 Large vessel with ledged rim; gray ware
EPB V (x-6̄-7/8: 23)
GPH. 0.029; Est. D. rim 0.24
Fig. 51; pp. 34, 103, 183
Sherd. Medium-coarse clay, fired rb with dark gray core; cursorily smoothed, dark gray surface.

141 Large vessel with ledged rim; gray ware
EPB V (Y-63-5: 4)
GPH. 0.053; Est. D. rim 0.28
Fig. 51; pp. 102, 183
Sherd. Coarse, dark rb clay; gray surface, cursorily polished.

142 Large vessel with ledged rim and multiple grooving; gray ware
EPB V (EPB-69-1/2: 26)
GPH. 0.089; Est. D. rim 0.31
Fig. 51; pp. 32, 35, 86, 102, 103, 112, 113, 183
Neck/rim sherd. Coarse brown clay; slipped surface, polished to low luster and fired gray to lighter gray; traces of mf.

Deep wheel-grooves on mid- or lower neck.
143 Large vessel with ledged rim; gray ware
EPB V (Y-65-7/8: 25)
GPH. 0.050 ; Est. D. rim 0.31
Fig. 51; p. 183
Sherd. Coarse, gritty clay, fired rb; cursorily polished surface (with emphasis on rim), very dark to lighter gray with traces of mf .

Channeled ledge.
144 Large vessel with ledged rim; gray ware
EPB V (EPB-69-1 / 2: 27)
GPH. 0.079; Est. D. rim 0.35
Fig. 51; pp. 32, 103, 183
Neck/rim sherd. Medium-fine clay, fired rb with thin gray core; surface left wheel-finished, except for polished rim, and fired dark to lighter gray.
145 Large vessel with ledged rim; gray ware
EPB V (EPB-69-1/2: 25)
GPH. 0.020; Est. D. rim 0.35
Fig. 51; pp. 103, 183
Fragment. Coarse clay, fired rb with thick, very dark gray core; slipped and polished surface, dark gray with rb mf.

Strongly everted, overhanging rim; deep, channeled ledge.
146 Large vessel with ledged rima; gray ware
EPB V (EPB-69-1/2: 23)
GPH. 0.042; Est. D. rim 0.37
Fig. 51; pp. 103, 183
Sherd. Medium-coarse clay, fired ry with gray core; slipped and polished surface, gray with very fine-grained mf .

Fine ridge at base of "cliff" on int.
147 Large vessel with ledged rim; gray ware
EPB V (EPB-69-1/2: 24)
GPH. 0.041; Est. D. rim 0.43
Fig. 51; pp. 32, 103, 183
Fragment. Coarse clay, fired rb; slipped surface, wheelfinished except for polished rim, fired dark gray with light rb mf .

Heavy rim with faceted face and flat top; ledge formed by large, protruding ridge around int. mouth.

148 Large vessel with ledged rim; gray ware
EPB V (Y-65-9: 12)
GPH. 0.042; Est. D. rim 0.45
Fig. 52; pp. 102, 183
Sherd. Medium-fine brown clay; largely wheel-finished, gray surface.

149 Large vessel with ledged rim; buff ware
EPB V (Y-65-10: 9)
GPH. 0.045; Est. D. rim 0.31
Fig. 52; pp. 36, 86, 103, 183, 185
Sherd. Coarse, strong brown clay; wheel-finished surface with thick, pale brown mf .

Profile and dimensions closely paralleled by a gray-ware specimen from EPB V.
150 Large vessel with ledged rim; red ware EPB V (Y-63-5: 1)
GPH. 0.031; Est. D. rim 0.31
Fig. 52; pp. 36, 86, 102, 103, 183
Sherd. Medium-coarse red clay; red surface, polished over fine mf to medium luster.
151 Large vessel with ledged rim; red ware
EPB V (EPB-69-1/2: 22)
GPH. 0.042; Est. D. rim 0.39
Fig. 52; pp. 36, 86, 102, 103, 183
Sherd. Similar in fabric to $\mathbf{1 5 0}$; surface light red with pinkish mf.
152 Large vessel with ledged rim; tan ware
EPB V (Y-65-11: 7)
GPH. 0.035; too little for Est. D. rim
Fig. 52; pp. 36, 86, 102, 103, 183
Sherd. Very coarse and gritty clay, fired light red; rough, bumpy surface showing attempted polishing, fired predom. rb with darker and lighter mottling.

The basic profile is also known through a number of grayware specimens from EPB $V$.

## LARGE AMPHORAS OR STORAGE JARS WITH UNLEDGED RIMS

153 Large vessel; gray ware
EPB V (Y-65-7/8: 37)
GPH. 0.051 ; Est. D. rim 0.31
Fig. 56; pp. 26, 99, 100, 102, 106, 175, 183
Neck/rim sherd. Medium-fine, dark gray clay; heavily micaceous slip, well polished and fired dark gray.

Wide, tapering neck or upper body; thick rim, flattened on face, top, and int.
154 Large vessel; gray ware
EPB V (EPB-69-1/2: 32)
GPH. 0.024 ; Est. D. rim 0.31
Fig. 56; pp. 100, 106, 183
Sherd. Coarse clay, fired brown with gray core; slipped and polished surface, dark gray with thin mf.

A very small $m f$ gray-ware sherd from the Terrace fill duplicates the profile in an approximately twofold enlargement.

155 Large vessel; gray ware
EPB V (Y-65-7/8: 38)
GPH. 0.055 ; Est. D. rim 0.33
Fig. 56; pp. 100, 106, 183
Sherd. Very coarse clay, fired rb with gray core; thick slip, polished to low luster and fired black; traces of ry mf.

The type of rim recurs on a large vessel from CC 3 (P 4663).

156 Large vessel; gray ware
EPB V (EPB-69-1/2: 31)
GPH. 0.071 ; Est. D. rim 0.35
Fig. 56; pp. 100, 106, 183
Neck/rim fragment. Coarse clay, fired rb with dark gray
core; surface wheel-finished, except for some light smoothing on rim, and fired dark gray; traces of mf .

## AMBIGUOUS VESSELS, MISCELLANEOUS

157 Small vessel; gray ware
EPB V (Y-65-7/8: 39)
GPH. 0.024 ; too little for Est. D. im
Fig. 58; pp. 35, 69, 111, 182, 193
Neck/rim sherd. Fine, pale brown clay; surface polished to medium luster and fired black with traces of lighter mf.

Probably shallow shoulder; short, wide neck; small, flaring rim with flat face. Rise on top of rim, probably for a handle.

Another EPB V context yielded a specimen of very similar profile, gray with mf .

158 Small vessel; gray ware
EPB V (EPB-69-1/2; 29)
GPH. 0.055; Est. D. rim 0.09
Fig. 58; pp. 34, 62 (n. 33), 69, 95, 96, 111, 182
Sherd. Fine, somewhat soft clay, fired light brown with gray core; wheel-finished surface, dark gray with silvery mf.

Wide, abbreviated neck; plain, flaring rim.
159 Vessel with multiple grooving; gray ware
P 5726 EPB V: Y-63-7
GPH. 0.026; Est. D. rim 0.25
Fig. 58; pp. 111, 112, 114
Sherd. Medium-fine, gray clay; surface well polished over silvery mf to medium, glittery luster.

Plain, flaring rim, below which is a series of carefully done, prominent grooves.

160 Base of medium-sized vessel; gray ware
EPB V (Y-65-7/8: 40)
GPH. 0.061 ; D. foot 0.066
Fig. 58; p. 107
Sherd preserving entire foot and lower body. Fine, light gray clay; surface lightly polished over mf and fired unevenly dark gray to brownish gray.

Spreading ring foot with concave underside; fine, tooled ridge just below juncture with body. Neck probably of at least moderate width, as suggested by the smoothing of the int.

161 Handle with attachments; gray ware
P 3039 EPB V: Y-63-7
GPH. 0.150 ; W: 0.031
Pl. 150; pp. 108, 109, 110, 183
Handle sherd, preserving upper attachment. Medium-fine gray clay; polished surface, gray with light gray mf.

False double-round handle, attaching above to top of rim; at top, transverse ridge of clay with large disk ends; at rim attachment, applied pellet or false rivethead. Probably from a large trefoil jug.

162 Handle with markings; gray ware
P 5541 EPB V: Y-63-X
GPL. 0.066; W. 0.038
Pl. 150
Handle segment, including upper attachment, of medi-um- or large-sized vessel. Medium-coarse, heavily micaceous clay, fired rb; scoured surface, dark gray with overlay of rb mf.

Double-round handle attaching to top of rim; near top, a pair of deep, transverse notches on either half of handle, apparently made after firing.

Roller, 3B-1.

163 Large vessel with stamped decoration; red ware
P57ํ EPB V: Y-65-28
GPH. 0.08; Th. 0.019
Pl. 154 ; pp. 36, 111, 118, 123, 125, 131, 132, 183
Body sherd. Medium-coarse red clay; smoothed surface, red.

On raised band, parts of two S-spirals, impressed with the same stamp.

164 Large vessel with stamped decoration; tan ware P 5728 EPB V: EPB-69-1/2
GPH. 0.070; Th. 0.019
Pl. 154; pp. 36, 111, 123, 125, 131, 132, 183
Shoulder sherd. Coarse rb clay, well compacted; slipped surface, polished to low luster up to mid-channel and smoothed above, and fired predom. rb with some darker areas; int. smoothed

Above a shallow channel, ca. 1 cm . wide, the lower parts of two S-spiral stampings. The impressions appear to have been made before the vessel was polished.

## 165 Medium-sized vessel; Fine-Line Buff ware

P 3884 EPB V: EPB-69-1/2
GPH. 0.060 ; Th. body 0.004
Fig. 58; Pl. 158; Color Pl. I; pp. 37, 56, 108, 134, 139, 149, 159, 183, 184
Sherd preserving lower handle attachment and surrounding wall. Fine pink clay, spongy; very smooth pink surface, matte and pitted; very dusky red paint.

Rolled, vertical handle, side-attached to lower shoulder and terminating in an articulated, hemispherical knob. Possibly a large round-mouthed jug or kantharos krater.

Very fine-line painting. To either side of handle, zones bordered laterally and below by groups of lines that intersect at corners to form small lattices; at $L$, perhaps a Checkerboard 2 panel, while at $R$ is a vertical strip of Type 1 simple lozenges, perhaps part of a vertically zoned panel (cf. 634). Solid bar on handle shaft; on knob, peripheral solid triangles surround a very small ladder.

## 166 Medium-sized vessel; Fine-Line Buff ware

P 5730 EPB V: EPB-69-1/2
GPH. 0.032; Th. 0.005
Pl. 158; pp. 13, 134, 159, 183, 184
Shoulder sherd. Fine yellow clay, somewhat powdery; smooth, matte surface, very pale brown; dark reddish gray paint.

Presumably a crosshatched triangle.
Other sherds of the same ware from this unit and Y-65-3 also preserve parts of crosshatched triangles, yet seem to represent different Fine-Line Buff vessels. That from Y-65-3 may belong with 182 from EPB VI.

## 167 Small vessel, petaled; Brown-on-Buff ware

P 3176 EPB V: Y-65-11
GPH. 0.030; Th. 0.005
Pl. 158; Color Pl. I; pp. 37, 111, 120, 121, 134, 136, 140, 165, 166, 167, 171-172, 183, 184, 185
Body sherd. Very fine pink clay; very pale brown surface, polished over dark rb paint to medium luster.

Vertical petals of about a finger-width, pushed out from within and thus suggesting a wide-mouthed vessel.

Stacked, double CCs on the relief petals; dots-betweenlines in the valleys separating the petals.
168 Medium-sized vessel; Ladders-and-Zigzags style, dark-on-red
P 3903/P 3912 EPB V: EPB-69-1/2
GPH. 0.095; Est. max. D. 0.35
Pl. 161; Color PI. I; pp. 37, 134, 141, 160, 184
Segments of belly and lower shoulder. Coarse clay, red
with thin gray core; micaceous red slip, polished to medium luster; matte paint, weak red.

Broad, capacious body; possibly a dinos.
Spaced panels in large zone on belly: ladders-and-zigzags and panels with horizontal wavy-line zones, one of which also has a Type 1 simple lozenge row. Crosshatched triangles on shoulder.

169 Small or medium-sized vessel; Alişar IV style, dark-onred
P 3038 EPB V: Y-63-7
GPH. 0.036; Th. 0.004
PI. 161; pp. 37, 134, 136, 163, 184
Sherd from upper shoulder and beginning of neck. Medium-fine ry clay; red slip, unevenly applied and mottled with clay color, polished to low luster; matte black paint.

Part of a figure in silhouette (presumably) among double CCs.

170 Small vessel; Alişar IV style, dark-on-tan
P 4558 EPB V: EPB-69-1/2
GPH. 0.026; Th. 0.005
PI. 161; pp. 37, 134, 136, 163, 184
Body sherd. Medium-fine red clay; surface polished to low luster and finely mottled light rb to ry; matte paint, dark reddish gray.

Thigh and tail of silhouette animal.
171 Small or medium-sized vessel; Alișar IV style, dark-ontan
P 3953 EPB V: EPB-69-1/2
GPH. 0.060; Th. 0.006
Pl. 161; pp. 37, 134, 136, 163, 184
Small fragment from body. Fine red clay; surface polished
to medium luster and fired yr; matte rb paint.
Probably part of either a tree or antlers.
172 Medium- or large-sized vessel; painted dark-on-buff
P 5729 EPB V: Y-65-7/8
GPH. 0.069; Est. GPD. 0.27; Th. 0.006
Pl. 162; Color Pl. II; pp. 37, 134, 141, 183-184
Shoulder sherd. Fine clay, spongy, fired light brown with gray core; slipped surface, polished to low luster and fired very pale brown; matte, dark brown paint.

Type 1A triangles with single outline and solid lozenges at apices; crosshatched with thick and thin lines in the manner of multiple lozenge filling; a now faint triple CC between the triangles.

## 173 Medium-sized vessel; painted dark-on-red

P 3871 EPB V: EPB-69-1/2
GPH. 0.028
Pl. 162; pp. 36, 134, 141, 149, 183-184
Shoulder fragment. Medium-fine clay, fired dark gray with dark red core; thin red slip, unevenly applied and polished to low luster; surface mottled red and gray, int. fired gray; matte, dusky red paint.

Wide, shallow shoulder.
On lower shoulder, a zone with Checkerboard 1 panel at $R$; above, a wavy line and a zone of Type 1 triangles on upper shoulder.
174 Medium- or large-sized vessel; painted dark-on-tan
P 3915 EPB V: EPB-69-1/2
GPH. 0.036; Th. 0.006
Pl. 162; pp. 36, 134, 140, 145
Shoulder sherd. Fine gray clay; thick slip, polished to low luster and fired ry; matte black paint.

Dot-filled, meander-like pattern.

## 175 Small or medium-sized vessel; painted dark-on-

 ground-coatP 3914 EPB V: EPB-69-1/2
GPH. 0.038; Th. 0.008
Pl. 166; pp. 38, 134, 141, 183-184
Shoulder sherd. Medium-fine, gritty clay, fired ry; thin, white ground-coat, smooth yet matte; black paint.

Steep shoulder; wide neck. Perhaps a round-mouthed jug.
Type 1A triangle with single outline, in a zone bordered above by lines.

176 Handle of small vessel; painted dark-on-ground-coat P 3037 EPB V: Y-63-7
GPL. 0.048; Th. 0.014
Pl. 166; pp. 38, 111, 134, 139
Sherd preserving upper handle and attachment to rim. Fine clay, fired light red with a gray core; red slip and pink ground-coat, the former polished over black paint to medium luster; ground-coat matte.

Rolled, vertical handle, attaching flush to an everted rim.
Ground-coat on portion of rim-top and along half of handle; remaining surface red-slipped. Feather pattern(?) on handle shaft; confused lines on rim.

## THE EARLY PHRYGIAN BUILDING SEQUENCE: EPB VI (177-182) p. 13 <br> HANDMADE POTTERY

## CARINATED BOWL

177 Carinated bowl with incised decoration; gray ware
P5731 EPB VI or later: ETC 2, Bag 17
GPH. 0.048 ; Est. D. rim 0.31
Fig. 1; Pl. 1; pp. 13 (n. 44), 19, 20, 22, 23, 24, 26, 27, 33, 44, 45, 175
Rim sherd. Medium-coarse, poorly compacted clay, rb with dark gray core; surfaces polished to medium luster and fired black; on ext., patchy, light grayish brown mf, polished.

Shallow grooves and a blunt ridge below carination; obliquely notched rim; top int. planed to a prominent flat band.

On lower ext., part of an ambiguous incised design.

## WhEELMADE POTTERY

## PLAIN BOWLS

178 Basin, Class 2; gray ware
EPB VI (NB 92, Bag 14: 2)
GPH. 0.034 ; Est. D. rim 0.41
Fig. 17; pp. 13, 48, 50, 187
Sherd. Medium-coarse clay, fired light grayish brown with dark gray core; cursorily smoothed surfaces, gray with almost solid overlay of silvery mf.

Thick-walled. Broadly flaring body and rim.
Cf. 179.
179 Plain bowl, Class 2; tan ware
EPB VI (NB 92, Bag 14: 3)
GPH. 0.022; Est. D. rim 0.31
Fig. 17; pp. 13, 36, 43, 48, 50, 187
Sherd. Fine red clay; cursorily smoothed, light rb surfaces; much mica in surface, but without appearance of a film.

Similar to $\mathbf{1 7 8}$, but smaller.

## ROUND-MOUTHED JUGS

180A-B Round-mouthed jug; Ladders-and-Zigzags style, dark-on-tan
P 4785a-b EPB \'I: NB 92, Bag 14
GPH. (A) 0.084 ; Est. max. D. 0.12
Fig. 22; Pl. 38; pp. 13, 37, 52, 54, 134, 139, 143, 149, 160, 187
Two fragments preserving segments of upper body and neck/rim. Medium-fine, light red clay; micaceous slip smoothed and fired ry; black paint, thickly applied.

Relatively thick-walled. Probably ovoid body with short, steep shoulder; wide, flaring neck with blunt ridge at base; band rim. On top of rim, beginning of rise for handle attachment.

In zone spanning from below max. D. to top of shoulder, panels of Crosshatching 1 flank handle; opposite, a series of Type 2 simple lozenges. On neck, a panel of ladders-andzigzags beside handle, and a Checkerboard 1 panel opposite; thick stripe along face of rim.

## 181 Round-mouthed jug with multiple grooving; gray

 wareP 926 EPB VI or later: North Court of Gate Building, on lower floor
H.-rim 0.106; Max. D. 0.107

Pl. 38; pp. 13, 52, 54, 113
Gaps. Medium-fine, light gray clay; cursorily polished surface, grayish brown with mf.

Low ring foot. Broad, ellipsoidal body: vertical neck, neatly grooved at base. Rolled handle.

## AMBIGUOUS VESSEL

## 182A-B Medium-sized vessel; Fine-Line Buff ware

EPB VI (NB 92, Bag 14: 6)
GPH.(B) 0.037; Th. 0.006
Pl. 158; pp. 13, 134, 159
Two associated sherds, from belly (A) and shoulder (B). Fine clay, spongy, fired pale ry throughout; pitted surface, well smoothed and matte; matte, dusky red paint.

In zone on belly, part of a Checkerboard 1A panel with at least a single-line border; on shoulder, part of a Type 1 triangle with single outline.

The vessel may also be represented in EPB V': see under $\mathbf{1 6 6}$.

## THE EARLY PHRYGIAN BUILDING SEQUENCE: EPB VII <br> (183-186) pp. 13-14

## WHEELMADE POTTERY

## DINOS

183 Dinos; Polychrome House style, dark-on-buff
P 1025/P 1086 EPB VII: Polychrome House, gravelly fill over floor
Rest. H. 0.282 ; Rest max. D. 0.330
Pl. 135; pp. 14, 37, 91, 94, 116, 134, 137-138, 139, 148, 150, 151, 161, 186
Fragmentary; base missing. Fine clay, yr with thin gray core; surface well polished to a medium luster and fired pink; dark paint, over polish

Ovoid or ellipsoidal body; small everted rim resting directly on shoulder, flattened and inward-sloping on top.

Fine-line painting. Below max. D., a narrow wavy-line zone. On belly, a large zone bordered below by a way-line zone contains spaced panels, of which eight are preserved: two wide panels of Crosshatching 1, a Type 1 latticed panel, and two Cross-and-Lozenge Panels 1 ; narrow, vertical strips of Type 1 simple lozenges alternate with the large panels; all except the crosshatched panels have laddered borders. On shoulder, Type 1B triangles. Between the two principal zones, a narrow strip of crosshatching that at one point loses lines to become a plain zigzag.

## AMBIGUOUS VESSEL

## 184 Medium-sized vessel, probably a jug; Polychrome House style, dark-on-buff

P 2260 EPB VII: Polychrome House, gravelly fill over floor GPH. 0.115 ; Est. GPD. 0.21
Pl. 89; pp. 14, 37, 66, 134, 137, 148, 151, 161, 186
Fragment and a sherd, together preserving profile from belly to base of neck. Fine clay, red with gray core; micaceous slip, well polished to medium luster and fired light brown; black paint, over polish.

Body perhaps ovoid; narrow neck with ridge at base.
On belly, a large zone of spaced panels, of which parts of five are preserved: two of Crosshatching 1, one each of Cross-and-Lozenge Panels 1 and 2, and a narrow vertical strip of Type 1 simple lozenges that apparently came between larger panels; all but the crosshatched panels have laddered borders. On shoulder, above a narrow strip of Crosshatching 1, Type 1B triangles.

## AMPHORAS

## 185 Shoulder-handled amphora; painted dark-on-red P 2335 EPB VII: shed beside Polychrome House

 GPH. 0.245; D. rim 0.122Pl. 112; pp. 14, 80, 82, 83, 134, 137, 144 (n. 137), 151 (n. 194), 153, 163, 164, 186

Large fragment preserving over half of upper body and one handle. Coarse clay, fired light brown to grayish brown; dark red slip, stroke-polished yet dull; matte black paint.

Elongated body with steep shoulder; short, narrow neck; small, flaring rim. Short strap handle set low on shoulder.

Thick-line painting. Two zones on lower shoulder,
roughly at levels of handle attachments, with narrow reserved band between. In the lower, closely spaced panels alternating crosshatched Xs and cross-and-lozenge panels in which the stacked whole and lateral half-lozenges outline smaller crosshatched and solid forms respectively. In the upper, narrower zone, small panels flanked by groups of five to six lines and a wavy line; of the four panels preserved, three are butterfly, either upright or on a side, and one is a Cross-andLozenge Panel 4. Upper shoulder reserved except for a row of wide, pendent garlands just below the neck; a second, similar row just under the rim. On top of rim, a long, solid bar flanked by groups of three lines. At lower handle attachment, a wavy line on a straight line; on face of handle, three groups of transverse slashes.

## 186 Shoulder-handled amphora; Alișar IV style, dark-on-

 tanP 2149a-f EPB VII: in and around shed beside Polychrome House
GPH. 0.265; Est. max. D. 0.53; Th. 0.013
Fig. 34; Pl. 113; Color Pl. III; pp. 14, 80, 82, 133, 134, 137, 140, 142 (n. 121), 149, 152, 164, 186
Six fragments preserving sections of upper body, including traces of handle. Coarse clay, fired rb with thin gray core; surface polished to low luster and fired ry to rb; matte black paint.

Steep-shouldered, apparently with narrow neck; thick, rounded ridge at max. D.; flattened bands at mid- and upper shoulder. Handles attached low on shoulder, from ridge to the lower of the flattened bands.

Ridge at max. D. bears oblique lines and is fringed below by a pendent wavy line; above, on lower shoulder, rows of Alisar-type stags to $R$ amid quadruple CCs (presumably in wide panels flanked by the handles); the zone is bordered above by the lower of the two bands, and the inconsistent decoration on the band from fragment to fragment (oblique lines or a simple zigzag) suggests a change of motif to either side of handles. On mid-shoulder, a large Zigzag 1 with quadruple CCs in each field, the zone bordered above by the second band, which bears a row of double CCs; the zone is interrupted at at least two points by a solid-barred X-panel above the handles. In upper shoulder zone, part of a Type 1B checkerboard panel.

# The Sounding Within Megaron 10 <br> (187-213) pp. 10-12 

## MEGARON 10: LAYER 4 <br> (187-188)

## HANDMADE POTTERY

## PLAIN BOWL

187 Handmade plain bowl, possibly lugged; gray ware
P5732 Meg. 10, Layer 4
GPH. 0.063; Est. D. rim 0.27
Fig. 2; pp. 12, 19, 22, 23, 24, 26
Body/rim sherd. Medium-coarse clay, dark gray with strip of brownish gray beneath int. surface; polished surfaces, pocked and bumpy, fired dark gray with blushes of brown;
scattered mica in surface.
Flaring rim, flattened and inward-sloping on top; obliquely notched at ext. edge. At break, a slight rise in surface may indicate a lug.

## WHEELMADE POTTERY

## AMBIGUOUS VESSEL

188 Wheelmade medium-sized vessel; gray ware
Meg. 10, Layer 4 (Meg. 10-4: 1)
GPH. 0.030; Est. D. rim 0.15
Fig. 58; pp. 12, 34, 54, 79, 111, 179
Rim sherd. Very fine gray clay; surface polished to low
luster and fired dark gray.
Flaring neck; outward-thickened rim.
Layer 4 also yielded a small sherd in mf gray ware, wheelmade, from the lower neck of a probable open-mouthed amphora.

## MEGARON 10: LAYER 2 (189-196)

There is no stored material from Layer 3.

## HANDMADE POTTERY

## BOWLS

189 Carinated bowl; probably tan ware
P 5733 Meg. 10 anteroom, Layer 2
GPH. 0.079 ; Est. D. rim 0.25
Fig. 1; pp. 12, 19, 22, 23, 24, 26, 45
Sherd. Medium-fine rb clay, heavily micaceous; surfaces polished to low luster and fired predom. rb with darker areas resulting perhaps from secondary firing.

Deep bowl. High flaring rim; top int. lightly trimmed to a flat band.

190 Handmade plain bowl with incised decoration; gray ware
P 5734 Meg. 10 anteroom, Layer 2
GPH. 0.030; Est. D. rim 0.25
Fig. 2; PI. 2; pp. 12, 19, 22, 24, 26, 27, 113
Sherd. Medium-fine, dark gray clay; surface polished to medium luster and fired black except for light brown rim.

Inward-thickened rim, obliquely notched on edge. Series of incised horizontal lines on ext.

## CLOSED VESSEL

191 Large closed vessel with incised decoration; gray ware
P 5743 Meg. 10 anteroom, Layer 2
GPH. 0.110; Th. 0.012
Pl. 7; pp. 12, 19, 22-23, 25, 27
Shoulder sherd, including very beginning of neck. Medium-coarse clay, fired dark gray with very thin strip of rb at edges; polished surface, now almost totally worn and matte, fired dark gray; smoothed on int.

Although the vessel is very evenly formed, the heavy fabric points to handmade production.

Incised on shoulder, part of what is probably a large zigzag with three lines per leg.

## WHEELMADE POTTERY

## BOWL

192 Bowl with articulated rim; indet.
Meg. 10, Layer 2, exact location unspecified (Meg. 10-2: 1)
GPH. 0.083; too little for Est. D. rim
Fig. 21; pp. 12, 48
Sherd preserving section of body and rim. Coarse, micaceous clay, fired ry with brownish gray core; cursorily smoothed surfaces, heavily micaceous, fired variously from gray to rb.

Apparently deep bowl; vertical rim offset below by promi-
nent groove
The vessel is not definitely Phrygian. Same as Gunter, 545 .

## AMBIGUOUS VESSELS

## 193 Wheelmade closed vessel; gray ware

Meg. 10, Layer 2, exact location unspecified (Meg. 10-2: 2)
GPH. 0.040; Th. body 0.008
Fig. 56; pp. 12, 51, 99, 100, 106
Rim sherd. Medium-coarse, micaceous clay, fired dark gray throughout; surface badly worn and now rough, perhaps as result of burning; much mica in surface, but apparently not as a film.

Tapering upper body; outward-thickened, rounded rim.
194 Wheelmade closed vessel; variegated brown and gray
Meg. 10, Layer 2 (Y-65-23: 1)
GPH. 0.041; Est. D. rim 0.32
Fig. 56; pp. 12, 26, 35, 99, 100, 106, 179
Shoulder/rim sherd. Medium-coarse clay, ext. half brown and int. half dark gray; wheel-finished surfaces fired respectively brown and dark gray.

Steep shoulder; large, outward-thickened and rounded rim; blunt protrusion on int.

Same as Gunter, 574.
195 Handle with incised decoration; gray ware
P 5735 Meg. 10, Layer 2: Y-65-23
GPL. 0.032; W. 0.024
Pl. 151; pp. 12, 27, 28, 109, 114, 180
Handle sherd. Medium-coarse clay, fired red with gray core; slipped surface, polished to low luster and fired dark gray to rb.

Apparently oval handle, trimmed to two flattened faces on ext. shaft; button-like, oval appliqué with incised chevrons, probably set at top of handle.

196 Handle with incised decoration; gray ware
P 5736 Meg. 10, Layer 2: Y-65-23
GPL. 0.036; W. 0.036
Pl. 151; pp. 12, 27, 28, 114, 180
Segment of handle, apparently at upper attachment. Coarse rb clay; well-smoothed gray surface.

At widening for attachment to body, deeply incised, stacked chevrons.

## MEGARON 10: LAYER 1, MAIN ROOM (197-212)

## WHEELMADE POTTERY

## CARINATED BOWLS

197 Carinated bowl, Class 1; gray ware
Meg. 10, Layer 1 (Meg.10-1: 5)
GPH. 0.026; Est. D. rim 0.21
Fig. 9; pp. 11, 33, 44, 45
Rim fragment. Medium-fine, dark gray clay; dark gray surfaces, smoothed and overlaid by uniform, glittery mf, gray on ext. and brown on int.

Slightly protruding carination; broadly flaring rim.
198 Carinated bowl, Class 2, with vase mark; gray ware P 3389 Meg. 10, Layer 1
GPH. 0.081; Est. D. rim 0.24
Fig. 9; Pl. 15; pp. 11, 44. 46, 180
Fragment; surfaces very worn. Medium-fine rb clay;
smoothed, dark gray surfaces.
Angled carination; tapering upper body; plain, flaring rim with prominent ridge at base.

Post-firing mark on ext., below carination.
A bowl from the EPB III Latrine Deposit is almost identical.

199 Carinated bowl, Class 2, with vase marks; gray ware P 3388 Meg. 10, Layer 1
H. 0.06 ; Est. D. rim 0.24

Fig. 9; pp. 32, 44
Large sherd preserving complete profile. Medium-fine, dark gray clay; slipped and polished surfaces, gray with mf.

Low, uneven disk foot. Body vertical above carination; short, broadly flaring rim. Three letters incised on floor after firing.

Roller, 2B-186 [the date given in the entry, p. 51, is an error].

200 Carinated bowl, Class 2; tan ware
Meg. 10, Layer 1 (Meg. 10-1: 7)
GPH. 0.044; Est. D. rim 0.31
Fig. 9; pp. 11, 36, 44, 46. 187
Sherd. Medium-fine yr clay; polished surfaces, clay color with glittery mf.

Body shallowly concave above carination; high, flaring rim, beveled to flat face.
201 Carinated basin, unclassed; gray ware
Meg. 10, Layer I (Meg. 10-1: 12)
GPH, 0.045 ; too little for Est. D. rim; Th. 0.015
Fig. 9; pp. 32, 33, 34, 44, 48
Sherd. Coarse clay, fired rb with gray core; wheel-finished surfaces, black with mf.

Thick-walled. Carination formed by wide, deep channel; thickened rim, broad and flattened on top.

## PLAIN BOWLS

202 Plain bowl, Class 2, with inscription; gray ware
I 336 Meg. 10, Layer 1
H. 0.069 ; Est. D. rim 0.21

Fig. 17; pp. 11, 24, 48, 50, 176, 187
Sherd preserving complete profile. Medium-fine, heavily micaceous clay, fired rb; very dark gray surfaces, wheelfinished on ext. with some smoothing on int.; rb mf.

Thick-walled and heavy. Flat base. Flaring rim above a lightly trimmed, flattish band.

For the inscription: Rodney S. Young, "Old Phrygian Inscriptions from Gordion," Hesperia 38 (1969), 257-259, no. 29; Brixhe and Lejeune, G-104.

## 203 Plain bowl, Class 3; gray ware

Meg. 10, Layer 1 (Meg. 10-1: 13)
GPH. 0.035 ; Est. D. rim 0.25
Fig. 17; pp. 48, 50
Rim sherd. Medium-fine gray clay; surfaces well polished over mf to medium luster and fired gray.

Straight-sided lower body; inturned rim, hook-like in section.

## AMBIGUOUS BOWL

## 204 Base of large bowl or basin; gray ware

Meg. 10, Layer 1, area of cobbles (Meg. 10-1, cobbles: 5)
GPH. 0.040 ; Est. D. base 0.15
Fig. 21; p. 51
Fragment; surfaces worn. Very coarse clay, fired rb;
cursorily smoothed, dark gray surfaces.
Wide ring foot with uneven resting surface.

## LARGE AMPHORAS OR STORAGE JARS WITH LEDGED RIMS

205 Large vessel with ledged rim; gray ware
Meg. 10, Layer 1 (Meg. 10-1: 22)
GPH. 0.030; Est. D. rim 0.29
Fig. 52; p. 102
Sherd. Medium-coarse gray clay; smoothed surface, gray with mf .

Rim trimmed to flattish face.
206 Large vessel with ledged rim; gray ware
Meg. 10, Layer 1 (Meg. 10-1: 11)
GPH. 0.035 ; Est. D. rim 0.34
Fig. 52; pp. 11, 104, 187
Sherd. Medium-coarse, dark gray clay; wheel-finished surface, clay color with traces of mf.

Rim broad and flattened on top.
207 Large vessel with ledged rim; gray ware
Meg. 10, Layer 1 (Meg. 10-1: 21)
GPH. 0.044; Est. D. rim 0.37
Fig. 52; p. 102
Sherd; surface very worn. Very coarse, crumbly clay, fired light brownish gray with gray core; wheel-finished, dark gray surface.

Thick-walled and heavy.
208 Large vessel with double-ledged rim; gray ware
Meg. 10, Layer 1 (Meg. 10-1: 24)
GPH. 0.054 ; Est. D. rim 0.38
Fig. 52; p. 105
Several sherds of upper neck/rim. Medium-coarse clay, fired very dark gray; wheel-finished surface, dark gray with lighter mf.

209 Large vessel with ledged rim; gray ware
Meg. 10, Layer 1 (Meg. 10-1: 23)
GPH. 0.030; Est. D. rim 0.40
Fig. 52; pp. 11, 104, 105, 187
Fragment; surface very worn and stained. Medium-coarse clay, fired grayish brown with gray core; slipped surface, perhaps with some polishing, dark gray with glittery mf.

Rim broad and flattened on top; ledge formed by thick, protruding ridge.

## LARGE AMPHORA OR STORAGE JAR WITH UNLEDGED RIM

## 210 Large vessel; variegated gray and brown

Meg. 10, Layer 1 (Meg. 10-1: 3)
GPH. 0.050; Est. D. rim 0.29
Fig. 56; pp. 26, 99, 100
Neck/rim sherd. Medium-coarse clay, fired brown with gray core; cursorily smoothed surface, gray with darker and lighter (brown) areas; int. brown.

Wide, tapering neck; outward-thickened, rounded rim.

## AMBIGUOUS VESSELS, MISCELLANEOUS

## 211 Small vessel; gray ware

Meg. 10, Layer 1 (Meg. 10-1: 18)
GPH. 0.044; Est. D. rim 0.10
Fig. 58; pp. 32, 69, 111
Neck/rim sherd. Medium-fine gray clay; gray surface,
wheel-finished.
Flaring neck with plain, widely flaring rim; at lower break, a swelling in body and part of a circular aperture.

212 Handle with markings; gray ware
P 5737 Meg. 10, Layer 1
GPL. 0.054; W. 0.033
Pl. 151
Sherd. Coarse clay, fired rb; smoothed gray surface.
Strap handle; three bored holes in a vertical row on ext. face, perhaps done after firing.

MEGARON 10: $\underset{(213)}{\operatorname{LAYER}} 1$, ANTEROOM
WHEELMADE POTTERY
LARGE AMPHORA OR STORAGE JAR
213 Large amphora or storage jar with ledged rim and multiple grooving; gray ware
Meg. 10 anteroom, Layer 1 (Meg. 10A-1: 5)
GPH. 0.117; Est. D. rim 0.39
Fig. 52; pp. 11, 103, 113
Fragment and sherd preserving sections of neck/rim. Medium-coarse clay, fired brown with gray core; cursorily smoothed surface, gray with light gray mf.

Wide, tapering neck with deep, prominent grooves on lower portion.

## The Sounding Within Megaron 12 (NCT) <br> (214-236) p. 14

## MEGARON 12 (NCT): NCT IVB (214-225)

## HANDMADE POTTERY

## PLAIN BOWL

214 Plain bowl; gray ware
P 5664 NCT IVb
GPH. 0.055 ; Est. D. rim 0.15
Fig. 2; pp. 14, 19, 22, 23, 24, 26
Sherd. Medium-fine, micaceous clay, rb with dark gray core and no reduction penetration; polished surfaces, fired dark gray to dark brown with blushes of rb.

Shallow bowl, apparently with rounded base. Flaring rim, flattened on top; uneven depression directly below on ext.

## CUP

215 Cup with loop handle; gray ware
P 5665 NCT IVb
GPH. 0.038; Est. D. rim 0.11
Pl. 3; pp. 14, 19, 22, 24, 25 (n. 24), 27 (n. 44), 34, 108
Fragment preserving segment of body and complete handle. Medium-coarse clay with large flecks of golden mica, fired rb with very thick, dark gray core and no reduction penetration; surfaces polished to low luster and fired dark gray with patches of rb where incompletely reduced or worn.

Plain rim, flattened on top. Rolled handle with shallow, oblique channeling, attached from upper body to top of rim; dowel at lower attachment inserted through hole in body; at upper attachment, rim hollowed to receive end of handle.

## GROUP 1 CLOSED VESSELS

216 Group 1 vessel; gray ware
P 5666 NCT IVb
GPH. 0.054; Est. D. rim 0.12
Fig. 3; pp. 14, 19, 22, 25, 26
Rim sherd. Coarse clay with small flecks of silver mica,
fired very dark gray; slipped surface, polished to low luster and fired black with some lighter blushes, especially on the smoothed int.

Tapering upper body; small, rounded rim, flattened on top.
217 Group 1 vessel with incised rim; variegated ware P 5667 NCT IVb, with join from NCT IVa GPH. 0.078; Est. D. rim 0.19
Fig. 3; Pl. 4; pp. 14, 19, 23, 25
Fragment of upper body and rim. Coarse, micaceous clay, fired rb with slight reduction penetration from ext.; thick, micaceous slip on both surfaces, polished to low luster on ext.; ext. fired black with streaks of rb, int. rb with darker patches.

Upper body tapering to wide mouth; outward-thickened rim, trimmed to a flat band face that bears incised oblique lines.

218 Group 1 vessel; variegated ware
P 5668 NCT IVb, with joins from NCT IVa
GPH. 0.036; Est. D. rim 0.31
Fig. 3; pp. 14, 19, 23, 25, 26
Fragment and sherd, each preserving part of upper body and rim. Coarse, sparsely micaceous clay, fired yr with thick, dark gray core; slipped surfaces, polished to low luster, fired yr with a dark patch on ext. and, on int., very dark gray with yr blushes.

Upper body gradually tapering to a wide mouth; flaring rim, trimmed to wide, flat surfaces on top and int., and obliquely notched on edge.

## 219 Group 1 vessel; tan ware

P 5669 NCT IVb
GPH. 0.053; Est. D. rim 0.33
Fig. 3; Pl. 4; pp. 14, 19, 22, 23, 25, 26
Upper body/rim sherd. Ver coarse clay with high concentration of golden mica flakes, fired red; thinly slipped surface, lightly polished, fired light rb; some ext. striations may have resulted from use of a tournette in forming (less likely from a wheel).

Upper body tapering to a verv wide mouth; small, erect rim, notched on ext. edge and faceted on int.

## WHEELMADE POTTERY

## PLAIN BOWLS

## 220 Plain bowl, Class 2; gray ware

NCT IVb (NCT IVb: 2)
GPH. 0.054 ; Est. D. rim 0.12
Fig. 17; pp. 14, 34, 35, 43, 48, 49, 50, 175, 179
Sherd preserving complete profile. Medium-fine clay, rb with thick, dark gray core; cursorily polished surfaces, dark gray except where lighter biscuit is revealed through wear.

Narrow, flattened base, poorly defined. Small, hemispherical bowl with flaring rim.

## 221 Plain bowl, Class 3; buff ware

NCT IVb (NCT IVb: 11)
GPH. 0.049 ; Est. D. rim 0.16
Fig. 17; pp. 36, 48, 50, 179, 182
Rim sherd. Medium-fine rb clay; unevenly slipped surfaces, fired light brown; most of int. darkened by secondary firing.

Relatively thick-walled bowl; incurved rim.

## LARGE AMPHORAS OR STORAGE JARS

## 222 Large vessel with ledged rim; possibly gray ware

NCT IVb (NCT IVb: 14)
GPH. 0.041 ; Est. D. rim 0.27
Fig. 52; pp. 14, 34, 36, 102, 175
Rim sherd. Medium-coarse brown clay; wheel-finished surface with thin, unevenly applied slip, fired predom. various shades of light gray with lighter brown blushes.

Wide, flaring neck; broadly everted, overhanging rim with shallow, channel-like ledge worked into top.

Same as Gunter, S68.

## 223 Large vessel; gray ware

NCT IVb (NCT IVb: 4)
GPH. 0.091 ; Est. D. rim. 0.50; Th. 0.011
Fig. 56; pp. 14, 34, 91, 93, 99, 100, 106, 175
Sherd preserving section of upper shoulder and rim, including a possible handle attachment. Coarse clay with fine mica, fired gray to rb; smoothed surface, fired shades of gray with some lighter blushes.

Steep shoulder; large, outward-thickened rim, flattened on face and underside, rounded on top. High on shoulder, a rise for what may be an upper handle attachment.

## 224 Large vessel; gray ware

NCT IVb (NCT IVb:5)
GPH. 0.165; Est. D. rim 0.50; Th. 0.016
Fig. 56; pp. 14, 34, 93, 99 (n. 170), 100, 106, 175
Several sherds preserving sections of body and rim. Coarse clay, fired gray throughout; cursorily smoothed surface with deep, irregular grooving or scouring.

Similar in shape and scale to 223 ; large, rounded rim formed by an outward rolling-over of the top, lightly and unevenly faceted.

## AMBIGUOUS VESSEL

## 225 Hole-mouthed vessel; possibly gray ware

NCT IVb (.NCT IVb: 13)
GPH. 0.039; Est. D. rim 0.15
Fig. 58; pp. $14,34,36,93,99,175$
Rim sherd. Medium-fine, dark rb clay; wheel-finished surface with thin slip, fired black to very dark gray with patch
of light brown.
Steep shoulder terminating in direct rim.
NCT IVb also yielded a sherd of a fine, black polished bowl (lacking rim) and a number of body sherds in wheelmade gray ware, some polished and some with mica films.

Same as Gunter, S67.

# THE SOUNDING WITHIN MEGARON 12: NCT IVA <br> (226-236) 

## HANDMADE POTTERY

## BOWLS

## 226 Plain bowl with incised decoration; gray ware

 P 5670 NCT IVaGPH. 0.032; Est. D. rim 0.31
Fig. 2; Pl. 2; pp. 14, 19, 22, 23, 26, 27, 113
Rim sherd. Medium-fine clay, fired yr with slight reduction penetration; unevenly polished, sparsely micaceous surfaces, fired very dark gray.

Inward-thickened and rounded rim, obliquely notched.
Incised tapering motif (lozenges? zigzag?) on body, below a series of deep grooves.

## 227 Ambiguous bowl with incised decoration; gray ware

P 5671 NCT IVa
GPH. ca. 0.097; Th. 0.008
Pl. 3; Color Pl. I; pp. 14, 19, 22, 23, 24, 27
Body fragment. Medium-fine gray clay; slipped, dark gray surfaces, polished to medium luster.

Deep, wide bowl.
Large zigzag pattern incised in multiple lines; above, a shallow, horizontal groove, barely preserved.

EPB V EPB-69-1/2 yielded a small sherd of a similarly decorated handmade bowl, in tan ware.

## CLOSED VESSELS

## 228 Group 1 vessel; buff ware

P 5672 NCT IVa
GPH. 0.063; Est. D. rim 0.33
Fig. 3; pp. 14, 19, 22, 23, 25, 26, 99, 100, 102
Upper body/rim sherd. Very coarse, crumbly clay, fired brown; slipped and polished surfaces, fired light brown with darker patches.

Large, outward-thickened band rim, neatly trimmed to broad, flat surfaces on face and top.

## 229 Group 2 lugged vessel with plastic decoration; tan

 wareP 5674 NCT IVa
GPH.-largest neck/rim frag. 0.085; Est. D. rim 0.31; Th. 0.009

Fig. 4; Pl. 6; pp. 14, 19, 20, 22, 23, 25, 26, 27, 28, 85
Approximately 30 sherds, including base, belly, and neck/rim fragments. Coarse, heavily micaceous clay, fired yr with gray areas; cursorily polished surface, fired light rb with darker patches, the latter apparently caused by secondary firing.

Flat base. Capacious body; wide neck; flaring rim, trimmed to flat band face and incised with upright lines. Small, triangular lug set just below rim.

On body, a notched, plastic band runs horizontally, curving downward at $R$.

230 Closed vessel with incised decoration; gray ware P 5673 NCT IVa
GPH. 0.039; Th. 0.007
Pl. 7; pp. 14, 19, 22, 25, 27
Shoulder sherd of apparently medium-sized vessel.
Medium-coarse clay, fired light brownish gray; slipped and lightly smoothed surface, gray to light gray; very small flecks of golden mica in both clay and slip.

Tapering incised motif (zigzag? lozenge?) below a narrow zone of oblique lines set high on shoulder.
231 Closed vessel with impressed decoration; gray ware NCT IVa (NCT IVa: 79-5)
GPH. 0.069; Th. 0.010
Pl. 7; pp. 14, 19, 22, 27
Shoulder sherd. Coarse, heavily micaceous clay, the outer third of biscuit fired dark rb, the inner two-thirds dark gray; smoothed surfaces ext./int. with much golden mica, fired gray.

Horizontal row of shallow, circular impressions.

## WHEELMADE POTTERY

## CARINATED BOWLS

232 Carinated bowl, Class 2; gray ware
NCT IVa (NCT IVa: 1)
GPH. 0.046; Est. D. rim 0.19
Fig. 9; pp. 14, 24, 44, 47
Sherd. Medium-fine gray clay; surfaces unevenly polished to low luster and fired dark gray with overlay of silvery mf.

Blunt, slightly protruding carination; low, vertical upper body; outturned rim; on top int., raised, flattened band offset above by a distinct, shallow groove.

## 233 Carinated bowl, Class 3; gray ware

NCT IVa (NCT IVa: 5)
GPH. 0.044; Est. D. rim 0.29
Fig. 9; pp. 14, 32, 33, 44, 47, 187
Rim sherd. Medium-fine clay, light grayish brown with
thin gray core; dark gray, wheel-finished surfaces with silvery mf.

Sharp carination; upper body slightly tapering and shallowly concave; lightly trimmed rim-face.
234 Carinated bowl, Class 3; gray ware
NCT IVa (NCT IVa: 7)
GPH. 0.050; too little for Est. D. rim
Fig. 9; pp. 14, 44, 47, 187
Rim sherd. Medium-fine brown clay; wheel-finished surfaces, predom. gray (amid discoloration) with patchy, silvery mf.

Inclining upper body, sharply inset from carination; small, outward-thickened rim with lightly trimmed face.

## BOWL WITH ARTICULATED RIM

## 235 Bowl with articulated rim; gray ware

NCT IVa (NCT IVa: 8)
GPH. 0.035; Est. D. rim 0.20
Fig. 21; pp. 14, 47, 50, 51, 187
Rim sherd. Medium-fine clay, pinkish brown with gray core; cursorily polished surfaces, dark gray with silvery mf.

Upper body vertical above sharp bend in contour; small, outward-thickened rim, neatly trimmed below.

## LARGE AMPHORA OR STORAGE JAR

236 Large vessel, stamped; red ware
SS 31 NCT IVa
GPH. 0.117
Pl. 154; pp. 14, 123-124, 125, 130, 131, 187
Body sherd. Coarse, gritty clay, red with thick gray core; smoothed red surface.

On raised band, approximately rectangular stamping of large $X$ with diminishing chevrons in the triangular fields.

# The PN 3 and Early Bronze Trenches <br> (237-247) pp. 14-15 

## HANDMADE POTTERY

## BOWLS

237 Carinated bowl with incised and impressed decoration; variegated ware
P 5547 Trench PN 3, level 6b-8, disturbed area
GPH. 0.040; Th. 0.009
Fig. 1; Pl. 1; pp. 19, 22, 23, 27, 28
Sherd preserving section of carination; rim missing. Medi-um-coarse, dark gray clay; unevenly polished surfaces, fired gray on ext. and light rb on int.

Deep bowl. Thick, blunt carination, incised with closely spaced, oblique lines; just above, a row of lunate impressions between incised horizontal lines.

238 Plain bowl with incised and impressed decoration; tan ware
P 5746 Trench PN 3, Layer 8, in pit at $N$ end of trench GPH. 0.051; Est. D. rim 0.24; Th. 0.008
Fig. 2; Pl. 2; pp. 19, 23, 24, 26, 27
Body/rim sherd. Medium-fine clay with some mica, fired yr; surfaces unevenly polished in strokes to medium luster and fired various shades of ry.

Flaring rim, obliquely notched on edge and broadls beveled on top int.; below, on int., a flattened band.

On upper ext., a vertical row of short, deeply impressed dashes flanked by pairs of incised lines; to either side, just below top of rim, a horizontal row of short, impressed dashes.

## UHEELMADE POTTERY

## CARINATED BOWL

## 239 Carinated bowl, Class 1; gray ware

EB Trench, fill below pebbled area in front of Meg. 12 (EB Tr: 4)
GPH. 0.034; Est. D. rim 0.18
Fig. 9; pp. 15, 44, 45
Sherd. Medium-fine, dark gray clay; polished surfaces, dark gray with traces of mf.

Corner-like carination; broadly flaring rim.

## LARGE ROUND-MOUTHED JUG OR KANTHAROS KRATER

## 240 Large round-mouthed jug or kantharos krater; painted dark-on-tan

P 5539 Trench PN 3, Phrygian fill above Early Bronze level
GPH. 0.071 ; Est. D. rim 0.30
Pl. 56; pp. 37, 52, 134, 137
Rim sherd. Medium-fine red clay; slipped and polished surface, fired ry; dark paint, worn.

Wide, vertical neck; band rim.
On neck, just below rim, a zone of solid triangles; just below, a narrow zone of simple zigzag and perhaps another row of solid triangles. A zone of simple zigzag on rim.

## AMPHORA

## 241 Open-mouthed amphora; painted dark-on-tan

P5537 Trench PN 3, presumably the Phrygian layer overlying the Early Bronze level
GPH. 0.081; Est. D. rim 0.31; Th. 0.014
Fig. 34; Pl. 116; pp. 15, 37, 79, 82, 105, 134, 137, 144, 162, 187, 191
Neck/rim sherd. Medium-coarse clay, light rb with thick gray core; slipped surface, polished and fired light ry to almost pink on top of rim; matte dark paint.

Wide neck; outward-thickened, flaring rim, rounded on top.

On neck, a complex lozenge row like that found in the Group of 932 (Fig. 40); on upper neck, and again on top of rim, a row of blob-like dots.

PN 3 also yielded a very fragmentary open-mouthed amphora painted in the Ladders-and-Zigzags style, the decoration largely illegible (see under 928).

## LARGE AMPHORAS OR STORAGE JARS WTTH LEDGED RIMS

## 242 Large vessel with ledged rim; gray ware

EB Trench, fill below pebbled area in front of Meg. 12 (EB Tr: 7)
GPH. 0.060; Est. D. rim 0.29
Fig. 52; pp. 15, 89, 104, 187, 193
Several rim sherds, some joining. Coarse clay, light brownish gray with gray core; once polished surface, now matte and very uneven from inclusions and wear, fired gray to light gray.

Thick ridge on neck; everted rim with lightly channeled face, flattened top, and a sharply stepped ledge, its width extended by a prominent ridge.

## 243 Large vessel with ledged rim; tan ware

Trench PN 3, Phrygian fill above Early Bronze level (PN 3: 3)
GPH. 0.040; Est. D. rim 0.41
Fig. 52; pp. 105, 106-107
Sherd. Medium-coarse rb clay; polished surface, fired light rb.

Broadly everted rim with shallow, channel-like ledge.
244A-B Large vessel with ledged rim, stamped and pattern-incised; gray ware
P 5540a-b Same context as 243
GPH. (A) 0.080; GPH. (B) 0.077; Th. 0.013-0.015
Pl. 152; pp. 15, 35, 113, 114, 115, 123-124, 125, 127, 185, 187
Two nonjoining sherds, one preserving shoulder and beginning of neck (A), the other (B) the neck into rim, but with edge of rim missing. Medium-coarse, dark gray clay; mf surface, polished (but now mostly matte) and fired light gray.

Short neck with ridge at base; ledged rim.
On upper shoulder, a zone of incised chevrons pointing $L$, some enclosing punctate dots; below, a fringe of oblique slashes, neatly incised. Zone on lower neck, defined above by a blunt ridge, bears a row of triangle-zigzag stamping, lightly impressed.

## LARGE AMPHORAS OR STORAGE JARS WITH UNLEDGED RIMS

245 Large vessel; gray ware
EB Trench, fill below pebbled area in front of Meg. 12 (EB Tr: 5)
GPH. 0.024 ; Est. D. rim 0.39
Fig. 56; pp. 106, 185
Sherd. Medium-fine, dark gray clay; smoothed surface, very dark gray with traces of mf .

Vertical neck; everted rim, broad and flat on top.

## 246 Large vessel; tan ware

EB Trench, upside down in Pit B (EB Tr: 2)
GPH. 0.115; Est. D. rim 0.25
Fig. 56; p. 106
Two joining sherds preserving sections of shoulder and neck/rim. Coarse, spongy clay, fired yr; slipped surface, polished and fired predom. ry.

Short, moderately wide neck with thick, blunt ridges at base and midway; broadly flaring rim, double-beveled on ext.

## AMBIGUOUS VESSEL

## 247 Medium- or large-sized vessel; painted dark-on-

 ground-coatP 5538 Trench PN 3, Phrygian layer overlying Early Bronze level
GPH. 0.070; Est. max. D. 0.29
Pl. I66; pp. 38, 131 (n. 79), 134, 153
Belly sherd. Medium-fine clay, fired red below surface, the rest dark gray; polished red surface; thinly applied, very pale brown ground coat, polished; dark paint.

On belly, zone preserving spaced panels of Crosshatching 1 on the red ground; bordered below by a narrow zone of simple zigzag. Low on the ground-coated shoulder, a row of simple X-panels, tangent, each with a single dot in each triangular field.

## Megaron 5, Fill Below Floor

(248-250) p. 15

## WHEELMADE POTTERY

## ROUND-MOUTHED JUG

## 248 Round-mouthed jug; indet.

P 3288 In oven, below floor of Meg. 5
GPH.-rim 0.056; Est. max. D. 0.07; Est. D. rim 0.06
Pl. 38; pp. 52, 54
Fragment preserving over half of body, including handle; base missing. Medium-fine clay, fired brown; polished surface, now mottled light brown to grayish brown.

Depressed ovoid body; vertical neck; plain, flaring rim. Relatively thick, rolled handle.

## LARGE AMPHORA OR STORAGE JAR

249 Large vessel with ledged rim, stamped; gray ware P 3291 Under floor of Meg. 5
GPH, 0.093; Est. D. rim 0.34; Th. 0.017
Fig. 53; Pl. 154; pp. 104, 123, 125, 130, 186
Neck/rim sherd. Medium-coarse, dark gray clay; cursorily
smoothed, dark gray surface.
On int. neck, just below ledge, two CC stampings and part of a third.

## AMBIGUOUS VESSEL

250 Medium- or large-sized vessel; painted dark-on-tan
P 3353 Under floor of Meg. 5
GPH. 0.078; Max. Th. 0.011
Pl. 162; pp. 134, 153, 186
Sherd, perhaps from shoulder. Coarse clay, fired red with thick gray core; slipped surface, stroke-polished to low luster and fired ry with one small area of burning; dark paint, over polish.

Below, a cone of single-line Type 1 zigzag; above, contiguous panels of simple $X_{s}$ with single dots in the triangular fields.

## The Terrace Fill

(251-398) pp. 15-16

## HANDMADE POTTERY

## CARINATED BOWLS

## 251 Carinated bowl, lugged; indet.

P 5694 Terrace 2
GPH. 0.065 ; too little for Est. D. rim
Fig. 1; Pl. 1; pp. 15, 19, 20, 29, 23, 24, 26, 45
Rim sherd with lug. Yr clay, medium-coarse and crumbly; polished to medium luster; ext. fired clay color with darker blotching, int. streaked clay color and gray.

Blunt carination; high flaring rim with oblique notching on edge; top int. flattened to form a slight band. Blunt, conical lug set just below carination.
252 Carinated bowl, lugged, with incised and impressed decoration; tan ware
P 4672 Terrace fill: over floor of Meg. 8
GPH. 0.041; Est. D. rim 0.31
Fig. 1; Pl. 1; pp. 15, 19, 22, 23, 26, 27, 44
Fragment of upper body and rim, including a lug. Very coarse clay, fired rb; slipped, unevenly polished surface, fired clay color to dark rb.

Short, flaring rim with oblique furrowing on edge; flattened band around top int. Triangular lug, flattened on top and edges, attached flush with carination.

Incised design below lug. Below carination, a row of
circular impressions extending uninterrupted over edge of lug.

## GROUP 2 CLOSED VESSELS

253 Group 2 vessel; tan ware
P 5696 Terrace 1
GPH. 0.039; Est. D. rim 0.21
Fig. 4; Pl. 6; pp. 15, 19, 23, 25, 26, 79
Rim sherd. Coarse, gritty clay, heavily micaceous, fired r : surface apparently slipped, polished on ext. and int. rim (now matte), fired yr.

Wide neck; band rim with deep, wedge-shaped dashes on face.

254 Group 2 vessel; gray ware
P 5738 Terrace 9
GPH. 0.065 ; Est. D. rim 0.29
Fig. 4; pp. 15, 19, 22, 25, 26
Neck/rim sherd. Very coarse clay, fired rb with very thick, dark gray core and no reduction penetration; slipped surface, roughly polished to medium luster on ext./int. and fired black

Wide, vertical neck; broadly flaring rim, lightlv trimmed on edge and planed to a flat, sloping top. High on neck, at broken edge, a wide scar that probably indicates a handle or lug.

## AMPHORA

## 255 Small amphora; painted bichrome-on-tan

P 3276 Terrace 8
H. 0.135 ; Rest. Max. D. 0.166 ; Rest. D. rim 0.095

Pl. 8; pp. 15, 28, 37, 77, 148, 164, 165 (n. 247), 187, 192
Large gap in body; most of rim missing. Medium-coarse clay, fired ry; uneven, bumpy surface, polished to low luster and fired brighter tone of clay color; matte black and red paints.

Shallowly concave base. Broad, ellipsoidal body with long shoulder; narrow neck; broadly flaring rim. Short strap handles, unevenly set on shoulder; finger hollow at base of each.

Thick-line imprecise painting. Below max. D., a row of small, pendent garlands. On either side of shoulder, a zone containing pairs of vertical lines fringed by wavy ones; between at least some pairs, an unclear rectangular motif in red; one handle flanked by red vertical lines. Solid rays on neck; groups of transverse lines on int. rim. Groups of transverse bars on handles.

## AMBIGUOUS VESSEL

## 256 Closed vessel with plastic decoration; indet.

Terrace 6: d
GPH. 0.105; Th. 0.015
Pl. 7; pp. 15, 19, 20, 22, 27, 28
Shoulder fragment of large vessel. Coarse clay, fired ry; smoothed surface, now discolored but perhaps clay color originally. Probably handmade, but the diagnostic int. surface is totally worn or flaked away.

Shallow, finger-width channels on lower shoulder. Above, parts of two curvilinear "snakes" of applied clay, each with transverse notching; the lower of the two terminates at the $L$ in a small loop.

## WHEELMADE POTTERY

## CARINATED BOWLS

## 257 Carinated bowl, Class 1; gray ware

Terrace 3: 2
GPH. 0.030 ; Est. D. rim 0.21
Fig. 10. pp. 44, 45
Sherd. Medium-fine clay, fired very dark gray; gray surface with rb mf , polished to medium luster.

Shallow bowl with broadly flaring upper body and outturned, overhanging rim.

## 258 Carinated bowl, Class 1; gray ware

Terrace 1: 1
GPH. 0.042; Est. D. rim 0.21
Fig. 10; pp. 24, 44, 45
Sherd. Fine gray clay; lightly polished surface, dark gray with overlay of light gray mf.

Slightly protruding carination; flaring upper body and rim, the latter beveled on top to a flat, sloping surface; flattened band around top int.

## 259 Carinated bowl, Class 1; gray ware

Terrace 9: 2
GPH. 0.064 ; too little for Est. D. rim
Fig. 10; pp. 44, 45
Sherd. Fine, light gray clay; surface polished to low luster and fired dark gray with overlay of light gray mf.

Thickening at lower body for attachment of foot. Flaring upper body and rim.

## 260 Carinated bowl, Class 1; red ware

P 5697 Terrace 1
GPH. 0.036; Est. D. rim 0.23
Fig. 10; pp. 36, 43, 44, 45
Sherd. Medium-fine red clay; surface polished over mf and fired predom. light red with areas of ry.

Shallow bowl with corner-like carination; broadly flaring rim, trimmed on edge to a flat face.

## 261 Carinated bowl, Class 1 ; red ware

Terrace 10: 3
GPH. 0.030; too little for Est. D. rim
Fig. 10; pp. 36, 43, 44, 45
Three joining sherds. Medium-fine clay, yr with gray core; red surface, polished to low luster over fine-grained mf.

Shallow bowl; protruding carination, above which the body flares to a more broadly flaring rim.

## 262 Carinated bowl, Class 1; tan ware

Terrace 1: 4
GPH. 0.027; too little for Est. D. rim
Fig. 10 ; pp. $36,39,43,44,45$
Sherd. Medium-coarse clay, fired red with a thick gray core; polished mf surfaces, mottled yr to ry.

Blunt, markedly protruding carination; broadly flaring rim.

## 263 Carinated bowl, Class 1; tan ware

Terrace 3: 1
GPH. 0.038 ; Est. D. rim 0.23
Fig. 10; pp. $36,39,43,44,45$
Sherd. Medium-fine ry clay; surface polished over mf to low luster and fired close to clay color with darker areas of red.

Protruding, corner-like carination; rim broadly flaring in a straight line.
264 Carinated bowl, Class 2; gray ware
Terrace 9: 3
GPH. 0.064 ; Est. D. rim 0.23
Fig. 10; pp. 44, 45, 46
Sherd. Medium-fine gray clay; surface polished to low luster and fired dark gray with traces of mf.

Low carination; shallowly concave upper body merges into high flaring rim.
265 Carinated bowl, Class 2; gray ware
P 4148 On floor of Meg. 8
GPH. 0.059; Est. D. rim 0.16
Fig. 10; Pl. 15; Pp. 15, 43, 44, 46
Single piece: edge of foot broken away; almost all of rim missing; heavily worn on ext. Medium-coarse, light-colored clay; polished surface, predom. very dark gray.

Spreading ring foot. Unevenly formed above carination.

## 266 Carinated bowl, Class 2; gray ware

Terrace 3: 5
GPH. 0.033; Est. D. rim 0.23
Fig. 10; pp. 44, 46
Sherd. Fine clay, fired ry; surface polished to low luster and fired very dark gray with traces of rb mf .

Sharp carination; tapering upper body; high flaring rim, heavily trimmed to a flat face.

## 267 Carinated bowl, Class 2; gray ware

Terrace 5: 1
GPH. 0.040 ; Est. D. rim 0.23
Fig. 10; pp. 44, 46, 184
Sherd. Medium-fine yr clay; very dark gray surface, covered with light rb mf and polished to a high luster so as to create a rich mottling of dark and light.

Peaked carination; tapering upper body; broadly outturned rim.

## 268 Carinated bowl, Class 2; gray ware

Terrace 3: 7
GPH. 0.045; Est. D. rim 0.23
Fig. 10; p. 44
Sherd. Medium-fine clay, fired rb with thick gray core; unevenly polished surface, dark gray with overlay of light rb mf.

Angled carination above a lightly trimmed facet; vertical upper body; plain, flaring rim.

## 269 Carinated bowl, Class 2; gray ware

Terrace 3: 12
H. 0.065 ; Est. D. rim 0.21

Fig. 10; pp. 32, 44, 47, 184
Complete profile preserved. Medium-coarse clay, rb with thick gray core; surfaces gray with overlay of rb mf; int. completely polished, but ext. polished below carination and left wheel-finished above.

Flattened base, defined by peripheral groove. Protruding, ridge-like carination; vertical upper body; flaring rim, trimmed to flattish face.

## 270 Carinated bowl, Class 2; gray ware

Terrace 3: 4
GPH. 0.039; Est. D. rim 0.25
Fig. 10; pp. 44, 47, 184
Rim fragment. Medium-fine clay, yellowish brown with gray core; cursorily polished surface, dark gray with overlay of light rb mf .

Slightly protruding carination; vertical upper body; broadly flaring rim.

## 271 Carinated bowl, Class 2; variegated tan and buff

Terrace 1: 6
GPH. 0.060 ; Est. D. rim 0.25
Fig. 10; pp. 36, 39, 43, 44, 46, 184
Four sherds. Medium-fine ry clay; polished surfaces, clay color on ext. and very pale brown on int.; traces of mf.

Body shallowly concave above carination; high flaring rim, beveled to broad, flat face.

A very similar profile occurs in mf red ware in EPB V .
272 Carinated bowl, Class 3; gray ware
Terrace 9: 1
GPH. 0.065; Est. D. rim 0.29
Fig. 11; pp. 24, 44, 47
Three nonjoining sherds. Fine gray clay; surfaces polished to medium luster and fired dark gray with overlay of rb mf .

Peaked carination; strongly tapering upper body; erect rim, outward-thickened and rounded.

273 Carinated bowl, Class 3; gray ware
P 3879 Terrace 9
GPH. 0.048; Est. D. rim 0.29
Fig. 11; pp. 35, 44, 47
Sherd. Coarse clay, light gray with thick, dark gray core; cursorily polished surface, dark gray to black with thin patches of mf .

Thick-walled. Sharp carination, above which the body is upright and shallowly concave; articulated, rounded rim.
274 Carinated bowl, Class 3; gray ware
Terrace 3: 9
GPH. 0.045 ; Est. D. rim 0.21
Fig. 11; pp. 44, 47
Sherd. Medium-fine gray clay; surface polished over a heavily micaceous film and fired clay color.

Sharp carination; upper body inclined and shallowly concave; outward-thickened, rounded rim.

275 Carinated bowl, Class 3; gray ware
Terrace 3: 8
GPH. 0.046; Est. D. rim 0.29
Fig. 11; pp. 44, 47
Sherd. Medium-fine, heavily micaceous clay, fired light rb; lightly polished, dark gray surface.

Inclined upper body, sharply inset above carination; direct rim.

276 Carinated bowl, Class 3; gray ware
P 3883 Meg. 7, W corner
GPH. 0.049; Est. D. rim 0.17
Fig. 11; pp. 44, 47
Sherd. Fine clay, gray with thick, dark gray core; light gray surface, overlaid with mf and polished.

Vertical upper body, inset and tapering into a direct rim.
277 Carinated bowl, Class 3; gray ware
P 3878 Terrace 9
GPH. 0.061; Est. D. rim 0.23
Fig. 11; pp. 44, 47, 184
Sherd. Medium-fine rb clay; surfaces polished to medium luster and fired dark gray with traces of lighter mf.

Angled carination; upright rim with neatly trimmed band face.

278 Carinated bowl, Class 3; gray ware
Terrace 3: 10
GPH. 0.037; Est. D. rim 0.21
Fig. 11; pp. 44, 47, 184
Upper body vertical above sharp carination; prominent, articulated rim, triangular in section.

279 Carinated bowl, Class 3; gray ware
Terrace 3: 6
GPH. 0.034; Est. D. rim 0.23
Fig. 11; pp. 44, 47, 184
Sherd. Medium-fine clay, light rb with gray core; polished surfaces fired predom, very dark gray, worn and now rb over much of int.

Angled carination, above which body rises vertically to an outward-thickened, rounded rim.
280 Carinated bowl, unclassifiable; gray ware
Terrace 1: 8
GPH. 0.038; Est. D. rim 0.21
Fig. 11; pp. 44, 46, 48
Sherd. Medium-fine brown clay; dark gray surface with rb mf , mostly wheel-finished with only light polishing.

Blunt, obtuse carination; everted rim, ledged at top.

## FLARING-RIMMED BOWL

281 Flaring-rimmed bowl; painted bichrome-on-groundcoat
P 5699 Terrace 1
GPH. 0.027; Est. D. rim 0.21
Fig. 11; Pl. 24; pp. 37, 38, 44, 48, 134, 136, 138, 164
Sherd; ground-coat worn, painting largely obliterated. Medium-fine ry clay; slipped surface, polished to low luster and fired red (ext.) to ry (int.); matte white ground-coat on top surface of rim; traces of black and red paints.

Slight, obtuse carination; broadly flaring rim with wide, flat top surface.

## PLAIN BOWLS

282 Plain bowl, Class 1; gray ware
P 1765 House Y'
H. $0.056-0.065$; D. rim 0.195

Fig. 18; PI. 25; pp. 15, 48, 49
Almost complete. Fine clay; very dark gray surfaces with uneven overlay of rb mf , polished to medium luster.

Low ring foot with beveled edge. Shallowly convex lower body; plain, vertical rim.

## 283 Plain bowl, Class 1; gray ware

Terrace 2: 5
GPH. 0.043; Est. D. rim 0.25
Fig. 18; pp. 48, 49, 51, 184
Sherd. Fine clay, fired rb with thick, light gray core; polished surfaces, dark gray with almost total overlay of light rb mf.

Almost straight lower body; rim vertical above bend in contour.

## 284 Plain bowl, Class 1; tan ware

Terrace 7: 2
GPH. 0.036; Est. D. rim 0.19
Fig. 18; pp. 24, 36, 43, 48, 49, 50
Sherd. Fine yr clay, heavily micaceous; surfaces polished to medium luster and fired predom. a darker tone of clay color.

Vertical rim, inward-thickened.

## 285 Plain bowl, Class 2; gray ware

Terrace 2: 2
GPH. 0.040 ; Est. D. rim 0.15
Fig. 18; pp. 43, 48, 50
Sherd, broken away just above foot. Fine clay, rb with thick gray core; polished surfaces: ext. streaked gray and rb, int. covered with light rb mf.

Flaring rim above slight bend in profile. Uneven row of four lines incised on int.

## 286 Plain bowl with beveled rim, Class 2; gray ware

P 5707 Terrace 2
H. 0.036 ; Est. D. rim 0.13

Fig. 18; pp. 43, 48, 50
Sherd preserving complete profile. Fine, heavily mica-
ceous clay, fired light rb with gray core; surfaces well polished to high luster and fired very dark gray.

## 287 Plain bowl, Class 3; gray ware

Terrace 3: 11
GPH. 0.044; Est. D. rim 0.23
Fig. 18; pp. 48,50
Two nonjoining sherds. Coarse rb clay; surfaces wheelfinished except for light polishing on rim, dark gray with overlay of rb mf.

Incurved rim, tapered at top; below, on ext., two blunt ridges.
288 Plain bowl, Class 3; gray ware
Terrace 1: 9
GPH. 0.035 ; Est. D. 0.21
Fig. 18; pp. 24, 48, 50, 184
Sherd. Medium-fine gray clay; surfaces polished and fired
dark gray with uneven rb mf.
Incurved rim, inward-thickened.

## AMBIGUOUS BOWLS

## 289 Foot of bowl; red ware

Terrace 3: 14
GPH. 0.039 ; Est. D. foot 0.09
Fig. 21; pp. 36, 51
Sherd. Medium-fine ry clay; surfaces cursorily smoothed and dull: ext. pinkish gray, int. light red.

Tall, spreading ring foot with double contour.
290 Bowl; painted dark-on-red
P 5706 Terrace 2
Th. 0.010
Pl. 36; pp. 37, 51, 134, 138, 157, 184
Body sherd; painting faintly preserved. Fine red clay; surfaces polished to medium luster and fired unevenly dark to light red.

Lines at perhaps midway on ext. On int., closely spaced quadruple CCs, of which nine are preserved.

Cf. 500 from Meg. 4.
291 Bowl; painted dark-on-red
P 3328 Terrace 8
GPH. 0.033 ; Est. D. foot 0.09
Pl. 36; pp. 51, 90, 134, 138
Sherd preserving part of base and wall. Fine clay, red with gray core; surfaces well polished over dusky red paint to high luster and fired clay color.

Low disk foot, unevenly flattened.
On ext., groups of annular lines on bottom and wall. On int., at least two decorative zones of uneven width encircle a small tondo filled with a stippled motif.

## ROUND-MOUTHED JUGS

292 Round-mouthed jug; gray ware
Terrace 6: 1
GPH. 0.045 ; Est. D. rim 0.11
Fig. 22; pp. 52, 54, 184
Sherd. Fine, heavily micaceous clay, fired light rb; polished surface, very dark gray with uneven rb mf

Shallowly convex, flaring neck; tall, flaring rim.

## 293 Round-mouthed jug; red ware

Terrace 2: 9
GPH. 0.042; Est. D. rim 0.10
Fig. 22; pp. 33, 36, 52, 54, 184
Sherd. Medium-fine yr clay, heavily micaceous; mf, smoothed over wheel-finished ground and fired red; the same substance seems to have been sloshed around the int.

Wide neck, vertical up to a low ridge and flaring above; outward-thickened rim, beveled to a flat face.

## 294 Round-mouthed jug; Wavy-Line style, dark-on-tan

 P 3484 Floor of Meg. 6 (Terrace 8)GPH. 0.103; Est. max. D. 0.10; Est. D. rim 0.08
Pl. 38; pp. 15, 37, 52, 54, 56, 134, 137, 155-156, 184
Fragment with upper handle attachment; restored gaps.
Fine ry clay; surface well polished over dark rb paint to medium luster and fired clay color.

Ellipsoidal body; wide neck; direct rim. Rolled handle.
Wavy-line zones at lower shoulder, base of neck, and on rim; perhaps a fourth on lower body.

295 Round-mouthed jug; painted bichrome-on-groundcoat
P 1766 House X, fill over floor
GPH. 0.028; Th. 0.004
Pl. 38; Color Pl. II; pp. 38, 52, 134, 137, 142
Neck fragment, missing rim. Fine pink clay; on ext., thick, white ground-coat, polished to smooth but almost matte finish; black and dark red paints; on int., dark red slip, polished to high luster.

Fine-line painting. In zone on neck, a complex zigzag design in which red was used for the tiny triangles at the apices of the zigzag and for dots.

296 Large round-mouthed jug or kantharos krater; Ladders-and-Zigzags style, dark-on-tan
P 5700 Terrace 1
GPH. 0.070 ; Est. D. neck 0.20
Pl. 56; Color Pl. II; pp. 37, 52, 53 (n. 12), 54, 78, 134, 137, 148,160
Shoulder/neck sherd. Medium-fine red clay; apparently slipped surface, polished and fired streaky yr with some red; much fine mica in surface, perhaps as a film; dark paint, worn.

Thick ridge at base of wide, vertical neck.
On shoulder, spaced panels of Crosshatching 1. On neck, a panel of ladders-and-zigzags.

116 from EPB V may belong to the same vessel.
297 Large round-mouthed jug or kantharos krater; painted dark-on-tan
P 3555 Meg. 6, floor (Terrace 8)
GPH. 0.036; too little for Est. D. rim
Pl. 56; pp. 37, 52, 53 (n. 12), 54, 78, 134, 137, 148
Rim sherd. Medium-fine red clay; surface polished over dark rb paint to high luster and fired yr.

Wide, vertical neck; slightly outward-thickened band rim.
Crosshatching 1 on neck; wavy-line zone on rim.

## NARROW-NECKED TREFOIL JUG

## 298 Small trefoil jug; painted dark-on-red

P 1853 Terrace fill SW of House Y
GPH. 0.040
Pl. 62; pp. 37, 57, 59, 61, 134, 137, 184
Neck/rim fragment. Medium-fine red clay; surface polished in vertical strokes to low luster and fired streaky red; dark, matte paint.

Narrow neck; beveled-band rim.
On mid-neck, a wavy line between pairs of lines; oblique line on rim.

## WIDE-MOUTHED TREFOIL JUGS

## 299 Wide-mouthed trefoil jug; gray ware

Terrace 3: 16
GPH. 0.042
Fig. 26; p. 62
Two nonjoining sherds yielding composite upper profile. Very fine gray clay; polished surface, dark gray with overlay of glittery brown mf.

Blunt ridge at base of neck; plain rim, with trefoil curvature.
300 Wide-mouthed trefoil jug; Wavy-Line style, dark-on-
tan
P 5695 Terrace 3
GPH. 0.029
Fig. 26; Pl. 81; pp. 37, 62, 134, 137, 155, 156, 184, 188
Sherd. Fine ry clay; smooth, matte surface, close to clay
color; rb paint.
Abbreviated neck; plain rim, with trefoil curvature.
Wavy-line zones on lower and upper shoulder, and on neck/trefoil.

A very small rim sherd of painted buff ware from Terrace 1 may be from the same shape or a Trpe 2 sieve jug; wavy line on neck.

## MISCELLANEOUS JUG

## 301 Probable spouted jug; painted dark-on-tan

P 4036 Terrace fill in Meg. 8
GPD. 0.060 ; Est. D. mouth 0.07
Pl. 87; pp. 37, 64, 134, 184
Spout sherd. Medium-fine ry clay; slipped and smoothed surface, fired clay color; dark rb paint.

End segment of open spout with rounded mouth. Perhaps similar in type to 415 from the Destruction Level.

On ext., below rim, a transverse row of Type 1 triangles.

## SIDE-SPOUTED SIEVE JUG

302 Side-spouted sieve jug with punched decoration; gray ware
P 3411 Terrace 8
GPH. 0.049; GPD. spout 0.025
Pl. 94; pp. 67, 68, 122, 185, 193
Sherd with part of spout. Very fine gray clay; very dark gray surface, well polished to high luster.

Trough spout with tubular basal section, rising from sieve area on lower shoulder; across bridge, a rectangle of applied clay, decorated on top with two rows of tiny, punched triangles.

## ONE-HANDLED UTILITY POTS

## 303 Probable one-handled utility pot; indet.

Terrace 1: 18
GPH. 0.055 ; Est. D. rim 0.19
Fig. 31; pp. 70, 71, 72, 184
Sherd. Coarse clay, heavily micaceous, fired very dark gray to black; wheel-finished surface, overlaid with mf and fired dark rb to dark gray (where scorched).

Small, notched ridge at transition from shoulder to wide neck; beveled band-rim.

304 Probable one-handled utility pot; indet.
Terrace l: 19
GPH. 0.070; Est. D. rim 0.15
Fig. 31; pp. 70, 71, 72
Sherd. Coarse, dark rb clay, heavily micaceous; rough, wheel-finished surface with large-grained mf , fired rb to gray to black.

## AMPHORAS

## 305 Wide-necked amphora; gray ware

P 3489 Terrace fill beside NE wall of Meg. 6
H. $0.455-0.465$; Max. D. 0.402 ; D. rim 0.995-0.31

Fig. 34 (rim); Pl. 116; pp. 15, 26, 35, 83, 85, 86, 106, 109, $117,184,185$
Several gaps, including one handle. Coarse grat clay;
slipped and fired predom. dark gray with lighter blushes; slip crackled.

Flat base. Plump ovoid body, poorly formed; wide neck
with three blunt ridges spaced from base to top; overhanging rim, trimmed to a vertical face. Strap handles with low medial rise, set from lower shoulder to mid-neck; shallow finger hollow at base of each.

## 306 Wide-necked amphora; gray ware

P 3919 Lower level of Terrace fill between Megs. 7 and 8 GPH. 0.170; Est. D. rim 0.30
Fig. 34; Pl. 116; pp. 26, 78, 83, 85, 86, 87, 103, 108, 110 , 117, 184
Fragment of upper body and neck/rim, including a handle. Medium-coarse reddish gray clay; surface well polished over mf and fired very dark gray under the uneven, pinkish gray film.

Continuous curve from shoulder into wide neck; groups of three to four precisely executed ridges at upper shoulder, base of neck, and mid-neck; broadly everted, ledged rim. Strap handle, tooled to look like a triple-round; carefully worked spool-rotelle set at top.

## 307 Wide-necked amphora; gray ware

## Terrace 9: 11

GPH. 0.155 ; Est. D. rim 0.39
Fig. 34; pp. 33, 34, 83, 85, 86, 103, 117, 184
Sherd with stub of handle. Medium-coarse clay, rb with thick gray core; surface lightly smoothed and fired very dark gray with an uneven overlay of rb mf .

Continuous curve from steep shoulder into short, wide neck; blunt ridges at base of neck and above midway; ledged rim. Strap handle.

## 308 Krater with patterned incision; gray ware

## P 3488 Found with 305

H. 0.49: Max. D. 0.44: D. rim 0.42

Fig. 34 (rim); Pl. 116; pp. 15, 32, 35, 83, 84, 85, 103, 104, $105,114,115,117,185,193,195$
Gaps; much of surface deteriorated. Coarse rb clay; slipped surface, lightly and unevenly polished, fired dark gray to gray with traces of mf ; rim and handles more carefully polished.

Shallowly concave base with hole 1 cm . wide at center, pierced before firing. Broad, ovoid body; wide neck with carefully tooled ridge at base and another at midway; broadly everted, ledged rim. Double-round handles.

On lower neck, and perhaps upper, a wavy-line pattern neatly incised with a six-tined instrument.

## 309 Open-mouthed amphora; gray ware

Terrace 3: 27
GPH. 0.120; Est. D. rim 0.33
Fig. 34; pp. 83, 85, 86, 105, 185
Three joining sherds from neck/rim, including handle scar. Medium-fine clay, rb with light gray core; polished surface, gray with patchy rb mf.

Short, wide neck; small, everted rim with shallow ledge. Upper handle attachment on lower neck.

## 310 Probable open-mouthed amphora; gray ware

Terrace $9: 9$
GPH. 0.049 ; Est. D. rim 0.32
Fig. 35 ; pp. $32,33,83,85,86,104,185$
Neck/rim sherd, including rise for handle. Mediumcoarse gray clay, heavily micaceous; largely wheel-finished surface, gray with overlay of light gray mf .

Blunt ridge on neck; ledged rim, flattened on ext. and top. Handle attachment on neck.

## 311 Open-mouthed amphora with patterned incision; gray ware

P5750 Terrace 1
GPH. 0.12: Max. Th. 0.016
Pl. 116; pp. 82, 83, 85, 86, 114, 115
Shoulder sherd with handle stubs. Medium-fine rb clay;
slipped surface, polished to low luster and fired dark gray.
Steep shoulder; wide neck. Strap handle, apparently in a tight loop, from shoulder to base of neck.

On upper shoulder, at handle level, a row of deeply incised chevrons alternating single- and double-line, the latter filled with punctate dots.

## 312 Open-mouthed amphora with stamped decoration;

 gray wareP 4265 Floor of Meg. 8
GPH. 0.170; Th. 0.011
Pl. 116; pp. 15, 83, 86, 88, 109, 123, 124-125, 131, 132, 185, 186
Fragment preserving handle and areas of attachment. Medium-coarse clay, light rb with gray core; smoothed surface, dark gray with traces of mf .

Wide neck. Strap handle with lightly trimmed edges; deep finger hollow at base.

To either side of lower attachment, parts of S-spiral stampings.

The same stamp seems to have been used on 918 from Meg. 4.

## 313A-B Open-mouthed amphora with stamped decoration;

 gray wareP 3824 Terrace 5/6; P 5004 Terrace 3
GPH.(A) 0.145 ; GPH.(B) 0.162 ; Th. 0.015
Pls. 116, 169-170; pp. 83, 85, 86, 123, 124-125, 126, 130, 131, 133, 185-186
Two associated sherds, preserving section of shoulder/ neck (A) and handle with surrounding body (B); on A, yellowish stains and signs of secondary firing. Medium-coarse clay, brownish gray with dark gray core; smoothed surface, with some polishing on handle, colored gray to dark gray (A) and light gray (B) with mf overlay.

Steep shoulder; wide neck with ridge at base. Broad strap handle from upper shoulder to perhaps mid-neck.

On lower neck on A, pairs of volute fan stampings made with two matching stamps or possibly two sides of a single stamp ( Pl .170 ). At the same level on B , to $L$ of handle, is the corner of a stamping that, insofar as preserved, matches exactly the fan of the $R$-hand volute fans on A. In a vertical row on the handle, five circular stampings of a tightly coiled spiral (Pl. 169).

Fabric, scale, and the use of what is apparently the same volute fan stamp in the same position suggest the association of A and B. The darker surface on A might be explained by differing conditions after breakage.

## 314 Amphora with ledged rim; painted dark-on-red

P 5702 Terrace 3
GPH. 0.031; Est. D. rim 0.21
Fig. 35; Pl. 117; pp. 37, 79, 83, 85, 86, 104, 134, 185
Sherd. Very fine, light red clay; surface evenly polished to low luster and fired red on ext., ry on top of rim and upper int.; dark paint, worn.

Narrow wavy-line zones, one at top of neck and another on the flattened face of the rim.

## 315 Open-mouthed amphora; painted dark-on-tan and buff <br> P 5749 Terrace 1

GPH. 0.13; Est. D. rim 0.35
Fig. 35; Pl. 117; pp. 37, 79, 83, 85, 103, 134, 137, 139, 152, 186
Neck/rim fragment. Coarse, crumbly clay, fired ry; surface of neck in clay color, but coated with an evenly applied, transparent mf that extends to below rim; face of rim slipped and fired pale brown; on int., rim and top of neck polished; dark paint, worn.

Tall, wide neck.
Large zone on neck, bordered above and below by straight and wavy lines: simple X-panel at $R$, panel with unclear motif at $L$, and a double CC centered between the two. Group of transverse lines on face of rim.

A gray-ware vessel from the Terrace fill has a similar rim profile.

## 316A-B Open-mouthed amphora; painted dark-on-tan

P5751a-b Terrace 1
GPH. 0.175 ; Est. D. rim 0.46
Fig. 35; Pl. 117; pp. 37, 79, 83, 85, 86, 104, 118, 134, 137, 138, $139-140,148,149,185$
Four sherds, three joining, preserving part of neck/rim and a handle attachment (A) and another part of neck (B). Medium-fine red clay; surface polished to medium luster and fired streaky ry; dark paint, very worn.

Vertical neck, tall and wide; everted rim with neatly trimmed, flat face and top, and a narrow ledge formed by a thick, protruding ridge. Handle, probably a strap, from neck to face of rim; W. of scar on rim suggests a platform similar to those on 911-912. Just below level of handle, a group of three pronounced, horizontal ridges, rounded off just short of the handle; B preserves similar ridging.

Thick-line painting. Below ridging, an area of Checkerboard 1 on $B$ and, on $A$, what appears to be a panel of horizontal wavy-line or zigzag zones. Above ridging, large panels of Crosshatching $l$ to either side of handle. Wavy-line zone on top of rim; unclear motif extending from rim onto handle.
317 Open-mouthed amphora; painted dark-on-tan
P 3554 Terrace fill SW of Meg. 6
GPH. 0.080; Est. GPD. 0.56
Pl. 117; pp. 37, 79, 83, 85, 134, 137, 141, 160, 185
Shoulder fragment. Coarse clay, red with thick gray core; micaceous slip, polished to medium luster and fired ry; dark rb paint.

Steep shoulder; wide neck.
Shoulder zone of crosshatched triangles with pendent, hatched chevrons between.

For the finish, cf. 318-319.

## 318 Amphora; painted dark-on-tan

P 5701 Terrace 1
GPH. 0.106; Est. max. D. 0.45; Max. Th. 0.010
Pl. 117; pp. 79, 83, 85, 134, 137, 142, 160-161, 185
Belly/shoulder fragment. Medium-coarse red clay; micaceous slip, polished to low luster and fired yr; dark paint.

In zone on belly, part of a panel with horizontal rows of solid lozenges and simple zigzag; on shoulder, a zone of Type 1 triangles.

Cf. 319
319 Open-mouthed amphora; painted dark-on-tan
P 5752 Terrace 1
GPH. 0.110; Max. Th. 0.011
Pl. 117; pp. 79, 83, 85, 134, 137, 149, 160-161, 185
Neck fragment. Like 318 in fabric.
Tall, wide neck with thick, blunt ridge, probably at base.
Parts of two zones with a common border at $L$, as though
beside a handle: Checkerboard 1 panel in the lower zone; in the upper, and staggered to $R$, a panel of Crosshatching 1 .

Very likely from the same vessel as 318.
320A-C Open-mouthed amphora; painted dark-on-tan
P 3609a-c Terrace fill beside NE wall of Meg. 6
GPH.(A) 0.190 ; Th. 0.015
Pl. 117; pp. 33 (n. 4), 37, 79, 83, 85, 86, 117-118, 134, 137, 139-140, 144 (n. 136), 145, 148, 185
Fragment and two sherds preserving segments of lower
body (B-C) and shoulder/lower neck (A). Medium-coarse clay, ry with gray core; thin yr slip, unevenly applied over lighter clay ground and polished to low luster; black paint.

Long, steep shoulder with three thick ridges, evenly spaced, from above midway to base of wide neck.

Low on body, a zone of standing and pendent Ts and Ls (B); higher, but still below max. D., a zone of lozenges in which some are crosshatched while others have compounded linear fillings. Low on shoulder, below lowest ridge, a zone of Type 1A triangles; between the lower two ridges, continuous Crosshatching l; between middle and top ridge, a complex lozenge row with lozenges and triangles blank except for a single dot at the center of each.

The painted 392-394 are probably amphoras.

## DINOI

## 321 Dinos; painted dark-on-red

P 3607 Terrace 8
GPH. 0.053; Est. D. rim 0.15
Fig. 48; Pl. 135; pp. 37, 91, 94, 134, 137-138, 139
Rim sherd. Medium-coarse, light red clay; micaceous red slip, polished to low luster; dark paint.

Broad shoulder; outward-thickened rim, triangular in section, set directly on shoulder.

Thick-line painting. Large, crosshatched triangle in zone on shoulder. Transverse bars on int. rim.

## 322 Dinos; painted dark-on-tan

P 3421 Terrace fill to SW of Meg. 6
GPH. 0.057; Est. D. rim 0.17
Fig. 48; Pl. 135; pp. 37, 91, 94, 134, 137-138, 139, 142, 149
Fragment with restored gaps. Medium-fine, sandy clay, fired ry; micaceous slip, stroke-polished to low luster and fired clay color; dark paint, worn.

Broad shoulder; everted rim, flattened on face and top.
Tall shoulder zone, bordered above by a narrow strip of zigzag; within, a panel of Type 2 checkerboard with outlined squares and dots in the reserved checks; unclear motif at $L$. Groups of transverse bars on top of rim; wavy-line zone on int. rim.

## STORAGE JARS

323 Storage jar with stamped decoration; red ware
P 4144 Floor of Meg. 8
GPH. 0.110; GPW. 0.245; Th. 0.018
Pls. 144, 170; pp. 15, 27-28, 36, 97, 98, 99, 113, 118, 123, 124-125, 126, 129, 131, 133, 184, 185-186, 190
Shoulder sherd. Coarse red clay; smoothed surface, red to light red.

Broad, gently sloping shoulder, suggesting a narrow neck; at upper $L$, a large, spool-shaped bolster; at upper $R$, a rise in surface probably indicates another bolster, thus allowing a total of four set at roughly $90^{\circ}$ intervals.

On lower shoulder, raised band with stampings: a narrow, vertical zigzag panel impressed in pairs (Pl. 144); an elongated oval with wavy lines; an S-curl of four lines (Pl. 170). At level of bolster, a row of stamped chevron-triangles above a row of punched dots; motif resumes to $L$ of bolster.
324 Storage jar with stamped pattern-banding; red ware P 3920 Terrace fill under anteroom of TB 8
GPH. 0.110; Th. 0.019
Pl. 149; pp. 36, 97, 98, 99, 119, 123, 124-125, 131, 184, 185
Shoulder/neck fragment. Medium-coarse clay, red with gray core; smoothed surface, red with lighter patches.

Tall shoulder, straight in profile; thick ridge at base of wide neck. At top of shoulder, a large, three-disked bolster from which a wide, raised band descends obliquely to $R$; beneath central disk, the scar of a vertical band; probably another oblique band at $L$.

On the band, two stampings, widely spaced, of a hatched rectangle.

## 325 Storage jar with stamped pattern-banding; red ware

P 5739 Terrace 1
GPH. 0.128; Th. 0.014
Pl. 149; pp. 36. 97, 98, 99, 119, 123, 124-125, 129, 184, 185
Sherd, probably from lower shoulder. Medium-coarse, light red clay; smoothed surface, light red with area of secondary firing at top.

Horizontal band, from which a narrower band rises obliquely to $L$. On both bands, stampings of a diminishing triangle: two rows on wider band, set on sides to point $R$ or $L$; single row on oblique band.

## LARGE AMPHORAS OR STORAGE JARS WITH LEDGED RIMS

326 Large vessel with ledged rim; gray ware
Terrace 1: 24
GPH. 0.054; Est. D. rim 0.25
Fig. 53; pp. 86, 103
Sherd. Medium-fine brown clay; very dark gray surface, overlaid with rb mf and polished, so as to create a streaky effect of dark and light.

## 327 Large vessel with ledged rim; gray ware

Terrace 1: 27
GPH. 0.029; Est. D. rim 0.28
Fig. 53; p. 102
Sherd. Coarse gray clay, heavily micaceous; polished surface with uniform gray mf of metallic appearance.
328 Large vessel with ledged rim; gray ware
Terrace 3: 22
GPH. 0.081; Est. D. rim 0.29
Fig. 53; p. 104
Two nonjoining sherds. Medium-coarse, heavily micaceous clay, fired rb; polished surface, dark gray with traces of mf .

Pair of blunt ridges at mid-neck.
329 Large vessel with ledged rim; gray ware
Terrace 3: 30
GPH. 0.122; Est. D. rim 0.31
Fig. 53; pp. 33, 54, 103
Fragment. Coarse clay, rb with thick gray core; wheelfinished surface, gray with rb mf .
330 Large vessel with ledged rim; gray ware
Terrace 1: 22
GPH. 0.043; Est. D. rim 0.31
Fig. 53; pp. 104, 185
Sherd. Medium-coarse brown clay; cursorily polished surface, gray to dark gray.

Cf. 331.
331 Large vessel with ledged rim; gray ware
Terrace 3: 21
GPH. 0.121; Est. D. rim 0.31
Fig. 53; pp. 104. 185
Fragment. Medium-coarse rb clay; surface polished (in vertical strokes on neck) and fired dark gray under rb mf.

The rim is an outward-tilted version of that on 330 .

## 332 Large vessel with ledged rim; gray ware

Terrace 1: 25
GPH. 0.082; Est. D. rim 0.31
Fig. 53; pp. 104-105
Sherd. Coarse clay, rb with thick gray core; polished surface, dark gray with traces of mf.

## 333 Large vessel with ledged rim; gray ware

Terrace 7: 4
GPH. 0.079 ; Est. D. rim 0.32
Fig. 53; pp. 86, 105
Sherd. Medium-fine, light gray clay; lightly polished gray surface.

The type of rim recurs on an open-mouthed amphora from TB 4 (P 1953).
334 Large vessel with ledged rim; gray ware
Terrace l: 32
GPH. 0.032 ; Est. D. rim 0.33
Fig. 53; p. 104
Sherd. Medium-coarse, dark rb clay; wheel-finished surface, very dark gray with traces of rb mf .

Shallowly concave ledge, formed by thick, protruding ridge.
335 Large vessel with ledged rim; gray ware
Terrace 1: 26
GPH. 0.039; Est. D. rim 0.35
Fig. 53; pp. 32, 103
Sherd. Coarse, heavily micaceous clay, brown with gray core; cursorily polished surface, with better attention given to rim, fired very dark gray with mf overlay.
336 Large vessel with ledged rim; gray ware
Terrace 5: 3
GPH. 0.079; Est. D. rim 0.35
Fig. 54; pp. 104, 185
Sherd. Very coarse, heavily micaceous clay, light brown with very thick, dark gray core; rough, wheel-finished surface, gray with light rb mf.

## 337 Large vessel with ledged rim; gray ware

Terrace 3: 32
GPH. 0.096; Est. D. rim 0.35
Fig. 54; pp. 86, 104
Sherd. Coarse, heavily micaceous clay, rb with very thick gray core; wheel-finished surface, very dark gray.

Vertical neck with prominent ridges; steeply sloping "ledge."

## 338 Large vessel with ledged rim; gray ware

Terrace 1: 30
GPH. 0.041 ; Est. D. rim 0.35
Fig. 54; p. 104
Sherd. Coarse brown clay, heavily micaceous; wheel-finished surface, dark gray with large-grained rb mf.

Thick flange forming a wide, shallow ledge.
339 Large vessel with ledged rim; gray ware
Terrace 5: 5
GPH. 0.13; Est. D. rim 0.35
Fig. 54; p. 105
Sherd. Coarse clay, light brown with very thick gray core; cursorily smoothed surface, dark gray with mf .
340 Large vessel with ledged rim; gray ware
Terrace 5: 4
GPH. 0.088; Est. D. rim 0.37
Fig. 54; pp. 103, 105
Four sherds. Medium-coarse, heavily micaceous clay, red with gray core; polished surface, dark gray with traces of mf .

341 Large vessel with ledged rim; gray ware
Terrace 2: 12
GPH. 0.087; Est. D. rim 0.38
Fig. 54; pp. 32, 104
Fragment. Coarse clay, rb with gray core; surface lightly polished, with emphasis on rim, and fired very dark gray under a patchy rb mf.
342 Large vessel with ledged rim; gray ware
Terrace 3: 26
GPH. 0.035 ; Est. D. rim 0.39
Fig. 55; p. 104
Fragment. Medium-fine gray clay; very dark gray surface, polished to medium luster.
343 Large vessel with ledged rim; gray ware
Terrace 1: 28
GPH. 0.109 ; Est. D. rim 0.39
Fig. 55; p. 103
Sherd. Very coarse clay, brown with thick gray core; rough, wheel-finished surface, gray with mf .

Thick, uneven ridges on neck.
344 Large vessel with ledged rim; gray ware
Terrace 1: 36
GPH. 0.069; Est. D. rim 0.39
Fig. 55; pp. 102, 103
Sherd. Coarse clay, rb with thick gray core; slipped surface, cursorily polished on rim, fired very dark gray with traces of rb mf.
345 Large vessel with ledged rim; gray ware
Terrace 7: 3
GPH. 0.076; Est. D. rim 0.40
Fig. 55; p. 103
Sherd. Medium-coarse, dark gray clay; surface polished over uniform, light gray mf .
346 Large vessel with ledged rim; red ware
Terrace 4: 6
GPH. 0.046; Est. D. rim 0.39
Fig. 55; pp. 33, 36, 103, 104
Sherd. Coarse red clay; wheel-finished surface, red with mf.

Edge and top of rim trimmed to three broad facets.
347 Large vessel with ledged rim; variegated red and tan Terrace 10: 1
GPH. 0.175; Est. D. rim 0.46
Fig. 55; pp. 36, 104
Sherd. Medium-fine clay, ry with gray core; polished surface: red mf on neck, stopping on underside of rim; rim itself fired ry.
348 Large vessel with ledged rim; variegated red and tan Terrace 5: 6
GPH. 0.058 ; Est. D. rim 0.23
Fig. 55; pp. 32, 36, 86, 103
Sherd. Medium-fine red clay, heavily micaceous; wheelfinished neck, light red; rim polished and fired dark yr.
349 Large vessel with ledged rim; tan ware
Terrace 1: 33
GPH. 0.061 ; Est. D. rim 0.29
Fig. 55; pp. 36, 105, 106
Sherd. Medium-coarse, heavily micaceous clay, yr with
thick gray core; polished mf surface, predom. ry.
Very shallow ledge.
350 Large vessel with ledged rim; tan ware
Terrace 3: 37
GPH. 0.086; Est. D. rim 0.35
Fig. 55; pp. 36, 103
Sherd. Medium-coarse ry clay; polished surface, clay color with thin mf .

351 Large vessel with ledged rim; tan ware
Terrace 1: 29
GPH. 0.059; Est. D. rim 0.37
Fig. 55; pp. 36, 102, 103
Sherd. Very coarse yr clay; slipped surface, wheel-finished and fired ry.

## 352 Large vessel with ledged rim; tan ware

Terrace 2: 11
GPH. 0.034; Est. D. rim 0.37
Fig. 55; pp. 36, 103
Sherd. Coarse clay, rb with very thick, dark gray core; rough, wheel-finished surface, rb.

## LARGE AMPHORAS OR STORAGE JARS WITH UNLEDGED RIMS

## 353 Large vessel; gray ware

Terrace 1: 38
GPH. 0.080; Est. D. rim 0.18
Fig. 57; pp. 82, 106, 185
Sherd. Very coarse clay, brown with thick gray core; cursorily smoothed, rough surface, dark gray with traces of rb mf .
354 Large vessel; gray ware
Terrace 4: 5
GPH. 0.055; Est. D. rim 0.31
Fig. 57; pp. 100, 185
Sherd. Medium-coarse rb clay; polished surface, dark gray with rb mf.
355 Large vessel; gray ware
Terrace 10: 2
GPH. 0.076; Est. D. rim 0.32
Fig. 57; pp. 32, 100, 106, 185
Sherd. Coarse, heavily micaceous clay, rb with very thick gray core; very dark gray surface, cursorily polished, with more careful attention to rim.
356 Large vessel; gray ware
Terrace 9: 12
GPH. 0.096; Est. D. rim 0.33
Fig. 57; pp. 100, 105, 106, 107, 185
Sherd. Coarse clay, rb with gray core; cursorily polished surface, cracked and crackled, fired predom. dark gray.

## 357 Large vessel; gray ware

Terrace 1: 31
GPH. 0.043; Est. D. rim 0.34
Fig. 57; pp. 100, 103, 106 (n. 183)
Sherd. Medium-coarse, dark gray clay, heavily micaceous; smoothed surface, gray with rb to light gray mf.
358 Large vessel; gray ware
Terrace 3: 33
GPH. 0.040; Est. D. rim 0.37
Fig. 57; pp. 100, 106
Sherd. Medium-coarse, dark rb clay; lightly polished surface, very dark gray with uneven rb mf.
359 Large vessel; gray ware
Terrace 1: 35
GPH. 0.079; Est. D. rim 0.37
Fig. 57; pp. 32, 100, 102, 106 (n. 183)
Sherd. Coarse clay, rb with gray core; slipped surface, polished and fired uniformly very dark gray.

360 Large vessel; gray ware
Terrace 3: 34
GPH. 0.068; Est. D. rim 0.37
Fig. 57; pp. 100, 105, 106 (n. 183)
Sherd. Coarse clay, rb with gray core; dark gray surface with patchv rb mf, polished.

## 361 Large vessel; gray ware

Terrace 2: 13
GPH. 0.077 ; Est. D. rim 0.39
Fig. 57; pp. 100, 105, 106 (n. 183)
Sherd. Very coarse, heavily micaceous clay, red with gray core; smoothed surface, very dark gray with traces of mf

## 362 Large vessel; gray ware

Terrace 3: 40
GPH. 0.047; Est. D. rim 0.39
Fig. 57; pp. 100, 106
Sherd. Coarse clay, rb with very thick gray core; wheelfinished surface, very dark gray with uneven overlay of rb mf.

## 363 Large vessel; variegated gray and tan

Terrace 2: 14
GPH. 0.122; Est. D. rim 0.39
Fig. 57; pp. 35, 86, 100 (n. 176), 106
Sherd. Very coarse, light rb clay, somewhat crumbly; wheel-finished surface: dark gray under patchy mf on ext., clay color on int. and top of rim.

## 364 Large vessel; buff ware

Terrace 4: 7
GPH. 0.073; Est. D. rim 0.27
Fig. 57; pp. 36, 100, 106, 185
Sherd. Medium-coarse ry clay; cursorily polished surface, very pale brown.

## 365 Large vessel; red ware

Terrace 7: 6
GPH. 0.073; Est. D. rim 0.38
Fig. 57; pp. 36, 98, 100, 106, 185
Two nonjoining sherds. Coarse clay, micaceous and gritty, fired red with thick gray core; rough, wheel-finished surface, clay color.

## 366 Large vessel; red ware

Terrace 4: 8
GPH. 0.054; Est. D. rim 0.40
Fig. 57; pp. 36, 98, 100, 106
Sherd. Coarse red clay; red to light red surface, wheelfinished except for some smoothing on rim.

## 367 Large vessel; tan ware

Terrace 3: 35
GPH. 0.070; Est. D. rim 0.37
Fig. 57; pp. 32, 36, 98, 100, 106, 185
Sherd. Coarse ry clay; predom. rb surface, polished to low luster on rim (neck more lightly finished and matte).

368A-B Large vessel with stamped decoration; red ware
P 3436 (A) Terrace 8; P 3889 (B) intrusion in Early Phrygian enclosure wall to NW of Meg. 6
GPH. 0.113; Est. D. rim 0.42
Fig. 57 ; Pl. 154; pp. 36, 98, 100, 105, 106-107, 117, 118, 123, 125, 128, 129
Two nonjoining sherds from neck and rim. Coarse clay, red with thick gray core; red to light red surface, slipped and smoothed.

Low on neck, within thick ridges, a row of diminishing triangle stampings that alternate direction to form a zigzag, in the manner of triangle-zigzag stamping.

## LARGE AMPHORAS OR STORAGE JARS, MISCELLANEOUS

369 Vessel with patterned incision; gray ware
P 3299 Тептасе 8
GPH. 0.135
Pl. 152: pp. 114-115, 119, 185
Shoulder sherd. Medium-coarse gray clay; evenly applied
mf , fired uniformly gray.
Just above Max. D. and higher on shoulder, two raised bands with incised herringbone; at $R$, a curvilinear element with incised zigzag connects the two bands and closes off the plain central strip between them.

Cf. 370.
370 Vessel with patterned incision; gray ware
P 3826 Terrace 9
GPH. 0.090 ; Th. 0.012
Pl. 152; pp. 114-115, 119, 185
Sherd from lower belly. Coarse gray clay; thick slip, polished to low luster and fired predom. very dark gray; uneven mf.

Scheme of banding and incision apparently similar to or the same as that on $\mathbf{3 6 9}$.
371 Vessel with patterned incision; gray ware
P 3822 Terrace 6
GPH. 0.135 ; Est. GPD. 0.60 ; Th. 0.015
Pl. 152; pp. 35, 114-115, 118, 185
Lower body fragment. Coarse, dark gray clay; on ext. and int., very thick slip, fired black, with dense, very pale brown mf , well smoothed, on ext.

Just below Max. D., a raised band on which deeply incised oblique lines intersect in an irregular pattern.
372 Vessel with stamped decoration; gray ware
P 3808 Terrace fill in Meg. 7
GPH. 0.090; Th. 0.011
Pl. 154; pp. 117, 118, 123, 125, 127
Upper shoulder sherd. Medium-coarse gray clay; thick
slip, smoothed and fired gray with traces of mf .
Steep shoulder; smooth transition into wide neck.
Spanning shoulder and neck, two bands of triangle-zigzag stamping, divided and bordered above by thick ridges.

373 Large vessel with stamped decoration; gray ware
P 5740 Terrace 1
GPH. 0.129; Th. 0.019
Pl. 155; pp. 118, 125, 129, 130, 186
Shoulder sherd. Coarse, gritty clay, fired rb; slipped and smoothed surface, very dark gray.

On raised band, small, single-circle stampings form a zigzag.

374 Large vessel with stamped decoration; buff ware
P 3759 Terrace fill beside enclosure wall to NW of Meg. 6
GPH. 0.085; Th. 0.012
Pl. 155; pp. 36, 125, 128, 131, 185-186
Shoulder sherd. Medium-coarse, gritty clay, yr; pink surface, slipped and smoothed.

On raised band, probably at top of shoulder, several rows of a small lozenge stamping with central eye.

375 Large vessel with stamped decoration; red ware
P 3801 Terrace fill in Meg. 7; P 4018 Terrace fill in Meg. 8
GPH. 0.225; Est. Max. D. over 0.60; Th. 0.016
Pl. 155; pp. 36, 119, 125, 133, 185-186
Belly fragment. Medium-fine clay, red with gray core; fine quality micaceous slip, smoothed and fired red to light red.

On wide, raised band at Max. D., a row of large, curvilinear four-lined $W$-stampings.

The design is clearly stamped rather than incised, as indicated by an instance of overstamping and by the regularity in design and dimensions from one occurrence to the next.
376 Large vessel with stamped decoration; tan ware
P 5704 Terrace 2
GPH. 0.106; Th. 0.011
Pl. 155; pp. 36, 123, 125, 130, 186
Belly sherd. Medium-coarse clay, fired ry throughout;
smoothed surface.
Above a horizontal groove, an impressed $X$-panel.

## AMBIGUOUS VESSELS, MISCELLANEOUS

## 377 Small vessel, faceted; gray ware <br> Terrace 4: 4

GPH. 0.078; Est. Max. D. 0.12; Est. D. rim 0.10
Fig. 58; pp. 32, 69, 95, 96, 111
Sherd. Coarse brown clay; largely wheel-finished surface, gray with a glittery mf.

At Max. D. and just below, broad, subtle facets; slight ridge at transition from shoulder to neck.
378 Handle of small vessel, studded; gray ware
P 3739 Terrace 9
GPL. 0.093
Pl. 15l; pp. 35, 109, 184
Almost complete handle. Fine rb clay; well-polished surface, black with thin overlay of rb mf .

High-swung, vertical handle, oval in section; planed to flat face on ext. From top down to point of rim attachment, a series of small, applied studs, single or in rows of two to three.
379 Handle of large vessel; gray ware
P 3876 Terrace 9
GPH. 0.108; W. 0.037
Pl. 151; p. 108
Section of shaft and point of attachment to rim. Coarse rb clay, heavily micaceous; dark gray surface, very worn.

Vertical handle made of two pieces: a strap hollowed to receive an oval snake of clay, the latter trimmed to two flat planes. Probably from a large trefoil jug.
380 Handle of large vessel; gray ware
P 3918 Terrace fill between Megs. 7 and 8
GPH. 0.170; W. 0.055-0.058
Pl. 151; p. 108
Fragment preserving entire handle and areas of attachment. Coarse gray clay; cursorily smoothed surface, dark gray with traces of mf .

Vertical handle attached from body to rim; most likely from a large trefoil jug. Broad strap with tall, medial spine along entire length; at top, a pair of subsidiary ridges trail out from either side of the spine to extend parallel down the face, terminating before midway.

## 381 Handle of large vessel; gray ware

Terrace 9: a
GPL. 0.125
Pl. 151; p. 109 (n. 190)
Upper segment of handle. Coarse clay; brownish gray surface.

Vertical handle, oval in section; centered at top, a truncated cone.

382 Handle(?) device with incised decoration; tan ware
P 4140 Terrace fill over Meg. 8
GPL. 0.077 ; W. 0.048; Max. Th. 0.014
Pl. 15l; p. 27
Sherd. Coarse clay, fired yr; surface polished to at least a low luster, but now largely worn, and fired rb; side with incision better worked than the other.

Thick, arrowhead-shaped device with steep "shoulder" and blunt tip. Perhaps a handle flange or platform.

Incised on top, a crude feathertree.

383 Medium-sized or large vessel with multiple grooving and stamped decoration; gray ware
P 5002 Terrace 2
GPH. 0.106; Th. 0.011
Pl. 155; pp. 114, 123, 125, 127, 131, 185-186
Shoulder sherd. Medium-fine rb clay; very dark gray surface, polished to low luster.

Steep shoulder with series of carefully executed, stacked grooves spanning transition to neck.

Just below grooving, a lozenge row made by three separate stamps: plain lozenge; plain triangle at top; below, a second triangle containing tiny chevrons.

## 384 Medium-sized or large vessel; Polychrome House

 style, dark-on-tanP 3302 Terrace fill near Meg. 5; P 3474 Terrace 8
GPH. 0.140; Est. Max. D. 0.37; Th. 0.008
Pl. 161; pp. 37, 134, 143, 148, 151, 161, 162, 186
Belly/shoulder fragment. Medium-coarse clay, red with gray core in places; micaceous slip, polished to medium luster and fired yr; dark paint, worm.

Narrow wavy-line zone on lower body. Spanning belly, a large zone of spaced panels, including Crosshatching 1 and a Cross-and-Lozenge Panel 1 (without chevrons in the lateral triangles); a horizontal wavy line connects the panels. Spaced above, a narrow zone that transforms from Type 1 simple lozenges at $R$ to Crosshatching 1 at $L$. On shoulder, crosshatched triangles.
385 Handle; Brown-on-Buff ware
P 3608 Terrace fill beside Meg. 6
Max. W'. 0.052
Pl. 158; pp. 110, 134, 139, 152, 165, 186
Sherd preserving top of handle and upper attachment. Fine pink clay; very pale brown surface, polished over dark rb paint to medium luster.

Strap handle attaching to top of rim; cylindrical bolster, tapering at ends, laid across top.

Ladder and a simple $X$-panel on ext. face; on bolster, ladder along top and a low $X$ toward rim; between bolster and rim, another X-panel. On ext. rim, below attachment, a pair of double CCs.

386 Medium-sized vessel; painted dark-on-buff
P 3810 Terrace 9
GPH. 0.120; Est. Max. D. 0.30; Th. 0.008
Pl. 162; pp. 37, 134, 153-154, 186
Lower body/belly fragment; stained surface. Very fine, light red clay; slipped surface, polished to low luster and fired pink; dark paint, worn.

Three wavy lines in a zone below Max. D. On belly, a zone preserving part of a semicircle panel, apparently Type 1; at $L$, triple CCs above a wavy line; similar wavy line to $R$.
387 Medium-sized vessel; painted dark-on-buff
P5741 Terrace l
GPH. 0.057; Max. Th. 0.007
Pl. 162; pp. 37, 134
Sherd, probably from shoulder. Medium-coarse, very pale brown clay; smoothed surface, clay color; dark paint, worn.

Wavy line below a row of dots-between-lines.
388 Medium-sized or large vessel; painted dark-on-buff
Terrace 4: Painted 1
GPH. 0.055; Th. 0.007
Pl. 162; pp. 37, 134
Shoulder/neck sherd. Mcdium-coarse yr clay; very pale
brown slip, polished yet matte; black paint.
Transition from shoulder to wide neck reserved between wavy and straight lines.

## 389 Ribbed vessel; painted dark-on-red

P 3326 Terrace 8, Floor
GPH. 0.170; Max. Th. 0.014
Pl. 163; pp. 15, 33 (n. 4), 37, 97, 111, 120, 121, 134, 140 , 185
U'pper or lower body fragment. Coarse ry clay; slipped surface, polished in vertical strokes and fired predom. red with traces of secondary firing; black paint.

Closely spaced, vertical ribs, narrowing toward top or bottom.

Rows of dots in valleys between ribs; on the ribs, spaced groups of closely set, transverse lines.

## 390 Medium-sized vessel; painted dark-on-tan

Terrace 3: Painted 3
GPH. 0.048; Th. 0.005
Pl. 163; pp. 134, 156
Sherd preserving section of shoulder and beginning of neck. Fine clay, fired ry throughout; surface well polished over rb paint to medium luster.

Small ridge at base of neck.
On shoulder, a zone of two wavy lines that become tangent at $L$. Single line just above ridge.

## 391 Medium-sized vessel; painted dark-on-tan

P 3837 Terrace 9
GPH. 0.075 ; Th. 0.006
Pl. 163; pp. 36, 37, 108, 134, 142, 148
Lower shoulder sherd, including handle attachment. Medium-coarse gray clay; thick slip of fine clay, unevenly polished to low luster and fired in streaks yr to ry; black paint, over polish.

Rolled handle, side-attached, with thickened, flattened knob at end.

To either side of handle, parts of belly and shoulder zones, each preserving Crosshatching 1 ; separating the zones, a narrow wavy line that runs across the handle.

## 392 Large vessel; painted dark-on-tan

P 5753 Terrace 1
GPH. 0.068; Est. Max. D. 0.46; Th. 0.012
Pl. 163; pp. 37, 134, 140, 147, 186
Belly sherd. Coarse, heavily micaceous clay, yr with thick gray core; micaceous slip, polished and fired close to clay color; rb paint, over polish.

Compass-drawn, concentric semicircles of three arcs with a solid lunette at center; probably pendent rather than standing.

## 393 Large vessel; painted dark-on-tan

P5703 Terrace 1
GPH. 0.058 ; Th. 0.010
Pl. 163; pp. 37, 134
Shoulder/neck sherd. Medium-fine yr clay; smoothed ry surface; black paint.

Thick-line painting. Rays or solid triangles above a wavyline zone.

Cf. 394.
394 Large vessel; painted dark-on-tan
P 5705a-b Terrace 2
GPH. 0.070; Th. 0.011
Pl. 163; pp. 33 (n. 4), 37, 134, 143
Small fragment, probably from body. Medium-coarse red
clay; yr surface, probably slipped, polished over dark paint to low luster.

Thick-line painting, similar to that on 393. Narrow zones of Type 1 simple lozenges and plain zigzag; above and below, parts of other zones with unclear motifs.

A sherd of the same thickness and surface coloration from Terrace 3 preserves a zigzag of similarly wide line.

## 395 Small vessel; ground-coated

P 3296 Terrace fill to SW of Meg. 5
GPH. 0.015; D. rim 0.031
Pl. 166; pp. 38, 64, 111, 134
Sherd preserving upper neck/rim. Fine, light brown clay with darker core; dark red slip, polished; matte, off-white ground-coat.

Narrow neck, apparently cylindrical; offset band rim, neatly flattened on top.

Red slip on neck and top of rim; ground-coat on face of rim, with no traces of painted decoration.
396 Handle; painted dark-on-ground-coat
P 1764 House Y, earth fill over floor
GPL. rotelle 0.045 ; D. rotelle end 0.035
Pl. 166; pp. 38, 110, 134, 139
Handle sherd with rotelle. Medium-fine red clay; surface polished to medium luster and fired yr; grayish white ground-coat; black paint, over polish.

Large spool-rotelle, now broken away at point of attachment to handle; on top of the shaft of the rotelle, a bowed ridge; projecting downward from the shaft, the stump of what was probably a strut.

On flattened end of the rotelle, ground-coat with a spoke design in black; transverse lines on ridge.
397 Medium-sized vessel; painted bichrome-on-groundcoat
P 4141 Terrace fill in Meg. 8
GPH. 0.022; Est. GPD. 0.16; Th. 0.006
Pl. 167; pp. 38, 134, 150, 186
Shoulder sherd. Medium-fine ry clay; thin ground-coat with smooth, matte finish, now light gray from secondary firing; dark and red paints.

Shallow shoulder and narrow neck; probably a jug.
Fine-line painting, neat and precise. In zone on shoulder, part of a Latticed Panel 2, the tiny squares of the intersections red-filled; at $R$, an oblique band of Crosshatching 1 , perhaps beside a handle.

## 398A-B Medium-sized vessel; painted bichrome-on-ground-coat

P 3836/P 3885 Terrace fill in Meg. 7
GPH.(A) 0.045 ; Est. GPD. shoulder 0.29 ; Th. 0.005
Pl. 167; pp. 38, 134, 140
Two associated sherds, the smaller (B) from belly, the larger (A) from shoulder. Medium-fine, gritty clay, fired ry; smooth, matte ground-coat, now pinkish white; black and red paints; red slip, overlapping ground-coat, polished to low luster.

Red slip below Max. D. Above, low on ground-coat field and between neatly drawn lines, a row of double CCs, small and tangent, and each with a red-dotted compass point; above, on shoulder, either a stacked zigzag or a lozenge design, formed by dark double lines filled with red.

# The Megaron 4 Terrace <br> (399-409) p. 16 

## THE MEGARON 4 TERRACE: M4 I <br> (399-406) <br> HANDMADE POTTERY

## CARINATED BOWL

399 Carinated bowl; red ware
P 5692 M4 I
GPH. 0.041 ; Est. D. rim 0.21
Fig. 1; pp. 16, 19, 23, 24, 26, 47
Rim sherd. Coarse, gritty clay, fired ry; slipped surfaces, polished yet almost matte, fired red.

Sharp carination; upright, rounded rim.

## GROUP 2 CLOSED VESSEL

400 Group 2 vessel with incised decoration; variegated gray and red
P 5698 M4 I
GPH. 0.049; Est. D. rim 0.30
Fig. 4; Pl. 6; pp. 16, 19, 22, 23, 25, 27
Rim fragment. Very coarse clay with large inclusions (including flint chips), fired red with dark gray core; cursorily smoothed surfaces, with some polishing, fired dark gray on ext. and red to light red on int.

Wide neck; plain, flaring rim.
On neck, part of an unclear incised design, bordered above by grooves at base of rim.

## WHEELMADE POTTERY

## CARINATED BOWLS

401 Carinated bowl, Class l; gray ware
M4 I: 6
GPH. 0.027; Est. D. rim 0.20
Fig. 11; pp. 16, 44, 45
Rim sherd. Medium-fine gray clay; cursorily polished surfaces, gray with traces of mf.

Corner-like carination; flaring rim.
402 Carinated bowl, Class 1; red ware
M4 I: 1
GPH. 0.031 ; Est. D. rim 0.26
Fig. 11; pp. 16, 36, 43, 44, 45
Rim sherd. Medium-fine red clay; polished surfaces, red to light red with mf .

Shallow bowl with protruding, corner-like carination and broadly flaring rim.

403 Carinated bowl, Class 1; tan ware
M4 I: 3
GPH. 0.026; Est. D. rim 0.21
Fig. 11; pp. 16, 36, 43, 44, 45
Rim sherd. Medium-fine clay, light red with gray core; polished ry surfaces; very fine mica in surface but not as a film.

Protruding carination; broadly flaring rim.
M4 I yielded two other Class 1 bowls of light ware; both are mf red, and both are of the same variety as $402-403$.

## AMPHORA

404 Shoulder-handled amphora with stamped decoration; gray ware
P 3290 M4 I
GPH. 0.165; Th. 0.014
Pls. 113, 169; pp. 80, 82, 113, 118, 123, 124-125, 130, 186
Shoulder sherd preserving upper handle attachment; stained. Medium-coarse gray clay; polished surface, very dark gray with mf.

Capacious body with broad shoulder. Strap handle attaching above to mid- or upper shoulder.

On raised band at upper shoulder, two rows of a circular stamping: an $X$ with single chevrons in the fields (Pl. 169).

## LARGE AMPHORA OR STORAGE JAR

405 Large vessel with patterned incision; gray ware P 3298 M4 I
GPH. 0.097; Th. 0.014
Pl. 153; pp. 114-115, 116, 118, 186
Shoulder sherd; yellow staining. Coarse gray clay; smoothed surface, very dark gray with uneven overlay of rb mf.

On raised band at lower shoulder: incised basket-weave design developed from a zigzag; in $L$ corner of each triangular segment, a tiny, deeply punched triangle.

## AMBIGUOUS VESSEL, MISCELLANEOUS

## 406 Handle of small vessel; Fine-Line Buff ware

P 3295 M4 I
GPH. 0.027; Th. shaft 0.015
Pl. 158; pp. 16, 134, 139, 155, 159, 160
Sherd preserving upper attachment to rim. Fine clay, somewhat spongy, fired pink throughout; surface polished yet nearly matte; dusky red paint, over polish.

Rolled handle attaching to top of rim.
In handle field on neck, an X-panel bordered to one side by a double ladder; on int. rim, hatched garlands, at least one of which encloses a smaller, solid one. Handle ringed by vertical lines at attachment; beyond, on shaft, longitudinal zones of tiny chevrons and hatching.

Possibly the same vessel as $\mathbf{1 1 3}$ from EPB 1

## THE MEGARON 4 TERRACE: M4 II (407)

407 Storage jar with stamped pattern-banding; red ware P 3289 M4 II
GPH. 0.100; Th. 0.016
Pls. 149, 169; pp. 16, 32, 36, 97, 99, 119, 123, 124-125, 126, 129, 131, 185
Shoulder sherd. Coarse clay, red with thick gray core; slipped surface, well smoothed and fired red.

Wide-necked.
Presumably at top of shoulder, a large, three-disked botster with applied bosses on the ends; descending vertically and obliquely from the bolster, three raised bands. On the
vertical band, two stampings: diminishing triangles and a rectangle of herringbone (PI. 169).

## THE MEGARON 4 TERRACE: M4 III (408-409)

## AMBIGUOUS VESSELS

408 Small or medium-sized vessel; Brown-on-Buff ware P 3309 M4 III
GPH. 0.047; Th. 0.006
Pl. 158; pp. 16, 98, 134, 150, 165, 166, 186
Body sherd. Fine clay, light rb with thick gray core; thin,
light brown slip, polished over dark brown paint to medium luster.

Panel or zone of Oblique Checkerboard 1.
409 Medium-sized or large vessel; painted dark-on-buff P 3318 M4 III
GPH. 0.064; Th. 0.007
Pl. 164; pp. 16, 36, 134, 140
Body fragment. Fine clay, light brownish gray; thin pink slip, polished to low luster; dark paint, over polish.

Narrow, stacked zones of dots-between-lines.

# The Destruction Level <br> (410-1035) pp. 1-7 

## The Destruction Level: Handmade Pottery <br> (410-434)

## MISCELLANEOUS HANDMADE POTTERY

## CARINATED BASIN

## 410 Carinated, lugged basin with incised decoration;

 indet.P 2929 Storeroom behind Meg. 4
GPH. 0.11 ; Est. D. rim 0.48
Fig. 5; Pl. 8; pp. 23, 27, 28, 107
Fragment preserving lug. Very coarse clay, soft and crumbly, fired rb with thick, dark gray core; slipped surfaces, cursorily smoothed on ext. and polished on int., mottled brown to very dark gray.

Deep, thick-walled bowl; blunt carination, obliquely notched; outward-thickened rim, broad and flattened on top. Flush with rim, a thick, semicircular lug with incised feather motif on top.

## ONE-HANDLED UTILITY POTS

411 Utility pot with incised decoration; now buff
P 2378 TB 3: NW aisle beside a large storage vessel H.-rim 0.148; Max. D. 0.149

Fig. 5; Pl. 8; pp. 26, 28, 72
Gaps; handle partially vitrified. Coarse clay, fired dark rb; slipped and smoothed surface, pale brown with darker patches.

Flattened base. Approximately spherical body; beveled band rim with rounded protrusion opposite handle. Oval handle with medial spine.

Incised oblique lines on shoulder and rim.
412 Utility pot with incised decoration; now buff P 3307 TB 7: behind main grinding stand H.-rim 0.231; Max. D. 0.215

Pl. 8; pp. 26, 28, 72
Small gaps and chips. Fabric like that of 411.
Very similar in shape and decoration to 411, but with more elongated, roughly ovoid body and strap handle.

413 Utility pot with applied bosses; now tan
P 4371 TB 7 anteroom: inside large amphora to $R$ of door to main room
H.-rim 0.077; Max. D. 0.090

Pl. 8; pp. 2 (n. 8), 28, 72
Gaps. Medium-coarse clay, fired ry throughout; cursorily smoothed surface.

Flat, moderately well defined base. Ellipsoidal body with applied, hemispherical bosses on shoulder, a pair opposite handle and singles flanking handle; wide neck, short and flaring; plain rim, with top line inclining upward away from handle. Thick strap handle with trimmed edges and a shallowly concave face.

## SPOUTED JUGS

414 Spouted jug; indet.
P 2598 Meg. 3: S corner
H. 0.281; Max. D. 0.203

Pl. 9; pp. 4, 28, 29, 64
Large gaps. Medium-fine clay, fired light red; thin slip, smoothed and now fired dark gray to black.

Poorly defined, flat base. Ovoid body; narrow neck rising to a beaked spout with flaring rim. Heavy rolled handle on shoulder.

415 Spouted jug; Chevron-Triangle style, now dark-on-tan P 1742 Debris over pavement in front of Meg. 2 GPH.-neck fragment 0.195; Est. GPD. 0.40
Fig. 5; Pl. 9; pp. 3, 28, 64, 65, 134, 137, 157, 158, 184
Several fragments and sherds preserving sections of body from Max. D. to high on shoulder and neck/spout. Coarse, gritty clay, fired red; slipped surface, smoothed and fired ry with much discoloration; dark reddish gray paint.

Large jug, thick-walled and heavy. Broad body with wide shoulder; narrow, tapering neck; nearly vertical trough spout, bowing out toward base, with thickened, flattened top. Vertical handle attached to rear of spout.

On shoulder, two zones of Type 2A chevron-triangles alternate with narrow zones of pendent garlands; stacked rows of pendent garlands from lower neck to top of spout; oblique lines along top of spout.

## CRUDE HANDMADE POTTERY

## BOWL

416 Bowl; now buff
P 2016 TB 4
H.-rim 0.043; Max. D. 0.088

Pl. 10; p. 29
Chips in rim. Coarse clay, soft and friable, fired pale brown throughout; cursorily smoothed surface.

Irregular flat base. Vertical, convex wall, inturned and rounded at top.

## JUGS AND MUGS

## 417 Miniature round-mouthed jug; indet.

P 3283 TB 7: SE aisle
H.-rim 0.046; Max. D. 0.045

Pl. 10; p. 29
Gap in rim. Medium-coarse clay, fired light brown; lightly smoothed surface, mottled clay color to light brownish gray.

Irregular base, causing pot to rest on a tilt. Approximately spherical body; low neck, wide and flaring. Rolled handle.

## 418 Trefoil jug; indet.

P 2683 TB 3: inside storage vessel, NW aisle
GPH. 0.057; Max. D. 0.058
Pl. 10; pp. 5, 29
Gaps, including base and handle. Coarse, gritty clay, fired light red; burned and discolored surface.

Approximately ovoid body; short neck; slightly outturned trefoil. Handle from lower shoulder to top of rim.

## 419 Miniature mug; now buff

P 2635 TB 3: on floor, SE aisle
H.-rim 0.024; Max. D. 0.026

Pl. 11; p. 29
Handle missing. Coarse clay, fired light brown throughout; cursorily smoothed surface.

Flattened, poorly defined base. Bulging cylindrical body; wide mouth. Handle from below midway to side of rim.

Apparently formed over a fingertip, 419 is the smallest vessel known in the repertory. A slightly larger specimen (MC 166), found in a large trefoil jug in TB 4, is similarly formed but has no handle.

420 Miniature mug; indet.
P 3284 TB 7: SE aisle
GPH. 0.043; Max. D. 0.042
Pl. 11; p. 29
Top of rim broken away. Coarse clay, fired light brown to gray throughout; lightly smoothed surface, pocked.

Undefined flat base. Roughly cylindrical body; short, vertical neck, slightly inset from body. Oval handle from just above bottom to neck.

## 421 Mug; indet.

P 4561 CC 3: in large amphora together with another mug, beside NW wall, near N' corner
H.-rim 0.089; Max. D. ca. 0.088

Pl. 11; pp. 5, 29
Intact except for chips in rim. Very coarse clay, fired gray; rough surface, now multi-colored.

Wide, flat base, irregular. Body a slightly bulging cylinder; plain, slightly inturned rim. Short handle, basically a strap, from mid-body to rim; the loop accommodates a finger.

## 422 Miniature side-spouted jug; now light gray

P 3015 CC 1
H.-rim 0.050; Max. D. 0.050

Pl. 11; pp. 29, 65
Handle and end of spout missing; chips in rim. Coarse clay, fired light gray throughout; lightly smoothed surface.

Flattened, undefined base. Irregular ellipsoidal body; flaring neck; plain rim. At less than $90^{\circ}$ to $L$ of handle, narrow tubular spout rising from single hole on shoulder.

P 2013 from TB 4 is of similar design. Cf. also the wheelmade 791.

## PINCH-POTS

## 423 Pinch-pot; now tan

P 4519 CC 3: SE aisle, center, just above floor
H.-rim 0.039; Max. D. 0.043

Pl. 12; p. 29
Intact. Medium-fine clay; cursorily smoothed surface, fired predom. ry.

Rounded bottom. Ellipsoidal body; abbreviated neck; flaring rim.

424 Pinch-pot; now buff
P 2320 TB 3: S quarter
H.-rim 0.031 Max.D. 0.037

Pl. 12; p. 29
Few small chips in rim. Medium-coarse clay, fired light brown throughout; smoothed surface.

Flattened base, poorly defined. Roughly ellipsoidal body; short, wide neck; small flaring rim.

425 Pinch-pot; now brownish gray
P 1251 CC 2: E corner
H.-rim 0.040; Max. D. 0.049

Pl. 12; p. 29
Intact but for chips in rim. Medium-coarse clav, fired light brownish gray throughout; smoothed surface.

Wide, flat base. Bulging cylindrical body, unevenly formed; abbreviated neck; flaring rim.

## 426 Pinch-pot; indet.

P 4573 CC 3: central aisle, SE side
H.-rim 0.076; Max. D. 0.080

Pl. 12; p. 29
Intact. Fine clay, fired pink; smoothed surface, fired ry to black.

Thick-walled and heavy. Irregular base. Ellipsoidal body; short neck; flaring rim.

## 427 Pinch-pot; indet.

P 4574 CC 3: central aisle, SE side
H.-rim 0.066; Max. D. 0.057

Pl. 12; p. 29
Intact but for chips in rim. Medium-coarse clay, fired ry; cursorily smoothed surface, now totally discolored from burning.

Irregular base. Approximately ovoid body; wide, short neck; broadly flaring rim.

## 428 Pinch-pot; indet.

P 3676 TB 8
H.-rim 0.083; Max. D. 0.082

Pl. 12; p. 29
Intact, with few chips in rim. Coarse clay, fired light brown to brownish gray throughout; cursorily smoothed surface.

Flattened, undefined base. Roughly cylindrical body; short, wide neck; flaring rim.

## 429 Pinch-pot; now gray

P 4560 CC 3: lying full of wheat in large patch of loose wheat, upper fill, SW aisle
H.-rim 0.067-0.071; Max. D. 0.065

Pl. 13; pp. 5, 29
Intact. Medium-fine gray clay; surface polished to medium luster and fired black.

Flattened, poorly defined base. Cylindrical body with very steep shoulder; short wide neck; small flaring rim, flattened and inward-sloping on top.

## 430 Pinch-pot; now gray

P 3673 TB 8: W corner
H.-rim 0.071; Max. D. 0.072

PI. 13; p. 29
Intact but cracked. Coarse clay, fired very dark gray to black throughout; smoothed surface.

Flattened, poorly defined base. Approximately spherical body; short, wide neck with plain rim.

## 431 Pinch-pot; indet.

P 3654 TB 8: SE aisle
H.-rim 0.058; Max D. 0.059

Pl. 13; p. 29
Chips in rim. Coarse, somewhat sandy clay, fired pale brown to light gray; rough surface.

Similar to 430, but with pair of opposing holes pierced through neck.
432 Pinch-pot; indet.
P 4503 CC 3: in large vessel on floor, SE aisle, center
H.-rim 0.069; Max D. 0.065

Pl. 13; pp. 5, 29
Intact but for a few chips. Medium-coarse, light red clay; cursorily smoothed surface, largely discolored.

Flattened base. Irregular body, essentially ovoid, with short, sloping shoulder; short, wide neck; plain rim, thickened and rounded on top.

For other contents of the host vessel, see 522.
433 Pinch-pot with pierced lug; indet.
P 4711 CC 3: against NW wall, beside 680 and behind a large amphora
H.-rim 0.088; Max D. 0.080

Pl. 13; p. 29
Gaps. Coarse clay, fired pink; cursorily smoothed surface, now clay color but with a greenish tinge.

Similar in basic shape to 432 . Pierced, cylindrical lug attached vertically to neck/rim; possibly a second one opposite.
434 Pinch-pot with pierced lug; now light tan
P 4525 CC 3: S corner area
H.-rim 0.064; Max. D. 0.079

Pl. 13; p. 29
Chips in rim; half of lug missing. Very coarse clay with large inclusions, fired light ry throughout; rough surface.

Rounded base. Irregular ellipsoidal body with short, shallow shoulder; short, wide neck with plain rim. Lug similar to that of 433, but attached horizontally to shoulder/ neck; clay daubed around the lug.

## The Destruction Level: Bowls

(435-528)

## CARINATED BOWLS (435-485)

## CLASS 1 CARINATED BOWLS

## 435 Carinated bowl, Class 1 ; indet.

P 2539 TB 3: one of 8 bowls in an inverted stack, SE aisle, together with 524 and P 2541
Fig. 12; Pl. 14; pp. 33, 43, 44, 45, 51, 107, 188
Gaps. Medium-fine rb clay; ext. stroke-polished and now mottled light brown to red to gray with thin mf; int. polished to medium luster and fired red.

Spreading ring foot in three tiers divided by fine grooves; short, thick stem. Sharp, angled carination; broadly flaring rim.

## 436 Carinated bowl, Class 1 ; indet.

P 4591 CC 3: SW aisle, center, upper fill
H. 0.076 ; Est. D. rim 0.22

Fig. 12; Pl. 14; pp. 44, 45, 188
About half missing. Fine clay; surfaces well polished over
mf and now fired ry to dark gray to black.
Spreading, conical foot with trimmed edge. Blunt carination; plain, broadly flaring rim.

437 Carinated bowl, Class 1 ; now red
P 4593 CC 3: N quarter, just above floor H. 0.082 ; D. rim 0.204

Fig. 12; Pl. 14; pp. 33, 44, 45, 188
A few small gaps; some dulled and blistered areas. Fine clay; thick, light red mf , brush-applied and rough yet glittery.

Broadly spreading ring foot with trimmed edge and narrow stem. Ridge-like carination, above which body flares in straight line to a small, articulated rim with flattened face.

## 438 Caxinated bowl, Class l; now gray

P 4595 CC 3
H. 0.060 ; D. rim 0.215

Pl. 14; pp. 34, 44, 45
Gaps. Fine gray clay; very dark gray to black surfaces, polished over thick rb mf.

Low, slightly spreading ring foot. Blunt carination; flaring upper body; direct rim.

439 Carinated bowl, Class 1 ; now light
P 1893 TB 4
H. 0.067 ; D. rim 0.214

Fig. 12; Pl. 14; pp. 5, 31, 44, 45
Gaps. Medium-coarse rb clay, heavily micaceous; surfaces polished over heavily micaceous film to medium, glittery luster and fired ry to red.

Spreading ring foot, offset from abbreviated stem by a ledge-like groove. Straight-lined lower body; peaked carination; flaring rim.

## CLASS 2 CARINATED BOWLS

440 Carinated bowl, Class 2; indet.
P 1282 CC 1: one of 3 bowls (the others being P 1301, P 1313) in a stack against NW wall
H. 0.063 ; D. rim 0.196

Pl. 15; pp. 44, 45
Complete; much of surface encrusted. Medium-fine ry clay; polished surfaces (by hand on int.), mottled clay color to red to black.

Flat base. Sharp carination; shallowly concave upper body, merging into high flaring rim.

P 1320 from CC 2 is practically identical, but larger.
441 Carinated bowl, Class 2; now light
P 3093 TB 6: against SE wall
H. $0.081-0.086$; D. rim 0.210

Fig. 12; Pl. 15; pp. 44, 45
Gaps. Medium-fine ry clay; slipped surfaces, strokepolished and now mottled ry to red.

Disk-like foot. Body shallowly concave above carination; high flaring rim, slightly outward-thickened and rounded.
442 Carinated bowl, Class 2; now tan
P 2274 TB 4: one in a stack of 3, NW aisle
H. 0.074; D. rim 0.195

Fig. 12; Pl. 16; pp. 44, 45
Small gaps. Medium-coarse, light brown clay; evenly polished surfaces, ry with mf .

Low ring foot, unevenly formed, grooved at juncture with body. Sharp carination; high flaring rim.

Very similar: P 1188 (CC 1), P 1892 (TB 4), P 3003 (TB 1).

443 Carinated bowl, Class 2; now light
P 1842 TB 4: in storage vessel against SE wall, with 978
H. 0.086-0.098; D. rim 0.264

Fig. 12; Pl. 16; pp. 32, 44, 45-46
Complete; surface very worn. Medium-coarse ry clay; thin slip, polished and fired clay color to light brown.

Flat base. Sharp carination; shallowly convex upper body; thickened, oval-sectioned rim, high flaring and lightly articulated.

444 Carinated bowl, Class 2; now red
P 4594 CC 3: central aisle
H. $0.080-0.098$; D. rim 0.217

Pl. 16; pp. 44, 46
Gaps; some areas dulled and blistered. Fine red clay; surfaces polished over mf and fired predom. light red.

Conical ring foot with sharp, precise ridge at juncture with body. Low-set carination; shallowly concave upper body, merging smoothly into plain, high flaring rim. On int., a neat wheel-groove corresponds to the carinated edge.

Cf. 445.

445 Carinated bowl, Class 2; now light
P 2479 TB 4 anteroom
H. 0.076; D. rim 0.222

Fig. 12; Pl. 16; pp. 44, 46
Gaps. Fine red clay; surfaces well polished to medium luster and now mottled red to ry.

Thin-walled. Narrow, rounded base; otherwise very much like 444.

446 Carinated bowl, Class 2; indet.
P 1843 TB 4: SE aisle
H. 0.097 ; D. rim 0.256

Pl. 16; pp. 44, 46
Small gaps and chips. Medium-coarse red clay; smooth. matte surfaces, mottled red to gray.

Thick-walled and heavy. Flat base. Sharp carination; tapering upper body; high flaring rim, neatly trimmed to a flat, vertical face.

## 447 Carinated bowl, Class 2; indet.

## P 1855 TB 4: SE aisle

H. 0.071 ; D. rim 0.199

Fig. 12; Pl. 16; pp. 32, 44, 46
Complete. Medium-fine clay, light ry to gray; surfaces polished to medium luster, in strokes on ext., and now fired half ry and half gray.

Spreading ring foot with abbreviated stem. Sharp carination; tapering upper body; flaring rim, slightly outward-thickened.

448 Carinated bowl, Class 2; now light
P 3649 TB 8: SE aisle
H. 0.064; D. rim 0.199

Pl. 16; pp. 44, 46
Gaps; large area nearly vitrified. Medium-fine, light brown clay; slipped surfaces, polished and fired ry to red.

Low ring foot. Sharp carination; tapering upper body; unevenly formed rim, broadly flaring and in places overhanging.

## 449 Carinated bowl, Class 2; now light

P 3105 TB 6: SE aisle
H. 0.066 ; Rest. D. rim 0.220

Fig. 12; Pl. 17; pp. 44, 46, 188
Gaps, including almost all of rim. Medium-fine ry clay; thin slip, polished on ext. and in deep strokes on int., now mottled ry to light brown.

Very low ring foot. Sharp carination; tapering, shallowly concave upper body; broadly outturned rim.

Cf. 450 .
450 Carinated bowl, Class 2; now light
P 3094 TB 6: SE aisle
H. 0.061 ; D. rim 0.207

Fig. 13; Pl. 17; pp. 44, 46, 49, 188
Large gaps. Medium-fine red clay; surfaces polished to low luster, in strokes on int., and now mottled various shades from red to brown.

Similar to 449 , but with peaked carination and broadly flaring rim.
451 Carinated bowl, Class 2; now light
P 1573 TG pottery depot
H. 0.066 ; D. rim 0.220

Fig. 13; Pl. 17; pp. $44,46,47,188$
Small gaps. Medium-fine, light brown clay; surfaces stroke-polished over mf and now mottled ry to light brown.

Low ring foot. Peaked carination; outturned rim.
P 1509 from the same context is identical in fabric and shape.

452 Carinated bowl, Class 2; now light
P3303 TB 7: SE aisle
H. 0.085 ; D. rim 0.185

Fig. 13; Pl. 17; pp. 44, 46, 188
Small gaps. Medium-fine clay, ry to red; surfaces strokepolished over mf to medium luster and fired clay colors.

Spreading ring foot with trimmed edge and high, tapering stem. Blunt carination; outturned rim, trimmed on edge to a flat band face.

## 453 Carinated bowl, Class 2; indet.

P 1578 TG pottery depot
H. 0.065 ; D. rim 0.234

Fig. 13; Pl. 17; pp. 44, 46, 47
Complete. Fabric similar to that of 445 , but surfaces deeply polished on wheel with a broad tool and mottled light brown to brownish gray.

Low, wide disk foot. Angled carination; tapering upper body; plain, flaring rim with ridge at base.

Cf. 454-455.

## 454 Carinated bowl, Class 2; indet.

P 1511 TG pottery depot
H. 0.069; D. rim 0.245

Fig. 13; Pl. 17; pp. 42-43, 44, 46, 47
Virtually complete. Medium-fine, light brown clay; slipped surfaces, polished in deep strokes to medium luster and now mottled ry to brownish gray.

Very much like 453 , but without ridge at base of rim.
P 1577 from the same context is practically identical in shape, but a little smaller. Very similar are: P 1580 (same context), P 1285 (CC 1), P 4523 (CC 3). Cf. also 455.

## 455 Carinated bowl, Class 2; now gray

P 1575 TG pottery depot
H. 0.075 ; D. rim 0.233

Fig. 13; Pl. 17; pp. 32, 34, 44, 46, 47
Complete. Similar in fabric and finish to 453-454, but fired gray throughout.

Very similar in shape to $\mathbf{4 5 4}$, but with raised base.
456 Carinated bowl, Class 2; now light
P 2296 TB 5: N quarter
H. 0.080 ; D. rim 0.201

Fig. 13; Pl. 18; pp. 44, 46, 5l, 188
Small gaps. Medium-fine clay, ry to red; polished surfaces, in strokes on int., fired clay colors with thin mf overlay.

High, spreading ring foot. Sharply curved, carinated edge; outturned, overhanging rim.

## 457 Carinated bowl, Class 2; now gray

P 1314 CC 2
H. 0.056 ; D. rim 0.165

Fig. 13; Pl. 18; pp. 44, 46, 188
Gaps. Medium-fine clay, brownish gray to gray; polished surfaces, now mottled clay colors.

Spreading ring foot, conical, with fine groove above edge and sharply ridged, abbreviated stem. Angled carination; vertical upper body; outturned, slightly overhanging rim.

## 458 Carinated bowl, Class 2; now light

P 4759 TB 1: W corner deposit
H. $0.070-0.078$; D. rim 0.185

Fig. 13 (partial section); Pl. 18; pp. $44,45,46,188$
Virtually complete. Fine clay; surfaces polished over mf and fired various shades from ry to pale brown.

Spreading ring foot with high, trimmed edge and distinct stem. Short, vertical upper body; broadly flaring rim, slightly overhanging.

459 Carinated bowl, Class 2; indet.
P 1579 TG pottery depot
H. 0.084; D. rim 0.257

Fig. 13; Pl. 18; pp. 42-43, 44, 46, 47, 48
Gaps. Medium-coarse ry clay; slipped surfaces, heavily polished by hand with wide tool and now mottled clay color to brownish gray.

Low disk foot. Vertical upper body; flaring rim.
P 1581 from the same context is practically identical, differing in having a low ring foot; a number of other bowls from the TG depot are very similar in fabric and profile: $P$ $1574, \mathrm{P} 1576, \mathrm{P} 1619, \mathrm{P} 1621, \mathrm{P} 1626$. Elsewhere, the group is represented by P 2019 and P 2224 from TB 4.

## 460 Carinated bowl, Class 2; now light

P 3098 TB 6: central aisle, SE of hearth
H. 0.079 ; D. rim 0.214

Fig. 13; Pl. 18; pp. 32, 44
About half missing. Medium-fine brownish gray clay; ext. polished to medium luster, int. left wheel-smoothed; both surfaces mottled rb to ry with mf overlay.

Well-formed, spreading ring foot with abbreviated stem. Angled carination; vertical upper body; short, flaring rim.
461 Carinated bowl, Class 2; now gray
P 3002 TB 1 anteroom
H. 0.060 ; D. rim 0.195

Fig. 13; Pl. 18; pp. 32, 44, 47
Gap in rim. Medium-fine gray clay; ext. polished to medium luster, int. stroke-polished to low luster, and both surfaces mottled dark to light gray.

Very low, raised base. Blunt carination, protruding and slightly undercut; vertical upper body; plain, flaring rim.
462 Carinated bowl, Class 2; now light
P 1510 TG pottery depot
H. 0.078 ; D. rim 0.231

Fig. 14; Pl. 19; pp. 44, 46, 47
Few small gaps and chips. Medium-coarse, light brown clay; polished surfaces, in strokes on int., now mottled ry to light brownish gray with mf overlay.

Very low ring foot. Sharp, protruding carination; vertical upper body; broadly flaring rim.

P 1582 from the same context is very similar.
463 Carinated bowl, Class 2; now light
P 1618 TG pottery depot
H. 0.084 ; D. rim 0.250

Fig. 14; Pl. 19; pp. 44, 46, 47
Large gaps. Medium-fine clay, ry to light brown; slipped surfaces, polished and fired light brown to light brownish gray with dark speckling.

Low, raised base. Protruding carination; flaring rim.
P 1583 from the same context is very similar in fabric and profile.

## 464 Carinated bowl, Class 2; indet.

P 2504 TB 4 anteroom
H. $0.071-0.079$; D. rim 0.228

Fig. 14; Pl. 19; pp. 44, 47
Gaps. Medium-coarse, light brown clay; polished surfaces, in strokes on int., fired rb to brownish gray with mf overlay.

Flat base. Protruding carination; slightly flaring upper body; flaring rim.

465 Carinated bowl, Class 2, with vase mark; indet.
P 3304 TB 7: SE aisle
H. 0.061 ; D. rim 0.234

Fig. 14; Pl. 19; pp. 44, 47
Complete. Fine red clay; surfaces well polished over mf
and fired predom. red with areas of ry and gray.
Low, ridge-ring foot. Sharp carination; short, practically vertical upper body; small flaring rim, neatly beveled to a broad, flat face; on int., prominent groove at level of carination.

Most of int. floor filled with a large, incised lattice, executed after firing: Roller, 2A-24.
466 Carinated bowl, Class 2; now light
P 4330 TB 7 anteroom: one of 2 bowls (the other being P 4393) in large vessel in E corner
H. 0.061 ; D. rim 0.201

Pl. 19; pp. 5, 32, 44, 47
Complete. Medium-fine, pale brown clay; slipped surfaces, smoothed and fired predom. ry with discolored and stained areas.

Ring foot. Sharp carination; small flaring rim, trimmed on edge to flattened face.
467 Carinated bowl, Class 2; now light
P 1178 CC 2: SE aisle
H. 0.053; D. rim 0.214

Fig. 14; Pl. 19; pp. 44, 47
Gaps; slip peeled on int. Medium-fine rb clay; slipped surfaces, polished and fired clay color to red.

Wide, flat base. Sharp carination; short flaring rim, lightly beveled on edge.

P 2822 from Meg. 4 does not have a beveled rim, but is otherwise very similar.

## CLASS 3 CARINATED BOWLS

468 Carinated bowl, Class 3, with rim markings; now light
P 2338 TB 3: W quarter, as lid for storage vessel
H. 0.092 ; Max. D. 0.286

Fig. 14; Pl. 20; pp. 5, 32, 43, 44, 47
Few gaps. Coarse, light brown clay; polished surfaces, now mottled clay color to red.

Flat base. Sharp carination; upper body tapering and shallowly concave; small, outward-thickened rim with lightly trimmed face. On rim-top, two preserved sets of triple, incised notches, set at about $120^{\circ}$ intervals; a third set can probably be restored.

A similar profile occurs on a smaller scale in P 1284 from CC 2. 468 held a small pot of unreported shape.

469 Carinated basin with handles, Class 3 ; indet.
P 3004 TB I
H. 0.099; Max. D. 0.332

Pl. 20; pp. 32, 43, 44, 47, 107-108
Gaps, including all but stumps of one handle; badly burned and warped. Medium-coarse red clay; slipped surfaces, smoothed and now mottled red to gray.

Flat base. Upper profile similar to that of 468. Pair of rolled, horizontal handles set at a nearly vertical angle above carination.

## 470 Carinated bowl, Class 3; now light

## P 3655 TB 8: SE aisle

H. 0.110 ; Max. D. 0.299

Fig. 14; Pl. 20; p. 44
Several gaps. Coarse, light brown clay; slipped surfaces, polished and now mottled clay color to ry.

Wide, flat base. Upper body inset and inclining above carination; direct rim.

Cf. 471.

## 471 Carinated bowl, Class 3; now light

P 1303 CC 2
H. 0.102; Max. D. 0.314

Fig. 14; Pl. 20; p. 44
Gaps. Coarse ry clay; slipped surfaces, polished in strokes on ext. and now mottled light brown to light brownish gray. Similar to 470 , but taller above carination.

P 1615 from the anteroom of Meg. 2 and P 2373 from TB 3 are very similar.

472 Carinated bowl, Class 3; indet.
P 1659 TG pottery depot
H. 0.093; D. rim 0.288

Fig. 14; Pl. 20; pp. 44, 47, 188
Large gaps; surfaces worn. Medium-coarse clay, brownish gray to light brown; polished surfaces, in strokes on int., now mottled clay colors with thin mf overlay.

Flat base. Blunt carination; plain rim, very slightly flaring.
473 Carinated bowl, Class 3; now light
P 2632 TB 2: S quarter
H. 0.083-0.102; Max. D. 0.285

Fig. 14; Pl. 20; pp. 44, 47
Few gaps. Very coarse clay, ry to light brown; polished surfaces, in strokes over traces of mf on int., now mottled clay colors to brown.

Lopsided. Wide, flat base. Vertical upper body, inset above sharp carination; low rim, outward-thickened and offset.

P 1397 from CC 2 and P 4343 from the anteroom of TB 7 are very similar. The upper profile also occurs on a fragmentary basin (P 3080) from CC 2.
474 Carinated bowl, Class 3; now tan
P 1302 CC 2: SW aisle, behind grinding platform
H. 0.092; Max. D. 0.257

Fig. 15; Pl. 21; pp. 32, 44, 47
Few gaps. Medium-coarse ry clay; slipped surfaces, smoothed and fired clay color.

Flat base. Upper body convex and incurving above carination; small, outward-thickened rim.
475 Carinated basin with lugs, Class 3 ; indet.
P 1986/P 2123 TB 3: NW aisle
H. 0.150; D. rim 0.423

Fig. 15; Pl. 21; pp. 43, 44, 47, 107
Large gaps. Medium-coarse clay, ry to light brown; ext. lightly polished and fired clay colors plus light gray; int. slipped, polished to low luster and fired ry.

Thick-walled and heavy. Wide, flat base. Ridge-like carination, above which body is vertical with fine ridge at midway; offset, outward-thickened rim, lightly beveled. At level of carination, three triangular lugs placed at $90^{\circ}$ intervals; a fourth can probably be restored.

P 2814, a now gray fragment from TB 1, is very similar in size and analogous in profile. Cf. also 476.
476 Carinated basin with handle, Class 3 ; indet.
P 3082 CC 2: NW half
H. 0.158; Est. Max. D. 0.47

Pl. 21; pp. 43, 44, 47, 109
Fragment preserving complete profile; handle broken away. Medium-coarse clay, ry to light gray; lightly polished surfaces, mottled clay colors plus light brown; traces of mf.

Similar in basic shape and profile to 475. Scars for vertical strap handle just below carination and at top; from upper attachment, ridges trail to either side along rim, ending in small knobs.

477 Carinated bowl, Class 3; now tan
P 1585 TG pottery depot
H. 0.093; Max. D. 0.274

Fig. 15; Pl. 22; pp. 44, 47
Gaps. Medium-fine, light brown clay; surfaces polished over mf and fired rb with dark speckling.

Low, raised base. Sharp carination, placed relatively high; vertical band rim.

## 478 Carinated bowl, Class 3; now light

P 1584 TG pottery depot
H. 0.086; Max. D. 0.267

Pl. 22; pp. 44, 47
Gaps. Medium-fine, light brown clay; surfaces polished over heavily micaceous film to lustrous, glittery finish and now mottled light brown to ry.

Straight-line lower body; otherwise similar to 477 .
479 Carinated bowl, Class 3; indet.
P 3072 TB 6: central aisle, SE of hearth H. 0.077 ; D. rim 0.215

Fig. 15; Pl. 22; pp. 44, 47
Small gaps. Fine, light brown clay; stroke-polished surfaces with mf, fired clay color with darker areas.

Well-formed, spreading ring foot with high, trimmed edge; abbreviated stem, offset above and below by short, ledge-like ridges. Sharp carination; vertical upper body; articulated rim, triangular in section.
480 Carinated bowl, Class 3; now light
P 1602 TG pottery depot
H. 0.070 ; D. rim 0.255

Fig. 15; Pl. 22; pp. 44, 47
Almost complete. Medium-fine rb clay; surfaces lightly polished over heavily micaceous film to low, glittery luster and fired clay color to ry.

Wide, flat base. Sharp carination; outward-thickened, rounded rim.

## 481 Carinated bowl, Class 3; now light

P 3104 TB 6: SE aisle
H. 0.098 ; D. rim 0.320

Fig. 15; Pl. 22; pp. 44, 47, 51, 188
Several small gaps. Coarse ry clay; slipped surfaces, strokepolished and now fired clay color to light brown.

Wide, flat base. High on body, poorly defined and indistinct channel; outward-thickened, rounded rim.

P 2227 from TB 4 is similar in size and profile.
482 Carinated basin, Class 3 , with patterned incision; indet.

## P 3081 CC 2: NW half

H. 0.155 ; Est. max. D. 0.42

Fig. 15 (partial section); Pl. 23; pp. 28, 32, 43, 44, 47, 114, $115,116,190$
Fragment preserving about half of vessel. Medium-coarse rb clay; slipped surfaces, polished to low luster and now mottled clay color to brownish gray with some darker areas.

Base essentially flat, but with flattened ring around periphery. Inclining upper body inset above sharp carination, the latter vertically notched in one small area; band rim.

On flattened bottom ring, row of cursorily incised herringbone. On rim-face, elongated panels of simple chevrons alternate with panels of simple lozenges, every other one of which is filled with punctate dots.

## UNCLASSIFIABLE CARINATED BOWL

## 483 Carinated bowl, unclassed; indet.

P 3744 TB 8
H. 0.084 ; D.rim 0.208

Fig. 15; Pl. 23; pp. 32, 44, 48, 188
Complete. Coarse clay, ry to gray; cursorily smoothed surfaces, now discolored.

Spreading ring foot, pierced by two small holes set close together. Body straight-walled both above and below obtuse carination; inward-thickened rim.

## FLARING-RIMMED BOWLS

484 Flaring-rimmed bowl with loop-legs; painted, indet.
P 2817 Storeroom behind Meg. 4
H. 0.076 ; D. rim 0.190

Pl. 24; pp. 37, 44, 48, 50, 134, 138, 138, 151, 164, 188, 192
Small gaps; most of two legs missing; chipped and worn on int. Medium-fine clay, light rb to brownish gray; slipped surfaces, polished to medium luster and now fired close to clay colors; dark paint, worn and faded.

Three short loop-legs from edge of flat base to lower body. Blunt, indistinct carination; vertical upper body; broadly outturned rim.

On rim-top, four small Cross-and-Lozenge Panels 7, each flanked by numerous lines.

P 1948, a fragmentary bowl from TB 2, seems to be a twin in shape and decoration. Cf. also 485.
485 Flaring-rimmed bowl; painted dark-on-ground-coat P 2877 TB 2: upper destruction debris GPH. 0.036; Est. D. rim 0.22
Fig. 15; Pl. 24; pp. 37, 38, 44, 48, 134, 138, 141, 164, 188
Body/rim fragment. Medium-fine ry clay; surfaces polished to medium luster and fired red; white ground-coat on rim-top, polished over black paint to low luster.

Slight carination, if any; broadly flaring rim.
On rim, Triangle 3A with double CCs in the fields.

## PLAIN BOWLS

(486-514)

## CLASS 1 PLAIN BOWLS

486 Plain bowl, Class 1 ; indet.
P 1616 TG pottery depot
H. 0.081 ; D. rim 0.245

Fig. 18; Pl. 25; pp. 48, 49
Gaps. Fine gray clay; surfaces polished in strokes over mf to medium luster and fired brownish gray to black with patches of ry.

Ring foot. Vertical rim.
P 1624 from the same context is practically identical.
487 Plain bowl, Class 1 ; now gray
P 1586 TG pottery depot
H. 0.073 ; D. rim 0.237

Fig. 18; P1. 25; pp. 32, 34, 48, 49, 107
Gaps. Medium-fine, dark gray clay; heavily micaceous film over surfaces; ext. well polished to high luster, int polished in strokes.

Ring foot with pronounced groove at juncture with body. Vertical rim.

P 1625 and P 1651 from the same context are very similar, as is P 2946 from CC 1.
488 Plain bowl, Class 1 ; indet.
P 1609 TG pottery depot
H. 0.079; D. rim 0.285

Fig. 18; Pl. 25; pp. 48, 49
Small gaps. Similar in fabric, finish, and coloration to 486, but wheel-polished on ext.

Wide, flat base. Vertical rim.
P 1603 from the same deposit is practically identical.
489 Plain bowl, Class 1; now gray
P 1514 TG pottery depot
H. 0.076; D. rim 0.267

Fig. 18; Pl. 25; pp. 34, 48, 49, 107
Gaps. Fine, light brownish gray clay; heavily micaceous film, polished to medium luster and fired black.

Very wide ring foot, neatly grooved at juncture with body. Subtle, reverse-curved profile; vertical rim.
490 Plain bowl, Class 1 ; now light
P 2950 CC 1: along NE wall, to NW of door
H. 0.054; D. rim 0.225

Fig. 18; Pl. 26; pp. 48, 49, 107
Small gap in foot. Medium-fine ry clay; mf surfaces fired clay color to red; ext. well polished to medium luster, int. stroke-polished.

Low, wide ring foot with trimmed edge. Shallow bowl with approximately vertical rim.

## 491 Plain bowl, Class 1; indet.

P 1894 TB 4: with 439 and a third bowl inside a large vessel to SW of the grinding stand in the E corner
H. 0.088; D. rim 0.214

Fig. 19; Pl. 26; pp. 5, 48, 49
Gaps. Medium-fine clay, fired red; polished surface, fired light brown.

Well-formed, spreading ring foot with distinct stem. Rim vertical above sharp bend in profile.
492 Plain bowl, Class 1 ; indet.
P 3071 TB 6
H. $0.076-0.085$; D. rim 0.213

Fig. 19; Pl. 26; pp. 48, 49
Gaps. Fine, light brown clay; surfaces well polished over mf to medium luster and now fired variously ry to gray from piece to piece.

Broadly spreading ring foot, uneven in profile, with short, irregular stem. Rim similar to that on 491.
493 Plain bowl, Class 1 ; now light
P 1599 TG pottery depot
H. 0.077; D. rim 0.239

Fig. 19; Pl. 26; pp. 32, 48, 49
Small gaps. Fine clay, fired ry to light brown; mf surfaces mottled ry to red; ext. polished to medium luster, int. strokepolished.

Spreading ring foot with fine groove at midway. Vertical rim, similar to those on 491-492, but with slight angling at base.

494 Plain bowl, Class 1 ; now tan
P 1261 CC 1
H. 0.081-0.090; D. rim 0.223

Fig. 19; Pl. 26; pp. 48, 49
Few gaps; segment of rim vitrified. Medium-coarse clay, fired yr throughout except for a patch of dark red; ext. polished to very smooth finish, int. stroke-polished.

Ring foot with trimmed edge. Relatively deep bowl; straight-line lower body; vertical rim.

495 Plain basin with lugs and multiple grooving, Class I; now light
P 3074 CC 2 : W corner
H. 0.112-0.123; D. rim 0.357

Pl. 27; pp. 32, 43, 44, 48, 49, 107, 188
Gaps. Medium-coarse clay, fired light brown to ry; smoothed surfaces, mottled clay colors.

Flat base. Vertical rim with shallow grooves below top. Pair of platform-like grips attached flush with rim; each worked to resemble three fused knobs or lugs.

Contained four miniature jugs, including 581, 589, and 593.

496 Plain bowl with handle and lugs, Class $l$; indet.
P 1259 CC 2: SE aisle, center
H. 0.085; D. rim 0.207

Pl. 27; pp. 43, 48, 49, 107-108, 188
Most of foot and half of handle missing. Coarse red clay; stroke-polished surfaces, now fired red to greenish gray.

Spreading ring foot with thick, abbreviated stem. Straightline lower body; rim vertical above sharp bend in contour. Rolled, horizontal handle attached flush with top; opposite, three narrow lugs, side by side.

## 497 Plain bowl, Class 1; indet.

P 2949 CC 1: along NE wall, to NW of door
H. 0.046; D. rim 0.195

Fig. 19; Pl. 27; pp. 48, 49
Gaps and chips; scratched and worn. Medium-fine ry clay; mf surfaces, well polished to medium luster and fired red to dark brown.

Low, spreading ring foot with short, wide stem. Very shallow body, curving abruptly into vertical rim.

## 498 Plain bowl, Class 1 ; now tan

P 1854 TB 4: SE aisle
H. 0.049; D. rim 0.207

Fig. 19; Pl. 27; pp. 32, 48, 49
Small gap in rim. Medium-fine brown clay; slipped surfaces, fired ry: ext. stroke-polished, while int. slip left unpolished over wheel-finishing.

Flat base. Relatively shallow bowl with walls of uneven thickness; vertical rim.

## 499 Plain bowl with handles, Class 1; Wavy-Line style,

 indet.P 2362 Meg. 3: along SW wall, over wooden beam bed, beside 507
H. 0.090; D. rim 0.284

Pl. 28; pp. 4, 43, 48, 49 (n. 8), 107-108, 109, 134, 138, 155 , 156, 188
Few small gaps; almost half of body vitrified. Medium-fine clay, fired ry to brown to gray; slipped surfaces, polished to medium luster and mottled ry to rb; faded dark paint.

Low disk foot, grooved at juncture with body. Vertical rim. Pair of rolled horizontal handles with squared-off sideattachments, set flush with top.

On ext., wavy-line zone near top. On int., three annular zones of same, evenly spaced from below top to central floor. Cf. 501.

## 500 Plain bowl with handle and spout, Class 1; Partial

 Wavy-Line style with CCs, indet.P 2960 Meg. 4; joined with P 3358 from a context overlying TB 7
GPH. 0.087; Est. D. rim 0.99
Fig. 19; Pl. 28; pp. 3, 39, 43, 48, 49, 134, 138, 139, 155, 157, 188
Two fragments preserving sections of body from above base to top; handle missing. Medium-fine clay, now fired gray to black throughout; surfaces well polished over paint to high luster.

Vertical rim, flattened on top. Short trough spout, rectangular in section and squarely cut off at end, attached flush with top and flanked by blunt knobs. Perhaps opposite spout, vertical handle from above mid-body to level of rim, where flanked, like the spout, by knobs.

On upper ext., four stacked zones of wavy lines. On top, closely spaced bars between lines; these widen into a checkerboard as they continue onto the top of the spout, and revert to the bar pattern when they go onto the front edge of the spout. On int., a pair of stacked wavy-line zones at top serves to enclose a seemingly radiating pattern of quadruple CCs.

Cf. 501.

## 501 Plain bowl with handles, Class I; Partial Wavy-Line

 style with CCs, indet.P 177 Meg. 12: on floor
H.-rim 0.107; Rest. D. rim 0.290

Pl. 28; pp. 7, 43, 48, 49, 134, 138, 155, 157, 188
Fragment, preserving about half, including one handle and trace of a second. Fine clay, fired pale ry; surfaces strokepolished over dark paint to medium luster and fired ry to pale brown.

Very low and wide ring foot with broad resting surface. Vertical rim, flattened on top. Handles much like those on 499.

On ext., two zones of three wavy lines each set just above midway and at rim; wavy lines drawn with a finer brush than the single enclosing lines. On int., around edge, two stacked zones of three wavy lines each; in the large tondo thus bordered, a big $X$ formed of sextuple, contiguous or overlapping CCs.

## 502 Plain bowl with handle and spout, Class 1; painted, indet.

P 2748 TB 1: W corner deposit
H. 0.144 ; D. rim 0.304

Pl. 29; pp. 6, 43, 48,49 (n. 8), 107-108, 122, 134, 138, 146 (nn. 158 and 159), 188, 191
Gaps, including most of base. Fine clay, now fired ry to brownish gray throughout; slipped surfaces, well polished over dark brown paint to medium luster.

Low ring foot. Deep, practically hemispherical bowl with vertical upper wall and rim. Short, tubular spout (wheelmade) with everted rim, set just below top; directly above and flush with rim, a long half-bolster with enlarged, squared-off ends. Opposite, and again flush with top, a thick, horizontal handle with flanking spurs whose ends are like those of the bolster.

On upper body, above a set of wavering lines, large zones of crosshatched meander hooks: on one side, Meander 3A and on the other a repeat of this motif and also a doubled version, 3B. Beneath handle, a row of triple CCs, while to $R$ is a narrow panel of two CCs, one above the other.

## CLASS 2 PLAIN BOWLS

503 Plain bowl, Class 2; now dark
P 1559 TG pottery depot
H. 0.074 ; D. rim 0.282

Fig. 20; Pl. 30; pp. 6, 48, 50, 107
Gaps. Fine gray clay; surfaces stroke-polished over mf to medium luster and mottled black to dark brown.

Low ring foot. Slight bend in contour below flaring rim.
P 1516 and P 1623 from the same deposit are very similar; cf. also 504.

## 504 Plain bowl, Class 2 ; now light

P 1923 TB 4: SE half, with another bowl inside a large vessel H. 0.058; D. rim 0.238

Fig. 20; Pl. 30; pp. 5, 48, 50
Few small gaps. Fine ry clay; surfaces polished by hand to medium luster and mottled clay color to red.

Similar to 503 except for wide, flat base.
P 1283 from CC 1 is very similar.
505 Plain basin with handles, Class 2; indet.
P 2838 Storeroom behind Meg. 4
H. 0.102-0.108; D. rim 0.440

Pl. 30; pp. 43, 48, 50, 107-108, 188
Large gaps; parts of both handles missing. Medium-fine rb clay; polished surfaces, now fired variously from rb to very dark gray; traces of mf.

Flat base. Flaring rim. Pair of rolled handles, attached below top.
506 Plain basin with handles, Class 2; indet.
P 3347 TB 7: along NE wall, behind main grinding stand
H. $0.100-0.118$; D. rim 0.370

Pl. 30; pp. 43, 48, 50, 107-108, 188
Large gap in body; all but stumps of handles missing; firedamaged surfaces. Coarse rb clay; surfaces polished over mf and now mottled red to brown to gray.

Wide, poorly defined flat base. Irregularly formed body; flaring rim. Pair of horizontal handles attached flush with rim; each flanked by short, blunt spurs.
507 Plain basin with lugs and spout, Class 2; painted, indet.
P 2363 Meg. 3: along SW wall, over beam bed, beside 499
H. 0.084 ; D. rim 0.389

Pl. 31 ; pp. 4, 43, 48, 49, 50, 107, 134, 138, 188
Few gaps. Medium-coarse clay, fired light brown to brownish gray; slipped surfaces, polished to low luster and now fired a wide range from ry to gray; dark paint, over polish.

Very wide, shallowly concave base. Flaring rim, flattened on top and slightly overhanging toward int. Three rectangular lugs, platform-like, set flush with top at roughly quarter intervals. In the fourth position, a short, narrow trough spout pulled out from the rim and squarely cut off at the end.

On rim-top, sets of transverse lines alternate with solid bars. On each lug, three triangles, two crosshatched and one solid.
508 Plain bowl, Class 2; painted, now dark-on-red P 1759 Burned debris over Terrace floor to SE of TG H. 0.050 ; Est. D. rim 0.21

Fig. 20; Pl. 31; pp. 7, 48, 50, 134, 138
Fragment preserving complete profile; slip and paint worn. Fine, light red clay; slipped red surfaces, polished over black paint to medium luster.

Low, raised base. Shallow bowl with flaring, inwardthickened rim.

On int., within an annular line, parts of two wavy lines radiating from center.

## CLASS 3 PLAIN BOWLS

509 Plain bowl, Class 3; indet.
P 2823 Storeroom behind Meg. 4
H. 0.067 ; D. rim 0.216

Fig. 20; Pl. 33; pp. 48, 50
Gaps; worn on int. Medium-fine, light brown clay;
surfaces polished over mf and now mottled brown to dark gray.

Very low ring foot, grooved at juncture with body; two fine ridges just above. Deeply incurved rim.
510 Plain bowl, Class 3 ; indet.
P 2734 TB 1: W corner deposit
H. 0.084 ; D. rim 0.244

Fig. 20; Pl. 33; pp. 48, 50
Gaps. Medium-fine clay, now fired light brown to gray; surfaces stroke-polished over mf to low luster and fired ry to brownish gray.

Spreading ring foot with wide, abbreviated stem. Walls of uneven thickness; incurved rim.

P 2666 from TB 4 has a similar profile.
511 Plain bowl with loop-legs, Class 3; now tan
P 2775 TB 1: W corner deposit
H. 0.094 ; D. rim 0.206

Pl. 33; pp. 4, 48, 50, 188
Gaps, including most of one leg. Medium-coarse, light brown clay; slipped surfaces, polished to high luster and fired ry with some darker patches.

Three rolled loop-legs, attaching from lower body to edge of a narrow raised base. Incurved rim with very shallow channel directly below.
512 Plain bowl, Class 3, with incised mark; now light P 3067 CC 2: W corner
H. $0.076-0.082$; D. rim 0.266

Fig. 20; Pl. 33; pp. 48, 50
Few small gaps. Coarse ry clay; polished surfaces, in strokes on ext., mottled ry to brown with traces of a pale brown slip.

Ridge-ring foot. Small, sharply incurved rim.
On bottom and off center, a small, deeply incised circle, compass-made: Roller, 2A-15.

## 513 Plain bowl, Class 3; now tan

P 3672 TB 8
H. 0.096 ; D. $\operatorname{rim} 0.280$

Fig. 20; Pl. 33; pp. 24, 32, 48, 50
Intact. Medium-fine clay; heavily micaceous rb film, left wheel-smoothed and glittery on ext., but stroke-polished on int. to medium luster.

Flat base with very small peripheral ridge. Inwardthickened rim, incurved above sharp bend in contour.

P 3718 from the same building is very similar, as is $\mathbf{P} 1601$ from the TG pottery depot.

514 Plain bowl, Class 3; indet.
P 1512 TG pottery depot
H. 0.090 ; D. rim 0.272

Fig. 20; Pl. 33; pp. 48, 50
Small gaps and chips. Medium-coarse clay, fired light brown to gray; polished surfaces, in strokes on int., mottled light brown to brownish gray to black in combination with a heavily micaceous film.

Low, raised base. Tall, inward-inclining rim above sharp bend in contour; rim accented by blunt ridge at midway.

## BOWLS WITH ARTICULATED RIMS

 (515-526)
## 515 Bowl with articulated rim; now gray

P 3057 TB 6: central aisle, SE of hearth
H. 0.064 ; D. rim 0.213

Fig. 21; Pl. 34; pp. 32, 50, 51, 188
Complete. Fine clay, fired dark brownish gray; slipped
surfaces, well polished to high luster and fired black with patches of light brown.

Spreading ring foot with abbreviated stem. Upper body vertical above sharp bend in contour; small, rounded rim with blunt ridge along inner periphery.

## 516 Bowl with articulated rim; indet.

P 2505 TB 4 anteroom
H. 0.065 ; D. rim 0.255

Fig. 21; Pl. 34; pp. 39, 50, 51, 188
Small gaps. Medium-fine clay, fired ry to light brown to dark gray; mf surfaces, stroke-polished to medium (ext.) and low (int.) luster, and fired clay colors.

Low, wide ring foot with broad resting surface. Upper wall swelling in section at point of bend in contour; small, rounded rim, offset below by shallow groove.

P 1593 from the TG pottery depot is very similar.
517 Bowl with articulated rim and vase mark; now tan
P 3068 TB 6: against SE wall, with 441 and P 3069
H. 0.054 ; D. rim 0.243

Fig. 21; Pl. 34; pp. 50, 51, 188
Several gaps. Very fine ry clay; surfaces polished over mf to medium luster and fired clay color.

Very low ring foot with deep groove at juncture with body. Small, rounded rim, sharply offset and lightly trimmed; corresponding inward-thickening.

On int. floor, a lattice pattern incised after firing: Roller, 2A-22.

P 4587 from CC 3 is very similar; cf. also 518.
518 Bowl with articulated rim; now gray
P 1513 TG pottery depot
H. $0.061-0.068$; D. rim 0.261

Fig. 21; Pl. 34; pp. 50, 51, 188
Small gaps. Fine gray clay; mf surfaces, wheel- and strokepolished to high luster and fired gray to black.

Very low ring foot. Similar to 517 , but thicker-walled.
519 Bowl with articulated rim; now tan
P 3070 TB 6: NW aisle, near N corner H. 0.066; D. rim 0.260

Fig. 21; Pl. 34; pp. 50, 51, 188
Gaps. Fine ry clay; mf surfaces, polished to medium (ext.) and low (int.) luster, and fired uniformly clay color.

Very low ring foot. Small rim, neatly trimmed on underside to make a pointed or peaked section.

## 520 Bowl with articulated rim; indet.

P 2209 TB 4
H. 0.097; D. rim 0.277

Pl. 35; pp. 47, 50, 51, 188
Gaps. Medium-coarse clay, red to light brown; polished mf surfaces, now predom. black with areas of red.

Narrow, flat base. Deep, straight-lined lower body; upper body vertical above sharp bend in contour; outward-thickened, rounded rim.

P 4588 from CC 3 is similar.

## 521 Bowl with articulated rim and multiple grooving; indet.

P 4589 CC3
H. 0.100 ; D. rim 0.281

Pl. 35 ; pp. 50, 51, 188
Small gaps. Medium-coarse red clay, heavily micaceous; pinkish mf, now largely worn, over cursorily smoothed, discolored surfaces.

Unevenly flattened base. Deep, incurved bowl with set of three deep grooves at max. D.; low rim, neatly offset.

522 Miniature bowl with articulated rim; now light
P4546 CC. 3: in large vessel, SE aisle, center
H. $0.038-0.049$; D. rim 0.119

## Pl. 35; pp. 5, 43, 50, 51, 188

Gaps. Medium-fine red clay; mf surfaces, polished but now matte, fired red to yr .

High ring foot, irregularly grooved. Shallow channel offsetting a rounded rim.

The finishing on both ext. and int. suggests that this is a bowl rather than a lid. The host vessel also contained: three pinch-pots (including 432), spindle whorls, a knife (ILS 715), a fork (ILS 714), and perhaps some loom weights that were found close by.
523 Bowl with articulated rim; now red with white overlay P 2212 TB 4
H. 0.074 ; D. rim 0.282

Pl. 35; pp. 48, 50, 51, 188
Small gaps. Medium-coarse, light red clay; on ext., chalky white slip(?) streaked by polishing; int. stroke-polished and fired red with white slip only along edges.

Low ring foot. Small, rounded rim, lightly offset below by a shallow depression.

P 2211 from the same building is practically identical in fabric and finish; although steeper-walled, it has the same type of rim.

## 524 Bowl with articulated rim; now tan

P 2421 TB 3: SE aisle, one in a stack of 8 inverted bowls, with 435 and P 2541
H. 0.059 ; D. rim 0.216

Fig. 21; Pl. 35; pp. 24, 32, 36, 43, 50, 51, 188
A few small gaps. Very fine clay, fired ry; mf surfaces, polished to medium luster on ext. and in strokes on int., and fired uniformly clay color.

Low, narrow ring foot with deep groove at juncture with body. Plain, vertical rim, offset below by a shallow groove.

## 525 Bowl with articulated rim and vase mark; now tan

 P 3305 TB 7: SE aisleH. 0.074 ; D. rim 0.240

Fig. 21; Pl. 35; pp. 24, 50, 51, 188
Few small gaps. Medium-fine ry clay; surfaces polished over mf to medium luster and fired uniformly clay color with one darker area.

Low, wide ring foot. Rim similar to that on 524 , but inward-thickened and beveled to a steep, flat surface.

On int. floor, a lattice pattern incised after firing: Roller, 2A-25.
526 Bowl with articulated rim; now gray
P 2524 Meg. 3: along SW wall, over wooden beam bed H. 0.054 ; D. rim 0.216

Fig. 21; Pl. 35; pp. 4, 24, 34, 50, 51, 188
Large gap and chips. Very fine, dark gray clay; ext. well polished on wheel over mf to high luster and fired black; int. stroke-polished and fired black with patchy overlay of rb mf.

Very low ring foot, trimmed on edge and grooved at juncture with body. Small, vertical rim above a shallow groove.

## AMBIGUOUS BOWLS

(527-528)

## 527 Bowl; painted, Brown-on-Buff ware

P 3061 TB 6: upper destruction debris
Max. dim. 0.081
Pl. 36; pp. 51, 134, 165, 167, 168, 169, 171, 173, 191
Sherd from lower body. Fine, pale brown clay; surfaces polished over brown paint to low luster.

Relatively small bowl, apparently deep.
On ext., two widely spaced parallel lines. On int., a tondo surrounded by annular zones: within tondo, apparently a latticed $X$ with laddered chevrons in the fields; beyond a bordering ring of concentric lines, a narrow zone in which pairs of ladders alternate with single, standing wavy lines; separated from the last by a laddered band, a larger zone of (apparently) panels, divided by a strip of Crosshatching 1 and each containing a Maltese cross filled with short dashes.
528 Pedestaled basin with openwork; now gray
P 2275 Meg. 3: SE aisle
GPH. ca. 0.160
Pl. 36 ; pp. 34, 51, 76, 123, 188, 190
Fragment preserving most of pedestal and central floor of basin. Coarse clay, fired gray to brownish gray; slipped surface, fired light gray with much discoloration and staining.

Four rectangular legs, spreading and now broken at ends, support a cylindrical segment with cut-out, rectangular windows; the last is fitted to a thick-walled, apparently shallow basin; thick articulating ridges separate the three components.

## The Destruction Level: Round-Mouthed Jugs <br> (529-644)

## SMALL AND MEDIUM-SIZED

(529-626)
529 Round-mouthed jug; now red
P 3263 TB 7: SE aisle
H.-rim 0.106; Max. D. 0.086

Capac.-neck 190 ml .; Max. capac. 290 ml .
Pl. 39; pp. 6, 33, 36, 42, 52, 54, 60, 87, 107, 108, 109, 182
Complete; surface blistered and peeled. Fine ry clay; heavily micaceous film, lightly polished and fired predom.
light red.

Spreading ring foot with broad resting surface, trimmed edge and distinct stem. Bicurved ellipsoidal body; band rim, neatly beveled on int. edge. High, rolled handle, sideattached and neatly squared off at max. D.; at upper attachment, end of handle deeply slotted to slip over rim.

P 3287 from the same unit is identical; cf. also 530 .
530 Round-mouthed jug; now red
P 3286 TB 7: SE aisle
H.-rim 0.093; Max. D. 0.093

Capac.-neck 230 ml .; Max. capac. 380 ml .
Pl. 39; pp. 6, 42, 52, 54, 56, 60, 87, 107, 108, 182
Few small gaps. Fabric like that of 529 , but fired darker

Very similar to 529 except for sharp ridge at top of stem, a well-rounded ellipsoidal body, and a direct rim set off below by a fine ridge that gives the impression of a band.

Outside TB 7, single examples of the group of 529-530 are represented by P 1332 and P 4611 from CC 1 and CC 3 respectively; both are badly burned.

## 531 Round-mouthed jug; now red

P 2052 TB 4: SE aisle
H.-rim 0.097; Max. D. (rim) 0.085

Pl. 39; pp. 6, 36, 52, 54, 55, 56, 65, 108, 182
Gaps, including part of rim; handle complete but warped.
Fine red clay; mf, left unpolished and slightly rough, fired light red.

Spreading ring foot with wide resting surface and short stem. Thin-walled. Bicurved ellipsoidal body, somewhat sagging; small, flaring rim. Very slender, high oval handle, side-attached below and continued as a tapering spur.

Cf. 532.
532 Round-mouthed jug; now red
P 2051 TB 4: SE aisle
H.-rim 0.110; Max. D. (body and rim) 0.090

Pl. 39; pp. 32, 36, 52, 54, 55, 182
Gaps, including upper handle. Fine red clay; mf surface, well polished (in vertical strokes on neck) and fired predom. red with some brown.

Like 531 except for reverse-bicurved body and squared-off lower handle attachment.

P 1927 from TB 3 and P 4643 from CC 3 are very similar to 531-532; cf. also 557.
533 Round-mouthed jug; now buff
P 2270 TB 4: W corner
H.-rim 0.106; Max. D. 0.103

Capac.-neck 350 ml .
Pl. 39; pp. 6, 33, 36, 52, 54, 182
Gap in neck. Fine ry clay, heavily micaceous; heavily micaceous film, seemingly brushed on over polish (but over wheel-finished int.) and fired predom. pink.

Very low ring foot. Thin-walled. Very plump ovoid body; small, rounded rim. Slender rolled handle.

P 2040 from the same unit and P 2700 from TB 2 are similar.

534 Round-mouthed jug; now tan
P 2269 TB 4: NW aisle
H.-rim 0.095; Max. D. 0.082

Capac.-neck 160 ml .; Max. capac. 260 ml .
Fig. 23; Pl. 39; pp. 33, 52, 54, 117, 182
Complete. Very similar in fabric and finish to 533, but surface fired ry.

Low, narrow ring foot. Depressed ovoid body; distinct ridge just above midway on neck; very small, flaring rim. Rolled handle with spurred lower attachment.

One of a group of three, the others being P 2041 from the same unit and P 2658 from Meg. 3; the former has the same capac. as 534.

## 535 Round-mouthed jug; now light

P1524 Meg. 1 anteroom: W corner
Rest. H. $0.100 ;$ Max. D. 0.100
Pl. 40; pp. 52, 54, 182
Gaps, including entire base. Very fine, light brown clay; surface polished over uniform mf to medium luster and fired ry with blotches of red.

Thin-walled. Well-formed ellipsoidal body; small band rim. Rolled handle.

P 1525, found with 535 , is practically identical in fabric and shape.

## 536 Round-mouthed jug; now tan

P 4743 TB 7
H.-rim 0.100; Max. D. 0.100

Pl. 40; pp. 52, 53, 54. 68, 182
Complete. Fine, light-colored clay; surface polished over fine-grained mf to medium, glittery luster and fired predom. yr.

Very low ring foot. Spherical body; short, flaring neck; small, outturned rim. Rolled handle.

537 Round-mouthed jug; indet.
P 2044 TB 4: SE aisle
H.-rim 0.089; Max. D. 0.095

Pl. 40; pp. 52, 54, 182
Small gaps. Fine, light brown clay; surface polished over mf and now mottled rb to gray.

Low ring foot; protruding bottom extends below foot's resting surface. Thin-walled. Well-rounded ellipsoidal body; light groove at base of neck; very small, rounded rim, offset by shallow groove below. Rolled handle.

Cf. 538.

## 538 Round-mouthed jug; indet.

P 2268 TB 4: NW aisle
H.-rim 0.092; Max. D. 0.097

Pl. 40; pp. 52, 54, 182
Small gaps. Fine clay, fired light brown to red to grav; surface like that of 537 .

Foot and bottom as on 537. Thin-walled. Ellipsoidal body: very small, outturned rim. Rolled handle, flattened at upper attachment.

Two other jugs from TB 4 (P 2047, P 2048) are very similar in finish to 537-538.

539 Round-mouthed jug; now tan
P 4732 TB 1: W corner deposit
H.-rim 0.097; Max. D. 0.103

Capac.-neck 310 ml .; Max. capac. 430 ml .
Pl. 40; pp. 6, 52, 54, 182
Small gap in neck/rim. Fine, light-colored clay; heavily micaceous and very glittery film, unevenly spread and mottled shades of rb.

Low ring foot. Thin-walled. Ellipsoidal-biconical body, well formed; very small, rounded rim. Rolled handle.

One of a group of jugs very similar in fabric and shape: P 4728 and P 4748 from the same TB unit, and P 4727, probably from TB 1 as well but with context information missing (the jug had been stored together with the others prior to inventory). TB I also yielded four other jugs of closely analogous fabric and shape: P 4723, P 4724, P 4729. and $P 4731$. With the possible exception of $P 4797$, all were found in the unit's large W corner deposit.
540 Round-mouthed jug; now gray
P 2369 Meg. 3: along SW wall
H.-rim 0.086; Max. D. 0.093

Pl. 41; pp. 43, 59, 53, 54-55, 57, 60, 63, 70, 117
Few small gaps and chips. Fine clay, light colored with gray core; surface polished over rb mf to high luster and fired predom. very dark gray with lighter blotches.

Very low, ridge-ring foot. Well-formed ellipsoidal body; flaring neck, relatively narrow at base, with finely tooled ridge at midway; plain flaring rim. Handle triangular in section.

## Cf. 541.

541 Round-mouthed jug; now gray
P 2392 Meg. 3: along SW wall
H.-rim 0.095; Max. D. 0.097

Capac.-neck 270 ml .; $\mathrm{Max}_{\mathrm{ax}}$ capac. 370 ml .
Pl. 41; pp. 43, 52, 53, $51-55,57,60,63,70,117$
Small gaps, including part of handle. Like 540 in fabric
and finish, but not as much lighter blotching
Like 540 in shape except for a slightly broader neck.
P 2637 and P 2662, also from Meg. 3, are close in all respects, including size, to $540-541$, as is P 1614 from the anteroom of Meg. 9: two of these (P 2637, P 1614) are fired predom. lighter, brown to light brown. Cf. also 542 and 579.

## 542 Round-mouthed jug; now gray

P 2348 Meg. 3: shallow depression ca. 0.50 from rear wall, at center
H.-rim 0.122; Max. D. 0.115

Capac.-neck 500 ml .
Pl. 41 ; pp. 4, 52, 53, 54, 55
Gaps, including lower handle; about half of body vitrified; handle melted. Fine, dark gray clay; polished surface, now
black with light gray beside vitrified areas.
A larger version of 540-541, but with spherical body and rolled handle.

Contained 15-16 astragals.
543 Round-mouthed jug; now red
P 2294 Meg. 3: S corner
H.-rim 0.097; Max. D. 0.093

Capac.-neck 230 ml .
Pl. 41; pp. 32, 52, 53, 55, 107, 117
Gaps in neck/rim; handle partially vitrified; slip firedamaged. Fine red clay; surface slipped and polished to medium luster and fired red with darker areas.

Flat base. Thin-walled. Ellipsoidal body; ridge at midway on neck; plain, flaring rim. Rolled handle with short spur at lower attachment.

## 544 Round-mouthed jug; indet.

P 2300 Meg. 3: along SW wall, near 540-541
H.-rim 0.087; Max. D. 0.093

Pl. 41 ; pp. $4,52,53,55,56,57,60,63$
Intact. Fine, light gray clay; surface well polished over mf to high luster and now mottled black to brown with an area of rb.

Very low and narrow raised base. Well-formed ellipsoidal body; plain, flaring rim. Triangular-sectioned handle, like those on 540-541.

Contained "rope-like material." Cf. 545-546.

## 545 Round-mouthed jug; now gray

P 1778 TB 2: N corner
H.-rim 0.103; Max. D. 0.108

Pl. 41; pp. 52, 53, 55, 56, 57, 60, 63, 69
Small gap. Fine, dark gray clay; surface polished over mf and fired predom. very dark gray with areas of light gray (including section of upper handle).

Very close in shape to 544 , but with wider neck and small, knobbed bolster across handle. Cf. 546.

## 546 Round-mouthed jug; now tan

P 2939 CC 1
H.-rim 0.093; Max. D. 0.102

Pl. 41; pp. 52, 53, $55,56,57,60,63$
Gaps. Fine red clay; surface well polished to high luster,
possibly over thin mf, and fired predom. yr.
Very close in shape to 544-545, but without bolster on handle.

Also belonging to the group of 544-545: P 2050 (TB 4) and P 2665 (Meg. 3); cf. also the painted 621.

## 547 Round-mouthed jug; indet.

P 1533 TG pottery depot
H.-rim 0.120; Max. D. 0.117

Capac.-neck 400 ml .
Pl. 42; pp. 33, 52, 53, 55, 56, 69
Few gaps. Gritty brown clay; mf applied over polish and
further polished to medium luster, fired yr to dark gray to black.

Very low ring foot. Ellipsoidal body; wide neck; plain, flaring rim. Rolled handle with small cylindrical bolster across top.

P 1660 from the same context is very similar in form, finishing, and coloration; the dimensions of the two are practically identical.

## 548 Round-mouthed jug; now tan

P 1932 TB 4: SE aisle, near E corner
H.-rim 0.121; Max. D. 0.112

Capac.-neck 380 ml .; Max. capac. 530 ml .
Pl. 42; pp. 33, 52, 53, 54, 55
Complete. Fine ry clay; mf, brushed on over polish and then lightly polished, fired predom. ry with dark streaks.

Low, slightly spreading ring foot surrounding hemi-
spherical depression on bottom. Ellipsoidal body; wide neck
with ledge-like groove at base; flaring rim. Rolled handle, slightly constricted at lower attachment.

P 4518 from CC 3 is very similar.

## 549 Round-mouthed jug; now light

P 1873 TB 4: E corner, among large vessels
H.-rim 0.103; Max. D. 0.096

Capac.-neck 240 ml .; Max. capac. 360 ml .
Pl. 42; pp. 52, 53, 55, 56, 69
Intact. Medium-fine pink clay; surface polished over mf and mottled various shades of red and ry; dark speckling overall.

Low, narrow ring foot. Ellipsoidal-biconical body; wide neck with ledge-like groove at base; plain, flaring rim. Rolled handle, constricted like that on 548.

550 Round-mouthed jug; now gray
P 2170 Meg. 3: central aisle, SE side
H.-rim 0.121; Max. D. 0.115

Capac.-neck 390 ml .
Pl. 42; pp. 34, 52, 53, 55, 116
Gap in rim. Medium-fine gray clay; rb mf, thickly applied over polish and then perhaps further polished, mottled with black ground.

Low ring foot. Lopsided; ellipsoidal-biconical body; wide neck with prominent ridge at base; plain, flaring rim. Rolled handle, thick and heavy, with constriction at lower attachment.

Cf. 551.
551 Round-mouthed jug; indet.
P 2393 Meg. 3: along SW wall
H.-rim 0.104; Max. D. 0.099

Capac.-neck 270 ml .
Pl. 42; pp. 52, 53, 55, 116
Intact but for gap in rim. Medium-fine brown clay; surface well polished to medium luster and fired pre-dom. yr with darker mottling; worn, now whitish mf.

Very similar in shape and details to 550 ; rim opposite handle slightly raised.

P 2043 and P 2341, both from TB 4, are very much like $\mathbf{5 5 0 - 5 5 1}$ in shape. P 3101 from TB 6, now red with mf, lacks the neck ridge but is otherwise very similar; it is also the largest of the group (H.-rim 0.144, Max. capac. 990 ml .).

## 552 Round-mouthed jug; now tan

P 1628 TG pottery depot
H.-rim 0.098; Max. D. 0.109

Pl. 42; pp. 33, 42-43, 52, 53, 54, 55, 63
Gaps. Fine ry clay; surface polished over fine-grained mf and fired predom. clay color with small area of brownish gray.

Very low, raised base. Broad, ellipsoidal body; wide neck,
shallowly convex in profile; small, outturned rim. Rolled handle.

One of five practically identical jugs from the same context, the others being P 1534-1537. Coloration varies from light to light and dark mottled to totally dark.
553 Round-mouthed jug; now gray
P 2172 Meg. 3: central aisle, SE side
H.-rim 0.095; Max. D. 0.099

Capac.-neck 220 ml .; Max. capac. 350 ml .
Fig. 23; Pl. 43; pp. 33, 34, 52, 53, 55, 56
Most of rim missing. Medium-fine gray clay; polished surface, with further polished mf , fired predom. black.

Low ring foot with trimmed edge and deep groove at juncture with body. Depressed ellipsoidal body, well formed; wide neck with distinct bulge in profile; small, offset rim, trimmed to flat face. Rolled handle, relatively heavy.
554 Round-mouthed jug; now red
P 3108 TB 6: SE aisle
H.-rim 0.104; Max. D. 0.106

Pl. 43; pp. 52, 53, 55, 56
Gaps, including most of handle. Very fine ry clay; brushapplied mf , polished to a medium, glittery luster and fired red; where film is unevenly applied, lighter clay ground appears.

Low ring foot of uneven height. Thin-walled. Well-formed ellipsoidal body; similar in neck and rim to 553. Slender, rolled handle.

## 555 Round-mouthed jug; now tan

P 1526 TG pottery depot
H.-rim 0.109; Max. D. 0.102

Capac.-neck 270 ml .; Max. capac. 450 ml .
Pl. 43; pp. 52, 53, 55, 56
Few gaps in neck/rim. Fine, light brown clay; surface polished over mf to medium luster and fired a uniform ry with some dark blotches.

Wide ring foot, constricted at juncture with body. Thinwalled. Ellipsoidal body; wide neck, constricted at base; small, flaring rim, trimmed to flat face and sharply offset below by a fine groove. Slender, rolled handle.

Cf. 556.

## 556 Round-mouthed jug; now light

P 1523 TG pottery depot
H.-rim 0.107; Max. D. 0.109

Pl. 43; pp. 33, 52, 53, 55, 56
Few small gaps. Fine ry clay; (now) whitish mf, brushed over polished red ground.

Very close in form to 555, but with ellipsoidal-biconical body.

P 1532 from the same context is practically identical in fabric and shape, although a little smaller; P 4515 from CC 3 is very similar. Cf. also 557.

## 557 Round-mouthed jug; now light

## P 1218 CC 2: SE aisle

H.-rim 0.106; Max. D. 0.098

Capac.-neck 220 ml .; Max. capac. 370 ml .
Pl. 43; pp. 52, 53, 54, 55
Gaps. Fine red clay; surface polished and fired predom. red with areas of ry.

Spreading ring foot with broad resting surface and short stem. Ellipsoidal-biconical body, somewhat reverse-bicurved; shallowly convex neck, constricted at base; plain, flaring rim. Rolled handle with squared-off side-attachment.

## 558 Round-mouthed jug; now light

P4741 TB 7
H.-rim 0.121; Max. D. 0.101

Pl. 43; pp. 52, 53, 55
Gaps. Fine, light red clay; surface well polished over mf and fired various shades of red and ry.

Broadly spreading ring foot with neatly trimmed edge and short stem. Well-formed, full ovoid body; wide, shallowly convex neck with slight constriction at base; small, rounded rim. Rolled handle, straight in outer line.

P 1554 from the TG pottery depot is similar.
559 Round-mouthed jug with multiple grooving; now tan P 1527 TG pottery depot
H.-rim 0.119; Max. D. 0.111

Pl. 44; pp. 6, 52, 53, 54, 55, 60, 108, 113
Gaps, including base of handle. Medium-fine red clay; mf, unevenly applied over polish and in turn lightly polished, fired predom. ry.

Disk foot. Ellipsoidal-biconical body, reverse-bicurved; multiple grooving at base of neck; flaring band rim. Thick, rolled handle, spurred at lower attachment.

Cf. 560.

## 560 Round-mouthed jug; now gray

P 1555 TG pottery depot
H.-rim 0.112; Max. D. 0.105

Pl. 44; pp. 34, 52, 53, 54, 55
Gaps. Medium-fine, dark gray clay; rb mf applied over polishing and mottled with gray clay ground.

Very similar to 559 ; ridge at base of neck; handle sideattached and squared off.

559-560 are two of a group of five from the same context, the others being P 1529, P 1530, and P 1620. A sixth example comes from Meg. 3 (P 2171).

561 Round-mouthed jug; now light
P 1220 CC 2: SE aisle
H.-rim 0.100; Max. D. 0.103

Pl. 44; pp. 52, 53, 55
Few small gaps. Medium-fine yr clay; mf, applied over polishing and itself lightly polished, mottled ry to red.

Low disk foot. Ellipsoidal-biconical body, reverse-bicurved; small, outward-thickened flaring rim. High rolled handle, lightly faceted along its length, with squared-off sideattachment.

562 Round-mouthed jug; now gray
P 2356 Meg. 3: along SW wall
H.-rim 0.131; Max. D. 0.112

Pl. 44; pp. 52, 53, 55
Few small gaps; edge of rim mostly chipped away; handle burned and distorted. Fine, very dark gray clay; surface well polished over rb mf and fired black with patches of light gray and yr .

Spreading ring foot with abbreviated stem; fine groove just above juncture with body. Well-formed ellipsoidal-biconical body, reverse-bicurved; basal neck ridge; plain, flaring rim. Rolled handle.

P 2325 from TB 3 is very similar but now fired red.

## 563 Round-mouthed jug; now gray

P 1531 TG pottery depot
H.-rim 0.116; Max. D. 0.112

Pl. 44; pp. 33, 34, 52, 53, 55
Few small gaps in rim. Fine, dark gray clay; surface polished over heavy mf to medium, glittery luster and now mottled gray to black.

Low ring foot, slightly spreading; groove at juncture with body. Broad, ellipsoidal-biconical body; wide neck, con-
stricted at base; small band rim. Rolled handle forming wide loop.

## 564 Round-mouthed jug; now gray

P 1556 TG pottery depot
H.-rim 0.158; Max. D. 0.157

Pl. 45; pp. 32, 34, 42, 52, 53, 54, 55, 117
Small gap in neck. Fine, dark gray clay; light-colored mf, applied over stroke-polished (body) and wheel-smoothed (neck) surface, and mottled with dark gray ground.

Low disk foot. Broad, ellipsoidal-biconical body, reversebicurved; wide neck rises vertically from ledge-like groove at base, and flares abruptly above a series of fine ridges set below midway; small, outward-thickened rim. Double strap handle.

P 1520 from the same context is practically identical in dimensions and very similar in form, the primary difference being the absence of neck ridging.

## 565 Round-mouthed jug; now light

P 1222 CC 1
H.-rim 0.139; Max. D. 0.145

Pl. 45; pp. 33, 52, 53, 55
Few gaps. Fine clay, red to light brown; heavy mf applied over stroke-polished surface and mottled light brown to ry.

Low ring foot. Broad, ellipsoidal-biconical body; wide neck with pair of grooves at base; band rim. Rolled handle.
566 Round-mouthed jug with multiple grooving; now light P 1791 TB 3: in front of main grinding stand
H.-rim 0.141; Max. D. 0.112

Capac.-neck 380 ml .
Pl. 45; pp. 5, 52, 53, 55, 113
Gaps. Medium-fine ry clay; surface polished over mf to medium luster and now mottled red to light brown.

Broadly spreading ring foot with abbreviated stem. Broad, ellipsoidal-biconical body; groove at base of neck and a series of grooves below midway; flaring rim. Rolled handle.

## 567 Round-mouthed jug; now red

P 1522 TG pottery depot
H.-rim 0.116; Max. D. 0.110

Pl. 45; pp. 33, 52, 53, 55
Gaps. Fine, ry clay; mf, unevenly brushed on over polished surface and left rough, fired red and mottled with lighter clay ground.

Low ring foot with groove at juncture with body. Broad, ellipsoidal-biconical body; plain, flaring rim. Slender, rolled handle rising from mid-shoulder.

P 1708 from the same context is practically identical in form; surface also appears to be the same in treatment, although fired darker.

## 568 Round-mouthed jug; now light

P 3112 TB 6: NW aisle
H.-rim 0.131; Max. D. 0.110

Pl. 45; pp. 52, 53, 55
Gaps; slip cracked and peeled. Medium-fine red clay; slipped and polished surface, now mottled red to light brown.

Very narrow, spreading ring foot, unevenly tooled. Thinwalled. Lopsided. Ellipsoidal-biconical body; light groove at base of neck; flaring rim. Rolled handle.

The wide-mouthed trefoil jug 759 from CC 2 is similar in both fabric and the disproportion of foot and body.
569 Round-mouthed jug with multiple grooving; now light P 1394 CC 2: SE aisle
H.-rim 0.119; Max. D. 0.103

Pl. 45; pp. 52, 53, 55, 113
Gaps, including handle; slip mostly flaked or burned
away. Medium-fine red clay; slipped and polished surface, now matte, mottled light red to light brown.

Narrow, spreading ring foot with broad resting surface. Lopsided. Ellipsoidal-biconical body; series of grooves on lower third of neck; small flaring rim.

## 570 Round-mouthed jug with multiple grooving; indet.

P 1789 TB 3: in front of main grinding stand
H.-rim 0.140; Max. D. 0.116

Pl. 46; pp. 5, 52, 53, 55, 107, 113
Small gaps; most of slip missing. Medium-fine red clay; slipped and polished surface, now dulled, mottled ry to greenish brown (from fire damage).

Spreading ring foot with short stem. Lopsided. Plump ellipsoidal body, reverse-bicurved; series of shallow grooves at mid-neck; rounded, flaring rim. Rolled handle.

## 571 Round-mouthed jug with multiple grooving; indet.

## P 1305 CC 2

H.-rim 0.119; Max. D. 0.121

Capac.-neck 440 ml .
Pl. 46; pp. 52, 53, 55
Gaps. Medium-fine light brown clay; matte surface, now mottled shades of light brown (perhaps totally discolored by fire).

Very low ring foot. Unevenly formed, ellipsoidal body; wide grooves at base of neck; flaring rim, lightly beveled to flat face. Rolled handle.

## 572 Round-mouthed jug; now light

P 1874 TB 4: E corner, among large vessels
H.-rim 0.101; Max. D. 0.106

Capac.-neck 340 ml .; Max. capac. 450 ml .
Pl. 46; pp. 52, 53, 54, 55
Intact. Medium-fine ry clay; surface slipped and polished, but now practically matte, and fired predom. ry with some areas of red; dark speckling.

Flat base. Ellipsoidal body; short neck with ledge-like groove at base; flaring rim. Rolled handle.

## 573 Round-mouthed jug; now tan

P 2232 TB 4: NW aisle
H.-rim 0.102; Max. D. 0.121

Capac.-neck 460 ml .
Pls. 46,103 (with the lid 851); pp. 31, 32,52, 53, 54, 55, 60, 73
Intact; part of rim and handle nearly vitrified. Mediumcoarse clay, fired rb throughout; surface smoothed up to base of neck and wheel-finished above.

Low, raised base. Ellipsoidal-biconical body, reversebicurved; wide neck with fine ledge-like ridge at base; outward-thickened, flaring rim. Rolled handle.

P 2056 from the same TB unit and P 3114 from TB 6 are practically identical; the latter has a capac. of 510 ml .
574 Miniature round-mouthed jug; now red
P 4533 CC 3: beside door, to NW
H.-rim 0.050; Max. D. 0.048

Pl. 46; pp. 29, 32, 52, 53, 55, 188
Intact but for few chips in rim. Medium-fine red clay; lower body smoothed and fired red; upper body and neck slipped (or perhaps mf ) and fired light red.

Very narrow, flat base. Ellipsoidal-biconical body; wide, flaring neck; plain rim. Thick rolled handle that off-balances the pot when empty.
575 Round-mouthed jug; now tan
P 2225 TB 4: N corner area
H.-rim 0.096; Max. D. 0.095

Pl. 47; pp. 32, 36, 52, 53, 55, 56, 60, 188
Small gaps. Fine ry clay; surface polished to low luster and fired clay color.

Ridge-ring foot. Squat, ellipsoidal body with multiple contours; plain, flaring rim. Rolled handle.

P 2574 from TB 3 is similar in fabric and shape. Both are monochrome versions of a type used in the Wavy-Line style, e.g., 599-600, 605; cf. also 576.

## 576 Round-mouthed jug; now red

P 4734 TB 1: W corner deposit
H.-rim 0.089; Max. D. 0.092

Pl. 47; pp. 6, 33, 52, 53, 55, 56, 60, 63, 188
Gap in rim. Fine, light-colored clay; mf applied over polished surface, left rough, and fired predom. red.

Foot like that on 575. Squat, ellipsoidal body of multiple contour; short, flaring neck; plain rim. Rolled handle.

P 4726, also from TB 1, is practically identical in form but with very mottled coloration; P 2045 and P 2655 from TB 4 are similar. Like 575, a form used in the Wavy-Line style (cf. 598). Cf. also 577.

## 577 Round-mouthed jug; now light

P 3260 TB 7: along SW wall, to NW of door
H.-rim 0.103; Max. D. 0.102

Capac.-neck 340 ml .
Pl. 47; pp. 42, 52, 53, 55, 56, 63, 188
Gaps in rim and handle. Fine ry clay; surface polished over mf to high luster and now mottled red to ry.

Very low disk foot. Squat, ellipsoidal body of multiple contour, with more pronounced planes than on 575-576; flaring neck; plain rim. Rolled handle like that on 576.

## 578 Round-mouthed jug; now dark

P 4745 TB 1: W corner deposit
H.-rim 0.095; Max. D. 0.107

Pl. 47; pp. 6, 33, 42, 52, 53, 55, 67, 111, 188
Intact but for missing handle. Fine clay; surface unevenly polished over large-grained mf and mottled shades of dark brown to black.

Very low and narrow raised base. Squat, ellipsoidal body, more fully rounded than 575-576; short, flaring neck; plain rim. Rolled handle.

## 579 Miniature round-mouthed jug; indet.

P 3267b TB 7: SE aisle
H.-rim 0.045; Max. D. 0.046

Pl. 47; pp. 52, 53, 55, 60, 188
Gap in rim. Medium-fine, powdery clay, fired light brown; heavily micaceous film, largely worn, polished and mottled ry to light brownish gray.

Low, raised base. Ellipsoidal body with multiple contours; relatively narrow neck with pair of grooves at base; small flaring rim, offset by shallow groove. Rolled handle.

P 3267a from the same TB unit is similar in size, fabric, and form.

## 580 Round-mouthed jug; now tan

P 2053 TB 4: SE aisle
H.-rim 0.113; Max. D. 0.096

Pl. 47; pp. 32, 52, 53, 55
Gaps, including handle. Medium-fine, light brown clay; slipped and polished surface, now dulled, fired ry.

Spreading ring foot with abbreviated stem. Thick-walled and heavy. Ovoid body, reverse-bicurved; plain, flaring rim.

P 2054 from the same TB unit is practically identical in profile but slightly taller; P 1306 from CC 2 is similar but more angular. Cf. also 581.

## 581 Miniature round-mouthed jug; indet.

P 3052a CC 2: in the basin 495
H.-rim 0.048; Max. D. 0.046

Pl. 47; pp. 52, 53, 55, 188
Gap in foot. Fine clay, fired light ry; lightly polished
surface, mottled clay color to light gray.
Spreading ring foot with wide resting surface and short stem. Body basically ovoid with short, rounded shoulder; tall, wide neck with shallow groove at base; flaring rim. Rolled handle.

589 and 593 were found in the same basin, as was a fourth miniature, P 3052c.

## 582 Round-mouthed jug; indet.

P 3092 CC 2: behind main grinding stand
H.-rim 0.129; Max. D. 0.123

Capac.-neck 440 ml .
Pl. 48; pp. 32, 52, 53, 55
Gaps, including handle. Medium-fine clay; mf applied over polished surface and itself polished, and fired predom. red but with much discoloration.

Slightly spreading foot with shallowly concave underside. Broad, depressed ovoid body; vertical neck with thick ridge at base; channeled band rim. Lower handle attachment spurred.

P 2692 from TB 5 is very similar; cf. also 583.

## 583 Modified round-mouthed jug; now red

P 2293 Meg. 3: S corner
H.-rim 0.120; Max. D. 0.111

Pl. 48; pp. 32, 52, 53, 55, 108
Small gaps. Medium-fine ry clay; red slip, now matte.
Well-tooled, spreading ring foot with broad resting surface and pronounced, flaring edge; fine ridge at juncture with body. Like 582 in body, neck, and rim, but the last has been pinched in opposite handle to form a wide trefoil mouth. Rope handle.

P 1395 from CC 9 is the only other known instance of such a modification; its form is analogous to that of 586 .
584 Round-mouthed jug; indet.
P 1288 CC 2: E corner
H.-rim 0.105; Max. D. 0.103

Capac.-neck 320 ml .
Pl. 48; pp. 32, 52, 53, 55
Few small gaps; badly burned. Medium-fine clay; polished surface, now dulled and mottled brown to gray to black.

Low, wide disk foot, unevenly formed and wobbly, with groove at juncture with body. Depressed ovoid body; short, flaring neck; plain rim. Thick strap handle.
585 Round-mouthed jug; indet.
P 2566 TB 2: NW aisle, near N corner
H.-rim 0.124; Max. D. 0.116

Capac.-neck 470 ml .; Max. capac. 680 ml .
Pl. 48; pp. 42, 52, 53, 55, 56
Most of handle missing; otherwise intact. Fine red clay: mf applied over polished surface and itself polished to medium luster, fired variously from red to gray.

Low, raised base. Well-formed ovoid body, reversebicurved; wide neck with ridge at base and pair of grooves just below midway; small band rim. Oval handle.

586 Round-mouthed jug; indet.
P 2374 Meg. 3: along SW wall
H.-rim 0.138; Max. D. 0.129

Capac.-neck 600 ml ,; Max. capac. 880 ml .
Pl. 48; pp. 52, 53, 55
Small gaps. Fine, heavily micaceous clay, fired pink; mf applied over polished surface and itself lightly polished, fired predom. ry with areas of gray.

Ring foot with broad resting surface and groove at juncture with body. Well-formed, depressed ovoid body; fine groove at base of nech; small band rim. Narrow strap handle.

P 1528 from the NW storeroom behind Meg. 1 is very similar in most respects, but is fired predom. gray.

587 Round-mouthed jug; now red
P 2653 TB 3: SE aisle
H.-rim 0.099; Max. D. 0.097

Capac.-neck 190 ml .
Pl. 49; pp. 52, 53, 55, 188
Intact piece with handle missing, chips in rim. Fine red clay; mf smoothed and fired light red.

Spreading ring foot with abbreviated stem. Carinated biconical body; small, flaring rim. Side-attached handle.

588 Round-mouthed jug with multiple grooving; now light P 2693 TB 3: SE aisle
GPH. 0.090; Max. D. 0.092
Capac.-neck 160 ml .; Max. capac. 290 ml .
Pl. 49; pp. 52, 55, 113, 188
Intact piece lacking foot, handle, and most of rim. Medium-fine ry clay; slipped surface, polished to medium luster and now mottled clay color to red.

Carinated biconical body; wide neck, shallowly convex in profile, with series of three deep grooves at midway; small rounded rim.

## 589 Miniature round-mouthed jug; indet.

P 3052d CC 2: in the basin 495
H.-rim 0.043; Max. D. 0.039

Pl. 49; pp. 52, 55, 188
Intact; chips in rim. Fine ry clay; surface well polished to medium luster and mottled clay color to gray, with a greenish tinge.

Disk foot. Carinated biconical body; wide, flaring neck with low ridge at base; plain rim. Thick oval handle.
590 Round-mouthed jug; now red
P 1860 TB 4
H.-rim 0.060; Max. D. 0.075

Pl. 49; pp. 32, 42, 52, 54, 55, 188
Small gaps. Fine ry clay; slipped surface, polished to high luster and fired red.

Ring foot. Body carinated just above midway; flaring neck; direct rim. Rolled handle forming broad, off-balancing loop.

591 Round-mouthed jug; now light
P 2690 TB 5
H.-rim 0.089; Max. D. 0.081

Capac.-neck 80 ml .; Max. capac. 210 ml .
Pl. 49; pp. 52, 55
Handle and most of rim missing. Fine red clay; micaceous slip, polished and fired predom. red with ry mottling.

Spreading ring foot. Straight-sided body, carinated above midway; tall, wide neck, constricted at base; slightly inturned, plain rim, offset by fine groove.

592 Round-mouthed jug; indet.
P 3046 CC 2: in large vessel, W corner
H.-rim 0.093; Max. D. 0.107

Capac.-neck 280 ml .
Pl. 49; pp. 5, 52, 54, 55
Intact but for chips in rim; fire-damaged surface. Medi-um-fine red clay; surface now roughened and fired variously from dark red to gray with traces of mf .

Flat base. Body carinated above midway; wide neck with ledge-like ridge at base; plain rim. Rolled handle.

593 Miniature round-mouthed jug; now light
P 3052b CC 2: in the basin 495
H.-rim 0.048; Max. D. 0.046

Pl. 49; pp. 52, 55, 188
Complete. Fine, light gray clay; polished surface, now matte, fired white to pale brown.

Raised base. Straight-sided body, carinated above midway;
wide neck; plain rim. Oval handle.
P 3052c, from the same basin, is almost identical.
594 Miniature round-mouthed jug; now dark
P 3016 CC 1
H.-rim 0.038; Max. D. 0.046

Pl. 49; pp. 52, 55, 188
Gaps. Fine brownish gray clay; surface polished to medium luster and fired dark brown to black.

Flat bottom. Wide body, carinated above midway; very wide, tall neck; flaring rim. Rolled handle.
595 Round-mouthed jug; now red
P 4370 TB 7 anteroom
H.-rim 0.104; Max. D. 0.100

Pl. 49; pp. 52, 54, 55-56
Gaps, including most of handle; scratched and worn. Medium-fine, light-colored clay; glittery mf, polished and fired predom. dusky red, mottled with lighter clay ground.

Disk foot, shallowly concave on underside. Straight-sided body, carinated near top; wide neck, shallowly convex in profile, with thick ridge at base; band rim. Strap handle.

Cf. 596.

## 596 Round-mouthed jug; now light

P 2907 TB 1 anteroom: inside large vessel against NW wall, near corner, with 788, 891, and P 2996 (see 703)
H.-rim 0.123; Max. D. 0.113

Pl. 49; pp. 6, 42, 52, 54, 55-56
Intact. Medium-fine ry clay; mf like that on 595, fired ry to red.

Thick-walled and heavy. Like 595, but larger and with somewhat longer shoulder. Strap handle with sharp medial spine.

595-596 represent a group of seven jugs, the others being P 2273 and P 2464 (TB 4), P 2573 (TB 5), P 2695 (TB 3), and P 3051 (CC 2). P 4370 is the smallest example; the others range in H.-rim from 0.114 to 0.131 . The largest ( P 2695 ) has a max. capac. of 740 ml .

## 597 Round-mouthed jug with stamped decoration; indet.

P 1276 CC 2: E corner
H.-rim 0.122; Max. D. 0.100

Pl. 49; pp. 42, 52, 53, 55, 119, 123, 125, 127
Small gaps. Medium-fine clay, fired rb to gray; slipped surface, polished to low luster and fired predom. rb with greenish gray burned areas.

Disk foot with short stem. Body similar to that of 591 ; raised band at base of neck; plain, flaring rim. Rolled handle.

On neck band, a row of triangle-zigzag stamping.
P 4606 from CC 3 bears the only other known instance of stamping on the shape. The jug has an ovoid body, but is otherwise much like 597, including the type and placement of the stamping.
598 Round-mouthed jug; Wavy-Line style, indet.
P 2307 Meg. 3: along SW wall
H.-rim 0.094; Max. D. 0.096

Pl. 50; pp. 52, 55, 56, 60, 134, 137, 155-156, 188
Complete. Fine ry clay; slipped surface, polished and mottled ry to brownish gray; dark paint, over polish.

Pot rests at an angle. Narrow, ridge-ring foot. Squat, ellipsoidal body of multiple contours; smooth transition into short, flaring neck; plain rim. Rolled handle.

Single wavy-line zones at belly, shoulder, transition to neck, and upper neck.

Three other round-mouthed jugs from Meg. 3 have the same shape and decorative scheme (P 2305, P 2308, P 2396). For the shape in monochrome, cf. 576.

599 Round-mouthed jug; Wavy-Line style, now tan P 2292 TB 3: inside larger vessel, W quarter
H.-rim 0.108; Max. D. 0.105

Pl. 50; pp. 5, 37, 42, 52, 54, 55, 56, 60, 134, 137, 155-156, 188
Gaps in neck/rim. Fine rb clay; slipped surface, well
polished over dark paint to medium luster and fired ry.
Very low, narrow raised base. Squat, ellipsoidal body of multiple contours; continuous shallow curve from steep shoulder into flaring neck; plain rim. Rolled handle.

Decorative scheme like that on 598.
For the shape in monochrome, cf. 575.
600 Round-mouthed jug; Wavy-Line style, indet.
P 2569 TB 2: N corner
H.-rim 0.097; Max. D. 0.091

Pl. 50; pp. 32, 52, 55, 56, 134, 137, 155-156, 188
Gaps, including handle. Medium-fine red clay; surface polished over dark paint and now fired red to black.

Base like that on 598 . Body much like that of 599.
Double zone of wavy lines on belly; singles on shoulder, lower and upper neck; single straight lines in intervals between zones.

P 2395 from TB 3 and P 2691 from TB 5 have similar decorative schemes.

601 Round-mouthed jug; Wavy-Line style, indet. P 1867 Destruction debris over Terrace behind TB 4 GPH. 0.093; Est. max. D. (rim) 0.10
Pl. 50; pp. 6, 52, 56, 134, 137, 155-156
Large gaps, including base and handle. Similar to 600 in fabric and shape.

Six stacked zones of wavy lines from lower belly to rim.
P 1217 from CC 2 is the only other example of the shape with this scheme of stacked zones.
602 Round-mouthed jug; Wavy-Line style, indet.
P 3055 TB 6: against NW wall, with 652
H.-rim 0.100; Max. D. 0.103

Capac.-neck 310 ml .
Pl. 50; pp. 32, 52, 56, 134, 137, 155-156
Small gaps in neck/rim. Fine red clay; surface polished to medium luster and fired light red with blotches of gray; dark paint, worn.

Ridge-ring foot, like that on 598. Squat, ellipsoidal body with carination at base of shoulder; above, a shallow reverse curve rises unbroken into flaring neck; plain rim. Rolled handle.

Single zones of wavy lines at lower belly, lower shoulder, transition to neck, and upper neck; pairs of straight lines in intervals between zones.

P 3650 from TB 8 is practically identical in fabric and shape; the decorative scheme is similar, but lacks the pairs of lines between zones. A jug from TB 7 is reported to have been identical to 602 .

603 Round-mouthed jug; Wavy-Line style, indet.
P 3258 TB 7: along SW wall, to NW of door
H.-rim 0.098; Est. max. D. 0.11

Pl. 50; pp. 42, 52, 56, 134, 137, 155-156
Over half missing, including part of handle. Fine ry clay; slipped surface, polished over dark paint and fired clay color to red.

Ridge-ring foot like that on 598. Squat, ellipsoidal body; plain rim. Rolled handle.

Single wavy-line zones at belly, shoulder, lower and upper neck.

Cf. 604.

604 Round-mouthed jug; Wavy-Line style, now buff
P 3418 TB 7: SE aisle
Rest. H.-rim 0.090; Max. D. 0.095
Pl. 50; pp. 52, 56, 134, 137, 155-156
Base, sections of body, and most of handle missing. Fine, light brown clay; slipped surface, polished over dark paint and fired clay color.

Very similar in shape to 603.
Three wavy-line zones, at belly, upper shoulder, and upper neck.

## 605 Round-mouthed jug; Wavy-Line style, indet.

P 2741 TB 1: W corner deposit
H.-rim 0.102; Max. D. 0.096

Pl. 51; pp. 6, 42, 52, 54, 55, 56, 134, 137, 155-156, 188
Few small gaps; burned on bottom. Fine clay, fired ry to brownish gray; slipped and polished surfaces, now fired predom. light brownish gray with small area of ry; dark paint.

Low and very narrow disk foot, uneven on underside. Squat, ellipsoidal body with multiple, flattened contours; continuous curve from steep shoulder into flaring neck: plain rim. Thick, rolled handle.

Three sets of wavy lines, not enclosed within zones, at belly, transition to neck, and mid-neck.

## Cf. 606.

606 Round-mouthed jug; Wavy-Line style, indet.
P 2742 TB 1: W corner deposit
H.-rim 0.095; Max. D. 0.096

Pl. 51; pp. 6, 42, 52, 55, 56, 134, 137, 155-156, 188
Most of neck missing. Fabric like that of 605.
Very similar in shape to 605 , but underside of body, around base, is nearly horizontal and offset from upper body by a sharp carination.

Two double zones, each with three way lines, on shoulder and neck.

P 4682, from an unrecorded locus, is a vitrified and fused mass of three very similar jugs (Pl. 51).
607 Round-mouthed jug; Partial Wavy-Line style, indet.
P 3800 TB 8
H.-rim 0.112; Max. D. 0.117

Capac.-neck 390 ml .; Max. capac. 590 ml .
Pl. 51; pp. 52, 114, 134, 137, 144, 149, 151, 155, 156, 157, 191
Gaps. Fine ry clay; surface well polished to medium luster and fired darker shade of clay color with areas of light brown; very dusky red paint, over polish.

Broadly spreading ring foot with wide resting surface and abbreviated stem. Broad, ellipsoidal body; short, wide neck; plain rim. Triangular-sectioned handle.

Wavy line on foot. Five stacked zones of wavy lines from lower belly to top of shoulder. On neck, five panels of varying width, each with laddered borders, either spaced or contiguous to neighbors: to either side of handle, Cross-andLozenge Panels 2 and 4, the latter with single-line chevrons in the lateral triangles; of greater width are Checkerboard 1C, a panel of carelessly executed laddered zigzags, and a wide lozenge-row panel with single-line and laddered components. Single wavy line on int. rim. Stacked chevrons on handle return.
608 Round-mouthed jug; Chevron-Triangle style, indet.
P 2376 TB 3
H.-rim 0.093; Man. D. 0.096

Pl. 51; pp. 52, 55, 56, 108, 134, 137, 157-158
Gaps; about half of surface gritty from near-vitrification.
Fine, light red clay; polished surface, now fired various
colors, including that of clay; dark paint, over polish.
Ven narrow wavy-line zone on belly. On shoulder, Type 2A chevron-triangles; standing wayy line at base of neck, matched above, on rim, by a pendent one that is repeated on int. rim. Bands on handle, above rim attachment.

P 2230 from TB 4 and P 2486 from the anteroom of the same building are very similar in shape and decoration; cf. also 609 .

## 609 Round-mouthed jug; Chevron-Triangle style, now tan

 P 3861 TB 8Rest. H.-rim 0.092; Max. D. 0.092
Pl. 51; pp. 52, 56, 134, 137, 157, 158
Fragment preserving most of body above base and upper part of handle. Fine clay; surface polished to low luster and fired predom. ry; black paint.

Very close in shape to 608; decoration differs in having Type 2B triangles.

## 610 Round-mouthed jug; painted, indet.

P 4516 CC 3: against SE wall, center
H.-rim 0.089; Max. D. 10.095

Pl. 51; pp. 52, 55, 56, 134, 137, 158
Gaps. Fine clay; well-polished surface, now fired almost totally brownish gray; dark paint.

Flat bottom. Depressed ovoid body; continuous curve into vertical neck: plain, flaring rim. Rolled handle.

Pendent wavy line on belly. Type 1A triangles on shoulder; at mid-neck and on rim, pendent wavy lines below pairs of straight ones.

## 611 Round-mouthed jug; Polychrome House style, now buff

P 1870 TB 2: N corner
GPH. 0.074; Est. Max. D. 0.12
Pl. 52; pp. 52, 56, 134, 137, 151, 161
Two joining fragments preserving sections of upper body and neck/rim, including lower handle stump. Fine, pale ry clay; slipped surface, carefully polished to a very smooth finish and fired very pale brown; black paint, over polish.

Wide neck with ridge at base; band rim.
On shoulder, Type 1B triangles; on neck, Cross-andLozenge Panels 2, apparently alternating with narrow panels of Type 1 simple lozenges; wavy-line zone on rim.

## 612 Round-mouthed jug; TB 8 Group, indet.

P 3692 TB 8: SW wall, to NW of door, between a storage vessel and a light mudbrick wall
H.-rim 0.129; Max. D. 0.116

Capac.-neck 500 ml .; Max. capac. 670 ml .
Pl. 52; pp. 52, 56, 134, 137, 139, 141, 143, 164, 191
Gaps. Medium-fine ry clay; thin slip, polished but now dulled, mottled red to ry; matte dark paint.

Shallowly concave bottom. Plump ellipsoidal body, practically spherical; plain, flaring rim. Rolled handle.

Wavy-line zone on belly. On shoulder, a 3B triangle row. On neck, above a wavy-line zone at base, a zone of laddered zigzag with single circles, compass-drawn, in some of the upper fields. Bands on handle.

## 613 Round-mouthed jug; TB 8 Group, now buff

## P 3693 TB 8: W corner

H.-rim 0.125; Max. D. 0.113

Pl. 52; pp. 52, 56, 134, 137, 139, 141, 142, 164, 191
Gaps, including most of knobs on handle. Medium-fine, pale brown clay; surface now dulled and fired clay color; matte dark paint, worn.

Close in shape to 612; pair of blunt, horn-like knobs atop handle.

Lines at max. D. On shoulder, six spaced triangles with single outlines: one of Type 1A, another filled with basketweave, and the remaining four consisting of diminishing chevrons. Wavy-line zone at transition to neck; above reserved band at lower neck, zone of Zigzag 1 extending to top; spaced groups of oblique lines on int. rim and, at point of handle attachment, a set of three diminishing garlands suspended from a line. Banded handle.

## 614 Round-mouthed jug; TB 8 Group, indet.

P 3720 TB 8: against NW wall, to NE of $W$ corner
H.-rim 0.124; Max. D. 0.125

Capac.-neck 530 ml .
Pl. 52; pp. 52, 56, 134, 137, 139, 150, 151, 164
Almost half of neck/rim missing. Medium-fine ry clay; slipped surface, polished but now dulled, fired clay color to red to brownish gray; matte dark paint.

Flat bottom. Lopsided. Ellipsoidal-biconical body; plain, flaring rim. Rolled handle with pair of knobs similar to those on 613 .

Wavy-line zone on belly. Mixed motifs on shoulder, counter-clockwise from handle: two Type 1A triangles, panel of Oblique Checkerboard 1 bordered by lines, two more 1A triangles with single circle in field to $R$, cross-and-lozenge panel with double lines of varying thickness and all blank lozenges, and a Cross-and-Lozenge Panel 6. Above reserved band on lower neck, zone of spaced panels that repeat two of the shoulder motifs, Oblique Checkerboard 1 and the blank cross-and-lozenge panel; single circle in the one preserved interval; vertical bars on int. rim. On handle, bands above lower attachment and from knobs to rim.

For a monochrome counterpart, cf. 549.
615 Round-mouthed jug; TB 8 Group, indet.
P1185 CC 2
H.-rim 0.111; Max. D. 0.107

Pl. 52; pp. 52, 56, 134, 137, 139, 147, 164, 191-192
Gaps; lower body badly burned; scratched and worn. Medium-fine clay, pale brown to light gray; dulled and discolored surface, fired variously pale brown to red with traces of red slip; matte dark paint, faded and blurred.

Close in shape to 614 ; strap handle.
Wavy-line zone just above max. D. On shoulder, Type 1A triangles with double outlines. Narrow zone of zigzag at transition to neck. On upper neck, as though hanging from top, a row of garlands (hatched and crosshatched at random) that overlap above single circles on mid-neck; groups of vertical lines on int. rim and, at point of handle attachment, three small garlands pendent from a line. Handle banded above rim.

P 3090 from the same CC unit is close in shape and size; the decorative scheme is also similar, but the neck bears a laddered zigzag like that on 612.

## 616 Round-mouthed jug; painted, indet.

P 3320 TB 7
GPH. 0.086; Max. D. 0.101
Pl. 53; pp. 52, 134, 137, 139, 150, 151
Lower body missing; gaps elsewhere. Medium-fine red clay; surface now mottled ry to gray; matte dark paint.

Body perhaps ellipsoidal-biconical; plain, flaring rim. Oval handle.

On shoulder, Type 1A triangles with a double CC in each interval. On neck, above a reserved band at transition, four spaced panels: to either side of handle, a Cross-and-Lozenge 4 bordered by double ladders; also, a Latticed Panel 1 and Oblique Checkerboard I; triple ladder to immediate $R$ of handle. Wavy line on int. rim.

617 Round-mouthed jug; painted, now buff
P 1876 TB 3: SE of main grinding stand GPH. 0.103; Est. Max. D. 0.13
Fig. 23; Pl. 53; pp. 5, 52, 116, 134, 137, 143, 191
Fragment preserving profile from max. D. to top. Fine clay, very pale ry to pale brown; slipped surface, polished and fired pale brown; black paint, over polish.

Tall, slightly flaring neck; plain rim.
On shoulder, Type 1A triangles with single outlines. On neck, large, multi-line zigzag with rows of dots between the lines.

## 618 Round-mouthed jug; painted, indet

P 2303 Meg. 3: along SW wall, over wooden beam bed
H.-rim 0.153; Max. D. 0.172

Pl. 53; pp. 4, 52, 55, 56, 69, 110, 134, 137, 139, 142 (n. 121), 143, 191
Several small gaps. Medium-fine clay, fired pale brown to brown to gray; slipped and polished surface, fired pale brown to gray to black; dark paint, over polish, unevenly applied in places and now faded.

Flat base. Broad, ellipsoidal-biconical body; wide neck with fine ridge at base; plain, flaring rim. Wide strap handle, topped by cylindrical bolster with flattened ends.

Double zone on shoulder: below, a simple lozenge row with alternating solid and crosshatched diamonds; above, a Zigzag 4 with 14-21 lines per leg. Tall neck zone of Zigzag 3 with relatively small triangles and the addition of double CCs. On handle, from lower attachment to bolster, oblique ladders alternate with oblique bands and rows of dots; bolster banded; Checkerboard 1 between bolster and rim.

Contained hazel nuts. For the shape in monochrome, cf. 549.

## 619 Round-mouthed jug; painted, now buff

P 3043 CC 2: W corner
H.-rim 0.125; Max. D. 0.097

Pl. 53; pp. 52, 54, 55, 56, 134, 136, 137, 138, 140, 148, 151
Few small gaps; part of handle vitrified. Fine, very pale brown clay; slipped surface, polished but now matte, fired clay color with slight greenish tinge; matte black paint.

Spreading ring foot with wide resting surface. Ovoid body, tilted forward on base, with short, steep shoulder; wide neck, shallowly convex in profile, with ridge within a constriction at base; channeled band rim. Rolled handle.

Thick-line and somewhat imprecise painting. Band just below max. D.; wavy-line zone on upper shoulder. On neck, four spaced panels: Crosshatching 1 to either side of handle, Cross-and-Lozenge Panel 4, with single-line chevrons in the lateral triangles, and a second, similar panel with solid central lozenges. Wavy line on rim.

P 2487 from TB 5 is very similar in shape and decoration. P 3079, from fill overlying ground level between Meg. 12 and the NE-SW enclosure wall, has a similar scheme with wavy lines in zones on belly and shoulder; the shape is also similar, but the body is a fuller, broader ovoid close to the large 639.

## 620 Round-mouthed jug; painted, indet.

P 2605 TB 2
H.-rim 0.097; Max. D. 0.108

Capac.-neck 320 ml .; Max. capac. 480 ml .
Pl. 53; pp. 52, 134, 137, 139, 141, 149
Gaps. Medium-fine, pale brown clay; slipped surface, polished but matte, fired predom. clay color but with some pieces fired ry; matte black paint.

Flat base. Ellipsoidal body with steep shoulder; short, flaring neck; plain rim. Rolled handle.

Tall shoulder zone, beginning at max. D., with Type 1A
triangles. On neck, four spaced panels: Crosshatching 1 in alternation with Checkerboard 1, each flanked by pairs of lines.

## 621 Round-mouthed jug; painted, indet.

 P 3053 TB 6: in doorway, beside SE jamb H.-rim 0.110; Max. D. 0.117Pl. 54; pp. 52, 55, 56, 132, 134, 137, 139, 143, 153, 192
Several gaps, including all but lower stump of handle. Fine clay, fired ry to pale brown; surface polished to medium luster and fired clay colors; black paint, over polish.

Low ring foot. Broad, well-formed ellipsoidal body; continuous curve into slightly flaring neck; plain, vertical rim.

Fine, careful painting. At and just below max. D., a narrow, double zone with wavy line below and Type 1 simple lozenges above; the latter is repeated at transition to neck and again on rim. Centered between reserved bands on shoulder, a zone of small, Type 1A triangles bordered below and above by dots-between-lines. On neck, above a reserved band and again bordered by dots-between-lines, a zone of Xpanels in which the double-line $X$ s are blank except for the solidly filled central intersection and corners; panels bordered by dots-beween-lines. Handle flanked by vertical wavy-line zones that span entire height of decorated area.

For a monochrome counterpart, cf. 544.
622 Round-mouthed jug; painted, indet.
P2475 TB4 anteroom
GPH. 0.100; Est. D. rim 0.090
Pl. 54; pp. 52, 56, 134, 137
Large sherd preserving profile from below max. D. to top. Medium-fine clay, now gray; surface polished to at least low luster and fired rb to gray; dark paint, over polish.

Continuous curve into short, wide neck; plain, slightly flaring rim.

Narrow zones of Simple Lozenge Row 1 at max. D. and at transition to neck; on shoulder, between reserved bands, Type 1B triangles. On neck, again within reserved bands, a zone of closely spaced X -panels of solid-barred type but with reserved lozenges at the central intersections; narrow intervals between the panels apparently solid. Band on rim.

## 623 Round-mouthed jug; painted, indet.

P 3139 CC 2
GPH. 0.107; Est. Max. D. (rim) 0.10
Pl. 54; pp. 52, 134, 137, 138, 148
Fragment preserving profile from below belly to top, including upper handle attachment. Medium-fine clay, fired ry to pale brown; polished surface, now practically matte, fired clay colors; dark paint, worn.

Short shoulder; very tall neck; plain, flaring rim.
On shoulder, narrow zone of basket-weave. Dots-betweenlines at base of neck; above, a narrow reserved band and then three stacked zones: herring-bone, solid triangles, and, on rim, Crosshatching 1.

## 624 Round-mouthed jug; painted dark-on-ground-coat

## P 3412 TB 7: beside central aisle

H.-rim 0.093; max. D. 0.088

Pl. 54; pp. 38, 39, 52, 55, 134, 137
Gaps; handle missing; ground-coat worn: paint almost entirely gone. Medium-fine red clay; lower body and int. rim polished, but now dulled, and fired red: off-white groundcoat on upper body and neck; black paint.

Flat base. Depressed ovoid body; tall, flaring rim.
Horizontal lines preserved on neck; possibly a laddered zigzag on rim.

For the shape, cf. 608.

625 Round-mouthed jug; ground-coated
P 3652 TB 8: SE aisle
H.-rim 0.111; Max. D. 0.115

Capac.-neck 350 ml .
Pl. 54; pp. 38, 39, 52, 134, 137
Gaps; most of ground-coat and all traces of paint are gone. Medium-fine, pale brown clay; clay ground on lower body now discolored; light-colored ground-coat from max. D. to top.

Low, narrow ring foot. Broad, depressed ovoid body; plain, flaring rim.

P 3860 from the same TB unit is a monochrome version of the shape.

## 626 Round-mouthed jug; painted bichrome-on-groundcoat

P 3042 CC 2: W' corner
H.-rim 0.114; Max. D. 0.103

Pl. 54; pp. 38, 52, 134, 137, 138, 139, 141
Gaps in body and neck/rim; fire-damaged surface. Fine clay; dark red slip on lower body, polished but now dulled; very pale brown, matte ground-coat, now largely discolored, from below Max. D. to top and overlapped below by red slip; matte dark and red paints, faded and worn.

Flat base. Ellipsoidal body; continuous curve from steep shoulder into wide, flaring neck; plain rim. Rolled handle.

On shoulder and neck, identical zones of Type 3A triangles in which the upper, standing triangles are red-filled; a double CC in each trapezoid.

For the shape, cf. 575 and 599.

## LARGE ROUND-MOUTHED JUGS (627-644)

## 627 Large round-mouthed jug; indet.

P 2359 Meg. 3: S corner
H.-rim 0.216; Max. D. 0.193

Pl. 57; pp. 39, 52, 53, 54, 55, 56, 117, 188
Gaps. Medium-fine gray clay; heavily micaceous, glittery
film, fired predom. ry with large patches of black.
Broadly spreading ring foot with wide resting surface and short stem. Broad, bicurved ellipsoidal body; wide, shallowly convex neck with deep groove at base and a series of ridges just below midway; offset, flaring rim. Double rolled handle.

## 628 Large round-mouthed jug; indet.

P 2785 TB 1: W corner deposit
H.-rim 0.254; Max. D. 0.232

Pl. 57; pp. 6, 52, 53, 55, 56, 109, 117, 188
Gaps; vitrified areas. Medium-fine, brownish gray clay; slipped surface, polished but now matte, mottled ry to clay color.

Low ring foot. Broad, ellipsoidal body, almost spherical; wide neck, concave in profile, with three thick ridges evenly spaced from base to midway; flaring rim, lightly offset below by a small ridge. Thick, oval handle, broadening into a strap above rim attachment; cylindrical knob set upright on top.

629 Large round-mouthed jug with multiple grooving; now red
P 2427 Meg. 3: along SW wall
H.-rim 0.193; Max. D. 0.171

Pl. 57; pp. 52, 53, 55, 56, 78, 110, 113, 188
Small gaps. Fine clay, fired red to light brown; heavily micaceous film, unevenly applied, polished to medium luster and fired predom. red.

Broadly spreading ring foot with short stem. Ovoid body; wide neck with thick ridge at base and set of grooves below
midway; plain, flaring rim. Doublerolled handle with broadheaded spool-rotelle set across top.
630 Large round-mouthed jug; indet.
P 2223 Meg. 3: fill in central aisle, at NE
H.-rim 0.246; Max. D. 0.224

Pl. 57; pp. 52, 54, 55, 56, 78, 107, 110, 188
Gaps; handle vitrified; slip largely peeled and damaged by fire. Medium-fine red clay; slipped surface, now matte, fired red to light brown to gray.

Broadly spreading ring foot with narrow, rounded edge and shallowly concave underside. Broad, well-formed ovoid body; wide vertical neck; channeled band rim. Double rolled handle, smoothed over to create a strap at lower attachment; pair of flat-headed knobs set one to either side at top, giving appearance of a spool-rotelle.
631 Large round-mouthed jug with patterned incision; now $\tan$
P 1271 CC 2: SE aisle
H.-rim 0.211; Max. D. 0.207

Pl. 57; pp. 33, 52, 55, 56, 114, 116, 188, 190
Several gaps. Medium-fine red clay; fine-grained mf, fired predom. ry.

Broad, spreading ring foot with wide resting surface and high, inclining edge. Very broad, ellipsoidal-biconical body, tilted forward on base; wide neck, convex in profile, with thick ridge at base; offset, rounded rim. Wide strap handle.

On upper neck, a zone of shallowly incised, hatched triangles.
632 Large round-mouthed jug; Wavy-Line style, indet.
P 2750 TB 1: W corner deposit
GPH. 0.220; D. rim 0.18
Fig. 24; Pl. 58; pp. 6, 52, 56, 137, 155-156, 188
Lower body and handle missing; gaps elsewhere; partially vitrified in one area and fire-damaged overall. Very fine clay, now fired dark; slipped and polished surface, now dull, fired light ry to gray; dark paint, worn.

Presumably ovoid body; channeled band rim. Oval handle.

Zones containing triplets of wavy lines: two on shoulder, two stacked on neck, and another below the rim. Single bands on belly and rim.
633 Large round-mouthed jug; painted, indet.
P 2608 TB 2: S quarter
GPH. 0.187; Est. max. D. 0.22
Pl. 58; pp. 52, 134, 137, 156, 157, 188
Fragment preserving large section of body and neck/rim, including handle base. Fine clay, now multicolored throughout; well-polished surface, now matte from burning; dark paint.

Apparently ovoid body; wide neck; flaring rim, offset below by sharp ridge. Enough preserved to show that there was only a single handle, apparently oval.

Wavy-line zone above lines on belly. On shoulder, Type 1A triangles. At mid-neck, between wavy-line zones, a row of quadruple CCs; wavy-line zone on rim.
634 Large round-mouthed jug; Fine-Line Buff ware
P 2604 TB 2: N corner, scattered
H.-rim 0.227; Max, D. 0.205

PI. 58; pp. 6, 32, 52, $56,107,134,137,139,141,142,143,144$
(n. 138), 149, 151, 152, 154, 159-160, 188, 191-192

Large gaps; small vitrified area. Fine clay, very pale brown
with spongy texture; well-smoothed surface, somewhat
porous, fired very pale brown; matte paint, varying from black to dark rb.

Broadly spreading ring foot. Plump ellipsoidal body; wide neck with thick ridge at base; band rim. Rolled handle.

Very fine, careful painting. Large shoulder zone
beginning at max. D. contains four wide panels with narrow intervals between, each flanked by a triplet of lines: the two to $R$ of handle each composed of several narrow vertical strips of varying row motifs (cf. Pl. 62-65) that include Checkerboard 1, Simple Lozenge 2, simple zigzag, herringbone, Crosshatching 1, and a Type 3A triangle; to $L$ of handle, a large panel of Checkerboard 2 and a multiple lozenge panel in which all diamonds and half-diamonds are crosshatched. On neck, a tall complex lozenge row in which all components are blank except for the solidly filled triangles above and below. On rim, narrow zone of doubleline zigzag. Broad bands on handle; below, a narrow horizontal strip of small-squared Checkerboard 1, this developed from the continuation of the lower border for the shoulder zone.

Cf. 635.
635 Large round-mouthed jug or kantharos krater; FineLine Buff ware
P 1871 TB 2: N corner
Est. D. rim 0.21
Pl. 59; pp. 6, 52, 56, 78, 134, 137, 141, 142, 159-160
Six nonjoining sherds from neck/rim, including upper handle attachment. Like 634 in fabric.

Insofar as preserved, like 634 in shape, but the vessel could have been two-handled.

On neck, a tall Type 3A triangle row with single outline. Rim and handle decorated as on 634. Cf. 636.

## 636 Probable large round-mouthed jug or kantharos krater; Fine-Line Buff ware

P 2876a-d TB 2: along NE wall to E corner, floating in debris
GPH. 0.057; Th. 0.004
Pl. 59; pp. 6, 52, 134, 159
Four sherds (three illustrated) from belly and shoulder, including on one the rise for a handle. Fine clay, with some scattered fine mica, fired very pale ry; smooth, finely pitted surface, practically matte, fired very pale brown; matte, dusky red paint.

Shoulder zone of tightly crosshatched Type 1A triangles; bordered below, at max. D., by lines and a pendent wavy line; to $L$ of handle, vertical lines whose intersection with the lower border is developed into a very small checkerboard.

Possibly the same vessel as 635 .
637 Large round-mouthed jug; painted, indet.
P 4354 TB 7 anteroom: against SE wall
H.-rim 0.232; Max. D. 0.220

Pl. 59; pp. 52, 54, 134, 137, 140, 147, 188, 191-192
Large gaps, including half of base. Fine ry clay; surface well polished to medium luster and fired red with areas of ry; dark paint, over polish.

Flat base. Broad, plump, ellipsoidal body; plain, flaring rim. Strap handle.

Lines at max. D. On shoulder, narrow panels of Crosshatching 1, set obliquely, alternate with oblique rows of double CCs. Above lines on lower third of neck, a zone extending to top encloses a row of large, pendent garlands of double line, these each enveloping a triad of double CCs; below, the resultant standing "triangles" formed by the garlands are crosshatched; zone terminated to either side of handle by vertical lines. Handle banded at lower attachment and top.

638 Large round-mouthed jug; painted, indet.
P 2290 Meg. 3: SE aisle, scattered
H.-rim 0.26-0.27; Max. D. 0.209

Fig. 24; Pl. 59; pp. 4, 37, 52, 55, 56, 107, 134, 137, 139, 141, $148,150,152,157,188,192$
Few small gaps. Fine clay, fired ry to brownish gray;
slipped surface, polished over dark paint to medium luster and fired clay colors to darker.

Broadly spreading ring foot with wide resting surface and inclining edge. Well-formed, depressed ovoid body, tilted; tall, flaring neck with shallow groove at base; flaring rim, offset below by a blunt ridge. Thick handle, rolled and faceted, with short, hipped spur at lower attachment.

On belly, triple row of wavy-line zones. On shoulder, Type 1A triangles, narrow and numerous. On neck, above a wavyline zone, three large and widely spaced panels: opposite handle, a very wide checkerboard pattern of large checks that alternate crosshatching with regular checkerboard; to either side, narrower panels, one Crosshatching 1 and the other a multiple lozenge design in which blank diamonds are defined by criss-crossing solid bars left reserved at their intersections; in the intervals between the panels, blocks of large, quadruple CCs; flanking handle, narrow vertical strips of Simple Lozenge 1. Three wavy lines in zone on rim.

## 639 Large round-mouthed jug; painted, indet.

P 2315 TB 3: NW aisle
H.-rim 0.253; Max. D. 0.207

Pl. 60; pp. 52, 55, 56, 134, 137, 139, 141, 188
Gaps; handle missing; surface very scratched. Mediumfine red clay; surface polished to medium luster and fired red to rb with one blackened area; dark paint.

Spreading ring foot with abbreviated stem. Well-formed ovoid body; wide neck with ridge at base; band rim.

Narrow wavy-line zone at max. D. On shoulder, Type 1A triangles, and above, on neck, Type 1B triangles, continuing behind handle; wavy-line zone on rim.
640 Large round-mouthed jug; painted, indet.
P 2385 TB 3: center, scattered
H.-rim 0.264; Max. D. 0.199

Fig. 24; Pl. 60; pp. 37, 39, 41, 52, 55, 56, 134, 137, 139, 141, 143, 145-146, 162, 188, 191
Large gaps; most of handle missing. Fine clay, now brownish gray; surface well polished over dark paint to high luster and now mottled red to brown to gray.

Spreading ring foot with broad resting surface and tall, trimmed edge; abbreviated stem. Well-formed ovoid body; tall, flaring neck with thick ridge at base. Rolled handle, probably not as outswung as the plaster restoration suggests (cf. 638).

A pair of stacked wavy-line zones at max. D. On shoulder, Type 1B triangles, some of whose connecting chevrons are closed at the bottom to form small, hollow triangles. At transition to neck and on rim, narrow zones of Simple Lozenge 1; between, in a tall neck zone, a large block-C meander with connecting bars, all double-line and crosshatched.

## 641 Large round-mouthed jug or kantharos krater; painted, indet.

P 2936 TB 1 anteroom
Too little for Est. D. rim
P1. 60; pp. 52, 53 (n. 12), 78, 79, 134, 137, 154, 192
Several isolated sherds and fragments preserving sections of upper body and neck/rim, including indication of one handle. Medium-fine clay, now fired light gray throughout; smooth, matte surface; dark paint.

Wide neck; vertical rim, tapering in section and offset below by a ridge.

Wavy-line zones at max. D., and also as the borders for zones on sholder and neck. On shoulder, parts of closely spaced panels: Crosshatching 1 and Semicircle Panels 2 whose half-circles are all dot-filled. On neck, part of another panel of Crosshatching 1 ; wary line on rim.

642 Large round-mouthed jug or kantharos krater; now tan
P 3063 NCB-SEB: Gravelly fill to SW of Meg. 12 (p. 6-7)
GPH. $0.10 \overline{5}$; Est. D. neck 0.21
Pl. 60; pp. 7, 52, 78, 79, 134, 137, 154, 192
Neck/rim fragment. Fine clay, fired ry; surface well polished to a medium luster and fired a more intense tone of clay color; faded dark paint, apparently under polish.

Wide neck, vertical and straight; band rim, slightly flaring. At $L$, rise for handle attachment to top of rim.

Zone on neck bordered below by a narrow wavy-line zone and above, just below rim, by two stacked zones of same. Within, three closely spaced semicircle panels: at $L$, the $R$ half of a panel with a pair of quintuple concentric semicircles attached to the lateral border; at center, Type 2; at $R$, Type 1. Wavy line on rim.

## 643 Large round-mouthed jug or kantharos krater; painted, now tan <br> P 194 Meg. 12: on floor <br> GPH. 0.139; Est. max. D. 0.23; Est. D. rim 0.17 <br> Pl. 60; pp. 7, 52, 78, 134, 137, 148-149, 151

Fragment preserving section of shoulder and neck/rim. Medium-fine clay, fired red; mf surface, polished to medium luster and fired yr with some signs of secondary burning; black paint, over polish.

Body probably ovoid. Wide neck with distinct ridge at base; band rim, slightly articulated.

On shoulder, from max. D. to a little below neck ridge, a zone of Type 1 crosshatching. At top of shoulder, just under
ridge, a row of small pendent garlands. Paneled zone on neck: at far $L$, a narrow panel of upright herringbone; beyond this to $R$, a Crosshatching 1 panel and a Cross-andLozenge Panel 4 with laddered borders and single-line chevrons in the lateral triangles.

## 644 Large round-mouthed jug; painted bichrome-on-ground-coat

P 2525 Meg. 3: along SW wall
GPH. 0.218
Fig. 25; Pl. 60; pp. 38, 39, 52, 134, 137, 149-150, 188, 192
Two nonjoining fragments preserving sections from below max. D. to top, including handle; blistered and cracked from heat; much of ground-coat flaked away. Fine, light red clay; polished clay ground, fired red; thick, white ground-coat on neck/rim; matte black and rb paints.

Wide neck with plain rim. Enough preserved to show that there was only a single handle, oval.

Thick band at top of shoulder, overlapping ground-coat. At base of neck and on rim, carefully drawn lines; in large neck zone between, spaced panels bordered by lines, the inner ones sometimes red: to $L$ of handle, checkerboard panel with large checks that seem to alternate blank, crosshatched, and stippled (some red) in diagonal rows; opposite handle, a small-squared checkerboard that may have a similar alternating arrangement of blank, red- or black-filled, and single-dotted checks; there is room for a third panel.

## The Destruction Level: Trefoil Jugs

## NARROW-NECKED TREFOIL JUGS, SMALL AND MEDIUM-SIZED (645-722)

## 645 Small trefoil jug; indet.

P 1856 TB 4: SE aisle
H.-rim 0.122; Max. D. 0.092

Capac.-neck 260 ml .
Pl. 63; pp. 6, 41, 57, 58, 59-60, 107, 108
Spout of trefoil missing. Fine clay, rb to gray; surface polished over mf to medium, glittery luster and fired red to gray.

Spreading ring foot with vertical edge and short stem. Well-formed ellipsoidal body; short neck with sharp ridge at base; beveled rim. Rolled handle with squared-off sideattachment.

One of a group of three, the others being P 2698 from the anteroom of TB 4 and P 2660 from TB 3.

## 646 Small trefoil jug; indet.

P 2638 TB 5
H.-rim 0.113; Max. D. 0.085

Pl. 63; pp. 41, 57, 58, 59, 60
Small gaps, including part of handle. Fine ry clay; slipped and polished surface, now matte, fired pale brown to greenish gray.

Similar in foot and body to 645, but neck is taller. Rolled handle with regular attachment.

647 Small trefoil jug; now tan
P 1937 TB 4: SE aisle
H.-rim 0.119; Max. D. 0.099

Capac.-neck 270 ml .
Pl. 63; pp. 41, 57, 58, 59, 60
Small gaps, including one in trefoil. Fine brown clay; surface polished over mf and fired clay color with dark speckling.

Low, spreading ring foot. Broad, ellipsoidal body, well formed; tall, cylindrical neck with pronounced, ledge-like groove at base; plain-rimmed trefoil with deeply pinched sides. Rolled handle.

## 648 Small trefoil jug; indet.

P 1792 TB 3: in front of main grinding stand
H.-rim 0.145; Max. D. 0.113

Capac.-neck 480 ml .
Pl. 63; pp. 5, 6, 57, 58, 59, 60
Part of handle missing. Fine ry clay; heavily micaceous film, polished to medium, glittery luster and fired red to gray.

Low, narrow ring foot. Ellipsoidal body; tall neck with ridge at base; deeply pinched trefoil with small, rounded rim offset below by a groove. Rolled handle forming a continuous, circular loop, affixed at shoulder and rim; small spur below.

649 Small trefoil jug; now dark brown
P 3107 TB 6: along SW wall, near door
H.-rim 0.131; Max. D. 0.113

Pl. 63; pp. 57, 58, 59, 108
Small gaps; handle missing. Fine, light gray clay; mf polished to medium luster and fired predom. dark brown.

Low disk foot with beveled edge. Ellipsoidal body; relatively wide neck with slight groove at base; band rim, offset by a groove. Handle spurred at lower attachment.

## 650 Small trefoil jug; indet.

P 2033 TB 4: SE aisle
H.-rim 0.140; Max. D. 0.120

Pl. 63; pp. 57, 58, 59
Several gaps. Medium-fine, pale brown clay; mf, polished to low luster and now mottled rb to brownish gray.

Flat base. Ellipsoidal body, somewhat elongated; abbreviated neck; plain rim. Rolled handle.

## 651 Near-miniature trefoil jug; now light

P 1835 TB 4: SE aisle
H.-rim 0.056; Max. D. 0.057

Pl. 64; pp. 36, 42, 57, 58, 59, 60, 188
Intact. Fine, pale brown clay; mf, polished to medium luster and fired ry to red.

Thin-walled and light. Narrow, flat base. Ellipsoidal body with multiple contours; short, relatively wide neck; plain rim. Rolled handle.

## 652 Small trefoil jug; indet.

P 3084 TB 6: against NW wall, with 602
H.-rim 0.102; Max. D. 0.087

Capac.-neck 170 ml .
Pl. 64; pp. 57, 58, 59, 60, 188
Few small gaps. Fine ry clay; surface polished over mf and now fired ry to pale brown to gray.

Spreading ring foot with abbreviated stem. Ellipsoidal body with multiple contours; short neck with ridge at base; small band rim. Rolled handle.

## 653 Small trefoil jug; now tan

P 1312 CC 1: NW half
H.-rim 0.142; Max. D. 0.150

Capac.-neck 1200 ml .
Pl. 64; pp. 55, 57, 58, 59, 60, 63, 188
Small gaps; slip very worn and peeled. Medium-fine ry clay; thickly applied slip, polished but now dulled, fired rb.

Narrow, flat base. Broad, well-formed ellipsoidal body with multiple contours; short, relatively wide neck with ridge at base; plain-rimmed trefoil with wide spout. Triangularsectioned handle.

## 654 Small trefoil jug; now tan

P 2995 TB 1
H.-rim 0.145; Max. D. 0.153

Capac.-neck 1110 ml .
Pl. 64; pp. 57, 58, 59, 60, 117, 188
Over half of trefoil missing. Medium-fine clay, brown to brownish gray; heavily micaceous film, polished and now fired predom. brown with darker areas.

Flat base. Broad, ellipsoidal body with multiple contours; short, relatively wide neck with thick ridges at base and midway; beveled-band rim. Rolled handle.

## 655 Small trefoil jug; now buff

P 1227 CC 2: SE half
H.-rim 0.121; Max. D. 0.099

Pl. 64; pp. 32, 42, 57, 58, 59, 60
Small gaps and chips. Fine clay, pale ry to pale brown; cursorily smoothed surface, lightly polished in patches, fired pale brown with greenish tinge.

Spreading ring foot. Well-formed ellipsoidal-biconical body; blunt ridge at base of neck; plain rim. Short oval handle.

## 656 Small trefoil jug; now tan

P 1859 TB 4: SE aisle
H.-rim 0.117; Max. D. 0.103

Capac.-neck 310 ml .
Pl. 64; pp. 57, 58, 59
Intact. Fine rb clay; yr mf, unevenly applied and polished over clay-colored ground.

Unevenly flattened base. Ellipsoidal-biconical body with series of incised lines midway on shoulder; ridge at base of neck; band rim. Rolled handle.

P 1190 from CC 2 is similar, but has a shorter neck and somewhat narrower body.

## 657 Small trefoil jug; now red

P 4351 TB 7 anteroom: center, before door into main room
H.-rim 0.117; Max. D. 0.128

Pl. 64; pp. 32, 57, 58, 59
Few small gaps. Fine red clay; surface well polished to medium luster (but now largely matte from burning) and fired various shades of red.

Ridge-ring foot. Bicurved ellipsoidal body; relatively wide neck with low ridge at base; plain rim. Rolled handle.

658 Small trefoil jug; indet.
P 2036 TB 4: SE aisle
H.-rim 0.130; Max. D. 0.117

Pl. 65; pp. 57, 58, 59
Gaps. Medium-fine ry clay; surface polished over mf and fired clay color to light gray.

Spreading ring foot with short stem. Broad, ellipsoidalbiconical body, reverse-bicurved; short neck with ridge at base; rounded rim. Thick, rolled handle.

659 Small trefoil jug; now red
P 2317 TB 5: NW aisle
H.-rim 0.097; Max. D. 0.105

Capac.-neck 310 ml .
Pl. 65; pp. 32, 33, 57, 58, 59, 60, 108
Gaps in trefoil. Fine ry clay; heavily micaceous film polished and fired red with darker patches.

Low, raised base. Ellipsoidal-biconical body, reversebicurved; short neck with thick ridge at base: plain rim Rolled handle with spur at lower attachment. Cf. 660.

660 Small trefoil jug; now tan
P 1935 TB 4: SE aisle
H.-rim 0.117; Max. D. 0.116

Pl. 65; pp. 32, 55, 57, 58, 59, 60, 108
Small gaps. Medium-fine clay, ry to red; slipped and polished surface, now matte, fired predom. yr.

Very similar in shape to 659 , but without neck ridge.
P 2034 from the same TB unit (SE aisle) and P 2681 from TB 3 are very close to 660 in both fabric and shape. 659 differs considerably in fabric.
661 Small trefoil jug; now light
P 1274 CC 1: NW half
H.-rim 0.107, Max. D. 0.109

Pl. 65; pp. 36, 57, 58, 59, 60
Complete. Fine ry clay; polished mf, fired ry to red.
Low, raised base. Broad, ellipsoidal-biconical body, reverse-bicurved; short neck with blunt ridge at base; rounded rim. Rolled handle with small spur below.

662 Small trefoil jug; now tan
P 1780 TB 2: N corner
H.-rim 0.135; Max. D. 0.130

Capac.-neck 580 ml .
Pl. 65; pp. 32, 42, 57, 58, 59, 60
Complete. Medium-fine brownish gray clay; pale yr slip, stroke-polished and mottled with clay ground.

Flat base. Ellipsoidal-biconical body, reverse-bicurved; short neck with ridge at base; plain rim. Rolled handle.
663 Small trefoil jug; now tan
P 3097 TB 6: against SE wall, near E corner
H.-rim 0.151; Max. D. 0.149

Capac.-neck 1020 ml .
Pl. 65; pp. 57, 58, 59, 60
Front of trefoil missing. Medium-fine ry clay; mf fired yr with some darkened areas.

Low, raised base. Ellipsoidal-biconical body, reversebicurved; short neck with thick ridge at base; rounded rim. Strap handle.

## 664 Small trefoil jug; indet.

P 1841 TB 4
H.-rim 0.128; Max. D. 0.113

Pl. 65; pp. 57, 58, 59, 60
Small gaps and chips. Medium-fine, light brown clay; surface polished over mf to medium luster and now fired predom. brown with red blotches.

Convex bottom, extending below level of low ring foot. Ellipsoidal-biconical body, reverse-bicurved; thick, squaredoff ridge at base of neck; small band rim. Thick, rolled handle, spurred at lower attachment.
665 Small trefoil jug; indet.
P 3091 CC 2: W corner
H.-rim 0.098; Max. D. 0.088

Capac.-neck 130 ml .
Pl. 65; pp. 31, 32, 57, 58, 59, 60
Intact; badly pitted. Medium-coarse rb clay; smoothed surface, mottled clay color to brown with darker areas from burning.

Thick-walled and heavy. Flat base. Ellipsoidal-biconical body, reverse-bicurved; relatively wide neck with ledge-like ridge at base; rounded rim. Short rolled handle.

## 666 Small trefoil jug; indet.

## P 1225 CC 2: SE aisle

H.-rim 0.152; Max. D. 0.125

Capac.-neck 650 ml .
Pl. 66; pp. 57, 58, 59
Gaps. Medium-fine, pale brown clay; slipped and polished surface, now almost matte, mottled yr to greenish gray.

Disk foot, low and wide. Broad, ellipsoidal-biconical body with multiple contours; small, beveled rim. Rolled handle.

## 667 Small trefoil jug; now light

P 3653 TB 8: SE aisle
H.-rim 0.141; Max. D. 0.133

PI. 66; pp. 36, 57, 58, 59
Gaps. Medium-fine ry clay; polished mf, now mottled clay color to yr.

Low, raised base. Ellipsoidal-biconical body with double contour on shoulder; short neck; rounded rim. Rolled handle with small spur below.

## 668 Small trefoil jug; indet.

P 2031 TB 4: SE aisle
H.-rim 0.115; Max. D. 0.109

Pl. 66; pp. 57, 58, 59
Gaps; slip peeled. Fine ry clay; thin slip, polished and fired clay color to brownish gray.

Unevenly flattened base. Broad, biconical body; short neck, grooved at base; plain rim. Rolled handle.

## 669 Small trefoil jug with studded handle; now red

 P 3262 TB 7: SE aisleH.-rim 0.126; Max. D. 0.111

Capac.-neck 310 ml .
Pl. 66; pp. $42,55,57,58,60,109,188$
Intact. Medium-fine, dark red clay; mf polished to medium luster and fired red; a few dark speckled areas.

Spreading ring foot with abbreviated stem. Broad biconical body, carinated at midway; neck grooved at base; small, rounded rim. Rolled handle, side-attached and squared off below; from rim attachment to top of bend, small pellets of applied clay arranged in alternating pattern of singles and pairs.
670 Small trefoil jug; now tan
P 1256 CC 2: E corner
H.-rim 0.138; Max. D. 0.105

Pl. 66; pp. 42, 55, 57, 58, 60, 188
Gap in trefoil and a blistered area on same. Fine ry clay; mf, stroke-polished to low luster and fired dark rb.

Spreading ring foot with abbreviated stem. Biconical body with flattened plane at midway; low ridge at base of neck; beveled-band rim. Handle like that on 669 , but without the pellets.

## 671 Small trefoil jug with multiple grooving; indet.

P 1258 CC 2: E corner
H.-rim 0.126; Max. D. 0.103

Capac.-neck 220 ml .
Pl. 66; pp. 55, 57, 58, 60, 113-114, 188
Gaps in trefoil; handle missing. Fine ry clay; mf, polished
to low luster and now mottled red to brownish gray.
Foot like that on 670 . Biconical body with double contour on shoulder; neck grooved for entire height; oversize trefoil, similar to that on 670 .
672 Small trefoil jug; indet.
P 2245 TB 4: W corner area
H.-rim 0.137; Max. D. 0.107

Capac.-neck 280 ml .
Pl. 66; pp. 57, 58, 60, 188
Small gaps and chips. Medium-fine ry clay; heavily micaceous film, polished and now mottled red to gray.

Spreading ring foot with trimmed edge and short stem.
Biconical body with double contour on shoulder; neck grooved at base; rounded rim. Rolled handle.
673 Small trefoil jug; indet.
P 1322 CC l: NW half
H.-rim 0.117; Max. D. 0.111

Capac.-neck 230 ml .
Pl. 66; pp. 57, 58
Few gaps, including front of trefoil. Medium-fine yr clay; surface polished, but now dulled, and fired clay color to greenish gray.

Somewhat thick-walled and heavy. Flat base. Broad, biconical body; neek grooved at base; plain rim. Rolled handle.

## 674 Small trefoil jug; now light

P 4637 CC 3: NW aisle
H.-rim 0.151; Max. D. 0.125

Pl. 67 ; pp. $41,57,58,60$
Few small gaps. Fine, light red clay; surface stroke-polished, but now matte, and fired predom. yr with streaky red mf preserved in places.

Low ring foot. Spherical body; short neck; rounded rim. Rolled handle, trimmed to two flattened faces on ext.

675 Small trefoil jug; now tan
P 3294 TB 7: NW aisle, in post hole
H.-rim 0.163; Max. D. 0.130

Capac.-neck 780 ml .
Pl. 67 ; pp. 33, 57, 58, 60
Handle missing. Medium-fine ry clay; mf, unevenly applied over polish and then polished, fired yr.

Convex bottom that extends below resting level of low ring foot. Spherical body, well formed; thick ridge at base of neck; rounded rim. Side-attached handle.

## 676 Small trefoil jug; now tan

P 3259 TB 7: beside door, to NW
H.-rim 0.125; Max. D. 0.107

Pl. 67; pp. 32, 36, 57, 58, 60
Intact. Fine ry clay; surface polished, but now dulled, and fired uniformly a polished tone of clay color.

Low ring foot. Spherical body; relatively wide neck, grooved at base; prominent groove at base of trefoil. Rolled handle.

Contained BI 453, a bone handle(?), and ILS 452, an iron needle.
677 Small trefoil jug; now light
P 4651 CC 3: NW aisle
H.-rim 0.145; Max. D. 0.114

Capac.-neck 500 ml .
Pl. 67; pp. 5, 57, 58, 60, 117
Chips in trefoil; most of surface now encrusted. Mediumfine ry clay; polished surface, fired predom. a lighter tone of clay color with some red areas.

Flat base. Spherical body, somewhat irregular; series of ridges rising from base of neck; rounded rim. Short, rolled handle.

Contained an iron needle.
678 Small trefoil jug with multiple grooving; indet.
P 2943 CC 1 anteroom
H.-rim 0.118; Max. D. 0.093

Pl. 67; pp. 57, 58, 60, 113, 117
Gaps, including most of trefoil and upper handle. Medium-fine yr clay; smoothed surface, now partially burned, mottled yr to greenish gray.

Low disk foot, constricted at juncture with body. Ovoid body with series of incised lines on lower shoulder; thick ridge at mid-neck; plain rim. Oval handle, side-attached to lower shoulder.
679 Small trefoil jug; indet.
P 1858 TB 4: SE aisle
Capac.-neck 620 ml .
Pl. 67; pp. 57, 58, 60
Complete. Medium-fine ry clay; mf applied over polish and now mottled yr to dark gray; int. trefoil, without mf, fired red.

Flat base. Ovoid body, reverse-bicurved; plain rim. Rolled handle.

## 680 Small trefoil jug; indet.

P 4569 CC 3
H.-rim 0.119; Max. D. 0.115

Capac.-neck 370 ml .
Pl. 67; pp. 5, 57, 58, 60, 117
Almost half of trefoil missing; slip peeled. Medium-fine red clay; thin slip, now dulled and discolored from burning.

Flat base. Broad, depressed ovoid body, well formed; distinct, ledge-like ridge at base of neck and a series of three carefully tooled ridges above; small, rounded rim. Narrow strap handle, trimmed along edges.

## 681 Small trefoil jug; now dark

P 1494 NW storeroom behind Meg. 1
H.-rim 0.128; Max. D. 0.116

Capac.-neck 450 ml .
Pl. 67; pp. 34, 57, 58, 60, 117
Half of trefoil missing. Fine gray clay; mf, wheel- and stroke-polished to medium luster, mottled very dark brown to gray.

Flat base. Depressed ovoid body; ridges midway on neck. Oval handle.

682 Small trefoil jug; indet.
P 1936 TB 4: SE aisle
H.-rim 0.115; Max. D. 0.116

Capac.-neck 430 ml .
Pl. 67; pp. 57, 58, 60
Part of trefoil and most of handle missing. Medium-fine ry clay; slipped surface, deeply polished and fired yr to gray.

Flat base. Broad, depressed ovoid body, bicurved, with slight angularity at max. D.; neck grooved at base; plainrimmed trefoil whose sides nearly touch at the pinch. Oval handle.

## 683 Small trefoil jug; now tan

P 2236 Meg. 3: SE aisle
H.-rim 0.118; Max. D. 0.092

Pl. 68; pp. 57, 58, 60, 116-117, 188
Complete. Medium-fine yr clay; heavily micaceous film, polished to medium luster and fired ry with darker patches.

Raised base, very low and narrow. Well-formed piriform body with groove on mid-shoulder; pair of ridges at base of neck; plain-rimmed trefoil whose sides touch at the pinch. Slender, rolled handle forming a wide loop; very low knob near top.
684 Small trefoil jug with multiple grooving; indet.
P 2640 TB 3: W corner
GPH.-rim 0.150; Max. D. 0.104
Pl. 68; pp. 31, 42, 57, 58, 60, 113-114, 188
Gaps, including most of trefoil; slip flaked and worn. Medium-coarse clay, fired yr with greenish tinge; matte slip, now fired same as clay.

Flat base, too narrow to counteract the heavy handle. Piriform body; narrow neck with series of three deep grooves rising from base. Relatively thick, rolled handle forming broad loop.

## 685 Small trefoil jug with fluted body; indet.

P 4372 TB 7 anteroom
H.-rim 0.101; Max. D. 0.085

Pl. 68; pp. 57, 58, 60, 120, 188
Gaps, including part of trefoil and most of handle. Fine clay; mf surface, polished to medium luster and fired various colors, light to dark.

Irregular convex base. Body essentially piriform, with two broad flutes placed at max. D. and directly above; very narrow neck, tall and flaring; plain-rimmed trefoil whose pinched-in sides meet over neck opening. Slender, rolled handle.
686 Near-miniature trefoil jug; now tan
P 3054 TB 6: to NW of door, in stone bin
H.-rim 0.059; Max. D. 0.069

Pl. 68; pp. 57, 58, 60, 61, 188
Small hole in body; few chips in rim. Medium-fine, light ry clay; slipped surface, polished and fired rb where not worn.

Irregular, undefined base, causing pot to rest on a tilt. Broad, depressed piriform body with angled contours; abbreviated neck, relatively wide. Rolled handle topped by small bolster.

687 Small trefoil jug; indet.
P 1493 TG pottery depot
H.-rim 0.115; Max. D. 0.113

Pl. 68; pp. 42. 57, 58, 60, 188
Complete. Fine gray clay; heavily micaceous film, polished and now fired ry to gray.

Flat base. Broad piriform body; sharp, ledge-like ridge at base of neck; prominent, rounded rim. Rolled handle.

## 688 Trefoil jug; now light

P 2351 Meg. 3: along SW wall, over wooden beam bed, beside the krater 929
H.-rim 0.177; Max. D. 0.150

Pl. 68; pp. 4, 57, 58, 60, 188
Several gaps. Fine ry clay; polished mf , now mottled clay color to red.

Low, raised base. Broad, piriform body; neck ridged at base; plain rim, offset by groove. Rolled handle with spur at lower attachment.

## 689 Trefoil jug; indet.

P 2267 TB 5
H.-rim 0.158; Max. D. 0.128

Capac.-neck 670 ml .
Pl. 68; pp. 57, 58, 60
Complete; surface very pitted. Medium-fine ry clay; mf, polished to medium luster and mottled clay color to red to purple.

Flat base. Ovoid body; wide neck; upright trefoil with band rim, almost horizontal along top line. Short strap handle with medial spine.

Cf. 690.
690 Trefoil jug; indet.
P 3409 TB 7: NW aisle
H.-rim 0.165; Max. D. 0.127

Capac.-neck 700 ml .
Pl. 68; pp. 57, 58, 60
Intact; pitted like 689. Medium-fine, sandy clay, fired light red; slipped surface, lightly polished and now fired light brown with a greenish tinge.

Low disk foot. Ellipsoidal-biconical body; wide neck with thick ridge at base; trefoil similar to that on 689. Strap handle with medial spine.

P 1207 from CC 1 and P 3933 from the anteroom of TB 8 are very similar. For the shape on a large scale, cf. 747-748.

## 691 Medium-sized trefoil jug; now tan

P 1226 CC 1: NW half
H.-rim 0.198; Max. D. 0.175

Pl. 69; pp. 32, 57, 60
Gaps; slip peeled. Fine, pale brown clay; thin slip, now matte, fired pale yr.

Narrow ring foot. Thin-walled; broad, ellipsoidal body; ridge at base of neck; band rim. Rolled handle.
692 Medium-sized trefoil jug; indet.
P 1939 TB 4: SE aisle, SW of center
H.-rim 0.181; Max. D. 0.166

Pl. 69; p. 57
Small gaps in body. Coarse ry clay; smoothed surface, discolored from burning.

Flat base. Ellipsoidal body; slight groove at base of neck; plain rim. Wide strap handle with finger hollow at base.

## 693 Medium-sized trefoil jug; now light

## P 1191 CC 2: SE aisle

H.-rim 0.194; Max. D. 0.176

Pl. 69; p. 57
Intact except for small gap in trefoil. Medium-fine ry clay; lightly polished mf , fired pale brown to ry.

Flat base. Broad, ellipsoidal body; relatively wide neck with fine ridge at base; plain rim. Strap handle.

## 694 Medium-sized trefoil jug; now red and tan

P 2252 TB 5: NW aisle
H.-rim 0.183; Max. D. 0.164

Capac.-neck 1660 ml .
Pl. 69; pp. 32, 57, 58, 60
Intact. Medium-fine clay, red to ry; lower half of body, neck, and handle polished and fired red; upper body cursorily smoothed and fired ry.

Flat, somewhat uneven base. Plump ellipsoidal body, practically spherical; cylindrical neck, apparently attached like that on 696; plain rim. Wide strap handle with finger hollow at lower attachment.

## 695 Medium-sized trefoil jug with multiple grooving;

 indet.P 1296 CC 2: E corner
H.-rim 0.219; Max. D. 0.208

Pl. 69; pp. 57, 60, 113, 114, 117
Several gaps. Medium-fine ry clay; micaceous slip, polished to low luster and fired predom. dark red with some discoloration.

Wide, flat base. Plump ellipsoidal body with two series of closely set grooves on lower and upper shoulder (apparently formed with multi-tined tool); relatively wide neck with sharp ridges at base and midway; plain-rimmed trefoil, offset by a pronounced, undercut groove. Strap handle.

## 696 Medium-sized trefoil jug; now tan

P 1875 TB 4: E corner area, to SW of grinding stand H.-rim 0.178; Max. D. 0.160

Capac.-neck 1500 ml .
Pl. 70; pp. 32, 36, 57, 58, 60
Virtually complete. Medium-coarse ry clay; smoothed surface, fired clay color.

Broad, flat base. Plump ellipsoidal body, close to ovoid; short, tapering neck, attached as a separate piece with a fine joining line at base; rounded rim. Short oval handle.

## 697 Medium-sized trefoil jug with multiple grooving;

 indet.P 2945 CC 1: along NE wall, to NW of door
H.-rim 0.254; Max. D. 0.246

Pl. 70; pp. 57, 60, 113
Gaps, including almost half of trefoil. Medium-coarse, dark red clay; mf fired rb where not worn or clearly discolored.

Narrow, flat base. Plump ellipsoidal body with multiple contours and a pair of neatly incised lines above Max. D.; short, wide neck; plain rim. Very wide strap handle with three shallow channels along outer length and medial spine from top to rim.

## 698 Medium-sized trefoil jug with compound handle; indet.

P 2280 Meg. 3: S corner
H.-rim 0.257; Max. D. 0.193

Pl. 70; pp. 4, 57, 60, 63, 108, 110, 116-117
Few gaps and chips; trefoil burned. Medium-fine ry clay; surface slipped and polished to low luster (where preserved) and fired variously from clay color to brownish gray.

Low, wide ring foot. Plump ellipsoidal-biconical body; tall neck, rising from pair of sharp, stepped ridges at base; plain rim. Compound handle: U-shaped section on lower shoulder, from which a bowed strut crosses over to upper shoulder; from U-shaped component rises a double-round handle that fuses to a single shaft with knob above attachment to rim; plain, cylindrical bolster across top.

699 Medium-sized trefoil jug; indet.
P 1491 TG pottery depot
H.-rim 0.242; Max. D. 0.234

Pl. 71; pp. 57, 60
Gaps and chips. Fine ry clay; mf, polished to low luster and fired red with darkened, speckled, and clearly discolored areas.

Narrow flat base. Ellipsoidal-biconical body; short neck with slight groove at base; band rim. Double-round handle with shallow finger hollow at base.

For a large version of the shape, cf. 730 .
700 Medium-sized trefoil jug; indet.
P 2743 TB 1: W corner deposit
H.-rim 0.244; Max. D. 0.207

Pl. 71; pp. 57, 60
Intact; most of body burned and vitrified. Medium-fine ry clay; surface polished to medium luster and fired clay color to red where not burned.

Flat base. Broad, irregularly spherical body; narrow neck; plain rim. Thick, rolled handle.

## 701 Medium-sized trefoil jug; indet.

P 2641 TB 3: NW aisle
H.-rim 0.167; Max. D. 0.133

Capac.-neck 840 ml .
Pl. 71; pp. 57, 58, 60, 116-117
Gaps and chips in trefoil; badly burned. Medium-coarse clay, fired ry to red; polished surface, now fired ry to very dark gray.

Flat base. Ovoid body; relatively wide neck with pair of fine ridges at base; wide trefoil with plain rim. Strap handle.

702 Small trefoil jug with stamped decoration; now light P 1839 TB 4: E corner, among large vessels
H.-rim 0.143; Max. D. 0.120

Pl. 71; pp. 57, 58, 59, 60, 66-67, 115, 123, 125, 127, 128, 129, 130
Complete. Fine clay, fired ry to pale brown; slipped surface, polished to medium luster and mottled clay colors with a few darker areas.

Flat base. Ellipsoidal-biconical body; short neck, grooved at base and ridged at midway; rounded rim. Rolled handle, flattened along ext. surface.

On bottom, row of small circle stampings around periphery. Low on shoulder, a row of triangle-zigzag stamping; at top of shoulder, stamped circles like those on the bottom.

P 2015 from the same TB unit (SE aisle) is nearly identical in size and preserved form (neck and handle missing), and has the same pattern of stamping. Cf. also the ambiguous 1021 from the anteroom of the same building.
703 Small trefoil jug with stamped decoration; indet. P 4577 CC 3: W corner, upper fill
H.-rim 0.142; Max. D. 0.116

Capac.-neck 540 ml .
Pl. 72; pp. 57, 58, 60, 66-67, 117, 123, 125, 127, 128
Intact except for chips in trefoil. Fine ry clay; polished surface, now dulled and discolored.

Flat base. Spherical body with multiple contours on shoulder; cylindrical neck with thick, prominent ridge just below trefoil; band rim. Short oval handle, carefully trimmed to a flat ext. surface.

At level of lower handle attachment on shoulder, a zone of triangle-zigzag stamping.

P 2996, a fragment from TB 1, has similar stamping in the same position.

## 704 Medium-sized trefoil jug with stamped decoration;

 now lightP 2310 Meg. 3: S corner
H.-rim 0.246; Max. D. 0.179

Pl. 72; pp. 4, 32, 57, 58, 60, 63, 66-67, 78, 108, 110, 113, $116-117,119,123,125,127,128$
Complete but for a few chips. Fine clay, fired ry to pale brown; wheel- and stroke-polished surface, now practically matte, mottled clay colors plus red with some darkening at top.

Low ring foot. Broad, ellipsoidal body, reverse-bicurved, with double contour on shoulder; very tall, cylindrical neck with series of four ridges rising from base; lightly beveled band rim. Long rope handle composed of three intertwined coils; set across top, a large spool-rotelle with wide, flattened ends pierced at the centers.

On shoulder, just above handle attachment, a low, raised band of triangle-zigzag stamping; motif repeated on a second band at mid-neck.

## 705 Small trefoil jug; Wavy-Line style, indet. P 3056 TB 6: SE aisle

H.-rim 0.118; Max. D. 0.092

Pl. 72; pp. 57, 59, 60, 61, 66, 67, 134, 137, 155, 156
Upper handle and over half of trefoil missing. Mediumfine ry clay; surface polished, but now matte, and mottled clay color to dark red to gray; dark paint.

Spreading ring foot with short stem. Piriform body with wide, flattened plane just below Max. D.; plain-rimmed trefoil with deeply pinched sides. Rolled handle.

Single wavy-line zones on lower and mid-shoulder; two stacked zones of same rising from top of shoulder onto neck.

706 Small trefoil jug; Wavy-Line style, indet.
P 1857 TB 4: SE aisle
H.-rim 0.149; Max. D. 0.115

Pl. 72; pp. 57, 59, 60, 61, 67, 134, 137, 155, 156
Small gaps and chips. Medium-fine, pale brown clay; surface well polished over dark paint to medium luster and fired predom. brownish gray with an area of ry.

Broadly spreading ring foot with short stem. Piriform body with multiple contours; ridge at base of neck; plainrimmed trefoil with sides completely pinched together. Rolled handle.

Three wavy-line zones, spaced from below Max. D. to upper shoulder; two stacked zones of same on neck.
707 Medium-sized trefoil jug; Partial Wavy-Line style with CCs, now buff
P 2397 Meg. 3: S corner
GPH. 0.241; Max. D. 0.210
Pl. 72; pp. 32, 57, 59, 60, 134, 137, 155, 157
Large gaps, including almost all of trefoil; badly burned and in places melted by fire. Medium-fine ry clay; thick slip, well smoothed, fired pale brown where preserved; black paint.

Spreading ring foot. Very broad and plump ellipsoidal body; short neck with small ridge at base. Strap handle with medial spine.

Two wavy-line zones low on shoulder; on mid-shoulder, row of double CCs bordered above and below by zones containing pairs of wavy lines; third zone of double wavy lines at top of shoulder. Two single wavy-line zones on neck.

[^219]surface well polished over dark paint to medium luster and fired clay color.

Ellipsoidal body with finger-width flute just below max. D.; tall, flaring neck with ledge-like ridge at base; plain rim. Rolled handle.

Within flute and just above, two wavy-line zones; shoulder zone of Type 1A triangles with single outline, bordered by wavy-line zone above; another zone of wavy line high on neck; just beneath pinch, on either side of trefoil, a small double CC.

## 709 Medium-sized trefoil jug; TB 8 Group, now tan

## P 3700 TB 8: with 612

Rest. H.-rim 0.196; Max. D. 0.155
Pl. 73; pp. 57, 60, 61, 134, 137, 139, 147, 150, 151, 152, 164
Gaps, including base and large section of lower body. Fine ry clay; polished surface, fired intense tone of clay color; matte black paint.

Approximately spherical body with slight angularity between the upper and lower halves; tall, cylindrical neck; plain rim. Rolled handle with small bolster across top.

On shoulder, two zones of equal height. In the lower, Type 1A triangles with single outline; in the upper, three spaced panels: a solid-barred X-panel bordered by herringbone opposite handle and, to either side, Latticed Panel 1 and Cross-and-Lozenge 4; in intervals between panels, a thick-line single circle. Zone on neck, bordered above by narrow zone of garlands, repeats X-panel of shoulder, one under each pinch. Thick arc outlines contour of trefoil; on int., garlands outline pinches and handle attachment, the last flanked by short vertical lines. Beneath base of handle, two small X-panels; on handle, from bolster to rim, transverse lines with tiny garlands pendent from the lowest.

## 710 Medium-sized trefoil jug; TB 8 Group, indet.

P 3699 TB 8: NW aisle, to NE of cross-wall
H.-rim 0.214; Max. D. 0.156

Pl. 73; pp. 57, 60, 61, 134, 137, 139, 142, 147, 149, 151, 152, 153, 164
Gaps; painting illegible in places. Medium-fine ry clay; slipped surface, polished and now mottled rb to gray; matte black paint.

Flat base. Tall piriform body, bicurved; tall, slightly flaring neck; plain rim. Handle like that on 709.

At and just above max. D., two narrow zones, simple zigzag and wavy-line. Two shoulder zones, divided by wavyline zone and bounded by vertical zones of same to either side of handle. In lower, eight closely spaced panels separated by vertical strips of wavy line: three to $R$ of handle unclear; remaining are Xs of double line with dot filling (three with a small circle around the intersection) and a Cross-and-Lozenge 4. On upper shoulder, a double-line zigzag with legs that alternate two solid and two crosshatched. Wavy-line zone at top of shoulder. On neck, zone with three narrow panels: butterfly opposite handle, flanked by Checkerboard 1A beneath the pinches. On ext. trefoil, narrow row of garlands; on int., pinches outlined by garlands, while spout and handle attachment are accented by vertical lines. Handle transversely banded.

Cf. the ambiguous jugs 805-806, also in the TB 8 Group.

## 711 Small trefoil jug; painted, now buff

P 2538 TB 2: NW aisle, near $W$ corner
H.-rim 0.077; Max. D. 0.089

Pl. 73; pp. 6, 37, 57, 58, 59, 61, 134, 137, 153, 154, 192
Gaps in trefoil and handle. Fine, pale brown clay; micaceous slip, stroke-polished to medium luster and fired clay color; dark rb paint, thickly applied over polish.

Flat base. Ellipsoidal-biconical body, lopsided; relatively wide, abbreviated neck with ridge at base; small, rounded
rim. Rolled handle.
On shoulder, Type 1A triangles, these interrupted opposite handle by a panel containing a checkerboard $X$ with a single dot in each triangular field; to $L$ of handle, vertical strip of herringbone. Three vertical lines in each pinch of trefoil. Handle banded above both attachments.

Cf. 712.
712 Small trefoil jug; painted, now buff
P 2537 TB 2: NW aisle, with 711
H.-rim 0.078; Max. D. 0.089

Pl. 73; pp. 6, 37, 57, 58, 59, 61, 134, 137, 138, 145
Intact. Like 711 in fabric, finish, and paint.
Close in shape to 711.
Two narrow zones on shoulder, separated by thin reserved band: in lower, meander hooks similar to Type 2 but with solid rather than crosshatched bars; Type 1A triangles above. Trefoil and handle treated in same manner as on 711.

## 713 Small trefoil jug; painted, now buff

P 2391 TB 3: in doorway
GPH. 0.119; Max. D. 0.112
Pl. 73; pp. 57, 59, 134, 137, 139, 162
Several gaps, including upper handle and most of trefoil. Fine, pale ry clay; very smooth, matte surface, fired pale brown; matte dark paint.

Spreading ring foot with abbreviated stem. Broad, ellipsoidal body; short neck with ridge at base; plain rim. Rolled handle.

Just below max. D., a wavy-line zone. On shoulder, Type 1B triangles; large chevron spans handle panel. Wavy line on neck.

For the shape, cf. 717.
714 Medium-sized trefoil jug; painted, now buff
P 2855 CC 1 anteroom: $S$ corner, scattered
GPH. 0.134
Pl. 74; pp. 57, 131 (n. 79), 134, 137, 138, 141, 143, 149, 150, 153
Fragment preserving section of shoulder, neck, and trefoil. Medium-fine clay, fired light brownish gray; slipped surface, stroke-polished over dark paint to low luster and fired pale brown.

Tall, narrow neck with thick ridge at base; rounded rim.
Overall thick-line painting with details in finer line. On shoulder, two zones of equal height separated by a narrow reserved band. In lower, several spaced panels, of which parts of three are preserved: Checkerboard 1A flanked on one side by two narrow vertical strips of wavy line and a reserved simple lozenge row; a two-zoned panel with checkerboard below and, above, crosshatched triangles with smaller pendent ones in the fields; latticed panel, each square of which contains an $X$ with a single dot in each field; large intervals between panels filled with randomly placed double CCs. On upper shoulder, Type 1A triangles, with a second vertical strip of reserved simple lozenges flanking the handle panel. On neck, two wavy-line zones.

## 715 Medium-sized trefoil jug; painted, now buff

P 3138 CC 2: NW half
GPH. 0.117

## Pl. 74; pp. 57, 134, 137, 141, 143, 191

Fragment preserving upper shoulder and most of neck/trefoil. Medium-fine brownish gray clay; slipped surface, polished to low luster and fired pale brown; matte dark paint.

Sharp ridge at base of neck and a second at beginning of trefoil; small rounded rim.

Shoulder zone of large Type 1B triangles, bordered below by wavy line zone; large chevron spans handle panel. On neck, simple lozenge row with all blank elements, repeated on smaller scale just above, on lower trefoil.

716 Medium-sized trefoil jug; painted, now red P 4534 CC 3: SE aisle
H.-handle 0.215; Max. D. 0.175

Pl. 74; pp. 32, 57, 60, 117, 134, 137, 138
Small gaps and chips. Medium-coarse red clay; cursorily smoothed surface, fired various shades of red; dark paint.

Thick-walled and heavy. Uneven flat base. Very plump, ovoid body; neck tapers to blunt ridge at midway; plain rim. Short oval handle.

Thick-line painting, carelessly executed. On lower shoulder, broad wavy line enclosed by trios of lines; at top of shoulder, pair of lines with oblique slashes pendent from the lower and a wavy line resting on the upper. Neck ridge accented by band. Rim outlined by a stripe, from which is suspended a row of large garlands. Transverse lines on top of handle.

## 717 Small trefoil jug; painted, indet.

P 1281 CC 2: E corner
GPH. 0.119; Max. D. 0.109
Pl. 74; pp. 57, 59, 60, 134, 137, 156, 190
Small gaps, including front of trefoil; surface pitted and worn. Medium-fine, pale brown clay; slipped surface, polished and fired clay color to pale ry; matte black paint.

Spreading ring foot. Ellipsoidal body; abbreviated neck with blunt ridge at base; plain rim. Rolled handle.

From just below max. D. to base of neck, five narrow zones, each with a row of closely set oblique lines.

For the shape, cf. 713.
718 Small trefoil jug; painted, indet.
P 2414 Meg. 3: along SW wall
Est. H.-h. 0.140; Est. max. D. 0.12
Pl. 74; pp. 38, 39, 57, 60, 134, 139, 142
Badly burned, melted and vitrified. Fine clay, now gray to black throughout; well-polished surface; paint over polish.

Flat base. Ovoid body; tall, cylindrical neck; band-rimmed trefoil with sides completely pinched together. Slender, rolled handle forming broad loop.

Fine-line painting. Type 1A triangles on shoulder, below which is a narrow zone of simple zigzag. On neck, four more zones of simple zigzag, evenly spaced. On int., pendent crosshatched triangles at either side and at handle attachment. On handle, transverse lines above upper attachment.
719 Small trefoil jug; painted, indet.
P 2982 CC 2: NW half
H.-rim 0.115; Max. D. 0.105

Pl. 74; pp. 57, 60, 134, 137, 138, 139, 142, 149, 150, 154, 191
Several small gaps and chips. Medium-fine, pale brown clay with high concentration of very small lime bits; smooth, matte surface, fired predom. ry with areas of clay color; matte dark paint.

Flat base. Plump piriform body; short neck; plain rim. Rolled handle.

Fine-line painting. Tall shoulder zone with three spaced panels of trapezoidal shape, two of Checkerboard 2 and an Oblique Checkerboard 1 ; in both intervals, a compass-drawn, six-petaled rosette inscribed within a circle and left reserved amid crosshatched fields. At base of neck, a narrow zone of zigzag on which stands a crosshatched triangle at each pinch of the trefoil. Three bands on handle.

720 Medium-sized trefoil jug; painted, indet.
P 2398 Meg. 3: S corner
H.-rim 0.247; Max. D. ca. 0.22

Pl. 75; pp. 57, 60, 61, 134, 137, 138, 139, 141
Several gaps; warped by fire; painting partially illegible.
Medium-coarse clay, fired red to ry to gray; slipped and
polished surface, mottled clay colors; matte dark paint
Narrow flat base. Broad, ellipsoidal-biconical body, bicurved; short neck; plain rim. Short strap handle.

Zone on upper shoulder, bordered below by a pendent wavy line that curves upward to base of neck at either side of handle; within, a large Type 3B triangle with the addition of a small crosshatched triangle in each of the lower trapezoidal fields. On neck, a row of garlands pendent from the lower of two lines at base of trefoil. On int., groups of vertical lines at spout and sides. Four groups of transverse lines on handle.

For the shape in monochrome, of. the large 733.
721 Medium-sized trefoil jug; painted, indet.
P 2214 TB 4: N corner area
GPH. 0.223; Max. D. 0.210
Pl. 75; pp. 57, 134, 137, 138, 148, 153, 191, 192
Intact piece; most of trefoil and handle missing. Medium fine ry clay; polished surface, now matte, mottled clay color to red; matte black paint.

Uneven flat base. Broad, depressed ovoid body, bicurved; plain rim. Oval handle.

Large shoulder zone with four widely spaced panels, each bearing a double-line $X$ with crosshatched triangular fields. On neck, a row of running dogs; three lines follow contour of trefoil.

## 722 Medium-sized trefoil jug; painted bichrome-on-

 ground-coatP 2295 Meg. 3: S corner
H.-rim 0.173; Max. D. 0.170

Pl. 75; pp. 38, 57, 60, 134, 137, 138, 149, 150, 151, 152, 192
Gaps, including most of bottom and much of lower body; ground-coat and paint worn and chipped. Fine clay, fired ry to light rb; lower half of body, neck/trefoil, and handle slipped, stroke-polished, and fired clay colors; on upper body, thick white ground-coat, now dingy, applied before slip and lightly polished; matte paints, black and dark red.

Flat base. Broad, ellipsoidal-biconical body, reversebicurved; short neck; small rounded rim. Rolled handle.

Fine, careful painting; black unless red is specified. Large shoulder zone, coterminous with ground-coat, containing large panels and triangular intervals: Cross-and-Lozenge 6; an oblique checkerboard in which every third check is filled and the others single-dotted, those filled alternating red and black vertical rows; Checkerboard 1A in which solid squares alternate black and red; a multiple lozenge formed of intersecting pairs of lines, the intersections red-filled and the lozenges themselves stippled. Single line low on neck, off the ground-coat.

## NARROW-NECKED TREFOIL JUGS, LARGE <br> (723-751)

## 723 Large trefoil jug; indet.

P 2513 Meg. 3: W corner, upside down
H.-rim 0.302; Max. D. 0.277

Pl. 76; pp. 4, 31, 57
Few small gaps and chips. Coarse ry clay with many exploded lime bits in surface; glittery mf , wheel- and strokepolished, mottled red to brownish gray.

Flat base. Ellipsoidal body, well formed; relatively wide neck with thick, trimmed ridge at base; rounded rim. Wide strap handle with deep finger hollow at base.

724 Large trefoil jug; indet.
P 4623 (C. 3: W' corner
H.-rim 0.315; Max. D. 0.270

Pl. 76; p. 57
Gaps. Medium-fine red clay; slipped and polished surface, now matte, fired predom. light red with several other colors.

Flat base. Ellipsoidal body; distinct, ledge-like ridge at base of neck; beveled-band rim, carefully formed. Strap handle, neatly tooled to rectangular section.

## 725 Large trefoil jug; now light

P 1215 CC 1: NW half
H.-rim 0.333; Max. D. 0.322

Pl. 76; pp. 57, 60
Few small gaps. Medium-coarse red clay; heavily micaceous film, unevenly applied, lightly polished and now mottled ry to pale brown with some darker areas.

Flat base. Plump ellipsoidal body; short neck; plain rim. Wide strap handle.

P 1631 from the TG pottery depot is very similar but a little smaller.

## 726 Large trefoil jug; now tan

P 1464 CC 2: SE aisle
H.-rim 0.327; Max. D. 0.310

Pl. 76; p. 57
Several gaps. Medium-coarse, dark red clay; heavily
micaceous film, very worn, polished and fired predom. ry.
Flat base. Ellipsoidal body; band rim. Wide strap handle.

## 727 Large trefoil jug; indet.

P 4630 CC $3:$ N corner
H.-rim 0.380; Max. D. 0.330

Pl. 76; p. 57
Gaps, including most of trefoil. Medium-coarse ry clay; smoothed surface, fired predom. clay color with much staining and discoloration.

Flat base. Ellipsoidal body; unusually tall neek with slight groove at base; upright trefoil, nearly horizontal along top, with band rim. Strap handle rising from high on shoulder.
728 Large trefoil jug; now light
P 1461 CC 2: SE aisle
H.-rim 0.334; Max. D. 0.282

PI. 77; pp. 42, 57, 108
Gaps. Medium-coarse clay, fired ry to pale brown; matte surface, predom. pale brown.

Flat base. Ellipsoidal-biconical body; incised line on neck; beveled-band rim. Wide strap handle with high, thick, medial spine.

## 729 Large trefoil jug with multiple grooving; now tan

P 2253 TB 5: W corner
H.-rim 0.330; Max. D. 0.287

Pl. 77; pp. 57, 59, 113
Small gaps in body; over half of trefoil missing. Medium coarse clay, fired light brown to dark gray; mf, polished to low luster and fired rb with some discolored areas.

Flat base. Ellipsoidal-biconical body, unevenly formed, with series of three broad grooves just below midway on shoulder; flaring neck; lightly beveled band rim. Doubleround handle.

730 Large trefoil jug; indet.
P 1640 TG pottery depot
H.-rim 0.321; Max. D. 0.301

Pl. 77; pp. 57, 60, 108
Small gaps and chips. Medium-coarse clay, fired pale brown to ry; heavily micaceous film, polished and fired ry with darker areas.

Thick-walled and heavy. Raised base, low and narrow.

Ellipsoidal-biconical body; narrow neck with low ridge at base; beveled-band rim. Wide strap handle with finger hollow at base and a medial spine.

For a smaller version of the shape, cf. 699 from the same deposit.
731 Large trefoil jug with multiple grooving; now tan
P 1795 TB 3: NW aisle
GPH. 0.365; Max. D. 0.330
Pl. 77; pp. 32, 42, 57, 60, 108, 109, 114
Several gaps in body; all of trefoil missing. Medium-coarse ry clay; lightly polished surface (and more intensely polished handle), fired pale tone of clay color.

Flat base. Well-formed, ellipsoidal body, bicurved, with series of closely set grooves low on shoulder; narrow neck with sets of grooves at base and midway. Thick, twisted rope handle with short spur at base and flattened "rivet head" at upper attachment.

Cf. 732.

## 732 Large trefoil jug with multiple grooving; now gray

P 3415 Destruction debris to NW of Meg. 4
GPH. 0.200
Pl. 77; pp. 32, 42, 57, 60, 108, 109, 114
Fragment preserving upper body, neck/trefoil, and
handle. Medium-coarse gray clay; surface finished in manner of 731 and fired clay color.

Like 731 insofar as preserved; rounded rim.
P 1672 from CC 2 and P 1770 from TB 3, both poorly preserved, belong to the same group as 731-732.
733 Large trefoil jug; indet.
P 4769 TB 5
H.-rim 0.365; Max. D. 0.321

Pl. 77; pp. 57, 61
Virtually complete. Medium-coarse, light-colored clay; surface slipped and hand-polished, but now matte, and fired predom. ry tones with some darker areas and staining.

Flat base. Broad, ellipsoidal body, bicurved; blunt ridge at base of neck; rounded rim. Strap handle with low medial ridge.
734 Large trefoil jug; indet.
P 2254 TB 5: W corner
H.-rim 0.282; Max. D. 0.288

Pl. 78; pp. 42, 57, 58, 59, 60, 61, 109
Small chips in trefoil. Fine, light brown clay; mf, polished and fired red where not worn or clearly discolored; most of body now dark-speckled.

Flat base. Ellipsoidal-biconical body, bicurved; low ridge at base of neck; plain rim. Strap handle with low medial rise and a small ridge trailing out from either side of base.

P 2255, found with 734, and P 4458 from the anteroom of TB 7 have similar bodies. Cf. also 735 .

## 735 Large trefoil jug; now tan

P 3714 TB 8: against SW wall
H.-rim 0.339; Max. D. 0.310

Pl. 78; pp. 36, 42, 57, 58, 60, 61, 109
Intact. Coarse, pale ry clay; lightly polished surface, fired uniformly clay color.

Flat base, narrow and uneven. Broad, ellipsoidal-biconical body, bicurved; rounded rim. Thick, oval handle with medial spine and finger hollow at base.
736 Large trefoil jug; indet.
P 1638 TG pottery depot
H.-rim 0.323; Max. D. 0.315

Pl. 78; pp. 57, 61
Several small gaps and chips. Coarse clay, light brownish gray; thin, glittery mf, worn, now mottled yr to gray.

Thick-walled and very heavy. Wide, slightly concave base. Broad, ellipsoidal body, bicurved; rounded rim. Wide strap handle with finger hollow at base.

737 Large trefoil jug; now tan
P 1851 TB 4
H.-rim 0.312; Max. D. 0.305

Capac.-neck $10,810 \mathrm{ml}$.
Pl. 78; pp. 57, 58, 59, 61, 109
Intact. Medium-coarse ry clay; mf, polished but now matte, fired yr.

Very uneven, flat base. Broad, ellipsoidal body, reversebicurved, with long shoulder; thick ridge at base of neck; rounded rim. Double-round handle with deep finger hollow at base.

P 1852 and P 1962 from the same TB unit are almost identical in shape; the former is now gray.
738 Large trefoil jug; now light
P 3322 TB 7: NW aisle
H.-rim 0.353; Max. D. 0.340

Pl. 78; pp. 32, 42, 57, 59, 61, 109, 114
Gaps. Medium-fine ry clay; smoothed surface, mottled clay color to red.

Flat base. Very broad, ellipsoidal body, reverse-bicurved; short, tapering neck with thick ridge at base; rounded rim. Strap handle with medial spine that is obliquely notched and outlined by a groove to either side; at base, a small knob, now broken away, while to either side of the handle a thick ridge trails along the body and ends in an enlarged, notched terminal; at upper attachment, a second small knob.

## 739 Large trefoil jug with multiple grooving; now red

P 1942 TB 4: SE aisle
H.-rim 0.33; Max. D. 0.317

Pl. 78; pp. 57, 59, 61, 113
Gaps. Coarse clay, fired predom. red throughout.
Low raised base. Ellipsoidal body with multiple grooving at level of handle attachment; short neck with basal ridge. Double-round handle with small knob at lower attachment.
740 Large trefoil jug; now light
P 4624 CC 3
H.-rim 0.342; Max. D. 0.324

Pl. 79; pp. 57, 59, 61
Virtually complete. Medium-coarse clay; glittery mf, fired very pale brown and other light colors.

Flat base. Plump ellipsoidal body, reverse-bicurved; narrow neck with thick, ledge-like ridge at base; beveledband rim. Strap handle with trimmed edges and fingerwidth, medial channel.

Cf. 741.
741 Large trefoil jug; now gray
P 1639 Meg. 2: main room
H.-rim 0.346; Max. D. 0.323

Pl. 79; pp. 3, 34, 57, 58, 59, 61
Gaps. Polished surface, fired very dark gray.
Like 740 in shape.
Contained 293 astragals; a large trefoil jug found in the storage jar 994 held 494.
$740-741$ are representative of a large, uniform group known through several other examples: P 1463 and P 1466 from CC 2; P 1563 from the TG pottery depot; P 3657 from TB 8; and P 4620 (filled with lentils), P 4622, P 4627, P 4633 from CC 3. Cf. also the earlier 44 and 120.
742 Large trefoil jug; indet.
P 3269 TB 7: along SW wall, to NW of door
H.-rim 0.328; Max. D. 0.323

Capac.-neck $13,910 \mathrm{ml}$.
Pl. 79; pp. 57, 58, 59
Gap in handle; burned and almost vitrified over large
areas. Coarse ry clay; heavily micaceous film, polished and mottled rb to brown where not severely bumed.

Flat base. Broad, ellipsoidal-biconical body, reversebicurved; short neck with thick, carefully trimmed ridge at base; beveled-band rim. Double-round handle.

## 743 Large trefoil jug; indet.

P 1883 TB 3: NW aisle
H.-rim 0.347; Max. D. 0.317

Pl. 79; pp. 32, 57, 59, 60, 61, 97, 109, 114
Gaps. Coarse brown clay; body polished and neck strokepolished over a slip that is now largely fire-damaged and mottled variously from red to gray.

Very uneven, flat base. Broad, ellipsoidal-biconical body, reverse-bicurved, with two sets of incised lines on lower and upper shoulder; narrow neck with thick, obliquely notched ridge at base; rounded rim. Double-round handle with pair of small knobs at upper attachment.

P 1797 from the same TB unit is very similar, including the incised lines and notching on the neck ridge.

## 744 Large trefoil jug; indet.

P 2447 Meg. 3: W corner, upside down
H.-rim 0.336; Max. D. 0.313

Pl. 79; pp. 4, 57, 59, 61, 114
Few small gaps. Medium-fine ry clay; heavily micaceous film, now largely worn, well polished and mottled clay color to red with some darker areas.

Flat base, uneven. Broad, ellipsoidal-biconical body, reverse-bicurved, with sets of lightly incised lines just above max. D. and midway on shoulder; thick, ledge-like ridge at base of neck; beveled-band rim. Double-round handle with long finger hollow at base; at upper attachment, a second finger hollow with raised margins.

P 1633 from the TG pottery depot and P 1676 from CC 2 are very similar in form and detail. Cf. also 745.

## 745 Large trefoil jug with patterned incision; indet.

P 1655 TG pottery depot
H.-rim 0.338; Max. D. 0.314

Fig. 26; Pl. 79; pp. 6, 57, 58, 59, 61, 97, 114, 115
Gaps. Medium-coarse rb clay; mf, polished and fired ry with areas of brownish gray and black.

Very similar to 744 . Low on shoulder, a narrow incised zone of two wavy lines.

Cf. 746.
746 Large trefoil jug with patterned incision; indet.
P 3715 TB 8: SE aisle
H.-h. 0.316; Max. D. 0.292

Pl. 79; pp. 57, 58, 59, 61, 97, 114, 115, 116-117
Large gaps in body; almost all of trefoil missing. Mediumfine ry clay; polished mf, mottled clay color, red and pale brown, with an overall greenish tinge.

Similar in base and body to 744-745; narrow neck with ledge-like ridge at base and two more ridges directly above. Handle like those on 744-745.

On shoulder, at level of lower handle attachment, an incised zone of three wavy lines.

P 1707 from CC 2 is very similar in shape.
747 Large trefoil jug; now light
P 2302 TB 5: NW aisle
H.-rim 0.375; Max. D. 0.292

Pl. 80; pp. 32, 57, 60, 74
Small gap in body. Medium-fine, pale ry clay; mf, polished on body and stroke-polished on neck, mottled ry to rb.

Flat base, narrow. Elongated biconical body; tall, slightly tapering neck; upright trefoil with band rim. Wide strap handle with medial spine.

Cf. 748.

748 Large trefoil jug; indet.
P 4626 CC 3: against NW wall, NE of center
H.-rim 0.352; Max. D. 0.311

Pls. 80, 103 (with the lid 856); pp. 57, 58, 60, 74
Gaps. Medium-fine clay, red to light red; smoothed surface, fired predom. ry with some darker areas and staining, and now largely covered by a gritty encrustation.

Flat, uneven base. Similar in shape to 747; handle lacks spine.

Contained animal bones. P 4625 from the N corner of the same TB unit is very similar. For the shape in a smaller size, cf. 689-690.

## 749 Large trefoil jug; now gray

P 1291 CC 1: NW half
H.-rim 0.316; Max. D. 0.293

Pl. 80; pp. 34, 57, 60
Gaps. Medium-coarse gray clay; smoothed surface, mottled various shades of gray.

Flat, somewhat uneven base. Spherical body; low ridge at base of neck; band rim with a pair of receding fasciae below. Strap handle, grooved so as to look like a double-round.

P 3117 from TB 6 is almost identical in shape; P 1299 from CC 1 is very similar.

## 750 Large trefoil jug; now tan

P 3116 TB 6: against NW wall
H.-rim 0.322; Max. D. 0.285

Pl. 80; p. 57
Gaps. Medium-fine, pale rb clay; glittery mf, polished and fired clay color.

Flat base. Well-formed spherical body; band rim. Strap handle.

## 751 Large trefoil jug; painted dark-on-ground-coat

P 1878 TB 4: SE aisle, SW of center
H.-rim 0.340; Max. D. 0.306

Pl. 80; pp. 38, 39, 57, 58, 61, 134, 137, 139, 141, 148, 191
Small gaps and chips; upper part of handle missing; ground-coat and paint worn. Medium-coarse, dark rb clay; on lower body, dark red slip, matte; the rest covered with a thick white ground-coat, now dingy; matte black paint.

Flat base. Broad, ellipsoidal-biconical body; short neck; rounded rim. Strap handle.

Thick-line painting, on ground-coat only. Just above max. D., a pair of narrow, stacked zones, each with a row of hooked lambdas. Tall shoulder zone of Type 1A triangles with single outline. Lines on neck; a crosshatched triangle in each of the pinches.

P 4578 from the anteroom of TB 7 is the only other painted example of a large trefoil jug from the Destruction Level; ground-coated like 751, the jug is badly burned and preserves no traces of decoration.

## WIDE-MOUTHED TREFOIL JUGS

(752-782)

## 752 Wide-mouthed trefoil jug; indet.

P 1551 TG pottery depot
H.-rim 0.085; Max. D. 0.116

Capac.-neck 450 ml .
Pl. 81; pp. 33, 61, 63, 182
Complete except for some chips and a small gap in trefoil. Fine, pale brown clay; heavily micaceous film, polished to medium, glittery luster and now mottled rb to brownish gray.

Thin-walled and light. Flat base. Ellipsoidal body. Rolled handle.

Three other jugs from the same context are very similar in size, fabric, and shape: P 1547, P 1548 (Capac.-neck 440 ml .), and P 1549. Cf. also 753-754.
753 Wide-mouthed trefoil jug; indet.
P 1499 TG pottery depot
H.-rim 0.106; Max. D. 0.134

Capac.-neck 780 ml .
Pl. 81; pp. 61, 63, 182
Small gaps in body. Fine clay, fired brown to gray; mf, polished to low luster and mottled $r b$ to brownish gray.

Thin-walled. Very similar in shape to 752, but somewhat larger; rounded rim.

One of five very similar jugs, all from the TG depot, that compose a medium-sized category between 752 and 754 , the others being P 1730-P 1733. The capac. of P 1731 is 970 ml ., that of P 1732 is 930 ml . Others from the deposit that are similar in size and form include P 1497 (now gray), P 1546, P 1550 , and P 1571.

## 754 Wide-mouthed trefoil jug; indet.

P 1501 TG pottery depot
H.-rim 0.160; Max. D. 0.196

Pl. 81; pp. 61, 62, 63, 182
Gaps; handle splintered. Fine clay, fired ry to gray; mf, stroke-polished to low luster and mottled clay colors to black.

Thin-walled. Similar to $\mathbf{7 5 2 - 7 5 3}$ except in reversebicurved profile and considerably greater size.

755 Wide-mouthed trefoil jug; now tan
P 1861 TB 4: SE aisle, SW of center, between large vessels
H.-rim 0.060; Max. D. 0.075

Pl. 81; pp. 32, 55, 61, 62, 63
Small gaps. Fine ry clay; surface polished to medium luster and fired clay color.

Thin-walled and light. Narrow, flat base. Ellipsoidal body; plain rim. Triangular-sectioned handle.

Cf. 781 for a close counterpart in painted ware.
756 Wide-mouthed trefoil jug; now gray
P 2333 Meg. 3: along SW wall, to NW of center
H.-rim 0.069; Est. max. D. 0.11

Pl. 81; pp. 34, 61, 62, 63
Intact; about half of body vitrified. Medium-fine gray clay; surface polished over mf to medium luster and fired gray to black.

Thin-walled. Ring foot, low and narrow. Ellipsoidal body; ridge at base of neck/trefoil; plain rim. Rolled handle with tiny bolster across top.
757 Wide-mouthed trefoil jug; indet.
P 1541 TG pottery depot
H.-rim 0.082; Max. D. 0.102

Pl. 81; pp. 61, 62, 63, 108
Small gaps. Fine ry clay; mf, polished to medium luster and fired clay color with darker areas.

Thin-walled and light. Ring foot, low and narrow. Wellformed ellipsoidal body; fine ridge at base of neck/trefoil; beveled rim. Relatively thick, rolled handle, side-attached and neatly squared off below.

Cf. 758.
758 Wide-mouthed trefoil jug; indet.
P 3120 TB 6: SE aisle, with 449 and 554.
H.-rim 0.099; Max. D. 0.112

Capac.-neck 480 ml .
Pl. 81; pp. 61, 62, 63, 108
Gap in trefoil; badly burned body, nearly vitrified at bottom. Fine clay, dark red to gray; surface mottled red to black.

Very similar to 757 in shape and details; handle heavier in relation to size of body.

P 1316 (CC 1) is very similar in shape to 757-758, but it lacks the side-attached handle and is also considerably larger (Capac.-neck 1370 ml .).

## 759 Wide-mouthed trefoil jug; indet.

P 1286 CC 2: E corner
H.-rim 0.105; Max. D. 0.127

Pl. 82; pp. 32, 61, 62, 63
Several gaps, including most of handle. Fine ry clay; slipped surface, lightly polished and fired brighter tone of clay color amid darker patches.

Thin-walled and light. Very narrow, slightly spreading ring foot. Ellipsoidal body, broader from front to back than from side to side; relatively high neck/trefoil with small ridge at base; plain rim.

Cf. the round-mouthed jug 568.
760 Wide-mouthed trefoil jug; indet.
P1216 CC 1: NW half
H.-rim 0.170; Max. D. 0.190

Pl. 82; pp. 61, 62, 63
Gaps. Medium-fine ry clay; surface polished over mf to medium luster and mottled clay color to red with a few darker patches.

Wide, flat base. Well-formed ellipsoidal body; relatively narrow neck; band-rimmed trefoil with relatively narrow spout. Rolled handle.

P 2450 from Meg. 3 is very similar in size and form.
761 Wide-mouthed trefoil jug; indet.
P 1552 TG pottery depot
H.-rim 0.106; Max. D. 0.123

Pl. 82; pp. 33, 57, 61, 63
Small gaps. Fine, pale brown clay; heavily micaceous film, polished to medium luster and fired ry to brownish gray to dark gray.

Thin-walled. Low ring foot. Well-formed ellipsoidal body; relatively narrow neck; pronounced trefoil, broadly outturned at front and back. Rolled handle.

P 1502 from the same context is very similar in form, yet larger (H.-rim 0.154 ) and now gray.

## 762 Wide-mouthed trefoil jug; indet.

P 1498 TG pottery depot
H.-rim 0.114; Max. D. 0.138

Pl. 82; pp. 55, 61, 62, 63
Small gaps and chips. Fine clay, fired pale brown to gray; surface polished to medium luster and fired clay colors to black.

Thin-walled and light. Very low disk foot. Plump ellipsoidal body with multiple contours; plain-rimmed trefoil with wide spout at front. Triangular-sectioned handle.

P 1540 from the same context is very similar but a little smaller. P 2370 and P 2684 from Meg. 3 are almost identical to 762 in shape and fabric, including the triangular handle; P 2370 contained Ziziphora seeds. Cf. also 763.

## 763 Wide-mouthed trefoil jug; indet.

P 2298 Meg. 3: S corner
H.-rim 0.127; Max. D. 0.145

Capac.-neck 1120 ml .
Pl. 82; pp. 32, 55, 61, 63
Few small gaps in body. Medium-fine ry clay; polished surface, mottled clay color to brownish gray.

A somewhat less refined version of 762; low ring foot instead of a disk.

764 Wide-mouthed trefoil jug; indet.
P 2682 TB 5
H.-rim 0.073; Max. D. 0.083

Pl. 82; pp. 55, 61, 62, 63, 188
Gaps, including most of handle. Fine ry clay; slipped surface, lightly polished and fired brighter tone of clay color with darker patches.

Thin-walled and light. Ridge-ring foot. Squat ellipsoidal body with multiple, flattened contours; distinct neck rising smoothly from shoulder; plain rim. Handle apparently rolled.

Cf. 765.
765 Wide-mouthed trefoil jug; now red
P 3420 TB 7: NW aisle, floating
H.-rim 0.123; Max. D. 0.130

Capac.-neck 830 ml .
Pl. 82; pp. 36, 55, 61, 63, 188
Few small gaps. Fine ry clay; mf, polished to medium luster, fired red, and streaked with clay color.

Very low, raised base. Body similar to that of 764; thick ridge at base of neck; plain rim. Rolled handle, relatively thick.

P 3089 from CC 2 is similar (Capac.-neck 560 ml .).
766 Wide-mouthed trefoil jug; now gray
P 1495 NW storeroom behind Meg. 1
H.-rim 0.084; Max. D. 0.105

Capac.-neck 340 ml .
Pl. 82; pp. 34, 61, 63
Small gap and chips in trefoil. Fine gray clay; polished mf surface, fired black.

Thin-walled. Flat base. Ellipsoidal-biconical body. Rolled handle.

P 1496 and P 1539 from the same unit are similar in fabric and shape but lighter in color. P 2687 from Meg. 3 is practically identical in shape; cf. also K-III 25.
767 Wide-mouthed trefoil jug; now red
P 2941 CC 1: along NE wall, NW of door
H.-rim 0.155; Max. D. 0.174

Pl. 82; pp. 36, 61, 62, 63
Few gaps. Fine clay, fired ry to rb; mf, polished to medium luster and fired red.

Thin-walled. Flat base, uneven. Broad, ellipsoidalbiconical body; lightly beveled rim. Thick, rolled handle.

768 Wide-mouthed trefoil jug; now gray
P 2353 Meg. 3: along SW wall, to NW of center
H.-rim 0.082; Max. D. 0.104

Pl. 83; pp. 34, 61, 63
Complete; about half of body vitrified. Fine gray clay; surface polished over mf to medium luster and fired black where not vitrified.

Thin-walled and light. Flat base. Ellipsoidal body, reversebicurved. Rolled handle.

P 2352, also from Meg. 3, is similar in fabric and shape.
769 Wide-mouthed trefoil jug; now buff
P 2318 Meg. 3: against SW wall, in or near S corner
H.-rim 0.093; Max. D. 0.117

Capac.-neck 480 ml .
Pl. 83; pp. 33, 36, 61, 63
Intact. Fine, pale ry clay; heavily micaceous film, largegrained and very glittery, polished over stroke-polishing and fired pink; film substance used as a wash on int.

Thin-walled and light. Abbreviated, flattened ring foot. Ellipsoidal body, reverse-bicurved; offset, rounded rim. Rolled handle.

770 Wide-mouthed trefoil jug; now tan
P2251 TB5: NW' aisle
H.-rim 0.116; Max. D. 0.140

Capac.-neck 780 ml .
Pl. 83 ; pp. $5,36,61,62,63$
Complete. Medium-fine ry clay; mf, polished to low luster and fired brighter tone of clay color.

Flat base, uneven. Ellipsoidal body, reverse-bicurved; abbreviated neck; plain-rimmed trefoil with wide spout. Rolled handle.

Contained four astragals.

## 771 Wide-mouthed trefoil jug; indet.

P 2415 Meg. 3: along SW wall, over wooden beam bed, beside 688
H.-rim 0.177; Max. D. 0.197

Pl. 83; pp. 4, 61, 62, 63
Gaps. Fine clay, fired pale brown to brownish gray; mf, polished to low luster and mottled red to rb to brownish gray.

Thin-walled and light. Uneven, flat base. Broad, ellipsoidal body, reverse-bicurved; abbreviated neck; small band rim. Rolled handle.

P 2377 and P 2416, found not far from 771, are very similar in fabric, coloration, and shape.

## 772 Wide-mouthed trefoil jug; now tan

P 2221 TB 4: NW aisle
H.-rim 0.095; Max. D. 0.106

Capac.-neck 350 ml .
Pl. 83; pp. 61, 62, 63
Intact. Medium-fine, pale ry clay; heavily micaceous, glittery film, polished and fired brighter tone of clay color.

Flat base. Ellipsoidal-biconical body, reverse-bicurved; broadly outturned trefoil with plain rim. Rolled handle.

773 Wide-mouthed trefoil jug; indet.
P1275a CC 2: E corner
H.-rim 0.102; Max. D. 0.108

Pl. 83; pp. 61, 63
Small gaps. Medium-fine ry clay; mf, polished to low luster and fired clay color to dark red to gray.

Flat base. Biconical body; rounded rim. Relatively thick, rolled handle.

Contained a lid (P 1275b) that does not fit the pot.

## 774 Wide-mouthed trefoil jug; now tan

P 1934 TB 4: along SE wall, near E corner, in area of small grinding stand
H.-rim 0.134; Max. D. 0.145

Pl. 83; pp. 61, 63
About a third of trefoil missing. Medium-coarse, pale brown clay; mf, now mostly worn away to expose clay ground, polished to medium luster and fired rb.

Relatively thick-walled. Flat base (pot does not stand alone when empty). Broad, biconical body; low ridge at base of neck; plain rim. Strap handle.
775 Wide-mouthed trefoil jug; indet.
P 4550 CC 3: beside door, to NW
H.-rim 0.161 ; Max. D. 0.158

Pl. 83; pp. 57, 61, 62, 63, 116, 122
Gap in trefoil. Fine, light-colored clay; mf, polished to low luster and fired red amid darker areas and staining.

Flat base, narrow. Biconical body; distinct neck, slightly tapering, with pronounced, ledge-like ridge at base; trefoil with neatly beveled rim and a low, applied boss within each pinch. Double-round handle.

776 Wide-mouthed trefoil jug with cut-out handle; indet.
P 2354 Meg. 3: along SW wall
H.-rim 0.191; Max. D. 0.193

Pl. 84; pp. 4, 57, 61, 62, 63, 108, 110, 122-123, 190
Gaps. Fine clay, light brown to gray; heavily micaceous film, polished to medium luster and mottled rb to brownish gray to dark gray.

Low, narrow ring foot with wide resting surface. Wellformed spherical body; relatively tall neck/trefoil with thick ridge at base; lightly beveled rim. Strap handle, neatly trimmed to a rectangular section; carefully cut-out rectangular strips, two on ext. and one above attachment to rim; at top, a bolster with enlarged, flattened ends.

777 Wide-mouthed trefoil jug; indet.
P 2297 Meg. 3: S corner
H.-rim 0.120; Max. D. 0.135

Pl. 84; p. 61
Few small gaps; handle nearly vitrified; slip worn and
peeled. Fine ry clay; slipped surface, polished to low luster and fired rb with darker patches.

Thin-walled and light. Flat base. Depressed ovoid body; lightly beveled rim. Rolled handle.

778 Wide-mouthed trefoil jug; Wavy-Line style, indet.
P 2247 TB 4: NW aisle, perhaps fallen from above
H.-rim 0.132; Max. D. 0.148

Pl. 85 ; pp. 61, 62, 63, 134, 137, 155, 156
Gaps in trefoil. Medium-fine ry clay; surface polished, but practically matte, and now mottled pale brown to brownish gray; matte dark paint.

Very low ring foot with wide resting surface. Ellipsoidal body; ledge-like ridge at base of neck; plain rim. Triangularsectioned handle.

From low on body to top of shoulder, six narrow wavy-line zones, evenly spaced and neatly executed. Wavy line on neck.
779 Wide-mouthed trefoil jug; Wavy-Line style, indet. P 3689 TB 8: SE aisle
H.-rim 0.111; Max. D. 0.123

Pl. 85; pp. 61, 62, 63, 134, 137, 155, 156, 188
Several gaps. Medium-fine ry clay; thin slip, polished but with little luster, fired clay color to pale brown to gray with an overall greenish tinge; matte black paint.

Base like that on 778 . Ellipsoidal body with multiple contours; ridge at base of neck; plain rim. Rolled handle.

Three closely spaced wavy-line zones from max. D. to top of shoulder; a fourth on neck.

## 780 Large wide-mouthed trefoil jug; Partial Wavy-Line

 style, indet.P 1272 CC 1: NW half
H.-rim 0.241; Max. D. 0.262

Pl. 85; pp. 61, 62, 63, 107, 134, 137, 155, 157
Small gaps and chips. Fine ry clay; slipped surface, polished to medium luster and fired clay color to rb ; matte black paint.

Spreading ring foot. Very broad, ellipsoidal-biconical body; abbreviated neck; plain-rimmed trefoil with wide spout. Thick strap handle with medial spine and finger hollow at base.

Two stacked zones of wavy lines, triple and double, from max. D. onto lower shoulder; on upper shoulder, Type 1A triangles with single outline.

P 2774, a very fragmentary jug from $T B 1$, is similar in size, shape, and decoration.

781 Wide-mouthed trefoil jug; painted, indet.
P 2394 Meg. 3: along SW wall
GPH. 0.102; Max. D. 0.130
Fig. 26; pp. 61, 62, 63, 134, 137, 139
Gaps in body; most of trefoil and handle missing. Fine clay, now gray; surface now totally blackened.

Ridge-ring foot. Ellipsoidal body; low ridge at base of neck. Handle apparently triangular-sectioned.

Wavy-line zone below max. D.; on shoulder, a zone of Type 1B triangles, bordered above by wavy-line zone; traces of painting on neck.

782 Wide-mouthed trefoil jug; painted, indet.
P 2240 Destruction debris over Terrace, behind TB 2-4 Est. max. D. 0.14
Pl. 85; pp. 6, 37, 61, 62, 134, 137, 140
Fragments preserving profile from low on body into trefoil, including base of handle. Medium-fine clay, pale brown to ry; slipped surface, smoothly polished but matte, mottled clay colors; matte dark paint and apparently a diluted version of same.

Large shoulder zone consisting of six stacked zigzags of double line, each filled with dilute paint; vertical lines flank handle panel.

## The Destruction Level: Miscellaneous Jugs

783 Narrow-necked jug with round mouth; indet.
P 3695 TB 8: SE aisle, among large trefoil jugs
H.-rim 0.279; Max. D. 0.207; D. rim 0.077

Pl. 86; pp. 64, 109, 117, 188
Gaps in neck and rim. Medium-coarse clay, fired ry to red; slipped, matte surface, now mottled variously from ry to brown with much staining and other discoloration.

Low ring foot, appearing as a raised base in profile. Ovoid body; narrow neck with a series of low, wide ridges beginning just above base; beveled-band rim, flaring. Short strap handle from mid-shoulder to mid-neck; finger hollow at base; short cylindrical knob set upright at top.

## 784 Narrow-necked jug with round mouth; now gray

 P 2452 Meg. 3: NW aisleGPH. 0.071 ; D. rim 0.082
Fig. 27; Pl. 86; pp. 4, 34, 64, 65, 110, 111, 116-117, 188
Fragment preserving neck, rim, and upper handle; part of rim vitrified. Medium-fine, dark gray clay; smooth, polished surface, now almost matte, fired predom. very dark gray to black.

Presumably similar in size to 783. Narrow neck, carinated at midway, with a pair of neatly tooled ridges at base; offset rim with flattened face and int. ledge; near base of neck on int., a second ledge. Rolled handle, flattened out at attachment to face of rim and squared off to create a pair of angular, flanking horns; across top, a cylindrical bolster with deep transverse grooves.

## 785 Narrow-necked jug with round mouth; painted, now buff

P 4583 CC 3: W corner, floating
GPH. 0.269; Max. D. 10.245; Est. D. rim 0.08
Pl. 86; pp. 64, 110, 134, 137, 138, 139, 148, 188
Base and lower body missing; several other gaps. Fine red clay; slipped surface, well polished but now almost matte, fired predom. light brown; matte black paint.

Ellipsoidal body, broad and plump; tall neck with low ridge at base; everted rim above a blunt ridge. Strap handle attaching to upper neck; to either side at top, flattened disks connected by a transverse ridge, giving impression of a true spool-rotelle.

Below max. D., narrow zone of pendent garlands underneath a somewhat wider zone of Crosshatching 1 , the latter overlapping itself beneath the handle. On upper belly and shoulder, two large zones of Type 1A triangles, the lower topped by a narrow zone of oblique lines. On neck, a zone of vertical ladders; just below rim, a sloppy zigzag. Broad bands
on handle, to either side of the false rotelle, whose disks are solidly painted.

## 786 Narrow-necked juglet with round mouth; vitreous

 glazeG 224 TB 4: along SE wall, inside a medium-sized trefoil jug
H.-h. 0.089; Max. D. 0.062

Pl. 86; pp. 64 (n. 35), 188
Intact. Fine, pale brown clay with some mica; purple glaze, now dull and largely discolored.

Essentially piriform body; round-bottomed and almost hemispherical up to a low-set, blunt carination, above which the profile is steeply sloping and slightly convex; narrow, cylindrical neck rising from a prominent, inset ledge; small, rounded rim. Short, rolled handle from top of body to rim.

Glaze apparently covers the entire ext., except on the handle, where the substance was applied in wide, transverse stripes against the clay ground.

## 787 Spouted jug; indet.

P 2461 Meg. 3: S corner
Max. H. 0.177 (to top of spout); Max. D. 0.152
Pl. 87; pp. 4, 39, 64, 65, 108, 110, 188
Gaps. Fine clay; polished surface with mf , fired red to black with various colors in between.

Flat base. Ellipsoidal body; narrow neck; trough spout, pulled out and up at front. Rolled handle, side-attached with tapered end; transversely grooved bolster set just below top, toward attachment to broadly splayed rim.
788 Spouted jug with multiple grooving and ridging; now tan
P 2908 TB 1 anteroom: inside large vessel against NW wall, with 596 and 891
H.-h. 0.152; Max. D. 0.137

Capac.-neck 650 ml .
Pl. 87; pp. 6, 32, 64, 65, 113, 114, 117, 119, 137, 148, 149, 152. 188
Neck and rim broken away around top. Medium-fine, light brown clay; surface polished to low luster and fired rb.

Flat base. Broad, ellipsoidal-biconical body with two sets of multiple grooves at lower and upper shoulder; narrow, cylindrical neck with series of multiple ridges made on raised bands at base and top. Strap handle, shallowly concave along ext. face; the grip's clear attachment to the top of the mouth and the higher break line of the neck suggest a spouted rather than a plain round mouth.

789 Spouted jug; painted, now buff

## P 1779 TB 2: N comer

H.-h. 0.134; Max. D. 0.111

Fig. 27; Pl. 87; pp. 6, 39, 64, 65, 134, 137, 138, 188
Few small gaps; surface fire-damaged; much of painting illegible. Fine clay, fired pale brown to light gray; surface polished but matte and fired clay color where not damaged by fire; matte dark paint.

Low disk foot. Ellipsoidal body, somewhat unevenly formed; short, narrow neck, drawn out at front into a long, U-sectioned trough spout; small, rectangular bridge near base. Slender oval handle.

Fine-line painting. Two stacked zones of panels on shoulder, clear only in an area to $L$ of handle: in the lower, panels of Checkerboard 1A and Crosshatching 1; in upper, a solid-barred $X$ and another Checkerboard 1A. Thick line at base of neck and another at top; line along top edge of neck and spout. Transverse bands on ext. spout; wavy line on bridge. Along ext. handle, three longitudinal lines; transverse bands from top to attachment to rim.

## 790 Jug, probably spouted; Wavy-Line style, now tan

 P 2773 TB 1: floatingGPH. 0.110; Est. max. D. 0.19
Pl. 87; pp. 6, 64, 65, 134, 137, 155, 156, 188
Fragment preserving upper body, base of neck, and handle attachment. Fine ry clay; surface polished to medium luster and fired ry to light brownish gray; matte black paint.

Body possibly ellipsoidal; narrow neck. Vertical handle rises from lower shoulder. Small rolled strut, attached high on shoulder opposite handle, probably served as support for a long spout.

At max. D., wavy line standing on straight line. On lower, mid-, and upper shoulder, three spaced zones, each containing three to four wavy lines.
791 Miniature jug with side-spouts; indet.
P 4362 TB 7 anteroom
GPH. 0.043; Max. D. 0.051
Pl. 88; pp. 29, 65, 187-188
Spouts and all but lower stub of handle missing; neck
broken away, and the break line apparently smoothed, in antiquity. Medium-fine red clay; slipped surface, smoothed, now discolored and damaged.

Narrow flat base. Ellipsoidal-biconical body; narrow neck. Rolled handle rising from low on shoulder. At $90^{\circ}$ to $L$ of handle and opposite handle at max. D., two holes, both pierced before firing; that nearer the handle is clearly at the base of a spout, as is evident from the surrounding scar, and the other also appears to have had a spout attached.

Cf. the handmade 422.

## 792 Jug with duofoil mouth; indet.

P 1319 CC 2: E corner, with 832
H.-rim 0.112; Max. D. 0.126

Pl. 88; pp. 65, 187-188
Gaps. Medium-fine clay, fired light brown with gray core; polished surface, now mottled clay color to light gray.

Uneven flat base with flattened ridge around periphery. Ellipsoidal body, reverse-bicurved; wide neck with ridge at base; outward-thickened rim, pushed in opposite handle to form two pouring channels. Rolled handle.

## 793 Ring-shaped jug; painted, indet.

P 2490 TB 4 anteroom
H. 0.158 ; L. 0.122 ; W. 0.102

Pl. 88; pp. 5-6, 65, 74, 134, 188
Gaps, including most of mouth. Medium-fine clay, fired ry to gray; slipped surface, polished to a low luster and fired clay colors; matte dark paint.

Essentially a ring vase like TumP 68 that has been compressed and doubled over; flattened on either side at bottom. On top of one end, a narrow neck; curve of preserved rim suggests either a spouted or a trefoil mouth. Short rolled handle spanning the halves.

Closely set longitudinal lines along the coils of the body. Encircling lines around shoulder and, with addition of a wavy line, around the handle base. On neck, two stacked zones of triangles.

## The Destruction Level: Ambiguous Jugs <br> (794-810)

794 Small jug with cut-out handle; indet.
P 1294 CC 2: E comer
H.-h. 0.151; Max. D. 0.120

Pl. 89; pp. 5, 66, 108, 122, 190
Small gaps in body; almost all of neck and rim missing (there is no basis for the plaster restoration). Fine brown clay; surface polished to low luster and now mottled rb to dark brown.

Flat base. Piriform-biconical body; short neck with ridge at base; rounded rim. Strap handle with central strip cut out along entire length, thus leaving two parallel shafts square in section; at top, a bridge with three conical knobs.

Contained bundled-up cloth.

## 795 Small jug with angular contours; indet.

P 2021 TB 4: SE aisle
GPH. 0.081; Max. D. 0.097
Pl. 89; pp. 60, 66, 188
Gaps; broken away above shoulder; slip peeled. Medium-
fine, light brown clay; slipped surface, now fired yr to gray.
Broadly spreading ring foot with short stem. Angular body in three straight planes; narrow neck. Handle rising from low on shoulder.

P 2022 from the same TB unit, also missing the neck, is very similar in shape but larger.

## 796 Small jug with stamped decoration; now red

 P 3058 TB 6GPH. 0.085; Max. D. 0.130
Pl. 89; pp. 58, 66-67, 123, 125, 127, 128
Intact piece, broken away at base of neck; lower handle stub. Medium-fine ry clay; glittery mf , polished to low luster and fired red with darker areas.

Narrow flat base. Broad, ellipsoidal-biconical body, bicurved; narrow neck with ridge at base. Rolled handle.

On lower and upper shoulder, two double zones of tri-angle-zigzag stamping, bordered and divided by deep, carefully executed grooves.

797 Small jug; Wavy-Line style, now buff
P 1189 CC 2: SE half
GPH. 0.125; Max. D. 0.129
Pl. 90; pp. 61, 67, 134, 137, 155, 156
Neck and all but base of handle missing. Fine, light ry clay; surface polished, but now matte, and fired uniformly very pale brown; matte black paint.

Low, spreading ring foot. Broad, ellipsoidal-biconical body; narrow neck.

Lines at max. D. Covering shoulder, four closely spaced wavy-line zones; narrow zone of sloppy dashes at base of neck.

798 Small jug; Wavy-Line style, indet.
P 3666 TB 8: SE aisle
GPH. 0.095; Max. D. 0.108
Pl. 90; pp. $61,67,134,137,155,156$
Small gaps in body; neck and all but lower stump of handle missing. Medium-fine red clay; polished surface, mottled red to rb ; matte dark paint.

Spreading ring foot with high, vertical edge and abbreviated stem. Broad ellipsoidal body, approaching piriform; narrow neck with ridge at base. Rolled handle.

From max. D. to base of neck, six stacked zones of wavy lines.

P 3419 from TB 7 is similar in shape and decoration.
799 Medium-sized jug; Partial Wavy-Line style with CCs, indet.
P 2952 CC 1: along NE wall, NW of door
GPH.-h. 0.234; Max. D. 0.217
Pl. 90; pp. 66, 134, 137, 155, 157
Most of neck and upper handle missing; other gaps.
Medium-fine ry clay; surface polished over dark paint to medium luster and fired clay color to red to pale brown.

Uneven flat base with peripheral ridge. Plump ellipsoidal body with multiple contours; narrow neck with low ridge at base. Oval handle.

Pairs of spaced wavy-line zones at max. D. and upper shoulder; in large field between, a row of tangent, quintuple CCs whose lines alternate thick and thin.

## 800 Medium-sized jug; Partial Wavy-Line style with triangles, indet.

P 2881 Meg 4
GPH. 0.184; Max. D. 0.200
Pl. 90; pp. 66, 134, 137, 155, 157
Large gaps in body, including most of base; neck and all but lower stub of handle missing. Fine ry clay; surface polished over dark paint to medium luster and fired clay color to pale brown.

Presumably spreading foot. Broad ellipsoidal body; moderately wide neck with thick ridge at base. Oval handle rising from mid-shoulder.

From max. D. onto upper shoulder, single, doublestacked, and triple-stacked wavy-line zones; on upper quarter of shoulder, a zone of Type 1A triangles with single outline. Wavy-line zone low on neck.

## 801 Medium-sized jug; Fine-Line Buff ware

P 1224 CC 2: SE half
GPH. 0.159; Est. max. D. 0.15
Pl. 90; pp. 66, 67, 134, 137, 139, 141, 143, 159
Large gaps in body; upper neck and all but lower stub of handle missing. Fine, pale brown clay; very smooth, matte surface, fired clay color with some darker areas; matte dark paint.

Flat base. Ellipsoidal body; tall, narrow neck, tapering. Rolled handle rising from high on shoulder.

Fine, carefully executed painting. From max. D. to top of shoulder, tall zone with three large panels; each contains
four vertical strips of simple lozenges, the two at the $L$ crosshatched, those at the $R$ solid. Similar motif repeated at smaller scale in three panels on neck, with two to three lozenge strips in each, that at the $L$ in each panel solid and the others crosshatched. Below handle, a short row of Type 3A triangles.

802 Medium-sized jug; Ladders-and-Zigzags style, indet. P 3734 TB 8 anteroom: along NE wall, just to NW of door H.-h. 0.232; Max. D. 0.249

Pl. 91 ; pp. 61, 66, 67, 109, 134, 137, 149, 153, 157, 160, 161
Small gaps in body; neck broken away in antiquity and recut to an off-center opening 0.065 wide. Medium-fine, light brown clay; surface polished to low luster and mottled ry to red; dark paint.

Low, narrow ring foot with broad resting surface. Very broad ellipsoidal body; short, narrow neck. Short handle, faceted to a polygonal section, attached to top rear of neck; from base, a pair of short, thick ridges trail obliquely to terminate in enlarged, flattened knobs.

On belly, narrow zone of single-line, contiguous X-panels. On shoulder, two zones of equal height separated by watyline zone. In lower, five spaced panels: two in which horizontal rows of solid simple lozenges are separated by a simple zigzag or straight lines; Checkerboard 1 A ; ladders-and-zigzags; and a panel of horizontal wavy-line zones. On upper shoulder, Type 1A triangles. Below handle, and within the arc formed by the trailing ridges, a set of hand-drawn concentric semicircles.

Cf. 803-804.

## 803 Medium-sized jug; Ladders-and-Zigzags style, indet.

P 4584 CC 3: along NE wall, to NW of door
H.-h. 0.234; Max. D. 0.248

Fig. 28; Pl. 91; pp. 61, 66, 67, 134, 137, 139, 157, 160, 161
Gaps in body; most of neck and rim broken away. Medi-um-fine clay; polished and once lustrous surface with some fine mica, now darkened and damaged by fire; matte paint, preserved largely as ghost lines.

Much like 802 in shape and formal details; short neck.
From max. D. to top of shoulder, two large zones of roughly equal height, divided by narrow wavy-line zone. In the lower, spaced panels of Checkerboard 1A, horizontal wavy-line zones, ladders-and-zigzags, and one containing three horizontal rows of solid lozenges. Type 1A triangles on upper shoulder. Narrow wavy-line zones on neck. Below the handle trails, a set of hand-drawn concentric semicircles, in which every other interval is filled with zigzag or laddering.

804 Medium-sized jug; Ladders-and-Zigzags style, indet. P 1297 CC 1: NW aisle
GPH. 0.222; Max. D. 0.265
Fig. 29; Pl. 91; pp. 39, 61, 66, 67, 108, 134, 137, 139, 153, 157, 160
Neck and handle missing; gaps elsewhere; painting preserved only as ghosts of lines.

Similar to 802 in shape, but body less broad. Rolled handle; instead of trailing ridges, d thick spur at base, enlarged and squared off at the end to give impression of a side-attachment.

Decorative program very much like that on 802 . Contiguous X-panels are lower on belly and rest on a narrow zone of simple zigzag. No semicircles below handle.

P 4657 from CC 3 is very similar.
805 Medium-sized jug; TB 8 Group, indet.
P 3733 TB 8 anteroom: along NW wall
GPH. 0.176; Max. D. 0.186
Pl. 91; pp. 61, 66, 134, 137, 138, 164
Neck and all but lower stub of handle missing; gaps elsewhere; paint worn and in places obliterated. Medium-fine
red clay; slipped surface, polished but now matte, fired clay color to pale brown with discolored areas; matte dark paint.

Flat base. Ellipsoidal body, somewhat elongated; narrow neck. Handle rises from mid-shoulder.

Just above max. D., narrow zones of oblique lines. On shoulder, two zones of equal height, the lower containing Type 1A triangles with multiple outlines. On upper shoulder, two Cross-and-Lozenge Panels 4, with room for a third panel; traces of single circles in intervals. Faintly preserved slashes on handle.

Cf. 806.
806 Medium-sized jug; TB 8 Group, dark-on-ground-coat P 3781 TB 8: against NW wall, near $W$ corner
GPH. 0.161; Rest. Max. D. 0.167
Pl. 91; pp. 38, 61, 66, 134, 137, 138, 142, 154, 164
About half of body, neck, and handle above base missing; ground-coat chipped and cracked. Medium-fine ry clay; lower body slipped and polished, but now matte, and fired clay color to pale green; thick, very pale brown ground-coat on upper body; matte black paint.

Flat base. Ellipsoidal body, bicurved; narrow neck. Rolled handle rising from low on shoulder.

On shoulder, two zones of equal height, separated by a narrow zone of widely spaced circles; in lower, spaced Type 1A triangles with single outline alternate with single circles like those above; in upper, a Zigzag 1. Below handle, a narrow panel containing a feather tree.

P 3835 from the same TB unit is a ground-coated jug of commensurate size that may also be in the TB 8 Group; badly damaged by fire, the vessel preserves traces of three zones on the shoulder, the middle one apparently a row of lozenges.

## 807A-B Medium-sized jug; Group of 932, indet.

P 2933 TB lanteroom
GPH.(A) 0.090 ; GPW.(A) 0.225
Pl. 91; pp. 66, 134, 137, 138, 139, 142-143, 162
Two associated fragments: A preserves about a third of shoulder, including handle base; B, a section of neck and rim. Medium-fine rb clay; slipped surface, polished to medium luster and fired light gray; matte dark paint.

Broad body; narrow neck with slight inset at base; outward-thickened rim, preserved beside the handle attachment, curves upward toward front to form trefoil or spout.

Two zones on shoulder: in the lower and taller, a Zigzag 2 with a double CC over each triangle; above, a narrow zone of Zigzag 4 with about a dozen lines to a leg. On neck, the complex lozenge row seen in Fig. 62; transverse lines on top of rim. Small, crosshatched triangle below handle.

808 Small jug; painted, indet.
P 4662 CC 3: SE aisle, just above floor
GPH. 0.074; Max. D. 0.099
Fig. 29; pp. 39, 66, 134, 137, 149, 150, 154, 192
Intact piece, lacking neck and all but lower stub of handle. Fine clay, darkened throughout by fire.

Flat base. Ellipsoidal-biconical body; narrow neck. Rolled handle rising from low on shoulder.

Fine, carefully executed painting. On shoulder, a zone of four trapezoidal panels, closely spaced and divided by lines, except for one triangular interval: Oblique Checkerboard 2 to either side of handle, a Checkerboard 2 opposite the handle, and a Semicircle Panel 3; crosshatched triangle in the single interval. At base of neck, narrow zone of solid triangles.

## 809 Small jug; painted, indet.

P 4567 CC 3: SE aisle
GPH. 0.096; Max. D. 0.122
Pl. 92; pp. 66, 134, 137, 138, 149, 191
Part of shoulder, neck, and all but stub of handle missing. Medium-fine ry clay; polished surface, now badly damaged and discolored by fire.

Flat base. Ellipsoidal body, unevenly formed; narrow neck. Oval handle.

From max. D. to above midway on shoulder, a zone of Checkerboard 1A; on upper shoulder, row of small double CCs, tangent and thus giving the impression of a guilloche.
810 Medium-sized jug; painted, indet.
P 2779 TB 1: W corner deposit
Rest. GPH. 0.183; Max. D. 0.208
Pl. 92; pp. 66, 134, 137, 138, 148
Large gaps in body, including entire base; neck and all but base of handle missing. Fine clay, fired light brown to gray from one piece to another; surface carefully strokepolished over dark paint to a high luster and now fired clay colors plus ry.

Broad, ellipsoidal body; narrow neck with thick ridge at base. Handle, perhaps triangular-sectioned, rising from low on shoulder.

Somewhat thick-line painting, well executed. Just below max. D., a pair of stacked wavy-line zones. From low on shoulder to base of neck, three spaced zones of varying width: double CCs against a solid field, Crosshatching 1, Type 1A triangles bordered below by a wavy-line zone.

## The Destruction Level: Askoi <br> (811-815)

811 Askos; now light
P 2613 TB 1
Max. H. 0.235 ; Max. D. 0.263
Pl. 93; pp. 65, 66, 188
Intact, with four holes in body. Medium-coarse, sandy clay, fired red; slipped and stroke-polished surface, mottled pale brown to ry.

Uneven flat base. Approximately ovoid body, closed at top; narrow neck rises obliquely from shoulder; flaring rim, defining oval rather than circular mouth. Horizontal strap handles on shoulder to either side of neck; channeled along faces; finger hollows at attachments.

## 812 Askos; painted, indet.

P 2364 TB 4
H.-rim 0.198; D. $0.137 \times 0.131$

Pl. 93; pp. 5-6, 65, 66, 115, 134, 138, 140, 167, 188, 191
Nearly half of rim and most of handle missing. Fine clay, fired pale ry; surface polished to low luster and mottled ry to pale brown; dark paint, over polish.

Flattened base with four short legs. Somewhat oblong, ellipsoidal body, tapering to a wide spine along top; at front, a tall, narrow neck with plain, flaring rim. Rolled basket handle rising at rear from side-attachment along spine; tapered spur below attachment to upper neck.

Body and neck blanketed by a well-executed Checkerboard 1A that adjusts to the contours of the vessel. Wide bands across handle attachments.

## 813 Askos; painted dark-on-ground-coat

P 2979 CC 1 anteroom: along SW wall, to SE of door GPH. 0.147; Max. D. 0.137
Pl. 93; pp. 5-6, 38, 39, 65, 66, 134, 138, 188
Gaps and chips in body; handle missing; neck recut in antiquity; ground-coat badly worn; paint preserved only in illegible traces. Medium-fine ry clay; lower half of body slipped, polished, and fired rb; chalky white ground-coat on upper body and neck, applied before the slip; matte dark paint.

Flat base with four short legs set closely together; both legs on a side spanned above by a shallow arch. Ellipsoidal body, almost spherical; narrow neck at front. Side-attached basket handle rises from rear.

## 814 Large askos; painted dark-on-ground-coat

P 3050 CC 2: NW half
H.-rim 0.490; Max. D. 0.310

Pl. 93; pp. 5-6, 38, 65, 66, 115, 134, 138, 140, 188, 191
Gaps, including part of lower handle attachment; groundcoat chipped and worn. Medium-fine ry clay; lower body slipped and polished, and now mottled clay color to brownish gray; matte white ground-coat on upper body and
neck, applied before slip; matte dark paint.
Feet and body very much as on 813, but the vessel is over twice as large; tall, narrow neck, set only a little forward of the body's axis; small, flaring rim. Thick, rolled handle forming a circular loop from rear to mid-neck; attachments apparently similar to those on 812, but with addition at base of a small, squared-off spur at the rear.

Entire area of ground-coat covered with Checkerboard 1 A .

815 Askos; painted, indet.
P 2457 TB 4 anteroom
GPH. 0.102; Max. D. 0.161
Fig. 27; Pl. 93; pp. 5-6, 65, 66, 134, 138, 188
Base, neck, and handle missing; paint largely worn away. Fine clay, fired brownish gray to gray; slipped surface, polished to medium luster and fired clay colors; matte dark paint.

Ellipsoidal body, flattened at top; narrow neck rising from one side of shoulder. Basket handle, apparently rolled, rises from a squared-off side-attachment on shoulder opposite neck.

At max. D. and on shoulder, broad bands define narrow zones of closely spaced triple CCs. On top, an elliptical field defined by another broad band contains a cluster of six CCs.

The spout is invariably attached to the $L$ of the handle.

## The Destruction Level: Side-Spouted Sieve Jugs

## TYPE 1 SIEVE JUGS

## TYPE 2 SIEVE JUGS

816 Type 1 sieve jug; indet.
P 2291 Meg. 3: S corner
H.-rim 0.108; Max. D. 0.109

Pl. 94; pp. 42, 55, 67, 68, 69, 70, 110
Complete. Fine ry clay; surface polished over mf to medium luster and mottled clay color to pale brown with some darker patches.

Narrow, raised base. Ellipsoidal body; continuous curve into tall, wide neck; flaring rim. Strap handle, shallowly channeled on face, topped by a small bolster with tapered ends. At considerably less than $90^{\circ}$ from handle, a long, wide trough spout attached to shoulder and neck; small bridge, peaked at center.

P 2202 and P 2235, from the SE aisle of Meg. 3, are almost identical; 821 came from the same vicinity.
817 Type 1 sieve jug; now light
P 2357 Meg. 3: along SW wall
H.-rim 0.121; Max. D. 0.132

Pl. 94; pp. 55, 67, 68, 69
Several gaps. Fine, pale brown clay; surface polished over mf to medium luster and fired clay color to red.

Flat base. Low, ellipsoidal-biconical body; tall, wide neck; flaring rim. Rolled handle. At less than $90^{\circ}$ from handle, a long, wide, completely open trough spout attached to shoulder and lower neck.

P 3745 and P 3862 from TB 8 are similar in form but slightly smaller.

## 818 Type 2 sieve jug; now light

P 2023 TB 4: SE aisle
H.-rim 0.102; Max. D. 0.117

Pl. 94; pp. 67, 68, 69, 111, 188
End of spout and all but base of handle missing; gaps elsewhere. Fine, light ry clay; mf, now largely worn, lightly polished to low luster and mottled clay color to rb.

Flat base, uneven. Ellipsoidal body; wide, flaring neck; small, rounded rim, offset below by a groove. Strap handle. At slightly less than $90^{\circ}$ from handle, a spout with tubular basal section attached to shoulder.

## 819 Type 2 sieve jug; indet.

P 2231 TB 4
H.-rim 0.118; Max. D. 0.132

Pl. 94; pp. 67, 68, 69, 110, 111, 188
Intact. Fine clay, fired ry to dark gray; mf, lightly polished to low yet glittery luster and mottled light red to light gray to very dark gray.

Low ring foot, appearing as raised base in profile. Ellipsoidal-biconical body, reverse-bicurved; wide, flaring neck with low ridge at base; plain rim. Wide strap handle; at top, a small bolster, ringed at center, with enlarged, flattened ends. At $90^{\circ}$ from handle, an open trough spout, short and wide, attached to shoulder and neck.

Cf. 820.
820 Type 2 sieve jug; ground-coated
P 2815 TB 2: S quarter
H.-rim 0.104; Max. D. ca. 0.115

Pl. 94; pp. 6, 38, 39, 67, 68, 69, 110, 134, 137, 188
Gaps, including most of foot; parts of body and handle
vitrified, the latter also melted; ground-coat very worn; the painting totally obliterated. Fine ry clay; slipped surface, polished and fired red; very pale brown ground coat, applied over slip on upper body and neck.

Low ring foot. Broad, depressed piriform body; wide, flaring neck; plain rim. Wide strap handle; strongly articulated bolster with thick, cylindrical midsection and hemispherical ends. At about $75^{\circ}$ from handle, a long, open trough spout attached from max. D. to rim.

## 821 Type 2 sieve jug; now mostly light

P 2201 Meg. 3: SE aisle
H.-rim 0.091; Max. D. 0.121

Pls. 95, 106 (with the stand 865); pp. 67, 68, 69, 76, 188
Gaps. Fine, pale brown clay; mf, fired rb to ry and streaked with lighter clay color as result of polishing; small area fired black.

Thin-walled and light. Flat base; will not stand alone when empty. Ellipsoidal body; wide mouth, defined by rounded rim set directly atop shoulder. Narrow strap handle, neatly trimmed to rectangular section, attached from max. D. to top of shoulder. At slightly less than $90^{\circ}$ from handle, a long, open trough spout attached to shoulder; cut away along top in a shallow curve from end to near the base.

For location in Meg. 3, see 816.
822 Type 2 sieve jug; now mostly black
P 2656 Meg. 3: along SW wall, over wooden beam bed, beside 929 and 960
H.-rim 0.095; Max. D. 0.119

Pl. 95; pp. 4, 55, 67, 68, 69-70, 188
Spout and most of handle missing; small gaps and chips elsewhere. Fine clay, fired brown with gray core; surface well polished over mf to high luster and fired black with patches of rb .

Ridge-ring foot. Broad, ellipsoidal body; very short, wide neck; flaring rim. Triangular-sectioned handle from max. D. to high on shoulder. Spout attached to shoulder; break line indicates either a tubular form or a bridged trough like that on 823.
823 Type 2 sieve jug; now light
P 2219 TB 4
H.-rim 0.094; Max. D. 0.116

Pl. 95; pp. 67, 68, 69, 188
Gaps, including all but stumps of handle. Fine, pale yr clay; slipped surface, polished but now dulled, fired clay color to pale brown.

Uneven flat base, causing pot to rest at a tilt. Broad, depressed ovoid body; short, wide neck; broadly flaring rim. Wide strap handle, attaching to top of rim. Long, narrow trough spout affixed to shoulder; small bridge with upturned edge.

## 824 Type 2 sieve jug; indet.

P 1642 NW storeroom behind Meg. 1
H.-rim 0.102; Max. D. 0.140

Capac.-neck 870 ml .
Pl. 95; pp. 3, 67, 68, 69, 188
Intact piece with all but stumps of handle missing. Medium-fine gray clay; heavily micaceous film, polished by wheel and hand to high, glittery luster and mottled pale brown to gray.

Flat base, uneven. Broad, ellipsoidal body; wide, very abbreviated neck; rounded rim. Strap handle from max. D. to top of shoulder. Short, open trough spout rising at $c a .45^{\circ}$ from shoulder; lateral edges stepped on top.

## 825 Type 2 sieve jug; indet.

P 3088 TB 6: SE aisle
H.-rim 0.100; Max. D. 0.127

Pl. 95 ; pp. 67, 68, 69, 70, 116, 188
Handle and spout missing; gaps elsewhere. Fine, light brown clay; mf, polished but now almost matte, mottled rb to gray.

Low ring foot. Ellipsoidal-biconical body, reversebicurved; short, wide neck with ridge at base; small rounded rim, neatly beveled along edge. Handle attached to top of rim. Spout rising from shoulder.

## TYPE 3 SIEVE JUGS

826 Type 3 sieve jug; now light
P 2940 CC l: along NE wall, NW of door, with two other sieve jugs
H.-rim 0.134; Max. D. 0.115

Pl. 96; pp. 67, 68, 69, 70, 188
Complete. Fine clay, fired ry to pale brown; slipped surface, polished to low luster and fired predom. pale brown with a few patches of ry.

Narrow, shallowly concave base. Broad ellipsoidal body; tall, narrow neck, slightly flaring; small, flaring rim. Slender, rolled handle. Trough spout rising from shoulder; small bridge with upturned edge, peaked at center.
827 Type 3 sieve jug; now tan
P 2222 TB 4: N corner area
GPH. 0.153; Max. D. 0.128
Pl. 96; pp. 67, 68, 70, 188
Foot, most of handle, and end of spout missing; small gaps and chips elsewhere. Fine ry clay; mf, polished to medium luster and fired clay color with lighter tones thereof.

Narrow break at bottom suggests a spreading ring foot. Ovoid body; narrow neck; flaring rim. Oval handle rises from max. D. and descends vertically, skirting neck, to attach to top of shoulder. Spout rising from shoulder; a narrow tube to point of break.

## 828 Type 3 sieve jug; indet.

P 4329 TB 7 anteroom: near NE wall, to SE of door
H.-rim 0.140; Max. D. 0.123

Capac.-neck 660 ml .
Pl. 96; pp. 67, 68, 70, 188
All but stumps of handle missing. Fine ry clay; mf, polished to medium, glittery luster and fired predom. red with much staining and discoloration.

Flat base, uneven. Depressed ovoid body; narrow neck; broadly flaring rim. Handle, apparently rolled, attached from max. D. to lower neck. Tubular trough spout rising from lower shoulder.

## 829 Type 3 sieve jug; indet.

P 3851 TB 8 anteroom: along NW wall
H.-rim 0.109; Max. D. 0.112

Capac.-neck 440 ml .
Pl. 96; pp. 67, 68, 70, 110, 188
Gaps, including about half of rim. Fine clay, somewhat powdery, fired pale brown to green; slipped surface, now fired clay colors to black.

Low and narrow raised base, shallowly concave on bottom. Ellipsoidal body; narrow neck, short and flaring; vertical rim, lightly trimmed on face and beveled on int. Slender, rolled handle. Short trough spout affixed to lower shoulder; small bridge with pronounced, upturned edge; sieve consists of numerous tiny holes arranged in concentric circles.

830 Type 3 sieve jug; now tan
P 2390 Meg. 3: S corner
H.-h. 0.182; Max. D. 0.133

Pl. 96; pp. 36, 38, 67, 68, 70, 116, 188
Complete. Fine clay; mf surface, polished and fired very uniformly ry.

Ridge-ring foot. Ellipsoidal-biconical body; relatively wide neck with prominent ridge at base; everted rim. Rolled handle. Short trough spout rising from upper shoulder; narrow bridge.

## 831 Type 3 sieve jug; now light

P 2980 CC 2: NW half
H.-rim 0.150; Max. D. 0.153

Pl. 96; pp. 55, 67, 68, 70, 188
Gaps. Fine ry clay; slipped surface, polished to medium luster and fired clay color to rb.

Uneven flat base, causing pot to rest at a tilt. Very broad, ellipsoidal-biconical body, somewhat lopsided; narrow neck with low ridge at base; small, everted rim. Triangularsectioned handle from max. D. to low on neck. Short, tubular spout rising from lower shoulder; apparently recut at end.

K-III 7 has a similarly reworked spout.
832 Type 3 sieve jug; Brown-on-Buff ware
P 1270 CC 2: E corner
H.-rim 0.173; Max. D. 0.095; L. spout 0.145

Pl. 97; pp. 5-6, 67, 68, 70, 110, 116, 134, 137, 148, 152, 156, $165,167,168,169,170-171,172$ (n. 266), 173, 188, 189, 191, 192
Gaps, including most of rim. Fine, very pale brown clay; surface well polished over dark brown paint to medium luster and now fired very light brownish gray.

Flat base. Ovoid body; very tall, narrow neck; small, flaring rim. Strap handle; cylindrical knobs with flattened ends set to either side of top, giving impression of a bolster. Long, wide trough spout projects almost horizontally from belly and shoulder; wide bridge, slightly upturned at edge.

Fine-line decoration. On lower body, narrow zone of herringbone below a row of (mostly) tangent double CCs. Zones of equal height on belly and shoulder extend long way around from handle to spout; zones separated by narrow band of Meander 1 alternating with dotted chevrons, the whole bordered above and below by dots-between-lines. On belly, four panels of goats and one with a lion, all proceeding to $R$; beneath the handle, a fifth and somewhat larger goat shares the same ground line, but is in a field open at the top; double CCs as fillers in the goat panels; animals separated by narrow panels of Checkerboard 1A alternating with either Crosshatching 1 or a vertical Meander 1. On shoulder, five hawks face $R$ in as many panels; separated as below, but without meanders. Between handle and spout, and spanning the combined height of the two paneled zones, a narrow panel of multiple, blank lozenges formed by criss-crossing pairs of lines, these solidly filled except for the intersections. From top of shoulder to just below rim, closely spaced, narrow zones, some bordered by dots-between-lines: stippled simple lozenges, Checker-board 1A, repeat of lozenges, solid bar, Meander 1, repeat of checkerboard. On handle, bars flanked by lines alternate with double CCs; edges painted solid; ends of false bolster, also solid, are connected by a strip of hatching at the top; row of double CCs below base, just above the larger goat. Area of spout enclosed within a square frame equal in height to the two animal zones, while the attachment itself is ringed by a thick line between rows of dots; a solid Maltese cross in each of the lower corners of the
spout frame, plus double CCs in the field surrounding the spout's base. Underside of spout zoned similarly to neck, but without meanders and with the addition of series of lines. On bridge, a row of short rays rises from the edge to meet a transverse strip of herringbone. Int. spout fringed by strips of vertical lines; row of CCs at outer edge.
833 Type 3 sieve jug; painted, now red
P 4553 CC 3: SE aisle, beside spindle whorls and between a storage vessel and a large trefoil jug
H.-rim 0.202; Max. D. 0.193

Pl. 98; pp. 67, $68,70,134,137,138,162,188$
Spout missing; many gaps elsewhere; partially vitrified areas. Fine rb clay; slipped surface, fired predom. red with some darker areas; matte black paint.

Spreading ring foot. Broad ellipsoidal body; short, narrow neck; flaring rim, flattened on top. Oval handle forming a small loop on shoulder. Sieve on shoulder consists of four large holes; circular breakline indicates bridged spout or one that was tubular at least in its lower section.

Thick-line decoration. Two zones of equal height from max. D. to base of neck, separated by narrow reserved band. In lower, five Cross-and-Lozenge Panels 1 with laddered borders, including one placed lopsided between handle and spout; tree motif under spout. In upper zone, Type 1A triangles; laddered chevron straddles spout. Wavy line on neck. Bands on handle at upper attachment.
834 Type 3 sieve jug; painted, indet.
P 3311 TB 7: N corner
GPH. 0.132 ; Max. D. 0.126
Capac.-neck 620 ml .
Pl. 98; pp. 31, 39, 67, 68, 70, 134, 137, 188
Foot and end of spout missing, as is most of neck; paint largely obliterated. Medium-coarse ry clay; slipped surface, polished and fired light brown to brownish gray; matte dark paint.

Presumably a spreading ring foot (cf. 827). Broad, ellipsoidal-biconical body; flaring neck, short and narrow, with thick ridge at base; small, flaring rim. Rolled handle from max. D. to high on shoulder. Spout rising from lower shoulder; tubular to point of break.

Faint lines of decoration preserved between handle and spout: panel of either crosshatching or oblique checkerboard.

## AMBIGUOUS SIEVE JUG

## 835 Sieve jug; painted, now tan

P 3257 TB 7: near SE doorjamb
GPH. 0.093; Max. D. 0.108
Capac.-neck 370 ml .
Pl. 98; pp. 32, 67, 68, 134, 137, 138, 143, 191
Neck broken away above base; handle and spout missing. Fine, light ry clay; cursorily smoothed surface, fired clay color; matte black paint.

Somewhat thick-walled and heavy. Narrow, shallowly concave base. Ellipsoidal body; neck of medium width with ridge at base. Rolled handle rising from low on shoulder. Sieve area on shoulder, surrounded by circular break (cf. 833).

Decoration somewhat carelessly executed. On shoulder, a row of tall, basically simple lozenges, alternately crosshatched and inscribed with a double CC; handle panel bridged by a chevron. Lines on lower neck.

## The Destruction Level: One-Handled Utility Pots

(836-850)

836 One-handled utility pot; now tan
P 1768 TB 3: NW aisle
H.-rim 0.122; Max. D. 0.137

Pls. 101,103 (with the lid 852); pp. 32, 70, 71, 72, 73, 96,97
Small gaps and chips; part of bottom vitrified. Coarse ry clay; wheel-finished surface, fired clay color.

Flat base. Plump ovoid body with short shoulder; short, wide neck with distinct, ledge-like ridge at base; outwardthickened rim, lightly beveled. Short strap handle.

Representative, with 837 , of the largest single group known in the shape. Very similar in fabric and finish, all have the standardized formal features of an ovoid body and a prominent, ledge-like ridge at the base of the neck. Examples at the scale of $\mathbf{8 3 6}$ include: P 1786 and P 1983 from the same TB unit; P 1311 and $P 1344$ from CC 1 ; P 1998, P 1999, P 2002, and P 2004 from TB 4; P 3845 from TB 8. P 1998 has a capac.-neck of 1020 ml . and can serve as a general index of volume for the lot. 837 represents a larger category.

## 837 One-handled utility pot with patterned incision; now $\tan$

P 1457 CC 2: SE half
H.-rim 0.215 ; Max. D. 0.215

Pl. 101; pp. 32, 70, 71 (n. 62), 72, 96, 97, 114, 115, 190
Several gaps. Like 836 in fabric and finish.
Like 836 in shape, but considerably larger.
On shoulder, just below basal neck ridge, an incised wavy line.

Others of this size category within the group include: P 1995 and P 1996 from TB 4; P 2999 from TB 1. The last two also share the patterned incision. The jar 978 represents a handleless version of the group.

## 838 One-handled utility pot; now gray

P 2819 Storeroom behind Meg. 4
H.-rim 0.110; Max. D. 0.141

Capac.-neck 740 ml .
Pls. 101, 103 (with the lid 853); pp. 32, 70, 71, 72, 96, 189
Part of handle missing; chips in rim. Coarse clay, fired dark gray throughout; lower body cursorily smoothed, the rest left wheel-finished.

Flat base. Depressed ovoid body; short, flaring neck with ridge at base; outward-thickened, beveled-band rim. Strap handle.

## Cf. 839-840.

## 839 One-handled utility pot; now tan

P 2859 CC 1 anteroom: along SW wall, to SE of door, in (or on) a larger vessel
H.-rim 0.143; Max. D. 0.169

Capac.-neck 1550 ml .
Pl. 101; pp. 32, 42, 70, 71, 72, 96, 189
Complete. Coarse rb clay; finished like 838; surface fired clay color with darker areas.

Similar to $\mathbf{8 3 8}$ but larger; distinct beveled-band rim.

## 840 One-handled utility pot; indet.

P 4555 CC 3: beside door, at NW
H.-rim 0.243; Max. D. 0.255

Pl. 101 ; pp. 32, 70, 71, 72, 96, 189
Complete. Coarse rb clay; wheel-finished surface fired
mostly black with large area of rb.
Very much like 839 , but larger.
P 2661 from TB 4 is almost identical.

## 841 One-handled utility pot; now tan

## P 2003 TB 4: SE aisle

H.-rim 0.108; Max. D. 0.123

Pl. 101; pp. 70, 71, 72
Gaps. Coarse clay, fired rb throughout; cursorily smoothed surface.

Flat base. Ovoid body; slightly tapering neck with groove at base; broadly flaring rim. Strap handle.
842 One-handled utility pot; now red
P 1318 CC 2: SE half
H.-rim 0.107; Max. D. 0.127

Pl. 101; pp. 32, 70, 71, 72
Small gaps. Coarse clay, fired red throughout; lower half of body cursorily smoothed, the rest left wheel-finished.

Narrow, flat base. Depressed ovoid body, reverse-bicurved; beveled-band rim. Strap handle with medial spine.

843 One-handled utility pot; indet.
P 1847 TB 4: SE aisle, SW of center
H.-rim 0.175; Max. D. 0.194

Capac.-neck 2400 ml .
Pls. 101, 103 (with the lid 854); pp. 32, 70, 71, 72, 74
Intact. Coarse clay, fired ry to light brownish gray throughout; wheel-finished surface.

Raised base, low and narrow. Broad, ovoid body; pronounced, rounded rim. Strap handle.
844 One-handled utility pot; now dark tan
P 1300 CC 2: E corner
H.-rim 0.212; Max. D. 0.231

Pl. 102; pp. 70, 71, 72
Small gaps. Coarse clay, fired dark brown throughout; cursorily smoothed surface.

Uneven flat base. Plump ovoid body; very short neck; tall, flaring rim, outward-thickened. Wide strap handle.

## 845 One-handled utility pot; now tan

P 2942 CC l: along NE wall, to SE of door
H.-rim 0.130; Max. D. 0.170

Capac.-neck 1450 ml .
Pl. 102; pp. 70, 71, 72
Gaps in neck. Coarse clay, fired rb throughout; cursorily smoothed surface with darkened areas.

Slightly concave base. Ellipsoidal body; very abbreviated neck; flaring rim. Strap handle.
846 One-handled utility pot; now buff
P 1309 CC 1: NW half
H.-rim 0.133; Max. D. 0.149

Pl. 102; pp. 32, 70, 71, 72
Gaps; handle and part of body nearly vitrified. Coarse clay, fired pale brown throughout; lower body cursorily smoothed, the rest wheel-finished.

Flat base, uneven. Ellipsoidal body; thick, blunt ridge at base of neck; flaring rim. Strap handle with shallow finger hollow at base.

## 847 One-handled utility pot; now gray

P 3115 TB 6: central aisle, SE of hearth
H.-rim 0.148; Rest. max. D. 0.163

Pl. 102; pp. 32, 34, 70, 71, 72
About half of body and neck/rim missing. Medium-coarse clay, fired gray throughout; lower body smoothed, the rest wheel-finished.

Narrow, flat base. Ellipsoidal-biconical body, reversebicurved; low ridge at base of neck; band rim. Strap handle with low medial spine; sides lightly trimmed.

## 848 One-handled utility pot; now buff

P 2008 TB 4
H.-rim 0.169; Max. D. 0.195

Pl. 102; pp. 32, 70, 71, 72
Small gaps and chips; handle nearly vitrified. Coarse ry clay; lower half of body smoothed, while entire surface has a thin slip, fired pale brown.

Flat base. Plump ellipsoidal body, almost spherical; abbreviated neck; beveled-band rim. Strap handle.

Flat base, uneven. Biconical body, low and broad; abbreviated neck; flaring rim. Strap handle.

850 One-handled utility pot; now gray
P 1504 TG pottery depot
H.-rim 0.128; Max. D. 0.145

Pl. 102; pp. 34, 70, 71, 72, 73
Handle missing. Medium-fine clay, fired very dark gray throughout; cursorily smoothed surface

Flat base. Lopsided, ellipsoidal-biconical body, reversebicurved; neck/rim as on 845. Strap handle attached from max. D. to top of shoulder.

## The Destruction Level: Lids

(851-857)

## 851 Lid; indet.

P 2301 TB 5: center, floating
H. 0.041 ; D. 0.093

Pl. 103 (on the round-mouthed jug 573); pp. 55, 73
Intact. Wheelmade; medium-coarse, heavily micaceous
clay, fired ry; top cursorily smoothed; surfaces discolored from burning.

Shallowly concave disk; at edge, and aligned with axis of rolled handle, a finger-width lunette pushed up from below.

P 2328 and P 2685a, also from TB 5, are of similar form but slightly larger; they fit well on one-handled utility pots of small size.

852 Lid; now buff
P 2386 TB 3: SE aisle
H. 0.046; D. 0.124

Pl. 103 (on the utility pot 836); p. 73
Complete. Apparently handmade; coarse red clay; slipped on top, cursorily smoothed and fired predom. very pale brown.

Shallowly concave disk with roughly beveled edge; at edge, three-sided cutting for a handle. Rolled loop handle, centered and aligned with the cutting.

Four other lids are of similar type and size: P 2355 and P 2389 from TB 3, P 4641 from CC 3, and P 3243 from destruction debris on the Terrace to NW of Meg. 4. All seem best suited for small one-handled utility pots of the size represented by 836 .

## 853 Lid; indet.

P 2327 TB 5
GPH. 0.036; D. 0.115
Pl. 103 (on the utility pot 838); pp. 73, 74
All but stumps of handle missing; chipped around edge. Handmade; coarse, heavily micaceous clay, fired ry; smoothed on underside and top and fired predom. light rb with some blackening.

Round and shallowly concave; broad, shallow lunette cut out from edge. Looped strap handle set parallel with lunette.

## 854 Lid; indet.

P 2326 TB 5
Th. 0.016 ; D. 0.15-0.159
Pl. 103 (on the utility pot 843); pp. 73, 74
Handle missing. Handmade; medium-coarse ry clay; cursorily smoothed surfaces, fired clay color to very light gray.

Irregular disk, flattened on top and bottom; on edge, shallow lunette like that on 853. Rolled loop handle on axis with lunette.

The largest ceramic lid known from the Early Phrygian period.
855 Lid; indet.
P 3682 TB 8: W corner
H. 0.062 ; D. 0.115

Pl. 103; pp. 60, 73, 74
Gap in rim. Wheelmade; medium-coarse clay, fired red; smoothed on top and now discolored.

Shallowly concave disk with ledge around periphery; at one point, edge turned up slightly from underneath and pinched inward. Rolled handle aligned with pinch.

P 1930 and P 1931 from TB 3 are of similar type.
856 Lid; now red
P 2685b TB 5: one of 2 lids in central aisle, at SW
GPH. 0.034; D. 0.111
P1. 103 (on the large trefoil jug 748): pp. 60, 73, 74
All but stumps of handle missing. Wheelmade; mediumcoarse red clay; smoothed on top and now fired predom. clay color.

Semicircular cutout in edge, the flanks pushed downward and slightly in. Rolled loop handle.

For the other lid found with it (P 2685a), see 851.

## 857 "Stopper"

MC: 193 TB 1: one of 3 found outside to SW, in debris
H. 0.040 ; Max. D. 0.045

Pl. 103; pp. 73, 74
Intact. Fine, presumably unbaked clay.
Crudely formed. Flat, disk-like head and cylindrical shaft.

## The Destruction Level: Miscellaneous Vessels

(858-863)

## 858 Rhyton; painted, now tan

P 1192 CC 1 or 2
Rest. H. 0.135 ; Est. D. rim 0.09
Fig. 32; Pl. 104; pp. 5-6, 42, 74, 134, 138, 149, 187-188
Two nonjoining fragments preserving bottom and section of wall, including rim. Medium-fine clay, red with thick gray core; slipped surface, polished and fired shades of ry; dark matte paint.

Funnel-shaped body tapering below to a strap handle tightly curled into a small loop; direct rim with wide, flattened top.

On handle, transverse bars flanked by lines; opposite, a small panel of Crosshatching 1A placed just below merger with body, a point emphasized by an encircling band. Tall, spaced panels on body, apparently extending full height: Checkerboard 1A and Crosshatching l preserved. Transverse bars on top of rim.

## 859 Sipping chalice with patterned incision; indet. <br> P 2458 TB 4 anteroom

H.-rim 0.232; D. rim 0.086

Fig. 32; Pl. 104; pp. 5-6, 74, 75, 113, 114, 115, 116, 118, 122, 187-188, 190
Gaps. Fine clay, fired ry; mf, stroke-polished to low luster and fired ry to light brownish gray.

Tall, cylindrical body; small, outward-thickened band rim, matched in profile at bottom edge. Tube, square in section, attached along full height of body and projecting enough above rim level to accommodate a sipper's lips; tube connected to int. by small hole at floor level. Thick, curved handle, square in section, attached to center bottom; terminates beyond a square collar in a small plastic bird with incised features; handle pierced by a small hole, behind the collar.

Body divided into seven narrow zones by ridges; within each, elongated panels of incised herringbone alternate with equally long blank panels, the latter slightly recessed by careful shaving; the regular staggering from zone to zone forms overall a laterally elongated checkerboard.
860 Sipping bowl, fluted; painted, indet.
P 2970 NCB-SEB: Gravelly fill to SW of Meg. 12 (pp. 6-7). H.-rim 0.101; Max. D. 0.167

Fig. 33; Pl. 105; pp. 6, 74, 75 (n. 77), 76, 95, 108, 121, 134, 138, 140, 157, 188, 190
Several gaps; end of sipping tube and one strut missing. Fine ry clay; slipped surfaces, well polished over dark paint to medium luster and mottled pale brown to ry.

Flattened base, poorly defined. Deep bowl, angling above base to a vertical, convex wall, on which are 12 upright flutes of finger or thumb width, evenly spaced, with corresponding ribs on int.; plain, slightly flaring rim, offset by a ridge at base. A clay tube pierces the body obliquely at a point high on a flute, and continues downward along int. wall to a
sieved area at the floor's periphery; two struts extend laterally from upper segment of tube to edge of rim, where they are met by bowed trails rising from the point at which the tube enters the body.

Area of fluting bordered below by a single line, as are the individual flutes and their ribbed counterparts on the int.; between the flutes, horizontal lines, either straight or wavy in no apparent scheme; wavy-line zone on rim, both ext. and int. Struts of tube laddered. On int., horizontal wavy lines on ribs and triple CCs on the floor.

## 861 Bowl with perforated cover; now tan

P 2472 TB 4 anteroom
H. 0.078; D. rim 0.131

Pl. 105; pp. 5-6, 74, 75 (n. 77), 122, 187-188
Gaps; handles missing. Fine ry clay; surface polished to medium luster and fired a more intense tone of clay color.

Flattened base. Shallowly convex wall, smoothly turning to vertical below incurved rim. An almost flat disk covers the entire mouth; cut-out circles of varying D. (0.01-0.017) arranged in roughly annular rows around a larger (0.024) central opening. High on body, the stumps of a small, vertical loop handle with horizontally trailing spurs; traces of a second opposite.

Cf. 862.
862 Bowl with perforated cover; Wavy-Line style, indet.
P 2241, P 2242 Destruction debris over Terrace behind TB 2-4
H. 0.074; Est. D. rim 0.115

Fig. 33; Pl. 105; pp. 6, 74, 75 (n. 77), 76, 122, 134, 138, 155, 156, 187-188
Three nonjoining pieces, together preserving complete profile and portion of cover. Fine ry clay; surface polished to medium luster over dark paint and now mottled light red to light brown.

Rounded, undefined resting surface. On body, flattened planes at midway and top, the two divided by a thick, blunt ridge; small, beveled rim, neatly offset below by a promi-nent groove. Set into mouth, ca. 1 cm . below top, an open-work disk on which a complete cut-out triangle and portions of two cut-out circles are preserved.

Resting surface bordered by a laddered circle, within which are traces of two ladders in spoke formation. On remaining ext. of body, closely spaced wavy-line zones, including one that is placed mostly on the blunt ridge.

## 863 Three-legged pan with pitted bottom; indet.

P 2368 Meg. 3: W corner
GPH. 0.039; D. rim 0.264
Pl. 105; pp. 4, 74, 76
Legs broken away; one area vitrified. Medium-fine clay, fired ry to brownish gray; base left wheel-finished; mf on sides and int., well polished to low luster and fired variously
from light brown to brownish gray; some dark staining on int.

Flat base with three legs along periphery; low, flaring sides; very shallow int. On base, numerous small holes, ca 0.005 deep and wide, closely spaced in roughly concentric rows.

P 2367 from the same unit is very similar but without legs The two were found one upon the other leaning against the SW wall in the corner. Two examples of the type are known from post-destruction contexts on the City Mound (P 3747, P 3786).

## The Destruction Level: Stands

(864-871)

## 864 Three-legged ring stand; now tan

P 1882b TB 3: behind main grinding stand
H. 0.085 ; D. 0.132

Pl. 106; pp. 51, 76
Gap in ring. Coarse ry clay; smoothed surface.
Circular ring, channeled on ext., supported by three elongated, trapezoidal legs; the whole was apparently cut out from a hollow cylinder of clay.

One of five very similar stands all found together and inventoried under the same number. The excavator assumed that they had fallen from a shelf on the NE wall.

## 865 Horseshoe stand; indet.

MC 174b Meg. 3: SE aisle
H. at back 0.061 ; Max. W. 0.128

Pl. 106 (with the sieve jug 821 ); pp. 76, 187
Complete. Fine clay, fired pale brown to gray throughout; ext. surface polished.

Horseshoe-shaped bar of clay, rectangular in section; flattened and somewhat broadened on base; raised peaks on top at back and ends.

One of eight such stands found together and inventoried under MC 173-174 (one of MC 173 shown in Pl. 106); MC 108 from CC 2 is the only other recorded example of the type.
866 Pedestaled stand; now gray
P 2898 TB 1: W corner deposit
GPH. 0.160 ; D. base 0.127
Pl. 106; pp. 6, 34, 38, 76, 187
Most of top broken away; vitrified at bottom, melted at top. Medium-coarse gray clay; smoothed surface, mottled gray to black.

Tall, hollow pedestal rising from a broadly spreading base; flares at top into an apparently shallow resting area with doubly beveled rim.
867 Large cylindrical stand, open-work and stamped decoration; indet.
P 2203 Meg. 3: SE aisle, near S corner
H. 0.043; D. rim 0.337

Pl. 107; pp. 4, 51, 76, 77, 119, 123, 125, 127, 128, 187, 190
Gaps; fire-damaged and vitrified in places. Coarse clay, fired ry to red; slipped surfaces, lightly polished on ext., mottled rb to dark red to gray.

Tall, hollow cylinder flaring at either end to an outwardthickened, rounded rim.

Body divided into three zones of open-work decoration by four narrow, raised bands of triangle-zigzag stamping. In top and bottom zones, four X -panels formed by cut-out triangles; panels staggered so that those of one zone are in line with the intervals of the other. Central and slightly narrower zone consists of two long panels (the length of an X-panel and
interval) with triangles cut out to leave a zigzag in each; midway between the zigzags, on either side, a narrow, cut-out "window."

Cf. 868.
868 Large cylindrical stand with open-work and stamped decoration; indet.
P 2204 Meg. 3
H. 0.460; Lower D. 0.333

Pl. 107; pp. 4, 38, 51, 76, 77, 119, 123, 125, 127, 128, 187, 190
Gaps; warped and melted out of shape at one end. Like 867 in fabric and shape.

Stamped and openwork program very much like that on 867, the principal difference being a continuous zigzag in the middle zone of open-work; $\mathrm{X}_{\mathrm{s}}$ of lower and upper zones not staggered.

Since no special note was made of the location in Meg. 3, it is possible that 868 was found shattered with 867 in the SE aisle and that both were assumed to be one stand at the time of recovery.
869 Cylindrical stand with open-work and stamped decoration; painted, indet.
P 1195 CC 2: SE half
H. 0.129; D. rim 0.271

Fig. 31; Pl. 107; pp. 76, 77, 113, 123, 125, 127, 128, 134, 138 , 187, 190
Few gaps and chips; painting obscured in darkened areas. Medium-coarse clay, fired ry to red; ext./int. surfaces slipped and lightly polished, and mottled red to light gray; matte dark paint.

Thick-walled and substantial. Hollow cylinder, low and wide; spreading base and broadly flaring rim, each with a high, vertical face bearing thick, obliquely notched ridges; ledged rim, flat and inward-sloping on top.

Slightly inset on the cylinder, a large zone of open-work zigzag bordered above by a narrow raised band of trianglezigzag stamping; at one point, perhaps where the openwork met itself in the course of execution, two standing triangles were cut out side by side, thus interrupting the zigzag.

Painted lines between the ridges on base and rim. Wavy lines border the area of openwork and stamping; oblique ladders on the thick legs of the open-work zigzag.

## 870 Cylindrical stand; painted, Group of 932 , indet.

P 2885 Meg. 4
H. 0.197; D. rim 0.328

Pl. 108; pp. $76,77,123,134,138,162-163$, 187
Few small gaps. Medium-coarse ry clay; slipped surface, well polished over dark paint to a medium luster and mottled clay color to gray with some blackened areas.

Thick-walled and heavy. Spreading base with wide resting surface and high, vertical face. Tall, wide, shallowly concave cylinder; thick, flaring rim, rounded on top.

Two zones of equal height on body, separated by a row of prominent dots-between-lines: complex lozenge row (Fig. 62) below, Zigzag 2 above. On top of rim, thick bands at quarter intervals, each flanked by lines and connected to one another by a wavy line or a row of dots.

Cf. 871.
871 Cylindrical stand; painted, Group of 932, indet. P 2618 TB 2: N quarter
H. 0.209; D. rim 0.352

Pl. 108 (without and with the krater 930); pp. 6, 76, 77, 88, 123, 134, 138, 162-163, 187
Few gaps and chips. Like 870 in fabric.

Close to 870 in shape; base less squared, upper body more flaring.

Same motifs as on 870, but with two zones of Zigzag 2, at bottom and top, and one of the complex lozenge, at midway; row of dots between the lower two.

871 very likely supported the krater 930 , which was found fallen beside it.

## The Destruction Level: Amphoras

## SMALL AMPHORAS <br> (872-876)

872 Small amphora; indet.
P 2465 TB 4 anteroom
GPH. 0.098; Est. max. D. 0.10
Pl. 109; pp. 77, 111, 162, 187
Base and lower body missing, as are upper neck and one handle. Medium-fine, light brown clay; thin, unevenly applied slip, lightly polished and mottled ry to dark brownish gray.

Thin-walled. Presumably ovoid body; narrow neck. Rolled handles from shoulder to lower neck form very small, fingersized loops.

873 Small amphora; indet.
P 1769 TB 3: NW aisle
H. 0.116; Max. D. 0.143; D. rim 0.088

Pl. 109; pp. 32, 77, 88, 187
Several gaps; one handle missing; badly burned throughout, with one vitrified area. Medium-fine clay; surface smoothed and now fired variously from dark gray to rb.

Flat base. Ellipsoidal body; continuous curve into short, wide neck; small everted rim, flat on top. Tooled strap handles form finger-sized loops on shoulder.

## 874 Small amphora; indet.

P 3045 CC 2: W corner
H. 0.115; Max. D. 0.126 ; Est. D. rim 0.10

Capac.-neck 550 ml .
Pl. 109; pp. 77, 107-108, 187
Most of rim missing. Very coarse ry clay; cursorily smoothed surface, now discolored from burning.

Flat base, uneven. Depressed ovoid body; short, wide neck; broadly flaring rim. Short, horizontal strap handles with furrowed faces, set at angle on shoulder.

875 Small amphora with ring handles; now tan
P 1834 TB 4: along SE wall, SW of center, in a large vessel H.-rim 0.103; Max. D. 0.108; D. rim 0.075

Pl. 109; pp. 5-6, 75, 77, 110, 187
Intact. Fine ry clay; mf, polished to low luster and fired tones of clay color.

Spreading ring foot. Owoid body; wide neck, short and tapering, with ridge at base; sharply offset, outwardthickened band rim with wide, channeled top. Double-round handles; large spool-rotelles with small, flattened pellets at
ends and a pointed knob at mid-shaft; circular clay rings resting loose in the handles.

876 Small amphora, petaled; painted, indet.
P 1849 TB 4: just to NE of the vessel that held 875
H. 0.129-0.135; Max. D. 0.131; D. rim 0.115

Pl. 109; pp. 5-6, 77, 78, 107-108, 116, 120, 121, 134, 137, 139, $140,143,166,167,171,172,187,191$
Few small gaps and chips. Fine clay, fired pale ry; slipped surface, polished to low luster and fired ry to light brown; dark paint, now largely faded.

Spreading ring foot with trimmed edge and short, thick stem. Broad, depressed ovoid body, the upper half with finger-width petals pushed out from within; short, wide neck; outward-thickened rim, carefully beveled on edge. Short, horizontal handles set on shoulder, each spanning the valley between two petals.

Area of petaling bordered below by lines and a pendent wavy line, and above by dots-between-lines; the last also outline the individual petals, forming an arcade along the top; double CCs on the petals. On neck, a zone of simple, stippled lozenges, with another row of dots-between-lines above. Thick bands on the beveled face of the rim; wavy line on int. rim. Stripes along handles.

## KANTHAROS KRATERS

(877-882)

## 877 Kantharos krater; indet.

P 2776 TB l: W corner deposit
H.-rim 0.246; Est. max. D. 0.21; D. rim 0.150

Pl. 110; pp. 78, 79, 187
Several gaps, including most of base and handles. Medi-um-fine, brownish gray clay; slipped surface, stroke-polished to a low luster and mottled ry to clay color.

Low ring foot. Ovoid body; tall, wide neck with ridge at base; small band rim. Slender rolled handles, probably not as bowed as in the plaster restorations.

## 878 Kantharos krater; indet.

P 2316 Meg. 3: S corner
H.-rim 0.310; Max. D. 0.259; D. rim 0.199

Pl. 110; pp. 5, 42, 56, 78, 79, 107, 116, 161, 187
Few small gaps and chips. Fine ry clay; surface polished over mf to medium luster and fired clay color to light brown to light brownish gray.

Well-formed spreading ring foot with high edge and short stem. Ovoid body; tooled ridge at base of neck; high band rim. Heavy, triangular-sectioned handles with squared-off spurs at bases.

P 3589, burned and from a disturbed area over TB 8, is practically identical in size and form, yet is painted in the Polychrome House style; cf. also 881.

## 879 Kantharos krater; Polychrome House style, indet.

P 2360 Meg. 3: S corner
H.-rim 0.260; Max. D. 0.221; D. rim 0.153

Pl. 110; pp. 42, 56, 78, 79, 107, 134, 137, 141, 149, 161, 187
Gaps and chips; very worn on one side. Fine ry clay; slipped surface, well polished and fired clay color to light greenish gray; dark paint.

Foot like that on 878 . Ovoid body; band rim, pushed out from inside. Handles pared to roughly triangular section.

Wavy-line zones span belly. Type 1B triangles on one side of shoulder and, on the other, Type 1 triangles connected by single wavy lines in the intervals. On either side of neck, two panels with laddered borders: three of Cross-and-Lozenge 1 and a large Type 1B checkerboard that covers half of one side. Wavy-line zone on rim.

## Cf. 880.

880 Kantharos krater; Polychrome House style, indet.
P 2278 Meg. 3: along SE aisle, perhaps fallen from above H.-rim 0.301; Max. D. 0.263; D. rim 0.209

Pl. 110; pp. 42, 56, 78, 79, 107, 116, 134, 137, 143, 151, 161, 187, 192
Large gaps. Fine ry clay; polished micaceous slip, fired light brown with patches of ry; matte dark paint.

Similar in shape to 879 , but with basal neck ridge and outward-thickened band rim; same type of handle.

Pair of wavy-line zones below max. D. Shoulder zone bordered above on one side by a narrow strip of Crosshatching 1 ; on both sides, Type 1B triangles, those on one side modified by the addition of small chevrons to either side of the ones connecting the triangles. Neck zone bordered below and above, on rim, by narrow strips of Type 1 simple lozenges; on either side, panels with laddered borders: two large cross-and-lozenge panels, Types 1 and 3, alternate with narrow panels consisting of double vertical rows of Simple Lozenge 1, the last also flanking the handles.

Two fragments, P 2449 from Meg. 3 and P 4373 from the anteroom of TB 7, are very similar in basic shape and style; either could be a large round-mouthed jug instead of a kantharos krater.

## 881 Kantharos krater; painted, indet.

P 3730 TB 8 anteroom: along NE wall, just to NW of door H.-rim 0.255; Max. D. 0.215; D. rim 0.160

Pl. 110; pp. 78, 79, 107, 134, 137, 139, 141, 149, 151, 187
Gaps; one handle missing. Medium-fine ry clay; thin micaceous slip, well polished and now mottled pale brown to ry to red; matte dark paint.

Similar in shape to $\mathbf{8 7 8 - 8 8 0}$. Slightly bulging neck; rolled handles, faceted to pentagonal section and side-attached below.

Wavy-line zone below max. D. On either side of shoulder, large Type 1A triangles with a triple CC set high in each interval. On either side of neck, a Checkerboard 1A panel at $R$ and, at $L$, a Cross-and-Lozenge Panel 5; in central interval, a triple CC, with addition on one side of a double ladder with oblique rungs. Wavy-line zone on rim.

882 Kantharos krater; painted, indet. P 2749 TB 1: W corner deposit
GPH. 0.287; Est. Max. D. 0.34; Est. D. rim 0.20
Fig. 36; Pl. 110; pp. 56, 78, 79, 108, 134, 137, 138-139, 145, 151, 153, 154, 187, 192
Large fragment preserving section of body and neck, including one handle and part of the second; badly burned and warped. Fine clay; slipped surface, well polished and now discolored green from burning; dark paint.

Ovoid body; band rim. Heavy rolled handles; S-shaped strut between each handle and neck.

Fine, careful painting. Narrow wavy-line zone just below max. D. and another at transition to neck. Paneled shoulder zone with narrow reserved band at top. On the completely preserved side, four panels of varying width bordered by dots-between-lines, the intervals between either blank or filled with a vertical row of double CCs; from $L$ to $R$ : Cross-and-Lozenge 5, a narrow vertical strip of single-line meander hooks with a row of dots winding through the maze, Checkerboard 1A, and an X-panel with all four triangular fields crosshatched. On other side of shoulder, a panel of Crosshatching 1 beside an interval with a large, laddered circle at center and double CCs in the corners. Neck zone, with narrow reserved bands above and below, bears semicircle panels on both sides; all are of Type 1, except for one that has crosshatched semicircles flanking a central, vertical strip of crosshatching. Wavy line on rim. Struts of handles laddered.

## NARROW-NECKED AMPHORAS, NECK-HANDLED (883-889)

883 Neck-handled amphora, banded; indet.
P 2916 Meg. 4: E corner
GPH. 0.530; Max. D. 0.495
Pl. 111; pp. 3, 80, 81, 82, 108, 118-119, 189
Many gaps, including upper neck/rim; vitrified in places and elsewhere largely fire-damaged; cannot be properly mended. Coarse, gritty clay, light red; slipped surface, now discolored.

Wide, flat base. Broad, squat body, somewhat barrelshaped, with two narrow bands defining the belly; narrow neck with thick ridge at base. Strap handles with high medial spines that extend a little below the lower attachments.

## 884 Neck-handled amphora; indet.

P 2420 Meg. 3: along NW wall, near 886
H. 0.500 ; Max. D. 0.386 ; D. rim 0.173

Pl. 111; pp. 4, 80, 81, 82-83, 100, 109, 116, 189
Gaps in rim; badly burned on base. Coarse clay, fired light brown to gray; cursorily slipped surface, now mottled ry to gray to black.

Wide, flat base. Elongated ellipsoidal body; narrow neck with thick ridge at base; broadly flaring rim. Short strap handles, each with a shallow finger hollow at the base.

## 885 Neck-handled amphora, banded; indet.

P 3688 TB 8: SE aisle, near center
H. ca. 0.640 ; Max. D. 0.427; D. rim 0.195

Fig. 38 (rim); Pl. 111; pp. 32, 80, 81, 82, 100, 105, 109, 117, 118-119, 189
Gaps; neck and one handle badly burned. Coarse clay, fired ry to red; slipped surface, polished to a smooth finish
and now mottled clay colors to gray.
Thick-walled and heavy. Flat base. Elongated, ellipsoidalbiconical body, reverse-bicurved, with wide, channeled band on lower shoulder; tapering neck with thick, ledge-like ridge at base and flattened ridges, evenly spaced, above; everted rim, rounded on top and ledged. Short strap handles, each with a deep finger hollow at the base and an upright cylindrical knob on top.

## 886 Neck-handled amphora, banded; indet.

P 2375 Meg. 3: near 884
H. 0.667 ; Max. D. 0.447 ; D. rim 0.184

Fig. 38 (rim) ; Pl. 111; pp. 4, 41, 77, 80, 81, 82, 106, 117, 118-119, 189
Small gaps and chips. Coarse clay, fired dark ry to gray; mf polished to very low, glittery luster and now mottled ry to brownish gray to dark gray.

Thick-walled and heavy. Flat base. Elongated ovoid body with three wide bands from above bottom to max. D.; tall neck with five thick ridges, evenly spaced, from base to top; everted rim, slightly over-hanging, flat on top. Short, doubleround handles from shoulder to lower neck.

## 887 Neck-handled amphora; indet.

 P 3704 TB 8: W cornerH. 0.610 ; Мax. D. 0.425 ; D. rim 0.105

Pl. 111 ; pp. 32, 77, 80, 81, 82, 108, 109, 116-117, 122, 189
Gaps; badly burned in one area. Coarse clay, fired red to dark ry; slipped surface, smoothed and now mottled ry to gray where not burned.

Flat base. Ovoid body with series of shallow channels at max. D.; cylindrical neck with pair of thick ridges at base and a row of pointed knobs directly above on either side; apparently recut at top. Short strap handles rising to base of neck, each with a tall medial spine; small knobs flank both lower and upper attachments.

## 888 Neck-handled amphora with patterned incision; now gray

P 3028 Meg. 4
GPH. 0.190; Est. D. neck 0.19
Pl. 112; pp. 34, 79, 80, 82, 114, 115, 189, 190
Fragment preserving most of shoulder and lower neck, with one handle. Upper shoulder and neck wheelmade, body handmade. Coarse, very dark gray clay; surface smoothed and fired clay color, except for one much lighter sherd fired pinkish gray and preserving mf.

Apparently broad body; relatively wide neck with low ridge at base. Strap handles to lower neck, where thick ridges trail horizontally to either side; scars at upper and lower attachments of preserved handle indicate appendages of some kind.

On both sides of upper shoulder, incised, multi-line zigzags filled with rows of punctate dots; unzoned

889 Three-handled neck amphora, banded, with patterned incision; now light
P 2915 Meg. 4, E corner
H. 0.680; Max. D. 0.558 ; D. rim 0.225

Fig. 38 (rim); Pl. 112; pp. 3, 80, 81, 82-83, 88, 100, 105, 109 , $113,114-115,117,118-119,189$
Gaps. Coarse, pale brown clay; slipped surface, smoothed and now fired predom. clay color with areas of ry.

Flat base. Broad, ellipsoidal-biconical body; thick ridge at base of neck and two more defining midway, the last tooled to sharp edges; everted rim with flattened top and ledge. Three strap handles, evenly spaced, rising to lower neck; each with a blunt medial spine and a finger hollow at base.

On body, three wide bands: one plain below max. D.; two with double rows of incised herringbone, placed just above max. D. and below level of lower handle attachments.

## NARROW-NECKED AMPHORAS, SHOULDER-HANDLED

## 890 Shoulder-handled amphora; now red

 P 3782 TB 8 anteroom: along NW wall H. 0.380; Max. D. 0.315; D. rim 0.137Fig. 38 (rim); Pl. 113; pp. 80, 83, 103, 189
Section of rim missing and the rest of it partially vitrified. Coarse red clay; slipped surface, polished to at least a low luster and now fired various shades of red.

Flat base. Ovoid body; ledge-like ridge at base of neck; everted rim, lightly ledged. Strap handles, unevenly placed, with upper attachments at transition to neck.

891 Shoulder-bandled amphora; now light
P 2906 TB 1 anteroom: near $N$ corner, in large vessel against NW wall, with 596 and 788
H. 0.221 ; Max. D. 0.208 ; D. rim 0.118

Capac.-neck 3240 ml .; Max. capac. 3480 ml .
Fig. 38 (rim); Pl. 113; pp. 6, 79, 80, 81, 83, 105, 111, 189
Gaps in rim. Medium-coarse clay, fired light brown to ry; slipped surface, stroke-polished and fired predom. ry.

Flat base. Ellipsoidal body, practically ovoid; ridge at base of neck; everted rim with indistinct, shallow ledge. Short strap handles from low on shoulder to base of neck.

## 892 Shoulder-handled amphora; now light

P 4601 CC 3: NW aisle, to NE of center, beside a large concentration of loom weights
H. 0.278; Max. D. 0.244; Est. D. rim 0.11

Fig. 38 (rim); Pl. 113; pp. 80, 83, 106, 189
Gaps, including most of base and about half of rim. Coarse red clay; smoothed surface (now roughened), fired predom. clay color; traces of mf .

Flat base. Ellipsoidal-biconical body, bicurved; short neck with low ridge at base; everted rim. Short strap handles.

893 Shoulder-handled amphora; indet.
P 4603 CC 3: beside door, at NW, with 985
H. 0.235; Max. D. 0.213; D. rim 0.111

Fig. 38 (rim); Pl. 113; pp. 80, 81, 83, 106, 189, 193
Gaps; one handle missing. Medium-coarse clay, now multicolored; smoothed surface, now fired predom. ry.

Flat base, uneven. Ellipsoidal-biconical body; short neck; everted rim, flat-topped. Short rolled handles from low to high on shoulder.

Found with a very similar amphora (P 4600)

## 894 Shoulder-handled amphora; now red

P 4608 CC 3: NW aisle
H. 0.347; Max. D. 0.290; D. rim 0.114

Pl. 114; pp. 5, 80, 81, 83, 106, 117, 189
Gaps. Coarse red clay; slipped surface, polished and now fired various shades of red.

Uneven flat base. Plump ovoid body; short neck with ledge-like ridge at base and thick, blunt ridge at midway; everted rim, like that on 892. Strap handles.

Found filled with wheat.

895 Shoulder-handled amphora; indet.
P 1468 CC 2: SE half
H. 0.410; Max. D. 0.323; Est. D. rim 0.14

Fig. 38 (rim); Pl. 114; pp. 80, 83, 106, 111,189
Gaps, including over half of rim. Medium-coarse clay, fired rb to ry; polished surface, now dulled and mottled dark ry to brownish gray.

Flat base, uneven. Broad, ellipsoidal-biconical body; cylindrical neck; outward-thickened rim, flattened on face and top. Strap handles with medial spines, set low on shoulder.

P 2547 from TB 3 is similar in form and scale.
896 Three-handled shoulder amphora; indet.
P 1368 CC 2: SE half
GPH. 0.420; Max. D. 0.375; D. rim 0.155
Fig. 38 (rim); Pl. 114; pp. 80, 83, 106, 109, 111, 189
Lower body and area of one handle missing. Coarse, gritty clay, fired red with very thick, dark gray core; cursorily smoothed surface, fired light red to black.

Elongated ellipsoidal body; small ledge at base of neck; everted rim, flattened on top. Two strap handles on lower shoulder, spaced to accommodate a third; each with a deep finger hollow at the base and a short, flattened knob on top.

897A-B Four-handled shoulder amphora with patterned ridging; now light
P5748a-b TB 4
GPH.(A) $0.390 ;$ GPH.(B) 0.30 ; Max. dim.(B) 0.710 ; Est. D. rim 0.39
Fig. 38 (rim); Pl. 114; pp. 80, 81, 83, 87, 88, 100, 103, 118, 189, 190
Two large fragments, one preserving base and lower body (A), the other the shoulder and neck/rim, including handles (B). Coarse red clay; slipped surface, smoothed and fired red to light brown.

Raised base, tooled to appear as a disk foot. Very broad body; short, relatively wide neck; large everted rim with wide, shallow ledge. Four oval handles forming small loops, set at $90^{\circ}$ intervals on upper shoulder.

At least three sets of well-formed ridges: on lower body, lower and upper shoulder. The uppermost sets delimit a large, curvilinear zigzag formed by ridging; pendent from the lower apices are pairs of hooked tails, each terminating in a small, flattened knob. Handles attached after execution of relief work.
898 Four-handled shoulder amphora; painted, indet.
P 3034 Meg. 4
GPH. 0.375; GPW. 0.560
Fig. 37 (rim); Pl. 115; pp. 80, 82, 83, 134, 137, 144 (n. 137), 149-150, 151, 152, 164, 189, 192
Two large fragments preserving sections of body from max. D. well onto shoulder, including scars for handles. Coarse clay, now fired predom. gray; surface smoothed and multicolored with much darkening; dark paint.

Very broad body, probably ovoid or ellipsoidal-biconical; incline of shoulder indicates narrow neck. Four large handles placed at $90^{\circ}$ intervals on lower shoulder.

Thick-line painting. Large zone, ca. 20 cm . high, at level of handles; in each frame between the handles, a large checkerboard design in which alternate checks are rendered as Checkerboard 2. On upper shoulder, a complex lozenge motif of at least two tiers, the overall scheme unclear.

## OPEN-MOUTHED AMPHORAS

(899-935)

899 Wide-necked amphora, three-handled; now gray P 4050 TB 8: steps in front, SE end
GPH. 0.520; Max. D. 0.572; D. rim 0.363
Pl. 118; pp. 5, 32, 79, 83, 84, 86, 117, 189
Lower body missing. Coarse clay, fired gray throughout; cursorily smoothed surface.

Broad body; wide neck with three blunt ridges on lower half; everted, ledged rim, similar to that on 918. Three strap handles, unevenly placed, from shoulder to lower neck; three finger hollows, side by side, at base of each.
900 Wide-necked amphora; now mostly buff
P 2839 Storeroom behind Meg. 4: sunken in floor H. 0.593 ; Max. D. 0.495 ; Est. D. rim 0.31

Fig. 39 (rim); Pl. 118; pp. 4, 26, 83, 84, 86-87, 105, 106, 189
Gaps; fire-damaged in one area. Medium-fine clay, fired yr to dark gray; slipped surface, cursorily smoothed and fired pink where not burned.

Slightly concave base. Broad, ovoid body; shallow, continuous curve into short, wide neck; flaring rim with very shallow, ledge-like channel. Short strap handles with low medial spines, attached from shoulder to neck; at both lower and upper attachments, single finger hollows and short, lateral spurs.

For the shape, cf. the painted 927.
901 Wide-necked amphora; now tan P 4775 TB 5
H. 0.480 ; Max. D. 0.465 ; Est. D. rim 0.32

Fig. 39 (rim); Pl. 118; pp. 32, 33, 83, 84, 86, 87, 88, 105, 109, 117, 189
Gaps in upper neck/rim. Coarse ry clay; slipped surface with mf smoothed and fired predom. a darker tone of clay color.

Flat base. Broad, ellipsoidal-biconical body, reversebicurved; wide neck with distinct, ledge-like ridge at base and a second thick ridge above; everted rim, flattened on face and top, with shallow ledge. Strap handles to mid-neck, each with a basal finger hollow.

Cf. 902-904.
902 Wide-necked amphora; now light
P 2134 TB 3: NW aisle, near N corner
H. 0.520 ; Max. D. 0.450 ; D. rim 0.350

Fig. 39 (rim); Pl. 118; pp. 32, 83, 84, 86, 87, 88, 101, 103, 109, 117, 189
Complete. Medium-coarse, light brown clay; slipped surface, polished in vertical strokes on shoulder and horizontally elsewhere, fired predom. red to ry.

Flat base with small central hole pierced before firing (D. 0.010 ). Broad, ovoid body with multiple contours; neck ridging like that on 901; everted rim, ledged. Strap handles with medial spine and single finger hollow at base.
903 Krateroid amphora; now light
P 3121 TB 6: along NW wall, near N corner
H. 0.475; Max. D. 0.422 ; D. rim 0.343

Fig. 39 (rim); Pl. 118; pp. 83, 84, 86, 87, 88, 104-105, 117, 189
Gaps. Medium-coarse red clay; heavily micaceous film, cursorily smoothed and fired predom. clay color to ry.

Flat base. Broad, ovoid body with very steep shoulder; shallow, continuous curve into wide neck, double-ridged as on 901-902; everted, overhanging rim with narrow ledge. Short strap handles, each with a medial spine.

For the shape, cf, the painted 926.

## 904 Krater; now light

P4774 TB 6: along SE wall, near E corner
H. 0.480 ; Max. D. 0.473 ; D. rim 0.390

Fig. 39 (rim); Pl. 118; pp. 5, 83, 84, 86, 87, 88, 106, 117, 189
Gaps. Medium-coarse clay, fired red to ry; glittery mf, carefully smoothed and now multicolored, predom. tones of clay colors.

Thick-walled and heavy. Flat base. Broad, depressed ovoid body; wide neck with ridging like that on 901; everted rim with inward-sloping int. surface. Strap handles.

## Contained grain.

P 3119, also from the SE aisle of TB 6, but at center, is practically identical in form but a little smaller; P 2288 from TB 4 is very similar. Both vessels have a set of double ridges on the lower neck, and share with 903-904 a glittery mf.

## 905 Krater; indet.

## P 1469 CC 2: SE half

H. 0.390; Max. D. 0.395; D. rim 0.345

Pl. 118; pp. 83, 84, 86, 87, 88, 117, 189
Gaps; near-vitrified on one side. Medium-coarse ry clay; slipped surface, smoothed and now mottled red to ry to brownish gray where not obviously burned.

Flat, narrow base. Plump ovoid body; small groove at base of neck and a thick ridge below midway; everted, ledged rim, similar to that on 919. Strap handles from shoulder to level of neck ridge; a finger hollow at the base of each.

## 906 Krater; now red

P 2558 TB 5 anteroom
H. 0.430-0.440; Max. D. 0.508; D. rim 0.461

Fig. 39 (rim); Pl. 118; pp. $36,78,83,84,86,87-88,103,106$, 109, 110, 189
Gaps. Medium-fine, heavily micaceous clay, fired red; surface well polished over mf to glittery luster and fired red.

Relatively thin-walled. Flat base. Broad, ovoid body with short, steep shoulder; distinct, ledge-like ridge at base of neck, and two thick ridges at third and two-thirds height; broadly everted rim with wide ledge. Double oval handles from low on shoulder to level of upper neck ridge.

## 907 Four-handled krater; now light

P 1872 TB 3
H. ca. 0.700; Max. D. 0.723; D. rim 0.617

Fig. 39 (rim); Pl. 119; pp. 5, 33, 83, 84, 86, 87-88, 105, 107-108, 189
Gaps. Medium-coarse clay, fired light red; surface well smoothed over glittery mf and fired red to light red where intact, shades of yr elsewhere.

Relatively thin-walled. Flat base. Very broad, ovoid body with pronounced taper toward base; thick, ledge-like ridge at base of neck; broadly everted, overhanging rim with wide, sloping ledge. Two pairs of handles, each set opposing: rolled horizontals low on shoulder; oval verticals from low on shoulder to mid-neck, these deeply channeled along the faces, topped by spool-rotelles, and flanked at bases by curving handle trails.

Cf. 908-910.

908 Four-handled krater; now red with buff mf
P 1850 TB 3: NW aisle, SW of center
H. 0.588; Max. D. 0.663; D. rim 0.590

Fig. 39 (rim) ; Pl. 119; pp. 32, 33, 83, 84, 86, 87-88, 103, 107-108, 117, 189
Gaps, including one horizontal handle. Coarse red clay; slipped surface, well smoothed and fired red with an overlay of pink mf.

Relatively thin-walled. Flat base. Very broad, plump ovoid body, tapering to base; short neck with low ridge at base; everted, overhanging rim with narrow ledge. Two pairs of handles, set opposing as on 907: rolled horizontals, sideattached, with thickened, squared-off ends; vertical straps from shoulder to mid-neck, trimmed to rectangular sections, with short spurs flanking both upper and lower attachments.

## 909 Four-handled krater; now red

P 3321 TB 7: SE aisle
GPH. 0.300 ; D. rim 0.575
Fig. 39 (rim); Pl. 119; pp. 33, 83, 84, 86, 87-88, 103, 107-108, 117, 189
Fragment preserving upper body and neck/rim, with gaps; faultily mended. Like 907 in fabric and finish.

Broad body with steep shoulder; very wide, short neck with prominent double ridges at base and mid-way; ledged rim similar to that on 907 . Two pairs of handles, arranged like those on 907-908: double horizontals, rolled, merging in center to form single side-attachment with thickened, squared-off end; vertical straps like those on 908 but without spurs.

## 910A-B Handle fragments; now red

P 4647a-b CC 3
GPW.(A) 0.410; GPW.(B) 0.390
Pl. 119; pp. 33, 83, 84, 87-88, 107-108, 122, 189, 190
Two handles with parts of the surrounding wall. Like 907 and 909 in fabric and finish.

Shoulder handles; double horizontals like those on 909 , but with outer ends drawn out horizontally and sideattached; at central mergers, pairs of applied pellet "eyes" lend the appearance of long-horned animal heads, e.g., wild goats or antelope.

## 911 Three-handled krater or wide-necked amphora; now gray <br> P 3031 Meg. 4

GPH. 0.470; GPW. 1.04; Est. D. rim 0.90
Fig. 39 (upper profile); Pl. 119; pp. 32, 83, 84, 86, 87-88, 105, $108,117,120,189$
Large fragments preserving sections of shoulder and neck/rim, including three handles. Coarse clay, fired gray with a strip of rb on int.; thick slip, polished to medium luster and fired predom. dark gray with patches of rb; overlay of silvery mf .

Very thick-walled and heavy. Body apparently an enormous ovoid with steep shoulder; thick ridge at base of tapering neck and a second above; broadly everted rim with wide ledge. Handles rise from high on shoulder to the undersides of semicircular platforms attached flush with rim; apparently evenly spaced; basically broad straps ( 0.104 wide) flanked by thick, rolled sections; thick, squared-off spurs flank the bases; wide, bowed bands lie pendent below.

912A-B Krater with open-work handles; now red
P 4349 TB 7 anteroom: against NE wall, adjacent to hearth in N corner
GPH.(A) $0.180 ;$ GPH.(B) 0.250 ; GPW. 0.57
Fig. 40 (rim); Pl. 119; pp. 5, 83, 84, 86, 87-88, 103, 105, 108, 117, 120, 123, 189, 190
Two fragments: one preserving base and lower body (A), the other a section of shoulder, neck/rim, and one handle (B). Coarse, gritty clay, fired red; slipped surface, smoothed and fired predom. red.

Raised base, shallowly concave on bottom; thick, carinated ridge on ext. Steep shoulder with obliquely notched ridge at about midway and a second above, at base of short, wide neck; everted, overhanging rim, ledged. Large handle ( 0.122 wide), similar in basic form to those on 911 , rising from low on shoulder to a rectangular platform flush with rim; triangles cut out from central strap section to form a large, thick X; rolled lateral sections trail broadly outward, as flattened bands, to either side of base.

## 913 Wide-necked amphora or krater; indet.

P 2903 TB 2: NW aisle, near N corner
GPH. 0.220; Est. D. rim 0.49
Fig. 40 (rim); Pl. 119; pp. 6, 83, 84, 87, 88, 103, 117, 189
Fragment preserving section of shoulder, neck/rim, and one handle. Coarse red clay; cursorily smoothed surface with high concentration of imbedded inclusions, now discolored from fire.

Thick-walled and heavy. Very steep shoulder, continuing almost directly into wide neck; three thick ridges, evenly spaced, from base of neck to midway; everted rim with wide ledge. Large strap handle from high on shoulder to upper neck; thickened spurs flank both attachments; long finger hollow at base; large, flattened knob near top.
914 Wide-necked amphora with patterned incision; indet. P 1952 TB 3: in front of main grinding stand H. 0.388; Max. D. 0.368; D. rim ca. 0.280

Fig. 40 (rim); Pl. 120; pp. 5, 43, 83, 84, 86, 87, 88, 101, 103, $109,113,114,115,117,189,190$
Fragmentary, but complete profile preserved. Mediumfine ry clay; polished surface, now multi-colored, yr to ry with some darker areas.

Relatively thin-walled. Flat base. Ovoid body; wide neck with three ridges from base to midway; everted rim with broad ledge. Double-round handles, each with a basal finger hollow; curving handle trails extend laterally from the bases; a small, cylindrical knob near the top on each.

On lower shoulder, at level of handle bases, narrow incised zone of three wavy lines.

Cf. 915 , found with it (as was 921 ); for the shape, cf. also the painted 924.
915 Krateroid amphora with patterned incision; indet.
P 1951 TB 3: with 914
GPH. 0.310; Max. D. 0.450; D. rim 0.373
Fig. 40 (rim); Pl. 120; pp. 5, 43, 83, 84, 86, 87, 88, 109, 113, $114,115,117,189,190$
Lower body missing; gaps elsewhere. Very much like 914 in fabric and finish.

Broad, steep-shouldered body, apparently ovoid; wide neck with distinct, ledge-like ridge at base and three thick ridges above; everted rim with sloping ledge. Medially spined strap handles, each with a basal finger hollow; knobs like those on 914.

On lower shoulder, incised zone of two wavy lines.

916A-B Wide-necked amphora with patterned incision; indet.
P 3103a-b Meg. 4
GPH.(A) 0.260 ; Est. D.(A) 0.60 ; GPH.(B) 0.300
Est. D. rim 0.37
Fig. 40 (rim); Pl. 120; pp. 82-83, 88, 114-115, 117, 189
Two fragments, one preserving section of lower body and belly (A), the other (B) a section of shoulder and neck/rim, plus handle scars. Coarse, gritty clay with mica flakes, fired red; cursorily smoothed surface, now predom. light gray with areas of rb and red.

Broad body with long, sloping shoulder; wide neck: everted rim with high face and ledge. Handle from lower shoulder to lower half of neck.

Below max. D., two pairs of high, obliquely notched ridges; a single ridge of the same kind low on shoulder. At max. D., mid-shoulder, and base of neck, narrow bands with crudely incised herring-bone.

## 917A-B Wide-necked amphora with patterned incision;

 indet.P 2492a-b Destruction debris to SW of TB 5
GPDim.(A) 0.175 ; GPDim.(B) 0.141
Pl. 120; pp. 83, 88, 114, 115, 189
Two nonjoining sherds, both preserving sections of shoulder and neck; A also has a handle stub. Coarse red clay; polished surface, fired ry to brownish gray.

Steep shoulder; wide neck with thick ridge at base. Double-round handle rising from shoulder.

On neck, large wavy line incised with a six-tined instrument.
918 Wide-necked amphora with stamped decoration; now gray
P 2848 Meg. 4 anteroom
Figs. 40 (rim), 60-61; Pls. 120, 170; pp. 15, 83, 84, 86, 88, $102,108,117,123,124-125,126,129,131,132,186$, 189
Fragment preserving about half of shoulder and neck/rim, including one handle. Coarse gray clay; smoothed surface, fired predom. very dark gray with some lighter areas.

Ledge-like ridge at base of neck and an obliquely notched ridge below midway; everted, ledged rim. Strap handle from shoulder to mid-neck; finger hollow at base; medial spine between channels.

On upper shoulder, groups of stamped S-spirals (Fig. 61) alternate with groups of chevron-triangles (Fig. 60) stamped twice to form hourglasses (Pl. 170).

The S-spiral stamp seems to be the same as that used on 312 from the Terrace fill.
919 Krater with stamped decoration; indet.
P 1846 TB 4: SE aisle
H. $0.400-0.430$; Max. D. 0.402 ; D. rim 0.360

Fig. 40 (rim); Pl. 120; pp. 83, 84, 86, 88, 103, 117, 118, 123, 124-125, 127, 189
Few gaps and chips. Medium-coarse red clay; slipped surface, smoothed and fired yr with mf where not clearly affected by burning.

Flat base. Broad, ovoid body with steep shoulder; vertical neck; everted, ledged rim. Strap handles.

At base of neck, a narrow strip of triangle-zigzag stamping, defined below and above by thich. blunt ridges.

P 4002 from the front steps of TB 8 is practically identical in every respect; P 4779 from an unspecified Destruction Level context is very similar.

## 920 Krater with stamped decoration; indet.

P 3059 CC 2: NW' half
H. 0.615 ; Max. D. ca. 0.720 ; D. rim 0.580

Fig. 40 (rim) ; Pl. 121 ; pp. 61, $77,83,84,88,100,105$, $107-108,109,113,118,119,122,123,128,189,190$
Over half preserved, with gaps. Coarse, light red clay; slipped surface with mf overlay, smoothed and fired predom. clay color with both darker and lighter mottling.

Relatively thin-walled. Mending has left vessel lopsided and bowed. Raised base with half-round profile. Very broad, depressed ovoid body with four raised bands, three below max. D. and the fourth and widest on lower shoulder; short neck with thick, ledge-like ridge at base and a high, sharp ridge near top; thick, everted rim with slight ledge. Rolled horizontal handles set upright on mid-shoulder; applied bosses at sides and top; low, horn-like ridges trail out and up from attachments to terminate in applied bosses. At level of handles and midway between them, a set of three larger bosses in a horizontal row.

Band on lower shoulder impressed with a rectangular stamp in rows so as to form a relief checkerboard (Pl. 121).

Cf. 921.

## 921 Krater with stamped decoration; indet.

P 1949 TB 3: in front of grinding stand, with 914-915
H. 0.610; Max. D. 0.650 ; Est. D. rim 0.58

Fig. 40 (rim) ; Pl. 121; pp. 5, 77, 83, 84, 88, 100, 105, 107-108, $109,113,117,118,119,122,123,127,128,189,190$
Large gaps. Similar in fabric to 920 ; burnished surface.
Raised base with beveled lower edge and thick ridge at top. Similar to 920 in shape, articulating elements and some details; two (instead of four) bands, on lower body and lower shoulder; an additional ridge on neck; rim more projecting, but with same slight ledge. Double-round handles from low on shoulder to level of upper neck ridge; single applied bosses span crevices at tops; ridges similar to those on 920 flank the bases. A row of bosses again occur midway between the handles.

On shoulder band, carefully executed triangle-zigzag stamping.

## 922A-B Wide-necked amphora or krater with stamped decoration and patterned incision; now buff P 2902a-b TB 1

GPW. (A) 0.410; Est. D. rim 0.37
Figs. 40 (rim), 61 ; pls. 121, 170; pp. 6, 83, 84, 87, 105, 107, $113,114-115,117,118,123,132,189$
Two nonjoining fragments preserving section of shoulder, lower neck, and one handle (A) and upper neck/rim (B). Coarse red clay; slipped surface, cursorily smoothed and fired predom. pink.

Steep shoulder with raised band on lower part; wide neck with three evenly spaced ridges from base to two-thirds height; large, broadly everted rim with deep channel on top, near inner periphery. Strap handle from mid-shoulder to mid-neck; on lower portion, pairs of channels sweep out to either side of an oval finger hollow at base; short spurs flank upper attachment; small conical knob on top.

On shoulder band, incised zigzag or lozenges; directly above, a row of S-spiral stampings (Fig. 61, Pl. 170), every third one impressed vertically. The stamped pattern recurs between the lower neck ridges; between the upper two ridges, at midway on neck, a third row of same, all horizontal.

## 923 Wide-necked amphora; painted, indet.

## P 2886a-c TB 2

## GPH. 0.065

Pl. 122; pp. 6, 83, 134, 137, 139, 141, 147, 149, 189
Non-joining sherds and a fragment preserving sections of shoulder, including a handle stub, and a second handle. Medium-coarse clay, fired red; surface hand-polished over dark paint to medium luster and mottled red to ry.

Medium-sized amphora. Long, sloping shoulder; neck wide, but too narrow for a krater. Strap handles from low on shoulder to neck; bolster across top.

In a zone of uneven height on shoulder, a row of Type IA triangles; above, a narrow zone of pendent garlands. On preserved handle, open crosshatching, Type 1; X-panel at base of the other handle; although the decoration differs, both handles appear to belong to the same vessel.

## 924 Wide-necked amphora; painted, indet.

P 4358 TB 7 anteroom: center, in front of door into main room
H. 0.346; Max. D. 0.277; D. rim 0.220

Fig. 40 (rim) ; Pl. 122; pp. 83, 84, 88, 105, 111, 134, 137, 140 , 189
Gaps, including one handle. Medium-fine red clay; slipped surface, polished and now largely discolored; matte black paint.

Disk foot. Ovoid body, curving continuously into wide neck; everted rim, pointed in section, with flattened sloping face and top, and shallow, sloping ledge. Short oval handles.

Wavy-line zones at max. D. and transition to neck. High on shoulder, sextuple concentric semicircles, compass-drawn and pendent from a single line.

For the shape, of. 914.

## 925 Wide-necked amphora; painted bichrome-on-ground

P 2616 TB 4 anteroom: SE side
H. ca. 0.310; Max. D. 0.268; Est. D. rim 0.26

Fig. 40 (rim); Pl. 122; pp. 37, 83, 84, 88, 105, 111, 134, 137, 164, 165 (n. 247), 189
Most of base, large portions of lower body, and most of neck/rim missing; one handle broken away; paint very worn. Medium-coarse clay, now fired predom. dark gray; slipped surface, smoothed and now discolored; matte dark and red paints.

Flat base. Plump ovoid body; continuous curve into short, wide neck; broadly flaring rim with flattened top and shallow, channel-like ledge. Short oval handles set high on shoulder.

Low on shoulder and on upper neck, groups of three lines, the central one red. Within, in a zone that spans onto lower neck, widely spaced oblique lines, each with a pendent wavy line; low in each interval, a triple CC; it cannot be determined whether the principal zone was bichrome.

926 Wide-necked amphora; painted dark-on-ground-coat
P 4580 CC 3: central aisle at SW, floating
H. 0.460; Max. D. 0.400; D. rim 0.290

Fig. 40 (rim); Pl. 122; pp. 26, 38, 39, 83, 84, 86, 87, 103, 134, 137, 189
Gaps; ground-coat and paint very worn. Medium-fine clay, fired dark rb; lower body, rim, and handles smoothed and now badly discolored; matte white ground-coat from max. D. to top of neck; matte black paint.

Flat base, uneven. Ovoid body with steep shoulder; shallow, continuous curve into wide, slightly tapering neck; everted, overhanging rim, knob-like in section, with distinct, narrow ledge. Strap handles, each with a shallow finger hollow at the base.

Thick-line decoration. Zone on shoulder now totally obliterated. On either side of neck, a zone of tall, Type 1A triangles.

For the shape, cf. 903.
927 Wide-necked amphora; painted bichrome-on-groundcoat
P 1187 Found scattered in burned debris mixed with clay above CC 2
H. 0.495 ; Max. D. 0.443 ; Est. D. rim 0.31

Fig. 40 (rim) ; Pl. 123; pp. 5-6, 26, 38, 83, 84, 86, 87, 103, 134, 138, 139, 142, 144, 145-146, 149 (n. 183), 151, 189, 190, 191-192
Many gaps, including most of neck/rim and one handle; warped and vitrified area; ground-coat and painting worn. Medium-coarse ry clay; lower body, handle areas, rim, and int. neck slipped, polished, and fired a streaky rb; on remaining ext., matte white to very pale brown ground-coat, applied before slip; matte black and red paints.

Wide, flat base. Ovoid body; shallow, continuous curve into neck; everted, ledged rim. Strap handles.

Fine-line decoration, the same on either side: three zones of equal height, two on shoulder and one on neck. In the lowest, four spaced panels, each with wavy-line borders: Cross-and-Lozenge Panels 6 , with the tiny connecting diamonds red-filled, alternate with Type 1A and 1B checkerboards whose solid checks alternate black and red. On upper shoulder, a complex lozenge row whose double lines are filled between with black (lower half) and red (upper half); the lozenges are alternately blank and compounded by smaller lozenges within. On neck, above a narrow band of simple zigzag, a large Meander 2. The ground-coat fields on either side are connected by a narrow, apparently undecorated strip running under the handles; the handle fields themselves, reserved and U-shaped, are bordered by a narrow zone of zigzag that seems to be continuous with one running beneath the rim on either side.

## 928 Krater; Ladders-and-Zigzags style, indet.

P 5140 TB 1
GPH. 0.410; GPW. 0.340; Est. D. rim 0.60; Th. 0.012
Fig. 41; Pl. 125; pp. 67, 83, 103, 134, 137, 138, 141, 160, 161, 189
Fragment preserving section from below max. D. to top, including a handle trail; small vitrified areas. Medium-coarse clay, now fired gray throughout; surface slipped and polished to low luster; dark matte paint.

Apparently ovoid body; thick ridge at base of tall, wide neck; everted, ledged rim, knob-like in section. At $L$ of fragment, the end of a handle trail, terminating in a thickened, trimmed finial.

Thick-line decoration. At max. D. and just above, a paneled zone with ladders-and-zigzags to the $L$ of a Checkerboard lA with large checks. On shoulder, above a narrow reserved strip, a row of Type 1 triangles with pendent, laddered chevrons in the intervals. On neck, two paneled zones, spaced, the upper somewhat higher than the lower: in the lower, ladders-and-zigzags at $L$ and, at $R$, a panel containing two horizontal strips of Type 1 simple lozenges; upper neck zone, bordered above by a wavy-line zone, shows a panel of Crosshatching 1. On face of rim, vertical dashes that extend onto underside.

A considerably smaller, piecemeal krater (est. D. rim 0.36 ) from Trench PN 3, levels 6 b to 7 a , is very close in painted program, with the addition of a zone of tangent $X$ panels below the belly zone.

929 Krater with built-in lid; painted, now tan
P 2306 Meg. 3: along SW wall, over wooden beam bed, beside 688 and 822
H.-rim 0.332; H.-mouth in lid 0.370; Max. D. 0.376
D. rim 0.364 ; D. mouth in lid 0.190

Fig. 40; PI. 124; pp. 4, 51, 74, 78, 83, 84, 86, 87, 88, 134, 137 , 138-139, 148, 149 (n. 182), 150, 153, 154, 189, 190, 192
Small gaps and chips. Medium-coarse clay, fired ry to gray; slipped surface, well polished to a medium luster and fired predom. a brighter tone of the ry clay color; matte dark paint.

Thick-walled and heavy. Raised base. Broad, ovoid body with short, straight shoulder; vertical neck with high, trimmed ridge at base; broadly everted rim with shallow ledge. Lid-like cover attached just below ledge; very shallowly conical up to a short neck; everted rim, similar to the outer one. Double-round handles from low on shoulder to high on neck; large spool-rotelles with abbreviated shafts.

Fine-line, careful decoration. Zones on shoulder, neck and lid contain a total of 45 panels representing 11 motifs; the panels vary in width and spacing, and show no apparent order. In descending frequency: Semicircle Panel 3 (11 occurrences); six each of Crosshatching 2 and Oblique Checkerboard 2; Checkerboard 1A (five); three each of Crosshatching 1, Oblique Checkerboard 1, Latticed Panel 2, and narrow herringbone; two each of Checkerboard 2 and an X-panel in which all triangles are cross-hatched; a single instance of an X-panel in which only the lateral triangles are crosshatched. Strips of simple zigzag border the top of the shoulder zone and the bottom of the neck zone, while a neat row of small, solid triangles with single outlines surround the annular zone on the lid.

## 930 Krater; painted, now buff

P2619 TB 2: N quarter
H. 0.398; Max. D. 0.365; D. rim 0.357

Pls. 108 (with the stand 871 ), 125; pp. 6, 77, 83, 84, 88, 134, 137, 138-139, 148, 150, 152, 153, 154 (n. 214), 169, 170 (n. 255), 189, 190, 191, 192
Gaps. Medium-coarse clay, fired light brown to gray; slipped surface, polished and fired light brown; matte dark paint.

Narrow, flat base, uneven. Oroid body with steep, straight shoulder; tall neck; everted rim with small ledge. Short strap handles on shoulder.

Four zones, placed below max. D., on shoulder, at transition to neck, and on upper neck. The lowest and the highest are continuous around the vessel: groups of five to ten thick rays spaced between panels of herringbone; vertical rows of small, double CCs in the intervals. On either side of shoulder, nine closely spaced panels of three types: A) a double-line $X$ whose upper and lower triangles are crosshatched (as is the central intersection), while the lateral fields bear checkerboard; $B$ ) a solid-barred $X$ with a small (C: in each field; C) Crosshatching 1; the panels are arranged A-B-C-B-A-B-C-B-A. Spanning transition to neck on either side, a large, compounded checkerboard two blocks high, in which the checks alternate in staggered pairs of Checkerboard 1A. Cross-hatching 1, and blanks with one or two CCs in each. On rim, solid bars with flanking lines occur at quarter intervals; wavy line on ledge. On each handle, three stacked panels of butterfly.

Found beside the stand 871 , in which the krater probably once rested.

## 931 Krater; painted, now buff

 P 3297 TB 7: against NW wallH. 0.420-0.470; Max. D. 0.470; D. rim 0.430

Fig. 42; Pl. 125; pp. 83, 105, 106, 134, 137, 138-139, 148, 152, 154, 189, 191, 192
About half missing, including one handle; near-vitrified in places; painting worn. Coarse ry clay; slipped surface, polished over dark paint and fired very pale brown, with a greenish tinge in places.

Flat base. Broad, ovoid body with steep shoulder; flaring rim with small ledge. Short strap handles from shoulder to base of neck.

Spaced panels on either side of shoulder: Crosshatching 1, a double-line Cross-and-Lozenge 7, and a feather tree are preserved; vertical rows of double CCs in the intervals. On either side of neck, a row of rays with either crosshatched or hollow bases and vertical wiggly lines between them; over handle, pendent wavy line and horizontal row of CCs. On rim, solid bars flanked by lines.
932 Krater; painted, Group of 932, indet.
P 3729 TB 8 anteroom: beside NE wall, just to NW of door H. 0.350 ; Max. D. 0.343 ; D. rim 0.312

Fig. 40 (rim); Pl. 126; pp. 5-6, 26, 77, 83, 84, 85, 88, 105, 133, 134, 137, 138, 139, 141, 142-143, 144 (n. 137), 148, 153, 162, 163, 189, 191
Gaps. Medium-fine clay, fired ry to brownish gray; slipped surface, polished and mottled clay colors; matte dark paint.

Flat base. Broad, very depressed ovoid body; low ridge at base of neck; everted rim with sloping ledge. Strap handles from lower shoulder to lower neck, each crowned by a bolster with flattened ends.

On either side of shoulder, silhouette animals of Alişar IV type flank a central, stylized tree whose roots (on one side at least) extend below the ground line. Two deer at $L$, two goats at $R$, all male; one of each rears up on the tree, while those behind look on. The deer have small antlers and short, stubby tails; the goats are distinguished by long, trailing horns, goatees, and bushy tails; numerous double CCs in the fields, occasionally following the animals' contours. On either side of neck, two zones divided by a prominent row of dots: on one side, a complex lozenge row (Fig. 62) and Type 3A triangles with CCs in the fields; on the other, Zigzag 2 with a CC over each triangle, and a narrow Zigzag 4 above. Wavy line on ledge of rim. On each handle, a pair of butterfly panels, stacked; bolsters solid except for small Xs on the ends; above at least one handle, an additional butterfly panel separates the neck zones to either side.

## 933 Krater; painted, indet.

P 4001 TB 8: steps in front
GPH. 0.337; Max. D. 0.433
Fig. 43; Pl. 127; pp. 5, 83, 84, 134, 137, 140, 149-150, 151, 163, 189
Fragment preserving section of mid-body, shoulder, neck, and one handle; paint worn. Coarse, gritty clay, now multicolored; slipped surface, smoothed and now fired clay colors; dark paint.

Apparently ovoid body with steep shoulder; wide neck with ledge-like ridge at base. Strap handle from lower shoulder to mid-neck.

Low on either side of shoulder, a narrow zone with a broad wavy line and hatching in the lower half. Above, on one side of shoulder, spaced panels, a laterally elongated Cross-and-Lozenge 4 and Checkerboard 1A; in the intervals, cursorily rendered silhouette birds, facing $R$. On other side of shoulder, a zone of Checkerboard 2, two blocks high, whose alternate squares are either crosshatched or latticed; feather tree, lines, and a hatched strip flank handle. On at
least one side of neck, broad wavy lines placed low, at midway, and at top, the last fringed.

## 934 Krater; TB 8 Group, indet.

## P 2519 TB 4 anteroom

GPH. 0.435; Max. D. 0.423
Pl. 127; pp. 83, 134, 137, 138, 154, 164, 189
Fragment preserving base, section of body through upper neck, and handle stub; surface badly worn. Coarse, gritty clay, fired very pale brown to gray; slipped surface, very pale brown to red; matte dark paint.

Flat base with small central hole ( 0.01 wide) pierced before firing. Ovoid body with short, steep shoulder; low ridge at base of neck. Strap handle rising from shoulder.

On shoulder, Type 1A triangles with double outline; flanking handle, narrow vertical strips of herringbone and opposing garlands. On neck, narrow zone of single circles at midway, enclosed above and below by groups of narrow zones with broad wavy lines; at top of neck, a narrow zone of pendent garlands.

935A-E Krater; TB 8 Group, now red
P 4165, P 4166 TB 8: steps in front
GPH.(B) 0.090 ; GPH. (C) 0.125 ; Est. D. rim $0.30-0.33$
Fig. 44; Pl. 127; pp. 5, 83, 84, 88, 105, 134, 137, 142-143, 164, 189
Five associated fragments preserving sections of shoulder and neck/rim; paint badly worn. Coarse pink clay; unevenly applied micaceous slip, fired red; matte black paint.

Steep shoulder with continuous curve into wide neck; ledged rim of inconsistent profile, rounded on face and flattened on top.

A zone on shoulder, above lines, combines single and double zones in a scheme that is probably related to handle placement: on B , at $L$, a single zone containing a panel with a fringed $X$ and multi-line border; centrally placed in the interval between this panel and a second set of vertical lines that marks the beginning of a double zone, a vertical line with a wavy line tangent to either side; the double zone on $B$ has in the lower register small, Type 1A triangles with quadruple to quintuple outlines, while in the upper is a Zigzag 4, i.e., a repeat of the zone below but without the triangles; on A, beyond a vertical divider and a square of crosshatching (Checkerboard 2?) at far $L$, a double zone in which the lower is similar to that on B, but above are groups of ladders alternating oblique and vertical. On mid-neck, as seen with C, thick bands enclose what appears to be a row of single, compass-drawn circles (not indicated in Fig. 44); at upper neck, on C-E, rows of Type 1A triangles with double to triple outlines, these interrupted at two points by vertical lines, beyond which are horizontal bars on D and a pendent horizontal wavy line (or garland) on C (perhaps in connection with handle panels).

## MISCELLANEOUS AMPHORAS

(936-937)

## 936 Elongated amphora; now buff

P 4602 CC 3: central aisle at NE, floating
H. 0.309; Max. D. 0.161 ; Est. D. rim 0.13

Pl. 134; pp. 8, 90, 189
Gaps; edge of rim mostly missing. Coarse, gritty clay, fired pink; thin slip, fired predom. clay color.

High ring foot. Slender, elongated body curving gradually into wide neck; everted rim, wide and concave on top. Short, rolled handles, unevenly placed, from shoulder to neck.

937 Dinoid amphora; indet.
P 4652 CC 3: SE aisle, floating
GPH. 0.325; Est. D. rim 0.30
Fig. 44; Pl. 134; pp. 90, 91, 94, 98 (n. 165), 100, 109, 189
Fragment preserving section of body from about max. D. to top, including one handle. Coarse, gritty clay, fired variously from red to ry; surface smoothed and now totally discolored from burning.

Long, steep shoulder with low, triangular-sectioned rim set directly atop. Strap handle low on shoulder; finger hollow at base; short cylindrical knob on top, with a second on shoulder above.

## AMBIGUOUS AMPHORAS (938-939)

938 Amphora with stamped decoration; now gray P 2849 Meg. 4 anteroom
Max. dim. 0.252
Pls. 134, 170; pp. 90, 123, 124-125, 130, 131, 132, 190
Shoulder fragment, including handle stub. Medium-
coarse clay, brown with light gray core; surface polished around stampings and fired predom. gray.

Strap handle rising from shoulder; finger hollow at base.
On shoulder, vertical stampings reminiscent of the Sspiral, but with substitution of wagon-wheels at the ends (Pl. 170).

## 939 Amphora with stamped decoration; now gray

P 3029, P 3264 Meg. 4 and debris over Terrace to NW GPW. 0.275
Figs. $60-61$; pls. 134, 170; pp. 34, 90, 119, 123, 124-125, 126 , 131, 133, 190
Two separately inventoried pieces joining to preserve low, wide section of shoulder, including scar for lower handle attachment; surface badly damaged by fire. Medium-coarse, very dark gray clay; surface polished to at least a low luster and fired clay color with a patchy overlay of mf .

Directly beneath the handle, a wide, raised band stamped alternately with an S-curl (Fig. 61) and a design of opposed, inward-pointing chevrons (Fig. 60, Pl. 170). The latter motif may have been made by impressing a stamp with a single set of chevrons two times, once in either direction.

## The Destruction Level: Jars

(940-1009)

## LOW-NECKED JARS AND DINOI (940-974)

## SMALL JARS

940 Small jar; now light
P 1329 CC 2: SE half
H. 0.070 ; Max. D. 0.091 ; D. rim 0.048

Capac.-neck 180 ml .
Pl. 136; pp. 29, 91, 92, 95, 187
Small gaps. Fine clay, soft and powdery, fired pale brown to red throughout; smoothed surface.

Low, raised base. Ellipsoidal body with multiple contours; narrow, abbreviated neck; flaring rim with shallow ledge on int.
941 Small jar; indet.
P 1239 CC 2: SE aisle
H. 0.068; Max. D. 0.087; D. rim 0.044

Pl. 136; pp. 29, 91, 92, 94, 95, 187
A few small gaps and chips. Medium-fine rb clay; polished surface, now practically matte, fired brown with darker areas.

Flat base, uneven. Broad, ellipsoidal body, reversebicurved; narrow, abbreviated neck; small, everted rim, flattened on top.

## 942 Near-miniature jar; now light

P 2372 TB 3: NW aisle, found upside down as a stopper in the mouth of the jar 956, both inside a large vessel
H. 0.052; Max. D. 0.083 ; Est. D. rim 0.040

Capac.-neck 100 ml .
Pl. 136; pp. 29, 91, 92, 95, 187
About half of rim missing. Medium-fine rb clay; lightly polished surface, fired clay color to red.

Flattened, poorly defined base. Broad, depressed piriform
body with long shoulder; narrow, abbreviated neck; small, everted rim, beveled to an inward-sloping surface on top.

943 Small jar; now red
P 2544 TB 2: N corner
H. 0.070 ; Max. D. 0.082; D. rim 0.039

Pl. 136; pp. 29, 91, 92, 95, 187
Intact. Medium-fine clay; polished surface, fired predom. red.
944 Small jar; now light
P 1184 CC 2: SE aisle
H. 0.079 ; Max. D. 0.099 ; D. rim 0.040

Capac.-neck 220 ml .
Pl. 136; pp. 29, 91, 92, ,95, 187
Intact but for a few chips. Medium fine clay, fired light $r$; lightly polished surface, mottled light brown to rb.

Narrow, flat base. Broad, piriform body, reverse-bicurved; narrow, abbreviated neck; small, flaring rim, beveled as on 942.

945 Small jar; now red
P 1400 CC 2: SE aisle
H. 0.105; Max. D. 0.131 ; D. rim 0.063

Fig. 48; Pl. 136; pp. 29, 32, 91, 92, 187
Several gaps. Medium-fine clay, ry to red; slipped surface, well polished to medium luster and fired predom. red.

Flat base. Broad, ellipsoidal body (now somewhat distorted by mending); short neck; small, everted rim, wide and flat on top.
946 Small jar; indet.
P 1459 CC 1: N'W half
H. 0.095 ; Max. D. 0.123; D. rim 0.070

Capac.-neck 490 ml .
Pl. 136; pp. 29, 91, 92, 95, 187
Gaps. Medium-fine rb clay; lightly polished surface, now
mottled clay color to brownish gray.
Wide, flat base. Broad, depressed ovoid body; wide, abbreviated neck; everted rim, flattened on top.

## 947 Small jar; indet.

P 1240 (C 2: SE aisle
H. 0.083; Max. D. 0.116; D. rim 0.073

Capac.-neck 430 ml .
Pl. 136; pp. 29, 91, 92, 95, 187
Small gaps. Medium-fine clay, soft and powdery, fired pale brown; thin slip, smoothed and fired clay color with some darker areas.

Flattened base, poorly defined. Broad, piriform body; wide, abbreviated neck; broadly flaring rim, beveled to an inward-sloping surface on top.

## 948 Small jar; now light

P 1280 CC 1: NW half
H. 0.110; Max. D. 0.138; D. rim 0.103

Pl. 136; pp. 91, 92, 95, 96, 187
Gaps. Medium-fine rb clay; surface well polished to low luster and mottled clay color to red.

Flat base. Broad, biconical body; broadly flaring rim, ridged at base and obliquely flattened on top.

949 Small jar, fluted and lugged; painted, indet.
P 1542 NW storeroom behind Meg. 1
H. 0.126; Max. D. 0.164; D. rim 0.107

Fig. 48; Pl. 136; pp. 3, 74, 75, 91, 92, 95, 121, 134, 138, 140, $143,149,153,157,187,190$
Intact but for some chips; painting partially illegible. Fine ry clay; slipped surface, polished over dark paint to medium luster and mottled clay color to light brown to light brownish gray.

Flat base. Broad body, ellipsoidal to depressed ovoid, with twelve vertical flutes of finger or thumb width from belly to top of shoulder; short neck, wide and tapering, rises from an offsetting ledge; flaring rim with flattened, sloping top. Flush with rim, two spool-shaped lugs set vertically and opposing, each pierced lengthwise.

Between the flutes, 12 narrow, vertical panels with at least seven motifs: three of stacked CCs (two in reserve against a solid field); two Type 1A checkerboards; a Simple Lozenge Row 1; Crosshatching 2; a tall, narrow butterfly; two multiple $X$-panels, one of open latticing with an $X$ in each square, the other having stacked, rectangular $X$-panels with laddered borders; two panels illegible. Wavy-line zone on neck.

## 950 Small jar; indet.

P 1255 CC 2: E corner
H. 0.108; Max. D. 0.111 ; D. rim 0.072

Capac.-neck 470 ml .
Pl. 136; pp. 72, 91, 92, 95, 187
Few chips in rim. Medium-coarse clay, fired pale brown to gray; surface roughened and otherwise damaged from burning.

Flat base. Ellipsoidal-biconical body with multiple contours, lopsided; short, wide neck; flaring rim.

951 Small jar; now tan
P 2337 TB 3: NW aisle
GPH. 0.101; Max. D. 0.121
Capac.-neck 530 ml .
Pl. 136; pp. 91, 92, 95, 187
Edge of rim completely chipped away; otherwise intact.
Medium-coarse clay, fired rb; mf polished to low luster and mottled tones of clay color.

Flat base, uneven. Ellipsoidal body with multiple contours; short neck.

## LOW-NECKED JARS AND DINOI, LARGE

## 952 Low-necked jar; indet.

P 2011 TB 4
H. 0.147; Max. D. 0.173; D. rim 0.103

Pl. 137; pp. 91, 92, 95, 188, 189
Gaps and chips; most of surface burned away. Mediumcoarse, light ry clay; slipped surface, lightly polished and mottled clay color to brownish gray.

Wide, flat base. Bicurved ellipsoidal body; short, wide neck; flaring rim.

P 2689 from TB 3 is similar but a little smaller (H. 0.126; capac. 810 ml .).

## 953 Low-necked jar; indet.

P 1798 CC 2: SE half
H. 0.25-0.261; Max. D. 0.315; D. rim 0.162

Pl. 137; pp. 91, 95, 188, 189
Several gaps. Medium-coarse, light ry clay; slipped surface, polished to low luster and mottled ry to pale brown with some darker areas.

Flat base, uneven. Broad, ellipsoidal body, bi-curved; very abbreviated neck; everted rim, rounded on edge and top.

954 Low-necked jar with multiple grooving; indet.
P 2858 CC 1 anteroom: along SW wall, to SE of door
H. 0.161; Max. D. 0.173; D. rim 0.099

Max. сарас. 1940 ml .
Fig. 49; Pl. 137; pp. 91, 92, 94, 95, 113, 188, 189
Intact; surface largely burned away. Medium-fine, light brown clay; slipped surface, polished to medium luster and mottled clay color to rb to brownish gray.

Narrow, flat base. Ovoid body, bicurved, with three spaced grooves on lower shoulder; short, wide neck, vertical and distinct, with ledge-like groove at base; outwardthickened, offset rim, channeled on flattened top.

## 955 Low-necked jar; indet.

P 1279 CC 1: NW half
H. 0.167; Max. D. 0.191; D. rim 0.119

Pl. 137; pp. 72, 91, 95, 188, 189
Gaps. Medium-coarse, pale brown clay; slipped surface, smoothed and mottled clay color to light brownish gray.

Flat base. Plump ovoid body, bicurved; short, wide neck with ledge-like ridge at base; outward-thickened, flaring rim, flattened on top.

## 956 Low-necked jar; indet.

P 2371 TB 3: with 942
H. 0.148; Max. D. 0.159 ; D. rim 0.085

Pl. 137; pp. 91, 95, 188, 189
Intact. Coarse, light rb clay; smoothed surface, now largely damaged from burning, fired clay color to gray.

Very narrow, flat base. Plump ellipsoidal body; short neck; flaring rim.

## 957 Low-necked jar with multiple grooving; indet.

P 1675 CC 1: NW half
H. 0.167; Max. D. 0.199; D. rim 0.113

Pl. 137; pp. 91, 95, 113, 188, 189
Gaps; large area nearly vitrified. Medium-coarse, light ry clay; slipped surface, lightly polished and mottled clay color to brownish gray.

Flat base. Broad, ellipsoidal body with series of closely set grooves low on shoulder; short, wide neck; outward-thickened, flaring rim.

958 Low-necked jar; now light
P 4609 CC 3: NE wall, to NW of door
H. 0.211; Max. D. 0.230; Est. D. rim 0.11

Pl. 137; pp. 91, 95, 96, 188
Several gaps, including most of neck/rim. Medium-fine pink clay; smoothed surface, fired predom. ry with much light mottling.

Low ring foot. Plump ellipsoidal body, reverse-bicurved; very abbreviated neck; flaring rim.

## 959 Dinos; now light

P 3285 TB 7: SE aisle
H. 0.260; Max. D. 0.345; D. rim 0.175

Pl. 138; pp. 91, 92, 94, 95, 96, 189
Gaps. Medium-fine clay; polished surface, fired pale brown to rb to red.

Low, articulated disk foot. Broad, ellipsoidal body; low rim, squared off on edge and flattened on top, set directly on shoulder.

## 960 Dinos; now gray

P 2602 Meg. 3: along SW wall, over wooden beam bed, beside 526 and 822
H. 0.274; Max. D. 0.354; D. rim 0.169

Fig. 49; Pl. 138; pp. 4, 34, 77, 91, 92, 93, 94, 96, 189
Gaps and chips; surface largely fire-damaged. Fine, dark gray clay; surface well polished to a high luster and fired predom. very dark gray.

Ring foot, low and wide, with broad resting surface. Broad, ellipsoidal body; everted, doubled-back rim, set directly on shoulder.

## 961 Dinos; indet.

P 2857 CCl anteroom
H. 0.230; Max. D. 0.327; D. rim 0.176

Fig. 49; Pl. 138; pp. 91, 94-95, 96, 101, 189
Small gaps in body; about half of rim missing. Fine clay, fired light brown to ry; slipped surface, polished to a medium luster and mottled dark ry to brown to brownish gray.

Wide, flat base. Very broad, ellipsoidal body; wide, abbreviated neck, ridged; broadly everted, ledged rim.

## 962 Dinos; now light

P 1260 CC 2: SE aisle
GPH. 0.171; Max. D. 0.191; D. rim 0.120
Pl. 138; pp. 91, 95, 96, 189
Edge of foot broken away; small gaps and chips elsewhere.
Medium-fine red clay; slipped surface, lightly polished and fired clay color to rb.

Spreading ring foot; short stem, ridged at top. Broad, ellipsoidal-biconical body; very short neck, wide and flaring, ridged at midway; everted rim, broad and flattened on top.

## 963 Dinos; now gray

P 2575 Meg. 3: S corner
H. 0.205; Max. D. 0.220; D. rim 0.144

Pl. 138; pp. 4, 32, 91, 92, 95, 96, 107, 187-188, 189
Gaps; badly burned in places. Medium-fine, dark gray clay; slipped surface, well polished to medium luster and fired very dark gray with patches of light gray and ry.

Spreading ring foot with trimmed, vertical edge; short stem, ridged at midway. Plump ellipsoidal-biconical body; very abbreviated neck; small flaring rim, beveled on int.

## 964 Low-necked jar with multiple grooving; ChevronTriangle style, indet.

P 3667 TB 8: SE aisle
H. 0.241; Max. D. 0.225; D. rim 0.137

Pl. 139; pp. 91, 92, 95, 106, 113, 134, 138, 157, 158, 188
Small gaps. Medium-fine clay, fired light brown to ry; polished surface, mottled clay colors; matte dark paint.

Flat base. Irregularly formed body, ellipsoidal to ovoid; short, wide neck with three grooves at base; everted rim, wide and flat on top.

Tall shoulder zone, bordered below by an uneven pendent wavy line, with Type 2B chevron-triangles; directly above, on neck, a wavy line.
965 Low-necked jar; painted, now red
P 4581 CC 3: NW aisle, to NE of center
H. 0.205; Max. D. 0.195 ; D. rim ca. 0.125

Pl. 139; pp. 91, 95, 134, 138, 143, 158, 188
Gaps, including much of neck/rim; edge of rim chipped away. Coarse, gritty clay, fired ry; thin, streaky slip, fired red; matte, very dusky red paint.

Flat base, uneven. Ellipsoidal-biconical body, unevenly formed; short, wide neck; tall, flaring rim.

Thick-line decoration. Shoulder zone of tall, irregularly formed Type 2 simple lozenges; two have been subdivided by an $X$ into four smaller lozenges, those stacked being crosshatched. Pendent garlands on neck.

## 966 Low-necked jar; painted, indet.

## P 1292 CC 2: E corner

H. 0.257; Max. D. 0.254; Est. D. rim 0.16

Pl. 139 ; pp. $91,92,94,95,96,134,138,143,147,188$, 191-192
Several gaps, including over half of neck/rim. Mediumcoarse clay, fired light brown to ry; slipped surface, polished and now fired predom. pale brown with areas of ry and red; matte dark paint.

Flat base, uneven. Approximately spherical body with ledge at top of shoulder; short, wide neck; broadly flaring rim.

Two zones on lower shoulder. The lower, bordered above and below by straight and wavy lines, bears a multi-legged zigzag whose lines intersect at top and bottom to form small, crosshatched triangles; double CCs and wavy lines in the triangular fields. On upper shoulder, three-lined pendent garlands, the contours followed below by a row of double CCs. Pair of wavy lines on neck.

## 967 Dinos; painted, indet.

P 2311 Meg. 3: along SW wall
H. 0.342-0.362; Max. D. 10.350; D. rim 0.195

Pl. 139; pp. 4, 91, 92, 95, 96, 107, 134, 138, 143, 148, 150, 153, 154, 189
Several gaps. Medium-fine clay, fired ry to brownish gray to dark gray; slipped surface, polished to low luster and now fired variously from ry to black; matte dark paint.

Broadly spreading ring foot with high, vertical edge and short stem. Plump ellipsoidal body, bi-curved; large, thickened rim, set directly on shoulder and beveled to a broad band on ext. edge.

Low on shoulder, a narrow zone of simple zigzag, bordered below by a pendent wavy line. Remaining shoulder occupied by a large zone with an upper border of simple lozenges that alternate solid and crosshatched in pairs. Within, two square panels each of Oblique Checkerboard 1 and a multi-line $X$ whose central intersection is checkerboarded while the legs are alternately filled between and blank; these alternate with each other and also with narrow, vertical strips of Crosshatching 1 and herringbone; in the intervals, one to three large, quadruple CCs, the outer circles much thicker than the inner ones.

## 968 Dinos; Wavy-Line style, indet.

P 2856 CC 1 anteroom: along SW wall, to SE of door H. 0.255 ; Max. D. 0.282 ; D. rim 0.160

Pl. 140; pp. 91, 92, 94, 95, 96, 107, 134, 138, 155, 156, 189
Few gaps; about half of rim nearly vitrified; heavily pocked. Medium-fine clay, fired dark ry to gray; polished
surface, mottled clay color to red to gray; matte dark paint.
Spreading ring foot with short, wide stem. Plump ellipsoidal body; small, everted rim, slightly under-cut, with flattened, inward-sloping top.

Fine-line decoration, neatly executed. From below max. D. to just below rim, seven narrow wavy-line zones, evenly spaced.

## 969 Dinos; Partial Wavy-Line style with CCs, indet.

P 4357 TB 7 anteroom
GPH. 0.200 ; Est. max. D. 0.30 ; Est. D. rim 0.15
Pl. 140; pp. 91, 94, 134, 138, 155, 157 (n. 228), 189
Large fragment preserving section from low on body to top. Fine clay, fired ry to dark gray; well-polished surface, fired clay colors plus light brown; dark paint.

Broad body; small, everted rim with vertical face, flat and inward-sloping on top.

From max. D. to just below rim, narrow wavy-line zones alternate with rows of triple CCs.

A fragmentary dinos (P 3465), found to the NE of Meg. 6 in a stratum just below the clay layer for the rebuilt citadel, is in the same Partial Wavy-Line mode, but it has quintuple CCs that form a zigzag pattern on the shoulder.

## 970A-B Dinos; painted, indet.

P 2937a-b Storeroom behind Meg. 4
GPH.(A) 0.129 ; GPH.(B) 0.095 ; Est. D. rim 0.31
Fig. 49; Pl. 140; pp. 39, 91, 92, 94, 95, 96, 134, 138, 157, 189, 191
Two nonjoining fragments preserving sections at max. D. (A) and shoulder/rim (B). Medium-fine clay, fired ry to gray; slipped surface, well polished over dark paint to high luster and mottled clay colors plus light brown.

Very large. Broad body; low, everted rim, wide and flattened on top.

From below max. D. to top, series of closely spaced lines apparently alternate with rows of quintuple CCs.

971 Dinos; Polychrome House style, indet.
P 1605 Burned debris over clay behind large retaining wall to SE of Meg. 1 (p. 6)
GPH. 0.120; Est. D. rim 0.15
Pl. 140; pp. 5, 6, 91, 134, 138, 161
Fragment presrving section of upper body and rim.
Medium-fine clay, fired rb with gray core; micaceous surface, polished to medium luster and now fired tan to light brown; matte, dark brown paint.

Body perhaps a plump ovoid. Small, thickened rim, grooved at base.

Belly zone preserves two panels of Crosshatching 1 and a Cross-and-Lozenge 4 with solid-barred chevrons in the lateral triangles. Above, low on shoulder, a narrow zone of Crosshatching 1 ; on shoulder proper, Type 1B triangles, this zone topped by a very narrow strip of oblique lines.

Another dinos in the same style (P 3777) from a disturbed area over TB 8 substitutes a row of hooked lambdas for the paneled belly zone.
972 Dinos; painted, indet.
P 2142 CC 1 or 2
H. 0.287; Max. D. 0.266; D. rim 0.121

Pl. 140; pp. 91, 92, 94, 95, 96, 107, 134, 138, 141, 148-149, 189
Several gaps; badly burned in places. Medium-fine clay, fired light brown; polished surface, mottled light brown to gray with some patches of ry; matte dark paint.

Spreading ring foot similar to that on 967. Broad, nearly spherical body with steep shoulder; low rim, flattened on top.

Thick-line decoration. On belly, a large zone of open Crosshatching 1. Above a reserved band, a shoulder zone of Type 1A triangles, executed in a somewhat finer line than the crosshatching below.

## 973 Four-legged dinos; painted, indet.

P 3005 Fill over floor between Megs. 9 and 10 (p. 7)
Rest. H.-rim 0.237; Max. D. 0.229; D. rim 0.166
Pl. 141; pp. 7, 91, 96, 134, 144, 189
Large gaps, including ends of legs; surface heavily scratched. Medium-coarse clay, fired ry; slipped surface, well polished over dark brown paint to high luster and fired ry to rb to pale brown.

Four rectangular feet, formed by cutting out sections of a high, tapering ring foot. Plump ellipsoidal-biconical body; abbreviated neck; broadly everted, overhanging rim.

On each leg, a narrow double zone with wavy line below a row of dots; at juncture with body, a standing wavy line. Just below max. D., a narrow zone of double CCs. From max. D. to top of shoulder, two primary zones with narrow interval between; each has panels of varying width, while the intervals bear CCs in horizontal or vertical rows, or in an elongated H shaped formation. In the lower zone four panels are preserved: part of a complex lozenge-row panel with two large, crosshatched lozenges; a narrow, vertical panel of Crosshatching 1 ; an elongated cross-and-lozenge panel, formed of thick lines and essentially Type 4 but with single horizontal lines at midway and in each of the lateral halflozenges; a double-line $X$ with all triangular fields crosshatched; elsewhere in the zone, a Type 1 triangle. The upper and somewhat narrower shoulder zone has five panels: a Checkerboard 1A bordered by dots-between-lines; an elongated, complex lozenge-row panel, formed of dots-between-lines, with two crosshatched lozenges and, at the sides, half-lozenges compounded within; a narrow Cross-andLozenge Panel 4 with dot borders; a second of Type 4, but turned on its side and given two additional horizontal lines that form a three-zoned panel of crosshatched lozenges between simple zigzags; another complex lozenge-row panel, similar to that in the lower zone, with solid half-lozenges at the ends. On top of rim, four solid bars with flanking lines set at regular intervals; running between them, a row of dots along the outer edge and a thick line along the inner.

## 974 Spouted dinos; painted dark-on-buff

P 3077 NCB-SEB: Gravelly fill to SW of Meg. 12 (pp. 6-7)
GPH. 0.150; Est. max. D. 0.33; D. rim 0.250
Pl. 141; pp. 7, 91, 96, 134, 139, 189
Fragment preserving section of upper body and rim, including spout. Coarse clay, fired light brown; slipped surface, smoothed and fired pale brown; black paint.

Steep shoulder; low, outturned rim. Tubular spout affixed to shoulder; small, flaring rim, squared off at end; a short strut extends from the back of the spout's mouth to the edge of the vessel's rim.

On upper shoulder, a Type 1A triangle zone whose lower, garlanded border curves upward as it approaches the spout to meet the top of the zone. On int. rim, a narrow zone of little garlands like those bordering the triangles. On strut, a double-ax motif.

## NECKED JARS <br> (975-985)

## 975 Small necked jar; now tan

P 2384 TB 3: SE aisle
H. 0.081 ; Max. D. 0.085 ; D. rim 0.058

Capac.-top of neck 210 ml .
Pl. 142; pp. 96, 187. 189
Intact. Medium-coarse brown clay; thin slip, badly worn, polished and fired ry.

Flat base. Ellipsoidal-biconical body; wide, tapering neck rising from a ledge-like groove; outward-thickened, flaring band rim.

976 Necked jar with multiple grooving; now light
P 3256 TB 7: along SW wall, near $W$ corner
H. 0.176 ; Max. D. 0.183 ; D. rim 0.116

Capac.-neck 2050 ml .
Pl. 142; pp. 96, 97, 113, 116, 187, 189
Gap in rim; nearly vitrified area. Coarse ry clay; slipped surface, lightly polished and fired dark ry to rb.

Flat base, uneven. Ellipsoidal body, unevenly formed, with series of closely set grooves midway on shoulder; tall, wide neck, rising from ledge-like ridge at base, with two low bands at midway; everted rim with shallow ledge.

Cf. 977.

## 977 Necked jar; indet.

P 3044 CC 2: along SW wall, behind grinding stand
H. 0.180; Max. D. 0.165; D. rim 0.111

Capac.-neck 1570 ml .
Pl. 142; pp. 96, 116, 187, 189
Over half of rim missing. Coarse, sandy clay, fired dark ry to rb; slipped surface, smoothed and fired clay colors to brownish gray.

Similar to 976 in shape and uneven formation; body less broad; thick ridge at base of neck; rim beveled on int
978 Necked jar with patterned incision; now light P 1884 TB 4: in a storage vessel against SE wall, with 443 H. 0.242; Max. D. 0.241; D. rim 0.202

Pl. 142; pp. 5, 32, 72, 96, 97, 114, 115, 187, 189, 190
Few gaps. Medium-coarse rb clay; lower body cursorily smoothed, the rest wheel-finished, and mottled overall clay color to light brown.

Flat base. Ovoid body; wide, flaring neck with distinct ledge-like ridge at base; thickened convex rim. Three small lugs, evenly spaced, set flush with top.

On upper shoulder, incised wavy-line zone.
P 4604 from CC 3 is almost identical in every respect. Cf. the one-handled utility pots $836-837$.

979 Necked jar with patterned incision; now light
P 1467 CC 2: SE half
GPH. 0.280; Max. D. 0.295
Pl. 142; pp. 95, 96, 97, 187, 189
Several gaps; edge of rim entirely missing. Medium-fine clay, fired dark ry to rb; polished surface, mottled clay colors to red to brown.

Flat base. Broad, ellipsoidal-biconical body; short, narrow neck with thick, vertically notched ridge at base; flaring rim.

Low and at midway on shoulder, two series of closely set grooves; between them, a row of incised herringbone.

## 980 Necked jar, ribbed; indet.

P 2218 TB 4: NW aisle
H. 0.227; Max. D. 0.229; D. rim 0.130

Pl. 142; pp. $5-6,95,96,97,120,121,187,189$
Most of rim chipped away; otherwise intact. Mediumcoarse clay, fired ry to dark brownish gray; slipped surface, polished and fired from ry to dark gray.

Flat base, uneven. Plump ovoid body with long, vertical ribs of finger width pushed out from inside; wide, exaggeratedly tapered neck, sharply inset at base to form a ledge; broadly flaring rim.

## 981 Jar with holes; indet.

P 260 l TB 2: S quarter
H. 0.258-0.270; Max. D. 0.405; D. rim 0.134

Pl. 142; pp. 6, 96, 97, 122, 187, 188
Vitrified in places. Coarse, gritty clay, fired red; slipped surface, smoothed, now discolored.

Very wide, flat base. Broad, squat piriform body; short, narrow neck; flaring rounded rim with slight ridge at base.

Holes $0.016-0.017$ in diameter placed over entire body and on bottom.

982 Necked jar; painted, indet.
P 1183 CC 2: SE aisle
H. 0.193; Max. D. 0.214; D. rim 0.129

Pl. 143; pp. 96. 97, 134, 138, 141, 143, 151, 153, 187
Few gaps. Medium-fine ry clay; slipped surface, polished and now fired predom. light brown with a greenish tinge, with areas of clay color and red; matte dark paint.

Flat base, uneven. Broad, depressed ovoid body; tall neck; broadly flaring rim with shallow ledge on int.

Just above max. D., a narrow zone of Simple Lozenge 2. On upper shoulder, a zone with three spaced panels: two are double, each with double-line $X_{s}$ filled with crosshatching, while the third is a poorly executed Cross-and-Lozenge 5 . On neck, a Type 3A triangle row.
983 Necked jar; painted, indet.
P 1197 CC 2: SE aisle
H. 0.256; Max. D. 0.222; D.rim 0.156

Pl. 143; pp. 96, 97, 111, 134, 135, 141, 142-143, 150, 187
Large gaps; paint worn and faded. Medium-fine $r$ clay; polished surface, mottled clay color to pale brown; matte dark paint.

Flat base, uneven and causing pot to rest at a tilt. Plump ovoid body; tall, wide neck; small, broadly flaring rim.

Thick-line decoration. Large shoulder zone, bordered below by a pendent wavy line, bears four spaced panels of Oblique Checkerboard 2; in each interval, a small, crosshatched triangle from whose apex rises a stylized tree motif. On lower neck, a narrow zone of three-legged Zigzag 4 between wavy lines.

## 984 Necked jar with applied device; painted, indet.

P 4635 CC 3: N corner
GPH. 0.250; Max. D. 0.229
Pl. 143; pp. 5, 95, 96, 97, 122, 134, 138, 187, 189
Gaps, including belly attachment and all of rim; painting largely illegible. Coarse red clay; slipped surface, well smoothed and now totally discolored; dark paint.

Narrow, flat base with two vertical, wedge-shaped supports set at a ca. $90^{\circ}$ angle to each other. Ellipsoidal body; wide, slightly tapering neck rising from an inset ledge. Large circular scar on belly, directly above the angle between the supports; short spurs to either side of scar and below at $R$ (presumably at lower $L$ as well); unlikely to be a handle, the device may have been a theriomorphic attachment to match the angled "feet."

On shoulder, what appear to be $X$-panels; horizontal lines on neck.

The jar contained astragals and a whorl; it perhaps also once held 15 more whorls, more astragals, an iron knife, and an iron needle, all found directly beside it.

## 985 Necked jar; painted, indet.

P 4579 CC 3: against NE wall, just to NW of door, with 893 H. са. 0.273 ; Max. D. 0.255 ; D. rim 0.169

Pl. 143; pp. 95, $96,97,134,138,187$
Gaps; surface damaged by fire; painting mostly illegible. Medium-coarse red clay; slipped surface, smoothed and now totally discolored; matte dark paint.

Flat base. Ovoid body with short shoulder; tall neck, wide and markedly tapering, rises from a ledge at base; broadly flaring rim.

Below max. D., a row of triple CCs with lines above. Zones on shoulder and neck almost totally obliterated; perhaps a double zone of meander on neck.

## AMBIGUOUS JAR

986 Fragmentary jar with stamped decoration; now buff P2143 CC2
GPH. 0.150 ; Est. max. D. 0.28
Pl. 143; pp. 92, 97, 123, 125, 190
Fragment preserving almost all of shoulder, part of lower body, and beginning of neck. Medium-fine clay, fired light brown throughout; smoothed surface.

Ellipsoidal or ovoid body; wide neck.
On upper shoulder, narrow zone consisting of two rows of small $X$-stampings, contiguous or overlapping, that form a lozenge pattern; bordered above and below by rows of punctate dots.

## STORAGE JARS <br> (987-1009)

## NARROW-NECKED STORAGE JARS

## 987 Narrow-necked storage jar, banded; now light

P 1661 Meg. 2: main room, S corner
H. 0.695 ; Max. D. 0.625 ; D. rim 0.285

Fig. 50 (rim); Pl. 144; pp. 3, 97, 98, 100, 106, 119, 189
Gaps. Coarse, gritty clay, fired rb with thin dark core; mf , unevenly smoothed and fired various light colors.

Wide, flat base. Broad, ovoid body with low bands at max. D. and midway on shoulder; short, narrow neck with obliquely notched ridge at base; everted, rounded rim, wide and flattened on top.

## 988 Narrow-necked storage jar, lugged; now gray

P 4099 Debris in front of TB 8, in corner between steps and front wall
H. 0.475 ; Max. D. 0.370 ; Rest. D. rim 0.205

Fig. 50 (rim) ; Pl. 144; pp. 97, 98, 100, 105, 106, 109, 118, 189
Gaps, including most of upper neck/rim. Medium-coarse clay, fired rb with thick gray core; smoothed surface, fired predom. dark gray.

Flat base. Elongated ellipsoidal body; tall neck with pair of narrow bands at bottom; outturned rim with narrow ledge. Just above max. D., two vertical lugs, set opposing, with a pair of short trails curving from the base of each.

989 Narrow-necked storage jar; indet.
P 1877 Meg. 3: E corner, with at least four other large vessels
Rest. H. 0.650 ; GPW. 0.505 ; D. rim 0.203
Fig. 50 (rim); Pl. 144; pp. 4, 97, 98, 100, 105, 117, 189
Many gaps; badly burned and warped. Coarse clay, fired red with gray core; slipped surface, now totally discolored.

Wide disk foot, channeled on ext. Presumably ovoid body, with ridges and a cord-impressed groove spanning belly; narrow neck with single ridge at base and two more at third and two-thirds height; broadly flaring rim with two stepped ledges.

990 Narrow-necked storage jar with markings; now gray P 3033 Meg. 4
GPH. 0.405 ; D. rim 0.280
Fig. 50 (rim); Pl. 144; pp. 34, 97, 98, 100, 107, 111, 189
Fragment preserving section of upper body and entire neck/rim. Coarse, dark gray clay; largely wheel-finished surface, fired predom. gray.

Steep-shouldered body, apparently elongated (cf. 988); tall, narrow neck; outward-thickened rim, slightly undercut, with high vertical face grooved at bottom.

At top ext. edge of rim, four deeply cut transverse notches, made after firing.

## 991 Narrow-necked storage jar with lugs and patterned incision; indet.

P 3102 TB 6: NW aisle
GPH. 0.365; GPD. 0.455 ; D. rim 0.191
Fig. 50 (rim); Pl. 144; pp. 97, 98, 100, 105, 113, 114, 115, 189
Lower body missing. Coarse clay, fired red with thick, dark gray core; cursorily smoothed surface, now discolored, with traces of mf.

Apparently elongated body with long, steep shoulder; narrow neck with thick ridge at base; broadly flaring rim, ledged. Pair of triple-disked bolsters, set opposing, high on shoulder.

At and below level of bolsters, a large wavy line incised with a five-tined instrument; bordering this above and below, and repeated on mid-neck, sets of multiple grooves formed with the same implement but apparently as the vessel was turned on the wheel.

## 992 Narrow-necked storage jar with stamped patternbanding; now red

P 2909 Disturbance over Meg. 4
GPH. 0.880 ; Max. D. 0.980 ; D. rim ca. 0.525
Figs. 50 (rim), 60; Pl. 149; pp. 3, 36, 97, 98, 99, 100, 106, 119, $120,123,124-125,126,130,131,189$
Preserved with several gaps from belly to top; several sherds from lower body; damaged by fire. Very coarse, gritty clay, fired red throughout; smoothed surface.

Very thick-walled and heavy. Enormous, broad body, perhaps ovoid, with plain bands on lower portion; short, tapering neck with ridge at base; large everted rim. High on shoulder, large, three-disked bolsters set at $90^{\circ}$ intervals; flattened knobs at ends.

Pattern-banded zone on upper shoulder, consisting of a horizontal band below and a large zigzag whose apices are replaced by the bolsters; vertical bands below the bolsters. On the pattern-banding, a diminishing lozenge stamping (Fig. 60) alternates with a CC motif (Fig. 60), except at one point on the horizontal band where at least four of the lozenge impressions occur side by side.

The same lozenge stamp appears to have been used on 1006-1008.

## WIDE-MOUTHED STORAGE JARS

## 993 Dinoid storage jar; now gray

P 2621 TB 2: just to NW of door
H. ca. 0.630; Max. D. 0.627; D. rim 0.329

Fig. 50 (rim) ; Pl. 145; pp. 6, 32, 90, 97, 98, 100, 106, 189
Large gaps; warped. Coarse, dark rb clay; slipped surface, polished and fired predom. very dark gray with blotches of $r b$ mf; rim more heavily polished than body.

Broad, ovoid body tapering to a flat base; everted rim set directly on shoulder. Below a ridge set high on shoulder, a pair of opposing bolsters.

Found fallen beside a large in situ iron stand (ILS 350), on which the vessel no doubt rested.

994 Wide-mouthed storage jar with low neck; now tan
P 1709 NW storeroom behind Meg. 1, in S corner H. 0.735 ; Max. D. 0.675 ; D. rim 0.415

Fig. 50 (rim); Pl. 145; pp. 3, 97, 98, 100, 106, 189
Large gaps; warped. Coarse clay, fired red; mf, cursorily smoothed and fired ry.

Flat base with half-round molding on ext. Very broad,
ellipsoidal-biconical body with long shoulder; short, wide neck with thick, carefully formed ridge at base; everted rim with flaring face and broad, flat top.

Found filled to over halfway with burned grain; fragments of a reed basket in bottom; also contained four clay loom weights and a large trefoil jug (P 1490) that held 494 astragals.

995 Wide-mouthed storage jar with low neck; indet.
P 3277 TB 7: against SE wall, near $S$ corner
GPH. 0.170; D. rim 0.465
Fig. 50; Pl. 145; pp. 97, 98, 100, 104, 107, 116, 189
Fragment preserving upper shoulder and rim; rest of body too burned to mend; vitrified areas. Medium-coarse clay, fired red; surface now largely damaged by fire and discolored.

Broad shoulder; wide neck, short and tapering, with pronounced, ledge-like ridge at base; large, everted rim, deeply undercut, with flattened face and top. At top of shoulder, two opposing sets of three semicircular disks with squared-off spurs below.

## 996 Wide-mouthed storage jar with low neck; markings; indet.

1260 Meg. 4
GPH. 0.130 ; Est. D. rim 0.52
Pl. 145; pp. 97, 98 (n. 164), 100, 189
Single large sherd preserving section of shoulder and neck/rim, the rim largely chipped away. Medium-coarse clay, fired red with thick gray core; smoothed surface, fired predom. clay color with some darker areas.

Thick-walled and heavy. Steep shoulder; wide, abbreviated neck; large, everted rim, broad and flat on top.

Extending from upper shoulder onto neck, two deeply cut oblique lines. On top of rim, a set of six closely spaced transverse lines with a seventh placed further away to the $L$; incised after firing.

Roller, 3B-2.
997 Wide-mouthed storage jar with low neck; stamped decoration; indet.
P 2281 TB 4: NW aisle, NE of center
H. 0.750; Max. D. 0.640; D. rim 0.358

Fig. 50 (rim); Pl. 145; pp. 32, 97, 98, 100, 104, 106, 113, 117, $119,123,124-125,130,189$
Several gaps. Coarse clay, fired red; slipped surface, smoothed and now entirely discolored.

Flat base. Ellipsoidal-biconical body with bands at max. D. and on shoulder, and three thick ridges at top of shoulder; short, wide neck; large, everted rim, lightly channeled on face. On upper shoulder, a pair of opposing, four-disked bolsters.

Bands each stamped with three rows of very small circles.
998 Wide-mouthed storage jar; indet.
P 1950 TB 3: NW aisle, at SW
H. 0.663; Max. D. 0.550 ; Est. D. rim 0.40

Fig. 50 (rim); Pl. 146; pp. 5, 32, 85, 97, 101, 105, 106, 189
Large gaps; warped and twisted; fire-damaged surface. Coarse, gritty clay, fired red to dark gray; slipped surface, smoothed and now discolored.

Flat base. Ovoid body with steep shoulder; continuous curve into wide neck; thickened, flaring rim, broadly beveled on ext. and top.

Found with a thin layer of grain at the bottom.

## 999 Wide-mouthed storage jar; indet.

P 3122 Terrace to NW of Meg. 4
H. $0.745-0.800$; Max. D. 0.700 ; D. rim 0.443

Fig. 50 (rim); Pl. 146; pp. 3, 85, 97, 100, 101, 102, 189
Many gaps. Coarse clay; well-smoothed surface, now
multicolored.
Very thick-walled. Wide, flat base. Enormous ovoid body with broad shoulder; wide neck; broadly everted rim, slightly undercut, with beveled edge, flat top, and shallow, sloping ledge.

## 1000 Wide-mouthed storage jar with stamped decoration; indet.

P 3128 Meg. 4: E corner
Rest. H. 0.545 ; Max. D. 0.497; D. rim 0.350
Figs. 50 (rim), 60-61; pls. 147, 168; pp. 3, 85, 86, 97, 98, 100, $101,103,105,117,123,124-125,126,130-131,132$, 133, 189, 190
Several gaps, including entire base; discolored throughout. Coarse, gritty clay; smoothed surface, now fired a dull, light brownish gray.

Broad, ovoid body; wide neck with a pair of obliquely notched ridges at base; large, outturned rim, doubly beveled on face and shallowly ledged on int. At top of shoulder, four four-disked bolsters, evenly spaced.

Below max. D. and on shoulder, two zones of stamping, each defined by wide, shallow channels. In lower zone, nine groups of stampings preserved (interrupted by large gap in body), representing six different stamps; from $L$ to $R$, beginning at gap:

1. at least eight spectacle-spirals (Fig. 61); 2. at least three goats (Fig. 61); 3. three X-panels; 4. six S-spirals (Fig. 61); 5. two diminishing lozenges (Fig. 60); 6. repeat of $X$ s in double row of three each; 7. repeat of goats (four); 8 . double row of concentric horseshoes (Fig. 61), three in each; 9. repeat of Sspirals (two) before gap.

Upper stamped zone complete, incorporating only one new stamp (6. below) among the 11 groups; from $L$ to $R$, beginning at approximately the same point used for the lower zone:

1. four X -panels, extending under a bolster to the $R(\mathrm{Pl}$. 168A) ; 2. four goats, beginning at $L$ under same bolster (Pl. 168B); 3. double row of concentric horseshoes, four in each (Pl. 168C); 4. repeat of X -panels in double row of three each (Pl. 168C); 5. six S-spirals, set obliquely, the third from $L$. falling under a bolster (PI. 168D); 6. double row of S-curls on sides (Fig. 61), three in each (Pl. 168E); 7. repeat of goats (four, PI. 168F); 8. double row under a bolster: repeat of concentric horseshoes (three) below, repeat of X-panels (two) above (Pl. 168G); 9. repeat of S-spirals (five, Pl. 168H); 10. repeat of concentric horseshoes in double row of four each (under a bolster, Pl. 168I); 11. four spectacle-spirals (Pl. 168J).

Of the stamps in the lower zone, only the diminishing lozenge is not repeated in the upper. Total of seven stamps used in both zones.

Cf. 1001.
1001 Wide-mouthed storage jar with stamped decoration; indet.
P 3127 Meg. 4: E corner
H. 0.570; Max. D. ca. 0.485; D. $\operatorname{rim} 0.335$

Fig. 61; pls. 147, 170; pp. 3, 85, 86, 97, 98, 100, 101, 117, 123, $124-125,126,127,128,131,132,133,189,190$
Several gaps, one very large. Like 1000 in fabric and finish.

Broad, ovoid body tapering to a narrow raised base; similar in neck/rim to $\mathbf{1 0 0 0}$. At top of shoulder, two cwlindrical knobs, flattened on top; the placement suggests an original total of four, evenly spaced.

Three zones of stamping, bordered like those on 1000, on lower body, belly, and shoulder. In lowest zone, 23 closely spaced S-spirals (Fig. 61, Pl. 170). Middle zone preserves ten groups (interrupted by two gaps) representing three stamps; from $L$ to $R$, beginning below interval between the shoulder
knobs:

1. three S-spirals (same stamp as in lowest zone); 2. two long ( 10 cm .) rows of small, plain triangles (apices up), 15 in upper and 14 in lower; 3. at least three concentric horseshoes (Fig. 61, Pl. 170); 4. repeat of S-spirals (four); 5. repeat of concentric horseshoes, one preserved before large gap; 6. after gap, repeat of S-spirals (at least three); 7. repeat of triangles in two rows, apices down (at least seven and nine in each); 8. repeat of concentric horseshoes, five preserved before large gap; 9. after gap, repeat of triangles in two rows, apices down (at least seven in each); 10. repeat of concentric horseshoes (five).

Because of a large gap, only six groups are preserved in shoulder zone, representing the same three stamps used on the belly; from $L$ to $R$ beginning at same point as above:

1. three S -spirals; 2. double row of concentric horseshoes, six in each; 3. three rows of triangles, apices up; 4. repeat of S-spiral, one preserved before large gap; 5. after gap, repeat of S-spirals (at least two); 6. repeat of triangles in two rows, apices up.

1000-1001 share only two stamped motifs, the S-spirals and the concentric horseshoes; neither, however, was made by the same stamp, those on $\mathbf{1 0 0 0}$ being larger.
1002A-C Wide-mouthed storage jar with animal protome; indet.
P 4564a-c CC 3: SE aisle
GPH.(A) 0.150 ; GPW.(B) 0.310 ; Th. 0.022
Fig. 50; Pl. 146; pp. 5-6, 97, 101, 117, 122, 190
Two sherds and a fragment, all nonjoining, from shoulder and neck; vitrified areas. Very coarse clay, gritty and crumbly, fired yellow throughout; smoothed surface, now roughened from burning.

Pair of thick ridges above or below max. D. (C). On upper shoulder, an animal protome, apparently a lion, with open mouth, conical ears, and a razorback neck; flanking spurs. Elsewhere, at transition to wide neck, a three-disked bolster.

## 1003A-C Wide-mouthed storage jar with stamped decoration; indet.

P 3035a-b, P 3145 Meg. 4
GPW.(A) 0.450 ; GPH. (C) 0.125 ; Est. GPD.(C) 0.60
Figs. $60-61$; pls. 148, 169; pp. 97, 98, 101, 123, 124-125, 126, 130-131, 133, 190
Associated fragments preserving sections of belly (B), lower shoulder (C), and upper shoulder plus beginning of neck (A). Coarse clay; polished surface, now discolored.

Broad, steep-shouldered body; wide neck. On upper shoulder, a four-disked bolster.

Wide stamped zones on belly, lower shoulder, and upper shoulder. In lowest and highest zones, two rows of circular stampings with random hatching (Fig. 60, Pl. 169); in lower zone, the series is broken at two points by a tree stamping with oval outline (Fig. 61), one above the other and opposing. On lower shoulder (C), two rows of closely spaced $X$-panels (Fig. 60); at one point, two stampings placed centrally and side by side break the series.

## 1004 Wide-mouthed storage jar with stamped decoration; indet.

P 3030a-b Meg. 4
GPH. 0.100; GPW. 0.420
Fig. 60; pls. 148, 169; pp. 97, 98, 101, 117, 123, 124-125, 126, 130-131, 190
Two fragments preserving together most of upper shoulder and a section of lower neck. Medium-coarse, gritty clay, fired pink; smoothed surface, fired clay color to light gray.

At top of shoulder, two obliquely notched ridges, the upper at base of wide neck. At same level, bolsters at quarter intervals: two double-disked and one triple-disked preserved, the latter with a cylindrical knob atop the middle disk.

Immediately under the ridges, a narrow zone of stamping, defined below by a broad, shallow groove and interrupted by the bolsters; two different X -stamps, one with hatched triangles (Fig. 60, Pl. 169); insofar as observable, a preponderance of one stamping between any two bolsters, with fewer impressions of the other stamp at the far $R$.

P 1757, a sherd of a large vessel from destruction debris to the SE of the TG, has X -stampings of the same basic design as that with hatched triangles, yet made with a different stamp.

## A MBIGUOUS STORAGE JARS

1005 Storage jar with stamped decoration; now gray
P 5742 NW storeroom behind Meg. 1: in fill
GPH. 0.180; Th. 0.022
Pls. 148, 169; pp. 3, 97, 123, 124-125, 126, 129, 130, 158
Several joining sherds from shoulder, enough to show that there were no handles. Coarse ry clay; cursorily smoothed surface, now fired predom. dark gray with patches of rb .

Broad body with steep shoulder.
On upper shoulder, groups of one to eight chevrontriangle stampings in alternation with one to three sextuple CCs (Pl. 169).

The triangle stamp is the same as that used on 1019.
1006 Storage jar with stamped pattern-banding; indet.
P 5724 CC 1: to NW of central hearth
GPH. 0.205 ; GPW. 0.320; Th. 0.028
Pl. 149; pp. 97, 98, 99, 100, 119, 123, 124-125, 131
Large sherd from shoulder. Coarse red clay; slipped surface, now discolored.

Steep shoulder; ridge at base of neck. Large, three-disked bolster at top of shoulder; flattened knobs on ends.

Wide, raised band set vertically beneath bolster; narrower oblique bands descend from either end of bolster; on the bands, widely spaced, diminishing lozenge stampings.

The stamp appears to be the same as that used on 992 (Fig. 60) and 1007-1008.
1007 Storage jar with stamped pattern-banding; indet.
P 5725 Unspecified context
GPH. 0.195; GPW. 0.215; Th. 0.019-0.025
Pl. 149; pp. 97, 98, 100, 119, 123, 124-125, 126, 130, 131
Large sherd from shoulder. Fabric like that of 1006; surface damaged by fire.

Horizontal band below a perpendicular one; somewhat narrower oblique band rising from the $L$ angle only. Stamped CCs on horizontal and vertical bands; diminishing lozenges on the oblique.

Cf. 1006.
1008 Storage jar with stamped pattern-banding; now tan P 4681 CC 3
GPH. 0.125; Th. 0.017
Pls. 149, 169; pp. 36, 97, 98, 100, 119, 124-125, 131
Body fragment, probably from shoulder. Coarse clay; smoothed surface, fired rb.

Horizontal raised band with a second perpendicular to it; diminishing lozenge stampings on both (Pl. 169).

Cf. 1006.

1009 Storage jar with stamped pattern-banding; now red P 1470 Meg. 2: main room
GPH. 0.110; Th. 0.020
Fig. 60; pls. 149, 169; pp. 15, 36, 97, 98, 119, 123, 124-125, 128, 129, 131, 186
Fragment preserving section of shoulder. Coarse clay,
fired red with thick gray core; smoothed surface, red
Steep shoulder, on which an oblique band rises from a wider, horizontal one. Diminishing triangle stampings (Fig. 60 , Pl. 169) on both; those on lower band in two inwardpointing rows; those on oblique band placed approximately in a triangle-zigzag formation.

## The Destruction Level: Ambiguous Vessels (1010-1035)

## LARGE AMPHORAS OR STORAGE JARS (1010-1022)

1010 Large vessel with patterned incision; now gray
P 1988 TB 3
GPH. 0.053; Th. 0.014
Pl. 153; pp. 34, 111, 114-115, 116
Body sherd from above max. D. Coarse gray clay; polished surface, fired dark gray.

Raised band at about max. D.; above, parts of two hatched triangles.
1011 Large vessel with patterned incision; now gray
P 3362 Debris over Terrace to NW of Meg. 4
GPH. 0.095; Th. 0.021
Pl. 153; pp. 111, 114, 115, 190
Large sherd preserving section of shoulder and base of neck. Coarse, dark gray clay; smoothed surface, fired very dark gray to black.

Wide neck with ledge-like ridge at base; two spaced ridges above.

At top of shoulder, neatly incised, double-line zigzag filled with a row of punctate dots.

For the decoration, cf. 888.
1012 Large vessel with patterned incision; indet.
P 2901 Meg. 4
GPH. 0.165
Fig. 59; Pl. 153; pp. 111, 113, 114, 116
Fragment preserving section of upper shoulder, neck, and rim; badly burned, vitrified, and warped. Medium-fine fabric, now discolored throughout.

Series of closely spaced grooves at top of shoulder; tall neck; everted rim, flattened and inward-sloping on top.

On shoulder, below grooves, an incised zone of zigzag in which at least some of the resultant pendent triangles are filled with punctate dots.

## 1013 Large vessel with stamped decoration; now gray

P 2873 Meg. 4
GPH. 0.140; D. neck 0.187; Th. 0.013
Pls. 156, 169; pp. 111, 123, 124, 125, 127, 128, 131
Fragment preserving complete neck plus section of shoulder and base of rim. Medium-coarse, dark gray clay; polished surface, fired predom. clay color with light gray mf.

Broad shoulder; short, narrow neck; rim apparently everted.

At transition to neck, a large band of triangle-zigzag stamping; the triangles have a circular boss at center bottom (Pl. 169).
1014 Large vessel with stamped decoration; now gray
P 3048 Meg. 4
GPH. 0.070; GPW. 0.098 ; Th. 0.013
Fig. 60; Pl. 156; pp. 111, 123, 124, 125, 130, 155, 190
Shoulder sherd. Coarse, dark brown clay; smoothed
surface, fired very dark gray.
Above a broad, shallow groove, two "wagon-wheels" (Fig 60) stamped side by side.

1015 Large vessel with stamped decoration; now red P 2331 TB 5
GPH. 0.070 ; Est. D. base of neck 0.17 ; Th. 0.007
Pl. 156; pp. 123, 125, 129, 130
Fragment preserving section of shoulder and beginning of neck. Fine red clay; mf, polished and fired light red with staining.

Relatively thin-walled. On lower shoulder, raised band that turns up at $R$, probably to a handle or bolster; ridge at base of wide neck.

On the band, small chevron-triangle stampings alternate up and down in a row; above the band, a row of small circle stampings.

A second triangular stamp of the same type and in the same arrangement occurs on P 1740 (Fig. 60), a sherd from destruction debris to the W of the TG ; here too, the stamping is on a band.

1016 Large vessel with stamped decoration; now red
P 1741 Behind Meg. 2, presumably on Terrace
GPH. 0.080; Th. 0.019
Fig. 61; Pl. 156; pp. 111, 123, 125, 131, 132, 190
Body sherd. Coarse clay, fired red throughout; surface slipped and smoothed.

Very large vessel. Raised horizontal band with evenly spaced S-spiral stampings (Fig. 61).
1017 Large vessel with stamped decoration; now red P 2473 TB 4 anteroom
GPH. 0.065; GPW. 0.085; Th. 0.029
Fig. 60; PI. 157; pp. 111, 123, 125, 131, 190
Body sherd. Coarse ry clay; slipped surface, smoothed and fired red.

Very large vessel, exceptionally thick-walled and heavy.
In a narrow zone defined by broad, shallow grooves. parts of two large rectangular stampings in which hand-formed concentric semicircles alternate standing and pendent; the stamp is edged above and below by chevrons (Fig. 60, a composite drawing).

P 920 from a post-destruction context on the City Mound bears a similar impression, made from a different stamp.

1018A-B Large vessel with stamped decoration; indet. P 2850, P 2851 CC 1
GPH.(A) 0.165 ; GPW.(B) 0.490 ; Th. 0.016
Pls. 157, 169, 170 ; pp. 111, 123, 125, 126, 130, 133, 190
Two associated fragments, both from shoulder. Coarse red clay; smoothed surface, fired rb with much discoloration.

Wide raised band on shoulder: on A, 11 horseshoe stampings, open end down (Pl. 170); on B, seven spiral stampings and ten horseshoes, the latter alternating open end up and to $R$ (Pl. 169).

1019 Large vessel with stamped decoration; now tan
P 4669 TB 7 anteroom
GPH. 0.079; Th. 0.017
Pl. 157; pp. 111, 123, 125, 126, 129, 130, 158
Shoulder sherd. Coarse clay, fired rb throughout; smoothed surface.

Very large vessel. Raised horizontal band, on which are preserved two chevron-triangles, on sides, and part of a CC .

The triangle stamp is the same as that used on the storage jar 1005.

1020 Large vessel with stamped decoration; now tan P 5544a Debris over paving in front of Meg. 1
GPH. 0.128; Th. 0.017
Pls. 157, 170; pp. 3, 123, 125, 133, 190
Lower shoulder fragment. Coarse clay, fired red with thick gray core; slipped surface, cursorily polished and fired rb.

On raised band, spaced S-curl stampings impressed horizontally (Pl. 170).

Essentially the same design, but made by a different stamp, appears on another banded vessel, uninventoried and without context.
1021 Large vessel with stamped decoration; now tan P 2299 TB 4 anteroom
GPH. 0.073; Est. GPD. 0.270; Th. 0.070
Pl. 157; pp. 123, 125, 127, 128, 129, 130
Sherd preserving section of shoulder and lower neck. Medium-fine, light brown clay; mf, polished to low luster and fired light ry.

At transition from shoulder to wide neck, a row of small circle stampings below a band of triangle-zigzag stamping.
1022 Large vessel with stamping and patterned incision; indet.
P 2210 TB 4: N corner
GPH. 0.100 ; Th. 0.016
Pl. 153; pp. 111, 113, 114, 116, 123, 125, 127, 128, 190
Shoulder fragment. Coarse clay; smoothed surface, now totally discolored.

Zone of stamping and incision defined by shallow grooves. Two vertical panels of triangle-zigzag stamping alternate with incised panels, one crosshatched and the other bearing a large, double-line zigzag whose triangular fields are crosshatched.

## AMBIGUOUS VESSELS, MISCELLANEOUS <br> (1023-1035)

1023 Handle; indet.
P 2597 TB 2
GPL. 0.094; Th. 0.012
Pl. 151; pp. 108, 111
Handle fragment, broken away at ends. Medium-fine clay, fired yellow to gray; smoothed suiface, fired clay colors.

Bowed, rolled handle with one side better finished than the other; ext. surface trimmed to a flat face. At one end, the handle forks, while at the other end the break occurs at a slight widening of the shaft, which suggests an approaching point of attachment or perhaps an arrangement similar to that at the other end. At midway, a pair of small knobs with flattened heads; directly beneath, on the back of the shaft, is the scar of a downward-angled attachment, perhaps a strut. The fact that the shaft has a front and a back, with a possible strut depending from the back, suggests that it was horizontally oriented.

1024 Medium-sized vessel; Polychrome House style, indet.
P 2874 TB 2
GPH. 0.135; Est. max. D. 0.25
Pl. 161; pp. 67, 111, 134, 143, 148, 161
Fragment preserving section of upper body, including lower handle attachment. Fine clay, fired ry to brownish gray; slipped surface, stroke-polished to low luster and mottled clay colors to light brown; matte black paint.

Body perhaps ovoid; narrow neck. Handle rises from low on shoulder. Probably a jug.

Below max. D., a wavy-line zone. On belly, just below level of handle, a zone of hooked lambdas; on shoulder, above a narrow zone of Type 1 simple lozenges, a row of Type 1B triangles.

A fragmentary dinos in the same style (P 3777), from a disturbance over TB 8 , also has hooked lambdas.
1025 Small vessel; painted, now dark-on-buff
P 1869 TB 2, N corner
GPH. 0.029 ; Est. D. rim 0.11
Pl. 164; pp. 37, 111, 134, 144 (n. 138), 191-192
Neck/rim sherd. Medium-fine, light brown clay; polished surface, fired very pale brown; matte black paint.

Short, wide neck; plain, flaring rim. Probably a roundmouthed jug.

On neck, a complex lozenge row in which the lozenges are solid and the resultant triangles crosshatched.
1026 Small vessel; painted, now dark-on-buff P 2875 TB 2
GPH. 0.049 ; Est. D. base of neck 0.07
Pl. 164; pp. 134, 143, 156, 190
Sherd preserving section of shoulder and base of neck. Medium-fine, somewhat spongy clay, fired pale ry; matte surface, slipped and fired very pale brown; matte black paint. Smooth transition from body to neck.
Fine-line decoration. On shoulder, three narrow zones of Simple Lozenge Row 2 with lines between.
1027 Small vessel; painted, now dark-on-buff
P 3064a-b TB 6
GPH. 0.047; Est. max. D. 0.13
Pl. 164; pp. 67, 111, 134, 145-146
Two sherds preserving sections of upper body, including a handle stump. Fine ry clay; slipped surface, polished over dark paint and fired light brown.

Apparently narrow-necked. Handle rises from midshoulder.

Below max. D., at least four wavy lines. On lower shoulder, to either side of handle, a zone or panels of Type 1A checkerboard with borders of dots-between-lines; the motifs are linked below the handle by wavy lines. On upper shoulder, a row of Meander 2, crosshatched.

1028 Small vessel; painted, indet.
P 4566 CC 3
GPH. 0.093; Est. max. D. 0.13
Pl. 164; pp. 67, 111, 134, 138
Fragment preserving about half of upper body to base of neck, including a handle stump. Fine ry clay; surface well polished to a medium luster and fired predom. red; matte dark paint.

Body perhaps ellipsoidal-biconical; narrow neck. Rolled handle rises from mid-shoulder.

Tall shoulder zone beginning at max. D.: two narrow panels, Checkerboard 1A and Oblique Checkerboard 1 (with large lozenges), lean toward and overlap each other, as though to form a large zigzag.

1029 Medium-sized vessel; painted, indet.
P 2935 TB 1 anteroom
GPH. 0.096; Est. max. D. 0.16
Pl. 165; pp. 67, 111, 134
Single large sherd preserving section of body from below max. D. to base of neck, including a handle base. Mediumcoarse, gritty clay, fired ry to light brown; slipped surface, polished to medium luster and fired clay colors; matte dark paint.

Ellipsoidal or ovoid body; narrow neck. Handle rises from mid-shoulder. Probably a jug.

Just above max. D., a narrow complex lozenge row with zigzag borders; on shoulder, a zone of tall, Type 1 triangles with a set of diminishing, laddered chevrons pendent, and pointing downward, in the field.

1030 Medium-sized vessel; painted, indet.
P 2388a-b Meg. 3
GPH. 0.120; Est. D. rim 0.20
Fig. 59; Pl. 165; pp. 106, 111, 116, 134, 148, 150, 152, 169, 192
Two nonjoining fragments, overlapping in profile, preserve sections of upper body and neck/rim. Mediumcoarse, light brown clay; slipped surface, polished and now fired a dingy, light brownish gray; matte black paint.

Continuous curve from steep shoulder into tall, wide neck; outward-thickened, flaring rim, flattened on face.

On shoulder, spaced panels of Crosshatching 1, a narrow solid panel and a checkerboard; pairs of double CCs in the intervals. Two zones on neck, the lower and taller of which has closely spaced panels with divider lines between: solidbarred X-panels with a CC in each field alternate with wide panels of Oblique Checkerboard 2. On upper neck, thick, solid rays in spaced groups, with traces of double CCs in the intervals.

For the shape, cf. the jar 983. Three body fragments of a medium-sized, painted vessel from Meg. 4 (P 3020) preserve in the shoulder zone the same combination of $X$-panels and Oblique Checkerboard 2.
1031A-B Medium-sized vessel; painted, indet.
P 3006/P 3060 NCB-SEB: Gravelly fill to SW of Meg. 12 (p. 6-7)

GPH. (A) 0.140; GPH. (B) 0.083; Est. max. D. 0.23
Pl. 165; pp. 7, 134, 146
Two nonjoining fragments, A preserving section of belly and lower shoulder, $B$ an overlapping section of shoulder. Fine clay, fired ry to pale brown; surface well polished over dark paint to a high luster and fired ry to red to pale brown.

Long shoulder.
Spanning belly, four stacked zones of wavy lines. On lower shoulder, a zone in which meander hooks (Type 3A) alternate with narrow vertical panels of either Checkerboard 1A or Type 1 simple lozenges. On upper shoulder, above a pair of wavy-line zones, a zone preserving a bit of a crosshatched motif.
1032 Large vessel; painted, indet.
P 2165 Debris over Terrace to SE of the TG
GPH. 0.120; Th. 0.009
Pl. 165; pp. 7, 134, 141, 142, 143, 154, 164, 191
Fragment preserving section of shoulder and base of
neck. Medium-coarse, light red clay; thin slip, polished and now fired a dingy light gray; matte dark and diluted paints.

Steep shoulder; narrow neck. Probably a large trefoil jug or a narrow-necked amphora.

Large zone on lower shoulder preserves a compounded triangle flanked by feather trees; numerous double CCs in the fields. On upper shoulder, two narrow zones, the higher of which is a simple, single-lined zigzag; the lower has a fourline zigzag whose outer intervals are filled with dilute paint and whose lines intersect to form small, crosshatched triangles above and below. Trace of a painted design on neck.

1033 Cloven-hoofed leg; painted, indet.
P 2611 TB 1
GPH. 0.031 ; D. 0.019
Pl. 165; pp. 37, 66, $111,134,188$
Single sherd, broken away above hoof; painting largely obscured. Coarse clay, now fired gray throughout; surface polished in vertical strokes; presumably dark paint.

Bottom of hoof broad and flattened; deeply cut groove on top forms the cloven hoof. Thick leg, flaring above to attachment.

On leg, vertical lines and ladders.
1034 Small vessel; painted dark-on-ground-coat
P 2244a-e Debris over Terrace behind TB 2-4
D. base 0.065

Pl. 167; pp. 6, 38, 115, 134, 138, 149, 150, 154, 191
Sherds preserving about half of base and small sections of body, including base of neck: ground-coat and paint worn. Medium-fine clay, fired red to gray; lower body polished and fired red; white ground-coat on bottom and probably also on upper body; matte black paint.

Flat base. Narrow neck.
On bottom, a hand-drawn rosette with elongated, spined petals and a circular, dot-filled center. On shoulder, what appear to be panels, the upper corners touching to form triangular intervals; preserved are an oblique checkerboard and Crosshatching 2.
1035 Medium-sized vessel; painted dark-on-ground-coat P 2381 TB 3
GPH. 0.160 ; Est. max. D. 0.19
Pl. 167; pp. 38, 111, 134, 142
Fragment preserving section from low on body into neck, including a lower handle stump. Medium-coarse clay; lower body and neck slipped, polished, and fired ry; upper body, from max. D. to lower neck, overlain by a very thin groundcoat; matte dark paint.

Steep-shouldered body with continuous curve into moderately wide neck. Strap handle rises from mid-shoulder.

Two stacked zones on shoulder, the lower a Zigzag 1 and the upper a row of double CCs. Pendent garlands on lower neck.

# Post-Destruction Level Contexts 

(1036-1089) p. 17

# Brown-on-Buff Ware and Its Extended Circle <br> (1036-1081) 

# BROWN-ON-BUFF WARE (1036-1060) 

Unless otherwise stated, vessels have fine, pale brown clay and are nonmicaceous; polishing over brown paint.

## PLAIN BOWLS

1036 Plain bowl, Class 2; bwon-onVuff ware
P 2184 Trench EML-4: Layer 5
H. 0.044; D. rim 0.211
P. 32; pp. 48, 49, 134, 165, 167, 168-169, 170 (n. 256), 171, 191
Several gaps. Surfaces polished to medium luster and fired pale brown with some areas of pink; now dark-speckled.

Low, narrow ring foot. Shallow body with slightly convex walls; plain rim, flattened on top.

On ext., three sets of six to eight lines set low on body, at midway, and on rim; in each set, thick lines enclose narrower ones. On top of rim, solid stripes spaced at intervals equal to their lengths. On int., three annular zones of varying width with narrow reserved bands between: a narrow Meander 1 surrounds a small, blank tondo; in the central and widest zone, a solid-barred zigzag with laddered chevrons in the fields, those above compounded by smaller chevrons; in the outermost zone, beneath the rim, Crosshatching 2 ; all zones bordered by dots-between-lines.

1037 Plain bowl, Class 2; Brown-on-Buff ware
P 3816 Trench WS-6: Extension 3, Layer 7 GPH. 0.003; Est. D. rim 0.20
Pl. 32; pp. 48, 49, 134, 165, 167, 168, 170, 191
Rim sherd; paint worn and faded. Light concentration of fine mica in clay; surface fired very pale brown.

Flat-topped rim.
On upper ext., a group of four lines above a row of double CCs, the latter bounded below by at least a single line. On top of rim, part of a bar or transverse line. On top int. and bordered by dots-between-lines, an annular zone of vertical dots-between-lines, practically ladders; below, a double CC.

## ROUND-MOUTHED JUGS

1038 Round-mouthed jug; Brown-on-Buff ware
P 2853 Trench TBT-CC2: Pit $Q$, over CC 1-2 and near clay
H. 0.145; Est. max. D. 0.14

Pl. 55; pp. 52, 56, 134, 137, 138, 144, 165, 166, 167, 168, 169, 170, 171, 173, 191
About a dozen nonjoining fragments and sherds, together preserving complete profile. Some fine mica in clay; surface polished to medium luster and fired pink to very pale brown.

Flat base. Ovoid body with steep shoulder that curves continuously into tall, flaring neck; plain rim.

On lower body, horizontal and vertical rows of triple CCs, the latter extending onto the bottom. At belly, transition to neck, and on rim, rows of simple, stippled lozenges border primary zones. Of the shoulder zone two panels are preserved, each with a hawk (to $R$ ) whose spread wings are cut off by the panel's borders of dots-between-lines; solid Maltese crosses placed above and below each wing, while tangent in the angle formed by each bird's left wing and leg is a CC; the hawks were divided by narrower panels of unclear geometric design, perhaps like the multiple lozenge motif set between spout and handle on 832 . In a large zone on neck, a complex lozenge row, solid-barred, with laddered inner lozenges and chevrons; the zone is interrupted at one point by a panel of Checkerboard 1A with dotted borders, presumably flanking the handle (cf. TumP 55-57).

## 1039 Probable round-mouthed jug; Brown-on-Buff ware

P 5361 City Wall trench: Cut 5, Extension 2, Layer 1 (Bag 30)
GPH. 0.056
Pl. 55; pp. 52, 56, 110, 134, 137, 165, 167, 191
Sherd preserving section of upper handle and attachment to rim. Pink clay; very pale brown surface.

Wide neck. Strap handle with neatly trimmed sides, attaching to top of rim; across top of handle, a bolster with swelling, flattened ends.

On upper neck, behind handle, a zone or panel of Checkerboard 1A, bordered above by dots-between-lines. Sides of handle solidly painted; on ext. shaft, transverse lines; from bolster to point of attachment to rim, transverse groups of lines above and below a wide, solid bar; herringbone along the top of the bolster, and the ends solidly painted.

## 1040 Probable round-mouthed jug; Brown-on-Buff ware

P 5522 Trench TTN: City Wall cut on NE side, mixed fill of all levels around wall and in robbers' fill (Bag 1)
GPH. 0.037; Th. 0.005
Pl. 55; pp. 52, 134, 137, 165, 171, 191
Neck sherd. Surface fired very pale brown.
Wide, flaring neck.
Parts of two zones, divided by dots-between-lines: below, Checkerboard 1 A ; above, part of a zigzag or lozenge design with stippled components.

## NARROW-NECKED JUG

## 1041 Narrow-necked jug; Brown-on-Buff ware

P967a Trench ET-C2: "Beam Building"
GPH. 0.078; Est. max. D. 0.15
Fig. 30; Pl. 92; pp. 32, 57, 66, 108, 110, 122, 134, 165, 166, $167,168,169,170,171,172,191$
Fragment preserving section of body from well below max. D. to base of neck, including lower handle attachment. Surface polished to very high luster and fired pink with some ligher areas.

Broad, ellipsoidal body; narrow neck. Strap handle rising from low on shoulder.

Low on body and on upper shoulder, narrow zones of

Meander 1 , the higher one bordered by dots-between-lines; within and spanning from belly onto shoulder, a large zone preserving parts of two figural panels to either side of handle, each separated from the grip by a narrow panel of Checkerboard 1A with dots-between-lines borders; the panel to the $L$ preserves the neck and head of a lion facing $R$, with a double CC in the front field; the other panel preserves the hindquarters of a hoofed animal walking to $R$. A double CC is preserved below the handle, while the shaft itself is covered with Crosshatching 2.

Four Brown-on-Buff sherds found with 1041 were inventoried with it. A small sherd of a trefoil mouth (P 967e) may belong (as suggested in Fig. 30), as may a handle with rotelle and a cut-out shaft similar to that on 794 (P 967c; Pl. 92). P 967b (Pl. 92) is from a different vessel; the sherd preserves the rear legs of a hoofed animal in a similar panel arrangement, but without the Meander 1 below. Likewise, the sieve-jug spout 1046 cannot belong, since its placement would have been in the area of the lion panel on 1041.

## SIDE-SPOUTED SIEVE JUGS

## 1042 Spout of a sieve jug; Brown-on-Buff ware

P 3791 Building X: earth under pebble floor and above clay
GPL. 0.110; W. 0.040
Pl. 99; pp. 67, 68, 134, 137, 165, 167, 168, 170-171, 191
Complete spout, including flare at attachment to body.
Fired very pale brown throughout; medium luster.
Tubular trough spout, long and narrow, with bridge covering about a third of the length.

On ext., three wide, transverse bands of Checkerboard 1 C , the innermost continuous over the bridge. Along length of int. floor, laddered chevrons in a narrow zone bordered by ladders. Top edge of trough and mouth trimmed with more laddering.

## 1043 Spout of a sieve jug; Brown-on-Buff ware

P 3832b-c Building X: under pebble floor
GPL. 0.044; GPW. 0.027
Pl. 99; pp. 67, 134, 165, 166, 167, 168, 170-171, 191
Two associated sherds, together preserving sections of center and one edge of spout, with slight overlap of contour and decoration. Pale ry clay with a little scattered mica; pink surface.

Very fine-line painting. On ext., presumably five longitudinal zones, mostly with borders of dots-between-lines: at center and along at least one side, just below the edge, Type 1C checkerboards; between these, on at least one side, laddered chevrons; the zones are terminated toward one end by a very finely executed transverse zone of lozenges like those of Multiple Lozenge Panel 1 (Fig. 64). On int., a laddered border at edge; along central floor, a zone of dotted chevrons bordered by dots-between-lines.

1044 Spout of a sieve jug; Brown-on-Buff ware
P 3908 Fill overlying the PPB
GPL. 0.080 ; W. 0.040
Pl. 99; pp. 3, 67, 134, 165, 166, 167, 168, 170-171, 191
Sherd preserving central section of spout. Surfaces fired pink.

Wide, shallow spout.
On ext., longitudinal zones of a block-C meandroid pattern along either side, just below top; on underside, transverse zones, spaced, including the same meandroid design and a band of lines and rows of dots in close alternation. On int., three longitudinal zones: Crosshatching

2 along the floor and dotted chevrons along either side. All zones, inside and out, bordered by dots-between-lines.
1045 Spout of a sieve jug; Brown-on-Buff ware
P 3178 Buildings $O$ and $Q$ : fill between
GPL. 0.045; GPW. 0.027
Pl. 99; pp. 67, 134, 165, 166, 167, 168, 170, 171, 191
Sherd preserving end of spout, including parts of one side and outer lip. Fired pink throughout.

All elements and spout edges, inside and out, bordered by dots-between-lines. On ext.: along side, just below top, a zone of stippled simple lozenges; around underside, a panel of Crosshatching 2; at end, a transverse zone of Meander 1. On int.: along side, Meander 1; along central floor, and spaced from the lateral zone, what is probably a zone of stippled lozenges.
1046 Spout of a sieve jug; Brown-on-Buff ware
P967d Same context as 1041
GPL. 0.045; GPW. 0.020
Pl. 99; pp. 67, 70, 134, 137, 165, 167, 170, 171, 191
Fragment preserving section at end of spout, including top edge of trough. Surfaces polished to high luster and fired very pale brown.

Transversely stepped interior.
On ext., at end, a transverse zone of Checkerboard 1C, modified by a central row of dotted rather than filled checks; further in, a zone with an unclear motif that includes a stippled, rectangular element. On int., Checkerboard 1A at end, and, above a step, part of a dotted $W$ or zigzag pattern; all enclosed within a double border of dots-between-lines.

## 1047 Probable sieve jug; Brown-on-Buff ware

P 3179 Trench M5-F: clay fill overlying Meg. 5
GPH. 0.031; Est. D. rim 0.09
Pl. 99; pp. 134, 165, 167, 170, 171, 191
Sherd preserving section of shoulder and neck/rim. Surface polished to medium luster and fired pinkish white.

High, broad shoulder curving smoothly into short, wide neck; plain, flaring rim. Probably a Type 2 sieve jug.

Two zones on shoulder, a block-C meandroid row below Crosshatching 2, with dots-between-lines borders; Meander 1 on neck, beneath a solidly striped rim.

## DINOI

1048 Ring-handled dinos; Brown-on-Buff ware
P 647 NE Corner trench, Cut 1: foundations of Wall A, to W of S end
GPH. 0.050 ; Th. 0.005
Pl. 141; pp. 78, 91, 110, 134, 138, 165, 166, 167, 170, 171, 189, 191
Sherd preserving section of upper shoulder and rim, including handle housing. Polished to medium luster and fired pink to very pale brown.

Everted, flat-topped rim. Cylindrical spool for ring handle (now missing) set just below rim.

On shoulder, to $R$ of handle area, a narrow panel of Crosshatching 2 with dots-between-lines borders. Spool solidly painted; directly below, a circular, reserved strip defined by dots-between-lines indicates where the ring handle would have rested; within, and once enframed by the resting handle, a circle quartered by dots-between-lines, each quadrant containing a small, stippled triangle with single outline.

Judging by the complementary decoration, the ring handle would have been ca. 0.06 in diameter and 0.01 thick.

1049 Ring-handled dinos; Brown-on-Buff ware
P 3960 Fill overlving PPB
(;PH. 0.048
Pl. 141; pp. 3, $78,91,93,110,134,138,165,166,167,189$, 191
Sherd preserving handle housing and small section of rim. Surface fired pink.

Everted rim, flattened on top. Cylindrical spool, similar to that on 1048 but larger.

Rim banded on top. On spool, narrow, closely spaced strips of oblique lines.

## AMBIGUOUS VESSELS

## 1050 Medium-sized vessel; Brown-on-Buff ware

P 2405 a -b Trench W2-S: clay layer
GPH. 0.025 ; D. base 0.062
Pl. 159; pp. 134, 165, 170, 191
Two nonjoining sherds, preserving parts of base and lower body. Fired very pale brown throughout.

Very low ring foot.
Relatively thick-line painting. On lower body, just above base, two zones divided by dots-between-lines: that below is a Zigzag 1 that meets itself with some crowding at one point; above, a narrower zone of Meander 1 with an upper border of dots-between-lines.

## 1051 Small vessel; Brown-on-Buff ware

P 3476 Trench M7-A: fill of cellar to NW of Meg. 5
GPH. 0.048 ; Est. max. D. 0.11
Pl. 159; pp. 134, 165, 168, 170, 191
Sherd from belly. Grayish clay; pale brown surface, polished to medium luster and now crinkled.

Below max. D., a narrow zone of closely spaced vertical lines. On belly, a double zone divided by laddered horizontals and verticals into two rows of small panels that alternate square and narrow; the square panels in the upper row bear dotted latticing while the narrower one between is blank; in the lower zone, narrow frames of plain chevrons separate panels ( $c a .1 .5 \mathrm{~cm}$. high) of single hawks, each facing $R$ and holding a fish in its beak.

## 1052 Small vessel; Brown-on-Buff ware

P 5722 Küçük Hüyük, Trench KH 5A: W Ridge Level II, Field Cut II
GPH. 0.030 ; Th. 0.006
Pl. 159; pp. 134, 150, 165, 171, 191
Sherd preserving section of upper shoulder and beginning of neck. Fired very pale brown throughout.

Above a border of dots-between-lines, an oblique checkerboard pattern in which inscribed lozenges are alternately solid-filled and blank with stippled surrounds.

Cf. the related design on 1078 .
1053 Medium-sized vessel; Brown-on-Buff ware
P 3212 Trench TB7-D: Layer 4, over TB 7
GPH. 0.059 ; Est. max. D. 0.29
Pl. 159; pp. 134, 165, 167, 168, 170, 171, 173, 191
Belly sherd. Surface polished to low luster and now somewhat discolored.

Wavy line at lower break. Just below max. D., a narrow zone of Crosshatching 2 bordered by dots-between-lines. Just above, on belly, a slightly taller zone with two figural panels separated by Checkerboard 1A with dots-between-lines margins; at $L$, a hawk to $R$, its wing extending forward between two Maltese crosses to the edge of the panel; the panel at $R$ preserves part of another Maltese cross.

1054 Small or medium-sized vessel; Brown-on-Buff ware
P 3761 Building P; clay bedding beneath floor
GPH. 0.045; GPW. 0.058; Th. 0.005-0.007
Pl. 160; pp. 134, 165, 166, 191
Shoulder sherd, preserving beginning of neck. Polished to medium luster and fired very pale brown; very dark brown paint, blurred from polishing.

Extending from shoulder onto neck, an open lattice design with inner panels of Crosshatching 2.

## 1055 Medium-sized vessel; Brown-on-Buff ware

P 3832a Same context as $\mathbf{1 0 4 3}$
GPH. 0.039; Th. 0.003
Pl. 160; pp. 134, 165, 166, 191
Sherd from lower body or shoulder. Very pale brown clay; surface fired pink to pale brown.

Lattice design like that on $\mathbf{1 0 5 4}$, but with laterally elongated panels; below or above, lines and a zone of plain chevrons.

Biscuit coloration and the absence of mica suggest a disassociation of 1055 from 1043.

## 1056 Small or medium-sized vessel; related to Brown-onBuff ware

P 5143 Trench PTC: fill from robbed Archaic-period wall GPH. 0.040; GPW. 0.041; Th. 0.003
Pl. 160; pp. $134,165,166,169,170,191$
Sherd from lower belly. Fine ry clay; pink slip (now worn), polished to at least medium luster; paint worn.

Belly zone defined below by lines and Meander 1 ; within, the lower portion of a hoofed animal to $R$, d double CC between the forelegs. A bull is indicated by the wavy-line filling of the brisket (cf. Tum P 55 and 57).
1057 Petaled vessel; Brown-on-Buff ware
P 4869 Fallen earth NE of Meg. 11
GPH. 0.028; Th. 0.005
Pl. 160; pp. 120, 134, 140, 165, 166, 167, 172, 191
Sherd from midsection; surface worn. Pinkish white surface.

Tapering (probably downward) petals with distinct valleys between; corresponding depressions on int., were petals where pushed out from within.

Petals bordered by dots-between-lines; preserved fillings for the petals are Checkerboard 1A and Crosshatching 2.

## 1058 Petaled vessel; related to Brown-on-Buff ware

P 3219 Trench M5-E: South Cellar deposit
GPH. 0.030
PI. 160; pp. 120, 143, 140, 165, 166, 167, 170, 172, 191
Body sherd. Fine red clay; pink slip.
On preserved relief petals, laddered chevrons and dotted latticing. Either below or above, laddered arcading emphasizes the petals; between this and two very narrow zones of simple zigzag, tiny triangles with dash filling alternate standing and pendent.
1059 Small vessel; Brown-on-Buff ware
P 3963 Fill overlying PPB, Room 4
GPH. 0.043; Th. 0.004
Pl. 160; pp. 3, 134, 165, 166, 173, 191
Sherd from midsection. Pink surface, polished.
Two narrow zones, spaced, each with dots-between-lines borders: simple chevrons below Checkerboard 1C.
1060 Small vessel; Brown-on-Buff ware with added red
P 1117 Building C: rubble foundation
GPH. 0.041; Th. 0.003
Pl. 160; pp. 134, 142, 165, 166, 170, 191
Shoulder sherd. Very pale brown surface; matte red paint, applied after polishing.

Two zones on shoulder, with bordering lines between and below; each a Zigzag 3 whose legs alternate polished brown and matte red.

## AMPHORAS IN STYLE OF BROWN-ONBUFF WARE

(1061-1064)
1061 Amphora; painted dark-on-buff
P 3456 Trench WS-8: to E of and 0.50 below clay floor GPH. 0.089; Th. 0.014
Pl. 128; pp. 90, 134, 165, 167, 170, 171, 191
Sherd preserving section of belly and lower shoulder, including lower handle attachment. Coarse, gritty clay, fired pale rb; slipped surface, well polished over dark brown paint to at least low luster, and fired very pale brown.

Wide strap handle with trimmed edges, rising from low on shoulder.

To either side of handle, vertical lines, that at $R$ perhaps part of a ladder or $t$ row of dots-between-lines. Sides of handle solidly painted; on face, upward-pointing, laddered chevrons, the "rungs" vertical; at bottom, center, a very small triangle filled with Crosshatching 2. Below handle, a panel with bordering line at $R$, aligned with side of handle; within, the upper part of an animal, of which too little is preserved for identification; in field at $R$, a Maltese cross.

1062 Open-mouthed amphora; painted dark-on-buff P 4413 Trench WS-5/6S: test cut, Layer 8 clay floor GPH. 0.045; Th. 0.015
Pl. 128; pp. 83, 91, 134, 165, 167, 169, 170, 191
Shoulder/neck sherd. Coarse clay; slipped surface, polished over dark paint to low luster and fired very pale brown.

At gradual transition from steep shoulder to wide neck, a narrow zone of Meander 1, bordered by dots-between-lines, divides two larger zones. On shoulder, part of a Checkerboard 1C at $L$, beside a likely figural panel that now preserves only the corner of a pendent triangle with oblique checkerboard filling. On neck, Crosshatching 2 to $L$ of what is probably the hoof of an animal beside the arc of a CC.
1063 Open-mouthed amphora; painted dark-on-buff
P 3875 Fill overlying PPB
GPH. 0.070; Th. 0.010
Pl. 128; pp. 3, 90, 134, 150, 165, 168, 170, 191
Sherd from lower neck. Coarse clay; lightly polished surface, fired pale yr; dark paint.

Wide neck.
Paneled zone preserving, at $R$, part of a bird with body to $R$ but head to rear, among double CCs; at $L$, an oblique checkerboard whose rows alternate solid, stippled, and blank diamonds. Lines above and, at very top, the beginning of another zone, with CCs on the floor.
1064 Open-mouthed amphora; painted dark-on-tan P 3986 Fill overlying PPB
GPH. 0.068 ; Th. 0.011
Pl. 128; pp. 3, 83, 90, 134, 144, 165, 168, 169-170, 171, 173, 191
Sherd preserving section of shoulder and lower neck. Coarse clay, fired rb with thick gray core; lightly polished surface, fired rb; matte dark paint.

Steep shoulder; wide neck. Probably a krater.
On shoulder, a zone preserving parts of two panels: at $L$ an unclear lozenge design; just to $R$, beyond a few lines, part of a hawk, facing $R$, with outspread wing extending to and
seemingly cut off by the panel's margin; double CCs in the fields. On neck, a complex lozenge row with stippled inner lozenges and triangles.

## ENORMOUS KRATERS IN THE STYLE OF BROWN-ON-BUFF WARE <br> (1065-1081)

## DOUBLE CONCENTRIC-CIRCLE GROUP

## 1065A-B Enormous krater; now buff

P 3327a-e, Fill over Meg. 6 floor (a sherd of A); Trench M5-E, South Cellar deposit
GPH.(A) 0.190 ; GPW.(A) 0.230; GPH. figural zone 0.190; Th. 0.022-0.024
Fig. 45; Pl. 129; pp. 83, 88, 89, 90, 134, 137, 152, 154, 165. $166,167,169,170,171,172,189,191,192$
Fragment and an associated sherd (B) from lower shoulder. Coarse clay; smooth, slipped surface, fired pink where not darkened by secondary firing; dark paint.

Portion of a large panel on lower shoulder, probably spanning down onto belly; bordered at $L$ by a multiple lozenge panel with reserved intersections, inner stippled lozenges, and a dots-between-lines frame; within, a lion with herringbone mane and belly and a hatched, crooked tail stands to $R$ on a bull(?) with large-dot stippled filling and a short tail; overhead, three pendent triangles with dotted crosshatching and fringed borders; large, compass-drawn rosettes and double CCs (D. 0.0105) in the field, behind and above the animals. On upper shoulder, separated from the figural panel by dots-between-lines, a zone of lozenges like those of Multiple Lozenge Panel 1. B, preserving the same lozenge motif and parts of two pendent triangles, most likely comes from the same vessel; the section of an arc preserved between the triangles probably belongs to another compassdrawn rosette.

1067 seems to represent the same vessel. Cf. also 1066 .

## 1066 Enormous krater; now buff

P 544d Trench M5-E: South Cellar deposit
GPH. 0.044; GPW. 0.095; Est. D. base of ridge 0.60; Th. 0.016 at base of neck, 0.024 on upper shoulder

Fig. 45; Pl. 129; pp. 83, 88, 89, 134, 137, 165, 166, 167, 170, 189, 191
Sherd from upper shoulder, preserving basal neck ridge at top. Coarse clay, fired ry with thick gray core; slipped surface, smooth and matte, fired very pale brown; dark brown paint.

At top of shoulder, just below neck ridge, a narrow zone of Meander 1; below, dots-between-lines and what appears to be the same multiple lozenge design as on the upper shoulder of 1065 . Above the ridge, a solid line and what seems to be the very bottom of a hoof.

1066 may well belong to the upper shoulder of the same vessel as 1065. The sherd also may have been directly below the neck zone of animal panels on 1071 and/or 1072 (Fig. 45).

1067 Enormous krater; indet.
P 3327f-g Trench TBW-4: Layer 4
GPH. 0.135; GPW. 0.272; Th. 0.020-0.023
Fig. 46; Pl. 129; pp. 83, 88, 89, 134, 137, 154, 165, 166, 167, 169, 170 (n. 257), 171, 172, 189, 191
Fragment (unmended because of too slight a join) from lower shoulder. Like 1065 in fabric and finish, but surface now darkened.

Figural panel, probably spanning lower shoulder and belly. Presumably at center of composition, a tree with spiny trunk and long, curling branches, the latter symmetrically arranged and filled with hatching; at $L$, its nose touching the tree, a deer with large-dot, stippled body, oblique dots-between-lines on neck, stippled antlers, and small ears; on the deer's back, a pair of seemingly fighting hawks with herringbone tail-feathers and series of undulating lines for the wings; to $R$ of tree, the nose of a second animal touches the tree, perhaps another deer; in front of the latter animal, a compass-drawn rosette like those on 1065A; behind the head of the deer at $L$, a faintly preserved double CC of the same diameter ( 0.0105 ) as those on 1065A. If the composition is symmetrical, as suggested in Fig. 46, the panel would have had a width of at least 0.50 .

## 1068 Enormous krater; indet.

P 3327h Unrecorded context
GPH. 0.115; GPW. 0.155; Th. 0.026-0.027
Fig. 46; Pl. 130; pp. 83, 88, 89, 90, 134, 137, 165, 166, 167, 170, 172, 189, 191
Shoulder sherd. Coarse clay, now darkened throughout from secondary firing; slipped surface, once polished, as indicated by slight traces of luster.

Panel extending to top of shoulder, as evident from a barely preserved rise for beginning of the neck. A lion to $R$ with finely stippled body, herringbone mane, and reserved, crescent-shaped shoulder; a very long tail, carried over back and filled with spaced groups of transverse lines, terminates in three prong-like divisions; double CCs in the field; below the lion's belly, the arc of a larger filler, perhaps a compassdrawn rosette similar to those on 1065A and 1067; above, part of a pendent triangle with dotted crosshatching; at far $L$ and all but lost in fire damage, a panel-divider of obscure design.

That $\mathbf{1 0 6 8}$ is not from the same vessel(s) as $\mathbf{1 0 6 5}$ and $\mathbf{1 0 6 7}$ is indicated by the position of the figural panel at the top of the shoulder, the smaller scale of the lion, and the finer stippling of the animal's body.
1069 Enormous krater; now buff
P 3327k Trench WS-5/6: Layer 5
GPH. 0.080; GPW. 0.115
Fig. 46; Pl. 130; pp. 83, 88, 89, 134, 137, 154, 165, 166, 167, 171, 189, 191
Sherd from lower shoulder, preserving part of a handle base. Coarse clay; slipped surface, polished to a very smooth finish but now almost matte, fired pink to pale brown; dark paint, very faded. Vertical lines that intrude on the decorated areas appear to be paint drippings.

Probably a strap handle with narrow finger hollow at center; alternatively, a double strap.

In a low zone beneath the handle, a Multiple Lozenge Panel $l$; to the $L$, a panel with a small goat walking to $R$, a double CC over its back; at far $R$, a compass-drawn rosette.

The double CC on 1069 is slightly smaller in diameter than those on 1065 A and 1067 , while the rosette seen here is a little larger ( 0.030 as opposed to 0.028 ).

## 1070 Enormous krater; now buff

P 544a Trench SET-N: fill to W of Wall A2
GPH. 0.077; GPW. 0.195; Th. neck 0.025; Est. D. rim 0.70; W. rim 0.084

Fig. 45; Pl. 129; pp. 83, 88, 89, 104, 134, 137, 148, 165, 166, 167, 170, 171, 187, 189, 191
Upper neck/rim sherd. Coarse clay, fired ry with thick gray core; slipped surface, smooth and matte, fired pink; dark brown paint.

Everted rim with flat, slightly flaring face; broad, flat top; wide, protruding ledge.

On upper neck, a narrow zone bordered above and below by dots-between-lines; within, a panel of Crosshatching 2 with dotted borders and, at $L$, a group of thick, solid rays; a double CC (D. 0.0105) in each of the two preserved intervals. On face of rim, a large Zigzag 1; on top, spaced panels, one of Crosshatching 2 and a second, worn one that appears to be Multiple Lozenge Panel 1; on ledge, a Type 1 meander.

Cf. 1071-1072.

## 1071 Enormous krater; now buff

P 544b Trench WCW-1: Level 6
GPH. 0.090; GPW. 0.120; GPTh. 0.028
Fig. 45; Pl. 129; pp. 83, 88, 89, 134, 137, 165, 166, 167, 169, 170, 171, 189, 191
Neck sherd. Much like 1070 in fabric and coloration; polished surface, still retaining a little luster; dark brown paint, apparently under polish.

In a zone bordered above by dots-between-lines, parts of two figural panels, considerably smaller than the shoulder scenes on 1065 and 1067, and apparently containing single animals. At $L$, a goat to $R$ with stippled body, reserved crescent shoulder, spaced dots-between-lines on brisket and neck, and a goatee; double CCs in the field (D. 0.0105). At $R$, beyond a narrow panel of Crosshatching 2 with dotted borders, the rump and tail of another animal, goat or deer, walking to $R$; the preserved tip of a painted element beneath the creature's tail is probably a Maltese cross similar to that on 1072.

As suggested in Fig. 45, the zone may well have been directly below the upper neck zone on 1070, the horizontal border of dots-between-lines providing an overlap; cf. 1072.

## 1072 Enormous krater; now buff

P 544c Trench WS-8: below Floor 7
GPH. 0.070; GPW. 0.070
Fig. 45; Pl. 129; pp. 83, 88, 89, 134, 137, 165, 166, 167, 169 , 170, 171, 189, 191
Sherd from low on neck. Much like $\mathbf{1 0 7 0}$ in fabric and coloration.

Lower $L$ portion of a figural panel similar to those on 1071; preserved is the trailing, hoofed leg of an animal proceeding to $R$; above, part of a Maltese cross. At far $L$, a panel of Crosshatching 2 with dotted border.

The sherd may belong to the same zone as 1071, but not necessarily to the same goat panel (as suggested in Fig. 45). 1071-1072 also may represent the next level up from 1066.

## 1073 Enormous krater; indet. <br> \section*{P 4411 Trench TB8-S3: Level 6}

GPH. 0.080 ; GPW. 0.115 ; Est. D. neck 0.65 ; Th. 0.030
Pl. 130; pp. 83, 88, 89, 134, 137, 148, 165, 166, 167, 169, 170 , 189, 191
Sherd from upper neck. Coarse clay; slipped surface, smooth and matte, fired pale brown with a greenish tinge that may have resulted from secondary firing; dark paint.

On mid- or lower neck, a zone or panel of Cross-hatching 2. Directly above, and bordered by dots-between-lines, a narrow zone similar in composition and placement to that on 1070 , yet about 1 cm . taller: a group of rays separated from an apparent checkerboard panel at far $R$ by three double CCs, stacked.

The greater height of the zone, the different arrangement of CCs, and the use of lines instead of dots for the panel border all suggest that the vessel is not the same as 1070.

## TRIPLE CONCENTRIC-CIRCLE GROUP

## 1074 Enormous krater; now buff

P 544f Trench TBW-3, clay layer; P 544e Trench M7-G, Layer 4
GPH. 0.140; GPW. 0.180; Th. 0.024
Pl. 131; pp. 83, 88, 89, 134, 137, 150, 165, 166, 167, 169, 170, 171, 172-173, 189, 191
Fragment from lower and mid-shoulder. Coarse clay, ry with gray core; slipped surface, smooth and matte, fired uniformly pink; dark brown paint.

At $L$, a large figural panel, probably extending down onto belly, preserving the head of a lion turned downward over that of what is most likely a bull, with only the tip of the horn preserved; the lion has an open, circular mouth with hanging tongue, a detailed semicircular stylization for the cheek, and tabby ears fringed by dots; triple CCs in the forward field and, above, part of a pendent triangle with dotted crosshatching and dotted border. To the $R$, beyond a narrow Latticed Panel 3 with dotted borders, the upper $L$ comer of another large panel, as indicated by part of a pendent triangle with fringed border. Separated from this large zone by dots-between-lines, an upper shoulder zone of oblique checkerboard with stippled components.

P 544h (Pl. 131), from an overlying layer of the PPB, preserves a triple CC and parts of two triangles like those on 1074, and probably belongs to the same vessel. Cf. also 1075-1076.
1075 Enormous krater; now buff
P544i From an upper layer overlying the PPB
GPH. 0.055 ; GPW. 0.09
Pl. 131; pp. 83, 88, 89, 134, 137, 150, 165, 166, 167, 171, 189, 191
Sherd from mid-shoulder. Like 1074 in fabric.
Upper portion of a large figural panel preserving the tip of a horn(?) and a triple CC. Abbove, dots-between-lines and an upper shoulder zone like that on 1074.

Most likely from the same vessel as 1074. The CCs are the same in diameter; like those on $\mathbf{1 0 7 4}$ they show an overlap at 2 o'clock in the outermost circle. Cf. also 1076.

## 1076 Enormous krater; indet.

P544g Trench WML-4N: Layer 5
GPH. 0.110; GPW. 0.120; Th. 0.023-0.024
Pl. 131; pp. 83, 88, 89, 134, 137, 165, 166, 167, 170, 172-173, 189, 191
Shoulder sherd. Like 1074 in fabric and coloration, where not darkened by secondary firing.

Large figural panel preserving the forepart of a lion to $L$ : open, circular mouth with zigzag teeth and a distended, snaky tongue; multiple double arcs for wrinkles of nose; semicircular convention for cheek, also used for the over-lapping-scale stylization of the mane; a double ax with handle is stuck in the beast's chest. Triple CCs in the forward field.

Probably from the same vessel as 1074-1075; the CCs are the same in diameter, and show the overlapping mentioned under 1075.

## 1077A-D Enormous krater; now buff

P 3924a-c, $\mathrm{f}=\mathrm{A}$, parts of $\mathrm{B}, \mathrm{D}$ Layers overlying the PPB ; P 3924d = a sherd of B Trench M5-F, Floor 3, Cellar 3 exterior; P 3924e = C Trench WCW-2, Layer 3
GPH. 0.154; Max. dim. (A) 0.480; Est. D. rim 0.80; W. rim 0.097 ; Th. neck 0.028

Fig. 47; Pl. 131; Frontispiece; pp. 3, 83, 88, 89, 104, 105, 134 $137,148,165,166,167,169,170,171,189,191$
Three sherds and a fragment ( $\mathrm{P} 3924 \mathrm{~b}-\mathrm{d}=\mathrm{B}$ ) preserving sections of upper neck and rim, including a large piece of the latter (A). Coarse clay, fired ry to grayish brown; thick
slip, smoothed and fired pale brown to pink with traces of secondary firing on some pieces; matte brown paint.

Very wide, slightly tapering neck; huge everted rim, offset below by ridge, with high, flat face and top; two broad ledges on int., the inner one slightly protruding.

On lower or mid-neck, a zone of lozenges like those of Multiple Lozenge Panel l. Above, at top of neck, a narrower zone containing panels of Checkerboard IA with dotted borders, these spaced between groups of thick rays; Maltese crosses in the intervals. On underside of rim, just above ridge, a row of triple CCs; on face of rim, line-bordered panels of Checkerboard 1A and Crosshatching 2 in alternation, with a triple CC in each interval; on top of rim, Z-shaped chevrons; in the annular zones on the ledges, Meander 1 and regular chevrons.

The vessel is possibly the same as 1074-1076; the outer circles of the CCs often show a similar overlap (see comment under 1075).

## WITHOUT PRESERVED CONCENTRIC CIRCLES

## 1078 Enormous krater; now buff

P 2788 Trench TBT-CC1: below Floor 5 and just above clay layer
GPH. 0.060 ; GPW. 0.080 ; Th. $0.022-0.023$
Pl. 132; pp. 83, 88, 89, 134, 137, 150, 165, 166, 167, 171, 189 191
Shoulder sherd. Coarse clay, fired ry with thick gray core; slipped surface, smooth and matte, fired pink; dark brown paint.

An oblique checkerboard with stippled elements probably serves as an upper shoulder zone as on 1065A; a bordering line at the top and the absence of any trace of a transition to the neck suggest a still higher shoulder zone (cf. 1066)

The shoulder motif differs from that on either 1065A or 1074-1075

1079 Enormous krater; now buff
P 3924g Fill overlying the PPB
GPH. 0.067; Th. 0.027
Pl. 132; pp. 3, $83,88,89,134,137,148,165,166,167,169$, 170, 171, 189, 191
Sherd from upper neck, preserving beginning of flare into rim. Similar in fabric and coloration to 1077.

Below, part of a Checkerboard 1A panel with dotted border; dots-between-lines separate this from an upper sone in which are preserved a herringbone panel with dotted borders and, to $L$, a Maltese cross and a thick ray.

Although the upper neck zone is similar to those on $\mathbf{1 0 7 0}$, 1073, and 1077, the different height of the zone suggests a separate vessel, as does the presence of a second geometric paneled zone directly below.

## 1080 Enormous krater; indet.

P 4412 Trench TB8-S3: Pit 3, sunk into clay layer GPH. 0.060; GPW. 0.145; GPTh. 0.031
Pl. 132; pp. 83, 88, 89, 134, 137, 165, 166, 167, 170, 189, 191
Sherd from upper neck, preserving beginning of flare into rim. Coarse clay; smooth, matte surface, now darkened by secondary firing.

Below, a zone of Meander l; above dots-between-lines, a wide panel or zone of Checkerboard 1A.

Like 1079 , the sherd appears to represent a vessel different from 1070. 1073, and 1077.

## 1081 Enormous krater; now buff

P 4410 Unrecorded context
GPH. 0.050; GPW. 0.115; Est. D. rim 0.75
Fig. 47; Pl. 132; pp. 83, 88, 89, 90, 104, 105, 134, 137, 165, $166,167,189,191$
Sherd preserving section of rim, broken away above neck. Coarse gray clay; slipped surface, well polished over dark brown paint to low luster and fired pale brown.

Everted rim with high, vertical face neatly beveled at edges; wide, flat top, inward-sloping down to two stepped ledges.

Dots-between-lines border the top of a missing zone on the neck. On the face of the rim, chevrons pointing $R$, these bordered below by dots-between-lines and above, on the upper beveled edge, by oblique lines; similar chevrons on top and ledges, the direction alternating from one level to the next.

The rim might belong with $\mathbf{1 0 7 3}, \mathbf{1 0 7 7}$, or $\mathbf{1 0 8 0}$, but there are no strong grounds for an association with any of them.

## Post-Destruction Contexts: Alissar IV Pottery

(1082-1089) p. 16

## AMPHORAS AND PROBABLE AMPHORAS

1082 Probable amphora; Alişar IV style, dark-on-tan P 3485 Trench WS-3/4, N: above and to W of Floor 1 GPH. 0.081 ; Th. 0.012
Pl. 133; pp. 90, 134, 163
Shoulder sherd. Coarse clay with scattered white bits and some mica, fired light red with gray core; polished surface, now practically matte, fired ry; dark paint.

Beside a pair of vertical lines at $L$ (perhaps next to a handle), a silhouette goat facing $R$, with the tips of its backwardcurving horns at top center; above, and partly overlapping the tail, part of a large CC.

1083 Open-mouthed amphora; Alişar IV style, dark-on-tan P 2485 Trench TBT-4: Pit C in clay, N end
GPH. 0.109; Th. 0.012
Pl. 133; pp. 83, 85, 134, 163
Sherd preserving section of upper shoulder and lower neck, with rise for handle along $R$ edge. Coarse clay with fine mica, fired ry; slipped surface, polished to low luster and fired darker tone of clay color; matte black paint, over polish. Int. well smoothed.

Smooth transition from shoulder into wide neck.
At $R$, beside handle, lines running the entire height of the sherd. On shoulder, the tail of a goat(?) facing $L$, with double CCs above. At transition to neck, above a triple-line border, a Simple Lozenge Row 1. On lower neck, the beginning of a complex lozenge row.

## 1084 Probable amphora; Alişar IV style, dark-on-groundcoat

P5564 Trench SET-1961: fill under A-1 floor (Bag 10)
GPH. 0.09; Th. 0.011
Pl. 133; pp. 90, 134, 162 (n. 239), 163
Shoulder sherd. Medium-coarse, micaceous clay, fired ry with thick gray core; ground-coated surface, smooth and matte, now predom. pink; dark paint.

Silhouette goat to $L$, rearing onto a tree with long, lateral branches and numerous pendent twigs; quadruple CCs in the field.

1085 Probable amphora; Alişar IV style, dark-on-groundcoat
P 4438 Trench PhWN-6: Layer 5
GPH. 0.122; Th. 0.014
Pl. 133; pp. 90, 134, 163
Belly sherd. Coarse, gritty clay with mica, fired rb;
polished slip, fired light brown to pink; polished groundcoat, fired lighter pink; matte black paint. Smoothed int.

Thick ridge low on belly.
Lower body slipped up to level of ridge, above which the surface is ground-coated; lines to either side of ridge. Above, on belly, the rear half of a silhouette animal, perhaps a deer, facing $R$; numerous double $C C s$ in the field; vertical bordering line at far $L$.

## 1086 Probable amphora; Alişar IV style, dark-on-ground-

 coatP 5195 Tumulus H : fill of mantle
GPH. 0.045
P1. 133; pp. 90, 134, 163
Neck sherd, including base of rim. Coarse clay, fired rb to ry; smoothed ground-coat, pale brown; matte black paint.

Below a thick line at base of rim, part of a tree with symmetrically arranged, upward-slanting branches, from each of which hang numerous twigs in even, orderly rows.

## 1087 Open-mouthed amphora; Alişar IV style, bichrome-on-tan

P 1084a Middle Phrygian Gate SE: rubble in front of stepped retaining wall
GPH. 0.158; Th. 0.012
Pl. 133; pp. 83, 85, 134, 163
Fragment preserving section of shoulder and lower neck, including upper handle attachment. Medium-coarse clay with silvery mica and spongy texture, fired ry; apparently slipped surface, polished to low luster and fired a darker ry; matte dark and dark red paints, over polish. Surface pitted from inclusions.

Smooth transition into wide neck. Strap handle with upper attachment at transition to neck.

On shoulder, to $R$ of handle panel, part of a goat facing $R$, with sloppy double CCs in the field; the animal's body is outlined in dark paint and red-filled. On neck, at least two zones, the lower preserving part of a butterfly panel with a $C C$ in the lower field; upper zone unclear. Above handle panel, part of a large, simple $X$ - or butterfly panel with redfilled leg(s) and a CC in each field; the panel's lower border, an arched outliner for the handle attachment, is also dark with red filling. At far $L$, the lower corner of what may be a butterfly, like that above the goat panel.

1088 Probable amphora; Alişar IV style, bichrome-on-red P 1084b Same context as 1087
GPH. 0.078; Th. 0.012
Pl. 133; pp. $90,134,163$
Shoulder fragment. Medium-coarse, micaceous clay, fired
light red with gray core; polished surface, now almost matte, fired close to clay color; black and dark red paints, over polish.

Most of the torso of an animal facing $R$, including neck and front legs; red-filled body with dark outlining; in the field, double CCs that are somewhat larger and more carefully executed than those on 1087.

Both fabric and CCs indicate that 1087 and 1088, although inventoried together, are from separate vessels.

1089 Open-mouthed amphora; Alişar IV style, bichrome-on-buff
P 2477 Trench Wl-S: Layer 5
GPH. 0.086; Est. D. rim 0.54
Fig. 47; Pl. 133; pp. 83, 85, 102, 134, 148, 152, 153, 163, 192
Neck/rim fragment. Coarse clay with high concentrations
of very fine, golden mica and white bits, fired light red; polished surface, now matte, fired pink; matte black and dark red paints.

Wide, vertical neck; ledged rim, rounded on ext. and top.
On upper neck, a zone of rays, black with dark red basal filling. At $R$ and very likely above a handle, part of a horizontally divided $X$-panel with at least one red-filled triangle. Traces of paint on face of rim; single-line zigzag on ledge.

## CONTEXT REGISTER

| Building C: rubble | 957 | 717 |
| :---: | :---: | :---: |
| foundation | 972 (or CC 2) | 719 |
| 1060 | 1006 | 726 |
| Buildings 0 and Q: fill | 1018 | 728 |
| between | CC 1: anteroom | 759 |
| 1045 | 678 | 773 |
| Building P: clay bedding | 714 | 792 |
| beneath floor | 813 | 794 |
| 1054 | 839 | 797 |
|  | 954 | 801 |
| Building X: under | 961 | 814 |
| pebble floor | 968 | 831 |
| 1042 | CC 2: main room | 832 |
| 1043 | 425 | 837 |
| 1055 | 457 | 842 |
| City Wall trench: Cut 5, | 467 | 844 |
| Extension 2, Layer 1 | 471 | 849 |
| (Bag 30) | 474 | 858 (or CC 1) |
| 1039 | 476 | 869 |
| Clay-Cut (CC) Building | 482 | 874 |
| CC 1: main room | 495 | 895 |
| $422$ | 496 | 896 |
| 422 440 | 512 | 905 |
| 440 490 | 557 | 920 |
| 490 | 561 | 940 |
| 494 497 | 569 | 941 |
| 546 | 571 | 944 |
| 565 | 581 | 945 |
| 565 | 582 | 947 |
| 594 653 | 584 | 950 |
| 653 661 | 589 | 953 |
| 661 673 | 592 | 962 |
| 673 691 | 593 | 966 |
| 697 | 597 | 972 (or CC 1) |
| 697 725 | 615 | 977 |
| 725 | 619 | 979 |
| 749 760 | 623 | 982 |
| 760 767 | 626 | 983 |
| 767 780 | 631 | 986 |
| 780 | 655 | CC 2: overlying disturbance |
| 804 | 665 | 927 |
| 804 | 666 | CC 3: main room |
| 826 | 670 | 421 |
| 845 846 | 671 | 423 |
| 858 (or CC 2) | 693 | 426 |
| $946$ | 695 | 427 |
| $948$ | 708 | 429 |
| 955 | 715 | 432 |

433
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437
438
444
521
522
574
610
674
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680
703
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Trench: Phrygian fill
below pebbled area, and
overlving Early Bronze
Age level, in front of
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EPB SW Room, fill associated with overlying diagonal wall (EPB IV) 60

EPB-69-1/2: to NE of Megaron 9, fill below exterior floor overlying EPB (EPB V)

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1041
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Cellar deposit
1058
1065A-B
1066
M5-F: clay fill overlying Megaron 5

1047
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exterior
1077B
M7-A: cellar to NW of
Megaron 5
1051
M7-G: Layer 4
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Megaron 1: anteroom 535
Megaron 1: debris in front

1020
Megaron 1: storerooms behind

681
766
824
949
994
1005

| Megaron 1: debris on | 769 |
| :---: | :---: |
| clay terrace to SE | 771 |
| 971 | 776 |
| Megaron 2: main room | 777 |
| 741 | 781 |
| 987 | 784 |
| 1009 | 787 |
|  | 816 |
| Megaron 2: debris in | 817 |
| front | 821 |
| 415 | 822 |
| Megaron 2: behind | 830 |
| 1016 | 863 |
| Megaron 3: main room | 865 |
| 414 | 867 |
| 499 | 868 |
| 507 | 878 |
| 526 | 879 |
| 528 | 880 |
| 540 | 884 |
| 541 | 886 |
| 542 | 929 |
| 543 | 960 |
| 544 | 963 |
| 550 | 967 |
| 551 | 989 |
| 553 | 1030 |
| 562 | Megaron 4: main room |
| 583 | 500 |
| 586 | 800 |
| 598 | 870 |
| 618 | 883 |
| 627 | 888 |
| 629 | 889 |
| 630 | 898 |
| 638 | 911 |
| 644 | 916 |
| 683 | 939 |
| 688 | 990 |
| 698 | 996 |
| 704 | 1000 |
| 707 | 1001 |
| 718 | 1003 |
| 720 | 1004 |
| 722 | 1012 |
| 723 | 1013 |
| 744 | 1014 |
| 756 | Megaron 4: anteroom |
| 763 | 918 |
| 768 | 938 |

Megaron 4: storeroom behind

410
484
505
509
838
900
970
Megaron 4: debris on
Terrace to NW 732

999
1011
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M4 III: fill for sloping earth floor overlying M4 I

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$$
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$$

Megaron 5: fill below floor

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1053
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TBT-4, Trench: Pit C in clay

1083
TBT-CCl, Trench: below floor 5 1078

TBW-3, Trench: clay
layer
1074
TBW-4, Trench: Laver 4 1067

Terrace Building (TB)
TB 1: main room
458
469
502
510
511
539
576
578
605
606
628
632
654
700
790
810
811
866
877
882
922
928
1033
TB 1: anteroom
461
596
641
788
807
891
1029
TB 1: debris to SW
857
TB 2: main room
473
485

| 545 | 907 | 737 | 733 |
| :---: | :---: | :---: | :---: |
| 585 | 908 | 739 | 734 |
| 600 | 914 | 751 | 747 |
| 611 | 915 | 755 | 764 |
| 620 | 921 | 772 | 770 |
| 633 | 942 | 774 | 851 |
| 634 | 951 | 778 | 853 |
| 635 | 956 | 786 | 854 |
| 636 | 975 | 795 | 856 |
| 662 | 998 | 812 | 901 |
| 711 | 1010 | 818 | 1015 |
| 712 | 1035 | 819 | TB 5: anteroom |
| 789 | TB 4: main room | 823 | 906 |
| 820 | 416 | 827 | TB 5: debris to SW |
| 871 | 439 | 841 | 917 |
| 913 | 442 | 843 | TB 6: main room |
| 923 | 443 | 848 | 441 |
| 930 | 446 | 875 | 449 |
| 943 | 447 | 876 | 450 |
| 981 | 491 | 897 | 460 |
| 993 | 498 | 919 | 479 |
| 1023 | 504 | 952 | 481 |
| 1024 | 520 | 978 | 492 |
| 1025 | 523 | 980 | 515 |
| 1026 | 531 | 997 | 517 |
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| 411 | 533 | TB 4: anteroom | 527 |
| 418 | 534 | 445 | 554 |
| 419 | 537 | 464 | 568 |
| 424 | 538 | 516 | 602 |
| 435 | 548 | 622 | 621 |
| 468 | 549 | 793 | 649 |
| 475 | 572 | 815 | 652 |
| 524 | 573 | 859 | 663 |
| 566 | 575 | 861 | 686 |
| 570 | 580 | 872 | 705 |
| 587 | 590 | 925 | 750 |
| 588 | 645 | 934 | 758 |
| 599 | 647 | 1017 | 796 |
| 608 | 650 | 1021 | 825 |
| 617 | 651 | TB 2-4: destruction debris | 847 |
| 639 | 656 | over Terrace behind | 903 |
| 640 | 658 | 601 | 904 |
| 648 | 660 | 782 | 991 |
| 684 | 664 | 862 | 1027 |
| 701 | 668 | 1034 | TB 7: main room |
| 713 | 672 | TB 5: main room | 412 |
| 731 | 679 | 456 | 417 |
| 743 | 682 | 591 | 420 |
| 836 | 692 | 646 | 452 |
| 852 | 696 | 659 | 465 |
| 864 | 702 | 689 | 506 |
| 873 | 706 | 694 | 525 |
| 902 | 721 | 729 |  |


| 529 | 735 | 304 | 289 |
| :---: | :---: | :---: | :---: |
| 530 | 746 | 311 | 299 |
| 536 | 779 | 315 | 300 |
| 558 | 783 | 316 | 309 |
| 577 | 798 | 318 | 313 |
| 579 | 806 | 319 | 314 |
| 603 | 855 | 325 | 328 |
| 604 | 885 | 326 | 329 |
| 616 | 887 | 327 | 331 |
| 624 | 964 | 330 | 337 |
| 669 | TB 8: anteroom | 332 | 342 |
| 675 | 802 | 334 | 350 |
| 676 | 805 | 335 | 358 |
| 690 | 829 | 338 | 360 |
| 738 | 881 | 343 | 362 |
| 742 | 890 | 344 | 367 |
| 765 | 932 | 349 | 390 |
| 834 | TB 8: debris in front | 351 | Terrace 4: fill to SW of |
| 835 | 899 | 353 | Megaron 6, W corner |
| 909 | 933 | 357 | 346 |
| 931 | 935 | 359 | 354 |
| 959 | 988 | 373 | 364 |
| 976 | TBT-CC2, Trench | 387 | 366 |
| 995 | $1038$ | 392 | 377 |
| TB 7: anteroom |  | 393 | 388 |
| 413 | Terrace Fill | Terrace 2: fill to SW of |  |
| 466 | Terrace 1-10, all in the | Megaron 6 anteroom | Megaron 7 in Trench |
| 595 | area of Megs. 6-7, have | 251 | TBW-1 |
| 637 | been so designated | 283 | 267 |
| 657 | primarily to allow coded | 285 | 336 |
| 685 | references in the | 286 | 339 |
| 791 | Catalogue for the | 290 | 340 |
| 828 | uninventoried material | 293 | 348 |
| 912 | from these units (e.g., | 341 |  |
| 924 | Ter 2: 7, Ter 9: 3). The other units of the | 352 | Terrace 6: fill inside |
| 969 | Terrace fill that follow | 361 | TBW-l and 2 |
| 1019 | are not here represented | 363 | 256 |
| TB 8: main room | by uninventoried pottery, | 376 | 292 |
| 428 | and thus are not so | 383 | 371 |
| 430 | coded. | 394 |  |
| 431 | Terrace l: fill beside | Terrace 3: fill to NE of | Terrace 7: rubble bedding of Terrace floor |
| 448 | enclosure wall to SW of | Megaron 7 | over Megaron 7 |
| 470 | Megaron 6 | 257 | 284 |
| 483 | 253 | 263 | 333 |
| 513 | 258 | 266 | 345 |
| 607 | 260 | 268 | 365 |
| 609 | 262 | 269 |  |
| 612 | 271 | 270 | Terrace 8: fill inside |
| 613 | 280 | 274 | Megaron 6 |
| 614 | 281 | 275 | 255 |
| 625 | 288 | 278 | 291 |
| 667 | 296 | 279 | 294 (on floor) |
| 709 | 303 | 287 | 297 (on floor) |
| 710 |  |  |  |


| 302 | 397 | 761 |
| :---: | :---: | :---: |
| 321 | 398 | 762 |
| 368 | Terrace fill below TB 8 | 850 |
| 369 | anteroom | Terrace Gateway: debris |
| 384 | 324 | on Terrace to SE |
| 389 (on floor) | Terrace fill in area of | 508 |
| Terrace 9: fill to rear of | Houses X and Y | 1032 |
| Megaron 7 | 282 | TTN, Bag 1, Trench: City |
| 254 | 295 | Wall cut on NE side, |
| 259 | 298 | mixed fill |
| 264 | 396 | 1040 |
| 272 |  |  |
| 273 | Terrace Gateway (TG) | Tumulus H: fill |
| 277 | Pottery Depot | 1086 |
| 307 | 451 | Water channel to S of |
| 310 | 453 | Megaron 10 (EPB V) |
| 356 | 454 | 120 |
| 370 | 455 | 121 |
| 378 | 459 | W1-S: Layer 5 |
| 379 | 462 | 1089 |
| 381 | 463 |  |
| 386 | 472 | W2-S, Trench: clay |
| 391 | 477 | 1050 |
|  | 478 | WCW-1, Trench: Level 6 |
| Terrace 10: fill between | 480 | WCW-1, Trench: Level 6 $1071$ |
| Megarons 6 and 4 | 486 |  |
| 261 | 487 | WCW-2, Trench: Layer 3 |
| 347 | 488 | 1077C |
| 355 | 489 | WML-4N, Trench: Layer |
| Terrace fill in area of | 493 |  |
| Megs. $6-8$ (see Catalogue | 503 | 1076 |
| for loci) | 514 |  |
| 252 | 518 | WS-3/4, N, Trench: above and to W of Floor |
| 265 | 547 | $1$ |
| 276 | 552 | 1082 |
| 301 | 555 |  |
| 305 | 556 | WS-5/6, Trench: Layer 5 |
| 306 | 559 | 1069 |
| 308 | 560 | WS-5/6S, Trench: Layer |
| 312 | 563 | 8 floor |
| 317 | 564 | 1062 |
| 320 | 567 | WS-6, Trench: Extension |
| 322 | 687 | $\text { 3, Layer } 7$ |
| 323 | 699 | 1037 |
| 372 | 730 |  |
| 374 | 736 | WS-8, Trench: below |
| 375 | 745 | Floor 7 |
| 380 | 752 | 1072 |
| 382 | 753 | WS-8, Trench: to E of |
| 385 | 754 | and below clay floor |
| 395 | 757 | 1061 |

Y-63-1: Polychrome House, cut below floor in NE corner (associated with EPB IIb)

Y-63-4: Polychrome House, beside N exterior wall, stratum underlying the cobbled Floor 2 (associated with EPB IIb)

11
12
28
Y-63-5: area to SW of Megaron 9, fill below bedding for slab pavement of outer court, overlying the cobbled
Floor 2 (EPB V)
93
98
108
114
128
141
150
Y-63-6: to SW of EPB SW
Room, fill below earth floor corresponding to the cobbled Floor 2
(associated with EPB IIb)
10
17
19
23
25
Y-63-7: fill between Megarons 9 and 10 , overlying the cobbled Floor 2 (EPB V)

## 61

65
101
102
115
118
124
159
161

| 169 | 86 | 136 | Y-65-17: EPB, N side, |
| :---: | :---: | :---: | :---: |
| 176 | 99 | 149 | rubble packing between |
| Y-63-8: deposit on floor | 106 | Y-65-11: brown earth fill | walls (considered with |
| between Megarons 9 and | 111 | under rubble and plaster | EPB V, although the |
| 10 | 113 | bed of Megaron 9, | material may be earlier) $67$ |
| 973 | 116 | overlying floor of EPB | 88 |
| Y-63-X: area to SW of | 119 | SW Room (EPB V) | 88 |
| Megaron 9, fill below | 126 | 79 | Y-65-19: to immediate W |
| bedding for slab paving, | 131 | 89 | of EPB, fill between |
| overlying earth floor at | 134 | 103 | Floors 3 and 4 (EPB IIa) |
| level of the cobbled | 137 | 105 | 5 |
| Floor 2 (EPB V) | 139 | 127 | Y-65-20: cut beside S wall |
| 72 | 140 | 152 | of Megaron 10, to |
| 74 | 143 | 167 | immediate W of EPB, fill |
| 80 | 153 | Y-65-12: fireplace in EPB | between Floors 3 and 4 |
| 82 | 155 | SW Room (EPB III) | (EPB IIa) |
| 162 | 157 | 32 | 6 |
| Y-65-4/5: under NW half | 160 | 36 | Y-65-21: same cut as Y-65- |
| of Megaron 9, brown | 172 | 39 | 20, fill between floors 4 |
| earth fill below rubble | Y -65-9: fill between | 40 | and 5 (EPB I) |
| bedding of Megaron 9, | Megarons 9 and 10 at |  | 14 |
| overlying floor of EPB (EPB V) | SW, overlying the cobbled Floor 2 (EPB V) | to SE of diagonal wall; fill below floor, overlying | Y-65-23: Megaron 10 sounding, Layer 2 in |
| 92 | 78 | Floor 4 (EPB IIb) | main room (Meg. 10-2) |
| 122 | 83 | 14 | 194-196 |
| 123 | 91 | 15 |  |
| 132 | 95 | 16 | Megaron 9, fill below |
| 135 | 104 | 18 | exterior floor, overlying |
| Y-65-6: Megaron 9, fill | 133 | 20 | EPB (EPB V) |
| under floor of anteroom, | 148 | 21 | 76 |
| overlying rubble and | Y-65-10: rubble bedding |  | 90 |
| plaster bedding (EPB V) | under NW wall of | Y-65-14: same as Y-65-13 <br> (EPB IIb) | 163 |
| 69 | Megaron 9, SW half (EPB | $27$ |  |
| 85 | V) | 27 |  |
| Y-65-7/8: fill between | 75 | Y-65-15: NW corner area |  |
| Megarons 9 and 10, | 77 | of EPB SW Room, fill |  |
| overlying the cobbled | 87 | between Floors 3 and 4 |  |
| Floor 2 (EPB V) | 96 | (EPB IIa) |  |
| 71 | 107 | 7-9 |  |
| 73 | 130 |  |  |

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# Gordion: Erken Frig Dönemi Çanak-Çömlekleri 

Türkçe Özet

Bu cilt, 1950-1973 yılları arasında Gordion'da bulunan Erken Frig Dönemi çanak-çömleklerini ele almaktadır. Sözkonusu dönem, höyükte (City Mound) Demir Cağı'na ait çanak-çömleğin ilk kez ortaya çıkması ile başlamakta ve M.Ö. 700 dolaylarında Erken Frig sitadelinin tahribi ile sona ermektedir. Katalog yalnızca City Mound'a ait çanak-çömleği kapsamaktadır. Tümülüs $\mathrm{P}, \mathrm{MM}$ ve W'dan çıkarılan çanak-çömlekler TGET de basılmıştır. Erken Frig dönemine ait diğer tümülüslerden ( $\mathrm{G}, \mathrm{KY}, \mathrm{X}$ ve Y ) çıkarılan çanak-çömlek de Ellen L. Kohler tarafindan yayınlanacaktır. Bu ciltte ise yukarıda değinilen tümülüslere ait çanak-çömlekler ile 1900 yılında kazılan Tümülüs III'den (K-III; Gordion, 53-67) çıkarılanlar birlikte incelenmektedir.

Önsözde adıgeçen kişi ve kuruluşların araştırmamıza büyük katkıları olmuştur. Özellikle T.C. Kültür Bakanlığı Eski Eserler ve Müzeler Genel Müdürlüğü, Anadolu Medeniyetleri Müzesi Müdürlüğü, The University Museum of the University of Pennsylvania, National Endowment for the Humanities ve Research Council of the University of North Carolina at Chapel Hille teşekkürlerimizi bir kez daha sunmak isteriz.

Giriş ve Katalog dışında, bu araştırma altı bölümden oluşmaktadır. Katalog öncelikle stratigrafik konuma göre düzenlenmiştir. Kataloğun birinci kısmı Tahrip Tabakası (Destruction Level) öncesi Demir Cağı'na ait çanak-çömleği (1-409) içermekte, ikinci kısım Tahrip Tabakasından (4101035) olanları kapsamaktadır. Son kısımda ise, Tahrip Tabakası sonrasına ait seçilmiş malzemeler (1036-1089) incelenmektedir.

Bölüm I'de, M.Ö. 700 dolayları Tahribat Tabakasından başlanarak, çanak-çömlekler arkeolojik bir tabana yerleştirilmektedir. Sitadelin tahribini gösteren kazı planı, surların içinde kalan üç temel bölgeyi içerir (plan A ve plate H): Kuzeydoğudaki Palace Area, dış avluda Megaron $1-2$ ve $9-10$ ile iç
avluda Megaron 3-5 ve 12 olmak üzere, yanları megaronlar ile çevrili iki avluyu kapsar. Güneybatıda, geniş bir set üzerine kurulu sekiz üniteli Terrace Building (TB) ile CC Building bulunmakta; kuzeybatıda ise çok odalı $P P$ Building yer almaktadır.

Megaron 1-4 ile Terrace/CC Buildings tahrip sırasında yanmıştır. Megaron l'in arkasındaki depolarda kaplar ve yanık hububata rastlanmasina karşın ( $\mathrm{pl} . \mathrm{A} \mathrm{)} ,\mathrm{Megaron} \mathrm{1-2'nin} \mathrm{yangın} \mathrm{sırasında} \mathrm{boş}$ olduğu anlaşılmaktadır. Yanan diğer binalardaki malzemelerin çoğu ise yerlerinde kalmıştır. Megaron 3 zengin buluntuları ve iyi kalitede yapılmış çanakçömleği ile saray merkezi olarak görünmektedir. Yüksek bir set üzerine kurulu Megaron 4, daha sonraki dönemlerde ağır hasar görmüştür. Işlevleri bilinmemekle birlikte, bu binada çok sayıda büyük erzak kapları bulunmuştur (pl. B). Terrace ve $C C$ Buildings'deki ünitelerin çoğu ise gıda ve tekstil dokuma merkezleri olarak kullanılmıştır (pls. B-C, E). Ön odalarda (anterooms) ve būyük odaların yan koridorlarında çok sayıda çanak-çōmleğe rastlanmıştır. Terrace Gateway yanı, Megaron l'in arkasındaki set üzerinde, kale içinde kapların dağtımı için buraya getirildiği bir çanak-çömlek deposu görünümündeydi (pls. D-E).

1988 yılında kazılara yeniden başlamadan ōnce, Early Phrygian Building (EPB) alanı, Tahrip-öncesi katların buluntu durumlarını en ayrıntılı sekilde stratigrafik sıralaması (sequence) ile vermiştir (plans CD, pl. F). Tahrip Tabakası sıralarında üzerine Megaron 9 inşa edilen EPB'nin stratigrafik sıralaması birkaç evreden oluşmaktadır. En eskisi olan EPB I, EPB'nin yapımı ile bağlantılı görülmektedir. Burada Tunç Dönemi seramiği dışında Erken Frig el yapımı (Early Phrygian Handmade) olarak nitelenen çanakçömlek de (1-4) bulunmuş, Demir Cağına ait çark yapımı seramige ise rastlanmamıştır. EPB II a ve b evresi, EPB'nin batısında yeralan üst üste kurulu iki tabandan oluşmaktadır. Erken Frig el yapımı
seramiği ile daha ileri Erken Frig dönemi gri çark yapımı kaplar EPB II'ye ait çanak-çōmlekler arasında yer almaktadır (5-29). EPB'nin batısındaki büyük bir çukurdan (Latrine) çıkan malzeme EPB II''e aittir. Çıkarılan kırık kaplardan tümü Frig çark yapımıdır (30-59). Erken Frig el yapımı çanak-çömlek endüstrisinin EPB III çukuru döneminde etkinliğini yitirdiği anlaşılamaktadır. EPB IV'den kalan tek kap (60) EPB'deki Southwest Room isimli odada bulunmuştur. EPB'nin üzerine Megaron 9 inşa edilirken, inşaat için büyük miktarda dolgu toprağ getirilmiştir. Sözkonusu toprak, Erken Frig dönemine ait ilk çanak-çömleğin en zengin örneklerinden birini içeren EPB V'i oluşturmaktadır (61-176). Polychrome House civarında bulunan EPB VI ve EPB VII (177-186) EPB sıralamasının uzantılarıdı. EPB'nin yanındaki Megaron 10 'da yapılan sondajda (pl. G) pesspeşe dört Demir Çağı tabakası ortaya çıkmıştır (187-213). Kuzeybatıdaki bir sondajda ise, Megaron 12 tabanı altında iki Frig tabakasına (NCT IVb ve IVa) rastlanmiş, megaronun önündeki PN 3 ve Early Bronze açmalarında ise daha erken bir Eski Tunç Çağ tabakasının üzerinde Frig malzemeleri bulunmuştur (237-247). Saray alanının güneybatısındaki TB ve CC yapılarının geniss seti altında gerçekleştirilen kazılarda çok sayıda Frig çanakçömleği çıkarılmışur (251-398). Bu malzemenin EPB V'den daha yeni olduğu anlaşılmaktadır. Megaron 5 'in tabanı altından çıkan malzeme ( $\mathbf{2 4 8} \mathbf{- 2 5 0}$ ) set dolgusundan daha eskidir; Megaron 4'ün yapımı ile ilgili tabakalar (M4 I-III) ise daha sonraki bir döneme aittir (399-409).

Bölüm II'de Demir Clağı el yapımı çanak-çömlekler üç ayrı kategoride incelenmektedir: 1.) Early Phrygian Handmade seramiğine ilk olarak en eski Demir Çağ tabakalarında rastlanmaktadır (figs. 1-4, pls. 1-7 ve color pl. I, 1). İthal malıdır ve Balkanlar ile Truva VIIb katında bulunan Coarse ve Knobbed Wares ile ortak özellikler taşımaktadır. Dolayısıyla, bu kategoriye ait çanak-çömlek, belki de Hitit İmparatorluğu'nun çöküşünden herhangi bir zaman sonra güneydoğu Avrupa kültürünün Batı Anadolu'ya ulaşmasını simgelemektedir. Anadolu'daki bu yeni kültürel varlık Frig kültürünün temelini olușturmuş olabilir. Early Phrygian Handmade tipi çanak-çömlek genelde gri olmakla birlikte, açık renkli çeşitlerine de rastlanmaktadır. Küçük kaplar genellikle iyi cilalanmıştır. Başlıca şekiller ağız kenarı düz ve dirsekli kâseler ile çogu "çıkıntı kulplu" (lug handles) olan omuzlu tür kaptan (closed vessels) oluşmaktadır. Cessitli insize desenler ve basit baskılar bu seramiğin kendine özgü bezek bic̣imi arasında yer almaktadır. Early Phrygian Handmade çanak-çömleklerde rastlanan bazı özelliklerin çark yapımı Frig kaplarında da gözlenmesi, bu iki gelenek arasındaki bağlantının göstergesi olabilir. 2.) Miscellaneous Handmade (çeşitli el yapımı) çanak-çōmlek (fig. 5, pls. 8-9) bazı
bakımlardan Early Handmade geleneğinin devamı saylabilir. 3.) Crude Handmade (kaba el yapımı; pls. 10-13) seramiği ise kabaca yapılmış ufak, basıt şekillerden oluşmaktadır.
III-Vnci bölümlerde Erken Frig çark yapımı çanakçömlekler incelenmektedir.
III. bölümde, çömlekçilik sanatının teknik yönleri renk, kil, astar, ve kap üzerinde uygulanan metodlar ile birlikte incelenmektedir. Erken Frig çanakçömleğinin karakteristik bir özelliği, seramiğin yüzeyine parlak bir görünüm veren mica film dir. Canak-çömleğin en azından \%85'i monokromdur. Tahrip öncesi tabakalardan ve Erken Frig tümülüslerinden çıkarılan kapların büyük bir çoğunluğu gri hamurludur. Çanak-çömleğin gri renkte pişirilmesi Early Handmade geleneğinden kalmış olabilir. Tahrip öncesi tabakalarda asıl renkleri kırmızı, krem ve devetüyü olan açık renkte pişirilmiş monokrom çanak-çömleğe de rastlanmaktadır. Yangından dolayı, Tahrip Tabakasından çıkarılanların asıl renklerini belirlemek genellikle mümkün değildir. Boya bezekli çanak-çömlekteki renkler genelde açık renkte pişirilen monokrom ürünlerinkine benzemektedir (color pls. I-III). Boyalar siyah, koyu kahverengi veya koyu kırmuzıdı; açık kırmızı ise yalnız bikrom boyalılarda ikincil renk olarak görülmektedir. Bazen boyanılacak bölüme önce beyaz bir astar (ground coat) sürülmüştür (Ör., 626, 722, 751, 813-814, 927). Bikrom boyalılarda zemini astarlama olağan bir teknikdir.
IVncü bölüm, Erken Frig çark yapımı çanakçömleklerin biçimlerini ele almaktadır. Temel şekiller sayıca az olmakla birlikte, sekillerdeki çeşitleme çoktur. Çoğu durumda, iki veya daha fazla sayıdaki çömleğin genel şekli birbirine o denli benzer ki, bunların tek bir üretim merkezinden, yani tek bir çömlekçinin elinden veya tek bir atölyeden çıkmış olmaları mümkündür (Ör., 529-530, 731-732). Keskin konturlu, yüzeyinde yiv, kabartma çizgi ve şeritleri olan monokrom kaplara oranla, boya bezekli kaplar genelde fazla ayrıntulı değildir.

Temel şekiller arasında kâseler (bowls), yuvarlak ağızlı maşrapalar (round-mouthed jugs), yonca ağızlı testiler (trefoil-mouthed jugs), emziği süzgeçli kaplar (side-spouted sieve jugs), tek kulplu mutfak kapları (onehandled utility pots), amforalar ve kulpsuz çömlekler (jars) yer almaktadır. Başka ssekillere kıstlı sayılarda rastlanmaktadır. Parçalardan sekil saptamak mümkün olmadığından, şekli belirsiz vaso$\operatorname{lar}$ (ambiguous vessels) başlğ̆ı altunda kategoriler oluṣturulmuştur.
Kâseler üç tiptir. 1.) Dirsekli kâseler (carinated bowls, figs. 6-15, pls. 14-23) dirseğin üzerindeki profile göre üç gruba ayrılmıştır: ağzı dişa dönük olarak genişleyenler (Class 1), ağzı dışa dönük keskin dirsekliler (Class 2), ve dik ağızlılar (Class 3). Dirsekli kâse varyantı, flaring-rimmed tipi kâse (fig. 15, pl. 24),
az rastlanan bir çeşittir ve büyük bir olasılıkla doğu platosundan ithal edilmiştir. 2.) Ağız kenarı düz kâseler (plain-rimmed veya plain bowls, figs. 16-20, pls. 25-33) ağız kenarlarına göre üçe ayrılmaktadır: dik (Class 1), dışarı açılan (Class 2), ve içeri dönük (Class 3). 3.) Bowls with articulated rims (fig. 21, pls. 34-35) ise aslında ağız kenarı düz kâselerin ek kenarlı olanlarıdır.

Yuvarlak ağızlı maşrapa (figs. 22-23, pls. 37-55 ve 61) Frig kapları arasında en yaygın olan şekillerdendir. Demir Çağı sıralarında Orta Anadolu'da geniş bir alana yayılmış olmasına karşın, bu şeklin kaynağı Güneydoğu Avrupa olabilir. Çoğu örnekler 9 ile 13 santim yüksekliğinde olmakla birlikte, özel bir kategoriye giren iri maşrapalara da (figs. 23-24, pls. 56-61) sık rastlanmaktadır Bu şekil üretim özelliğine göre gruplara ayrılmaktadır (Ör., 529-530, 540-541, 559-560). Aynı oranda yaygın olan yonca ağzlı, dar boyunlu testinin (fig. 26, pls. 62-80) kökeni Tunç Dönemi Anadolu'suna uzanmaktadır. Bu şeklin küçük, orta ve genelde bezeksiz olup, ağır işlerde kullanılan büyük boyları bulunmaktadır. Bir başka çeşidi olan geniş yonca-ağızlı testinin (fig. 26, pls. 81-85) Frig icadı olduğu söylenebilir. Dar boyunlu yuvarlak ağılı testiler (pl. 86), gaga ağızlı testiler (pl. 87) ve askoslar (pl. 93) az rastlanan testi tiplerindendir. Tümülüs P'den çıkarlılan hayvan biçimli kaplar aynı zamanda testi olarak da kullanılmıştır (TGET, TumP 49-50, 58, 62-63). Büyük bir olasılıkla Suriye-Filistin kökenli bir sekilden kaynaklanan emziği süzgeçli kap (fig. 30, pls. 94-100) Gordion'da üç tür olarak görülmektedir: Tip 1 şeklen yandan emzik eklenmiş yuvarlak ağızlı maşrapayı andırmaktadır; ağzı yuvarlak olan Tip 2, geniş yoncaağızlı testinin boyutlarındadır; Tip 3 dar boyunlu testi sseklindedir. Tip l'e yalnızca Gordion'da rastlanmıs, Tip 2 ve 3 ise aynı dönemlere ait Kızılırmak bölgesindeki merkezlerde de görülmüştür. Bu şekildeki kapların bira içmek için kullanıldıkları düşünülmektedir; içinde kamış olan diğer kaplar (859-860 [figs. 32-33, pls. 104-105], TumP 70-71) ile delikli kapaklı iki kâsenin de (861862 [fig. 33, pl. 105]) aynı işlevi gördüğü varsayılmaktadır. Rhyton (858 [fig. 32, pl. 104], TumP 67), halka biçimli testiler ( 793 [pl. 88], TumP 68 ), çok çukurlu tabaklar ( 863 [pl. 105]) ile ikili çömlekler (TumP 69) ender rastlanan kaplardandır.

Tek kulplu mutfak kabı (fig. 31, pls. 101-102) en yalın Frig şeklidir. Kaba hamurdan yapıh, cilasız olan bu kabın üç farklı boyutu ve özellikle yapılmış seramik kapağ1 (pl. 103) bulunmaktadır. Seramik kaideler değişik şekil ve boyutlardadır (fig. 31, pls. 106-108). Atnalı şeklindeki özel bir tür kaide, emziği süzgeçli kaplar için kullanılmıs olabilir (865 [pl. 106]).

Amforalar dört gruba ayrılmaktadır: 1.) Küçük amforalar (pl. 109) homojen değildir ve sayıları
azdır. 2.) Kantaros krateri (fig. 36, pl. 110) şeklen standart olup, aslında iri maşrapanın iki kulplusudur. 3.) Dar boyunlu iri amforalar (pls. 111-115) ise boyundan ve omuzdan kulplu olarak iki türden oluşmaktadır. 4.) Geniş ağızlı iri amforalar (figs. 4147, pls. 115-132) da geniş boyunlu amfora (Ör., 900, 914, 924-927) ve daha açık kraterler (Ör., 904-905, 908-909, 929-930) olarak iki çeşite ayrılmaktadır.

Kulpsuz çőmlekler ( $j a r s$ ) üç genel kategori altında toplanmaktadır: 1.) Kısa boyunluların (low-necked jars; figs. 48-49, pls. 135-141), küçük boyutlarda çeşitli örnekleri bulunmakta (940-951), daha büyük boyutlarda ise dinos (Ör., 959-963, 967-973) en belirgin tür olarak görülmektedir. 2.) Boyunlu çömlekler ( necked jars; pls. 142-143) sayıca azdır, şeklen de standart değildir. 3.) Kulpsuz küpler (storage jars; pls. 144-149) 40 santimden yüksek olup, üç çeşitten oluşmaktadır: dar boyunlu (Ör., 987-992), geniş ağzlı-kısa boyunlular (993-997), ve, aslında kulpsuz geniş boyunlu amfora olan, geniş ağızlıbelirgin boyunlular (998-1001). Birçok kulpsuz küpün omzunda makara veya deǧişik şekilli plâstik ekler bulunmaktadır; bu ekler bir olasılıkla kabı eǧmek veya taşımak işlevini görmüştür. Kulpsuz küp ve iri amforaların ağız kenarları birbirlerine benzediğinden yalnızca kenar parçalarına dayanarak şekilleri ayırdetmek genelde olanaksızdır. Bu nedenle, yalnız ağız kenarlarına ait parçalardan tanınan iri kaplar çoğunluğu "iri amforalar veya kulpsuz küpler" başlığ altında toplanmış (Ör., 140156, 326-368), ancak kenarlar arasında da içi basamaklı (ledged rims) ve içi basamaksız (unledged rims) olarak bir ayırım yapılmıştır. Kulp parçalarına göre değişik boyutlardaki sekilleri belirlemek de güçtür. Şekiller ile ilgili bölümün son kısmı hem iri kapların ağız kenarlarını (figs. 51-57), hem de kulpları kapsamaktadır.

Bölüm V'de bezekler incelenmektedir. Boyasız bezemeler (non-painted embellishment) arasında yiv, insize desenli (patterned incision), kabartma çizgi (ridging), şerit, delikli bezeme (openwork), kabartma, ve plâstik ekleri içermektedir. Tekniklerin çoğuna genelde, bazen de yalnızca, monokrom çanakçömleklerde rastlanır. En fazlası altı sıraya varan yivler kabın kontur noktalarını belirginleştirmek amacıyla kullanılmıştır (Ör., 569-570, 678, 729). Iri ve ufak kapların değişik bölümlerinde de görülen yatay kabartma çizgilere (Ör., 305, 543, 889, 921) ise genelde boynun gövdeye birleştiği yerde rastlanmaktadır (Ör., 550, 775, 884). Yis ve kabartma çizgi tekniklerinde olduğu gibi, daha ziyade iri amfora ve kulpsuz küplerde görülen yatay şeritlerin işlevi de kapların konturunu belirginleştirmektir (Ör., 885-886). Basit geometrik desenlerde insize desenli bezek de kullanılmıştır. Y'alnız monokrom çanak-çömlekde rastlanan bu tür bezek, genellikle omuz kısmında dar bir kesimde görülmektedir (Ör.,

745-746, 837); iri kaplarda ise bezek seritler üzerine sık stk islenmiştir (Ör., 889, 916). Dalgalı hat ve balık sırtı en yaygın desenlerdir; diğerleri zigzag, sevron ve üçgen motifleridir. İnsize desenli bezeğin tertibi boyalı vazolarınkinden farklı olmakla birlikte, Frikyalı çömlekçilerin boyah vazolardan esinlenerek insize desenli bezeği yaratmıs olmaları mümkündür. Omuz üzerine işli geniş zigzaglardan oluşan şeritler (pattern banding) bir dizi kulpsuz küpün başlıca özelliğidir (324-325, 407, 992, 1006-1009).

Kabartmalı bezeklere az rastlanır. Dikey kaburgalar veya taç yaprakları (876, 980, 1057-1058; pl. 61) doğu plato yöresinden alınmış olabilir; bu teknik özellikle Alişar'da çok gelişmiştir. Tümülüslerden çıkarılan emziği süzgeçli kapların üzerindeki bir tür kesiklikabartma tek bir çömlekçinin veya atölyenin ürünü olabilir (TumP 76-78; K-III 19 ve 21). Orta Frig döneminde oldukça yaygın olmalarına karṣın, figürlü plastik eklere az rastlanmaktadır (859, 1002, K-III 20). Genellikle kaide ve kulp bezeği olarak görülen delikli geometrik desenler de azdır (867-869, 912, KIII 16). Büyük bir olasılıkla bu teknik tunç ve tahta oyma isçiliğinden etkilenmiştir.

Demir Çağı İç Anadolu'sunda kaplara ayrıntılı baskı desenleri işlemek yalnızca Friglere özgü bir yöntem olarak belirmiştir. Büyük bir olasılıkla bu, Friglerin güneydoğu Avrupa kökenli olmalarından kaynaklanmaktadır. Baskı desenli çanak-çōmlek, Trakya'da Geç Tunç Çağı'ndan Demir CCağı'na dek yaygın olup, Trakya'da rastlanan bazı baskı desenleri Gordion'da bulunan türleri anımsatmaktadır. Frig baskı motifleri çeşitlidir ve temel şekiller üçgen, kare/dikdörtgen, daire, baklava veya helezoniden oluşmaktadır (figs. 60-61, pls. 168-170). Bu devire ait yegane figürlū baskı $\mathbf{1 0 0 0}$ nolu vazo ūzerindeki keçi motifidir. Baskılar genelde dar bir kesimde gōrülmekte, bir kap üzerinde kullanılan baskı türü sayısı da bir ila yedi arasında değiṣmektedir. Üçgenzigzag (triangle-zigzag) baskı motifi en yaygın desendir. Gordion'da rastlanan en ayrıntilı baskı tertibi ise 1000-1001 nolu kulpsuz küplerinkidir (pl. 147). Aynı baskının birden fazla kap üzerinde kullanılmış olması, üretimin tek bir yerden kaynaklandığ́nın göstergesidir.

Erken Frig dönemi boyalı kaplar ile İc Anadolu'dan Kuzey Suriye'ye kadar uzanan yaygın boyalı vazo geleneği arasında yakın bağlar bulunmaktadır. Aynı zamanda, Friglere özgü bazı nitelikler Gordion'daki boyalı kaplarda görülmektedir. Bazı meander desenlerde Grek geometrik kapların etkisine rastlamak mümkündür.
Frig vazolarını boyayan ressamlar, tek kulplu mutfak kapları ile kulpsuz küpler dışında, tüm standart şekilli kaplar üzerinde de çalışmışlardır. Coğu bezek kompozisyonu omuzlarda yoğunlaşmış, bazen de ek olarak karın ve boyun kısımları da işlenmiştir. Boyalı Frig kaplarındaki temel geometrik
motiflerin çeşiti çoktur ve çoğu motife de tek sıra desen veya paneller halinde rastlanır (figs. 62-65). Başta içleri kafesli taranmış (crosshatched) üçgenler olmak üzere, zigzaglar, baklava zincirleri ve meanderler sıra desenlerinin en yaygın olanlarıdır. Yaygın panel motifleri arasında baklava ve $X$ panelleri yeralmaktadır. Kafesli tarama ve dama tahtası motifleri ise hem sura hem de panel halinde görülmektedir.
Boyalı kapların çoğunun başka bir eşi bulunmamasına karşın, boyama biçemlerinde benzerliklere rastlanmaktadır. Bunun en iyi örneği dar kesimli dalgalı hatların tek bezek olarak kullanıldığı Wavy Line biçemidir (Ör., pls. 50-51). Cheuron-Triangle biçeminde belirli bir tür üçgen (fig. 62) kabın omzunda bulunmaktadır, boyun kısmı ise ya çok basıt bezekli, ya da bezeksiz bırakılmıştır (Ör., pl. 51). Kendine özgü dokusu olan Fine-Line Buff malı ise ince işli, uyumlu desenleri içermektedir (Or., pl. 58). Ladders-and-Zigzags (Ör., 803-804 [figs. 28-29]) ve Polychrome House (Or., $\mathbf{8 8 0}$ [pl. 110]) biçemleri, belirli motif çeşitlerinin tekrarlandığı formülümsū bir kompozisyondan oluşmaktadır. Grup 932 (Ör., 870871 (pl. 108]) de, ince issli baklava zinciri dahil, belirli desen çesitlerini içermektedir. 932'nin özelliği (pl. 126), Alişar IV tipine benzer silüetli hayvan motiflerinin olmasıdır. Bu özellik, Grup 932'nin Kızılırmak havzası ile bağlantılı olduğuna göstermektedir. İthal malı oldukları tahmin edilen Alişar IV'e ait bazı çanak-çömlek Gordion'da bulunmustur (Ör., 186 [pl. 113] ve pl. 133).

Brown-on-Buff malı en ince ve en seckin boyalı Frig ürünleri arasında yer almaktadır. Örneklerin çoğu Ornate Class'a girmektedir; bu grup, desenlerdeki özelliğ ve zenginliği bakımından Erken Frig boyalı vazo sanatında esssizdir (Ör., 832 [pl. 97]; TumP 5557, TumW 61). Bezemeler alt gövdeye, hatta bazen dibe kadar uzanmaktadir. Kulplar her zaman boyalı, süzgeçli kapların emziklerinin hem iç hem de dış kısımları sık sık bezeklidir (pl. 99). Ornate Class'in önemli bir özelliği de küçük veya büyük panellerde rastlanan linear hayvan figürleridir. Bu biçeme benzer hayvan ve Brown-on-Buffa özgü bazı geometrik desenler bir dizi iri kraterde de görülmektedir ( $\mathbf{1 0 6 5}$ 1081 [figs. 45-47, pls. 129-132]). Dolayisiyla, Ornate Class türu ile kraterlerin kökenlerinin aynı oldukları varsayılmaktadır.
Bölüm VI bu cildin özetidir. Ilk iki kısımda Erken Frig Devri çanak-çömleğin geçmişi incelenmekte, seramiğin gelişimi ve relatif kronolojisi ile ilgili deliller ele alınmaktadır. Son kısımda ise, delillerin çok kısıtlı bulunduğu Erken Frig Devrinin kesin kronolojisi işlenmektedir. EPB I ve Early Handmade çanak-çōmleğinin ilk ortaya çıkışı M.Ô. 1000 yılı dolaylarına tarihlenebileceği gibi, daha erken olan Truva VIIb katuna da tarihlenebilmektedir. Erken Frig çark yapımı çanak-çömleğin ilk kez belirmeye
başladığı EPB II'nin ise dokuzuncu yüzyıldan daha ileri bir tarihe uzanmadığ久 düşünülmektedir. EPB V ve Tümülüs W için M.Ö. 750 yılı dolaylarında bir tarih önerilmekte, set dolgusunun ise bunlardan 25 yıl sonrasına ait bir döneme rastladığı varsayılmaktadır. Tümülüs III, P ve MM'nin sekizinci yüzylin son çeyreğine rastladığı, bunların arasında MM'nin

Erken Frig sitadelinin tahrib tarihi olan M.O. 700 yll dolaylarına yerleştirilebileceği dūşūnūlmektedir.

Çevirici: Ayşe Gürsan-Salzmann
Çeviriye katkıda bulunan: Halime Can Hodson, Nurhan Ülgen

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[^0]:    1. Gordon, 53-67, 97-98.
    2. Alişar: OIP 6, 19, and 29. Boğazköy: Kurt Bittel and Hans Guterbock, Boğazköy I: Neue Untervuchungen in der hethitaschen Hauptstadt (Berlin, 1935), 52-58; see also the preliminary reports on work in Iron Age levels in MDOG 74 (Apr. 1936), 28-33, MDOG 75 (July 1937), 40-50, and MDOG 78 (May 1940), 44 ff .
    3. Alâeddin Tepe: Akurgal, PK, 8-14 and pls. 21-29; Mahmut Akok, "Türk Tarih Kurumu Adına, Konya Alâeddin Tepesinde 1941 Yılında Yapılmış Olan, Arkeolojik Kazıda Elde Edilen Mımari Buluntular," TTK VII, 60-63. Midas City: Phrygı III. Actual contexts of the Earl Phrygian period were not found at Midas City: C. H. Emilie Haspels. The Highlands of Phygia: Stes and Monuments (Princeton, 1971), 140-142.
[^1]:    4. Tahsin Ozgüç and Mahmut Akok, "Die Ausgrabungen an swa Tumuli auf dem Mausoleumshügel bei Ankara," Belleten 11 (1947), 57-85. For a still-helpful survey of Phrygian archaeology in Anhara: Tahsin Orgüç, "Untersuchungen über archäologische Funde aus Anatolien, 1," Belleten 10 (1946), 609-622, and especially pp. 610-614 for work at Cankirı Kapı and on the mound now crowned by the temple of Augustus and the Haci Bayram mosque.
    5. Karahoyuk. Malatya: Louis Delaporte, "Malatia: Céramique du Hıttite récent," RHA II/ 16 (July 1934), 257-285; idem. "Malatia: La V'ille et le pays de Malatia," RHA II/12 (July 1933), 129-154; ıdem, "La ['roisième Campagne de fouilles à Malatya," RHA V/34 (Jan. 1939), 43-5f. Carchemish: Woolley. Hama: Hama II/3. The lron Age pottery from sites excavated in the Amuq has not been published: for the architecture and general stratigraphy: Richard C. Hames, Excariatoons on the Plam of Antioch, Vol. II: The Structural Remanns of the Later Phases, OIP 95 (Chicago, 1970).
    6. Akurgal, $P K, 10-14$.
    7. Ibid., 1-8.
    8. Ibud., 33-47 and 129.
[^2]:    9. Buluç. Closer to Gordion, the large Phrygian mound at YenidoğanHacituğrul, northeast of Polath, saw intermittent excavation in the 1970s: M. J. Mellink, "Archaeology in Assa Minor," AJA 80 (1976), 272 and AJA 84 (1980), $50 x-309$; none of the finds has vet been published.
    10. The Iron Age pottery from Bogazkoy has not yet appeared as a separate study. For interim reports and analyses: Eva-Maria Bossert, "Funde nachhethitischer Zeit," MDOG 89 (1957), 58-67, dem, "Die importierte Keramik aus den phrygischen Schichten von Büyukkale (Bogazköy)," MDOG 94 (1963), 53-71; Thomas Beran, "Eine Kultstätte phrygischer Zeit in Boǧazköy," MDOG 94 (1963), 33-52; Ruth Opificius,
    "Altphrygische Keramik von Büyükkale (Bogazköy)," MDOG 95 (1965), 81-89.
    11. Kultepe on I.A. is the principal source for materials from Kültepe and Kululu. See also: Emre, "Sultanhan": dem, "Excavations at Yassidag 1973,". Anadolu 17 (1973), 43-90.
    12. Bayburtluoğlu; Ma3at I and Masat II.
[^3]:    13. Göllüdağ: Tezcan. Tepebağları: Çinaroğlu. Porsuk I.
    14. Gail E. S. Durbin, "Iron Age Pottery from the Provinces of Tokat and Sivas," AnalSt 21 (1971), 98-124. James Mellaart, "Iron Age Pottery from Southern Anatolia," Belleten 19 (1955), 115-136.
    15. G. M. A. Hanfmann in Tarsus III, 18-332. Gordion did, however, receive a few ceramic imports that probably came from the general region: p. 64.
    16. Porsuk I, 69-70.
    17. For the "Lydian Trench" in the House of Bronzes area at Sardis: BASOR 162 (Apr. 1961), 9-16; 170 (Apr. 1963), 4-9; 186 (Apr. 1967), 31-37. More recently: George M. A. Hanfmann, Sards from Prehistoric to Roman Times (Cambridge, Mass., and London, 1983), 26-33. Troy VIII: Troy IV, 245-302.
    18. Brixhe and Lejeune, 228-244.
    19. Ibrd., 245-251. See also: K. Bittel, Hatlusha: The Capital of the Hittutes (New York, 1970), 137-144; P. Neve, "Hattuša in nachhethitischer Zeit," in Mansel'p Armağan (Ankara, 1974), 872, n. 1. Herodotos (1.72), in discussing the sixth-century political geography of the area, implies that the Halys was the eastern boundary of the Phrygians.
[^4]:    22. Ahurgal, PK, 33-47. The sthouette animal sts le of Altşar IN eenters for example, most likel, had a North Syrian rather than (irech Ceometric origin ( p . 136), and thus the mode cannot be used as a suchroninm with Greeh chronolog. See abo If | Mellink's revew of PK in t/ 161 (1957). 392-393, and Opificius' commens m MDOC; 95 (1965), $87-88$
[^5]:    20. Kulh'pe in I.A., 80 and 82,110-116. For the inscription found in recent (1984) excavations at Kültepe: Tahsin Özgüç, Kültepe-Kım, $H$ : New Researche at the Trading Center of the Ancuent Near East (Ankara, 1986), 93 and pl. $1: 33\{5\}$.
    21. Brixhe and Lejeune, 257-268. See also Mellink, "Tyana," 249-257.
[^6]:    4. Ibd., 429 . For A. Körte's favoring of a higher date, not far from that of Eusebios: Gordion, 20 and 23-24
    5. TGET, 32.
    6. Ibrd., 121-123 and 270.
    7. CMB 17/4 (Dec. 1953), 32-34 and fig. 26. The trefoil jug shown at $L$ in fig. 26 ( P 292) is new in both slape and body treatment ( p .62 . and 121 n . 31), while the jug at $\operatorname{far} R(\mathrm{P} 280)$ is innovative in proportions and technıque. The bird bowl itself ( P 286) belongs to Coldstream', (iroup II (675-640) and appears to be late in the group because of the hollow rays: Coldstream, GGP, 299-300. The bowl has a few small chips and shows some possible signs of wear. Aı Kültepe-Kanesh, a gap of about forty years between Karum levels II and Ib saw analogous development: Emre, "Potters." 87-99.
[^7]:    8. The figure is based on excavators' accounts of the quantities within individual units. Overall, considerably fewer than half of the vessels retrieved were actually kept. Slightly over 1200 items of pottery from the level have been inventoried, of which about 860 are included by entry or reference in the Catalogue ( $\mathbf{4 1 0 - 1 0 3 5}$ )
    9. For the excavation of the entry complex: AJA 59 (1955), 12-16; A/A 60 (1956), 257-261; AJA 61 (1957), 320; AJA 64 (1960), 233; AJA 66 (1962), 157-159.
    10. AJ/A 59 (1955), 13. fig. 26 and pl. 7, fig. 30 . For the association of these projects with the Early Phrygian citadel, rather than with postdestruction activities (as had been thought by R. S. Young): DeVries, "Gordion," $3 \times \bar{T}-388$.
[^8]:    11. For the excavation of Megs. 1-2: AJA 61 (1957), 320-323; AJA 62 (1958), 142-143. Meg. 1 was previously called in reports the "Burned Phrygian Building" or "Brick Building," and Meg. 2 the "West Phrygian House" or "Mosaic Building."
    12. For the excavation of Megs. $9-10$ (previously called the Northeast and North Buildings respectively): A/A 68 (1964), 288-291; A/A 70 (1966), 272-273.
    13. For the excavation of Meg. 3: A/A 62 (1958), 144-145; A/A 64 (1960), 237-240; AJA 66 (1962), 160-163. For Meg. 4: AJA 66 (1962), 163-164: AJA 68 (1964), 286-288.
    14. For Meg. 5: AJA 70 (1966), 271-272. Meg. 12 (previously called the Northwest Building): AJA 68 (1964) 288-289; AJA 70 (1966), 272-273. Meg. 11: DeVries, "Gordion," 383. For Megs. 6-8, no longer visible at this time: p 15.
[^9]:    15. CC 1-2 were discovered in a deep sounding made in 1952. Excavation of the TB and CC units extended from 1955 to 1973: A/A 60 (1956), 262-264 (CC 1-2); AJA 62 (1958), 146-147 (TB 4); AJA 64 (1960), 240-243 (TB 3-5); A/A 66 (1962), 164-167 (TB 1-2, anterooms of TB 4-5); AJA 68 (1964), 285-286 (TB 1-2, ТВ 6); A/A 70 (1966), 269-270 (TB 7); AJ/A 72 (1968), 238-239 (TB 8); DeVries, "Gordion," 384-387 (anteroom of TB 7 and main room of CC 3 ).
    16. For the excavation of the TG (prevously called the "South Phrygian House") and pottery depot: A/A 61 (1957), 323-324; A/A 62 (1958), i46. 17. AJA 72 (1968), 234-235; DeVries, "Gordion," 379-381. Despite the name, no evidence exists for Persian involvement in the second period of use.
[^10]:    18. See DeV'ries, "Phrıgians," 36-37.
[^11]:    19. Similar yet far more extensive accommodations for large vessels were present in the North Court of the Gate Building.
    20. For a general overview of the contents of Meg. 3: DeVries, "Phrygians," 34-36.
    21. Ibid., 36. The round-mouthed jug 618 held bits of hazel nuts; the wide-mouthed trefoil P 2370 (see 762) contained the Zuziphora (buckthorn) seeds mentioned by DeVries.
[^12]:    22. DeVries, "Phrygians," 38-40; tdem, "Gordion," 384-387.
[^13]:    23. No unit was excavated with the goal of total retrieval and preservation of the contents. The figures given are based on the running counts of excavators, some of whom were more precise than others. This unevenness of recording over the years from 1955 to 1973, when the TB and CC units were dug, also limits what can be said about the disposition of pottery within the units. At the same time, and for the same reasons, statistical analyses of the material are presently impossible.
[^14]:    24. Simular use was made of large bronze cauldrons in early tumuli: TGET, 102 (M1M 1-3) and 199 (TumW 1-2); Gordon, $68-70$ (K-111 49).
[^15]:    27. No plan exists of the $m$ stlu material, nor did the excavator attempt a
[^16]:    28. For work conducted in the area: A/A 70 (1966), 273-275; DeVries, "Gordion," 373-374.
    29. The datum for absolute levels is that of the Sangarios River as it was in 1950.
[^17]:    30. The cut, it should be emphasized, did not penetrate below the pre-EPB Floor 5. In relation to the Meg. 10 sequence to the N, Floor 5 is already well within purely Bronze Age strata (p. 12).
    31. Gunter, 29-30 and 94, nos. 582-583; pp. 176-177.
[^18]:    32. AJA 66 (1962), 158-159.
    33. Context EPB-69-1/2, for example, is about $60 \%$ Bronze Age, running the gamut from Early to Late.
[^19]:    34. A/A 68 (1964), 289; AJA 70 (1966), 272-273.
    35. The clearest indication of a N-S slope is the fact that the N wall of Meg. 10 was bedded at a higher level than was its S wall.
[^20]:    36. See the remarks of R. S. Young, AJ. 70 (1966), 276.
    37. Gordion Notebook 117, p. 34. See also Hespena 38 (1969), 257-258, no. 29 , where R.S. Young suggested a reflooring around the time of the final paving of the outer court, i.e., EPB $\$ '.
    38. Gordion Notebook 117, p. 50.
[^21]:    39. A discrepancy exists here between the excavator's field account and his report in A/A 70 (1966), 276. In the latter, he enumerates three layers in the anteroom area down to this point, whereas in Gordion Notebook 117. pp. 50 and 53, only two layers are documented. Storage bags are on hand for only two layers in the anteroom of Meg. 10. These are clearly indicated as Floors 1-2 and 2-3, yet the latter puzzlingly carries as well the designation Layer 3. The source of the confusion may lie in a conflation with the Layer 2 isolated by the excavator in the main room. Yet this stratum, at least under the mudbrick structure, should be parallel with (instead of later than) the Floor 9-3 layer in the anteroom. In any event, the anteroom is here considered to have had only two layers down to Floor 3.
[^22]:    40. Meg 10-4 also yielded a spindle whorl of polished gray ware.
    41. AJA 70 (1966), 276.
[^23]:    46. L:MB 16/1 (May 1951), 10-13: Gunter, 2.
[^24]:    47. Gunter, 45.
    48. See note in Catalogue following 225, and also pp. 19 and 34.
    49. A/A 66 (1962), 168; AJA 70 (1966), 277-278; Gunter, 2-3.
[^25]:    50. A/A 66 (1962), 168; Gunter, 109-110 and plans 11-12.
    51. A/A 70 (1966), 271-272; A/A 72 (1968), 239-241; DeVries, "Cordion," 374-377.
    52. For work in this area: $A / 462$ (1958), 145
[^26]:    53. 4 A .470 (1966), $271-279$ and pl. 71 , fig. 10 .
[^27]:    56. AJA 70 (1966), 271.
    57. Ihnd., pl. 69, fig. 9 .
[^28]:    54. AJA 64 (1960), 235 and pl. 57, fig. 16. The retaining wall for the South Court is not indicated in plan A.
    55. For further remarks on the two contexts, see pp. 182-186.
[^29]:    58. Gordion, 38-104. TGET.
    59. Tumulus G: UMB 16/1 (May 1951), 13-17 and pl. 7, fig. 1. Tumulus KY: $A / A 60$ (1956), 266. Tumuli X and Y: AJA 70 (1966), 267-268. These and post-Kimmerian tumuli are to be the subjects of separate studies by E. L. Kohler, one for inhumations in wooden tombs (as those here under consideration), and one for cremations. See Kohler, 65.
    60. TGET, 198-199 and 215-216.
[^30]:    61. See also ibid., 7-10 and 46-51
    62. Ibid., 102, 175-176, 198-199.
    63. Ibid., 271-272. For a different interpretation, see Muscarella, "Tumulus."
    64. Sams, "Patterns," 45-46.
[^31]:    1. Gunter, 43,45 , and 106 .
[^32]:    6. Troy IV, 163-174, Shapes A 103-A 105, A 107, B 46.
    7. Ibvd., 179 and fig. $259\{37.1000\}$.
    8. Ibud., 178.
    9. Ibid., 178-179, figs. 266 \{32.16\}, $286\{10-11,14,16\}, 260\{37.1013\}, 282$ \{14, 16-18\}.
    10. $1 h_{u} d, 179$ and fig. 281, passim.
    11. Sandars, "Bronze to Iron," 18 and Sea Peoples, 206-207, table V; Schachermeyr, 105-106.
    12. Gunter, 43, 45, and 106.
[^33]:    13. Ibid., 106.
    14. Cičikova, 187-194.
    15. J. P. Mallory, In Search of the Indo-Europeans: Language, Archaeology and $M_{y} h^{\prime}$ (London, 1989), 30-33.
[^34]:    16. For discussion of the color terminology used in this study, see p. 31 .
[^35]:    17. Troy IV, 158-159.
[^36]:    18. Ibud. fig. $283\{2-3\}$
    19. Rutter, 29, nos. 12-13 (both profiles shown inverted) and pp. 27-29.
[^37]:    22. Troy IV, 163-164 (Shape A 101) and fig. $259\{37.1011\}$.
    23. E.g., Gunter, nos. 348-350.
[^38]:    26. Troy IV, figs. $266\{37.898)$ and $285\{1-6\}$.
    27. Ibid., 175 and fig. 266.
    28. Ibid., 175 and fig. 267 \{32.13\}.
    29. $\mathrm{Ibvd}, 172$ and fig. 267 (32.87).
    30. Ibid., fig. 265 [36.1097]. For the shape at Babadag: Morintz, 105, fig. 3 and 107-108, figs. $4\{3\}$ and $5\{6\}$. See also Heurtley, PM, 219 , no. 425.
    31. E.g., Gunter, nos. 311, 359, 455-458.
[^39]:    39. L.loyd and Mellaart, 75-78, figs. 16-17.
[^40]:    33. Troy IV, fig. 282 [4\} (bowl of Knobbed Ware). Coarse Ware: figs. 266 $\{32.16,37.898\}, 284$ \{12|, 285 \{1-6\}. For similar treatments on pottery from the Balkans, see Bankoff and Winter, fig. 2.
[^41]:    34. Troy IV, figs. 263 \{32.17\} and 266 (32.16\}.
    35. Ibid., 158.
    36. Ibid., 179 and figs. 218 (Shape A 101) and 259 \{37.1011\}.
    37. Ibvd., fig. $265\{36.1097\}$.
    38. Itid., fig. 260 \{32.18\}; see also ibid., fig. 282 \{14\}.
    39. Ibid., figs. $259 \mid 32.92\}$ and $280 \mid 5\}$.
[^42]:    40. Ibrd., fig. $2 \times 3 \mid 4-5\}$.
    41. Ibud., 178. See also Bankoff and Winter, 25-26.
    42. Firath, pl. 163. fig. 4, top and center.
    43. Troy IV, 179 and fig. $280 \mid 8-9\}$ Morintz, figs. $3|4|$ and $4\{3 \mid$.
    44. Sandars, "Bronze to Iron," 18-19 and fig. 1B, F. J-K. Bankoff and Winter, 21 and Fig. 8 . Note that a distinction is here made between obliquely champled handles, like that of $\mathbf{2 1 5}$, and more rope-like vervions with twisted ridges (e.g., 28)
[^43]:    45. For a handmade jug of analogous proportions from Polath: Ama $\backslash$ I (1951). 49 and pl. 4 b
[^44]:    2. See, e.g. Expedition 21/4 (Summer 1979), 11, fig. 7.
[^45]:    3. Shepard, 162. Similar surfaces can occur without an additive in modern potting. This was demonstrated to the author by a Catawba Indian potter, Mrs. Sara Ayers of West Columbia, South Carolina. In her wares, the mica film seems to have resulted from smoothing with a wet cloth. After polishing with a pebble, the post-fired surface is practically indistinguishable from that of many Phrygian vessels.
[^46]:    4. Mica films are not present on the great majority of painted wares, not even those with micaceous clays in which the glittery effect may have been inherent. The widespread use of slips on painted pottery could stem in part from a desire not to have a glittery surface in competition with painted design (e.g., 117, 320, 389. 394).
[^47]:    10. Gunter, $29-30$.
[^48]:    13 Voble, 62. Kaolin is today mined in the mountains to the west of Gordion.
    14. Kiallepe 1978, 190. For white grounds in the Old Hittite period, see, c.g., the Bitik vase: Akurgal, Hithtes, pl. XIV'.
    15. Shepard, 22-24, 91-92.

[^49]:    16. Ancient wares in general seem not to have been fired much in excess of about $1000^{\circ} \mathrm{C}$. Attic pottery, for example, was fired between $800^{\circ}$ and $950^{\circ} \mathrm{C}$, beyond which point undesirable results would have begun to occur. See Noble, 75-76.
[^50]:    17. John Coles, Archaeology by Experment (New York, 1973), 64-66.
[^51]:    1. Because it is generally uncertain whether one or more potters are involved, such non-quantifying words as "producer" and "source" are often used in discussion of related groups and series.
[^52]:    2. Bowls frequently bear post-firing marks, a practice initiated by the tume of EPB III. Roller, 8-9; her 2A-4 is from the Latrine Depoin instead of Meg. 9.
    3. TGET, 46-51.
[^53]:    6. E.g., Gunter, nos. 228, 232, 297, 299.
[^54]:    7. OIP 29, 353, fig. 403 \{c2758, c2760]; 354, fig. 404 (c2089); 384, figs. 434-435, passm. Kiultepe in I.A., 14, figs. 16-20; 40, fig. 116 (from Kululu).
[^55]:    8. The grips themselves preview those of 499 from Meg. 3 in the use of side-attachments, but the strutted supports create overall a untque handle design (p, 108). The little half-bolsters flanking the handles mught echo a feature of bronze ring-handled bowls, as known in Tumulus Mal (e.g., MM 55-69; cf. also 502). The pre-MM production of bronze ring-handled bowls with bolsters had been assumed by R. S. Voung on the evidence of wooden imitations with bronze handles from Tumulus $P$ (TumP 31-33) and the bronze ring handles TumW 24: TGET, 207 and 230. 102 may lend some additional corroboration to this view of the early production of the type. The only direct imitation in clay attested for the Early Phrygian period is K-III 46, which may have been fitted with bronze ring handles.
[^56]:    9. Gordon, 67 , fig. 49.
[^57]:    10. TGET, 48.
    11. Buluç. pl. 12 \{BT. 31 and 34$\}$ (bronze); pl. 15 \{BT.18-29, 25$\}$ (clay).
[^58]:    15. Troy IN', 165 and fig. 218 (Shapes A 105, A 106). Ozdogan, figs. 7-1 1
    16. Heurtley, PM, 106, 232-235 and pl. 21 [471 (Vardarophtsa), 484 (Tsaoutsitza)\}. Cf. also Vergina I, pl. 34 \{21\}. The question of a Masedonian origin for the shape has been considered by S. Dupré in Porsuk I, 62-63.
    17. The contention that the round-mouthed jug was inspired by a shape of Greek Geometric pottery, the tankard, is difficult to entertain: Ahurgal, $P K, 42-43$. Beyond the fact that proportions tend to be somewhat different, the Greek type does not appear until MC: II (ca. 800-760). Coldstream, GGP, 20 and 47 : it is doubtful that the earliest roundmouthed jugs at Gordion, from EPB IIb, are as late or later (pp. 194-195).
    18. Alişar: OIP 6, pl. $1\{3239\}$ (sc. Period IV); OIP 19, 239. fig. 309 and pl. 28 \{b585, b679\}; OIP 29, 358-360, figs. 408-410 and p. 393, fig. 440 Kultepe in I.A., pl. 15. Maşat I1, pl. 63 \{8-9|. Bogwhw: MDOG Nfi (1953), 34, fig. 14; $M D O G 89$ (1957), 65, fig. 56b; MDOG 95 (1965), 86, fig. $3 \mid 18$, 29) (BK Level II/7). Forms that seem peculiar to the eastern plateau include: OIP 29, fig. 409 \{d2020, c2685|. thd., fig. 410 \{el710\}: Kultepe m I.A., pl. 15 \{2-3\}. A painted example from the Yunus cemetery at Carchemish closely reflects the Alişar IV style: W'ooller, pl. 12,
    19. Buluç, pl. 15. figs. 8-11. Phrygıe 3, pl. 9a \{1\}
    20. Porsuk I, 62-63 and pl. $51\{43-54\}$.
[^59]:    21 . Ibud., $87-88$ and pls. $81-82 \mid 153$ (the sipper), 154-164\}.

[^60]:    22. Tumuli III. X . and Y each contained a single unde-mouthed trefoil jug in clay (p. 62).
[^61]:    23. See also DeVries, "Phrygians," 36-38.
[^62]:    24. Fischer, 46-47, with references. Gunter, 34.
    25. For the shape in East Greek Geometric: Coldstream, GGP, pls. 58g, $59 \mathrm{e}, 60 \mathrm{a}-\mathrm{b}, 6 \mathrm{lb}$ and f, 62f, 63b and e. For Cilicia and Cyprus: Tarsus III, 77-78.
    26. OIP 29, 362, fig. 411 \{el272a|; 364, fig. 413 \{ell64\}; 367, fig. 416 |ell12\}. Masal II, pl. 65 \{7-8\} (Level III). MDOG 76 (Apr. 1938), 17, fig. 4a, a painted jug from Boğazköy, is one of the few eastern examples that would not be out of place at Gordion; the chevron-triangles on the shoulder might indicate affinities with Phrygia (p. 158). For a widenecked variety that gained popularity in later times on the eastern plateau: p. 62.
    27. The context bag for Laver 5 within Meg. 10 contains a tiny sherd of a gray-ware trefoil jug (p. 12).
[^63]:    28. Miscellaneous handles from EPB III, many of which are the right size for large trefoil jugs, include straps with medial tidges and finger-width channels.
    29. The smallest of the painted examples is an otherwise unrevealing single sherd from Y-65-7/8, not appearing in the Catalogue
[^64]:    32. E.g., Kultepe im I.A., pl. 16 \{5-6\}; Maşat II, pls. $65\{4-5\}$ and 66 $\{2,7\}$; MDOG 78 (May 1940), 54, fig. $12\{5-6,9\}$.
    33. 158 from EPB $V$ could be another example or a Type 2 sieve jug ( p . 00 ).
[^65]:    30. Buluç. pl. 15, figs. 3-4.
    31. L'MB $17 \cdot 4(1953), 33$, fig. 26, at $L$ (P 292).
[^66]:    34. TGET, 30. TumP 46-47 are of blue Egyptian paste and thus not technically pottery, although they too look to a generally similar source, as does the black-on-red juglet TumP 59 (ibul., 36-37 and 47-48).
    35. Among the closest in form to $\mathbf{7 8 6}$ is a juglet with trefoil mouth from Far'ah: Ruth Amiran, Anczent Pottery of the Holy Land (New Brunswick, N.J., 1970), pl. 87 (9]. See also: Patricia Maynor Bikai, The Pollery of Tyre (Warminster, 1978), 41-43, and pls. 12 \{1-23\}, 25 \{3-4\}, 39 \{2-3\}; Tarsus III, nos. 340, 852, 997.
[^67]:    36. MDOG 89 (1957), 64-65, fig. 55.
    37. OIP 29, 362, fig. 411 \{e255\}; 363, fig. 412 \{d2000 and probably 3244\}; 364, fig. 413 \{e2247].
    38. Heurtley, PM, 210, no. 395; 218, no. 424; 224, no. 453; 227-228, nos. 463-465. Vergina I, 194-201.
[^68]:    39. Cf. Kohler, 75, fig. 7.
    40. M. J. Mellink, "Archaic Wall Paintings from Gordion," in Athem t" Gordion, 97, fig. 4.
    41. TGET, 48.
[^69]:    42. OIP 19, 243, fig. 316 \{al32\}. The form and attitude of the neck are matched by a one-handled specimen from Karmir-Blur: Boris P. Piotrowhy, The Ancuent Crvilization of Crartu (Geneva, 1969), pl. 58.
    43. Lloyd and Mellaart, 71-72 and fig. 14|1-9|. Troy III, fig. 293 |Shape B 41).
    44. TGET. Is
[^70]:    45. Heurtley, "Tombs," pl. $8\{132\}$, from Tomb 1 at Marmariani. 46. TGET, 49.
[^71]:    47. TGET, 251-254.
    48. Bulus, pl. 15, figs. 1-2.
[^72]:    49. TGET, 252.
    50. Sams, "Beer," 108-115; TGET, 251.
    51. OIP 29, 365-366, figs. 414-415; 394, fig. 443 illustrates untyped spout sherds. MDOG 75 ( July 1937), 48, fig. 29b; see also MDOG 72 (Dec. 1933), 32, fig. 15, upper $L$ (spout sherds).
    52. For the importance of beer in Hittite life: Abrecht Goetze. Kleinasien (Munich, 1957), 118-119.
    53. Fischer, 46, with references. Masat I, 65-66 and pl. 50 \{2\}; Masat II, 102 and pl. F.
    54. Mellink, Hutt. Cem., pl. 14e. Hâmit Z. Koşay, Alaca Hoyük: 1937-1939 (Ankara, 1951 ), pl. 58 \{2]. Beycesultan II: Lloyd and Mellaart, opp. p. 57, pl. 4b, upper $L$. Since many such vessels are preserved as spout sherds, it is impossible to know the arrangement, and thus the frequency of one variation or the other: e.g., Fischer, pl. 36 \{385-390\}.
    55. Trude Dothan, The Philistines and Their Material Culture (New Haven, London, and Jerusalem, 1982), 132-155.
[^73]:    56. Woolley, 32 (Grave YC 58) and pl. 24 [Shapes J1 and J2]. A spouted jug held by an attendant in the Group $B$ reliefs at Karatepe may represent the general type: Winter, 119 and pl. 15d.
    57. An often-cited metal vessel with spout from Tell Halaf is difficult to equate with Type 2. In any event, the jug appears not to have had a sieve: p. 121, n. 26.
[^74]:    59. $\mathrm{Ib} \mathrm{d}_{\mathrm{I}, 51} 5 \mathrm{and} 253$.
    60. Ibid., 252-253. A Late Geometric spouted vessel from Myrrhinous in Attica has the same feature. This and the blanketing of painted checkerboard ( $\mathrm{p} .140, \mathrm{n} .115$ ) are strongly suggestive of Phrygian influence: $B C H$ 85 ( 1961 ), 629, fig. 6. For the use of a sieved disk in similar fashion in second-millennium Syria: F. Thureau-Dangin and Maurice Dunand, Til-Barsb (Paris, 1936), 104-105 (no. 19) and pl. 37 (la-b].
    61. TGET, 252.
[^75]:    65. See also Gordion, 65, fig. 39, showing K-III 33a sitting on K-ILI 30.
    66. Cf., e.g., the analogous forms of Attic cooking pots of the Archaic and Classical periods: Brian A. Sparkes and Lucy Takott, The Atheman Agora. Vol. 12: Black and Plain Pollery of the 6ih, 5 th and th Centunes B.c: (Princeton, 1970), pl. 93.
[^76]:    62. TB 1 , however, had at least one example in the anteroom (see under 837).
    63. Gordton, 65 and 83-85.
    64. Tumulus S-1, judged later than the destruction on typological grounds, had a single specimen (p. 407).
[^77]:    67. G. Körte, Gordion, 83-85, saw them as the Phrygian equivalent of the beer stein, but it seems much more likely that the sieve jugs themselves were for drinking beer rather than for pouring it into other containers. See TGET, 251.
    68. MDOG 78 (May 1940), 54-55, fig. $12\{4\}$ is a vessel of fine, light-colored ware from Büyukkale II. The vessel would not, however, be as old as Early Phrygian if it comes from the same context of Büyükkale II as ibid. fig. $12\{6\}$, a fluted trefoil jug of seventh-century or later type (p. 62, n. 32). See also $M D O G 89$ (1957), 58-59, fig. 49d, from Büyükkale I, and T.AD 20/1 (1973), 144, fig. 3, at $L$, from an Iron Age grave in the area of Temple I. For the shape at Midas City: Phrygze III, pl. 14d.
[^78]:    69. Gordion, 60-61.65. The vessels have not been examined closely by the author.
    70. Gordion, 65 and fig. 39.
[^79]:    71. Ibul., 68-70.
    72. TGET, 48 and n. 91.
    73. Sams, "Beer," 114-115; TGET, 48.
    74. The practice is documented locally in a wall-painting scene of the later sixth century and by depiction on a sherd of uncertain date from a post-destruction context. The former is as yet unpublished; for the sherd: Sams, "Beer," 108.
    75. Emre, "Acemhöyük," 129-130, pls. 12 \{2\} and $35\{4\}$.
[^80]:    76. A/A 72 (1968), pl. 76, fig. 14 (P 3458 ).
    77. A possible reason for the differences in proportion between TumP 70-71 and 860 is considered below in connection with 861-862.
    78. Cf. MM 168-169 and TumW 9, and also the wooden TumP 145, itself perhaps modeled on a bronze type.
[^81]:    79. TGET, 132, fig. 86, paswm.
    80. Porsuk $1,87-88$, pls. 81 and $95|153|$. For a single, isolated instance in Knobbed Ware from Troy V'IIb 2: Troy IV, 168-169 (Shape B 43) and figs. 263, 288 \{32.17\}.
    81. Kullepe in $I . A, 2 \times-94$ and $91-92$, figs. $101-103$ and pl $27\{3 \mathrm{c}-\mathrm{b} \mid$.
    82. See Masat II, 152-153.
    83. TGET, 259-253.
[^82]:    84. A remote precursor of the idea occurs in Level II of the Karum at Kültepe: Emre, "Pottery," fig. 11 [Kt. g/k 46\} and pl. 21 \{1\}.
    85. TGET, 250-251 and pl. 95F.
    86. Gordion, 67, fig. 42.
[^83]:    87. For bronze cauldrons in Meg. 3: DeVries, "Phrygrans," 35. 88. Ibid.
[^84]:    89. The bowl K-III 46 probably had ring handles in metal. 90. An ambiguous vessel from Midas City could represent this shape or a large round-mouthed jug: Phrygee III, pl. 9a \{1\}. An amphora from Alişar IVa is of comparable scale and proportions, but the little shoulder handles, not at all like those on the Phrygian shape, suggest an independent design: OIP 29, 376, fig. 425 \{e 1883 \}.
[^85]:    91. Vergina I, I86, fig. 35 and pp. 211-213; see especially tbid., pl. 64 [25]. 92. Coldstream, $G G P, 289-283$ and pl. 69c and $h$.
[^86]:    93. TGET, 255-257.
    94. Buluç. pls. 18 and 21.
[^87]:    95. TGET, 175-176 and 256-257.
    96. Ibid. The amphoras from METU Tumulus II in Ankara, all neckhandled, are of similar small scale, and thus might be part of the same general pattern: Buluç, pl. 18.
    97. TGET. 256.
[^88]:    98. Ibid. 44, 173, 213, 255 and n . 156.
    99. Information supplied by Ann Gunter.
    100. Fischer, 55-57, with references; Mellink, Hitt Crm, 96 and pls. 14 g -h and 29a (P 768); Lloyd and Mellaart, 73, fig. 15 \{5-6|. Trol 11., 37 and 171, Shapes C 46-48.
    101. Troy IV, 174 and fig. 265, Shape C. 84.
    102. Coldstream, $G G P, 11$ and 34 .
    103. Troy IV, 35 and 168 , and fig. 231 . Shape B 42; for the ledged rim. ,bad., fig. 287 \{37.1216\}.
[^89]:    104. Desborough, 6-20.
    105. Porsuk I, 89 and pl. $85 \mid 194\}$ is either an amphora or a large jug. 106. Tarus 111, fig. $77\{831\}$ seems to be a rare example of the shape in Cillcia. See ibid., fig. $115\{151\}$ for an imported white-painted specimen, perhaps from Cyprus.
    106. Woolley, pl. 10, figs. 5-6 and pl. 11: Carchemish III, pl. 68b. Hama II $3,55-56$. figs. $45,49.51$; p. 87. fig. 122; p. 197, fig. 242. Kultepe in I.A., pl. $14|6|$. (rom the latest Iron Age building level, but possibly residual. Masat II. pl. 79 \{11, from the first phase of Level II (p. 163, n. 244). OIP 29, 370, fig. 419 |e1078], from Alişar IVa. Boğazkoy IV, 34, fig. 7.
[^90]:    108. TGET, 256.
    109. See also Buluç, pl. 21 [BT.1\}.
[^91]:    111. TGET, 2.56
[^92]:    112. In second-millennium Mesopotamia, large vessels bearing similar holes were evidently connected with making beer: Richard S. Ellis, "Mountains and Rivers," in L. D. Levine and T. C. Young, Jr. (eds.), Mountains and Lowlands: Essays in the Archaeology of Greater Mesopotamia (Malibu, 1977) 33-34. I thank Marie-Henriette Gates for this reference.
[^93]:    113. P 290, P 294, P 415.
    114. Troy IV, 40-49, especially Shapes C 75, C 80 , C 82 . For seemingly related designs in Beycesultan II-I: Lloyd and Mellaart, 73, fig. 15 \{12\} and 87 , fig. $20\langle 6\rangle$.
    115. Fischer, $58-60$, with references, and pls. 68 and 80 .
    116. Ibid., pl. 70.
    117. Porsuk I, pls. 36-38.
    118. See, e.g., M. W. Prausnitz, "A Phoenician Krater from Akhziv," Oriens Antiquas 5 (1966), 177-188.
    119. Woolley, pls. 9-10, 13, and 22.
    120. Porsuk I, pls. 54-55 \{72-80\}.
[^94]:    121. OIP 6, pls. 2-4. OIP 29. 372-376, figs. 121-425; 397-399, figs. 446-450. Mrtsat II, pl. 69 |2-5| and figs. J-K, pasvm. MDOG; 74 (Apr. 1936), 32, figs. 24-25, $M D O G 94$ (1963), 49-52, figs. $15-18$ and p. 70, fig. 14. Porsuk I, 89 and pls. 87-88 \{293-230|. For a Giltom krater that is proportionally close to the Anatolian series: Tarms II, fig, $59\{124 \mid$ (Early Iron).
    122. Wide-ncehed amphoras: $O I P$ 6. pl. 3, $1 H O O$; 89 (1957), 64-65, fig. 56a.
[^95]:    123. Desborough, pl. 12 (krater and plate); Coldstream, GGP. pls. 6, 7a, 8a-b; Frederick H. van Doorninck, Jr., "Protogeometric Longships and the Introduction of the Ram," IJNA 11 (1989), 277-279, figs. 1-3, a krater in Bodrum.
[^96]:    124. "Perhaps" because it seems that excavators did not always distinguish original, untampered clay of the sixth century from later, and often confusing disturbances within it.
    125. For a general evaluation of this rich deposit A/f 70 (1966), 268-269.
[^97]:    196. See AJA 70 (1966), pl. 69, fig. 2. The wall with a vertical timber slot in the lower $L$ corner of the photograph is the NE cross-wall of Meg. 6. Note the apparent tumble into the lower area from the removal of the South Cellar. In general, the Terrace suffered relatively few later intrusions that might have brought up early material.
[^98]:    127. AJA 70 (1966), 269
    128. AJ/A 59 (1955), 6.
[^99]:    129. Porsuk 1, pl. $96\{231\}$.
    130. TGET, 215-216, 254. Tumulus C had been looted in antiquas
    131. Ibid., 176, 254-255, 270. In TGET all the jars from MM were classified as dinoi although formal distinctions were noted. In the present typology, MM 361, 367-368, and 370 are considered dinoi, and the rest low-necked jars.
[^100]:    132. LMB $17 / 4$ (1953), 30. E. L. Kohler sees the grave as having been partiall disturbed by later house or tumulus builders (personal communication).
    133. Buluç, pls. 16-17.
    134. Ibid., pls. 19-90.
[^101]:    135. TGET, 254; for analysis of contents in the jars from MM: tbid., app. II-A, samples 44-54, and p. 284. For the contents of dino1 in tombs at Ankara: Sevom Buluç, "Baz Frig Malzemesine uygulanan Kimyasal ve Fiziksel Analızlerin Ilginç Sonuçlarondan Ornekler" in I. Arkeomelr Somustar Toplantm (Ankard, 1956i, 72-73.
    136. DeVries, "Phrygians," $35-36$, for a general examination of the evidence for drinking and eating in Meg. 3.
    137. TGET, fig. 5; Gomhom, 67.
    138. Fischer, pls. 52-53, 61, 63, 71, 73-79. For deep bowls with markedly incurved rims: abd., pl. 104 \{936, 958\}. See also the wide selection from the Late Bronze Porsuk V: Porsuk I, pls. 25-35 and 39.
    139. Mellink. Hall. Cfm, pls. 11-12, 14a, 15a; Gunter, nos. 411, 436, 441. 455-458, 461.
[^102]:    140. E.g., Mellink, Hill. Cem., 24 and pl. 27d (P 311), Gunter, nos. 113-114, 121, 123 (225 is her no. S67).
    141. Tarsus III. 41 and, mter aha, nos. 41, 99, 366, 471, 521-523, 550, 872-873.
    142. E.g., ibid., nos. 99, 471,521-529, 550. 879 .
    143. Porvuk I, 63-64 and pls. 56-58 \{81-92\}.
    144. Coldstream, $G G P$, pls. 1g, 16d. 95b (pixides); pls. 5f. 17f, 31j, 39). 40a, 56b, 60e, 63a (low-lipped hraters). Samos V, pl. $32|170-173|$ and 33 1175-176| (pyxides).
    145. Knudsen, 277-28!
    146. TGET, 223-2!4.
    147. Ind., 110.
[^103]:    148. MDOG 75 (July 1937), 43, fig. 24, from Büyükkale II; an unpublished example comes from Büyükkale II/1, Context 364/63. TAD 19/1 (1970), 182-184 and figs. 9a, 10a.
    149. Boğazhoy IN, 42-43, fig. 9a; see also TGET, 255. A painted fragment from an early post-Hittite context on Büyükkale is possibly a low-necked jar: MDOG 95 (1965), 83, fig. $2\{7\}$.
    150. OIP 29, 379, fig. $42 \mathrm{x}\{\mathrm{e} 2329$, el271a, e1296\} (two-handled).
    151. Porsuk I, 89 (Cooking Pots), with references to examples at Karahüyük and Malatsa, and pls. 86-87 \{204-222\}.
[^104]:    152. OIP 29, 377, fig. 426 \{a131\}. Kültepe in I.A., pl. 19 [1|; see also ibid., 14, fig. 27 for a second specimen with handles, and figs. 28-31 for rims like those on dinoi and low-necked jars.
    153. UMB $17 / 4$ (Dec. 1953), 35, fig. 28, from Tumulus J; see also $T G E T$, 255. Maşat II, 131 and fig. L \{5-19\}, from Level II and later. A painted dinoid amphora served as the cremation vessel in a grave at Karaburun in the Elmalı region: $4 / 476$ (1972), pl. 57, fig. 12; see also p. 155.
[^105]:    154. TGET, 254-255.
    155. Bulus, pl. 17 \{ $\mathrm{BT}^{7} 7$.
    156. TGET, 255.
[^106]:    157. The later Tumulus J, however, contained an example of similar scale (P 636): UMB 17/4 (Dec. 1953), 35, fig. 28. Post-destruction contexts on the City Mound have also yielded oversize dinoi that are typologically later than the Early Phrygian period. For a post-Alişar IV dinos of comparable size at Boğazkos: $M D O G 94$ (1963), 65-66 and fig. 12.
    158. Information supplied by Dr. P. Neve.
    159. TGET, 215-216, 254-255.
    160. Ibd., 175-176, 254-255, 270.
[^107]:    161. OIP 29, 369, fig. 418 \{d595\}.
[^108]:    169. Raci Temizer, Misemo of Anatohan Cinhzations (Ankara, 1981), 76, no. 118 . dated to the fourteenth century.
[^109]:    163. Buluç, pl. 21 (BT.14. BT.3).
    164. Roller, 61, 996 is her 3B-2, but 990 is not included in her study.
[^110]:    165. The only amphora known to have such a device, in this case knobs, is 937 from CC 3, a vessel that is generally anomalous within the shape (pp. 90-91).
    166. In late Troy VI and VIIa, a variety of krateroid jar recalls the proportions of Gordion's wide-necked storage jars, but the Trojan shape is appreciably smaller: Troy IV, 41-42 and fig. 235, Shape C 80.
    167. Woolley, pl. 14f, the cremation urn for Grave YB 47. Hama II/3, 47-50 and 87, figs. 87, 124-125.
[^111]:    168. Fischer, 60-62 and pls. 71-79; Porsuk I, 37-38 and pl. 39; Lloyd and Mellaart, 75-77, figs. 16-17 (Beycesultan II), and p. 87, fig. $20\{7\}$ (Beycesultan I).
    169. Mellink, Hitt Cem., pls. 11-12; Gunter, nos. 441, 457-461.
    170. Fischer, 60-62. A jar from Beycesultan 1 is especially close in upper profile to 224: Lloyd and Mellaart, 87, fig. 20 [7].
    171. Cf. Porsuk I, pl. 39 \{237-238\} (Porsuk V).
    172. Ibid., 63-64 and pls. 56-58 \{81-92\}. See also p. 93.
    173. Jbid., 69-70.
    174. Ibid., 64.
[^112]:    175. OIP 19, 256, fig. 335; OIP 29, 380, fig. 429 and pl. 11 [976, a106x. allofig All are from Building A in Alssar IVa, and all have an unusual ststem of horizontal handles set on a thick ridge around the lower bells $P^{\prime}, \ldots, u k$ I. 90.92 and pls. $14,96\{231\}$.
[^113]:    176. A likely exception is 363 , with a krater-like neck (p. 86).
[^114]:    177. TGET, 256.
[^115]:    178. The Great Tumulus in Ankara shows a sımilar pattern of use: Buluç, pls. $17\{$ BT. 7$\}$ and $21\{$ BT. $2,3,5\}$.
    179. Troy I11, figs. 425 \{20\}, $429\{2\}, 434$ \{Pot F 8-9.65|, $444 \mid 11,17\}$. Troy IV, figs $253\{5 \mid, 287\{37.1216\}$.
    180. Fischer, $58-60$ ("V'asen mit Deckel"). The examples at Bogazköy that most closely pretigure Iron Age forms (pls. 68-69 (620-621, 626-634]) are not discussed by Fischer. Their distribution includes Buyukkale IV c-d and Unterstadt 4 and 2 See also: Kultepe 1948, pl. 75 \{563-564, 568\}; Emre. "Acemhöyük." 148, puぃom: Anadolu 17 (1973), 50, fig. 27 (Yassıdağ).
[^116]:    181. Gunter, nos. 318-319, 364 .
    182. OIP 29, 397, figs. 446-447 and pl. 10, passim; Kullepe in I.A., 22, fig. 62 and 23. figs. 64-65, 69-71. Masat II, figs. J \{1-2\} and K \{1-6\} (Level III; the others illustrated are contextually later); MDOG 94 (1963), 50, fig. 16; Porsuk I, pls. 87-88 \{223-230\}.
[^117]:    183. A few rims from the Terrace fill that appear to be related to the development of ledged types have been considered in that connection: 357. 359-361.
[^118]:    184. The bases of bowls are considered on pp. 43-52, passim.
[^119]:    187. Buluş. pl. 15 \{BT.25\}.
[^120]:    188. Ibıd., pl. 21 \{BT.1\}.
    189. Ibid. Porsuk I, pl. 96 (231, and also 253); the button-like attachments on top of the handles are also paralleled at Gordion (infra).
    190. Heurtley, PM, 235 and pl. $22 \mid 476\}$ (Tsaoutsitza); 236, nos. 486-487 (Saratse); 239, nos. 499-500 (Olynthos, the former much exaggerated). In the ninth-century necropolis at Vergina, a half-spool form is a standard feature on a common variety of kantharos: l'ergina 1, 202-2(14. for a plain cylindrical button, more like that on 381 and others at Gordion: ibrd., pl. 31 [21].
    191. OIP 29. 393, fig. 441 \{6\}. Porruk 1. 62-63 and pls. 51, $59\{44.51 \mid$ : 93 and $\mathrm{pl} .96\{231,250-253\}$.
    192. The terminology used for these elements follows that of TGET, wherein a bolster is essentially cylndrical while a rotelle has enlarged, spool-like ends (e.g., MM 47-48. TumW 5). However, the pool-shaped devices on bronze ring-handled bowls are there termed "bolsters" (TGET, 229-233) At the risk of some confusion, this usage is also mantaned here for ceramic attachments on bowls and for the various disked forms on storage jars (p.98).
[^121]:    193. The form also occurs on a large round-mouthed jug from the Great Tumulus in tnkara: Buluç, pl. 15, fig. 10.
[^122]:    194. TGET, 207 and 230.
    195. OIP 29, 358-359, figs. 408-409 \{c2692, d2020]; 372-374, figs. 421-423; 375 , fig. 424 \{e1113\}; 393, fig. 441 \{8, 10\}; 394, fig. 442 \{1-3, $5-7$, 9-13, 18); 401, figs. 453-454. Kultepe in J.A., 16-17, figs. 55-56; pl. 15 \{3-5]. Maşat II, pl. 63 (8-9]. MDOG 86 (1953), 34, fig. 14. Porsuk I, pl. 90 \{234-241].
    196. OIP 19, 245, fig. 318 \{al058\}. OIP 29, 393, fig. 441 \{11\}; 401 , fig. 455 $\{3,6\}$ (the latter perhaps a false rotelle). Porsuk I, pl. $91\{245\}$.
[^123]:    1. For post-firing incision: Roller, 8-54.
[^124]:    ‥ A similarly incised handie also occurs at Mıdas City: Phrygı III, pl. 34b \{6|.

[^125]:    3. Ibud., 77-78 and pls. 32b and 34.
    4. Coldstream, Greece, 263; Troy IV, figs. 300-301. Paolo Emilio Pecorella, "Neo-Hittite Levels of Malatya," Proc.Xth.Int.Congr., 140-141 and pl. 50.
    5. The incised design may, however, be present in a punctate version at Midas City: Phryge III, pl. 34a \{1\}.
[^126]:    6. At Midas Citr, the multiple design may also have been made with a tined instrument: ibid.. pl. 32b \{4\}.
[^127]:    7. A less refined version occurs at Midas City: ibid., pl. 34a \{2-3\},
    8. For the motif, with and without punctation, at Midas City: ibud., pl. 34a |4, 9-10|.
    9. One of the incised lozenge designs at Midas City is analogous in having all hatched triangles: 2 bid., pl. 34a \{9\}.
[^128]:    10. Cf. ibid., pl. 34a \{5, 11\}.
    11. W 95-100 from Meg. 3; W 119 from CC 3 (DeVries, "Gordion," 386, fig. 20).
[^129]:    15. Cf. Bogazhoy IN', pl. 4b and Beilage 5.
    16. Cf., e.g., Fischer, pl. 81 \{670\}. Mavat II, fig. $3\{6\}$ and pl. 11 \{3\}; Troy IV, figs. 55.69. $232 \mid 33.1277\}$. Mellink, HItt. Cem., pls. 11 g -i and 12a-c.
    17. Lloyd and Mellaart, 75-78 and figs. 16-17.
[^130]:    18. Pattern-banding does not appear to have been a feature of secondmillennium Anatolian pottery, yet it is attested earlier in Troy II, already with stamping and incision: Troy 1, 237 and 295, and fig. $411\{37.999$, 37.998).
    19. $M D O G 94$ (1963), $60-61$ and fig. 7 \{12\}.
[^131]:    20. Cf. Kultepe 1949. pl. 43 [347]: OIP 29. 156-157,figs. 197-198; Fischer. no. 156; Masal II, pls. $51|1-2|$ and 92 |2|
    21. Sendschwh V, 140, fig. 195 and pl. 24p.
[^132]:    22. OIP 19, pl. 33A. OIP 29, 360, fig. 410 \{el346\}; 363, fig. 412 \{d2000\}; 394, fig. 442 \{19-20\}.
    23. OIP 29, 396, fig. $445\{7-9\}$ (presumed to be non-ribbed), and p. 360 , fig. $410\{e 871$, el418\}; Kulltepe in I.A., pl. $15\{1,5 \mathrm{~b}, 6\}$, Masat II, pl. 71 (7); Bayburtluoğlu, pl. 176, fig. 15; Porsuk I, pls. 92 and 97 \{255\}, from Porsuk 111.
    24. Emre, "Sultanhan," 127, fig. 24 and pl. $8\{5\}$.
    25. TGET, 233-236 and MM 70-123. TumW 9-10.
[^133]:    26. Cf. H. Luschey, Due Phiale (Bleicherode am Harz, 1939), 76-95; Knudsen, 178. The only actual example of a non-bowl with such petaling known to the author is a spouted (and apparently sieveless) jug from a grave at Tell Halaf dated to the eighth century: Tell Halaf IV, pl. 48 \{8\}. The vessel is often cited as Phrygian, although on no particularly compelling grounds. North Syrian representations of similarly petaled non-bowls in sculpture add to the repertory, but it is not known whether metal or clay vessels were being depicted: Tell Halaf III, pl. 133a; Akurgal, Hittites, pls. 106-107 (Malatya); Winter, 119 and pl. 15d.
    27. Cf. Tell Halaf IV, pls. 47 \{2\}, $48\{8\}, 49\{1\}$. Woolley, pl. 17d \{1\}, from the Yunus cemetery.
    28. A bronze example from Tumulus S-1 (B 190), judged later than the destruction on typological grounds, is possibly of this type, as may be a fragmentary bowl from one of the Ant Kabir tumuli in Ankara: Belleten 11 (1947), pl. 22 \{47\}.
    29. TGET, 32 and 235.
    30. Winter, pl. 15d; Tell Halaf IV, pls. 51 (1, 28-29) and 52 (99).
[^134]:    31. Tumulus S-1 (supra, n. 28) yielded a fluted bronze fragment (B 157), while from Tumulus II at the Ant Kabir in Ankara came two fluted vessels: Belleten 11 (1947) pls. 22-23, figs. 48 and 53. In pottery, the technique probably began by or during the second half of the seventh century, as indicated by a horizontally fluted trefoil jug from Tumulus H (P 292): UMB 17/4 (Dec. 1953), 33, fig. 26, at far $L$.
[^135]:    33. Cf. ibid., 18-19, fig. 9C and pl. 12A.
    34. Cf. the wooden TumP 148-149 and the bronze ladle TumP 9.
    35. AJA 60 (1956), pl. 92, figs. 42-43. An analogous fixture appears on a krater attributed to Alişar IV but the vessel is possibly later: OIP 19, 248 and 250, fig. 324 \{a 1059 \}. Further afield are the bull protomes on a vessel from Karmir-Blur, dated to the eighth century and possibly derived from metalworking: Boris B, Piotrovsky, The Anctent Cuviltzation of Urartu (Geneva, 1969), pl. 55.
    36. UMB 17/4 (1953), 35, fig. 28.
[^136]:    37. Buluç, pl. 15, fig. $8\{$ BT. 20$\}$.
    38. Bronze: Gordion, 48, fig. 76, a fragmentary belt plate from Tumulus III; TumP 9, a ladle with an à jour disk. Wood: the handles on the bowls TumP 121-122.
    39. TGET, 63, fig. 33. Tumulus MM provides further examples through the table MM 388: ibid., 185, fig. 111 H and K .
[^137]:    40. B 708. See Muscarella, Fibulae 4. E. L. Kohler considers Tumulus S to be pre-Kimmerran.
[^138]:    41. Phrygze III, 75-77 and pl. 33.

    42 Cf., e.g., the series of stamped kalathoi of tenth- and ninth-century date from Lefkandi in Euboea: Lefkandi I, pl. 125; Popham, pl. 21. For the northern Cyclades and Aeolis: Zagora 1, 52-53 and figs. 22-25, 27; Lamb. $51-56$, fig. $6 \mathrm{~b}-\mathrm{c}$ and $\mathrm{pl} .32\{11,16\}$. For Corinth and a survey of the limited evidence for stamped pottery in Geometric Greece: Christopher A. Pfaff, "A Geometric Well at Corinth: Well 1981-6," Hesperaa 57 (1988), 39-40; an oval X-stamping, dated to MG II, is the only Corinthian Geometric example (out of six) that finds parallels in Early Phrygian stamping (C-75-207, $\mathrm{c}^{2}$. ., pl. 31).
    43. Jorg Schäfer, Studien zu den griechischen Reliefpthoı des 8.-6. Jahrhunderts v. Chr. aus Kreta, Rhodos, Tenos, und Boiothen (Stuttgart, 1957). See also Coldstream, Greece, 213 and 276.
    44. Hoddinott, 71 and fig. 61; Detev, 78 and fig. 28; Čičikova, 191-192 and pls. $53\{4\}$ and 54 .

[^139]:    45. For the Hittite material at Gordion: Hans G. Güterbock, "Seals and Sealings in Hittite Lands," in Athens to Gordion, 51-57.
    46. Fischer, 75.
    47. Lloyd and Mellaart, 75-78 and figs. 16-17. For the controversy over the date of Beycesultan III-I: III, p. 33, n. 5 .
[^140]:    48. Terracotta: SS 42, a rectangular, crosshatched stamp with a bird; SS 249, a lozenge-shaped stamp with crosshatching. S1 576 is a flat, 5 cm square of limestone cut with a neat, simple swasuka. For a Lydian stamp seal of terracotta from a seventh-century context at Sardis B.ASOR 18:(Apr. 1966), 12-13, fig. 7
[^141]:    49. Another possible approach may lie in the fact that to either side of the mixed group at point 8 there begins a sequence of five unrepeated groups, differently arranged in each case, that meet on the opposite side. Point 8 , directly beneath a bolster, would thus become the starting mark, its two stamps each to be repeated wice in each of the two flanking sequences, although not in balanced order. This is admittedly the legio facilior.
    50. Küllepe-Kimı, pl. 27 \{4\} (Karum la). Fischer, 75 and pl. 127 \{482, 1181-11931 (beginning with Büyükkale III). Cf. also Bittel, fig. 165.
    51. Leflandi I, 304-307; Lamb, pl. 29 \{11\}; Troy IV', figs. 291 | $\}$ and 301 \{9, 15-16|. For the Aeolic character of Troy VIII: Coldstream, Greece, 263-264. Plain impressed triangles also occur in other schemes in Geometric Greece, e.g., Zagora I, 52-53.
    52. Cf. Detev, fig. $22|4|$.
[^142]:    53. Phrygie I1I, pl. 33b $\{1-7,10-11\}$.

    54 Plain trangles in a single row of upright mpresmom are known from Büyükkale II/1 at Bogarkin (unpublished: BK 1962. SW Areal, B94). A similar use is seen at Syro-Hitute Matutya: Malatya-I, pl. in \{2\}.
    55. For the design in bronze, of. the belts TumP 31-36, where it is used as a border for the engraved geometric panels: TGET. figs. 9 E and $10-11$
    56. lidi., 50 , fig. 29. 1 .
    57. Ibid., 178, fig. 104. The same inlaid monf. formed in the same was. also appears on the so-called pagoda table $\$ 191388$ : bod., hg. 111 E and J

[^143]:    58. Cf. Bittel, fig. 165. Troy IV. fig. 301 \{16\}.
    59. Phrgge III, pl. 33b \{12-13\}. See also p. 127, n. 54
    60. Phrygur III, pl. 33b \{4\}. Cf. also ibd., pl. 33b [2, 7). other instances of modified stamps used in regular triangle-zigzag formation.
[^144]:    61. Fischer, pl. 127 \{1198\}.
    62. TGET, 70 and pl. $30 \mathrm{E}-\mathrm{F}$.
    63. Lamb, 52, fig. 6c and p. 56.
    64. Gordion, 104, fig. 84. The photograph is poor, and the author has never examined the piece.
    65. W 89: AJA 64 (1960), pl. 61, figs. 23-24; in fig. 24 of the citation the artist has omitted a tiny circle at the center of each loop.
[^145]:    66. Cf. Detev, fig. 28. midway at $R$, an Iron Age example from Razkopanitza.
    67. The mannerism also occurs at Midas City: Phrygre III, pl. 33b [8-9].
[^146]:    68. Cf. Sandars, "Bronze to Iron," 17-29: Deter, figs. $27|9.25|$ and $2 x$. lower $L$ (for plain, untangented circles. cf. figs. 10 [4] and $18\{3 \mid$ ); Thoy N , figs. $260\{37.1013\}$ and $282\{16-18\}$ (cf. also the different arrangement on no. 14).
    69. Cf. Fischer, pl. 198 \{1177. 1195\}.
    70. Cf. Kïltepe-Kamts, pl. 31 \{1\}; OIP 29, fig. 209 \{c1740\}; L. Bahadır Alkım, Anatoha I (Geneva. 1968), fig. 132; Bittel, fig. 165.
[^147]:    71. Phrygre III, pls. 7a $\{6\} ; 20 \mathrm{~d}\{2\} ; 33 \mathrm{a}\{2\}$. Cf. also pl. 33a \{3\}, a larger, related variety not seen in the Early Phrygian period at Gordion.
    i9. Troy IV, fig. 301 \{13, 16\}.
    72. RH.4 \' 34 (Jan. 1939), pl. 15 \{4\}: Malatha-I, pl. 52 \{2\}, in combination with triangles and a larger circle stamp, and pl. $58\{4\}$ (cf. also pl. $63\{5\}$ from a later context); Sendschurli \', 140, figs. 194-195.
    73. Circles and triangle-zigzag were also combined in Troy VI11 (p. 127, n. 51 ).
    74. Cf. Detev, fig. 28, lower L. Troy IV, fig. $282\{14,17\} ;$ Fischer, pls. 116 [993\} and 128\{1177, 1195\}; Lloyd and Melladrt, 75-78, figs. 16 \{9-10\} and $17|3.6|$.
[^148]:    76. A simple version of the circular motif, with an $X$ and no more, occurs at Malatya: Malalva-I, pl. 57 \{2\}. For analogous designs in Beycesultan II: Lloyd and Mellaart, 75-7K. figs. $16\{8\}$ and 17 \{2\}. Cf. also an example from Corinth (p. 124, ı. 42).
    77. Phrygie III, pl. 33a \{11\}, where the intention seems to have been spokes rather than petals such as those on pl. 33a \{4\}.
    78. Sams, "Schools," 232-234.
[^149]:    79. Phrygıe 111, pl. 33a \{9, 12\}. On the former, the stamp was used to create a continuous lozenge design, an approach not known to have been used by pre-Kimmerian potters at Gordion. The design of the X -stamp of ibid., pl. 33a 13$\}$ has parallels in Early Phrygian vase painting (cf. 247, 714), but does not occur locally in impressed form until later times ( $P$ 9087 ).
[^150]:    80. Detev, fig. $2 s$, upper $R$.
[^151]:    89. TGET, 184, fig. 110A.
    90. Ibid., fig. 110C-D.
[^152]:    91. Detev, fig. 28, middle $R$ and middle $L$ respectively.
    92. Vergina I, 256 and pl. 88 (N VIIIg, N XVIIa (somewhat bent); R. Higgins in Lefkandi 1. 221 and pl. 231b; Popham, 236 and pl. 30a.
    93. TGET, 178, fig. 104 and 181, fig. 107.
[^153]:    94. Much the same backward sweep of the legs appears in Phrygian woodcarving: cf. A/A 64 (1970), pl. 61. fig. 24.
    95. Examples from Gordion are as yet unpublished, but for an impression of the general style from Phrygian Ankara see Necati Dolunay, "Tuirh Tarih Kurumu Adına Yapıan Cankırı Kapı Halrivata," Belleten 5 (1941ı. pl. 81, top.
[^154]:    97. Hammond, Migratoons, 152.
    98. For earlier consideration of connections between Phrygian and Balkan painting, see Akurgal, PK, 26-28, and M. J. Mellink, "Mita, Mushki and Phrygians," Amadolu Araşturmalant 2 (1965), 323-324.
    99. Hammond, Megrathons, 136 ff.
[^155]:    100. Heurtley, PM, 297-999; Hammond, Megrations, pl. 9; Akurgal, $P K$, pls. A and B \{1-2\} (after p. 32).
[^156]:    101. Sams, "Patterns," 47; DeV'ries, "Gordion," 390.
    102. Akurgal, $P K, 33-59$ Sce dho Muscarella, Fihulue, 60-62, and Coldstream, GGP, 378-379. Coldstream's statement regarding the earliest Greek wates at Gordion should now be modified in light of the imported vessels referred to in $n .101$.
    103 Sams, "Schools."
[^157]:    104. For a comparative survey of the Near Eastern evidence: Jeannine Nizette-Godfroid, "Remarques stylistiques sur la céramique protophrygienne peinte," AntCl 44 (1975), 492-497; idem, "Quelques remarques stylistiques sur la céramique proto-phrygienne," in Proc.Xth.Int.Congr., 199-134.
[^158]:    105. This is probably not far from the actual number discovered, since there are few indications in excavators' notebooks that painted pottery was discarded.
[^159]:    109. Ibid. Panted dinoi do occur, however, in post-destruction tumuli at Gordion: p. 96, 1. 157, and infra, n. 110.
    110. Ver) similar in decoration and fabric are a dinos from Tumulus Z (P 3935) and a round-mouthed jug ( $P$ 745) from a house in the vicinity of Tumulus H. In both instances, the accompanying material suggests the later date. See also pp. 89-90.
[^160]:    111. Sams, "Schools," 227-229.
[^161]:    112. Elizabeth Simpson, "The Phrygian Artisuc Intellect," Source: Notes in the History of Art VII/3-4 (1988), 24-42.
    113. Cf., e.g., OIP 29, 398-399, figs. 448-450, passim.
[^162]:    114. TGET, 49.
    115. Heurtley, "Tombs," pl. 8 \{132\}. A Late Geometric vessel from Myrrhinous in Attica may have been under Phrygian influence: BCH 85 (1961), 629, fig. 6 . The vessel not only bears a covering of dotted (Type 1B) checkerboard, but is also closely reminiscent of the sieve jugs TumP 72 and K-III 11 and 22 in having a spout and sieved top.
[^163]:    116. Cf. OIP 29, 359, fig. 409 \{d2020, c2685\}; 362, fig. 411 |e255\}.
    117. Hama II/3, 48, fig. 24; 54. fig. 41; 58, fig. 58; 87, figs. 124-125; 91, fig. 126. Cf. also Woolley, pl. 9 \{1\} and Carchemesh 1II, pl. 68b from the Yunus cemetery; Malatya-I, pl. $58\{1\}$.
[^164]:    118. OIP 29, 363, fig. $412\{\mathrm{~d} 2000\}$ : 395 , fig. $444 \mid 8$ (see also 10 and 12)\}. The insertion of a reserved chevron within the triangle, otherwise not seen at Gordion, is in itself a recurring feature at centers on the eastern plateau. A similarly compounded form occurs in the post-Hittite Level III (i.e., general Alişar 1l' period) at Karahuyük in Elbistan: Karahoyuk. pls. 21 [10| and $24|4|$.
    119. Cf. Kultepe in I.A., pl. 14 \{2\}: OIP 29. 391, fig. $436\{19$ (cf. also 20)\}: Porsuk I, pl. 77 \{130\} (Porsuk III). Mont other instances of the design are ancillary or almost so, the row sometimes appearing as not much more than double hound's tooth: cf. OIP 29, 399. fig. 450 \{2|; 404, fig. 461 (6); 406, fig. 465 (16); Masal I, pl. 73 \{3\}. An exception is a large Type 3B triangle from an early context of Büuukkale II/1 at Boğa/hos (458/63). The design appears to have been absent from the North Swan branch of the koine.
[^165]:    120. Coldstream, GGP, 175 and pl. 36e
    121. A particular quirk in the formation of double-line zigzags carries across much of the koine, namely the reserving of the tiny triangles created by the intersections of the parallel lines of the legs at top and/or bottom. Cf., e.g., 618 and the imported Alişar IV amphora 186. Far from being universal, the detail appears to mark the work of careful painters.
    122. Cf. OIP 6, pl. II; OIP 29, 360, fig. 410 \{el346\}; 403, fig. 458 \{11\}. Examples (unpublished) are also known from Büyükkale II/ 1 (contexts 376-77/63, 278/63, 304/63); related is MDOG 94 (1963), figs. 15-16. Porsuk I, pls. 84 and 95 (189) from Porsuk III is also related. For Malatya, RHA II/12, pl. M15 \{1]. At the lunus cemetery the design occurs on a round-mouthed jug from grave IC 50, possibly an import from the plateau: Woolley, pl. 12c and Akurgal, $P K$, pl. 13. For the continuation of the design into later times: $: b r d ., \mathrm{pl} .27 \mathrm{~b}$.
[^166]:    123. Cf. Masat II, pl. $63\{8\}$ and $O I P$ 29, 409, fig. 471 \{7\}. 124. OIP 29, 366, fig. 415 \{d482\}; 393, fig. 440 \{31\}. Woolley, pl. 10 [4]. 125. OIP 29, 363, fig. 412 \{d2000\}; 375, fig. $424\{\mathrm{e} 2300\}$ (cf. also the single-line form of p. 373 , fig. 422 \{c1693\}); 400, fig. 452 \{l1|. Masat I, pl. 79 \{4b-c\} (from Kultepe). For Malatya: RHA II/12, pl. M18 \{10\}, which is possibly shown upside down.
[^167]:    126. OIP 29, 362, fig. 411 \{d544\}; 376, fig. 425 \{el 883$\}$. Maşal I, pl. $80\{3\}$ : Maşat II, pl. 71 \{3|. Malatya: RHA II/12, pls. M15 \{6\} and M18 \{7\}. Hama II/3, 50, fig. 29 and 87, fig. 123. The motif occurs also at Marmariani and elsewhere in Thessaly, but here it may have been a derivation from Attic Late Protogeometric and Early Geometric rather than a native pattern that might have traveled to Anatolia: Coldstream, GGP, 150, 160 and pls. $1-1$ and 33 c .
    127. OIP 29, 365, fig. 414 \{d514\}; 407, fig. 467 \{2\}. Maşal II, pl. $70\{1\}$. An exact parallel, i.e., with circles, occurs in a context of BogazköyBüyükkale Ia.
    128. OIP 29, 392, fig. 439 (20).
    129. Ibid., 358, fig. 408 \{d2001\}; 366, fig. 415 \{e2249\}.
    130. Cf., e.g., OIP 29, 407, fig. $466\{12\} ; 409$, figs. $470\{3\}$ and 471 [ 8$\}$
[^168]:    131. Cf. OIP 29, 363, fig. 412 \{d2000]; 391, fig. 436 \{26-27\} (bowl rims). 395, fig. $444\{11\}$. Porsuk I, pl. $79\{128\}$; RH. 4 II/12, pls $\mathrm{Ml}+\{3\}$ and MIT \{2\}.
    132. Cf., e.g., OIP 29, 362, fig. 411 (d997); 363, fig. 412 [3244]; 365, fig. 414 (d514); 366, fig. 415 (e2249); 375, fig. 424 (e2319. e2299); figs. 436-471, passm. Masal II, pls. $65\{2 \mid$ and 70 (10). An unpublished example comes from Büyükkale IL/l (B 118),
    133. OIP 29, 366, fig. 415 (e2249); 383, tig. $433\{25\}, 395$, fig. $444\{30\}$; 400, fig. 452 \{4\}.
    134 Cf., e.g., OIP 29, 362, fig. 411 (d927); 367, fig. 416 (e 1339). Woolley, pl. 11 |5|.
    134. Cf. Wooller, pls. $10\{3\}$ and $13\{1,4\}$
[^169]:    136. OIP 29, 375, fig. 424 \{e1113\}; 393, fig. 440 \{34\}; 409, fig. $470\{12\}$. The example at Boğazkoy, from Büyükkale II/l (BK 1962, B 110), is no doubt an emulative design, yet the lozenge row was formed in a manner similar to that described in n. 137 following for various types on the eastern plateau. At Gordion, the method seen on 320 and the examples from Alişar cited above is standard practice.
    137. OIP 29. 409, fig. 471 [ 1 \} and $M D O G 95$ (1965), 86 , fig. $3\{16\}$ show the same alternation of solid and crosshatched. However, the method of formation differs in having smaller lozenges drawn within the larger ones. As a result, the solid apices are diamonds rather than triangles, while the large lozenges are linked by pairs of tiny diamonds rather than single ones. The same method was used for a number of other varieties at Alişar: cf., e.g., OIP 29, 406, fig. 465 \{6\}; 409, figs. 470 [7] and 471 \{3\}. This manner of formation seems to have been peculiarly eastern. At Gordion the only known cases come not with rows but with lozenge panels, on the shoulder amphoras 185 and 898 , and they help to suggest that the vessels were imports from the east (pp. 82, 151). At Kültepe, the method of drafting shown by the type occurring in the Group of 932 is paralleled, but with all lozenges crosshatched: Kultepe in I.A., pl. 24 \{8|. Porsuk I, pl. $95\{180\}$ is similarly formed, but with solid triangles. Cf. also Woolley, pl. 13 |4|.
    138. Cf. Porsuk I, pl. 95 |180\}, essentially a reverse of the scheme on 1025 and at the same time recalling the solid triangles on 634.
[^170]:    139. Akurgal, $P K$, pls. 4-5.
    140. Meanders occasionally appear in Cypriote pottery, but as an element of influence from Greek Geometric: SCE IV/2, 308-310. For an imported example at Tarsus and a rare meandroid design at Malatya: infra, i1. 45, 159.
[^171]:    141. Cf., e.g., the meanders of Northwestern Geometric Pottery from Boubousti in western Macedonia: Heurtley, PM, 228-229, figs. 100c-d and 101 l . See also pp. 134-135.
    142. Coldstream, $G G P, 209$ and 396 ; cf., e.g., pl. $45 \mathrm{c}-\mathrm{d}$.
    143. Porsuk I, 99 and pls. $81\{154,159,162\}, 82,\{163,166\}, 87\{226\}$. The design is also found at Tepebağları in the same general district: Çinaroğlu, pl. $127\{3\}$.
[^172]:    144. Coldstream, $G G P, 396$ for references.
    145. On the eastern plateau, a meander of the Greek orthodon type, but with latticed filling, occurs at Kültepe, on a vessel from a refuse deposit of the earliest Iron Age level: Kuiltepe in I.A., pl. 26 (5). At Boğazköy, the design is found crosshatched on a West Anatolian Black-on-Red cup that is probably somewhat later than the early seventh-century date assigned on stylistic grounds by E.-M. Bossert: MDOG 94 (1963), 61-63, figs. 9-10. A crosshatched specimen from Kerkenes Dağ cannot be dated: AJSL 45 (1929), 267, fig. $63\{\mathrm{~K} 115$ a). See also Tarsus III, 213 and fig. 74 ( 644 ), for an imported Cypriote amphora from the early seventh-century Destruction Level.
    146. Schweitzer, 83-84, figs. 46-47. Cf. also Coldstream, Greece. 247.
    147. Schweitzer, 83.
    148. Samos V, pl. 50 (297].
    149. TGET, 73, fig. 42 \{TumP 157\} (horizontal struts and uprights); 75, fig. 46, bottom $\{$ TumP 162|; cf. also p. 184, fig. 110A, far $R$ panel |M11 388). A different approach, without the effect of mirror images, can be seen in the engraved panels on the belt TumP 34, p. 18, fig. 9D-E; the design of the third panel from the right in fig. $9 \mathbf{E}$ is exactl paralleled albeit in crosshatched form, on a kantharos from Samos: Schweitzer, 114, fig. 88.
    150. Coldstream, GGP 94, 123; cf., e.g., pls. 20b, 25a, 33f, 39e, 63f-g.
[^173]:    151. Coldstream, Greece, 247.
    152. A Ceometric vessel with crosshatched meander found its way as far inland as Sardis: B.4SOR 162 (Apr. 1961), 14-16. fig. 5 \{P60.546\}.
    153. BK 1963. SW' Areal, Context 978.63 . For the context see MDOG 95 (1965). $\$ 1-87$ The material on the eastern plateau is often too frag. mented to indicate the type of meander: e.g., ibld., figs. $2\{12\}$ and $3\{15\}$. 154. Coldstream, GGP, pl. 60d (Kamiros).
    154. Schweitzer, 106, fig. 75.
    155. AthMill 68 (1953), 91, fig. 3: DeVries, "Phrygians," 33.
    156. Coldstream, Greece. 266; Schweitzer, 106. Schweitzer's contention, $\mathrm{pp} .85-86$, that the screen TumP 151 "was produced in Rhodian-East Greek workshops" is curious and invites debate.
[^174]:    158. TGET, 18, fig. 9E, panels at far $L$ \{TumP 34\}; 185, fig. 111F, bottom panel on handle of MM 388. The belt TumP 35 has a wealth of complex meander designs, no two exactly alike. Of these, one provides through its void pattern an exact parallel for the double version on 502 : ibid., opp. p. 20, fig. 10, fifth panel from $R$. Seemingly related in form and spirit is the design of meander hooks woven into Fabric G from Tumulus P: ibid., 305-307, fig. 148 and pl. 101D.
    159. Kiltepe in I.A., pl. $15\{5\}$ is like the single version on 502 yet differently filled. A match for the double version on the bowl, crosshatched yet with more turns, occurs within a complex scheme on a vessel from Búyükkale Ib/2 (B 1125). For complex, labyrinthine schemes: MDOG 74 (Apr. 1936), 30, fig. $22\{1,5-7\}$ and MDOG 75 (July 1937), 46, fig. 27b. See also OIP 29, 393, fig. 440 \{24\} and 395, fig. 444 \{1\}. For a multi-turned version from Malatya: RHA L1/12, pl. M16 (9). That certain types survived into later periods on the eastern plateau is indicated by Masat II, pl. 78 \{1\}, from phase 1 of Level II.
    160. TGET, 63, fig. 33 [TumP 151\}; 178, fig. 104 \{MM 378 (and also MM 379)!. For Warpalawas as depicted in reliefs at 1 vriz and Bor: Rainer Michael Boehmer, "Phrygische Prunkgewänder des 8. Jahrhunderts v.Chr., Herkunft und Export," AA (1973), 152 ff. and figs. 3-4. For a good detail of the ornament at Bor: Bittel, 289, fig. 331.
    161. A simple battlement design appears in weaving in a textile fragment (Fabric G) from Tumulus P: TGET, 305-306, fig. 146 and pl. 101B.
    162. Coldstream, GGP, 12; the battlement meander appears in East Greece (Cos) by the second half of the ninth century (ibud., 271).
    163. Cf. OIP 29, 396, fig. 445 \{1\}; 409, fig. 471 \{7\}; pl. II \{6\}. MDOG 72 (Dec. 1933), 32, fig. 15, center. The battlement meander sometimes occurs in vertical arrangements, including one instance from Alâeddin Tepe-Konya: Akurgal, PK. pls. 9a and 22, upper $L$; see also Porsuk I, pl. 92 (256).
[^175]:    164. Kullepe in I.A., pls. $15\{2,5\}, 28$ (10\}. MDOG 79 (Dec. 1933), 32, fig. 15, upper R. Porsuk I, pls. $82\{165\}$ and 85 \{203\}. The scheme may also be present at Malatya: RHA II/12, pl. M16 \{2\}. In East Greece, an analogous treatment of the battlement occurs at Izmir, but in vertical panels: cf. Coldstream, GGP, pl. 60f. A similar if not the same approach is seen on a Greek Geometric vessel from Sardis: BASOR 162 (Apr. 1961), 16, fig. 5 \{P60.598).
    165. Sams, "Schools," 232
    166. Buluç, pl. 17 \{BT.15|. The example from Konya, crosshatched, is as yet unpublished.
    167. The design appears in one of the earliest contexts of Büyükkale II (389/63). In later contexts of II and into I it becomes popular, especially on large vessels. Cf., e.g., $M D O G 79$ (Dec. 1933), 33, fig. 16, upper $R$; MDOG 74 (Apr. 1936), 30, fig. 22 \{5\}; MDOG 89 (1957), 65. fig. 56a. For the motif in Greek Geometric: Coldstream, GGP, 395 for references. Since the design is a simply conceived one, its parallel occurrences in Greece and Anatolia may be of no significance.
    168. Cf., e.g., Kuiltepe on I.A., pls. 14 [1, 3-4], 27 [2], and fig. 100, from the first Iron Age phase, Level 1. OIP 29. 391, fig. 437.
    169. That large compasses were familiar to Phrygian artists is otherwise indicated by circular designs in woodworking. Cf., e.g., TGET, 59, fig. 28
[^176]:    TTumP 13s|, a wooden disk ca. 9 cm . in diameter, and the medallions on wooden screens: p. 63 , fig. 33 \{TumP 151|; 17K, fig. 104 |M1.1 37 s (and 379)|.
    170. Cf., e.g., OIP 29, 369, fig. 418 (d595], a jar on which the motif is hand-drawn and upright; 391, fig. 437. A few vench from Pornuk [1. have compass-drawn versions: Porsuk 1, 68 and pls. $55\{77\}$ and $59 \mid 12\}$
    171. Buluç, pl. 16 \{BT.14\}. Büyükkale I1/1, 1962, sw Areal: Contex B 142.
    172. Tarues 111, 305-307. Cf. also Coldstream. GGP. 40-41
    173. Cf. B.ASOR 162 (Apr. 1961), 23 and fig. 12.
    174. OIP 29. 375, fig. 424 \{e2299\} (Alişar [Vc); 372-374, figs. 421-123 \{cl699-cl694\}, all from the same context of IVb, Frir numerous other instances the context is less specofic or unstated. At Bogachiv, several unpublished examples come from early contexts of Buyukkale II/ 1 (e.g.. 390/63, 458/63. 376-377/63); cf. also MDOG 94 (1963), 49-51, figs. 15-17. Kıultipe 1 I. 4 ., pls. $24\{8\}$ and $25\{5\}$ (both from earlier Iron Age levels). Masat II, pls. 69 \{3-4\}, $70|1-2| .71$ |5 (all from Level 111)

[^177]:    175. RHA I1/12, pl. M17 \{1, 4\}; see also Sams, "Schools," 233. 176. Woolley, pl. 12c; Akurgal, $P K$, pl. 13.
    176. Cf., e.g., Maşat II, pl. 70 \{10\}. Kïltepe in I.A., pl. 24 \{2\}; Maşat I, pl. 79 $\{4\}$ (from Kültepe).
[^178]:    178. OIP 29, 407, fig. 467 \{3\}.
    179. Cf., e.g., E. Akurgal, The Art of Greece: Its Origins in the Mediterranean and Near East (New York, 1968), 177, pl. 51, a krater by the Analatos Painter.
    180. Cf. OIP 29, 362, fig. 411 and pl. 8 \{e1342\} (Alişar 4bM); 376, fig. 425 \{e2320| (Alişar 4cM); 395, fig. 444 [33\}; 408, fig. 468 \{9\}. Cf. also Kuiltepe on I.A., pl. 25 \{4\}, from the earliest Iron Age level. Coldstream, GGP, 396, his "S's: horizontal: curved."
    181. OIP 29, 395, fig. $444\{25\}$ and 398, fig. $449\{10\}$.
[^179]:    182. The painter of the lidded krater 929 from Meg. 3 was clearly a devotee of checkerboard and related designs, for he used no fewer than four upright and oblique check patterns and as well a lattice motif, these together accounting for almost half of the vessel's 45 panels.
    183. OIP 29, 395, fig. 444 \{23\}; 408 , fig. 468 \{11\}. Tarsus III, 206 and fig. 71 \{564\}. The vessel from Tarsus is bichrome, its red and black checks rendered in much the same manner as those on 927. The southwest Anatolian parallels cited by Hanfmann (p. 206) are survey finds and thus undated. The partial wagon-wheel design on no. 564 suggests a derivation from the eastern plateau or perhaps the Malatya region: Sams, "Schools," 239-234.
[^180]:    184. OIP 29. 407, fig. 467 \{15\}; 409, fig. 471 \{9\}. For the example at Tarsus, see supra n. 183.
    185. OIP 29, 393, fig. 441 \{3|: 395. fig. $44+|2-3|$ (with little, single-line swastikas in the blanks); 405. fig. 46 으 $\{18 \mid$ (as a zone). $M D O G 94$ (1963), 51-52, figs. 17-18. Kultepe in I..4, pl. $15\{3.6 \mid$ (with some solid squares). Porsuk I, pls. $81\{156\}$ and $83\{174\}$ Malutya: RH. 4 II/12, pls. $\mathrm{M}!5\{8,10\}$ and M16 110$\}$ (with dotted blanks).
    186. The motif also occurs on a neck sherd of a round-mouthed jug ( $P$ 1868) from the destruction debris behind TB 2. In woodworking, Checkerboard 2 with latticed squares is found on $W 100$ from $\$ 1 \mathrm{cg} 3$.
[^181]:    187. P 3595, P 3631, P 3635, P 3713. For a related design used similarly at Boğazkoy: $M D O G 78$ (M1a1 1940), 58, fig. $15\{1]$.
    188. Gordıon, 44, fig. 6a.
    189. OIP 29, 407, Fig. 466 \{2, 5, 11\}. Masat 11, pl. 69 \{5\}. Heurtley, PM. 227. nos. 463-464; 228-299, figs. 98 and 101, passm. Akurgal, $P K$, pl. A2 (after p. 32).
[^182]:    190. OIP 29, 395, fig. 444 [17\} (plain); 392, fig. 439 \{7\}; 393, fig. 440 [20\}; 395 , fig. 444 \{24\}; 408 , fig. $468\{15\}$.
    191. Phrygie III, pl. 33a \{13\}.
[^183]:    194. For the motif on 185 in a single-line version: OIP 99, 400, fig. 459 \{11\}: Masat II, pl. 63 \{5\}. Both single- and double-line rendition occur at Carchemısh: Woolley, pis. $9\{3\}$ and $10\{3\}$.
    195. OIP 99. 360, fig. 410 \{e 1343\} (Aliģar 4b31). Woolley. pl. 13\{2\}
    196. OIP 29, 407, fig. $466|10|$; Woolley, pls. $9\{6\}$ and $13\{10\}$.
[^184]:    197. Cf. TGET, pl. 25H \{TumP 122\}, a wooden bowl with incised lozenge panels on the exterior. See also 2 bid., 184, fig. 110A and C \{MM 388\} and 208, fig. 126 (TumW 25 ).
    198. MDOG 89 (1957), 64-65, fig. 55, an ornate bichrome-on-bulf jug that, as described, is reminiscent of Brown-on-Buff ware. Masal II, pl. 70 $\{8\}$, a version with hatched rather than stippled inner lozenges.
    199. OIP 29, 396, fig. $445\{31\} ; 409$, fig. $470\{19-20\}$.
    200. For the motif in woodworking, TGET. 63 , fig. 33 \{TumP 151\}.
[^185]:    201. OIP 29, 394, fig. 442 \{18\}. Cf. also Maşal II, pl. 63 \{8\} (Level 1II); Porsuk I, pl. $90\{236,238\}$ (Porsuk III).
    202. For the precise arrangement: OIP 29, 394, fig. 442 (2); Maşat II, pl. 63 \{9]. For other uses of the type on handles: OIP 29, 375, fig. 424 [el113, e2319); 401, fig. 455 (2, 4, 7).
    203. OIP 29, 372, fig. 421; 374, fig. 423.
    204. For the mannerism at Alişar: OIP 29, 372, fig. 421; 373, fig. 422 shows the detail in butterfly panels.
[^186]:    205. OIP 29, 394, fig. $442\{19\}$. For the $X$ type outside a paneled frame, see ibid., 407, fig. 466 (12]. The variety also occurs in Northwest Geometric Pottery: Akurgal, $P K$, pl. A2 (after p. 32).
    206. OIP 29, 393, fig. 441 [8]; Woolley, pl. 13 \{8\} (upper neck).
    207. Heurtley, PM, 229, fig. 101j-k. For W 119: DeVries, "Gordion," 386, fig. 20.
    208. MDOG 94 (1963), 51-52, figs. 17-18. Woolley, pl. $13\{2,6\}$; for a related hourglass treatment: ibid., pl. $11\{2,4 \mid$.
    209. Woolley, pl. $13\{8\} ;$ OIP 29,406 , fig. $465\{12\}$.
[^187]:    210. E.g., OIP 29, 375, fig. 424 \{e 2300, el338\}; 399, fig. 450 (10-11\}. Kultepe in I.A., pl. $32\{3\}$ (from Kululu). For the use of the design as a continuous pattern, essentially a zigzag: Masal I1, pl. 65 \{2\}.
    211. Cf. OIP 29, 372-375, figs. 421-42 t (Alişar IV'c-1I): 401, figs. 153-455. passim. Mayat II, pls. $69\{4-5\}$ and $71\{+\}$ (Level [II). The design occurs also at Malatya, perhaps over a handle: RH.4 II/Iき. pl. MII (9).
[^188]:    919. OIP 29. 398, fig. 448 \{12\}.
    920. Woolley, pl. 9 \{4\}.
[^189]:    214. Cf. TGET, 59, fig. 28 \{TumP 138\}. Herringbone like that on 930 and the large kraters occurs with other geometric designs on a wooden fragment from Meg. 3 (W 100).
    215. OIP 29, 392, fig. $438\{37-39\} ; 393$, fig. $440\{1,9\} ; 400$, fig. $452\{5\}$. 216. Kültepe in I.A., pl. 19\{1\}.
    216. OIP 29. 406, fig. 465 \{8|; 408, fig. 468 \{15\}. For more naturalistic, tapering renditions: abid., 391 , fig. 437 \{28\} and 392, fig. $438\{18\}$.
    217. TGET, opp. p. 20, figs. 10-11 |TumP 35-36); 60, fig. 29 (TumP 139]; 178, fig. 104 (MM 378, below the "rose window").
[^190]:    219. OIP 29, 409, fig. 470 \{8\}. Kullepe in I.A., pl. 31 \{7\}, from the early phase at Kululu.
    220. Sams, "Schools," 232-234.
    221. Fischer, 32-33.
[^191]:    222. Buluç. pl. 16 \{BT.16\}.
    223. Ibid. Phrygue III, pl. 9 a and $\mathrm{b},\{1|; \mathrm{pl} .9 \mathrm{a}| 6 \mid$ may represent the Pure style.
    224. AJA 76 (1972), 261-262 and pl. 57, fig. 12. The use of an elongated, reserved panel for the decoration suggests a date nor earlier than the later seventh century, if developmental patterns at Gordion can be applied here, yet the vessel could be descended from an older tradition in the area.
    225. Troy I' 'figs. $300\{37.1020$ and VIII.88\} and $301\{1\}$
    226. Poruk I, 96-97 and 110, no. 153.
[^192]:    227. For the same treatment at Midas City: Phrygue 111, pl. 9a \{4\}.
[^193]:    228. Buluç, pl. 16 \{BT.16\}. See under 969 for a second dinos with the same variation from a post-destruction context.
    229. This interpretation seems preferable to a connection with Iron Age Cilician painting, where the alternation of lines and circles is common: e.g., Tarsus III, in nos. 567-568, 583.
    230. Phrygie III, pl. 9a $\{1,5\}$ and $\mathrm{b}\{1\}$ (the inside of the bowl 9a $\{3\}$ ). 231. BASOR 162 (Apr. 1961), 23 and fig. 12.
[^194]:    232. TGET, 49.
    233. Buluç, pl. 17 \{BT.17\}.
    234. OIP 29, 407, fig. 467 \{5, and perhaps 12\}; MDOG 76 (Apr. 1938), 17. fig. 4a, a vessel that possibly reflects Phrygian influence (p. 59, n. 26) Sams, "Schools," 229-230.
    235. Coldstream, GGP, 158-160; idem, Greece, 40-41
    236. For the amphora, from Tomb VI at Marmariani: Desborough, 139-140 and pl. 22 \{74\}; Heurtley, "Tombs," pl. 5 \{74\}. For the hydria, now in the Vlastos Collection, Athens: Coldstream, GGP, pl. 33d.
    237. An analogous design occurs in incised form at Vergina: Vergna 1, pl. 30 |A11].
    238. Jid., $182-185$, fig. $33|\mathrm{~N} 41|$ and pl .45.
[^195]:    239. OIP 29, 372-374, figs. 421-423; MDOG 95 (1965), 82-83, figs. I [5] and $2\{11\}$. See also 1084 .
    240. OIP 29, 372-374, figs. 421-423; 375, fig. 424 \{el113, e2300, e2299\}; 400, figs. 453-454. Masal II, pl. 69, \{3-5\}.
    241. E.g.. OIP 29, 375, fig. 424 \{e1338\}.
[^196]:    242. The same general kinds of anomalies admittedly apply to the Ornate Class of Brown-on-Buff ware, but since the number of examples is far greater than that of the group under discussion the class can hardly be termed exotic (pp. 167-170)
    243. A fragmentary large vessel from Alişar may be of similar shape: OIP 29,406, fig. $464\{1\}$.
[^197]:    244. A few vessels at Gordion (uncatalogued here) appear in decoration to represent a later phase of the stvle ( $\mathrm{P} 423, \mathrm{P} 969$ ). See also Majal 11, pl. 72 \{3a-b\}, a bichrome example from a context of Level II. From Phase 1 of the same level at Maşat comes a well-preserved amphora in more or less the "pure" Alişar style: did.. pl. 79 |la-c|. The level is provisionally dated no earlier than ca. 600 в.c.. yet the veswel could possibly be residud from the earlier Level III.
    245. MDOG 95 (1965), 84-85. See also Mavat II, pl. 71 \{2\}, from Level III, and infra, p. 165
    246. Akurgal, $P K$, pl. 2la.
[^198]:    247. OIP 19, pl. 45 \{1108\}; OIP 29, 407, fig. 467 \{3\} and 408, fig. $469\{3-5\}$. See also Masal II, pl. 65 \{2\}, from an unspecified Iron Age level. Further afield, a shoulder amphora from the Yunus cemetery at Carchemish reflects an analogous approach: Woolley, pl. $10\{6\}$. All the cited examples bear vertical straight and wavy lines, as seen on 255. A sherd from Büyükkale II/1 (Context 499/63) at Boğazköy recalls the oblique arrangement on 925.
    248. $M D O$; 95 (1965), $82-88$ and figs. 1 [3] and 3 [18]. OIP 29, 360, fig. 410 (e870, e871); 365, fig. 414 (c2743): 366, fig. 415 (e284); 375, fig. 424 \{e1338\}. In some other cases of bichrome painting at eastern sites it is not always clear from the published reports whether fine ground-coats are being distinguished from light-colored clay grounds or normal slips.
[^199]:    249. TGET. 215 and 253-254.
[^200]:    250. These are now in the Museum of METU.
    251. Akurgal, $P K$, pl. 22, bottom, is the only specimen in Konya that I have identified as Brown-on-Buff. Of the others on the same plate, that at $L$ center is not of the same fabric; it may be the same vessel as pl. 21b, both sherds having a thickness of $c a .1 \mathrm{~cm}$.
    252. Phrygie III, 118 and pl. $7 \mathrm{c}\{2\}$.
    253. Tezcan, figs. 29-25; Mellink, "Tyana," 255-256.
[^201]:    254. TGET, 48.
[^202]:    255. X-panels are, however, one of the principal motifs on the possibly related krater 930 .
    256. The effect can perhaps be best appreciated in views from above of the bowl K-III 13. The middle zone on the bowl $\mathbf{1 0 3 6}$ provides the only real exception to the rule.
[^203]:    257. The style itself has been the subject of a separate study and thus is not treated here in extensive detail: Sams, "Animals"; see also TGET, 48-49. "Animals" came before the further isolation of the large kraters (pp. 88-90), and before the recognition of a slight join between the two sherds of 1067. The latter discovery yields the symmetrical composition of two deer (with birds of prey on their backs) feeding from a central tree (fig. 46), a theme that probably reflects inspiration from either North Syrian iconography or the Alişar IV style (p. 162).
    258. Wood: TGET, 73, fig. 42 \{TumP 157\}; 75, fig. 46 \{TumP 162\}; 184-185, figs. 110 and 111L |MM 388]. Bronze: ibid., 18, fig. 9D [TumP 34]; opp. p. 20, fig. 10 [TumP 35], where both the basic type and variations occur in diagonal rows within panels.
[^204]:    259. The variant on K-III 6 occurs engraved in bronze: TGET, 18, fig. 9E [TumP 34]. For its use in wooden inlay: ibid., 184, fig. 110.A |MM 388], second panel from $R$.
    260. Akurgal. $P K$, pl. 22, upper center.
[^205]:    261. For the design in wooden inlay: TGET, 69, fig. 39E and pl. 30C [TumP 154].
    262. Gordıon, 59.
[^206]:    265. TGET, 48-49.
    266. The differing curves of goat horns on TumP 55 and 56 no doubt imply a distinction between species. Both types occur together on 832 and K-III 6. See also Gordion, 57.
[^207]:    267. Akurgal, $P K, \mathrm{pl}$. 22, center $R$ and bottom.
[^208]:    1. TGET, 275; Brixhe and Lejeune, p. IX.
    2. As did a few fibulae of Aegean type: Muscarella, Fibulae, 62 and 82; Ertuğrul Caner, Prähistorische Bronzefunde XIV.8: Fibeln in Anatolien I (Munich, 1983), 41-43.
[^209]:    3. Gunter, 29-30.
    4. TGET, 221.
    5. Sams, "Animals," 181-195.
[^210]:    6. In the developmental summary that follows, the distribution of individual motifs, as they occur in the sequence, is noted.
[^211]:    7. For incised marks and designs that were made after firing on a number of vessels from EPB III and later contexts, see Roller, 8-54 and 60-68, passim.
[^212]:    8. TCET, 256.
[^213]:    9. Ibid., 175-176.
    10. See the plan in ibud., opp. p. xxxy.
[^214]:    11. A/A 64 (1960), pl. 57. fig. 14. Rudolf Naumann, Architeklur Klemassens, 2d ed. (Tubingen, 1971), 289-302.
    12. Carchemesh 11, pl. B.17.a, and Carchemush 11I, pl. 42.b.
[^215]:    13. G. Kenneth Sams, "Sculpted Orthostates at Gordion," in Kutlu Emre et al., eds., Anatolia and the Ancient Near East: Studies in Honor of Tahsin Ozgüç (Ankara, 1989), 447-454.
    14. Ibd., 449-452.
    15. AJA 70 (1966), 273.
[^216]:    17. The bronze bowl TumW 9 has been used to date the burial to ca. 800 B.C. because of its similarity to one from Grave 30 at Assur that bears the name Assurtaklak, the same as the eponym for the year 805: TGET, 234 and 269-270. Yet the association of the bowl with the eponym is under challenge, and it has been argued that Grave 30 is no earlier than the late eighth century: see Muscarella, "Tumulus," 8 and idem, "Fibulae and Chronology, Marlh and Assur," JFA 11 (1984), 418-419. In any event, the bowl can hardly be used as a precise tool for dating.
    18. TGET, 32.
[^217]:    19. Ibid., 102, for a statement of Young's view that the tomb was not that of Midas, and 269-272 for Mellink's contention that it was. Muscarella, "Tumulus," 9-10, supports Young. For recent dendrochronological analysis of logs from the outer casing of the tomb, see: Peter I. Kuniholm, "Aegean Dendrochronology Project: 1989-1990 Results," VI. Arkeometri Sonuçlart Toplantıst (Ankara, 1991), 130-131.
[^218]:    130 One-handled utility pot; gray ware
    EPB V (Y-65-10: 11)
    GPH. 0.059 ; Est. D. rim 0.12
    Fig. 31; pp. 70, 71, 72, 183
    Sherd. Very coarse, gray clay; wheel-finished surface, gray to light gray with traces of burning.

[^219]:    708 Small trefoil jug; Partial Wavy-Line style with triangles, now tan
    P 3141 CC 2: NW half
    Rest. H.-rim 0.127; Max. D. 0.104
    Pl. 72; pp. 57, 59, 121, 192, 134, 137, 155, 157
    Gaps in body; base and handle missing. Fine ry clay;

