The Project Gutenberg eBook of History of Ancient Pottery: Greek, Etruscan, and Roman. Volume 2 (of 2), by Samuel Birch and H. B. Walters

This ebook is for the use of anyone anywhere in the United States and most other parts of the world at no cost and with almost no restrictions whatsoever. You may copy it, give it away or reuse it under the terms of the Project Gutenberg License included with this ebook or online at www.gutenberg.org. If you are not located in the United States, you'll have to check the laws of the country where you are located before using this eBook.

Title: History of Ancient Pottery: Greek, Etruscan, and Roman. Volume 2 (of 2)
Author: Samuel Birch
Author: H. B. Walters
Release date: February 7, 2015 [EBook \#48155]
Language: English
Credits: Produced by KD Weeks, Chris Curnow and the Online Distributed Proofreading Team at http://www.pgdp.net (This file was produced from images generously made available by The Internet Archive)

## *** START OF THE PROJECT GUTENBERG EBOOK HISTORY OF ANCIENT POTTERY: GREEK, ETRUSCAN, AND ROMAN. VOLUME 2 (OF 2) ***

## Transcriber's Note:

Minor errors in punctuation and formatting have been silently corrected. Please see the transcriber's note at the end of this text for details regarding the handling of any textual issues encountered during its preparation. The end note also discusses the handling of the many Greek inscriptions.
Volume I of this text is available separately at Project Gutenberg at: http://www.gutenberg.org/ebooks/48154
References to Volume I are linked as well for ease of navigation.


ATTIC BLACK-FIGURED HYDRIA: harnessing of horses to chariot (British Museum).

## HISTORY OF ANCIENT POTTERY

GREEK, ETRUSCAN, AND ROMAN
BY H. B. WALTERS, M.A., F.S.A.
BASED ON THE WORK OF SAMUEL BIRCH

## IN TWO VOLUMES VOLUME II

WITH 300 ILLUSTRATIONS
INCLUDING 8 COLOURED PLATES


NEW YORK
CHARLES SCRIBNER'S SONS 1905
Page
CONTENTS OF VOLUME II ..... V
LIST OF PLATES IN VOLUME II ..... ix
LIST OF TEXT-ILLUSTRATIONS IN VOLUME II ..... xi

## PART III

## THE SUBJECTS ON GREEK VASES

## CHAPTER XII

INTRODUCTORY—THE OLYMPIAN DEITIES

Figured vases in ancient literature-Mythology and art-Relation of subjects on vases to literature-Homeric and dramatic themes and their treatmentInterpretation and classification of subjects-The Olympian deities-The Gigantomachia-The birth of Athena and other Olympian subjects-Zeus and kindred subjects-Hera-Poseidon and marine deities-The Eleusinian deitiesApollo and Artemis-Hephaistos, Athena, and Ares-Aphrodite and Eros-Hermes and Hestia

## CHAPTER XIII

DIONYSOS AND MISCELLANEOUS DEITIES

Dionysos and his associates-Ariadne, Maenads, and Satyrs-Names of Satyrs and Maenads-The Nether World-General representations and isolated subjectsCharon, Erinnyes, Hekate, and Thanatos-Cosmogonic deities-Gaia and Pandora -Prometheus and Atlas-Iris and Hebe-Personifications-Sun, Moon, Stars, and Dawn-Winds-Cities and countries-The Muses-Victory—Abstract ideasDescriptive names

CHAPTER XIV
HEROIC LEGENDS

Kastor and Polydeukes-Herakles and his twelve labours-Other contestsRelations with deities-Apotheosis-Theseus and his labours-Later scenes of his life-Perseus-Pelops and Bellerophon-Jason and the Argonauts-Theban legends -The Trojan cycle-Peleus and Thetis-The Judgment of Paris-Stories of Telephos and Troilos-Scenes from the Iliad-The death of Achilles and the Fall of Troy-The Odyssey-The Oresteia-Attic and other legends-Orpheus and the Amazons-Monsters-Historical and literary subjects

## CHAPTER XV <br> SUBJECTS FROM ORDINARY LIFE

Religious subjects-Sacrifices-Funeral scenes-The Drama and burlesques-Athletics-Sport and games-Musical scenes-Trades and occupations-Daily life of women-Wedding scenes-Military and naval subjects-Orientals and Barbarians-Banquets and revels-Miscellaneous subjects-Animals

CHAPTER XVI
DETAILS OF TYPES, ARRANGEMENT, AND ORNAMENTATION

Distinctions of types-Costume and attributes of individual deities-
Personifications-Heroes-Monsters-Personages in everyday life-Armour and shield-devices-Dress and ornaments-Physiognomical expression on vasesLandscape and architecture-Arrangement of subjects-Ornamental patternsMaeander, circles, and other geometrical patterns-Floral patterns-Lotos and palmettes-Treatment of ornamentation in different fabrics

Importance of inscriptions on vases-Incised inscriptions-Names and prices incised underneath vases-Owners' names and dedications-Painted inscriptionsEarly Greek alphabets-Painted inscriptions on early vases-Corinthian, Ionic, Boeotian, and Chalcidian inscriptions-Inscriptions on Athenian vases-DialectArtists' signatures-Inscriptions relating to the subjects-Exclamations-K $\alpha$ 入ós-names-The Attic alphabet and orthography-Chronology of Attic inscriptionsSouth Italian vases with inscriptions

## PART IV

ITALIAN POTTERY

## CHAPTER XVIII <br> ETRUSCAN AND SOUTH ITALIAN POTTERY

Early Italian civilisation—Origin of Etruscans—Terramare civilisation—Villanuova period-Pit-tombs-Hut-urns-Trench-tombs-Relief-wares and painted vases from Cervetri-Chamber-tombs-Polledrara ware-Bucchero ware-Canopic jarsImitations of Greek vases-Etruscan inscriptions-Sculpture in terracottaArchitectural decoration-Sarcophagi-Local pottery of Southern Italy-Messapian and Peucetian fabrics

## CHAPTER XIX <br> TERRACOTTA IN ROMAN ARCHITECTURE AND SCULPTURE

Clay in Roman architecture-Use of bricks-Methods of construction-TilesOrnamental antefixae-Flue-tiles-Other uses-Inscriptions on bricks and tilesMilitary tiles-Mural reliefs-List of subjects-Roman sculpture in terracotta-Statuettes-Uses at Rome-Types and subjects-Gaulish terracottas-Potters and centres of fabric-Subjects-Miscellaneous uses of terracotta-Money-boxes-Coin-moulds

## CHAPTER XX ROMAN LAMPS

Introduction of lamps at Rome-Sites where found-Principal parts of lampsPurposes for which used-Superstitious and other uses-Chronological account of forms-Technical processes-Subjects-Deities-Mythological and literary subjects -Genre subjects and animals-Inscriptions on lamps-Names of potters and their distribution-Centres of manufacture

CHAPTER XXI
ROMAN POTTERY: TECHNICAL PROCESSES, SHAPES, AND USES
Introductory-Geographical and historical limits-Clay and glaze-Technical processes-Stamps and moulds-Barbotine and other methods-Kilns found in Britain, Gaul, and Germany-Use of earthenware among the Romans-EcheaDolia and Amphorae-Inscriptions on amphorae-Cadus, Ampulla, and Lagena-Drinking-cups-Dishes-Sacrificial vases-Identification of names

CHAPTER XXII
ROMAN POTTERY, HISTORICALLY TREATED; ARRETINE WARE
Roman Pottery mentioned by ancient writers-"Samian" ware-Centres of fabricThe pottery of Arretium-Characteristics-Potters' stamps-Shapes of Arretine vases-Sources of inspiration for decoration-"Italian Megarian bowls"-Subjects -Distribution of Arretine wares

## CHAPTER XXIII <br> ROMAN POTTERY (continued); PROVINCIAL FABRICS

Distribution of Roman pottery in Europe-Transition from Arretine to provincial wares-Terra sigillata-Shapes and centres of fabric-Subjects-Potters' stampsVases with barbotine decoration-The fabrics of Gaul—St. Rémy-Graufesenque
—"Marbled" vases-Vases with inscriptions (Banassac)—Lezoux-Vases with medallions (Southern Gaul)-Fabrics of Germany-Terra sigillata in BritainCastor ware-Upchurch and New Forest wares-Plain pottery-MortariaConclusion

## PLATE

XLIX. Attic black-figured hydria: Harnessing of horses to chariot (colours)
TO FACE PAGE
L. Contest of Athena and Poseidon: vase at Petersburg (from Baumeister) ..... 24
LI. Kotyle by Hieron: Triptolemos at Eleusis ..... 26
LII. The Under-world, from an Apulian vase at Munich (from Furtwaengler and Reichhold) ..... 66
LIII. Helios and Stars (the Blacas krater) ..... 78
LIV. The Sack of Troy: kylix by Brygos in Louvre (from Furtwaengler and Reichhold) ..... 134
LV. Scenes from funeral lekythi (Prothesis and cult of tomb) ..... 158
LVI. Early Etruscan red ware ..... 300
LVII. Etruscan hut-urn and Bucchero ware ..... 302
LVIII. Etruscan imitations of Greek vases ..... 308
LIX. Etruscan antefix and sarcophagus ..... 316
LX. Sarcophagus of Seianti Thanunia ..... 322
LXI. Roman mural reliefs: Zeus and Dionysos ..... 366
LXII. Roman mural reliefs: Theseus; priestesses ..... 370
LXIII. Roman lamps (1st century b.c.) ..... 402
LXIV. Roman lamps: mythological and literary subjects ..... 412
LXV. Roman lamps: miscellaneous subjects ..... 416
LXVI. Moulds and stamp of Arretine ware ..... 492
LXVII. Gaulish pottery (Graufesenque fabric) ..... 520
LXVIII. Gaulish pottery from Britain (Lezoux fabric) ..... 526
LXIX. Romano-British and Gaulish pottery ..... 544FIG.111. Gigantomachia, from Ionic vase in Louvre
Mon. dell' Inst. ..... 13
112. Poseidon and Polybotes, from kylix in Berlin
Gerhard ..... 14113. The birth of Athena
114. Hermes slaying Argos (vase at Vienna)Brit. Mus.
115. Poseidon and Amphitrite (Corinthian pinax)
Ant. Denkm. ..... 23
116. Apollo, Artemis, and Leto
117. Aphrodite and her following (vase atAthens)
Wiener Vorl. ..... 20
Mon. dell' Inst.
'Е $\varphi$. A $\rho \chi$. ..... 43
Brit. Mus. 118. Eros with kottabos-stand ..... 48
119. Hermes with Apollo's oxen (in the Vatican) Baumeister ..... 51
120. Dionysos with Satyrs and Maenads (Pamphaios hydria)
Brit. Mus.
121. Maenad in frenzy (cup at Munich)122. Charon's bark (lekythos at Munich)123. Thanatos and Hypnos with body of warrior
124. Nike sacrificing bull
125. Herakles and the Nemean lion
126. Herakles bringing the boar to Eurystheus
127. Apotheosis of Herakles (vase at Palermo)
59
Baumeister ..... 63
Baumeister ..... 70
Brit. Mus. ..... 71
Brit. Mus. ..... 88
Brit. Mus. ..... 96
Brit. Mus. ..... 97128. Peleus seizing ThetisArch. Zeit.107
Brit. Mus. ..... 121
129. Judgment of Paris (Hieron cup in Berlin) Wiener Vorl. ..... 122
130. Capture of Dolon Brit. Mus. ..... 129131. Pentheus slain by Maenads132. Kroisos on the funeral pyre (Louvre)
Brit. Mus. ..... 142
Baumeister ..... 150
133. Alkaios and Sappho (Munich) Baumeister ..... 152
134. Scene from a farce
Brit. Mus. ..... 161
135. Athletes engaged in the Pentathlon Brit. Mus. ..... 163
136. Agricultural scenes (Nikosthenes cup in Berlin)
Baumeister ..... 170

Hoppin

Hoppin amphora in Munich) amphora in Munich)
137. Warrior arming; archers (Euthymides
137. Warrior arming; archers (Euthymides ..... 176 ..... 176
138. Banqueters playing kottabos Brit. Mus. ..... 181
139. Maeander or embattled pattern ..... 212
140. Maeander (Attic) ..... 212
141. Maeander (Ionic) ..... 212
142. Maeander and star pattern ..... 212
143. Maeander (Attic, 5th century) ..... 213
144. Maeander (Attic, about 480 b.c.) ..... 213
145. Net-pattern ..... 215
146. Chequer-pattern ..... 216
147. Tangent-circles ..... 216
148. Spirals under handles (Exekias) ..... 217
149. Wave-pattern (South Italy) ..... 218
150. Scale-pattern (Daphnae) ..... 218
151. Guilloche or plait-band (Euphorbos pinax) ..... 219
152. Tongue-pattern ..... 219
153. Egg-pattern ..... 220
154. Leaf- or chain-pattern ..... 221
155. Ivy-wreath (black-figure period) ..... 222
156. Ivy-wreath (South Italian) ..... 222
157. Laurel-wreath (South Italian) ..... 223
158. Vallisneria spiralis (Mycenaean) ..... 224
159. Lotos-flower (Cypriote) ..... 224
160. Lotos-flowers and buds (Rhodian) ..... 225
161. Palmette-and lotos-pattern (early B.F.) ..... 225
162. Lotos-buds (Attic B.F.) ..... 226
163. Chain of palmettes and lotos (early B.F.) ..... 226
164. Palmettes and lotos under handles (Attic B.F.) ..... 227
165. Palmette on neck of red-bodied amphorae ..... 228
166. Enclosed palmettes (R.F. period) ..... 228
167. Oblique palmettes (late R.F.) ..... 229
168. Palmette under handles (South Italian) ..... 230
169. Rosette (Rhodian) ..... 231
170. Rosette (Apulian) ..... 231
171. Facsimile of inscription on Tataie lekythos Brit. Mus. ..... 242
172. Facsimile of Dipylon inscription Ath. Mitth. ..... 243
173. Scheme of alphabets on Greek vases ..... 248
174. Facsimile of inscription on Corinthian pinax
Roehl ..... 251
175. Facsimile of signatures on François vase Furtwaengler and
Reichhold ..... 257
176. Facsimile of signature of Nikias Brit. Mus. ..... 259
177. Figure with inscribed scroll (fragment at Oxford) ..... 264
178. Etruscan tomb with cinerary urn179. Villanuova cinerary urns from Corneto180. Painted pithos from Cervetri in Louvre181. Canopic jar in bronze-plated chair182. Etruscan alphabet, from a vaseAnn. dell' Inst.285
Notizie ..... 286
Gaz. Arch. ..... 293
Mus. Ital. ..... 305
Dennis ..... 312
183. Terracotta sarcophagus in Brit. Mus. Dennis ..... 318
184. Painted terracotta slab in Louvre Dennis ..... 319
185. Askos of local Apulian fabric Brit. Mus. ..... 326
186. Krater of "Peucetian" fabric Notizie ..... 328
187. Concrete wall at Rome Middleton ..... 338
188. Concrete wall faced with brick Middleton ..... 339
189. Concrete arch faced with brick Middleton ..... 339
190. Diagram of Roman wall-construction Blümner ..... 340
191. Roman terracotta antefix Brit. Mus. ..... 343
192. Method of heating in Baths of Caracalla Middleton ..... 347
193. Flue-tile with ornamental patterns ..... 348
194. Stamped Roman tile ..... 354
195. Inscribed tile in Guildhall Museum ..... 359
196. Inscribed tile from London ..... 363
197. Mask with name of potter ..... 377
198. Gaulish figure of Aphrodite ..... 383
199. Gaulish figure of Epona ..... 386
Blanchet
200. Terracotta money-box390
201. Terracotta coin-mould ..... 392
Daremberg and SaglioJahrbuch
202. Lamp from the Esquiline ..... 399
203. "Delphiniform" lamp ..... 399
204. Lamp with volute-nozzle ..... 400
205. Lamp with pointed nozzle ..... 400
206. Lamp with grooved nozzle ..... 401
207. Lamp with plain nozzle ..... 401
208. Lamp with heart-shaped nozzle ..... 402
209. Mould for lamp ..... 405
210. Lamp with signature of Fortis ..... 424
211. Stamps used by Roman potters ..... 440
212. Roman kiln at Heddernheim ..... 444
213. Kiln found at Castor ..... 447
214. Plan of kiln at Heiligenberg ..... 450
215. Section of ditto ..... 450
216. Ampulla ..... 466
217. Lagena from France ..... 467
218. Arretine bowl in Boston: death of Phaëthon ..... 484
219. Arretine krater with Seasons ..... 488
220. "Italian Megarian" bowl Brit. Mus. ..... 491
221. Gaulish bowl of Form 29 ..... 500
222. Gaulish bowl of Form 30 ..... 501
223. Gaulish bowl of Form 37 ..... 502
224. Vase of St.-Rémy fabric Déchelette ..... 517
225. Vase of Aco, inscribed
226. Vase of Banassac fabric from PompeiiDéchelette518
227. Medallion from vase of Southern Gaul: scene from the Cycnus ..... 531
Brit. Mus.
228. Medallion from vase: Atalanta and Hippomedon ..... 532
Gaz. Arch.
229. Jar from Germany, inscribed Brit. Mus. ..... 537Mus. Borb.525
230. Roman mortarium from Ribchester Brit. Mus. ..... 551

Figured vases in ancient literature-Mythology and art-Relation of subjects on vases to literatureHomeric and dramatic themes and their treatment-Interpretation and classification of subjectsThe Olympian deities-The Gigantomachia-The birth of Athena and other Olympian subjectsZeus and kindred subjects-Hera-Poseidon and marine deities-The Eleusinian deities-Apollo and Artemis-Hephaistos, Athena, and Ares-Aphrodite and Eros-Hermes and Hestia.

The representation of subjects from Greek mythology or daily life on vases was not, of course, confined to fictile products. We know that the artistic instincts of the Greeks led them to decorate almost every household implement or utensil with ornamental designs of some kind, as well as those specially made for votive or other non-utilitarian purposes. But the fictile vases, from the enormous numbers which have been preserved, the extraordinary variety of their subjects, and the fact that they cover such a wide period, have always formed our chief artistic source of information on the subject of Greek mythology and antiquities.
Although (as has been pointed out in Chapter IV.) ancient literature contains scarcely any allusions to the painted vases, we have many descriptions of similar subjects depicted on other works of art, such as vases of wood and metal, from Homer downwards. The cup of Nestor (Vol. I. pp. 148, 172) was ornamented with figures of doves ${ }^{[1]}$, and there is the famous description in the first Idyll of Theocritus ${ }^{[2]}$ of the wooden cup (kıббú $\beta ı \nu$ ) which represented a fisherman casting his net, and a boy guarding vines and weaving a trap for grasshoppers, while two foxes steal the grapes and the contents of his dinner-basket; the whole being surrounded, like the designs on some painted vases, with borders of ivy and acanthus. The so-called cup of Nestor ( $\nu \varepsilon \sigma \tau о \rho i ́ \varphi$ ) at Capua ${ }^{[3]}$ was inscribed with Homeric verses, and the $\sigma \kappa$ v́ $\varphi$ os or cup of Herakles with the taking of Troy ${ }^{[4]}$. Anakreon describes cups ornamented with figures of Dionysos, Aphrodite and Eros, and the Graces ${ }^{[5]}$; and Pliny mentions others with figures of Centaurs, hunts and battles, and Dionysiac subjects ${ }^{[6]}$. Or, again, mythological subjects are described, such as the rape of the Palladion ${ }^{[7]}$, Phrixos on the ram ${ }^{[8]}$, a Gorgon and Ganymede ${ }^{[9]}$, or Orpheus ${ }^{[10]}$; and other "storied" cups are described as being used by the later Roman emperors. But the nearest parallels to the vases described in classical literature are probably to be sought in the chased metal vases of the Hellenistic and Roman periods. ${ }^{[11]}$ We read of scyphi Homerici, or beakers with Homeric scenes, used by the Emperor Nero, which were probably of chased silver ${ }^{[12]}$; and we have described in Chapter XI. what are apparently clay imitations of these vases, usually known as "Megarian bowls," many bearing scenes from Homer in relief on the exterior.
In attempting a review of the subjects on the painted vases, we are met with certain difficulties, especially in regard to arrangement. This is chiefly due to the fact that each period has its group of favourite subjects; some are only found in early times, others only in the later period. Yet any chronological method of treatment will be found impossible, and it is hoped that it will, as far as possible, be obviated by the general allusions in the historical chapters of this work to the subjects characteristic of each fabric and period.
Embracing as they do almost the whole field of Greek myth and legend, the subjects on Greek vases are yet not invariably those most familiar to the classical student or, if the stories are familiar, they are not always treated in accordance with literary tradition. On the other hand, it must be borne in mind that the popular conception of Greek mythology is not always a correct one, for which fact the formerly invariable system of approaching Greek ideas through the Latin is mainly responsible. The mythology of our classical dictionaries and school-books is largely based on Ovid and the later Roman compilers, such as Hyginus, and gives the stories in a complete connected form, regarding all classical authorities as of equal value, and ignoring the fact that many myths are of gradual growth and only crystallised at a late period, while others belong to a relatively recent date in ancient history. ${ }^{[13]}$
The vases, on the other hand, are contemporary documents, free from later euhemerism and pedantry, and presenting the myths as the Athenian craftsmen knew them in the popular folk-lore and religious observances of their day. It cannot be too strongly insisted upon that a vase-painter was never an illustrator of Homer or any other writer, at least before the fourth century b.c. (see Vol. I. p. 499). The epic poems, of course, contributed largely to the popular acquaintance with ancient legends, and offered suggestions of which the painter was glad to avail himself; but he did not, therefore, feel bound to adhere to his text. This will be seen in the list of Homeric subjects given below (p. 126 ff .); and we may also refer here to the practice of giving fanciful names to figures, which obtains at all periods, and has before now presented obstacles to the interpreter.
The relation of the subjects on vases to Greek literature is an interesting theme for enquiry, though, in view of what has already been said, it is evident that it must be undertaken with great caution. The antiquity and wide popularity of the Homeric poems, for instance, would naturally lead us to expect an extensive and general use of their themes by the vase-painter. Yet this is far from being the case. The Iliad, indeed, is drawn upon more largely than the Odyssey; but even this yields in importance as a source to the epics grouped under the name of the Cyclic poets. It may have been that the poems were instinctively felt to be unsuited to the somewhat conventional and monotonous style of the earlier vase-paintings, which required simple and easily depicted incidents. We are therefore the more at a loss to explain the comparative rarity of subjects from the Odyssey, with its many adventures and stirring episodes; scenes which may be from the Iliad being less strongly characterised and less unique-one battle-scene, for instance, differing little from another in method of treatment. But any subject from the Odyssey can be at once identified by its individual
and marked character. It may be that the Odyssey had a less firm hold on the minds of the Greeks than the Iliad, which was more of a national epic, whereas the Odyssey was a stirring romance. ${ }^{[14]}$ It may also be worth noting that scenes from the Odyssey usually adhere more closely to the Homeric text than those from the Iliad.
Another reason for the scarcity of Iliad-scenes may be that the Tale of Troy as a whole is a much more comprehensive story, of which the Iliad only forms a comparatively small portion. Hence the large number of scenes drawn both from the Ante-Homerica and the Post-Homerica, such as the stories of Troilos and Memnon, or the sack of Troy. The writings of the Cyclic poets begin, as Horace reminds us, abovo, ${ }^{[15]}$ from the egg of Leda, and the Kypria included the whole story of the marriage of Peleus and Thetis, the subsequent Judgment of Paris, and his journey to Greece after Helen, scenes from all these events being extremely popular on the vases. ${ }^{[16]}$ The Patrokleia deals with the events of the earlier years of the war, the Aithiopis of Arktinos with the stories of Penthesileia and Memnon, and the death of Achilles, and the Little Iliad of Lesches with the events of the tenth year down to the fall of Troy. All provided frequent themes for the vase-painter, as may be seen by a reference to a later page (119 ff.). The Iliupersis of Arktinos and Lesches might almost be reconstructed from two or three large vases, whereon all the episodes of the catastrophe are collected together (see p. 134); but when we come to the Nostoi of Agias and the Telegonia, the vase-painters suddenly fail us, the stories of Odysseus' wanderings and Orestes' vengeance seeming to supply the deficiency.
Luckenbach ${ }^{[17]}$ has pointed out that the only right method of investigating the relation is to begin with vase-paintings for which the sources are absolutely certain, as with scenes from the Iliad and Odyssey. In this way the subjects from other epics can be rightly estimated and the contents of the poems restored. Further, in investigating the sources of the vase-painters, and the extent to which they adhered to them or gave free play to the imagination, the three main periods of vase-painting must be separately considered, though the results in each case prove to be similar. By way of exemplifying these methods he enters in great detail into certain vase-subjects, their method of treatment on vases of the different periods, and their approximation to the text. Thus, the funeral games for Patroklos (Il. xxiii.) are depicted on the François vase (see p. 11) with marked deviations from Homer's narrative; and not only this, but without characterisation, so that if the performers were not named the subject could hardly have been identified. To note one small point, all Homeric races took place in two-horse chariots (bigae), but on B.F. vases four-horse quadrigae are almost invariably found. ${ }^{[18]}$
Subjects of a more conventional character, such as battle scenes, farewell scenes, or the arming of a warrior, present even more difficulty. Even when names occur it is only increased. We must assume that the vase-painter fixed on typical names for his personages, without caring whether he had literary authority. In some cases the genre scenes seem to be developed from heroic originals, in others the contrary appears to be the case. ${ }^{[19]}$ It is not, however, unfair to say that the Epos was the vase-painter's "source." The only doubtful question is the extent of his inspiration; and, at all events, it was a source in the sense that no other Greek literature was until we come to the fourth century.
Turning now to the consideration of later literature, ${ }^{[20]}$ we find in Hesiod a certain parallelism of theme to the vases, but little trace of actual influence. Indirectly he may have affected the vasepainter by his crystallisation of Greek mythology in the Theogony, where he establishes the number of the Muses (l. 77), and also the names of the Nereids. ${ }^{[21]}$ It is, however, interesting to note the Hesiodic themes which were also popular with the vase-painters: the creation of Pandora; the fights of Herakles and Kyknos, and of Lapiths and Centaurs, and the pursuit of Perseus by the Gorgons; the contest of Zeus with Typhoeus (or Typhon); and the birth of Athena. ${ }^{[22]}$
The influence of lyric poetry was even slighter. Somewhat idealised figures of some of the Greek lyrists appear on R.F. vases, such as Sappho and Anakreon (see p. 152); but this is all. In regard to Pindar and Bacchylides, the idealising and heroising tendencies of the age may be compared with the contemporary tendency of vase-paintings, and the latter may often be found useful to compare with-if not exactly to illustrate-the legends which the two poets commemorate. For instance, in the ode of Bacchylides in which he describes the fate of Kroisos, there is a curious deviation from the familiar Herodotean version, the king being represented as voluntarily sacrificing himself. ${ }^{[23]}$ The only vase-painting dealing with this subject (Fig. 132, p. 150) apparently reproduces this tradition.

With the influence of the stage we have already dealt elsewhere. ${ }^{[24]}$ With the exception of the Satyric drama, it can hardly be said to have made itself felt, except in the vases of Southern Italy, in the fourth century b.c., but indications of the Satyric influence may be traced in many R.F. Attic vases, no doubt owing to their connection with the popular Dionysiac subjects. On a vase in Naples ${ }^{[25]}$ are represented preparations for a Satyric drama. When we reach the time of tragic and comic influence, we not only find the subjects reproduced, but even their stage setting; in other words, the vases are not so much intended to illustrate the written as the acted play, just as it was performed.
The whole question is admirably summed up by Luckenbach ${ }^{[26]}$ in the following manner: (1) The Epos is the chief source of all vase-paintings from the earliest time to the decadence inclusive, and next comes Tragedy, as regards the later vases only; of the influence of other poetry on the formation of myths in vase-paintings there is no established example. (2) Vase-paintings are not illustrations, either of the Epos or of the Drama, and there is no intention of reproducing a story accurately; hence great discrepancies and rarity of close adherence to literary forms; but the salient features of the story are preserved. (3) Discrepancies in the naming of personages are partly arbitrary, partly due to ignorance; the extension of scenes by means of rows of bystanders,
meaningless, but thought to be appropriate, is of course a development of the artist's, conditioned by exigencies of space. Anachronisms on vases are of frequent occurrence. (4) Such scenes as those of warriors arming or departing are always the painter's own invention, ordinary scenes being often "heroised" by the addition of names. But individuals are not necessarily all or always to be named; and, again, the artist often gives names without individualising the figures. (5) In the archaic period successive movements of time are often very naïvely blended (see p. 10); the difference between art and literature is most marked in scenes where a definite moment is not indicated. (6) Vasepaintings often give a general survey of a poem, the scene not being drawn from one particular passage or episode. The features of one poem are in art sometimes transferred to another.
The attention that has been paid now for many years to collecting, assorting, and critically discussing the material afforded by the vases has much diminished the difficulties of this most puzzling branch of archaeology. It has been chiefly lightened by the discovery from time to time of inscribed vases, though, as has just been noted, even these must be treated with caution; and even now, of course, there are numerous subjects the interpretation of which is either disputed or purely hypothetical. But we can at least pride ourselves on having advanced many degrees beyond the labours of early writers on the subject, down to the year 1850.
When painted vases first began to be discovered in Southern Italy, the subjects were supposed to relate universally to the Eleusinian or Dionysiac mysteries, and this school of interpretation for a long time found favour in some quarters, even in the days of Gerhard and De Witte. But it was obvious from the first that such interpretations did not carry the investigator very far, and even in the eighteenth century other systems arose, such as that of Italynski, who regarded the subjects as of historical import. ${ }^{[27]}$ Subsequently Panofka endeavoured to trace a connection between the subjects and the names of artists or other persons recorded on the vases, or, again, between the subjects and shapes. The latter idea, of course, contained a measure of truth, as is seen in many instances ${ }^{[28]}$; but it was, of course, impossible to follow out either this or the other hypothesis in any detail.
The foundations of the more scientific and rational school of interpretation were laid as early as the days of Winckelmann, and he was followed by Lanzi, Visconti, and Millingen, and finally Otto Jahn, who, as we have seen, practically revolutionised the study of ceramography. Of late, however, the question of the interpretation of subjects has been somewhat relegated to the background, owing to the overwhelming interest evoked by the finds of early fabrics or by the efforts of German and other scholars to distinguish the various schools of painting in the finest period.
Millingen, in the Introduction to his Vases Grecs, drew up a classification of the subjects on vases which need not be detailed here, but which, with some modifications, may be regarded as holding good to the present day. He distinguishes ten classes, the first three mythological, the next four dealing with daily life, and the three last with purely decorative ornamentation. A somewhat similar order is adopted by Müller in his Handbuch, by Gerhard in his Auserlesene Vasenbilder, and by Jahn in his Introduction to the Munich Catalogue (p. cc ff.). In the present and following chapters the arrangement and classification of the subjects adhere in the main to the system laid down by these writers; and as the order is not, of course, chronological in regard to style, reference has been made where necessary to differences of epoch and fabric. ${ }^{[29]}$ It may be convenient to recapitulate briefly the main headings under which the subjects are grouped.
I. The Olympian deities and divine beings in immediate connection with them, such as Eros and marine deities.
(a) In general; (b) individually. (Chapter XII.)
II. Dionysos and his cycle, Pan, Satyrs, and Maenads. (Page 54 ff .)
III. Chthonian and cosmogonic deities, personifications, and minor deities in general. (Page 66 ff .)
IV. Heroic legends and mythology in general.
(a) Herakles; (b) Theseus, Perseus, and other heroes; (c) local or obscure myths; (d) the Theban and Trojan stories; (e) monsters. (Chapter XIV.)
V. Historical subjects. (Page 149 ff.)
VI. Scenes from daily life and miscellaneous subjects (for detailed classification see p. 154). (Chapter XV.)

The number of subjects to be found on any one vase is of course usually limited to one, two, or at most three, according to the shape. Usually when there is more than one the subjects are quite distinct from one another; though attempts have been made in some cases, as in the B.F. amphorae, to trace a connection. ${ }^{[30]}$ On the other hand, the R.F. kylikes of the strong period often show a unity of subject running through the interior and exterior scenes, whether the theme is mythological or ordinary. ${ }^{[31]}$ It was only in exceptional cases that an artist could devote his efforts to producing an entire subject, as on some of the large kylikes with the labours of Theseus, ${ }^{[32]}$ or the vases representing the sack of Troy. ${ }^{[33]}$ The great François vase in Florence is a striking example of a mythology in miniature, containing as it does more than one subject treated in the fullest detail. And here reference may be made to the main principles which governed the method of telling a story in ancient art, and prevailed at different periods. ${ }^{[34]}$ The earliest and most simple is the continuous method, which represents several scenes together as if taking place simultaneously, although successive in point of time. This method was often employed in Oriental art, but is not found in Hellenic times; it was, however, revived by the Romans under the Empire, and prevailed all through the early stages of Christian art. Secondly, there is the complementary method, which aims at the complete expression of everything relating to the central event. The same figures are not in this case necessarily repeated, but others are introduced to express the action of the different subjects, all being collected in one space without regard to time, as in the continuous style. This is of Oriental origin, and is first seen in the description of Achilles' shield; it is also well illustrated in the

François vase, in the story of Troilos. Here the death of Troilos is not indeed actually depicted, but the events leading up to it (the water-drawing at the fountain and the pursuit by Achilles) and those consequent on it (the announcement of the murder to Priam and the setting forth of Hector to avenge it) are all represented without the repetition of any figures. Lastly, there is the isolating method, which is purely Hellenic, being developed from the complementary. This is best illustrated by the Theseus kylikes, with their groups of the labours, which, it should be remembered, are not continuous episodes in one story, but single events separated in time and space, and collected together with a sort of superficial resemblance to the other methods.

Some description of the François vase has been given elsewhere (Vol. I. p. 370) ${ }^{[35]}$; but as it is unique in its comprehensiveness, and as a typical presentation of the subjects most popular at the time when vasepainters had just begun to pay special attention to mythology, it may be worth while to recapitulate its contents here. The subjects are no less than eleven in number, arranged in six horizontal friezes, with figures also on the handles, and there are in all 115 inscriptions explaining the names of the personages and even of objects (e.g. ט́రpía, for the broken pitcher of Polyxena). Eight of these subjects belong to the region of mythology:-(1) On the neck: the hunt of the Calydonian boar, and (2) the landing of Theseus and Ariadne at Naxos, accompanied by dancing youths and maidens. (3) On the shoulder: chariot race at the funeral games of Patroklos, and (4) combat of Centaurs and Lapiths (with Theseus). (5) On the body: the marriage of Peleus and Thetis, attended by the gods in procession. (6) On the body: the death of Troilos (see above), and (7) the return of Hephaistos to Olympos. (8) On each of the handles, Ajax with the body of Achilles. On the flat top of the lip is represented (9) a combat of pigmies and cranes; on either side of the foot (10) a lion and a panther devouring a bull and stag, Gryphons, Sphinxes, and other animals; and on the upper part of the handles (11) Gorgons and figures of the Asiatic Artemis (see p. 35) holding wild animals by the neck.

It is, of course, impossible to indicate all the subjects on the thousands of painted vases in existence; and it must also be remembered that many are of disputed meaning. The succeeding review must therefore only be considered as a general summary which aims at omitting nothing of any interest and avoiding as far as possible useless repetition. In the references appended under each subject the principle has been adopted of making them as far as possible representative of all periods, and also of selecting the most typical and artistic examples, as well as the most accessible, publications. ${ }^{[36]}$

In dealing with the subjects depicted on Greek vases, we naturally regard the Olympian deities as having the preeminence. We will therefore begin by considering such scenes as have reference to actions in which those deities were engaged, and, secondly, representations of general groups of deities, either as spectators of terrestrial events or without any particular signification. It will then be convenient to deal with the several deities one by one, noting the subjects with which each is individually connected. We shall in the following chapter proceed to consider the subordinate deities, such as those of the under-world and the Dionysiac cycle, and personifications of nature and abstract ideas. Chapter XIV. will be devoted to the consideration of heroic legends, mythological beings, and historical subjects; and in Chapter XV. will be discussed all such subjects as relate to the daily life of the Greeks.

## The Olympian Deities

One of the oldest and most continuously popular subjects is the Gigantomachia, or Battle of the Gods and Giants, which forms part of the Titanic and pre-heroic cosmogony, and may therefore take precedence of the rest. The Aloadae (Otos and Ephialtes), strictly speaking, are connected with a different event-the attack on Olympos and chaining of Ares; but the scenes in which they occur are so closely linked with the Gigantomachy proper that it is unnecessary to differentiate them. We also find as a single subject the combat of Zeus with the snake-footed Typhon. ${ }^{[37]}$
The locus classicus of Greek art for the Gigantomachia is of course the frieze of the great altar at Pergamon (197 в.c.), but several vases bear representations almost as complete, though it is not as a rule possible to identify the giants except where their names are inscribed. ${ }^{[38]}$ Most vases give only one to three pairs of combatants.


FIG. 111. GIGANTOMACHIA, FROM IONIC VASE IN LOUVRE.

Some pairs are found almost exclusively together, e.g. Athena and Enkelados, or Ares and Mimas; Artemis and Apollo are generally opposed to the Aloadae Otos and Ephialtes, Zeus to Porphyrion, and Poseidon to Polybotes (Fig. 112) or Ephialtes. Hestia alone, the "stay-at-home" goddess of the hearth, is never found in these scenes, but Dionysos, Herakles, and the Dioskuri all take their part in aiding the Olympian deities.

Zeus hurls his thunderbolts ${ }^{[39]}$; Poseidon is usually depicted with his trident, or hurling the island of Nisyros (indicated as a rock with animals painted on it) upon his adversary ${ }^{[40]}$; Hephaistos uses a pair of tongs with a burning coal in them as his weapon ${ }^{[41]}$; and Dionysos is in some cases aided by his panther. ${ }^{[42]}$ Aeolus occurs once with his bag of winds. ${ }^{[43]}$


FIG. 112. POSEIDON AND THE GIANT POLYBOTES, FROM THE KYLIX IN BERLIN.

The following groups can be identified on vases by inscriptions or details of treatment:-
Zeus and Agasthenes, Hyperbios, and Ephialtes: Louvre E 732 (Fig. 111).
Zeus and Porphyrion: Berlin 2531.
Hera and Harpolykos: Louvre E 732.
Hera and Rhoitos (miswritten Phoitos): Berlin 2531.
Poseidon and Polybotes: Louvre E 732; Berlin $2531=$ Fig. 112.
Poseidon and Ephialtes: Reinach, ii. 188.
Apollo and Ephialtes: Berlin 2531.
Artemis and Otos: Reinach, ii. 164.
Artemis and Aigaion: Berlin 2531.
Hephaistos and Euryalos: B.M. E 47.
Hephaistos and Klytios: Berlin 2293.
Athena and Enkelados: B.M. B 252; Louvre E 732; Él. Cér. i. 8.
Ares and Mimas: Berlin 2531; B.M. B 617.
Hermes and Hippolytos: Berlin 2293.
Hermes and Polybios (?): Louvre E 732.
Dionysos and Eurymedon: Bull. de Corr. Hell. xx. pl. 7.
Athena with arm of Akratos: Berlin $2957=$ Él. Cér. i. 88.
Death of Otos (supposed): Bibl. Nat. $299=$ Reinach, ii. 255.
Among scenes supposed to take place in Olympos, the most important is the Birth of Athena from the head of Zeus. ${ }^{[44]}$ Usually she is represented as a diminutive figure actually emerging from his head, but in one or two instances she stands before him fully developed, ${ }^{[45]}$ as was probably the case in the centre of the east pediment of the Parthenon. This subject is commoner on B.F. vases, and does not appear at all after the middle of the fifth century. ${ }^{[46]}$ In most cases several of the Olympian deities are spectators of the scene; sometimes Hephaistos wields his axe or runs away in terror at the result of his operations ${ }^{[47]}$; in others the Eileithyiae or goddesses of child-birth lend their assistance. ${ }^{[48]}$ On a R.F. vase in the Bibliothèque Nationale Athena flies out backwards from Zeus’ head. ${ }^{[49]}$
In accordance with a principle already discussed (Vol. I. p. 378), the composition or "type" of this subject is sometimes adopted on B.F. vases for other groups of figures, where the absence of Athena shows clearly that the birth scene is not intended, and no particular meaning can be assigned to the composition. ${ }^{[50]}$
Representations of the Marriage of Zeus and Hera cannot be pointed to with certainty in vasepaintings. On B.F. vases we sometimes see a bridal pair in a chariot accompanied by various deities, or figures with the attributes of divinities ${ }^{[51]}$; but the chief figures are not in any way characterised as such, and it is better to regard these scenes as idealisations of ordinary marriage processions. On the other hand, there are undoubted representations of Zeus and Hera enthroned among the Olympian deities or partaking of a banquet. ${ }^{[52]}$


FIG. 113. THE BIRTH OF ATHENA (BRIT. MUS. B 244).

The story of the enchaining of Hera in a magic chair by Hephaistos, and her subsequent liberation by him, is alluded to on many vases, though one episode is more prominent than the others. Of the expulsion of Hephaistos from heaven we find no instance, and of the release of Hera there is only one doubtful example ${ }^{[53]}$; but we find a parody of the former's combat with Ares, who forces him to liberate Hera. ${ }^{[54]}$ The episode most frequent is that of the return of Hephaistos in a drunken condition to Olympos, conducted by Dionysos and a crowd of Satyrs; of this there are fine examples on vases of all periods. ${ }^{[55]}$ On earlier vases Hephaistos rides a mule; on the later he generally stumbles along, leaning on Dionysos or a Satyr for support.
On the François vase we see Zeus and Hera, with an attendant train of deities, Nymphs, and Muses, going in a chariot to the nuptials of Peleus and Thetis; on many vases we have the reception of the deified Herakles among the gods of Olympos ${ }^{[56]}$; and on others groups of deities banqueting or without particular signification. ${ }^{[57]}$ But on the late Apulian vases it is a frequent occurrence to find an upper row of deities as spectators of some event taking place just below: thus they watch battles of Greeks and Persians, ${ }^{[58]}$ or such scenes as the contract between Pelops and Oinomaos, ${ }^{[59]}$ the madness of Lykourgos, ${ }^{[60]}$ the death of Hippolytos, ${ }^{[61]}$ and others from heroic legend, which it is unnecessary to specify here; only a few typical ones can be mentioned. ${ }^{[62]}$ They also appear as spectators of scenes in or relating to the nether-world. ${ }^{[63]}$

Zeus appears less frequently than some deities, and seldom alone; but still there are many myths connected with him, besides those already discussed. As a single figure he appears enthroned and attended by his eagle on a Cyrenaic cup in the Louvre ${ }^{[64]}$; or again in his chariot, hurling a thunderbolt ${ }^{[65]}$; in company with his brother-gods of the ocean and under-world, Poseidon and Hades, he is seen on a kylix by Xenokles. ${ }^{[66]} \mathrm{He}$ is also found with Athena, ${ }^{[67]}$ with Hera, Apollo, Artemis, Aphrodite, and Hermes ${ }^{[68]}$; and frequently with Herakles at the latter's reception into heaven. ${ }^{[69]}$ In one instance he settles a dispute between Aphrodite and Persephone. ${ }^{[70]}$ He receives libations from Nike, ${ }^{[71]}$ or performs the ceremony himself, attended by Hera, Iris, and Nike, ${ }^{[72]}$ and is also attended by Hebe and Ganymede as cupbearers. ${ }^{[73]}$ His statue, especially that of Zعv̀ৎ 'Eркعĩoৎ at Troy, sometimes gives local colour to a scene. ${ }^{[74]}$
Most of the scenes in which he appears relate to his various love adventures, among which the legends of Europa, Io, and Semele are the most conspicuous; but first of his numerous amours should perhaps be mentioned his wooing of his consort Hera. He carries her off while asleep from her nurse in Euboea, ${ }^{[75]}$ and also appears to her in the form of a cuckoo. ${ }^{[76]}$ The rape of Ganymede by his eagle appears once or twice on vases, ${ }^{[77]}$ but more generally Zeus himself seizes the youth while he is engaged in bowling a hoop or otherwise at play. ${ }^{[78]}$ On a fine late vase with Latin inscriptions Ganymede appears in Olympos, ${ }^{[79]}$ and he is also depicted as a shepherd. ${ }^{[80]}$
Semele Zeus pursues and slays with the thunderbolt ${ }^{[81]}$; the birth of her son Dionysos from his thigh is represented but rarely on vases, and is liable to confusion with other subjects. This story falls into three episodes: (1) the reception of the infant by Hermes from Dirke, in order to be sewn into Zeus' thigh ${ }^{[82]}$; (2) the actual birth scene ${ }^{[83]}$; (3) the handing over of the child to the Nymphs. ${ }^{[84]}$ Of his visit to Alkmena there are no certain representations, but two comic scenes on South Italian vases ${ }^{[85]}$ may possibly refer to it, and one of them at least seems to be influenced by the burlesque by Rhinton, from which Plautus borrowed the idea of his Amphitruo. The apotheosis of Alkmena, when her husband places her on a funeral pyre after discovering her misdeed, is represented on two fine South Italian vases in the British Museum; in one case Zeus looks on. ${ }^{[86]}$ His appearing to Leda in the form of a swan only seems to find one illustration on a vase, but in one case he is present at the scene of Leda with the egg. ${ }^{[87]}$
He is also depicted descending in a shower of gold on Danaë ${ }^{[88]}$; or as carrying off the Nymphs Aegina and Thaleia ${ }^{[89]}$; or, again, with an unknown Nymph, perhaps Taygeta. ${ }^{[90]}$ In the form of a bull, on which Europa rides, he provides a very favourite subject, of which some fine specimens exist. ${ }^{[91]}$ One variation of the type is found on an Apulian vase, where Europa advances to caress the bull sent by Zeus to fetch her. ${ }^{[92]}$ The story of $\mathrm{Io}^{[93]}$ resolves itself into several scenes, all of which find illustration on the vases: (1) the meeting of Io and Zeus when she rests at the shrine of Artemis after her wanderings ${ }^{[94]}$; (2) Io in the form of a cow, guarded by Argos ${ }^{[95]}$; (3) the appearance of her


FIG. 114. HERMES SLAYING ARGOS IN PRESENCE OF ZEUS (VASE AT VIENNA).]

In addition, the presence of Zeus may be noted in various scenes from heroic or other legends, which are more appropriately discussed under other headings ${ }^{[98]}$, such as the freeing of Prometheus ${ }^{[99]}$, the combat of Herakles and Kyknos ${ }^{[100]}$, or the weighing of the souls of Achilles and Hector ${ }^{[101]}$; at the sending of Triptolemos, the flaying of Marsyas, the death of Aktaeon, and that of Archemoros ${ }^{[102]}$; at the creation of Pandora and the Judgment of Paris ${ }^{[103]}$; the rape of the Delphic tripod and that of the Leukippidae, at Peleus' seizing of Thetis, ${ }^{[104]}$ and with Idas and Marpessa. ${ }^{[105]}$ The story of the golden dog of Zeus, which was stolen by Pandareos, is referred to under a later heading. ${ }^{[106]}$

Hera apart from Zeus appears but seldom, but there are a few scenes in which she is found alone; of those in which she is an actor or spectator some have been already described, the most important being the story of Hephaistos' return to heaven. ${ }^{[107]}$ As her figure is not always strongly characterised by means of attributes, it is not always to be identified with certainty. As a single figure she forms the interior decoration of one fine R.F. kylix, ${ }^{[108]}$ and her そó $\alpha \nu 0 \nu$, or primitive cultidol, is sometimes found as an indication of the scene of an action. ${ }^{[109]}$ On one vase she is represented at her toilet. ${ }^{[110]}$
There is a vase-painting which represents Hera on her throne offering a libation to Prometheus, an aged figure who stands before her. ${ }^{[111]}$ She is also present at the liberation of Prometheus ${ }^{[112]}$; in a scene probably intended for the punishment of Ixion ${ }^{[113]}$; at the creation of Pandora ${ }^{[114]}$; and in scenes from the story of Io. ${ }^{[115]}$ She suckles the child Herakles in one instance, ${ }^{[116]}$ and in another appears with him in the garden of the Hesperides ${ }^{[117]}$; she is also present at his reconciliation with Apollo at Delphi, ${ }^{[118]}$ and at his apotheosis, ${ }^{[119]}$ receiving him and Iolaos. ${ }^{[120]}$ On an early Ionic vase she appears contending with him in the presence of Athena and Poseidon, and wears a goat-skin head-dress, as in the Roman type of Juno Sospita or Lanuvina. ${ }^{[121]}$
The scene in which she appears most frequently is the Judgment of Paris (see below, p. 122); she is also present at the birth of Dionysos ${ }^{[122]}$; at the stealing of Zeus' golden dog by Pandareos ${ }^{[123]}$; at the contest between Apollo and Marsyas ${ }^{[124]}$; at the slaughter of the Niobids ${ }^{[125]}$; and with Perseus and Athena. ${ }^{[126]}$
She appears sometimes with Hebe, Iris, and Nike, from whom she receives libations ${ }^{[127]}$; and in one scene, apparently from a Satyric drama, she and Iris are attacked by a band of Seileni and rescued by Herakles. ${ }^{[128]}$


From Ant. Denkm.

FIG. 115. POSEIDON AND AMPHITRITE ON A CORINTHIAN PINAX.

Poseidon is a figure somewhat rare in archaic art as a whole, especially in statuary, but is more frequently seen on vases, mostly in groups of deities, or as a spectator of events taking place in or under the sea, his domain. Among subjects already discussed, he is present at the birth of Athena, ${ }^{[129]}$ at the nuptials of Zeus and Hera,,${ }^{[130]}$ and in assemblies of the Olympian gods, generally with his consort Amphitrite ${ }^{[131]}$; he also takes part in the Gigantomachia and the reception of Herakles into Olympos. ${ }^{[132]} \mathrm{He}$ is represented in a group with his brother deities of the higher and nether world, Zeus and Hades ${ }^{[133]}$; with Apollo, Athena, Ares, and Hermes ${ }^{[134]}$; among the Eleusinian deities at the sending forth of Triptolemos ${ }^{[135]}$; and occasionally in Dionysiac scenes as a companion of the winegod. ${ }^{[136]}$ As a single figure he is frequently found on the series of archaic tablets or pinakes found near Corinth, and also in company with Amphitrite (Fig. 115) ${ }^{[137]}$; on later vases not so frequently. ${ }^{[138]}$ In one instance he rides on a bull, ${ }^{[139]}$ in others on a horse, sometimes winged ${ }^{[140]}$; elsewhere he drives in a chariot with Amphitrite and other deities ${ }^{[141]}$; he watches the Sun-god in his car rising out of the waves ${ }^{[142]}$; and one vase has the curious subject of Poseidon, Herakles, and Hermes engaged in fishing. ${ }^{[143]}$

PLATE L


From Baumeister.
Athena and Poseidon Contending for Attica; Vase from Kertch (at Petersburg).

Among scenes in which he plays an active part the most interesting is the dispute with Athena for the ownership of Attica, also represented on the west pediment of the Parthenon ${ }^{[144]}$; his love adventures, especially his pursuit of Amymone ${ }^{[145]}$ and Aithra, ${ }^{[146]}$ are common subjects, but in many
cases the object of his pursuit cannot be identified. ${ }^{[147]}$ He receives Theseus under the ocean, ${ }^{[148]}$ and possibly in one case Glaukos, on his acceptance as a sea-god ${ }^{[149]}$; he is also present at the former's recognition by Aigeus. ${ }^{[150]} \mathrm{He}$ is seen at the death of Talos, ${ }^{[151]}$ and with Europa crossing the sea. ${ }^{[152]}$ In conjunction with other deities, chiefly on late Italian vases, he is present as a spectator of various episodes, such as the adventures of Bellerophon, Kadmos, or Pelops, the rape of Persephone, the creation of Pandora, the death of Hippolytos, and in one historical scene, a battle of Greeks and Persians. ${ }^{[153]}$ He superintends several of the adventures of Herakles, notably those in which he is specially interested, as the contests with Antaios and Triton ${ }^{[154]}$; and he supports Hera in her combat with that hero. ${ }^{[155]}$ He is also seen with Perseus on his way to slay Medusa, ${ }^{[156]}$ and among the Gorgons after that event. ${ }^{[157]}$

In connection with Poseidon it may be convenient to mention here other divinities and beings with marine associations-such as Okeanos, Nereus, and Triton, and the Nereids or sea-nymphs, daughters of Nereus, with the more rarely occurring Naiads. Of these the name of Okeanos occurs but once, on the François vase. The figure itself has disappeared, but the marine monster on which he rides to the wedding of Peleus and Thetis, and the inscription, remain. Nereus appears as a single figure, with fish-tail and trident, ${ }^{[158]}$ but is most frequently met with in connection with the capture of his daughter Thetis by Peleus, either as a spectator or receiving the news from a Nereid. ${ }^{[159]}$ He also watches the contest of Herakles with Triton, ${ }^{[160]}$ himself encountering the hero in some cases. ${ }^{[161]}$ On one vase Herakles has seized his trident and threatens him by making havoc of his belongings. ${ }^{[162]}$ He appears at Herakles' combat with Kyknos, ${ }^{[163]}$ and at his apotheosis, ${ }^{[164]}$ and also offers a crown to Achilles. ${ }^{[165]}$ In one case he is found in Dionysos' company. ${ }^{[166]}$ With his daughter Doris he watches the pursuit of another Nereid by Poseidon. ${ }^{[167]}$
Triton is found as a single figure, ${ }^{[168]}$ and (chiefly on B.F. vases) engaged in a struggle with Herakles. ${ }^{[169]}$ He also carries Theseus through the sea to Poseidon, ${ }^{[170]}$ and watches the flight of Phrixos and Helle over the sea. ${ }^{[171]}$ The group of deities represented by Ino and Leukothea, Palaimon, Melikertes, and Glaukos appear in isolated instances, ${ }^{[172]}$ as do Proteus ${ }^{[173]}$ and Skylla ${ }^{[174]}$ -the latter as single figures, without reference to their connection with the Odyssey. A monstrous unidentified figure, with wings and a serpentine fish-tail, which may be a sea-deity (in one case feminine), is found on some early Corinthian vases ${ }^{[175]}$; possibly Palaimon is intended.

The Nereids, who are often distinctively named, are sometimes found in groups, ${ }^{[176]}$ especially watching the seizure of Thetis or bearing the news to Nereus ${ }^{[177]}$; or, again, carrying the armour of Achilles over the sea and presenting it to him. ${ }^{[178]}$ On one vase they mourn over the dead Achilles. ${ }^{[179]}$ They are also present at the reception of Theseus, ${ }^{[180]}$ the contest of Herakles and Triton, ${ }^{[181]}$ and with Europa on the bull. ${ }^{[182]}$ Kymothea offers a parting cup to Achilles ${ }^{[183]}$; the Naiads, who are similar beings, present to Perseus the cap, sword, shoes, and wallet. ${ }^{[184]}$ They are also found grouped with various deities, ${ }^{[185]}$ and even one in the under-world. ${ }^{[186]}$ Thetis appears once as a single figure, accompanied by dolphins ${ }^{[187]}$; for her capture by Peleus and relations with Achilles, see p. 120 ff .

The Eleusinian deities Demeter and Persephone (or Kore) are usually found together, not only in scenes which have a special reference to their cult, but in general assemblies of the gods. They once appear in the Gigantomachia. ${ }^{[188]}$ Scenes which refer to the Eleusinian cycle are found exclusively on later examples, ${ }^{[189]}$ and as a rule merely represent the two chief deities grouped with others, such as Dionysos and Hekate, and with their attendants, Iacchos, Eumolpos, and Eubouleus. ${ }^{[190]}$ One vase represents the initiation of Herakles, Kastor, and Polydeukes in the Lesser Mysteries of Agra ${ }^{[191]}$; another, the birth of Ploutos, who is handed to Demeter in a cornucopia by Gaia, rising from the earth, in the presence of Persephone, Triptolemos, and Iacchos ${ }^{[192]}$; and others, the birth of Dionysos or Iacchos-a very similar composition. ${ }^{[193]}$ Demeter and Persephone are represented driving in their chariot, with attendant deities and other figures, ${ }^{[194]}$ or standing alone, carrying sceptre and torches respectively, ${ }^{[195]}$ or pouring libations at a tomb (on a sepulchral vase). ${ }^{[196]}$ They are present at the carrying off of Basile by Echelos (a rare Attic legend), ${ }^{[197]}$ and Demeter alone is seen, once at the birth of Athena, ${ }^{[198]}$ once at the slaughter of the dragon by Kadmos, ${ }^{[199]}$ once enthroned, ${ }^{[200]}$ and once with Dionysos as Thesmophoros, holding an open roll with the laws ( $\theta \varepsilon \sigma \mu \mathrm{oí}$ ) of her cult. ${ }^{[201]}$



Kotyle by Hieron: Triptolemos at Eleusis (British Museum).

Closely connected with Eleusis is the subject of the sending forth of Triptolemos as a teacher of agriculture in his winged car. This is found on vases of all periods, ${ }^{[202]}$ but is best exemplified on the beautiful kotyle of Hieron in the British Museum (Plate LI.), where, besides Olympian and Chthonian deities, the personification of Eleusis is present. Besides the other Eleusinian personages, Keleos and Hippothoon are also seen. ${ }^{[203]}$ Triptolemos is generally seated in his car, but in one or two cases he stands beside $\mathrm{it}^{[204]}$; in another he is just mounting it. ${ }^{[205]}$ On the latter vase Persephone holds his plough. On a vase in Berlin Triptolemos appears without his car, holding a ploughshare; Demeter presents him with ears of corn, and Persephone holds torches. ${ }^{[206]}$
Persephone is also seen with Iacchos, ${ }^{[207]}$ who, according to various accounts, was her son or brother. She appears with Aphrodite and Adonis, ${ }^{[208]}$ and one vase is supposed to represent the dispute between her and Aphrodite over the latter, which was appeased by Zeus. ${ }^{[209]}$
The story of the rape of Persephone by Hades, her sojourn in the under-world, and her return to earth is also chiefly confined to the later vases, especially the incident of the rape. ${ }^{[210]}$ In the elaborate representations of the under-world on late Apulian vases she generally stands or sits with Hades in a building in the centre. ${ }^{[211]}$ She is often depicted in scenes representing the carrying off of Kerberos by Herakles, ${ }^{[212]}$ or banqueting with Hades. ${ }^{[213]}$ On both early and late vases Hermes, in his character of Psychopompos, is seen preparing to conduct her back from the nether world (see Plate XLV.), ${ }^{[214]}$ or actually on his way. ${ }^{[215]}$ In another semi-mystical version of the return of Persephone, signifying the return of spring and vegetation, her head or part of her body emerges from the earth, ${ }^{[216]}$ in one case accompanied by the head of Dionysos, whereat Satyrs and Maenads flee affrighted. ${ }^{[217]}$ The interpretation of some of these scenes, however, has been much questioned. ${ }^{[218]}$

The number of vases with subjects representing the three Delphic deities-Apollo, Artemis, and Leto-is considerable. The appearances of Apollo, at any rate, are probably only exceeded in number by those of Athena, Dionysos, and Herakles. It is, in fact, impossible to make a complete enumeration of the groups in which Apollo occurs, and a general outline alone can be given. ${ }^{[219]}$
Apollo as a single figure is often found both on B.F. and R.F. vases, usually as Kitharoidos, playing his lyre; sometimes also he is distinguished by his bow. ${ }^{[220]}$ As Kitharoidos he is usually represented standing, ${ }^{[221]}$ but in some cases is seated. ${ }^{[222]}$ He is sometimes accompanied by a hind ${ }^{[223]}$ or a bull (Apollo Nomios?). ${ }^{[224]} \mathrm{He}$ is represented at Delphi seated on the Pythoness' tripod, ${ }^{[225]}$ or is seated at an altar, ${ }^{[226]}$ or pours a libation. ${ }^{[227]}$ He rides on a swan ${ }^{[228]}$ or on a Gryphon, ${ }^{[229]}$ and also crosses the sea on a tripod. ${ }^{[230]}$ In some scenes he is characterised as Daphnephoros, ${ }^{[231]}$ holding a branch of laurel, or is represented in the attitude associated with Apollo Lykeios, resting with one hand above his head. ${ }^{[232]}$ In one scene the type of Apollo Kitharoidos closely resembles that associated with the sculptor Skopas. ${ }^{[233]}$


From Mon. dell' Inst. ix.
FIG. 116. APOLLO, ARTEMIS, AND LETO.

When he is grouped with Artemis, the latter deity usually carries a bow and quiver, ${ }^{[234]}$ or they pour libations to one another; ${ }^{[235]}$ but more commonly they stand together, without engaging in any action. They are also depicted in a chariot. ${ }^{[236]}$ More numerous are the scenes in which Leto is also included (as Fig. 116), though she is not always to be identified with certainty. ${ }^{[237]}$ In this connection may be noted certain scenes relating to Apollo's childhood: his birth is once represented, ${ }^{[238]}$ and on certain B.F. vases a woman is seen nursing two children (one painted black, the other white), which may denote Leto with her infants, though it is more probably a symbolic representation of Earth the Nursing-mother (Gaia Kourotrophos; see p. 73). ${ }^{[239]}$ Tischbein published a vase of doubtful authenticity, which represents Leto with the twins fleeing from the serpent Python at Delos ${ }^{[240]}$; but in two instances Apollo certainly appears in Leto's arms, in one case shooting the Python with his bow. ${ }^{[241]}$

With these three is sometimes joined Hermes-in one instance at Delphi, as indicated by the presence of the omphalos ${ }^{[242]}$; or, again, Hermes appears with Apollo alone, or with Apollo and Artemis. ${ }^{[243]}$ Poseidon is seen with Apollo, generally accompanied by Artemis and Hermes, also by Leto and other indeterminate female figures. ${ }^{[244]}$ In conjunction with Athena, Apollo is found grouped with Hermes, Dionysos, Nike, and other female figures; also with Herakles. ${ }^{[245]}$ With Aphrodite he is seen in toilet scenes, sometimes anointed by Eros. ${ }^{[246]}$ In one case they are accompanied by Artemis and Hermes, ${ }^{[247]}$ and on one vase Apollo is grouped with Zeus and with Aphrodite on her swan. ${ }^{[248]}$ He accompanies the chariots of various deities, such as Poseidon, Demeter, and Athena, ${ }^{[249]}$ especially when the latter conducts Herakles to heaven. ${ }^{[250]}$
Apollo, in one case, is associated with the local Nymph Kyrene on a fragment of a vase probably made in that colony. ${ }^{[251]} \mathrm{He}$ frequently receives libations from Nike, ${ }^{[252]}$ and in one case is crowned by her. ${ }^{[253]}$ With Nymphs and female figures of indeterminate character he occurs on many (chiefly B.F.) vases, sometimes as receiving a libation. ${ }^{[254]}$ On several red-figured vases he is accompanied by some or all of the nine Muses, one representing their contest with Thamyris and Sappho. ${ }^{[255]} \mathrm{He}$ and Artemis are specially associated with marriage processions, whether of Zeus and Hera or of ordinary bridal couples. ${ }^{[256]}$ Apollo also appears in a chariot drawn by a boar and a lion at the marriage of Kadmos and Harmonia. ${ }^{[257]}$
In Dionysiac scenes he is a frequent spectator ${ }^{[258]}$; he greets Dionysos among his thiasos, ${ }^{[259]}$ joins him in a banquet, ${ }^{[260]}$ or accompanies Ariadne's chariot ${ }^{[261]}$ or the returning Hephaistos ${ }^{[262]}$; listens to the Satyr Molkos playing the flutes, ${ }^{[263]}$ or is grouped with Satyrs and Maenads at Nysa. ${ }^{[264]}$ More important and of greater interest are the scenes which depict the legend of Marsyas, and they may fitly find a place here. The story is told in eight different episodes on the vases, which may be thus systematised:

1. Marsyas picks up the flutes dropped by Athena: Berlin 2418 = Baumeister, ii. p. 1001, fig. 1209: cf. Reinach, i. 342 (in Boston).
2. First meeting of Apollo and Marsyas: Millin-Reinach, i. 6.
3. The challenge: Berlin 2638.
4. Marsyas performing: B.M. E 490; Reinach, i. 452 (Berlin 2950), i. 511 (Athens 1921), ii. 312; Jatta 1093 = Reinach, i. 175 = Baumeister, ii. p. 891, fig. 965.
5. Apollo performing: Jatta $1364=$ Él. Cér. ii. 63; Wiener Vorl. vi. 11.
6. Apollo victorious: Reinach, ii. 310; Petersburg $355=$ Reinach, i. $14=$ Wiener Vorl. iii. 5.
7. Condemnation of Marsyas: Naples 3231 = Reinach, i. 405; Reinach, ii. 324.
8. Flaying of Marsyas: Naples 2991 = Reinach, i. 406 (a vase with reliefs); Roscher, ii. $2455=$ Él. Cér. ii. 64 .

Among other scenes in which Apollo (generally accompanied by Artemis) plays a personal part, the following may be mentioned: the slaying of the Niobids by the two deities ${ }^{[265]}$; the slaying of Tityos by Apollo ${ }^{[266]}$ (in one case Tityos is represented carrying off Leto, who is rescued by Apollo) ${ }^{[267]}$; and various love adventures in which Apollo is concerned. ${ }^{[268]}$ The name of the Nymph pursued by him in the latter scenes cannot, as a rule, be identified; one vase appears to represent him contending with Idas for the possession of Marpessa. ${ }^{[269]} \mathrm{He}$ also heals the Centaur Cheiron (this appears in burlesque form), ${ }^{[270]}$ and protects Creusa from the wrath of Ion. ${ }^{[271]}$ He is seen seeking for the cattle
stolen from him by Hermes, and contending with that god over the lyre. ${ }^{[272]}$ He frequently appears in Birth of Athena scenes as Kitharoidos, ${ }^{[273]}$ and also at the sending forth of Triptolemos ${ }^{[274]}$ or in the under-world. ${ }^{[275]}$ In one case he appears (with Athena, Artemis, and Herakles) as protecting deity of Attica, watching a combat of Greeks and Amazons. ${ }^{[276]}$ On one vase there is a possible reference to Apollo Smintheus, with whom the mouse was especially associated. ${ }^{[277]}$
Like other deities, Apollo and Artemis are frequently found on Apulian vases as spectators of the deeds of heroes, or other events in which they are more or less interested; some of these subjects have already been specified (see above, p. 17). Apollo especially is often seen in connection with the story of Herakles, or the Theban and Trojan legends. One burlesque scene represents his carrying off the bow of Herakles to the roof of the Delphic temple, ${ }^{[278]}$ and the subject of the capture of the tripod, with the subsequent reconciliation, is of very frequent occurrence. ${ }^{[279]}$ As Apollo Ismenios, the patron of Thebes, he is a spectator of the scene of the infant Herakles strangling the snakes ${ }^{[280]}$; in one case he is represented disputing with Herakles over a stag, ${ }^{[281]}$ which may be another version of the story of the Keryneian stag, a scene in which he also occurs. ${ }^{[282]} \mathrm{He}$ is seen with Herakles and Kyknos, ${ }^{[283]}$ Herakles and Kerberos, ${ }^{[284]}$ and is very frequently present at the apotheosis of the hero. [285]

Apollo and Artemis watch Kadmos slaying the dragon, ${ }^{[286]}$ and one or other of them is present at the liberating of Prometheus ${ }^{[287]}$; Apollo alone is seen with Oedipus and Teiresias, ${ }^{[288]}$ and watches the slaying of the Sphinx by the former. ${ }^{[289]}$ Among Trojan scenes he is sometimes present at the Judgment of Paris, ${ }^{[290]}$ also at the sacrifice of Iphigeneia, the pursuit of Troilos, the combats of Achilles and Ajax with Hector, and the recognition of Aithra by her sons. ${ }^{[291]} \mathrm{He}$ is, of course, frequently seen in subjects from the Oresteia, both in Tauris and at Delphi, ${ }^{[292]}$ and at the death of Neoptolemos before the latter temple. ${ }^{[293]}$ The pair are also seen at the carrying off of Basile by Echelos (see p. 140). ${ }^{[294]}$
 takes refuge from Ajax before it, instead of the usual statue of Athena. ${ }^{[295]}$

The appearances of Artemis, as distinct from Apollo, need not detain us long; she is sometimes found in mythological scenes, but frequently as a single figure, of which there are some fine examples. ${ }^{[296]}$ A winged goddess grasping the neck or paws of an animal or bird with either hand frequently occurs on early vases, and is usually interpreted as Artemis in her character of nótvid $\theta \eta \rho \tilde{\nu} \nu$ or mistress of the brute creation, sometimes called the Asiatic or Persian Artemis. ${ }^{[297]}$ On an early Boeotian vase (with reliefs) at Athens is a curious representation of Artemis Diktynna, a quasimarine form of the goddess, originally Cretan (?); on the front of her body is represented a fish, and on the either side of her is a lion. ${ }^{[298]}$ As a single figure she appears either with bow or quiver, or with lyre, sometimes accompanied by a stag or hind, or dogs ${ }^{[299]}$; she also rides on a deer ${ }^{[300]}$ or shoots at a stag. ${ }^{[301]}$ Or, again, she is attended by a cortège of Nymphs ${ }^{[302]}$ or rides in a chariot. ${ }^{[303]}$ Like that of Apollo, her そó $\alpha \nu 0 \nu$ is sometimes introduced into a scene as local colouring. ${ }^{[304]}$
The myth with which she is chiefly associated is that of Aktaeon, which may find a place here, though in most cases Aktaeon alone is represented, being devoured by his hounds. ${ }^{[305]}$ A curious subject on a vase at Athens appears to be the burial of Aktaeon, Artemis being present. ${ }^{[306]}$ She is also represented at the sacrifice of Iphigeneia, for whom a stag was substituted by her agency, ${ }^{[307]}$ and in connection with the same story at her shrine in Tauris. ${ }^{[308]}$ She is especially associated with Apollo in such scenes as the contest with and flaying of Marsyas, ${ }^{[309]}$ the rape of the Delphic tripod by Herakles ${ }^{[310]}$ and the subsequent reconciliation, ${ }^{[311]}$ or the appearance of Orestes at Delphi. ${ }^{[312]}$ The two deities sometimes accompany nuptial processions in chariots, Artemis as pronuba holding a torch, but it is not easy to say whether these scenes refer to the nuptials of Zeus and Hera or are of ordinary significance. ${ }^{[313]}$ A scene in which she pursues a woman and a child with bow and arrow may have reference to the slaughter of the Niobids. ${ }^{[314]}$
Other scenes in which she is found are the Gigantomachia ${ }^{[315]}$ and the Birth of Athena ${ }^{[316]}$; or she is seen accompanying the chariots of Demeter ${ }^{[317]}$ and Athena, ${ }^{[318]}$ and with Aphrodite and Adonis. ${ }^{[319]}$ She disputes with Herakles over the Keryneian stag ${ }^{[320]}$; and is also present when he strangles the snakes, ${ }^{[321]}$ and at his apotheosis in Athena's chariot. ${ }^{[322]}$ She attends the combat of Paris and Menelaos, ${ }^{[323]}$ and as protecting deity of Attica she watches a combat of Greeks and Amazons. ${ }^{[324]}$ A vase in Berlin, on which are depicted six figures carrying chairs (Diphrophori, as on the Parthenon frieze) and a boy with game, may perhaps represent a procession in honour of Artemis. ${ }^{[325]}$

Hephaistos is a figure who appears but seldom, and never as protagonist, except in the case of his return to Olympos, ${ }^{[326]}$ a subject already discussed (p. 17), as has been his appearance in the Gigantomachia ${ }^{[327]}$ and at the birth of Athena. ${ }^{[328]}$ In conjunction with the last-named goddess he completes the creation and adornment of Pandora on two fine vases in the British Museum ${ }^{[329]}$; he is also present at the birth of Erichthonios. ${ }^{[330]}$ His sojourn below the ocean with Thetis and the making of Achilles' armour also occur. ${ }^{[331]}$ Representations of a forge on some B.F. vases may have reference to the Lemnian forge of Hephaistos and his Cyclopean workmen. ${ }^{[332]} \mathrm{He}$ is also seen with Athena, ${ }^{[333]}$ at the punishment of Ixion, ${ }^{[334]}$ and taking part in a banquet with Dionysos. ${ }^{[335]}$

More important than any of the other Olympian deities, for the part she plays in vase-paintings, is Athena, the great goddess of the Ionic race, and especially of Athens. Of her birth from the head of Zeus we have already spoken, as also of the part she plays in the Gigantomachia (p. 15). The separate episode of her combat with Enkelados (her invariable opponent) is frequently depicted on B.F. vases ${ }^{[336]}$; but in one instance she tears off the arm of another giant, Akratos. ${ }^{[337]}$ We have also
seen her assisting at the creation of Pandora, ${ }^{[338]}$ and contending with Poseidon for Attica. ${ }^{[339]}$ She receives the infant Dionysos at the time of his birth, ${ }^{[340]}$ and is also generally present at that of Erichthonios, ${ }^{[341]}$ and once with Leto at that of Apollo and Artemis. ${ }^{[342]}$ She is, of course, an invariable actor in Judgment of Paris scenes, in one of which she is represented washing her hands at a fountain in preparation for the competition. ${ }^{[343]}$
From assemblies of the gods she is rarely absent, and she is also associated with smaller groups of divinities, such as Apollo and Artemis (p. 31), with Ares or Hephaistos, ${ }^{[344]}$ or with Hermes, ${ }^{[345]}$ or in Eleusinian ${ }^{[346]}$ or Dionysiac scenes. ${ }^{[347]}$ Thus she assists at the slaying of the Niobids, ${ }^{[348]}$ and on one vase is confronted with Marsyas, before whom she has just dropped the flutes. ${ }^{[349]}$ Scenes in which she appears receiving a libation from Nike are extremely common ${ }^{[350]}$; and she is also found with Iris and Hebe. ${ }^{[351]}$ In one instance she herself pours a libation to Zeus. ${ }^{[352]}$
Generally the companion of princes and patroness of heroes, she protects especially Herakles, whom she aids in his exploits and conveys finally in her chariot to Olympos, where he is introduced by her to Zeus. ${ }^{[353]}$ Some scenes represent the two simply standing together ${ }^{[354]}$; in others she welcomes and refreshes him after his labours, ${ }^{[355]}$ and in one case he is supposed to be represented pursuing her. ${ }^{[356]}$ It is unnecessary to particularise here the various scenes in which she attends Herakles (see p. 95 ff .); but one may be mentioned as peculiar, where she carries him off in her chariot with the Delphic tripod which he has just stolen. ${ }^{[357]}$ Another rare scene connected with the Herakles myths is one in which, after the fight with Kyknos (see p. 101), Zeus protects her from the wrath of Ares. ${ }^{[358]}$ Another of her favourite heroes is Theseus, ${ }^{[359]}$ and she is even more frequently associated with Perseus, whom she assists to overcome and escape from the Gorgons. ${ }^{[360]}$ She gives Kadmos the stone with which to slay the dragon, ${ }^{[361]}$ and is also seen with Bellerophon, ${ }^{[362]}$ Jason and the Argonauts, ${ }^{[363]}$ and Oedipus. ${ }^{[364]}$ She is present at the rape of Oreithyia by Boreas, ${ }^{[365]}$ at the punishment of Ixion, ${ }^{[366]}$ and at the setting out of Amphiaraos ${ }^{[367]}$; at the stealing of Zeus' golden dog by Pandareos ${ }^{[368]}$; also at the rape of the Leukippidae by the Dioskuri, ${ }^{[369]}$ and of Basile by Echelos (see p. 140), ${ }^{[370]}$ and in a scene from the tragedy of Merope. ${ }^{[371]}$
The scenes where she is assisting the Greek heroes in the Trojan War are almost too numerous to specify, her favourite being of course Achilles; her meeting with Iris (II. viii. 409) is once depicted, ${ }^{[372]}$ and she also appears in connection with the dispute over Achilles' arms. ${ }^{[373]}$ She is not so frequently seen with her other favourite, Odysseus, but in one instance she is present when he meets with Nausikaa, ${ }^{[374]}$ and also when he blinds Polyphemos. ${ }^{[375]}$ On the numerous vases representing Ajax and Achilles (or other heroes) playing at draughts, the figure or image of the goddess is generally present in the background. ${ }^{[376]}$ The same type on B.F. vases is adopted for the subject of two heroes casting lots before her statue ${ }^{[377]}$; lastly, she appears as the friend and patron of Orestes when expiating the slaying of his mother. ${ }^{[378]}$
As a single figure Athena is represented under many types and with various attributes, seated with her owl ${ }^{[379]}$ or in meditation, ${ }^{[380]}$ writing on tablets ${ }^{[381]}$ or holding the $\dot{\alpha} \kappa \rho о \sigma \tau o ́ \lambda$ ıov of a ship ${ }^{[382]}$; playing on a lyre ${ }^{[383]}$ or flutes, ${ }^{[384]}$ or listening to a player on the flute or lyre ${ }^{[385]}$; with a man making a helmet, ${ }^{[386]}$ or herself making the figure of a horse, ${ }^{[387]}$ and in a potter's workshop. ${ }^{[388]}$ On an early vase she appears between two lions ${ }^{[389]}$; or she is accompanied by a hind (here grouped with other goddesses). ${ }^{[390]}$ She is depicted running, ${ }^{[391]}$ and occasionally is winged ${ }^{[392]}$; or she appears mounting a chariot, accompanied by various divinities. ${ }^{[393]}$ As the protecting goddess of Attica she watches a combat of Greeks and Amazons ${ }^{[394]}$; she also attends the departure or watches combats of ordinary warriors, ${ }^{[395]}$ or receives a victorious one. ${ }^{[396]}$ In one instance she carries a dead warrior home. ${ }^{[397]}$
There are many representations of her image, either as a そóovov or cultus-statue, or recalling some well-known type of later art. Among the former may be mentioned her statue at Troy, whereat Kassandra takes refuge from Ajax, ${ }^{[398]}$ and the Palladion carried off by Odysseus and Diomede. ${ }^{[399]}$ Among the latter, three can be traced to or connected with creations of Pheidias: viz. the chryselephantine Parthenos statue ${ }^{[400]}$; the Lemnian type, holding her helmet in her hand (Plate XXXVI. ${ }^{[401]}$; and the Promachos, in defensive attitude, with shield and spear. ${ }^{[402]}$ The last-named type (earlier, of course, than the famous statue on the Acropolis) is that universally adopted for the figure of Athena on the obverse of the Panathenaic amphorae, on which she is depicted in this attitude between two Doric columns surmounted by cocks (on the later examples by figures of Nike or Triptolemos). ${ }^{[403]}$ Her statue is also represented as standing in a shrine or heroön ${ }^{[404]}$; or as the recipient of a sacrifice or offering. ${ }^{[405]}$ Her head or bust alone appears on several vases. ${ }^{[406]}$

Ares, in the few instances in which he appears on vases, is generally in a subordinate position; he is a spectator at the birth of Athena ${ }^{[407]}$; and appears twice on the François vase, at the wedding of Peleus and Thetis, and again in an attitude of shame and humility, to indicate the part he played in the story of Hephaistos and Hera; of his combat with the former god mention has already been made (p. 16). In the Gigantomachia his opponent is Mimas, with whom he also appears in single combat ${ }^{[408]}$; and he aids his son Kyknos against Herakles and Athena. ${ }^{[409]} \mathrm{He}$ is seen in several of the large groups of Olympian deities, ${ }^{[410]}$ or in smaller groups, e.g. with Poseidon and Hermes, ${ }^{[411]}$ with Apollo, Artemis, and Leto, ${ }^{[412]}$ or with Athena ${ }^{[413]}$ or his spouse Aphrodite ${ }^{[414]}$; also with Dionysos, Ariadne, and Nereus. ${ }^{[415]} \mathrm{He}$ also receives a libation from Hebe. ${ }^{[416]} \mathrm{He}$ is seen at the birth of Pandora, ${ }^{[417]}$ the punishment of Ixion, ${ }^{[418]}$ the slaying of the Niobids, ${ }^{[419]}$ the apotheosis of Herakles, ${ }^{[420]}$ and the contest of that hero with the Nemean lion. ${ }^{[421]}$ In some cases his type is not to be distinguished from that of an ordinary warrior or hero, as in one case where he or a warrior is seen between two women. ${ }^{[422]}$

Aphrodite seldom appears as a protagonist on vases, and in fact plays a small personal part in mythology. Apart from scenes of a fanciful nature she is usually a mere spectator of events; but as
she is not often characterised by any distinctive attribute, there is in many cases considerable difficulty in identifying her personality. This is especially the case on B.F. vases, on which her appearances are comparatively rare. One vase represents her at the moment of her birth from the sea in the presence of Eros and Peitho ${ }^{[423]}$; she also appears (on late vases only) with Adonis, ${ }^{[424]}$ embracing him, and in two instances mourning for him after his death ${ }^{[425]}$; but caution must be exercised in most cases in identifying this subject, which is but little differentiated from ordinary love scenes. One scene apparently represents Zeus deciding a dispute between her and Persephone over Adonis. ${ }^{[226]}$
More commonly she is seen riding over the sea on a goose or swan, ${ }^{[427]}$ of which there is one exceedingly beautiful example in the British Museum; here she is to be recognised as the Heavenly Aphrodite (Ourania), whereas in her character of Pandemos (profane or unlicensed love) she rides on a goat. ${ }^{[428]}$ In other instances the swan draws her chariot over the sea, ${ }^{[429]}$ or she is borne by a pair of Erotes, ${ }^{[430]}$ or sails in a shell, as in the story of her birth and appearance in the island of Kythera ${ }^{[431]}$; in others, again, her chariot is drawn (on land) by the Erotes, ${ }^{[432]}$ or by a lion, wolf, and pair of boars. ${ }^{[433]}$ She is also represented at her toilet ${ }^{[434]}$ or bathing, ${ }^{[435]}$ in the latter case in the attitude of the Vénus accroupie of sculpture; in these instances again there is often difficulty in distinguishing from scenes of ordinary life. Again, she is represented spinning, ${ }^{[436]}$ playing with a swan, ${ }^{[437]}$ or caressing a hare, ${ }^{[438]}$ or in company with a young hunter, ${ }^{[439]}$ possibly meant for Adonis.


From ' $\mathrm{E} \varphi .{ }^{\prime} \mathrm{A} \rho \chi$. 1897.
FIG. 117. APHRODITE AND HER FOLLOWING (VASE AT ATHENS).

In many scenes she is grouped with a cortège of attendant Nymphs and personified figures, often with names attached. ${ }^{[440]}$ Besides Eros, the following are found on these vases: Pothos (Longing) and Himeros (Charm), Hygieia (Health), Peitho (Persuasion), Paidia (Play), Pandaisia (Good Cheer), Eunomia (Orderliness), Euthymia (Cheerfulness), Eudaimonia (Happiness), Hedylogos (Winning Speech), and Kleopatra (a fancy name). Eros himself she embraces ${ }^{[441]}$ and suckles, ${ }^{[442]}$ and in some cases he assists in her toilet, perfuming her hair from an unguent flask, ${ }^{[443]}$ or adjusting her sandals ${ }^{[444]}$; he is seldom absent from her side on the later vases. In one instance Aphrodite and two Erotes make a basket of golden twigs. ${ }^{[445]}$ Their heads or busts are also found on late vases, as is that of Aphrodite alone. ${ }^{[446]}$
In relation to other mythological subjects she is frequently found in assemblies of the gods, especially in the spectator groups on Apulian vases ${ }^{[447]}$; also at the birth of Athena (rarely), ${ }^{[448]}$ at the marriage of Zeus and Hera, ${ }^{[449]}$ and in the Gigantomachia (very rare). ${ }^{[450]}$ She is seen among the Eleusinian deities, ${ }^{[451]}$ and in scenes from the nether world ${ }^{[452]}$; and she accompanies the chariots of Athena and Demeter. ${ }^{[453]}$ She also accompanies Poseidon in his wooing of Amymone, ${ }^{[454]}$ and is present at the slaying of Argos by Hermes, ${ }^{[455]}$ the punishment of Aktaeon ${ }^{[456]}$ and the contest of Apollo and Marsyas, ${ }^{[457]}$ and the wooing of Europa by Zeus. ${ }^{[458]}$ She is also grouped with Apollo and the Muses listening to Thamyris and Sappho. ${ }^{[459]}$
She is seldom seen with Herakles, but is present at his apotheosis, ${ }^{[460]}$ and also with him in the Garden of the Hesperides ${ }^{[461]}$; she is once seen with Theseus, ${ }^{[462]}$ and is present at the rape of the Leukippidae by the Dioskuri. ${ }^{[463]}$ Other heroes with whom she is connected (chiefly as a spectator on the Apulian vases) are Kadmos, Meleager, Perseus, and Pelops. ${ }^{[464]}$ In the tale of Troy, however, she plays a more important part. The Judgment of Paris is, of course, the scene with which she is chiefly connected ${ }^{[465]}$; in one instance she appears alone with Paris, unless Anchises be here meant. ${ }^{[466]}$ She is present at the first meeting and wedding of Peleus and Thetis ${ }^{[467]}$; at the toilet of Helen, and at her carrying off by Paris ${ }^{[468]}$; she assists her son Aeneas in his combat with Diomede, ${ }^{[469]}$ and is present at the rape of Kassandra. ${ }^{[470]}$ Helen takes refuge from Menelaos with her in her temple ${ }^{[471]}$; and finally she assists Aeneas to escape with the aged Anchises from Troy. ${ }^{[472]}$

Besides the scenes in which he appears with Aphrodite, Eros is a sufficiently important personage on vases to demand a section to himself. On the black-figured vases he never appears, nor on the earlier red-figured ones is it possible to find many instances, but towards the end of the fifth century his popularity is firmly established, while on the Italian vases, especially the the later Apulian, his presence is almost invariable, not only in mythological scenes, but in subjects from daily life. As a single figure he occurs again and again, generally holding a wreath, mirror, box, fan, or some object which may be regarded as signifying a lover's present.
Concurrently with his increasing popularity we note the change that comes over the conception of his personality. Beginning as a full-grown youth of fair proportions, his form gradually attenuates
and becomes more juvenile, or even in some cases infantile, as in Hellenistic art; while on the Apulian vases it assumes an androgynous, altogether effeminate character. His hair is arranged in feminine fashion, and his person is adorned with earrings, bracelets, anklets, and chains, remaining otherwise entirely nude, except that he sometimes wears soft shoes of a feminine kind (see Plate XLIV. and Fig. 118).

On the red-figured vases he generally appears as a single figure, though on those of the "fine" style he is often in attendance on Aphrodite; roughly speaking, it may be said that he figures in all scenes that deal with the passion of Love, such as the Judgment of Paris, ${ }^{[473]}$ the story of Adonis, ${ }^{[474]}$ the marriage of Dionysos and Ariadne, ${ }^{[475]}$ or the love-affairs of Zeus, Poseidon, and other gods. ${ }^{[476]}$
In other legends in which Love plays a part, such as the stories of Jason and Medeia, ${ }^{[477]}$ Phaidra and Hippolytos, ${ }^{[478]}$ Peleus and Thetis (or Theseus and Ariadne), ${ }^{[479]}$ Pelops and Hippodameia, ${ }^{[480]}$ Paris and Helen, ${ }^{[481]}$ he is also to be seen; as also at the carrying off of Persephone. ${ }^{[482]}$ Moreover, he occurs in several scenes where the reason is not so apparent, as at the birth of Erichthonios, ${ }^{[483]}$ in the Garden of the Hesperides, ${ }^{[484]}$ at the suckling of Herakles by Hera, ${ }^{[485]}$ with Herakles and a Centaur, ${ }^{[486]}$ and in the nether world ${ }^{[487]}$; also with deities such as Zeus, Athena, Nike, Helios and Selene, and Dionysos ${ }^{[488]}$; anointing the head of Apollo. ${ }^{[489]}$ The cosmogonic conception of Eros and his connection with Gaia is referred to in the next chapter under the latter heading (p. 73). Two Erotes draw the chariot of Demeter and Persephone ${ }^{[490]}$; and he is also seen in company with the Nereids. ${ }^{[491]}$ His presence in Dionysiac scenes, especially on the later vases, is often to be noted, though without any special meaning to be attached to $\mathrm{it}^{[492]}$; in one instance he is carried on the back of a Seilenos. ${ }^{[493]}$ In many of these scenes he merely accompanies Aphrodite, and they do not therefore require enumeration. Lastly, he is seen in company with Sappho, ${ }^{[494]}$ the great poetess of Love.
In non-mythological scenes he is found almost as frequently, especially in toilet scenes, ${ }^{[495]}$ or what we may regard as "scenes of courting"; but on the later vases these exhibit little or no action, and are not worth considering in detail, with a few exceptions. Thus we see Eros in marriage processions, ${ }^{[496]}$ in musical scenes, ${ }^{[497]}$ and at banquets ${ }^{[498]}$; at a sacrifice to a term ${ }^{[499]}$; watching girls play the game of morra ${ }^{[500]}$ ("How many fingers do I hold up?"); swinging them, or being danced on their feet ${ }^{[501]}$; in scenes of fruit- and incense-gathering ${ }^{[502]}$; or pouring wine into a krater. ${ }^{[503]}$ He appears with Agon (see p. 89) training in the palaestra. ${ }^{[504]}$ He pursues a youth or a girl, ${ }^{[505]}$ embraces a girl,,$^{[506]}$ or is carried by her pick-a-back ${ }^{[507]}$; offers a hare to a youth, ${ }^{[508]}$ or drives a youth with a whip from an altar ${ }^{[509]}$; and in one instance is about to chastise with a slipper two youths who are playing with a top and hoop ${ }^{[510]}$; these two latter scenes may be regarded as implying the power of Eros over youth. He is also seen shooting an arrow at a woman, ${ }^{[511]}$ an idea characteristic of Anacreontic and Alexandrine poetry. Another scene which recalls the wallpaintings of the Hellenistic Age is on a vase in the British Museum, representing two Erotes being weighed in scales. ${ }^{[512]}$
As a single figure he pursues a hare or kills a snake ${ }^{[513]}$; crouches before a plant ${ }^{[514]}$; is represented armed with shield and spear ${ }^{[515]}$; or places a sash or wreath on a tripod. ${ }^{[516]} \mathrm{He}$ is borne in a chariot by horses or swans, ${ }^{[517]}$ or rides on a horse, deer, dog, or swan. ${ }^{[518]} \mathrm{He}$ is also seen playing various games, such as the kottabos or morra, ${ }^{[519]}$ see-sawing or playing knucklebones, ${ }^{[520]}$ or with a ball or hoop or toy-boat. ${ }^{[521]}$ Or he plays the flute or lyre ${ }^{[522]}$; or plays with animals, such as a deer, dove, swan ${ }^{[523]}$; or finally (on Apulian vases) with a toy which resembles a wheel, and was probably used for magic purposes, as several passages of literature indicate. ${ }^{[524]}$


FIG. 118. EROS WITH KOTTABOS-STAND (BRIT. MUS.).

Lastly, we must give a survey of the frequent representations of Eros flying through the air carrying some attribute, which are so universal on the Italian vases, though some of the earliest types also represent him in this manner. Thus he carries a hare, or dove or other bird ${ }^{[525]}$; fruit (such as grapes or pomegranates), flowers, and branches ${ }^{[526]}$; wreaths, dishes of fruit, baskets, vases of various forms, and a spit of meat ${ }^{[527]}$; thyrsi, tambourines, lyres, torches, incense-burners, strigils, and ladders ${ }^{[528]}$; fans, parasols, mirrors, toilet-boxes, strings of beads, and sashes, or balls. ${ }^{[529]}$

Among the other associates of Aphrodite the chief are Peitho, Pothos, and Himeros, of whom mention has already been made. Peitho, except where her name is given, is not always easy to identify; the other two are not differentiated from Eros in form, and are, in fact, only variations of the conception of Love, as are the more rarely occurring Phthonos (Amor invidiosus) ${ }^{[530]}$ and Talas (Amor infelix), the latter of whom is associated with Sappho. ${ }^{[531]}$ Peitho is found with Himeros in one instance, ${ }^{[532]}$ and in another with Eukleia ${ }^{[533]}$; she also accompanies Aphrodite in Eleusinian and other scenes, ${ }^{[534]}$ at the deliverance of Andromeda, ${ }^{[535]}$ in the Garden of the Hesperides, ${ }^{[536]}$ and at the rape of Helen ${ }^{[537]}$ and the Leukippidae, ${ }^{[538]}$ and at the recovery of Helen by Menelaos ${ }^{[539]}$; she consoles her when mourning for Adonis ${ }^{[540]}$; and is present at the moment of her birth. ${ }^{[541]}$ Like Eros, she is seen in company with Sappho, ${ }^{[542]}$ and she also appears with Meleager and Atalante. ${ }^{[543]}$

Pothos and Himeros are seen floating over the sea with Eros on a fine R.F. vase in the British Museum, ${ }^{[544]}$ and at the Judgment of Paris ${ }^{[545]}$; and grouped together generally as Erotes, they may be distinguished on some
late vases. Pothos attends at the toilet of Helen, ${ }^{[546]}$ and plays the flutes in a Dionysiac scene. ${ }^{[547]}$ Himeros is seen swinging Paidia (another of Aphrodite's following) ${ }^{[548]}$; at the marriage of Herakles and Hebe ${ }^{[549]}$; presenting a crown to Dionysos, ${ }^{[550]}$ or removing his shoes, ${ }^{[551]}$ and accompanying him in a scene of preparation for the Satyric drama. ${ }^{[552]}$

Hermes, the messenger of the gods, is a common figure on vases of all periods, but chiefly as a subordinate agent, though he plays a leading part in some scenes, and frequently occurs as a single figure. ${ }^{[553]}$ Some small vases are decorated merely with his head, wearing the winged petasos. ${ }^{[554]}$ He is represented passing over the sea with a lyre, ${ }^{[555]}$ carrying a ram, ${ }^{[556]}$ riding on a ram or goat, ${ }^{[557]}$ or reclining on the latter animal ${ }^{[558]}$; also as making a libation ${ }^{[559]}$ or sacrificing a goat. ${ }^{[560]} \mathrm{He}$ presides over the palaestra, ${ }^{[561]}$ and is also seen standing between Sphinxes, ${ }^{[562]}$ or again (apparently as a statue) standing by a fountain. ${ }^{[563]}$ In one scene he leads a dog disguised as a pig, ${ }^{[564]}$ and he is also represented tending a flock of sheep, ${ }^{[565]}$ or fishing. ${ }^{[566]}$

The story so vividly recounted in the Homeric hymn of his infantile theft of Apollo's oxen is given in several scenes, including his taking refuge in his cradle (Fig. 119) ${ }^{[567]}$; he is also represented with his mother Maia, ${ }^{[568]}$ and disputing with Apollo over the lyre which he invented. ${ }^{[569]}$ The only other myth in which he plays a chief part is his pursuit of the Nymph Herse in the presence of her father Kekrops and her sister Aglauros. ${ }^{[570]}$ He appears in the Gigantomachia (in one instance as Zeus' charioteer), ${ }^{[571]}$ frequently at the birth of Athena, ${ }^{[572]}$ and with the bridal cortège of Zeus and Hera ${ }^{[573]}$; also in numerous assemblies of the Olympian deities, especially on the Apulian vases. ${ }^{[574]}$ He is present at the seizing of Ganymede, ${ }^{[575]}$ and defends Hera against an attack of Seileni. ${ }^{[576]}$ His slaying of Argos and deliverance of Io has already been mentioned ${ }^{[577]}$; and he assists in recovering the golden dog of Zeus which was stolen by Pandareos. ${ }^{[578]}$


FIG. 119. HERMES WITH APOLLO'S OXEN

He is present at the return of Hephaistos, ${ }^{[579]}$ at Poseidon's capture of Amymone, ${ }^{[580]}$ with Aphrodite mourning for Adonis, ${ }^{[581]}$ and with Apollo slaying Tityos and the Niobids and contending with Marsyas, ${ }^{[582]}$ also at his reconciliation with Herakles. ${ }^{[583]} \mathrm{He}$ accompanies the chariots of Poseidon, Apollo, and Athena, ${ }^{[584]}$ and also those of mortals, especially in wedding processions ${ }^{[585]}$; and he is also seen with Eos and Selene, ${ }^{[586]}$ Kastor and Polydeukes, ${ }^{[587]}$ Prometheus, ${ }^{[588]}$ Leda at the finding of the egg, ${ }^{[589]}$ and at the birth of Pandora. ${ }^{[590]} \mathrm{He}$ is specially associated with Zeus, Apollo, Athena, and Dionysos, ${ }^{[591]}$ and also appears with Aphrodite Pandemos ${ }^{[592]}$; he is not infrequently found in Dionysiac scenes ${ }^{[593]}$; and to him is entrusted the newly born Dionysos to be handed over to the Nymphs of Nysa. ${ }^{[594]}$ On B.F. vases he is frequently seen leading a procession of Nymphs. ${ }^{[595]}$
As a Chthonian deity he is present in many scenes relating to the nether world, especially on the large Apulian vases, ${ }^{[596]}$ and in connection with the Eleusinian myths, such as the carrying off of Persephone. ${ }^{[597]}$ As Psychagogos or Psychopompos he is seen in Hades waiting to conduct Persephone to earth, or actually en route with her. ${ }^{[598]}$ He frequently performs the same office for mortals, conducting them to Charon's bark. ${ }^{[599]} \mathrm{He}$ is also found in company with Thanatos, ${ }^{[600]}$ and with Herakles bringing back Alkestis. ${ }^{[601]}$ A unique scene with Hermes in his Chthonian capacity is on a vase where he is represented chaining up Kerberos ${ }^{[602]}$; and another, yet more curious, depicts him standing by a jar ( $\quad$ í $\theta_{0}$ ) from which a number of small winged figures ( $\varepsilon$ í $\delta \omega \lambda \alpha$ or ghosts) are flying out, with a supposed reference to the Athenian festival of the ПıӨoípıа. ${ }^{[603]}$
In the stories of Herakles he plays an important part, as also in those of Theseus and other heroes, and he is frequently visible in scenes from the Trojan legends. He conveys the infant Herakles to Cheiron for instruction, ${ }^{[604]}$ and conducts the hero to Hades to fetch Kerberos ${ }^{[605]}$; he is also seen feasting or bathing with him, ${ }^{[606]}$ and in company with him and Athena, ${ }^{[607]}$ and most frequently in connection with his apotheosis. ${ }^{[608]}$ With Theseus he is found more rarely ${ }^{[609]}$; but he frequently accompanies Perseus in his flight from the Gorgons. ${ }^{[610]}$ In other heroic scenes he is often one of the spectator deities on Apulian vases. In one instance he is seen banqueting with an unidentified hero. [611]

In the Trojan legends his chief appearance is as conductor of the goddesses to the Judgment of Paris ${ }^{[612]}$; and in one case he accompanies Peleus when bringing the infant Achilles to Cheiron. ${ }^{[613]}$ He also assists Zeus in weighing the souls of Achilles and Hector, ${ }^{[614]}$ conducts Priam to Achilles, ${ }^{[615]}$ and is present in many other scenes which need not be recounted in detail. A scene difficult of explanation represents him accompanying Odysseus in a chariot. ${ }^{[616]}$

A Herm or terminal figure of Hermes is a not uncommon feature on vases, especially of the R.F. period, ${ }^{[617]}$ and generally as the object of a sacrifice made to it. ${ }^{[618]}$
Last of the Olympian deities comes Hestia, who is usually coupled with Hermes; she, however, only appears on a few vases in gatherings of the Olympian deities, ${ }^{[619]}$ as on the François vase, where she attends the nuptials of Peleus and Thetis, and at the marriage of Herakles and Hebe. ${ }^{[620]}$

1. Il. xi. 635: cf. Athen, xi. 489 F.
2. i. 27 ff.: cf. Vol. I. p. 180.
3. Athenaeus, xi. p. 489 B.
4. Ibid. p. 782 B.
5. Od. 5 .
6. H.N. xxxiii. 155.
7. Ibid. 156.
8. Mart. viii. 51: cf. Juv. i. 76.
9. Stat. Theb. i. 543.
10. Virg. Ecl. iii. 46.
11. Schreiber, Alexandr. Toreutik, passim; Robert in 50tes Winckelmannsfestprogr. 1890.
12. Suet. Ner. 47: see Vol. I. pp. 134, 185, 499.
13. Cf. Miss Harrison, Mythol. and Monum. of Athens, p. ii; and see Vol. I. p. 13.
14. See on this subject J.H.S. xiii. p. 83.
15. Art. Poet. 147.
16. See Luckenbach in Jahrb. für Class. Phil. Suppl.-Bd. xi. (1880), p. 575 ff.
17. Op. cit. p. 493 ff.
18. The only exceptions are in the Panathenaic contests, which are of course not epic: cf. B.M. B 130-31.
19. See on this subject Comm. in hon. T. Mommseni, p. 163 ff.; Arch. Zeit. 1876, p. 116; DumontPottier, i. p. 366, and, J.H.S. x. p. 13 ff.
20. Luckenbach, op. cit. p. 560 ff.
21. There is only one vase (Naples $2296=$ Reinach, Répertoire, i. 476) on which the names of the Nereids are derived from Homer.
22. Op. et Di. 60 ff.; Scut. 345 ff., 178, 216; Theog. 820, 924 ff.
23. See J.H.S. xviii. p. 267.
24. Vol. I. p. 472: see also below, p. 159. On the subject generally see Vogel, Scenen Eur. Trag.; Huddilston, Gk. Tragedy in Vase-paintings; Engelmann, Arch. Studien zu den Tragikern.
25. Reinach, i. p. 114.
26. Op. cit. p. 636.
27. See for further details of early theories Vol. I. p. 21.
28. E.g. the B.F. hydriae with water-drawing scenes; the funeral lekythi; and the R.F. cups with their subjects relating to banquets and revels.
29. See also Chapters VI.-XI. throughout.
30. Morgenthau, Zusammenhang d. Bilder auf gr. Vasen.
31. Cf. for instance E 39, 45, 47, 48, in B.M.
32. See below, p. 108.
33. See p. 134.
34. This subject has been admirably treated by Wickhoff in his Roman Art (Eng. edn.), p. 13 ff.
35. The publication of this vase by Furtwaengler and Reichhold, Gr. Vasenmalerei, pls. 1-3, 11-13, with full discussion of subjects and technical details, has now superseded all previous illustrations. The only other complete ones were in Mon. dell' Inst. iv. 54-8 (Reinach, i. p. 13436) and Wiener Vorl. ii. pls. 1-5. The general view given in Plate XXVIII. is reproduced from the first-named work.
36. For the abbreviations used in the following notes see the Bibliography (Vol. I.).
37. Munich $125=$ Reinach, ii. $120=$ Furtwaengler and Reichhold, pl. 32; B.M. F 237: cf. also B.M. B 62.
38. The best and most complete examples are as follows:-B.F.: B.M. B 208; Reinach, i. $162=$ Louvre E 732. R.F.: B.M. E 47, 469; Berlin 2293, 2531 (both in Wiener Vorl. i. pls. 8 and 5; the latter very good); Bibl. Nat. 573 = Reinach, ii. 256. Best of all (late R.F.), a grand vase found in Melos (Monum. Grecs, 1875, pt. 4, pls. 1-2 = Wiener Vorl. viii. 7), on which no less than eighteen deities are engaged, but none of the giants are named. Hera, Hephaistos, and Amphitrite are absent. Figs. 111 and 112 give two of these-E 732 in Louvre, and the interior of Berlin 2531.
39. Arch. Anzeiger, 1890, p. 8.
40. Reinach, ii. $188=$ Él. Cér. i. 5.
41. B.M. E 47; Berlin 2293.
42. B.M. B 253, E 443 (and see p. 56).
43. Bull. de Corr. Hell. xx. (1896), pl. 7: cf. the archaic frieze of the Siphnian treasury at Delphi.
44. B.F.: B.M. B 147 (a very fine early example, but much restored), 244 (Fig. 113), 424; Berlin 1704 (also good). R.F.: B.M. E 15, E 410 (fine); Reinach, ii. 207.
45. Reinach, i. 171.
46. Reinach in Revue des Études Grecques, 1901, p. 127, traces the subject to a Megarian origin.
47. B.M. Vases, ii. p. 11.
48. B.M. B $147,218,244$.
49. Cat. 444.
50. See B.M. B 157, B 341; also Berlin 1899 (= Él. Cér. i. 22) and Reinach, ii. 21, 2.
51. E.g. B.M. B 197 (a fine vase, by Amasis?) and B 298: see on the subject Foerster, Hochzeit des Zeus und Hera.
52. B.M. E 82; Wernicke, Ant. Denkm. pl. 1, $7=$ Reinach, ii. 266.
53. Petersburg $355=$ Reinach, i. $14=$ Wiener Vorl. iii. 5 (also interpreted as a sculptor finishing off a statue of Hera).
54. B.M. F 269 (gods nicknamed respectively Daidalos and Enyalios).
55. B.F.: François vase; B.M. B 42 (Plate XXI.), 264; Vienna 218; Athens 628 = Ath. Mitth. 1894, pl. 8. R.F.: Bibl. Nat. 539 = Reinach, ii. 261; Reinach, ii. 3 = Millin-Reinach, i. 9; Reinach, ii. 311; Munich $776=$ Baumeister, i. p. 644, fig. $714=$ Furtwaengler and Reichhold, pl. 29; Munich $780=$ Él. Cér.: i. pl. 46 A = Wiener Vorl. i. 9, 3.
56. See below, p. 107; the best examples are Berlin 2278 = Ant. Denkm. i. 9 (Sosias); B.M. B 379; Reinach, ii. 76 (in Berlin).
57. B.M. B 345; E 67, 444; Berlin 2060; Reinach, i. 157, 1, 2 and 203 = Baumeister, iii. pl. 93, fig. 2400 (by Oltos and Euxitheos, a very fine example); a late instance, Petersburg $419=$ Reinach, i. 161 .
58. Reinach, i. 98; 194 (Dareios in council).
59. B.M. F 278; Reinach, i. 379.
60. B.M. F 271.
61. B.M. F 279.
62. Numerous examples will be found in the pages of Reinach's Répertoire.
63. Rape of Persephone: Reinach, i. 99; other scenes, ibid. i. 355; B.M. F 270.
64. E $668=$ Reinach, i. 435; and cf. Jatta $1405=$ Reinach, i. 483; Bibl. Nat. 489.
65. Reinach, ii. 287.
66. B.M. B 425: cf. Mus. Greg. ii. 21, 1.
67. Él. Cér. i. 82 (also i. 22?), and Vienna 329.
68. Él. Cér. ii. 30 (may be Poseidon); Micali, Mon. Ined. 37, 3; B.M. E 432 (Artemis); Naples S.A. $702=$ Reinach, i. 499 and Reinach, ii. 183 (Aphrodite); Bibl. Nat. 229 (Zeus with Hera, Athena, Ares, and Hermes); Arch. Anzeiger, 1898, p. 189, and Boston Mus. Report, 1899, No. 15 (with Hermes).
69. B.M. B 166, B 379, B 424, E 262; Furtwaengler and Reichhold, 20; Berlin 1857 (H. plays lyre); Petersburg 1775 = Wiener Vorl. iii. 9, $1=$ Reinach, i. 302 (parody): and see below, p. 107.
70. Reinach, i. 156, 1.
71. Él. Cér. i. 14 (now in B.M.); Munich $345=$ Reinach, i. 66.
72. Arch. Anzeiger, 1895, p. 38 (fine polychrome pyxis in Berlin).
73. B.M. E 381; Él. Cér. i. 20.
74. B.M. F 278; Roscher, iii. p. 969.
75. Hartwig, Meistersch. pl. 68 (in Louvre): cf. Eusebius, Prep. evang. iii. 84b.
76. Él. Cér. i. 29A (doubtful).
77. Reinach, i. 335, 2.
78. Él. Cér. i. 18 (= Helbig, ii. p. 310, No. 104); Bibl. Nat. 416 = Reinach, i. 472; Berlin 2032 = Reinach, i. 334.
79. Röm. Mitth. 1887, pl. 10.
80. B.M. F 542.
81. B.M. E 313; Reinach, i. 408.
82. Petersburg 1792 = Reinach, i. 1: see Robert, Arch. Märchen, pl. 2, p. 179 ff.
83. Petersburg 1793 = Reinach, i. 3; Bibl. Nat. $219=$ Mon. Ant. di Barone, pl. 1; Boston Mus. Report, 1895, No. 27: see also for the first Robert, Arch. Märchen, pl. 3, p. 189.
84. B.M. E 182; Bibl. Nat. $440=$ Reinach, ii. 260; and see p. 55 , note 644.
85. B.M. F 150; Jahrbuch, i. (1886), p. 276 (see Vol. I. p. 473).
86. B.M. F 149 (signed by Python) = J.H.S. xi. pl. 6; B.M. F 193.
87. B.M. F 286; Reinach, i. 278.
88. B.M. E 711; Petersburg 1723 = Baumeister, i. p. 406, fig. 447 (both R.F.).
89. Aegina: Helbig, ii. p. 311, No. $113=$ Wernicke, Ant. Denkm. 6, 4; Berlin 3239 = Él. Cér. i. 17; Boston Mus. Report for 1895, No. 39 (a sister brings the news to her father Asopos). Thaleia: Reinach, ii. $285=$ Él. Cér. i. $16=$ Wernicke, 6, 3.
90. Reinach, ii. 144: see below, p. 82.
91. B.F.: Louvre E $696=$ Reinach, i. 162; Athens 853 = Reinach, i. 507; id. ii. 49. R.F.: B.M. E 231; Munich 208 = Jahn, Entführung d. Europa, pl. 7 (polychrome on white); Petersburg $1637=$ Reinach, i. 24, and 1915 = Reinach, i. 22 (Europa brought to Zeus). Late: B.M. F 184; Naples 3218 = Jahn, op. cit. pl. 1 (Eros on bull).
92. Helbig, ii. p. 312, No. 118 = Overbeck, Kunstmythol. Atlas, pl. 6, fig. 13.
93. See generally Boston Mus. Report, 1900, p. 62, and Jahrbuch, 1903, p. 37; also Wiener Vorl. 1890-91, pl. 12.
94. Berlin 3164 , and Reinach, ii. $16=$ Él. Cér. i. $25,26$.
95. Reinach, i. 407.
96. Ibid. i. 111, $1=$ Berlin 2651 (R.F.), and 111, $2=$ Munich $573=$ Wiener Vorl. 1890-91, pl. 12, 1 (B.F.); Boston Mus. Report, 1900, No. 21.
97. B.M. B 164; Bibl. Nat. 302 = Él. Cér. iii. 97; Reinach, i. 363; Vienna 338 = Wiener Vorl. 189091, pl. 11, 1 = Fig. 114; ibid. i. 111, 4 = Jatta 1498 = Wiener Vorl. 1890-91, pl. 12, 2.
98. See generally Overbeck, Kunstmythol. ii. p. 27 ff., 181 ff.
99. Reinach, i. 388.
100. See p. 101; Zeus defending Athena against Ares after the combat, Arch. Anzeiger, 1898, p. 51 (Boston vase).
101. See p. 130.
102. B.M. E 140; Reinach, i. 342, 405, 452; ibid. i. 229; i. 235.
103. B.M. E 467 and J.H.S. xxi. pl. 1; Petersburg $1807=$ Reinach, i. 7.
104. B.M. B 316; E 224; Naples 2638 = Reinach, i. 78.
105. Munich $745=$ Furtwaengler and Reichhold, pl. 16.
106. See p. 141.
107. See above, p. 16.
108. Munich 336 = Overbeck, Kunstmythol. Atlas, pl. 9, 19; head only, Él. Cér. i. 29; also perhaps in Naples 2900 = Baumeister, iii. p. 1653, fig. 1714; but more probably Aphrodite is intended.
109. Overbeck, op. cit. iii. p. 18; Reinach, i. 231, ii. 16.
110. Él. Cér. i. 34.
111. Bibl. Nat. $542=$ Reinach, i. 141.
112. Reinach, i. 388.
113. B.M. E 155.
114. B.M. E 467.
115. B.M. B 164; Berlin 3164; Reinach, i. 111, 4.
116. B.M. F 107.
117. Naples 2873 = Millin-Reinach, i. 3: cf. B.M. F 148 and Reinach, i. 301.
118. Reinach, ii. 4.
119. B.M. B 379; Berlin 2278; Furtwaengler and Reichhold, 20.
120. Bibl. Nat. $253=$ Reinach, i. 399.

121. Petersburg $1792=$ Reinach, i. 1; Bibl. Nat. 219.
122. Bull. de Corr. Hell. 1898, p. 586.
123. Jatta $1093=$ Reinach, i. 175.
124. Reinach, i. 463.
125. Naples 2202 = Dubois-Maisonneuve, Introd. pls. 45-46.
126. Reinach, ii. 9, 321 and Él. Cér. i. 30 (Hebe); Reinach, ii. 325 (Iris).
127. B.M. E $65=$ Reinach, i. 193.
128. B.M. B 147, E 410.
129. B.M. B 197.
130. B.M. E 82; Berlin 2278 = Ant. Denkm. i. 9 .
131. See above, p. 13 (esp. Berlin 2531 (Fig. 112), Reinach, ii. $188=$ Él. Cér. i. 5, Boston Mus. Report, 1898, No. 41, and Helbig, ii. p. 304, No. 81 = Mus. Greg. ii. pl. 56, 1); B.M. B 166; Berlin 2278; Reinach, ii. 76; Louvre F $30=$ Rev. Arch. xiii. (1889), pl. 4 (by Amasis).
132. B.M. B 425: cf. Mus. Greg. ii. 21, 1.
133. B.M. B 212, B 262, and Reinach, ii. 23, $30=$ Munich 145 (Apollo); Boston Mus. Report, 1896, No. 1, and Athens 750 (Hermes); Athens 838, Él. Cér. ii. 30(?), iii. 13, 36 A (Athena and Hermes); B.M. B 191 (Ares and Hermes), B 228 (Athena, Ares, Herakles); Bourguignon Sale Cat. 41 (Apollo, Eros, Nereids, Papposilenos).
134. B.M. E 140.
135. Reinach, ii. 35; and see B.M. E 445.
136. Berlin 347-473 (alone), 474-537 (with A.): see also 787-833; specimens published in Ant. Denkm. i. pls. 7-8 (e.g. Fig. $115=$ Berlin 495).
137. B.M. E 322; Berlin 2164; Bibl. Nat. 363 = Reinach, ii. 257, 4; ibid. ii. 22, 8; Petersburg 1531, 2164. With Amphitrite pouring a libation: Wiener Vorl. vii. 2 (Duris in Louvre).
138. Reinach, ii. 35.
139. Athens 880; Bibl. Nat. 314.
140. Berlin 1869; Athens 836; Reinach, ii. 22; B.M. B 254 (A $\varphi \rho \rho o \delta i ́ t \eta$ inscribed by error for А $А р и т р і ́ т \eta)$.
141. Naples $3219=$ Reinach, i. 125.
142. Él. Cér. iii. 14.
143. Plate L.: cf. Bibl. Nat. 222 = Reinach, ii. 251 = Rayet and Collignon, p. 121.
144. Reinach, i. 124, 465, ii. 22 (Jatta 1346), 181; Athens 1171 = Heydemann, Gr. Vas. pl. 2, 1. Amymone alone may be intended on Bibl. Nat. 359.
145. B.M. E 174; Reinach, ii. 23 = Helbig, ii. p. 309, No. 102.
146. Bibl. Nat. 432 = Millin-Reinach, ii. 20; Él. Cér. iii. 20-25; Bibl. Nat. 370; Reinach, i. $286=$ Wiener Vorl. viii. 2, by Brygos (perhaps the Nymph Salamis: cf. J.H.S. ix. p. 56; the scenes on the exterior of this cup may refer to Kychreus, the son of Poseidon and Salamis, and the snake slain by him). Athens 1551 = Heydemann, Gr. Vas. pl. 1, fig. 2, seems to represent Poseidon pursuing a Nereid.
147. J.H.S. xviii. pp. 277-79, and cf. pl. 14 (Louvre G 104, by Euphronios), where Theseus is received by Amphitrite.
148. Bibl. Nat. $418=$ J.H.S. xviii. p. 278.
149. B.M. E 264.
150. Reinach, i. 361.
151. E.g. i. 36.
152. Reinach, i. 108, 195; Berlin 2634; Reinach, i. 379; i. 99; B.M. E 467; B.M. F 279; Reinach, i. 98.
153. B.M. B 196, Munich 114 = Reinach, i. 422; Reinach, ii. 61; and see B.M. B 228; Reinach, i. 301; ii. 66 (Kyknos).
154. B.M. B 57.
155. Ath. Mitth. 1886, pl. 10 (with the Graiae); Mon. Grecs, 1878, pl. 2 (in Louvre).
156. Millin-Reinach, ii. 4.
157. B.M. B $428=$ Roscher, iii. 247.
158. B.M. E 9, 73; Reinach, i. 64, i. 78 (= Naples 2638), ii. 278; Wiener Vorl. vii. 2 (Duris in Louvre); Munich 369 = Furtwaengler and Reichhold, 24 (Hieron): all R.F. See also p. 120.
159. B.M. B 201; Reinach, i. 346, 6-7.
160. B.M. B 225, E 162; Bibl. Nat. $255=$ Reinach, ii. 61. See p. 101.
161. Reinach, i. 339.
162. Berlin 1732 = Reinach, ii. 66 (inscribed 'A $\lambda \iota$ ıo̧ Г $\varepsilon ́ \rho \omega \nu$ ).
163. Reinach, ii. 76.
164. Naples $3352=$ Reinach, i. 485.
165. B.M. B 551.
166. Athens 1551.
167. B.M. E 109; Berlin 1676 = Reinach, ii. 22; Louvre F 148.
168. B.M. B 223, 311; Reinach, i. 227, ii. 61, 1. See p. 101.
169. J.H.S. xviii. p. 277.
170. Naples $3412=$ Reinach, i. 498.
171. B.M. B 166 (Palaimon?), E 156 (Leukothea: see p. 136); Reinach, i. 319 (Ino?): for possible instances of Melikertes see Berlin 779, 780, 914, and Roscher, ii. p. 2635.
172. Naples 1767 = Engelmann-Anderson, Atlas to Homer, Od. pl. iv. 22; B.M. B 201.
173. B.M. F 218.
174. Berlin 1007, 1008; Él. Cér. iii. 31 and 32 B (fem.); see Vol. I. p. 314.
175. Ant. Denkm. i. 59 (Branteghem Coll. 85); B.M. E 774 (names given to fancy scene): see also Munich 331; Naples $2638=$ Reinach, i. 78, 2; and Kretschmer, Gr. Vaseninschr. p. 200.
176. See p. 25, note 159; also Reinach, p. 231.
177. B.M. F 69; Jatta $1496=$ Reinach, i. 112; Reinach, i. 300; Roscher, iii. 221-24: see generally Heydemann's Nereiden mit Waffen.
178. Louvre E $643=$ Reinach, i. 311.
179. Reinach, i. 83, 232.
180. Ibid. ii. 61.
181. Berlin 3241 = Roscher, iii. 218; Petersburg $1915=$ Reinach, i. 21.
182. Reinach, i. 286.
183. B.M. B 155.
184. Bourguignon Sale Cat. 41; and in assemblies of the gods, Reinach, ii. 76.
185. Naples $3222=$ Reinach, i. 167.
186. Vase in Boston (1900 Report, No. 4): cf. for a Nereid(?) with dolphins, Louvre G 3.
187. Mon. Grecs, 1875, pt. 4, pls. 1-2.
188. The best example is a votive plaque found at Eleusis in 1895 (Athens $1968={ }^{\prime} \mathrm{E} \varphi$. Ap p .1901 , pl. 1): see also Petersburg 1792 and $525=$ Reinach, i. 1 and $11=$ Baumeister, i. pp. 474-75.
189. For other deities in Eleusinian scenes, see under Aphrodite, Hermes, Dionysos, Hekate.
190. B.M. F 68.
191. Rev. Arch. xxxvi. (1900), p. 93.
192. Petersburg 1792-93 = Reinach, i. 1, 3.
193. Reinach, ii. 32; B.M. F 90.
194. Reinach, ii. 321; Athens 1844 = Ath. Mitth. 1881, pl. 4.
195. Athens $1626=$ Dumont-Pottier, pl. 37.
196. Arch. Anzeiger, 1895, p. 39 (Berlin): cf. 'Е $\varphi$. Apx. 1893, pl. 9, and see p. 140 below.
197. Berlin $1704=$ Reinach, i. 197.
198. Berlin 2634.
199. Athens $1120=$ Ath. Mitth. 1901, pl. 8.
200. Reinach, ii. 329 (very dubious): cf. a terracotta from Cyprus in B.M. (A 326).
201. B.F.: Reinach, ii. 32-33. R.F.: B.M. E 140 (Plate LI.); E 183, E 281, E 469; Petersburg $1207=$ Reinach, i. 10; Wiener Vorl. iv. 7, 4. Late: Petersburg 350 = Reinach, i. 12; Helbig, $127=$ Millin-Reinach, ii. 31, and $152=$ Reinach, ii. 34; Wiener Vorl. i. 6.
202. Él. Cér. iii. 62; a newly acquired R.F. amphora in B.M.: see also Roscher, E.g. Keleos, p. 1028; Reinach, i. 286 (?); Munich 336.
203. B.M. E 274 and Munich 299: see Overbeck, Kunstmythol. iii. p. 535.
204. Bibl. Nat. $424=$ Reinach, i. 463.
205. Ath. Mitth. 1899, pl. 7.
206. Naples S.A. $11=$ Reinach, i. 401.
207. Reinach, i. 124.
208. Ibid. i. 156, 1: see Apollod. iii. 14, 4, and Hygin. Astron. ii. 7.
209. B.F.: B.M. B 310. R.F.: Reinach, i. 99, 156, 2; B.M. F 277; Baumeister, i. pl. 7, fig. 462: and see Helbig, 144 = Overbeck, Kunstmythol. Atlas, 18, 12.
210. See below, p. 67; also Berlin 1844 and Mus. Greg. ii. 21, 1, for earlier examples.
211. Reinach, i. 389 and 401 (= Naples S.A. 11); ibid. ii. 70.
212. B.M. E 82, F 68.
213. B.F.: B.M. B 261; Munich $728=$ Reinach, ii. 48. Late: B.M. F $332=$ Plate XLV.
214. Reinach, i. 522, $1=$ Roscher, ii. p. 1378; Baumeister, i. p. 423, fig. 463 (inscribed).
215. Reinach, i. 228 (Berlin 2646) and 348 (Boston); Arch. Anzeiger, 1895, p. 37 (Berlin); Harrison, Prolegomena to Gk. Religion, p. 277 (vase in Dresden; Satyrs astonished; Hermes present).
216. Reinach, i. $144=$ Louvre F $311=$ Baumeister, i. p. 445 , fig. 493.
217. Robert, Arch. Märchen, p. 198 ff.: see J.H.S. xix. p. 232, xx. p. 106 ff., and Jahrbuch, vi. (1891), p. 113; also below, under Ge-Pandora (p. 73), and Harrison, Prolegom. to Gk. Religion, p. 277 ff.
218. For a more complete tabulation see Overbeck, Kunstmythologie, vol. iv., especially pp. 42 ff., 322 ff .; also the plates of vol. ii. of the Él. Cér., and the Atlas to Overbeck, pls. 19 to end.
219. Bibl. Nat. $367=$ Reinach, ii. 257.
220. B.M. B 260, 681.
221. B.M. B 592; Berlin 1868.
222. Él. Cér. ii. 3; ii. 6A = Petersburg 411.
223. B.M. B 195, F 145(?); Berlin 1867; Reinach, ii. 29.
224. Reinach, ii. 286.
225. B.M. E 80.
226. B.M. E 516; Él. Cér. ii. 4.
227. B.M. E 232; Reinach, ii. 157, 296; Wiener Vorl. A. 10, 2.
228. B.M. E 543; Reinach, ii. 228; Berlin 2641 = Él. Cér. ii. 44.
229. Helbig, $97=$ Reinach, i. $79=$ Baumeister, i. p. 102, fig. 108.
230. Millin-Reinach, i. 46; Petersburg $411=$ Él. Cér. ii. 6A.
231. B.M. F 311; Naples 2902 = Él. Cér. ii. 97A.
232. Reinach, ii. $310=$ Él. Cér. ii. 65.
233. B.M. B 260, 548, E 274, 383, 514; Brygos vase in Louvre $=$ Reinach. i. 246 ; Naples R.C. $169=$ Reinach, i. 313 (Artemis with torch; localised at Delphi by a crow on the omphalos).
234. Él. Cér. ii. 10 (Berlin 2206) and 32; Vienna 331; Reinach, ii. 27; B.M. E 579; Forman Sale Cat. 356.
235. B.M. E 262; Reinach ii. 26 (= Louvre F 297), 284 (?); on Melian amphora (Athens $475=$ Rayet and Çollignon, pl. 3), Apollo in chariot, before which stands Artemis with stag.
236. B.M. B 680, E 256; Reinach, ii. 27-8, 45 (Naples S.A. 192); Athens 1342.
237. Athens 1962 (Leto about to bring forth, assisted by Eileithyia).
238. B.M. B 168, 213; Mus. Greg. ii. 39, 1 a; Él. Cér. ii. 2. Nyx (Night) was similarly represented on the Kypselos chest (Paus. v. 18, 1).
239. Reinach, ii. 310.
240. Berlin 2212 = Overbeck, Kunstmythol. iv. p. 378; Bibl. Nat. 306 = Él. Cér. ii. 1 A.
241. Berlin 2645 = Reinach, i. 397 (Apollo on omphalos, with hind); Reinach, ii. 26 (Louvre F 297),

28 (Bibl. Nat. 443), i. 184 (Fig. 116); B.M. E 502 (omphalos); Athens 1362 (by Mys, a fine example).
243. Reinach, ii. 29; B.M. B 215, 245; Petersburg $9=$ Reinach, ii. 24 (Apollo crowned by woman); Él. Cér. ii. 39; Bibl. Nat. 428; Munich 157.
244. B.M. B 212, 262; Reinach, ii. 23, 323; Él. Cér. ii. 30 (?), 36 C: and cf. Bourguignon Sale Cat. 41.
245. B.M. B 238; Reinach, ii. 24 (Munich 47), 25, 30; Naples 1891 = Él. Cér. ii. 35; Munich $609=$ Reinach, ii. 42.
246. B.M. F 311, 399.
247. B.M. E 785.
248. Reinach, ii. 183.
249. Ibid. ii. 25 (?), 32, 72-73; B.M. B 203, and Wiener Vorl. 1889, pl. 6, 1; and see generally Overbeck, Kunstmythol. iv. p. 51.
250. B.M. B 199-201, 211, etc.; Reinach, ii. 72; Berlin 1827 (all B.F.).
251. B.M. B 6; see Vol. I. p. 344.
252. Reinach, i. 253; Él. Cér. ii. 47-48 (also Iris).
253. Naples 1762 = Millingen-Reinach, 29.
254. B.M. B 259, 261; E 323, 415; Él. Cér. ii. 13 (= Reinach, ii. 27). In some of these Artemis may be intended.
255. Berlin 2388; Él. Cér. ii. 79, 80, 83, 86 (a fine example); Jatta 1538 = Reinach, i. 526; Helbig, 133 = Mus. Greg. ii. 15, 2; and cf. Boston Mus. Report for 1898, No. 54 (A. as a neat-herd?).
256. B.M. B 197, 298; B.M. B 257, Reinach, ii. 154, and Millingen-Reinach, 44.
257. Wiener Vorl. C. 7, $3=$ Roscher, ii. 842.
258. B.M. B 195, 255-56, 258; F 77; Reinach, ii. 23.
259. Petersburg $1807=$ Reinach, i. $8=$ Baumeister, i. p. 104, fig. 110.
260. Munich $62=$ Reinach, ii. 75.
261. B.M. B 179.
262. Reinach, ii. 31.
263. Reinach, ii. 287 = Él. Cér. ii. 62 (inscribed AE 1 IO $\Sigma$ : see below, p. 78).
264. Millin-Reinach, i. 54.
265. B.F.: Ant. Denkm. i. 22. R.F.: B.M. E 81; Reinach, i. 227 = Vol. I. p. 442. Late: Jatta $424=$ Reinach, i. 463; Naples $3246=$ Roscher, iii. 407 (Niobe at grave of children).
266. B.F.: Reinach, i. 244 (= Louvre E 864), 245; Bibl. Nat. 171 = ibid. ii. 252. R.F.: B.M. E 278.
267. Louvre G $42=$ Reinach, ii. 26.
268. B.M. E 64 (= Reinach, i. 111), E 170 (= E.g. i. 185); Él. Cér. ii. 21; and see Millin-Reinach, i. 71.
269. Munich $745=$ Reinach, i. $67=$ Furtwaengler and Reichhold, 16: see also Bibl. Nat. $171=$ Reinach, ii. 253.
270. B.M. F 151.
271. Reinach, i. 375.
272. Helbig $227=$ Reinach, i. 357; E.g. ii. 259 = Bibl. Nat. 820 (?).
273. B.M. B 147.
274. Naples 690, 3245.
275. Reinach, i. 355.
276. Millin-Reinach, ii. 25.
277. Reinach, ii. 297.
278. Petersburg $1777=$ Reinach, i. 153.
279. See below, p. 103.
280. B.M. F 479.
281. Reinach, ii. 56, 3: see p. 97.
282. Ibid. i. 233.
283. Berlin 1732 = Reinach, ii. 66.
284. Reinach, ii. 69.
285. See p. 106, note 1219, for B.F. scenes; for R.F. (in Olympos), Reinach, i. 222 and ii. 76.
286. Berlin 2634.
287. Reinach, i. 388.
288. Overbeck, Her. Bildw. pl. 2, 11 = Wiener Vorl. 1889, 9, 6.
289. B.M. E 696.
290. Berlin 2633; Reinach, ii. 87 (?); Wiener Vorl. E. 11 = Jahrbuch, 1894, p. 252.
291. B.M. F 159; François vase; Helbig 106 = Reinach, ii. 101; Wiener Vorl. vi. 7 (Duris in Louvre); B.M. E 468, Helbig 232 = Reinach, ii. 59; Reinach, i. 218.
292. Reinach i. 105 (Naples 3223) and i. 504; B.M. F 166, Berlin 3256, Naples $1984=$ Reinach, i. 390, 2, and Anzeiger, 1890, p. 90 (Berlin).
293. Reinach, i. 321.
294. Arch. Anzeiger, 1895, p. 39 (Berlin).
295. B.M. E 336: cf. Reinach, i. 218 and Overbeck, Kunstmythol. iv. p. 15.
296. Röm. Mitth. 1888, pl. 1; Hartwig, Meistersch. pl. 67, 2; E.g. p. 602 ff. (cultus-statue of the moon-goddess, Artemis Munychia); and see note 299.
297. Vol. I. p. 289; Berlin $301=$ Reinach, i. 380; Naples $304=$ Reinach, i. 380; Baumeister, i. p. 132, fig. 139; François vase; Arch. Anzeiger, 1890, p. 2 (Karlsruhe).
298. Athens $462=$ Reinach, i. 517: see $\$ 1 \$ 2$ 1892, p. 219 ff .
299. Él. Cér. ii. 7 (with hind and lyre); Bibl. Nat. 365 = Reinach, ii. 257 (drawing arrow from quiver); Bibl. Nat. 491 = Gaz. Arch. 1885, pl. 32; Reinach, i. 494 (with two dogs); Froehner, Musées de France, pl. 4.
300. Él. Cér. ii. 8, 43; Naples 3253 = Reinach, i. 194; B.M. F 274; Reinach, ii. 228.
301. B.M. E 432.
302. Millin-Reinach, ii. 77.
303. B.M. E $262=$ Reinach, ii. 45; and see Él. Cér. ii. 9 (in Louvre).
304. Naples $2200=$ Reinach, i. 379; Berlin 3164; Reinach, ii. 16 (?).
305. B.F.: Athens $882=$ Heydemann, Gr. Vas. pl. 8, 3; Él. Cér. ii. 103 C. Late: B.M. F 176, F 480 (Etruscan); Berlin 3239 = Él. Cér. ii. 103 B; Reinach, i. 229 and 250 (the former of these now at Boston).
306. Athens $835=$ Ath. Mitth. 1890, pl. 8.
307. B.M. F 159.
308. Reinach, i. 104, 133, 158, 504.
309. Athens $1921=$ Reinach, i. 511.
310. B.M. B 195, B 316, E 255; Bibl. Nat. 251 = Reinach, ii. 252.
311. Reinach, ii. 4.
312. Ibid. i. 132.
313. B.M. B 197, B 298; Reinach, ii. 154: cf. B.M. B 257.
314. Él. Cér. ii. 90.
315. See above, p. 15.
316. B.M. E 410.
317. Reinach, ii. 32.
318. B.M. B 203.
319. Reinach, i. 499.
320. B.M. B 231; Reinach, i. 233.
321. B.M. F 479.
322. B.M. B 320; Reinach, ii. 72; in Olympos, B.M. B 379, Berlin 2278, and Reinach, ii. 76.
323. Wiener Vorl. vi. 7 = Duris kylix in Louvre.
324. Millin-Reinach, ii. 25.
325. Arch. Anzeiger, 1895, p. 36.
326. See note 326 on p. 17.
327. B.M. E 47; Berlin 2293.
328. B.M. B 147, B 244; B.M. E 410; Bibl. Nat. 444.
329. E 467 and D 4.
330. Berlin $2537=$ Reinach, i. 208; ibid. i. 66 (Munich 345), 113.
331. Berlin 2294; and see below, p. 130.
332. B.M. B 507; Él. Cér. i. 51: cf. p. 171.
333. Bibl. Nat. $820=$ Reinach, ii. 259 (?).
334. Reinach, i. 330.
335. B.M. B 302, and cf. F 68.
336. B.M. B 252: see Arch. Journ. ii. p. 67.
337. Berlin 2957 = Él. Cér. i. 88 (Etruscan).
338. B.M. D 4; E 467.
339. Plate L.; and see p. 24.
340. B.M. E 182; Petersburg $1792=$ Reinach, i. 1.
341. Berlin 2537; B.M. E 372; Munich 345 = Reinach, i. 66; Wiener Vorl. iii. $2=$ Reinach, i. 113.
342. Athens 1962.
343. Reinach, i. 126: for other examples see p. 122.
344. Bibl. Nat. 216 = Él. Cér. iv. 96 (Ares); Bibl. Nat. $820=$ Reinach, ii. 259 (Hephaistos).
345. B.M. E 268; Bibl. Nat. 220 (= Reinach, ii. 211) and 229; and see under Hermes, p. 52, note 591.
346. Reinach, i. 11.
347. B.M. B 552; Berlin 2179 = Wiener Vorl. iii. 6; Mus. Greg. ii. 38, 2E.g. (with Poseidon and Dionysos).
348. Reinach, i. 463.
349. Berlin 2418 = Baumeister, ii. p. 1001, fig. 1209: cf. B.M. E 490 and Reinach, i. 342 (in Boston); Reinach, i. 175, 510, 511 (Athens 1921).
350. Él. Cér. i. 68, 76 A; with N. sacrificing, Boston Mus. Report, 1898, No. 51.
351. B.M. E 324 (Hebe?); Reinach, ii. 323 (Hebe?); ibid. 324 (Iris).
352. Vienna 329: cf. Él. Cér. i. 82 (A. with Z., but not pouring libation).
353. See p. 106 for these scenes, in which she is almost invariably present.
354. B.M. B 198, B 498; Helbig $93=\$ 1$ ii. 54, 2.
355. B.M. D 14; Berlin 2626 = Coll. Sabouroff, i. 67; Millin-Reinach, ii. 41.
356. Reinach, ii. 75 (doubtful).
357. Stackelberg, pl. 15.
358. Arch. Anzeiger, 1898, p. 51 (vase in Boston).
359. B.M. E 48; Berlin 2179 = Wiener Vorl. iii. 6; Boston Mus. Report, 1900, No. 25; Reinach, i. 55, 6 (Petersburg 116), 91, 421 (Petersburg 2012), ii. 271; and see Wiener Vorl. E. 12, 2.
360. B.M. B 155, 248, 380, E 181, 493, F 83; Bibl. Nat. 277 = Reinach, i. 290; Mon. Grecs, 1878, pl. 2.
361. B.M. E 81; Petersburg $2189=$ Reinach, i. 5(?).
362. Reinach, i. 108, 195, 331.
363. Ibid. i. 102, 226.
364. B.M. E 696.
365. Reinach, i. 184.
366. B.M. E 155.
367. Reinach, i. 480.
368. Bull. de Corr. Hell. 1898, p. 586.
369. Reinach, i. 231.
370. Arch. Anzeiger, 1895, p. 39 (Berlin).
371. Reinach, i. 363.
372. Ibid. ii. 296: see pp. 77, 128.
373. At meeting of Paris and Helen, Athens 1942 = Reinach, i. 402; at combat of Ajax and Hector, Wiener Vorl. vi. 7 (Duris in Louvre); at dispute over the arms, B.M. E 69; and see for other instances, Reinach, i. 3, 82, 138, 174, 218; ii. 59, 266.
374. Reinach, ii. 110.
375. Vase in Boston: see 1899 Report, No. 16.
376. See below, p. 124.
377. B.M. B 541, E 160.
378. Reinach, i. 5 (?), 158, 390; Arch. Anzeiger, 1890, p. 90 (Berlin).
379. Berlin $2313=$ Reinach, i. $416=$ Wiener Vorl. vii. 4, 3.
380. B.M. E $316=$ Plate XXXVI.
381. Reinach, ii. 123 (= Munich 1185), 262 (= Bibl. Nat. 369).
382. B.M. E 299.
383. Berlin $1846=$ Reinach, ii. 30 (before Dionysos).
384. Reinach, i. 342.
385. Ibid. ii. 166; Boston Mus. Report, 1896, No. 1.
386. Él. Cér. i. 83.
387. Berlin $2415=$ Reinach, i. 343 (the Trojan horse?).
388. Vol. I. p. 223, Fig. 72.
389. Reinach, i. 501.
390. Ibid. ii. 44.
391. B.M. E 515, 519.
392. Röm. Mitth. 1897, pl. 12; Bibl. Nat. 260; Louvre F 380.
393. B.M. B 203; Reinach, ii. 73; with Poseidon, Athens 836; with Hermes, Benndorf, Gr. u. Sic. Vasenb. pl. 4, 1.
394. Millin-Reinach, ii. 25.
395. Reinach, ii. 125, 130; Bibl. Nat. 232, $256=$ Rein. ii. 254.
396. Ibid. i. 44.
397. Bibl. Nat. 260.
398. B.M. B 242, 379, 541, E 160, 470, F 160, 209, 278; Munich $65=$ Reinach, i. 76; Naples $2422=$ Furtwaengler and Reichhold, 34.
399. See below, p. 133.
400. B.M. E 494, E 696; E 716 (moulded vase); and cf. B 611 (Nikephoros).
401. B.M. B 222, E 305 (Pl. XXXVI.), E 324, E 515; Él. Cér. i. 82; Bibl. Nat. 219; Bull. de Corr. Hell. 1898, р. 586.
402. For a fine example of Athena Promachos see Athens 1169 = Benndorf, Gr. u. Sic. Vasenb. 31, 2.
403. See Vol. I. p. 389, and Plates XXXIII., XXXIV.; also the B.M. examples B 130-46, 602-12.
404. Él. Cér. i. 67.
405. B.M. B 80; Berlin 1686 = Rayet-Collignon, pl. 7; Reinach, ii. 122; Athens 1858 = Reinach, i. 396 (identified as Athena Nike or Onka); for the trophy-like form of the figure on the last-
 Benndorf, Gr. u. Sic. Vasenb. pl. 31, fig. 1.
406. B.M. D 22; Bibl. Nat. 472 = Reinach, i. 131, 4.
407. B.M. B 147; Reinach, i. 156.
408. B.M. B 617; Berlin 2531; Bibl. Nat. 573 = Reinach, ii. 256; Athens $1259=$ Reinach, i. 506.
409. See p. 101; for his subsequent attack on Athena, Arch. Anzeiger, 1898, p. 51 (vase in Boston).
410. B.M. E 67, E 82; Reinach, i. 203.
411. B.M. B 191, В 228.
412. Amer. Journ. of Arch. 1896, p. 6, fig. 4.
413. Bibl. Nat. 216 (= Él. Cér. iv. 96) and 229.
414. Él. Cér. iv. 94-95; B.M. E 82, and Berlin 2278 (in assemblies of gods); Gaz. Arch. 1876, pl. 34.
415. B.M. B 551; and see Athens 903.
416. Él. Cér. iv. 98.
417. B.M. E 467.
418. B.M. E 155.
419. Reinach, i. 463.
420. B.M. B 379; Berlin 1961 (= Reinach, ii. 43) and 2278; Bibl. Nat. 254.
421. Reinach, ii. 91.
422. Él. Cér. iv. 99.
423. Röm. Mittheil. 1899, pl. 7: cf. Paus. vii. 8.
424. B.M. F 108, 373 (?); Millingen-Reinach, 26; Reinach, i. 119, 265, 325, 479 (?); Él. Cér. iv. 66 (?).
425. Reinach, i. $499=$ Naples S.A. 702; also Naples $2900=$ Millingen-Reinach, $41=$ Baumeister, iii. p. 1653, fig. 1714.
426. Reinach, i. 156.
427. B.M. D 2; J.H.S. xii. pl. 13; Jahrb. 1886, pl. 11, 2; Berlin 2636 (Él. Cér. iv. 5) and 2688 (=

Benndorf, Gr. u. Sic. Vasenb. 37, 3); Reinach, ii. 7, 183. Late: B.M. F 240, 556.
428. Berlin 2635 = Jahrbuch, 1889, p. 208 = Roscher, iii. 1514.
429. Berlin 2660.
430. Él. Cér. iv. 6.
431. Arch. Anzeiger. 1898, p. 137 (Dresden vase): cf. Paul, E.g. Fest. iii. E.g. Cytherea and the B.M. terracottas D 89-91.
432. B.M. E 712, 775; Athens 1944; Reinach, i. 124, ii. 323; Inghirami, Vasi Fitt. 324.
433. Reinach, i. 353.
434. B.M. E 230, F 311; Athens 1588 = Roscher, iii. p. 2119 (Fig. 117); Reinach, i. 39, ii. (290; Burlington Fine Arts Club Cat. 1903), p. 108, No. 46.
435. Reinach, ii. 301, 320; Berlin 2707 = Coll. Sabouroff, pl. 62, 2.
436. Petersburg $1983=$ Reinach, i. 15.
437. Froehner, Musées de France, pl. 13, 4.
438. Berlin $4126=$ Reinach, i. 128.
439. B.M. E $699=$ J.H.S. xi. pl. 4.
440. B.M. E 224, 697, 698, 775; Berlin 3257 (with Eunomia and Euthymia at marriage of Herakles and Hebe); Naples S.A. $316=$ Reinach, i. 477 (with Eukleia, Klymene, and Pannychis); Mon. Grecs, 1889-90, pls. 9-10 (without names); Fig. 117 = Athens 1588 = Roscher, iii. p. 2119 (with Kore, Hebe, Eudaimon, Harmonia, and others).
441. Reinach, ii. 315; Millin-Reinach, i. 65.
442. Reinach, i. 198.
443. B.M. E 230, E 289, and cf. F 311; Baumeister, i. p. 618, fig. 687 (? see p. 57, note 710 ).
444. Él. Cér. iv. 38.
445. Stackelberg, pl. 30: cf. B.M. E 697.
446. Reinach, i. 129; B.M. F 258; Bibl. Nat. 1005, 1133 (head of A. adorned by two Erotes).
447. See above, p. 17.
448. B.M. E 15; Reinach, i. 156(B.F.).
449. B.M. B 197.
450. Mon. Grecs, 1875, pls. 1-2.
451. Petersburg 350, $525=$ Reinach, i. 11-12; Rev. Arch. xxxvi. (1900), p. 93.
452. B.M. F 270, 332; Reinach, i. 355-56, 479.
453. B.M. B 203; F 90.
454. Reinach, i. 124,465 ; ii. 181.
455. Berlin 3164; Reinach, i. 111, 4 and 416.
456. Berlin 3239.
457. Reinach, i. 405, 452 (Berlin 2950); ii. 197.
458. Helbig 118 = Overbeck, Kunstmythol. Atlas, 6, 13.
459. Reinach, i. 526.
460. Reinach, i. 481; Berlin 2278; Furtwaengler-Reichhold, 20; at marriage with Hebe, Berlin 3257.
461. B.M. E 224.
462. Reinach, i. 91.
463. B.M. E 224.
464. Naples $3226=$ Millin-Reinach, ii. 7 (Kadmos); B.M. F 271 (Pelops); Reinach, i. 188, and

Jahrbuch, 1896, pl. 2 (Perseus); Naples S.A. 11 = Reinach, i. 401 (Meleager).
465. See below, p. 122.
466. Millingen-Reinach, 43: cf. Berlin 3244 for another possible Anchises.
467. B.M. E 424; François vase.
468. Reinach, i. 437.
469. B.M. E 73; Tyszkiewicz Coll. pl. 18 (now in Boston).
470. B.M. F 209.
471. Reinach, i. 222, and cf. i. 437 and B.M. F 278 (statue of A.); Noel des Vergers, Étrurie, iii. pl. 39.
472. B.M. B 173, 280; Reinach, ii. 116.
473. B.M. E 289; Reinach, i. 7, 15, 126; Wiener Vorl. A. 10, 3.
474. B.M. F 108 (anointing Adonis' hair).
475. B.M. E 129.
476. Zeus and Danaë: B.M. E 711; Europa: B.M. E 231, F 184, Naples 3218 (Eros on bull); Reinach, i. 22, 24.
477. Reinach, i. 449.
478. B.M. F 272, 279; Arch. Anzeiger, 1890, p. 89 (Berlin).
479. B.M. E 424; Plate XXXIX. fig. 2.
480. B.M. F 271, 331; Reinach, i. 235.
481. Reinach, i. 9, 402 (Athens 1942), 437.
482. Reinach, i. 156, ii. 309.
483. Ibid. i. 66.
484. B.M. E 227.
485. B.M. F 107.
486. Reinach, i. 22.
487. B.M. F 270; Reinach, i. 355, 455 (with Orpheus).
488. Reinach, i. 66; E.g. i. 100, 167; B.M. F 152, 194; Gerhard, Akad. Abhandl. pl. 7, fig. $1=$ Inghirami, Vasi Fitt. 394 (with Helios and Selene ?see p. 79, note 954); B.M. F 74 and F 102 (Herakles).
489. B.M. F 311: cf. F 399.
490. B.M. F 90.
491. B.M. F 69: cf. Bourguignon Sale Cat. 41.
492. B.M. E 228, 428, 435, 703; F 58, 60, 72, 382; Millin-Reinach, ii. 16 (offers wreath to D.).
493. Millin-Reinach, i. 20.
494. Reinach, i. 525, 526.
495. B.M. E 225, 229, 705; F 138, 308, 310, 332.
496. Reinach, i. 206.
497. B.M. E 126, 189, 191.
498. B.M. F 48.
499. Athens $1946=$ Dumont-Pottier, i. pl. 21, 5.
500. B.M. E 205 (?); Reinach, i. 412.
501. B.M. F 123 (cf. p. 50, note 547); Reinach, ii. 315 = Baumeister, ii. p. 780, fig. 834.
502. B.M. E 704; E 721.
503. Reinach, i. 232.
504. Bull. de Corr. Hell. 1899, p. 158 = Burlington Club Cat. 1903, p. 97, No. 11.
505. B.M. E 397, Reinach, ii. 142; B.M. E 217, 360, 702, Reinach, ii. 315.
506. Reinach, ii. 317; Hartwig, Meistersch. pl. 22, fig. 1 (? see p. 80, note 970).
507. Reinach, ii. 191.
508. Naples 2961.
509. B.M. E 297.
510. Hartwig, Meistersch. pl. 27, p. 262.
511. Petersburg 1181 = Reinach, ii. 318: cf. Reinach, i. 250, and Arch. Anzeiger, 1890, p. 89 (see p. 46, note 478).
512. F 220.
513. B.M. E 293; Reinach, i. 465.
514. B.M. E 652.
515. Bibl. Nat. 366 = Él. Cér. iv. 51.
516. B.M. E 526, 528.
517. Reinach, i. 479; Ibid. i. 57.
518. Reinach, i. 55, Millin-Reinach, ii. 59; Reinach, ii. 324, Él. Cér. iv. 53; Reinach, i. 347; E.g. ii. 248, B.M. F 555.
519. B.M. F 579 = Fig. 118; Reinach, i. 277.
520. Baumeister, iii. p. 1573, fig. 1633; B.M. E 501.
521. B.M. E 706, Naples 2872 = Reinach, ii. 169; B.M. E 296, Él. Cér. iv. 49; B.M. F 221.
522. B.M. E 241, Reinach, i. 229, ii. 302; Él. Cér. iv. 50.
523. B.M. E 213; Reinach, i. 36; B.M. F 68, F 441.
524. B.M. F 223, 279, 373: cf. Theocr. ii. 30 ( $\rho$ ó $\mu$ ßoc); Hor. Epod. xvii. 7 (turbo).
525. B.M. E 118, 571; F 219, 257, Reinach, i. 312 (dove), Él. Cér. iv. 49 (cock).
526. B.M. E 13; F 294, 340, 378; Reinach, i. 528, B.M. F 17, 308, 409.
527. B.M. F 132, 225, 278, 280, 258 (two Erotes holding wreath); F 165, 176, 329, 389; F 310; F 234, 257, 306, 414, 440; E 518.
528. B.M. F 349; E 242, F 391; Baumeister, i. p. 498, fig. 540; B.M. F 387, 481; F 294, 382, MillinReinach, i. 20 (torch and bow); B.M. F 443; E 239; F 308, 414 (Plate XLIV.).
529. B.M. F 420, 434; F 456; F 13, 219, 292, 325; F 31, 280, 317, 323; F 37; E 293, 388; F 31, 63, 234, 278; F 280, 315, 337, 373.
530. Naples S.A. 11 = Reinach, i. 401 (at death of Meleager).
531. Abhandl. d. k. sächs. Gesellsch. viii. pl. 1, fig. 1 (with Sappho).
532. B.M. E 222; also at the toilet of Aphrodite (Fig. 117 above).
533. Raoul-Rochette, Mon. Inéd. 8.
534. Petersburg $350=$ Reinach, i. 12; Rev. Arch. xxxvi. (1900), p. 93; Reinach, i. 124.
535. Reinach, i. 188.
536. B.M. E 224.
537. Reinach, i. 437.
538. B.M. E 224.
539. Noel des Vergers, Étrurie, iii. pl. 39.
540. Naples $2900=$ Millingen-Reinach, 41.
541. Röm. Mitth. 1899, pl. 7.
542. Reinach, i. 526.
543. Roscher, iii. p. 1811.
544. B.M. E 440.
545. Berlin 2633.
546. B.M. E 226.
547. Reinach, ii. 302: see also Boston Mus. Report, 1900, No. 11, and Jatta 1093 = Heydemann, Satyr- u. Bakchennamen, pl. 1 (holding grapes).
548. Munich $234=$ Reinach, i. 298 = Baumeister, iii. p. 1571, fig. 1632.
549. Berlin 3257.
550. Reinach, ii. 200.
551. Jatta 1093.
552. Naples $3240=$ Reinach, i. 114.
553. B.M. B 32; Louvre G 10; Reinach, ii. 276.
554. Berlin 4003 = Coll. Sabouroff, i. pl. 50.
555. B.M. E 58.
556. Louvre F 159; Él. Cér. iii. 87.
557. Berlin 2727 and Reinach, i. 159; Berlin 1881.
558. B.M. B 549.
559. Él. Cér. iii. 73 (Hermaios), 76.
560. Millin-Reinach, i. 51.
561. Reinach, ii. 276.
562. B.M. B 32; Athens 592 = Ath. Mitth. 1893, pl. 2.
563. B.M. B 332.
564. Vienna 321 (cf. Ar. Ach. 729 ff.).
565. Reinach, ii. 25.
566. Él. Cér. iii. 14 and 75.
567. Louvre E 702 = Reinach, i. 354; Helbig, 227 = Reinach, i. 357 = Baumeister, i. p. 680, fig. 741 (Fig. 119).
568. Reinach, ii. 25; De Witte, Coll. à l'Hôtel Lambert, pl. 1.
569. Bibl. Nat. $820=$ Reinach, ii. 259.
570. Él. Cér. iii. 93; Millin-Reinach, i. 70; Reinach, ii. 330.
571. B.M. F 237, and see above, p. 15.
572. Berlin 1702 (Hermes Kyllenios), and see p. 15.
573. B.M. B 197; Reinach, ii. 266.
574. See above, p. 17.
575. Reinach, i. 472.
576. B.M. E 65.
577. See p. 20.
578. Louvre A 478 (Hermes, 1898, p. 638); Bull. de Corr. Hell. 1898, p. 586.
579. Reinach, i. 234.
580. Ibid. i. 124.
581. Ibid. i. 499.
582. Ibid. i. 244; i. 463; i. 175.
583. Ibid. ii. 4.
584. B.M. B 203 (Athena); Reinach, ii. 22, 26, 73; Benndorf, Gr. u. Sic. Vasenb. 4, 1.
585. B.M. B 340; E 44, 459; Reinach, ii. 125, 152, 275.
586. Athens $1345=$ J.H.S. xix. pl. 10; Millin-Reinach, ii. 37 (Lasimos in Louvre).
587. Millin-Reinach, ii. 44.
588. Reinach, i. 388.
589. Ibid. i. 380.
590. B.M. E 467; J.H.S. xxi. pl. 1.
591. See generally under those deities; for H. and Athena: B.M. B 144, Reinach, i. 257, ii. 42 (Panathenaic); B.M. E 268, Reinach, i. 520 (Athens 477), ii. 25, 211 (Bibl. Nat. 220).
592. Berlin 2635 = Jahrbuch, 1889, p. 208.
593. B.M. B 257, 259, 267, 302 (banqueting); Berlin 2160 (with the Satyr Oreimachos); Reinach, i. 129 (playing lyre).
594. B.M. B 424, E 492; Petersburg 1792, 1793 ( $=$ Reinach, i. 1 and 3); Helbig, $103=$ Rayet and Collignon, p. 223; Reinach, i. 93, ii. 310; and see Ath. Mitth. 1889, pl. 1, p. 1 ff, and p. 55, note 642.
595. B.M. B 230; Oxford 222; Reinach, ii. 29.
596. See p. 69.
597. B.M. F 277; Reinach, i. 99: cf. Rev. Arch. xxxvi. (1900), p. 93.
598. See p. 28; also Naples 1989 = Él. Cér. iii. 91, and Reinach, i. 522.
599. Reinach, i. 456; Berlin 2455; Munich $209=$ Fig. 122, p. 70.
600. Athens $1093=$ Roscher, ii. p. 2678; Berlin 2991.
601. Louvre F 60.
602. Bibl. Nat. 269.
603. J.H.S. xx. p. 101: cf. the story of Pandora's "box," and see Vol. I. p. 152 and p. 75 below.
604. Munich $611=$ Reinach, i. 419.
605. Reinach, i. 389, ii. 32, 70.
606. B.M. B 167, В 301; В 229.
607. Reinach, i. 297, 323, ii. 70, 74-75.
608. B.M. B 166, 318, 379; Louvre F 116-117; Reinach, i. 222, 368, ii. 76.
609. Bibl. Nat. 172; Reinach, i. 91, ii. 271.
610. B.M. B 248, B 280, E 493; Bibl. Nat. 277 = Reinach, i. 290; E.g. ii. 48; Mon. Grecs, 1878, pl. 2 (represents an earlier episode).
611. Bibl. Nat. 224.
612. See p. 122.
613. Athens 966.
614. Reinach, i. 89, 144.
615. Ibid. i. 138, ii. 99.
616. Wiener Vorl. 1890-91, 10 (Louvre).
617. Él. Cér. iii. 78-81; Bibl. Nat. 839: see Roscher, i. p. 2393.
618. B.M. B 362, 627, E 585; Berlin 1928, 2172; Schreiber-Anderson, 16, 8, and 14, 3.
619. B.M. B 345, E 444; Berlin 2278; Reinach, i. 203; Ath. Mitth. 1889, pl. 1.
620. Forman Sale Cat. 364.

# CHAPTER XIII DIONYSOS AND MISCELLANEOUS DEITIES 

Dionysos and his associates-Ariadne, Maenads, and Satyrs-Names of Satyrs and Maenads-The Nether World-General representations and isolated subjects-Charon, Erinnyes, Hekate, and Thanatos-Cosmogonic deities-Gaia and Pandora-Prometheus and Atlas-Iris and Hebe-Personifications-Sun, Moon, Stars, and Dawn-Winds-Cities and countries-The Muses-Victory-Abstract ideas-Descriptive names.

## § 1. Dionysos and his Associates

The most important deity in Greek mythology outside the Olympian circle is undoubtedly Dionysos; but the part that is played by him and his attendant train in Greek art is out of all proportion even to this, at least in the vase-paintings. Apart from what we may regard as strictly mythological subjects, such as the Birth of Dionysos and scenes in which other gods or heroes are introduced, the number and variety of the themes are so great that an exhaustive enumeration is quite impossible; nor indeed would it repay the trouble to give a complete list of what may for convenience be termed Dionysiac scenes. Suffice it to say that they occur with equal frequency on the vases of all periods from the middle of the sixth century onwards.
The personages with whom we have to deal in this section are, besides Dionysos himself, his spouse Ariadne, Pan, with his "double" Aegipan, and the motley rout of Satyrs, Seileni, and Maenads, who appear either in the wine-god's company or by themselves. Dionysos is generally accompanied by one or more Maenads or Seileni, whether engaged in some definite action, such as pouring wine or playing flutes, or no; but he is also not infrequently seen as a single figure. ${ }^{[621]}$ On the earlier vases he is elderly and bearded, but on the later youthful and beardless. He is occasionally represented with horns, ${ }^{[622]}$ or in the form of a man-headed bull. ${ }^{[623]}$ He is depicted sacrificing at an altar, ${ }^{[624]}$ pouring a libation, ${ }^{[625]}$ or slaying a fawn ${ }^{[626]}$ or goat $\chi \iota \mu \alpha \iota \rho o \varphi o ́ v o \varsigma^{[627]}$; banqueting, ${ }^{[628]}$ or playing on the lyre. ${ }^{[629]}$ He rides on a bull, ${ }^{[630]}$ goat, ${ }^{[631]}$ mule, ${ }^{[632]}$ or panther, ${ }^{[633]}$ or in a winged chariot ${ }^{[634]}$-in one case drawn by Gryphons, in another by a Gryphon, bull, and panther ${ }^{[635]}$-or in a chariot shaped like a ship ${ }^{[636]}$; or is carried by a Seilenos. ${ }^{[637]}$ On a beautiful cup by Exekias ${ }^{[638]}$ he sails over the ocean in a boat, the mast of which grows into a vine. We are reminded in this scene of the Homeric hymn (xix.) and the story of the Tyrrhenian pirates, a subject which, according to one interpretation, is represented on a vase at Athens. ${ }^{[639]}$
His birth is not often represented, and chiefly on R.F. vases ${ }^{[640]}$; it has been referred to already in detail, in reference to Zeus. When handed over to Hermes, ${ }^{[641]}$ the newly born infant is conveyed by that god to Nysa, where he is finally delivered to a Seilenos, to be nursed by the Nymphs of that place. ${ }^{[642]}$ Or he is handed directly to a Nymph by Zeus, ${ }^{[643]}$ or, by a curious error or confusion on the artist's part, to Ariadne, his future bride. ${ }^{[644]}$ There is a possible representation of the Indian Dionysos or Bassareus, ${ }^{[645]}$ India being the land whence he was fabled to come; and other vases represent various events connected with his first manifestation of himself in Greece: such as the madness he brought on Lykourgos, who refused to receive him, ${ }^{[646]}$ and his subsequent sacrifice after his triumph ${ }^{[647]}$; the death of the similarly contumelious Pentheus (the story on which the plot of the Bacchae turns) ${ }^{[648]}$; or his supposed visit to the Athenian Ikarios. ${ }^{[649]}$ He sometimes appears with his mother Semele, whom he brings back from Hades ${ }^{[650]}$; in one or two instances their heads are seen rising from the ground to indicate their return from the nether world. ${ }^{[651]}$ They are then solemnly introduced into Olympos. ${ }^{[652]}$
Dionysos is frequently grouped with various deities, such as Apollo, Athena, and Hermes ${ }^{[653]}$; or they are seen in his company at a banquet. ${ }^{[654]}$ He sometimes appears at the birth of Athena, ${ }^{[655]}$ the apotheosis of Herakles, ${ }^{[656]}$ and his marriage with Hebe ${ }^{[657]}$; or in heroic scenes, such as the Judgment of Paris, ${ }^{[658]}$ or the combat of Herakles and Kyknos. ${ }^{[659]}$ He appears with the Seileni who attack Hera and Iris, ${ }^{[660]}$ and brings back Hephaistos to Olympos. ${ }^{[661]}$ He frequently takes part in the Gigantomachia, usually in single combat, ${ }^{[662]}$ being aided by his panther, and sometimes by Seileni and Maenads. ${ }^{[663]}$ Sometimes he is seen preparing for this event, wearing a cuirass, while Satyrs or Maenads hold the rest of his armour. ${ }^{[664]} \mathrm{He}$ is also grouped with Gaia Koupot $\rho$ ó $\varphi$ oc, ${ }^{[665]}$ and with Poseidon and Nike ${ }^{[666]}$; or accompanies the chariot of Athena ${ }^{[667]}$; and is seen in more than one assembly of the Olympian deities. ${ }^{[668]}$
His wooing and consoling of the deserted Ariadne ${ }^{[669]}$ is an attractive and popular subject, and several vases seem to represent the nuptial ceremonies between the pair, ${ }^{[670]}$ or the preparations for the same, with Eros assisting at the bride's toilet. ${ }^{[671]}$ Numerous are the instances in which he is seen grouped with Ariadne, often in loving embrace, ${ }^{[672]}$ and generally surrounded by his cortège, ${ }^{\text {[673] }}$ but also alone. Or, again, he and Ariadne drive in a chariot drawn by lions, ${ }^{[674]}$ panthers, ${ }^{[675]}$ stags, ${ }^{[676]}$ or goats ${ }^{[677]}$; in two cases Ariadne drives her own chariot alone, ${ }^{[678]}$ in another Dionysos is seen alone in a four-horse chariot. ${ }^{[679]}$ They are also seen reclining together at a banquet, ${ }^{[680]}$ sometimes accompanied by Herakles and other deities. ${ }^{[681]}$ On a vase of quasi-Etruscan style ${ }^{[682]}$ we see the sleeping Ariadne surrounded by Dionysos, Satyrs, and Maenads. This presumably refers to the scene in Naxos.

The numerous vases on which Dionysos appears, with or without Ariadne, accompanied by a throng of Satyrs and Maenads, sometimes in high revelry, sometimes in more peaceful circumstances, may next be mentioned, though it is not necessary to cite more than a few typical examples ${ }^{[683]}$; equally numerous are smaller groups, where only one or two followers appear, but only a few of these need be particularised. ${ }^{[684]}$ Thus we see him in peaceful converse with Maenads or Nymphs ${ }^{[685]}$; seizing them with amorous intent ${ }^{[686]}$; listening to a Satyr playing the lyre or flute ${ }^{[687]}$; or going to a banquet,
accompanied by Satyrs with torches ${ }^{[688]}$; or feeding a bird. ${ }^{[689]}$ In banquet scenes he receives drink from a Satyr, ${ }^{[690]}$ or plays at the kottabos (see p. 182) ${ }^{[691]}$; or Seileni steal his food and drink. ${ }^{[692]} \mathrm{He}$ watches a Lydian woman dancing in armour, ${ }^{[693]}$ or dances himself to the flutes played by an actor. ${ }^{[694]}$ In one instance he is seen leaving his chariot to join in the revels of his followers ${ }^{[695]}$; in another he takes part in the orgies of the Scythian Agathyrsi, ${ }^{[696]}$ and he is seen in a drunken condition, supported by one of his followers. ${ }^{[697]}$ He is not infrequently grouped with Eros, from whom he receives drink or a wreath ${ }^{[698]}$; also with Pan, ${ }^{[699]}$ or with semi-personified figures such as Komos (Revelry) ${ }^{[700]}$ or Oinopion (Wine-drinker). ${ }^{[701]}$
Pan only makes his appearance on late vases, usually in Dionysiac groups, ${ }^{[702]}$ or as a single figure on the smaller Apulian wares; when he is depicted with goat's legs and squat proportions, he is usually called Aegipan ${ }^{[703]}$; or, again, Paniskos, when he has the form of a beardless youth. ${ }^{[704]} \mathrm{He}$ surprises a Nymph asleep, ${ }^{[705]}$ and is sometimes associated with the Nymph Echo. ${ }^{[706]}$


FIG. 120. DIONYSOS WITH SATYRS AND MAENADS (HYDRIA BY PAMPHAIOS IN BRIT. MUS.).

Dionysos' connection with the Attic drama is more specially indicated by scenes in which he appears as the inventor or patron of tragedy, presenting a tragic mask to a young actor ${ }^{[707]}$; he also appears in an elaborate scene representing the preparations for a Satyric drama. ${ }^{[708]}$ As the object of worship he is sometimes seen in a form which implies a reference to some primitive cult, as an aniconic pillar-image ( $\xi$ ó $\alpha \nu 0 \nu$ or $\beta \alpha i ́ t v \lambda o \zeta)^{[709]}$; or, again, in the form of a tree (Dionysos Dendrites), and homage is paid to him by Maenads. ${ }^{[710]}$ Besides sacrifices to his image, we see sacrificial dances performed, ${ }^{[711]}$ or choragic tripods consecrated to him. ${ }^{[712]}$ His statue is once seen at a fountain. ${ }^{[713]}$

We must now treat of the scenes in which Seileni and Satyrs, Maenads and Nymphs, appear independently of Dionysos, or in particular actions without relation to him. They are, indeed, often, if not invariably, present in all scenes in which he takes part, whether mythological or of a less definite character; as, for instance, the return of Hephaistos to Olympos, ${ }^{[714]}$ in which the gods are usually accompanied by a more or less riotous escort of Satyrs, and others as already mentioned. The attack of the Satyrs on Iris and Hera has been alluded to in connection with the latter ${ }^{[715]}$; and they seldom elsewhere appear in relation to the Olympian deities or other myths, except in those scenes which depict the rising of Persephone or Ge-Pandora from the earth. ${ }^{[716]}$ But Satyrs and Maenads are sometimes represented as performing sacrifices, not only to Dionysos, ${ }^{[717]}$ but also to Herakles, ${ }^{[718]}$ or to a terminal figure of Hermes. ${ }^{[719]}$ We turn next to scenes of more general character.
There are numerous vases, especially of the R.F. period, on which groups of Satyrs and Maenads are represented in revels of a more or less wild and unrestrained character, or else in more peaceful association. Those in which Dionysos himself is present have already been enumerated, but the general types may be now considered. It may, perhaps, be possible to distinguish two, or even three, classes of this subject: the inactive groups of Satyrs and Maenads ${ }^{[720]}$; those in which they rush along in frenzy and unrestrained licence, brandishing their thyrsi, or with tambourines ( tympana) and other musical instruments ${ }^{[721]}$; and, lastly, scenes of convivial revelry (K $\tilde{\mu} \mu \mathrm{o}$ ), in which they are engaged in drinking from all sorts of vessels. ${ }^{[722]}$ Sometimes these revels are strictly confined to Satyrs, and then they become absolutely licentious in character ${ }^{[723]}$; or, again, a group of Maenads unattended tear along with torches, thyrsi, and musical instruments ${ }^{[724]}$; or, lastly, both join in dances hand-in-hand, a subject which on early vases is often adopted for a long frieze encircling a vase. ${ }^{[725]}$
As a pendant to these, many subjects and single figures must here be mentioned which seem to be excerpts from the larger compositions, as well as independent motives presenting special features found in the more elaborate scenes. We begin with subjects in which both Satyrs and Maenads take part, among which we find a favourite subject to be the gathering of fruit, ${ }^{[726]}$ especially grapes, and the processes of the vintage. ${ }^{[727]}$ Satyrs offer drink to Maenads, ${ }^{[728]}$ or play the flutes for them to dance $\mathrm{to}^{[729]}$; and there is a favourite series of subjects of an amorous character, in which the Satyrs pursue the objects of their passion, ${ }^{[730]}$ or surprise them asleep, ${ }^{[731]}$ seize them and overcome their struggles to escape, ${ }^{[732]}$ and finally enfold them in embraces, ${ }^{[733]}$ or carry them on their shoulders.
${ }^{\text {[734] }}$ Satyrs are also seen surprising women while bathing ${ }^{[735]}$; and a group of them appear astonished at the sunrise. ${ }^{[736]}$

We may next dismiss briefly the scenes which depict Maenads alone, usually as single figures. They sometimes appear in a state of frenzy (Fig. 121), ${ }^{[737]}$ dancing with snakes twisted round their
 they ride on a mule ${ }^{[741]}$ or bull, ${ }^{[742]}$ or are seen accompanied by hinds, goats, and panthers, ${ }^{[743]}$ or playing with a cat and bird. ${ }^{[744]}$


From Baumeister.
FIG. 121. MAENAD IN FRENZY (CUP AT MUNICH).

Satyrs in independent scenes often appear in burlesque guise, attired and acting as athletes, ${ }^{[745]}$ or as warriors, ${ }^{[746]}$ with the Amazonian pelta, ${ }^{[747]}$ or even enacting the part of Herakles in the Garden of the Hesperides ${ }^{[748]}$; and are present in other scenes of a burlesque nature, which may often be derived from the Satyric drama, such as one in which they carry ghosts ( $\varepsilon$ 臽 $\delta \omega \lambda \alpha$ ) with torches. ${ }^{[749]}$ There is also a long list of scenes of miscellaneous character: a Seilenos washing, ${ }^{[750]}$ or piling up bedding(?) ${ }^{[751]}$; fishing ${ }^{[752]}$; as potter, poking a furnace ${ }^{[753]}$; acting as footman to a girl and carrying a parasol ${ }^{[754]}$; flogging a youth, ${ }^{[755]}$ or holding a boy Satyr on his hand ${ }^{[756]}$; caressing a hare ${ }^{[757]}$; and so on. Satyrs fight with torches ${ }^{[758]}$; sport with deer and other animals ${ }^{[759]}$; ride on goats, asses, and mules, ${ }^{[760]}$ or lead them along ${ }^{[761]}$; and in one instance a Satyr has fallen off his mule, and a companion runs to help him ${ }^{[762]}$; in another, two Satyrs draw a third in a cart. ${ }^{[763]}$ They are seen carrying chairs ${ }^{[764]}$ and vessels of various kinds, such as amphorae, situlae, kraters, rhyta, ${ }^{[765]}$ or wine-skins ${ }^{[766]}$; also seated on wine-skins or wine-jars, ${ }^{[767]}$ playing games with jugs and wine-jars, ${ }^{[768]}$ balancing drinking-cups on their backs, ${ }^{[769]}$ pouring wine into a jar ${ }^{[770]}$ or drawing it out from the mixing-bowl, ${ }^{[771]}$ or playing games, such as see-saw or ball. ${ }^{[772]}$ Many of these scenes are from the interiors of R.F. cups, to which they were well adapted, the varied attitudes giving so much scope for the ingenuity of the daring artists of the period. Scenes in which Satyrs play the lyre or flute are, very numerous. ${ }^{[773]}$

A feature of the numerous Dionysiac subjects on vases is the tendency to individualise Satyrs and Maenads by means of names, sometimes meaningless, sometimes names otherwise known in mythology, and frequently personifications of abstract conceptions, such as we shall see later to be very common on vases of all periods; in these cases they usually have some relation to the character or occupation of the personages to whom they are attached. The Satyrs Marsyas and Olympos sometimes appear in the larger compositions ${ }^{[774]}$; the former has been already mentioned in another connection. There is also a curious representation of Akratos, ${ }^{[775]}$ the deity of unmixed wine (a liquid which to the Greeks implied an extravagance of revelry, owing to the intoxicating nature of the undiluted beverage). A type of Seilenos covered from head to foot with shaggy skin, and known as Papposeilenos, is often found on the later vases. ${ }^{[776]}$ It is difficult to distinguish in all cases between Seileni and Satyrs on the vases, and the exact differences between the various types have not yet been properly elucidated, so that the terms are of necessity somewhat conventional. ${ }^{[777]}$ The equine type of Satyr, with horse's hoofs as well as tail, which is so frequently found on the sixth-century Ionic vases, has been noted elsewhere. ${ }^{[778]}$ The young beardless Satyr is mostly found in the later period.
The number of vases on which Satyrs and Maenads are distinguished by name is very large, but only a few of the more important need be mentioned, along with some of the more curious names from the isolated instances. ${ }^{[779]}$ On a vase in Berlin ${ }^{[780]}$ no less than ten Maenads are named-Anthe
(Flower), Choro (Dance), Chrysis (Gold), Kale (Beauty), Kisso (Ivy), Makaria (Blessed), Naia, Nymphe, Phanope, and Periklymene (Renowned); on one at Leyden ${ }^{[781]}$ six—Dorkis, Io, Klyto, Molpe (Song), Myro, and Xantho (Fair-hair). On the former vase a Seilenos is expressly so named, and on the latter are four Satyrs with names; on a kylix by Brygos in the British Museum ${ }^{[782]}$ the Seileni attacking Iris are styled Babacchos, Dromis, Echon, Terpon, etc. ${ }^{[783]}$
Other Satyr-names are Briacchos, ${ }^{[784]}$ Dithyrambos, ${ }^{[785]}$ Demon, ${ }^{[786]}$ Hedyoinos (Sweet Wine), ${ }^{[787]}$ Hybris (Insolence), ${ }^{[788]}$ Hedymeles (Sweet Song), ${ }^{[789]}$ Komos (Revelry), ${ }^{[790]}$ Kissos (Ivy), ${ }^{[791]}$ Molkos, ${ }^{\text {[792] }}$ Oinos, ${ }^{[793]}$ Oreimachos, ${ }^{[794]}$ Simos (Snub-nose), ${ }^{[795]}$ Tyrbas (Rout). ${ }^{[796]}$
The Maenads' names are if anything more numerous: Bacche, ${ }^{[797]}$ Choiros (Pig!), ${ }^{[798]}$ Doro, ${ }^{[799]}$ Eudia (Calm), ${ }^{[800]}$ Eudaimonia (Happiness), ${ }^{[801]}$ Euthymia (Good Cheer), ${ }^{[802]}$ Erophyllis, ${ }^{[803]}$ Galene (Calm), ${ }^{[804]}$ Hebe (Youth), ${ }^{[805]}$ Komodia (Comedy) and Tragoedia (Tragedy), ${ }^{[806]}$ Kalyke (Bud), ${ }^{[807]}$ Lilaia, ${ }^{[808]}$ Mainas, ${ }^{[809]}$ Nymphaia, ${ }^{[810]}$ Opora (Harvest) and Oreias (Mountain-Nymph), ${ }^{[811]}$ Oinanthe, ${ }^{[812]}$ Pannychis (All-night Revel), ${ }^{[813]}$ Polyerate (Well-beloved), ${ }^{[814]}$ Philomela, ${ }^{[815]}$ Sime (Snub-nose), ${ }^{[816]}$ Terpsikome, ${ }^{[817]}$ Thaleia, ${ }^{[818]}$ Rodo (Rose), ${ }^{[819]}$ Paidia, ${ }^{[820]}$ and Kraipale, ${ }^{[821]}$ a name which is not easy to render in classical English, but which denotes the results following on a night's debauch.


From Furtwaengler and Reichhold.
The Under-World, from an Apulian Vase at Munich.

## § 2. The Nether World

The Chthonian character of Dionysos brings us by a natural transition to the deities of the underworld, and in connection therewith it will be convenient to treat of Death-deities of all kinds, as well as scenes representing the life of the nether regions.
Of Demeter and Persephone, the Chthonian goddesses par excellence, we have already spoken (p. 27), and of the myths connected with them, such as the rape of the latter by Hades or Pluto, the king of the realms named after him. It is owing to this connection with Persephone that Hades is found in such scenes as the sending forth of Triptolemos, ${ }^{[822]}$ or at her return to the upper world, ${ }^{[823]}$ as well as at the rape of his consort. He is frequently seen in company with her, as the rulers of the nether world, ${ }^{[824]}$ especially on the large Italian "under-world vases" referred to below, and sometimes they are represented banqueting together. ${ }^{[825]}$ As king of the nether world he is appropriately grouped with his brothers Zeus and Poseidon, the rulers of the air and ocean. ${ }^{[826]} \mathrm{He}$ is occasionally carried by Herakles on his shoulders, ${ }^{[827]}$ but the meaning of this subject is uncertain. He also appears as a single figure, with sceptre and cornucopia. ${ }^{[828]}$

The only general representations of the under-world are to be found on the large Apulian vases made for sepulchral purposes (Vol. I. p. 476), of which some half-dozen are conspicuous for the number of subjects and figures they contain. All these are collected together in the Wiener Vorlegeblätter, Series E., the list being as follows:-

| (1) Munich 849 | $=$ | Wiener Vorl. E. | pl. 1 | $=$ | Reinach, | i. 258 |
| :--- | :--- | :---: | :--- | :--- | :--- | :--- |
| (2) Naples 3222 | $=$ | $"$ | pl. 2 | $=$ | $"$ | i. 167 |
| (3) Karlsruhe 388 | $=$ | $"$ | pl. 3, 1 | $=$ | $"$ | i. 108 |
| (4) Naples S.A. 709 | $=$ | $"$ | pl. 3,2 | $=$ | $"$ | i. 455 |
| (5) Petersburg 424 | $=$ | $"$ | pls. 4 and |  |  |  |
|  |  |  | 5,1 | $=$ | $"$ | i. 355 |
| (6) Petersburg 426 | $=$ | $"$ | pl. 6,2 | $=$ | $"$ | i. 479 |

No. (1) is reproduced in Plate LII. On a smaller scale, or fragmentary, are the following:-

| (7) Petersburg 498 | $=$ | Wiener Vorl. E. | pl. 5,2 |  |  |  |
| :--- | :--- | :---: | :--- | :--- | :--- | :--- |
| (8) B.M. F 270 | $=$ | $"$ | pl. 6,1 | $=$ | Reinach, | i. 356 |
| (9) Karlsruhe 256 | $=$ | $"$ | pl. 6,3 | $=$ | $"$ | i. 455 |
| (10) Jatta Coll. 1094 | $=$ | $"$ | pl. 6,4 | $=$ | $"$ | i. 356 |
| (11) Naples S.A. 11 | $=$ | $"$ | pl. 6,5 | $=$ | $"$ | i. 401 |

There are also three B.F. vases having reference to the under-world, though in the first two cases it is probable that the scene relates to the return of Persephone (see p. 28), the accompanying figure of Sisyphos only being introduced to mark the locality:-
(12) B.M. B 261 (Hades, Persephone, Hermes, Sisyphos).
(13) Munich 728 = Wiener Vorl. E. pl. 6, $6=$ Reinach, ii. 48 (similar scene).
(14) Berlin 1844 (Persephone and Sisyphos only).

On the Apulian vases there is usually in the centre a pillared building representing the palace of Hades, in which he and his spouse stand or sit; round this are grouped various figures and episodes connected with the nether regions: Herakles carrying off Kerberos ${ }^{[829]}$; Orpheus with his lyre, sometimes accompanied by Eurydike ${ }^{[830]}$; persons undergoing punishment, such as Sisyphos with his rock ${ }^{[831]}$; Tantalos threatened with a rock, not as in the usual legend suffering from thirst ${ }^{[832]}$; the Danaids with their hydriae ${ }^{[833]}$; and Theseus and Peirithoös sitting with their hands bound behind them. ${ }^{[834]}$ In one instance a Fury, at the instance of Hades and Hekate, is binding one, the other having already entered on his punishment ${ }^{[835]}$; in another we see Theseus liberated and about to depart from his friend (see below, p. 111). ${ }^{[836]}$
Among the administrators of these penalties are Aiakos, Minos, and Rhadamanthos, the judges of the souls ${ }^{[837]}$; the Erinnyes or Furies ${ }^{[838]}$; and allegorical personages, such as Dike (Justice), ${ }^{[839]}$ Ananke (Necessity), ${ }^{[840]}$ or Poinae (Punishments). ${ }^{[841]}$ Of the Chthonian deities, Hermes, ${ }^{[842]}$ Hekate, ${ }^{[843]}$ Triptolemos, ${ }^{[844]}$ and Iacchos ${ }^{[845]}$ are present. Olympian deities are also sometimes introduced as spectators. ${ }^{[846]}$ Other figures introduced are Megara with the two children of Herakles ${ }^{[847]}$; Pelops with Myrtilos and Hippodameia ${ }^{[848]}$; a group of the Blessed Shades ${ }^{[849]}$; and (but not on this class of vase) Oknos with his ass, a subject depicted by Polygnotos in his great fresco at Delphi. ${ }^{[850]}$ The subject of Ixion on the wheel is usually found by itself, but occurs on the neck of one of the Apulian vases. ${ }^{[851]}$

Another subject which may be associated with the above scenes is that of Charon and his bark; on the vases, however, its significance is purely sepulchral, as it is confined to the Attic white lekythi (Vol. I. p. 459), on some of which the dead man is represented entering the ferry-boat. ${ }^{[852]}$ Some vases of Etruscan fabric also represent groups of Chthonian deities, especially Charon, who in the mythology of that people is no longer "the grim ferryman that poets write of," but Charun, a hideous demon wielding a huge hammer. ${ }^{[853]}$ In one instance he separates Alkestis from Admetos ${ }^{[854]}$; in another he watches Ajax stabbing a captive Trojan. ${ }^{[855]}$


FIG. 122. CHARON'S BARK (LEKYTHOS AT MUNICH).

The Erinnyes or Furies play an important part in the nether-world scenes, ${ }^{[856]}$ and one is also represented at the punishment of Ixion. ${ }^{[857]}$ They pursue Orestes after the slaughter of his mother and Aigisthos to Delphi and Tauris, ${ }^{[858]}$ and even when with Pylades he comes to make himself known to Electra. ${ }^{[859]}$ Among other mythological scenes they are found at the combat of Herakles and Kyknos ${ }^{[860]}$; with Pelops, ${ }^{[861]}$ and with Medeia and Jason ${ }^{[862]}$; and threatening with punishment
the hero Agrios, who is seized and bound upon an altar by Oineus and Diomedes. ${ }^{[863]}$ Kerberos is once seen without Herakles in the under-world vases ${ }^{[864]}$; and there is a very curious representation of his being chained up by Hermes. ${ }^{[865]}$
Hekate as a Chthonian deity frequently appears on the under-world vases ${ }^{[866]}$; she is also connected with Eleusinian scenes and legends, ${ }^{[867]}$ such as the sending of Triptolemos, ${ }^{[868]}$ the birth of Dionysos or Iacchos, ${ }^{[869]}$ or with the rape and return of Persephone. ${ }^{[870]}$ She appears also as a single figure. ${ }^{[871]}$ Allusion has already been made to the Chthonian associations of Hermes, Triptolemos, and Iacchos (pp. 27, 52).


FIG. 123. THANATOS AND HYPNOS WITH BODY OF WARRIOR (FROM BRIT. MUS. D 58).

Thanatos, the personification of Death, appears on vases ${ }^{[872]}$ almost exclusively in one aspect, as the bearer of souls in conjunction with Hypnos (Sleep); they convey the body of Memnon from Troy to his home in Egypt, ${ }^{[873]}$ and this type is borrowed for other scenes (e.g. on the funeral lekythi) in which an ordinary warrior is borne "to his long home." ${ }^{[874]}$ In one instance Thanatos is seen urging Ajax on to commit suicide ${ }^{[875]}$; he also appears on another vase where the subject may relate to the
 winged figures boding or signifying death, ${ }^{[878]}$ are by no means uncommon. It has been held by some writers that the personifications of Thanatos above referred to are more properly to be regarded as Kñ $\rho \varepsilon \varsigma ~ \theta \alpha \nu \alpha ́$ тoıo. ${ }^{[879]}$ These small winged figures are also employed to represent a soul escaping from a deceased person ${ }^{[880]}$; or, again, to indicate the souls of Achilles and Hector (or Memnon) when weighed by Zeus (see below, pp. 130, 132). ${ }^{[881]}$ We also find actual representations on B.F. vases of the ghost of a hero, especially in Trojan scenes; he floats through the air fully armed, with large wings. ${ }^{[882]}$

## § 3. Cosmogonic and other Deities

In the next instance it will be found appropriate to discuss sundry representations which are connected with the earlier or Titanic cosmogony, although, with the exception of the Gigantomachia, already discussed, allusions thereto are comparatively rare on vases.

Chief among these personages is Ge or Gaia, the Earth-mother, half Titanic, half Chthonian, who is usually represented as a figure rising half out of the ground, with flowing hair. She thus appears in several Gigantomachia scenes (as the mother of the giants, who were Гךүعvعĩs, earth-born), ${ }^{[883]}$ and at the birth of Dionysos and Erichthonios, where she hands the child to Athena. ${ }^{[884]}$ As a full-length figure she appears protecting her sons Tityos and Antaios against Apollo and Herakles respectively ${ }^{[885]}$; also in certain doubtful scenes on B.F. vases as the Nursing-mother (Koupot 0 ó $\varphi$ oc), with two children in her arms, ${ }^{[886]}$ though we have already seen (p.30) that these are susceptible of another interpretation. Finally, the series of scenes in which men are represented hammering on the head of a female figure rising from the earth ${ }^{[887]}$ may be regarded as referring to Gaia, with allusion to the custom of smiting on the earth to raise spirits. In this connection Gaia is undoubtedly to be identified with Pandora (see below). ${ }^{[888]}$ A cognate subject is that of a similar female head or bust in company with Eros, sometimes found on late Italian vases. ${ }^{[889]}$ If Gaia is here intended, her connection with Eros finds some support in the poetic cosmogonies ${ }^{[890]}$; otherwise it may be Aphrodite.

The story of Kronos, who swallowed the stone given to him by his wife Rhea in place of his children, is possibly depicted on one vase, ${ }^{[891]}$ though the genuineness thereof is open to doubt. The stone is enveloped in drapery to prevent discovery. A bust of Kronos has also been identified on a vase. ${ }^{[892]}$ The story of Zagreus and his destruction by the Titans, which belongs to the same cycle, also finds one or two representations. One vase appears to represent them devouring him piecemeal. ${ }^{\text {[893] }}$
Another personage who may perhaps be regarded as of pre-Olympian origin is Themis, who comes between Gaia and Apollo in the occupation of the prophetic stool at Delphi (Aesch. Eum. 2). Aigeus, the father of Theseus, is represented as consulting her seated on her tripod, ${ }^{[894]}$ and one vase has been supposed to depict her conversing with Zeus before the birth of Dionysos. ${ }^{[895]}$ She also appears at the Judgment of Paris. ${ }^{[896]}$
Kybele, the mother of the gods, only occurs in one or two doubtful instances, with the lion which is usually associated with her. ${ }^{[897]}$

Among the primitive and recondite Greek cults which go back to a remote origin, that of the Kabeiri may perhaps be mentioned here. Previous to the discovery, in 1887-88, of their sanctuary near Thebes, little was known, either from literary or monumental sources, of these mysterious deities; but the excavations on this site yielded large quantities of pottery with scenes relating to their cult, mostly of a burlesque character. ${ }^{[898]}$ Among these was one very interesting fragment representing (with names inscribed) the Kabeiros and his son (Pais) banqueting, and attended by two deities known as Mitos and Pratoleia. ${ }^{[899]}$ Lenormant noticed that the spectator-deities on an under-world vase in the British Museum correspond exactly to the four Cabeiric deities as described by certain ancient authorities. ${ }^{[900]}$
Turning next to myths which treat of the semi-divine personages of the earliest cosmogony, we have the legends given by Hesiod of Prometheus and the creation of Pandora; and we may include with them the Titan Atlas. Pandora, it has been already noted, is only a variation of Gaia, ${ }^{[901]}$ and this is borne out by the name given to her on a beautiful polychrome cup in the British Museum representing her creation, completed by Hephaistos and Athena. ${ }^{[902]}$ She is there named Avectónpo, "She who sends up gifts," E.g. from the earth. The subject is not so popular as might have been expected, but appears on two other vases in the Museum, in each case with Olympian deities as spectators of the event, and on a beautiful vase now at Oxford. ${ }^{[903]}$ The story of the opening of the míӨos has not found its way into art, but its connection with the Athenian feast of the mıoí $\gamma \iota \alpha$ is curiously illustrated in one instance. ${ }^{994]}$

Prometheus too is seldom seen, and chiefly on B.F. vases. In one case he receives a libation from Hera, ${ }^{[905]}$ and there are two or three representations of his liberation by Herakles. ${ }^{[906]}$ On a Cyrenaic cup he is grouped with Atlas, the vulture pecking at his breast, while the other groans under the burthen of the heavens. ${ }^{[907]}$ Atlas is found almost exclusively with Herakles in connection with his visit to the Garden of the Hesperides. Either he is actually present in the Garden ${ }^{[908]}$ or is confronted with the hero, who in some cases bears his burden for him while he obtains the apples. ${ }^{[909]} \mathrm{He}$ is also seen in company with a Sphinx. ${ }^{[910]}$

We now come to discuss a few subordinate deities or semi-divine personages who do not fall into any of the preceding categories.
Asklepios, chiefly a figure of later art, is exceedingly rare on vases. There is, in fact, only one on which he can certainly be identified. This is a late R.F. vase at Athens, on which he is seen reclining on a couch feeding a serpent and accompanied by Hygieia. ${ }^{[911]}$ Nor does the latter occur elsewhere, though her name, as already noted (p. 43), is sometimes given to one of the personified figures attending on Aphrodite. ${ }^{[912]}$ Eileithyia, the goddess of childbirth, generally appears, in duplicated form, assisting Zeus at the birth of Athena, ${ }^{[913]}$ or Leto at that of Apollo and Artemis. ${ }^{[914]}$ She is closely related to Artemis, and a representation of a goddess who has been identified as ArtemisEileithyia may be seen on an early Boeotian vase with reliefs at Athens. ${ }^{[915]}$
Iris, the messenger of the gods, is usually distinguished from Nike by her caduceus or herald's staff, and from Hebe by her wings. She is often depicted as a single figure, ${ }^{[916]}$ or pouring a libation to Hera, Athena, or other deities. ${ }^{[917]}$ She is associated more especially with Hera, as Hermes is with Zeus, and attends on the former in several scenes of assemblages of the gods. ${ }^{[918]}$ In company with Hera she is attacked by a troop of Seileni and defended by Herakles, ${ }^{[919]}$ and on another vase she is similarly surprised by a troop of Centaurs. ${ }^{[920]}$ She assists at the creation of Pandora, ${ }^{[921]}$ at the Judgment of Paris, ${ }^{[922]}$ and at the wedding of Peleus and Thetis, ${ }^{[923]}$ and also appears in the Garden of the Hesperides. ${ }^{[924]}$ She is also seen with Paris carrying off Helen ${ }^{[925]}$; and with Menelaos fetching her back ${ }^{[926]}$; and in another scene, apparently drawn from a Homeric source (Il. viii. 397 ff .), where she dissuades Athena and Hera from taking sides in the war, at the behest of Zeus. ${ }^{[927]}$ She conveys the infant Herakles to the Centaur Cheiron, ${ }^{[928]}$ and is also seen in company with a warrior. ${ }^{[929]}$
Hebe in Olympos performs somewhat similar functions to Iris, more particularly that of pouring out wine for the gods. ${ }^{[930]}$ She is also specially associated with Herakles at and after his apotheosis, ${ }^{[931]}$ appearing as his bride in several instances. ${ }^{[932]}$ Besides these, she frequently appears in assemblies of the gods, ${ }^{[933]}$ or at the punishment of Marsyas, ${ }^{[934]}$ or the Judgment of Paris. ${ }^{[935]}$

## § 4. Personifications

The next group of deities with which we have to deal is that of the various personifications which are to be found in great numbers on vases of all periods, especially the later. These naturally fall under several headings, which, following the lines of the classification adopted by M. Pottier in a valuable article on the subject, ${ }^{[936]}$ we may distribute as follows:-

1. Physical (Sun, Moon, Dawn, Winds, etc.). 2. Geographical (Cities, Rivers, Mountains, etc.). 3. Products of earth (Wine, Harvest, etc.). 4. Groups of various kinds (Muses, Nymphs, etc.). 5. Physical conditions (Health, Old Age, etc.). 6. Social advantages (Wealth, Peace, Victory, etc.). 7. Ethical ideas (Justice, Envy, Strife, etc.). 8. Metaphysical ideas (Necessity, Law, etc.). 9. Social enjoyments (Comedy, Tragedy, Revelry, etc.). 10. Descriptive names.

Of some of these, indeed, we have already treated-such as the beings included in the following of Aphrodite and Dionysos, Ge-Pandora, Hebe (Youth), and the deities of the nether world. The rest we now proceed to consider in order, beginning with natural phenomena, and firstly those of an astronomical character.
I. Helios, the Sun, who in some senses, especially in the mythology of the Roman poets, is identical with Phoebus Apollo, is only once so identified on vases. ${ }^{[937]} \mathrm{He}$ is usually depicted in his four-horse chariot rising out of the sea (as on the eastern pediment of the Parthenon), either as a single figure
or in connection with some myth, indicating that the action takes place at sunrise. As a single figure he appears both on early and late vases, on the latter, usually, as an upper decoration on the large Apulian kraters. ${ }^{[938]} \mathrm{He}$ is also accompanied by Eos (Dawn) and Selene (Moon), by Hemera (Day), or by Eros ${ }^{[939]}$; but in most cases he and Selene appear together, the latter descending as he rises (as on the Parthenon pediment). Thus on R.F. vases they denote the time of the action, as when Theseus descends below the sea to visit Poseidon, ${ }^{[940]}$ or as on the Blacas krater in the British Museum, when Eos pursues Kephalos. ${ }^{[941]}$ On the latter vase four stars are also depicted diving into the sea, to indicate their setting. On Apulian vases he is present at the seizure of Persephone, ${ }^{[942]}$ at the flight of Pelops from Oinomaos, ${ }^{[943]}$ at the madness of Lykourgos, ${ }^{[944]}$ at the Judgment of Paris, ${ }^{[945]}$ and in the Garden of the Hesperides. ${ }^{[946]}$ In one instance a group of Satyrs start back affrighted at his appearance. ${ }^{[947]}$ There are two instances of his encounter with Herakles, who endeavoured to stay his progress with his bow. ${ }^{[948]}$

PLATE LIII


Helios and Stars, from the Blacas Krater in the British Museum.

Selene, the Moon, appears in many of the scenes already described under Helios, as on the Blacas krater. She is depicted under two types, either on horseback ${ }^{[949]}$ or driving a chariot like Helios, ${ }^{[950]}$ both as a single figure and in other scenes; and she is sometimes characterised by the lunar disc or crescent. Besides the scenes already referred to, she appears on horseback at the birth of Dionysos ${ }^{[951]}$ and at the pursuit of Medeia by Jason. ${ }^{[952]}$ The magic arts used by Thessalian witches to draw down the moon from heaven are also the subject of a vase-painting, ${ }^{[953]}$ where two women essay to perform this feat by means of a rope, addressing her, "O Lady Moon!"

Stars are occasionally represented with an astronomical reference, as on the Blacas krater, where they appear in the form of youths, or grouped with Helios, Selene, and Eos. ${ }^{[954]}$ Phosphoros, the Morning Star, may be identified in this connection, represented as a youth running ${ }^{[955]}$; but in other cases they are not personified, as on a vase which represents the moon and stars with the constellation Pegasos. ${ }^{[956]}$

Hemera, the Day, we have already once noted; but in art she is hardly to be distinguished from Eos (Dawn). Nor can Nyx (Night) be identified with certainty on vases. ${ }^{[957]}$ Eos is not an uncommon figure, especially on R.F. vases, and she also plays a part in certain myths. As a single figure she appears rising from the sea in, or driving, a four-horse chariot like Helios, ${ }^{[958]}$ her steeds in one case being named Phlegethon and Lampon. She is also represented flying with two hydriae, from which she pours out dew upon the earth. ${ }^{[959]}$ She is frequently seen pursuing or carrying Kephalos ${ }^{[960]}$ or Tithonos, ${ }^{[961]}$ and is present at the apotheosis of Alkmena. ${ }^{[962]}$ At the combat of her son Memnon with Achilles she and the other mother, Thetis, are generally present. ${ }^{[963]}$ She also pleads with Zeus for her son's safety, ${ }^{[964]}$ and bears away his body after the fatal issue of the fight. ${ }^{[965]}$

Next we have to deal with the Winds, as personified by the figures of Boreas, Zephyros, etc. As single figures they seldom appear, though we have possible instances of Boreas, with the unusual type of a serpent's tail, ${ }^{[966]}$ or simply as a winged male figure. ${ }^{[967]}$ A wind-god is seen in an episode from the Gigantomachia opposing the chariot of Zeus, ${ }^{[968]}$ and another in an assemblage of deities round Apollo Kitharoidos. ${ }^{[969]}$ Zephyros is seen pursuing Hyakinthos, ${ }^{[970]}$ and he and Boreas together bear the body of a warrior to the tomb in the same manner as Hypnos and Thanatos. ${ }^{[971]}$ But the most important subject connected with Boreas is his pursuit of the Athenian maiden Oreithyia, a frequent scene on the later R.F. vases, ${ }^{[972]}$ some being very fine examples. Erechtheus, Kekrops, and the Nymphs Aglauros, Herse, and Pandrosos, are usually present, and the latter in one case announce the news to Kekrops or Erechtheus. ${ }^{[973]}$ Boreas is also depicted in the act of punishing Phineus by blinding him, and attacked by the latter's friend Parebios. ${ }^{[974]}$
On some early B.F. vases we find winged beings which may be styled Boreades, in conjunction with Harpies, apparently representing the influences of good and evil winds respectively. ${ }^{[975]}$ Zetes and Kalais, the sons of Boreas, will be treated of in the story of the Argonautika. ${ }^{[976]}$ The Aurae or breezes have been identified on a well-known vase in the British Museum, ${ }^{[977]}$ and on an Apulian vase in the same collection is a head undoubtedly intended for Aura. ${ }^{[978]}$ The Hyades or rain-
goddesses in two instances extinguish the flames of a funeral pyre at the bidding of Zeus, at the apotheosis of Alkmena ${ }^{[979]}$ and of Herakles ${ }^{[980]}$; in one of the latter instances they are named Arethusa and Premnusia. They also receive the infant Dionysos. ${ }^{[981]}$ Echo belongs perhaps rather to the Dionysiac cycle, appearing as the beloved of Pan. ${ }^{[982]}$
II. We may next consider the personifications of cities and countries, which are, indeed, in some cases more than merely symbolical figures, being actual goddesses with a definite cult, such as the Nymph Kyrene, who often appears on works of art. ${ }^{[983]}$ On the great Naples vase representing Dareios in a council of war, personifications of Hellas and Asia are placed among the spectatordeities, ${ }^{[984]}$ and the former seems also to be indicated on a similar vase with a battle of Greeks and Persians. ${ }^{[985]}$ On one of the late vases with the subject of Pelops and Oinomaos, a personification of the locality Olympia appears to be similarly present, ${ }^{[986]}$ just as on the Hieron kotyle the personification of Eleusis is included among the Eleusinian and other deities at the sending forth of Triptolemos. ${ }^{[987]}$ The city of Thebes is personified in several instances, especially as a spectator of Kadmos slaying the dragon ${ }^{[988]}$; also on a "Megarian" bowl with reliefs in the British Museum, the subjects on which are taken from the Phoenissae of Euripides. ${ }^{[989]}$ Nemea, the scene of Herakles' victory over the lion, and of the death of Archermos, is similarly personified as a Nymph in the representations of both subjects, ${ }^{[990]}$ and the town of Krommyon as a Nymph protests against the slaying of the sow by Theseus. ${ }^{[991]}$ The Nymph Sparta occurs once, dismounting from her horse. ${ }^{[992]}$ Two cups of the early B.F. class usually known (from their subjects) as Cyrenaic, bear representations of the Nymph Kyrene (see above)-in one case with Apollo, in the other holding a branch of silphium (the local product) and surrounded by Boreads and Harpies (see above). ${ }^{[993]}$

Among the Greek islands, Aegina and Salamis were supposed to have derived their names from Nymphs beloved of Zeus and Poseidon, who are represented pursuing these quasi-personified figures ${ }^{[994]}$; we may also regard Europa as coming under that category. ${ }^{[995]}$ Zeus also pursues Taygeta, who is connected with the mountain in Laconia. ${ }^{[996]}$ On one vase we find the names of the islands Delos, Euboea, and Lemnos, ${ }^{[997]}$ given, presumably in pure fancy, to two Maenads and a Satyr in a Dionysiac scene where all the figures are named. A more genuine instance is that of the Nymph Krete on the Talos vase, indicating the locality. ${ }^{[998]}$
Turning to other geographical features, we have Mount Olympos transformed into a lyre-playing companion of Satyrs ${ }^{[999]}$; or, again, river-gods such as Acheloös, who as a combination of man and bull, or with a fish-body like Triton, wrestles with Herakles. ${ }^{[1000]}$ The river Nile appears once, but not personified-only as an indication of landscape. ${ }^{[1001]}$ In connection with the city of Thebes we find personifications of the local river Ismenos and the local fountain-Nymphs Dirke and Krenaia. ${ }^{[1002]}$
III. Natural products, such as Oinos (Wine) and Opora (Harvest), are only found personified among the Dionysiac conceptions with which we have already dealt (p. 65); to these two names we may add those of Hedyoinos (Sweet Wine), Kissos (Ivy), Kalyke (Bud), and Rodo (Rose), the three latter coming more under the heading of pet-names than of strict personifications.
IV. Our next class includes certain groups of personages (all feminine) which for the most part hold their own throughout all periods of art and literature, and are, so to speak, more crystallised into definite mythological personages, associated with the gods and human beings of the legendary ages. These are the Muses, the Charites or Graces, the Horae or Seasons, the Moirae or Fates, and the Erinnyes or Furies.

The Muses do not appear so frequently in vase-paintings as in sculpture, and mostly on later vases. Two fine R.F. examples of the whole nine (with their appropriate attributes) call for mention ${ }^{[1003]}$; other vases give a more limited number, or even single figures ${ }^{[1004]}$; but it must be remembered that in such cases identification is difficult, as characterisation by means of a lyre or scenic mask does not necessarily connote the presence of a Muse. On one vase Terpsichore is seen with two figures inscribed as Mousaios and Melousa ${ }^{[1005]}$; but these may be no more than fancy names for an ordinary group of musicians. Five of them are seen in a group with Apollo, Thamyris, and Sappho, [1006] and elsewhere they accompany Apollo. ${ }^{[1007]}$

The Graces can nowhere be identified on Greek vases, though they form a well-known type in sculpture; but there is an Etruscan kylix in the British Museum (probably copied from a Greek original), which appears to represent them as an interior group. ${ }^{[1008]}$ The Horae or Seasons appear (without distinctive names) on the François vase at the nuptials of Peleus and Thetis, and on the Sosias cup ${ }^{[1009]}$ in an Olympian assemblage (three in each case); also two of them at the sending forth of Triptolemos. ${ }^{[1010]}$ The three Moirae (Fates) appear on the François vase (as above), and once also at the birth of Athena ${ }^{[1011]}$; the Furies have already been discussed. ${ }^{[1012]}$
V. The personifications having reference to physical conditions (as distinguished from ethical ideas) are comparatively few in number. They include Hebe (Youth), who by virtue of her divine attributes has already been discussed in another section (p. 77); Hygieia (Health), who is also a fully developed goddess, but only once occurs on a vase, except among the somewhat vague personifications surrounding Aphrodite (see pp. 43, 76]); and three others, regarded as of masculine sex. These are Geras (Old Age), Hypnos (Sleep), and Thanatos (Death). Geras is seen in combat with Herakles ${ }^{[1013]}$; Thanatos has already been discussed (p. 71). Hypnos as a winged youth hovers over Alkyoneus, whom Herakles overcame while asleep ${ }^{[1014]}$; causes Ariadne to sleep while Theseus escapes ${ }^{[1015]}$; and with Thanatos carries the body of Memnon, ${ }^{[1016]}$ or an ordinary mortal, ${ }^{[1017]}$ to the tomb.
VI. Social advantages as apart from ethical qualities are perhaps difficult to determine exactly; but we may fairly rank under this heading such ideas as are suggested by Chrysos (Gold) and Ploutos (Wealth); Eirene (Peace); Nike (Victory); and the numerous attendants of Aphrodite and Dionysos, such as Eunomia, Eudaimonia, and others already named (pp. 43, 65). Chrysos and Ploutos as boys accompany Nike in her chariot ${ }^{[1018]}$; Eirene's appearance on vases is doubtful, but she may appear in one instance carrying the infant Ploutos. ${ }^{[1019]}$ The birth of Ploutos seems to be represented in one instance. ${ }^{[1020]}$

But by far the most important personage in this class is Nike (Victory), whose appearance as a winged female figure is so often attested by inscriptions on R.F. vases that she can generally be identified with certainty. She is especially popular as a single figure on the Nolan amphorae and lekythi of the "severe" and "strong" periods, some of which are conspicuously beautiful examples. ${ }^{[1021]}$ Altogether her appearances rival those of Eros in number, though on the Italian vases they are far fewer. Whether Nike ever occurs on B.F. vases is a very doubtful point, and has been denied by many scholars, but some figures are not easy to explain in any other way. ${ }^{[1022]}$ On other works of art she does not appear before 480 b.c., unless the "Nike" of Archermos is to be so identified; it seems probable that she was an offshoot from Athena, whom we know to have been worshipped under the name of Nike, as in her temple on the Athenian Acropolis.
She is frequently associated with the gods, either in scenes from mythology or in groups apart from action ${ }^{[1023]}$; usually she pours libations to them, or crowns them in reference to some achievement. Thus we find her with Zeus, ${ }^{[1024]}$ with Hera, ${ }^{[1025]}$ with Athena, ${ }^{[1026]}$ with Poseidon and Dionysos, ${ }^{[1027]}$ with Apollo (especially at his victory over Marsyas), ${ }^{[1028]}$ with Artemis Elaphebolos, ${ }^{[1029]}$ and with Aphrodite. ${ }^{[1030]}$ She frequently crowns or pours libations to Herakles, or attends him at his apotheosis ${ }^{[1031]}$; on the later vases she takes Athena's place in conveying him in a chariot to Olympos. ${ }^{[1032]}$
Among the numerous mythological events in which Nike plays a more or less symbolical part may be mentioned the Gigantomachia, in which she drives Zeus' chariot, ${ }^{[1033]}$ the birth of Athena, ${ }^{[1034]}$ the sending of Triptolemos, ${ }^{[1035]}$ the Judgment of Paris, ${ }^{[1036]}$ the birth of Dionysos ${ }^{[1037]}$ and that of Erichthonios, ${ }^{[1038]}$ and the punishment of Ixion. ${ }^{[1039]}$ Among Trojan scenes she appears with Achilles arming, ${ }^{[1040]}$ at his (supposed) fight with Telephos and possibly also at that with Memnon, ${ }^{[1041]}$ and at the carrying off of the Palladion. ${ }^{[1042]}$ She is also seen with Herakles in the Garden of the Hesperides, ${ }^{[1043]}$ with the Dioskuri, ${ }^{[1044]}$ with Perseus and Bellerophon, ${ }^{[1045]}$ with Orestes at Delphi ${ }^{[1046]}$; crowning Hellas as the victor over the Persians ${ }^{[1047]}$; and in many scenes with Dionysos. [1048]

More numerous and characteristic, however, are the scenes in which she appears as a single figure, or associated with mortals, usually victorious warriors or athletes. As a single figure she most commonly pours a libation over an altar, ${ }^{[1049]}$ or flies towards the altar bearing a torch, incenseburner, lyre, tripod, sash, or other attribute ${ }^{[1050]}$; in one case (unless Iris is intended) a jug and caduceus. ${ }^{[1051]}$ Especially characterised as the goddess of Victory, she often holds a palm-branch. ${ }^{[1052]}$ She frequently takes part in religious and sacrificial ceremonies, such as the decoration or dedication of a choragic tripod, ${ }^{[1053]}$ or burns incense, ${ }^{[1054]}$ or herself sacrifices a ram or bull. ${ }^{[1055]}$ The last-named subject is, however, commoner on gems and a certain class of terracotta reliefs. ${ }^{[1056]}$ On one vase she gives drink to a bull ${ }^{[1057]}$; or, again, she rides on a sacrificial bull ${ }^{[1058]}$; or places a hydria on a fountain or altar. ${ }^{[1059]}$ She pursues a hare, doe, or bird, ${ }^{[1060]}$ or offers a bird to a youth. ${ }^{[1061]}$ On the later Panathenaic amphorae and elsewhere she holds the $\dot{\alpha} к \rho о \sigma t o ́ \lambda$ ıоv or sternornament of a ship ${ }^{[1062]}$; and sometimes she erects a trophy. ${ }^{[1063]}$


FIG. 124. NIKE SACRIFICING BULL (BRITISH MUSEUM F 66).

She appears in a chariot drawn by female Centaurs, ${ }^{[1064]}$ or accompanied by Chrysos and Ploutos (see above), ${ }^{[1065]}$ and she also conducts a victorious warrior in this manner. ${ }^{[1066]}$ In other instances she pours a libation to a warrior, ${ }^{[1067]}$ who is sometimes inscribed with a fanciful name ${ }^{[1068]}$; or, again, as anticipating his victory, she brings him his helmet. ${ }^{[1069]}$ She is, however, more frequently seen in athletic scenes, crowning a victorious athlete, ${ }^{[1070]}$ rider, ${ }^{[1071]}$ or charioteer, ${ }^{[1072]}$ or superintending the games in the palaestra, ${ }^{[1073]}$ torch-races, ${ }^{[1074]}$ or the taking of an oath by an
athlete. ${ }^{[1075]}$ In musical contests she performs the same functions, crowning or pouring libations to a successful performer. ${ }^{[1076]}$ She crowns a successful potter in his workshop, ${ }^{[1077]}$ and also a poet (?). ${ }^{[1078]}$ A being of similar character, who may perhaps be recognised in the figure of a winged youth on some B.F. and early R.F. vases, is Agon, the personification of athletic contests. ${ }^{[1079]}$
On the later R.F. vases the figure of Nike is often duplicated, probably more to produce a balanced composition than for any other reason. ${ }^{[1080]}$
VII. The next class of personifications is that of abstract ethical ideas. Even on the earlier vases there are found a considerable number of these, such as Eris (Strife); but on the later, unlimited play is given to the tendency of the age (seen also in sculpture and painting) to invest every abstract idea with a personality, apart from any idea of deification or mythological import.
Among these, by far the most numerous examples are, of course, those relating to the passion of Love. We have already traced the development of the type and conception of Eros in vase-paintings, and in the same place we have had occasion to speak of the associated ideas which became personified as subsidiary conceptions to that of Love, such as Peitho (Persuasion), Pothos (Yearning), and Himeros (Charm), Phthonos (Envy or Amor invidiosus), and Talas (Unfortunate or Unrequited Love). ${ }^{[1081]}$ Of a similar type are the feminine conceptions associated with AphroditeEudaimonia (Happiness), Euthymia (Cheerfulness), and the like. ${ }^{[1082]}$
Among other abstract ideas are those of Arete (Virtue) and Hedone (Pleasure), which have been suggested as represented on one vase. ${ }^{[1083]}$ On a R.F. vase in Vienna, Dike (Justice) is seen overcoming Adikia (Injustice) ${ }^{[1084]}$; Apate (Deceit) on the vase with Dareios in council beguiles the goddess Asia with bad advice, ${ }^{[1085]}$ and also leads Tereus astray ${ }^{[1086]}$; Phobos (Fear) drives the chariot of Ares when he assists Kyknos against Herakles ${ }^{[1087]}$; he is specially associated with the god of war, the idea being that of inducing panic among enemies; and in many cases his head appears, like that of the Gorgon, as a device on shields. ${ }^{[1088]}$ In one instance he appears as a lion-headed monster. ${ }^{[1089]}$ Artemis, in the capacity of Aidos (Shame), hinders Tityos from carrying off Leto. ${ }^{[1090]}$ Eris (Strife) appears on B.F. vases as a winged female figure running, in scenes of combat, chariotraces, etc., or as a single figure. ${ }^{[1091]}$ But the identification is not always certain; in some combat scenes it is possible that Ate or a Ker is meant, and in those of an agonistic character we may see Agon, the personification of athletics (see above, p. 89). ${ }^{[1092]}$
VIII. The metaphysical ideas next to be discussed are almost exclusively punitive agencies, either connected with scenes in the under-world (Ananke, Poinae, and the Furies), or bringing down penalties and disasters on the heads of wrong-doers, such as the personifications of madness which occur in many of the tragic subjects on Apulian vases.

In the first group we reckon Ananke (Necessity) and the Poinae (Punishments), who appear with the Furies in a scene from the under-world, ${ }^{[1093]}$ Ate or Ker (Destiny), a winged figure seen at the death of Hector ${ }^{[1094]}$ and at the madness of Lykourgos ${ }^{[1095]}$; and Nemesis (Vengeance) in the scene between Atreus and Thyestes, ${ }^{[1096]}$ with reference to its fate-fraught character. In less tragic circumstances the latter is present in a bridal scene, with attributes of a flower and an apple. ${ }^{[1097]}$ The Moirae or Fates have already been mentioned (p. 83), as has Themis or Divine Ordinance (p. 74).
The second group includes Lyssa (Frenzy), who drives Aktaeon, Hippolytos, and Lykourgos to madness or destruction ${ }^{[1098]}$; Mania (Madness), who similarly drives Herakles to slay his children ${ }^{[1099]}$; and Oistros (E.g. a Gad-fly), who performs similar functions when Medeia is about to slay hers. ${ }^{[1100]}$
IX. Personifications relating to social enjoyments, such as games, the drama, or banquets, are closely analogous to many of those described under headings III. and VI., and occur in the same connection. Thus in Dionysiac scenes we find Choro (Dance), Molpe (Song), Dithyrambos, Hedymeles (Sweet Song), Komos (Revelry), Komodia and Tragoedia (Comedy and Tragedy), and Pannychis and Kraipale, typifying all-night revels and their consequences. ${ }^{[1101]}$
X. Finally, there are what M. Pottier has described as personifications of individualities, under which heading fall many conceptions which do not find a place in any of the classes already discussed. Among these are many of the names given to Maenads and Satyrs (p. 65), which are intermediate between personal names and embodiments of abstract or physical ideas, some inclining more to one side, some to the other. Of these it is only necessary to mention as illustrative of the present subject the Mainas ${ }^{[1102]}$ and the Nymphe ${ }^{[1103]}$ found as names of individuals on several vases, and the Oinopion or "Wine-drinker" on vases by Exekias. ${ }^{[1104]}$
To the same class belong the names given to Nymphs of various kinds, such as the Nereids (see p. 26) or the Hesperides. The latter are named on one vase ${ }^{[1105]}$ as Asterope, Chrysothemis, Hygieia, and Lipara; on another ${ }^{[1106]}$ as Aiopis, Antheia, Donakis, Kalypso, Mermesa, Nelisa, and Tara.
Of more general signification, and sometimes perhaps to be regarded as descriptive titles rather than names, are such as Archenautes (Ship-captain), ${ }^{[1107]}$ Komarchos (Master of Revels), ${ }^{[1108]}$ or Paidagogos (Tutor). ${ }^{[1109]}$ On the other hand, Neanias, Komos, Paian (given to boys at play), ${ }^{[1110]}$ and Eutychia (on the tomb of a woman) ${ }^{[1111]}$ may be merely fanciful personal names.
621. B.M. B 589, B 693; B 180 (between vine-poles); Bibl. Nat. 176; Hartwig, pl. 30, fig. 2 (Hieron); Branteghem Coll. No. 28 (Hermaios); Athens 1583 = Rayet and Collignon, p. 291; Amer. Journ.
of Arch. 1900, pl. 1, p. 185 (Duris in Boston).
622. Petersburg $880=$ Reinach, i. 13.
623. B.M. F 194.
624. B.M. E 257.
625. Wiener Vorl. 1890-91, pl. 7, fig. 2 (Nikosthenes in Boston).
626. B.M. E 439.
627. B.M. E 362.
628. Athens 1583 = Rayet and Collignon, p. 291.
629. Bibl. Nat. $576=$ Hartwig, Meistersch. pl. 33, 1.
630. Reinach, ii. 35.
631. Ibid. i. 159.
632. B.M. B 225, B 378, B 426, E 102; Louvre F 133; Petersburg $855=$ Reinach, i. 18.
633. B.M. E 429; Millin-Reinach, i. 60, ii. 17; Reinach, i. 168, ii. 302.
634. Reinach, ii. 32 (cf. Triptolemos).
635. Bourguignon Sale Cat. 57; Mon. Grecs, 1879, pl. 3.
636. B.M. B 79.
637. Mus. Greg. ii. 3, 3E.g..
638. Munich $339=$ Reinach, ii. $36=$ Wiener Vorl. 1888, 7, 1.
639. Cat. $969=$ Reinach, i. 415 : see p. 178.
640. B.M. E 182; Bibl. Nat. 219 = Mon. di Barone, pl. 1; Reinach, i. 1 and $3=$ Petersburg 1792 and 1793; and see p. 19.
641. B.M. E 492; Reinach, i. 93, 122; Helbig 103 = Rayet and Collignon, p. 223.
642. Petersburg $2007=$ Reinach, i. 7.
643. Bibl. Nat. $440=$ Reinach, ii. 260.
644. Reinach, i. 93.
645. Baumeister, i. p. 434, fig. 483: cf. B.M. E 695 (doubtful).
646. B.M. F 271; Naples $3219=$ Reinach, i. 125 and $3237=$ Millingen-Reinach, $1=$ Baumeister, ii. p. 834, fig. 918.
647. Naples $3237=$ Millingen-Reinach, $2=$ Baumeister, ii. p. 835, fig. 919.
648. B.M. E 775 = Fig. 131; Munich 807 = Baumeister, ii. p. 1204, fig. 1396; Jahrbuch, vii. (1892), pl. 5, p. 154 (Dionysos not present); and see below, p. 142.
649. B.M. B 149, В 153, Е 166.
650. B.M. F 194 (D. with bull's head).
651. Naples S.A. $172=$ Reinach, i. 498: cf. Louvre F 136 and F 311 (Reinach, i. 144).
652. Berlin 1904.
653. B.M. B 347 (Hermes and Apollo); Bibl. Nat. 231; Athens 903 (Ares, Hermes, Herakles); Munich 157; Reinach, i. 8 (Petersburg 1807), 203, ii. 24, 42, and 75 (Munich 47, 609, 62), 30, 35, 74.
654. B.M. B 302; E 66 (Herakles).
655. B.M. E 410.
656. B.M. B 200, B 201, B 318-21; Berlin 1961, 2278.
657. Berlin 3257.
658. Munich 773; and see Overbeck, Her. Bildw. p. 210.
659. Berlin 1732 = Reinach, ii. 66.
660. B.M. E 65.
661. See p. 17.
662. B.M. B 253, E 8, E 303, E 443; Bibl. Nat. 230; and see p. 14.
663. Boston Mus. Report, 1900, No. 14 (Maenads); Froehner, Musées de France, pl. 6 (Seileni).
664. Petersburg $1600=$ Reinach, i. 25; Bibl. Nat. 391 = Froehner, Musées de France, pl. 8.
665. B.M. B 168 (?): see Reinach, ii. 38 and p. 30.
666. B.M. E 445.
667. B.M. B 203.
668. B.M. E 444; Reinach, i. 203: see note 653, p. 56.
669. Berlin 2179 = Wiener Vorl. iii. 6.
670. B.M. F 171 (crowned by Nike); Athens 667; Forman Sale Cat. 356.
671. Millin-Reinach, ii. 43 (doubtful); Baumeister, i. p. 618, fig. 687.
672. B.M. B 198, B 256-59, E 129, E 279, F 307; Reinach, i. 161 = Baumeister, i. p. 441, fig. 491; Millin-Reinach, ii. 16, 49 A (D. throws himself into arms of A.).
673. B.M. B 204, 206, 208, F 1, 69.
674. Würzburg, Phineus cup $=$ Reinach, i. 201 = Furtwaengler and Reichhold, pl. 41 (lions and stags).
675. B.M. E 546; Jatta $1092=$ Reinach, i. 482.
676. Petersburg $1427=$ Reinach, i. 18.
677. Reinach, ii. 37, 6.
678. B.M. B 179; Micali, Storia, 86.
679. B.M. B 206.
680. B.M. B 302, B 476, B 556; Bibl. Nat. 433 = Millin-Reinach, i. 38; Cambridge 48.
681. Millin-Reinach, i. 37.
682. Reinach, i. 215.
683. B.F.: B.M. B 206, B $300=$ Fig. 120, B 427; Reinach, ii. 141 and i. $203=$ Wiener Vorl. D. 1, 3 (D. in chariot). R.F.: B.M. E 16, 55, 75, 228, 362, 462; Berlin 2471 = Coll. Sabouroff, i. 55; Bibl. Nat. 357 = Monuments Piot, vii. pl. 2; Roscher, iii. p. 2118. Late: B.M. F 1, 77, 179, 303-4; Reinach, ii. 200. See also p. 61.
684. See B.M. Cat. and Reinach, E.g.; B.M. B 148, E 110, 253, 503, F 149; Berlin 2174; Bibl. Nat. $222=$ Reinach, ii. 251; Louvre F 3, F 5, F 101, F 124, F 204, G 43.
685. B.M. E 350 (receiving wine from Nymph).
686. B.M. E 184.
687. Berlin 2402 = Coll. Sabouroff, i. 57; Berlin $2290=$ Baumeister, i. p. 555, fig. 592 (Hieron); Reinach, ii. 155 = Wiener Vorl. 1889, 4, 5 (Taleides), and ii. 289, 6.
688. B.M. E 465, F 153.
689. Reinach, ii. 301.
690. B.M. E 511, F 56.
691. B.M. F 37, 275; in F 273 Ariadne similarly occupied.
692. B.M. E 66, E 786.
693. Anzeiger, 1895, p. 40.
694. Jahrbuch, i. (1886), p. 278: cf. B.M. F 188.
695. Hartwig, Meistersch. pl. $6=$ Louvre G 34.
696. Ibid. pls. 38-39, 1, and see p. 181.
697. Athens 1282-83 = Bull. de Corr. Hell. 1895, p. 98.
698. B.M. E 703, F 152; Millin-Reinach, ii. 16 and ii. 40.
699. B.M. F 114; Millin-Reinach, ii. 21.
700. Reinach, ii. 38.
701. B.M. B 210; Bourguignon Sale Cat. 18 (both Exekias).
702. B.M. E 228, 241, 435, F 163, 270; Reinach, ii. 301; Millingen-Reinach, 2.
703. B.M. E 228, F 203, F 253.
704. B.M. F 437.
705. Petersburg 2161.
706. B.M. F 83, 381.
707. B.M. F 163; Munich $848=$ Reinach, i. 383.
708. Naples $3240=$ Reinach, i. $114=$ Baumeister, i. pl. 5, fig. 422.
709. Minervini, Mon. du Barone, pl. 7.
710. B.M. E 451-52, 471; Berlin 1930, 2290 (= Wiener Vorl. A. 4); Naples $2419=$ Furtwaengler and Reichhold, pls. 36-7 (see Vol. I. p. 141); Schreiber-Anderson, pl. 14, 8.
711. Berlin 2029; Naples 2411 = Reinach, i. 154.
712. Bologna 286.
713. B.M. B 332.
714. See p. 17; and cf. B.M. B 42 (Plate XXI.).
715. See pp 22, 76; also Berlin 2591.
716. Froehner, Musées de France, pl. 21 and p. 69 ff.; Reinach, i. 144, 228; Harrison, Prolegomena to Gk. Religion, p. 277; and see pp. 29, 73.
717. See p. 60, note 710.
718. B.M. E 505.
719. Reinach, i. 472, ii. 198.
720. В.М. В 203-4, 206, 427, F 58, 77, 80-1, 156.
721. B.M. F 75-6, 276; Louvre F 120, F 124 (= Wiener Vorl. 1890, 5, 3), G 33, G 57; Naples 3113, 3241 (= Reinach, i. 384); Munich 184 = Furtwaengler and Reichhold, pl. 46 (Hieron); Gaz. Arch. 1887, 15 (Hieron in Brussels); Hartwig, Meistersch. pls. 6, 31-2.
722. Hartwig, E.g. pl. 5; Wiener Vorl. E. 12, 1; Mus. Greg. ii. 79, 2E.g.; B.M. B 297 (Plate XXX.); Satyr as single figure, Louvre G 24.
723. B.M. E 35, E 768; Hartwig, E.g. pl. 45 (Hieron); Cambridge 48.
724. B.M. F 133; Naples 2419 = Furtwaengler and Reichhold, pl. 37; Forman Sale Cat. 352.
725. B.M. B 296; Reinach, ii. 75 (Munich 62), 141; Karlsruhe 259 = Furtwaengler and Reichhold, pl. 30; Amer. Journ. of Arch. 1900, pp. 188-189; Vienna 231.
726. Louvre F 334.
727. B.M. B 426; Bibl. Nat. 320; Petersburg 9 = Reinach, ii. 24; J.H.S. 1899, pl. 5; Wiener Vorl. 1890-91, pl. 3, 2 (Nikosthenes).
728. B.M. E 510.
729. B.M. E 437, E 439, F 49, F 227.
730. B.M. E 319; Mus. Greg. ii. 72, 2E.g.; Munich 408 = Furtwaengler and Reichhold, pls. 44-5.
731. B.M. E 555; Berlin 2241; Naples S.A. 313; Reinach, i. 340, ii. 261 (Bibl. Nat. 852).
732. B.M. B 265, E 368; Bibl. Nat. 539 = Reinach, ii. 261; Él. Cér. i. 45; Louvre F 161, F 381, G 34 (= Hartwig, pl. 6), G 46.
733. B.M. F 192; Munich $184=$ Furtwaengler-Reichhold, pl. 46 (Hieron); Reinach, i. $223=$ Wiener Vorl. D. 5; and cf. Adamek, Vasen des Amasis, pl. 2 (in Berlin).
734. Sale Cal. Hôtel Drouot, 11 May, 1903, No. 62.
735. Reinach, i. 201.
736. Roscher, i. 1998.
737. Munich 332 = Baumeister, ii. p. 847, fig. 928.
738. B.M. E 253, and cf. E 510; Bibl. Nat. 357 = Monuments Piot, vii. pl. 3; Munich $372=$ Reinach, ii. 117; and cf. J.H.S. xix. p. 220.
739. B.M. E 357; Karlsruhe 242; Reinach, i. 281 (?); Hartwig, Meistersch. p. 32.
740. Athens 1353 = Bull. de Corr. Hell. 1895, p. 95; Bibl. Nat. 357 = Monuments Piot, vii. pl. 2; Munich $807=$ Millingen-Reinach, pl. 5.
741. Louvre F 311 = Reinach, i. 144.
742. B.M. B 284 (?), B 486 (?); Reinach, ii. 77; Millin-Reinach, ii. 12.
743. B.M. B 515, E 567.
744. Millin-Reinach, ii. 49 A.
745. Munich 542; Stackelberg, 24; Forman Sale Cat. 331 (as racing charioteers, driving Maenads).
746. B.M. E 377; Louvre G 73 (trumpeting); Froehner, Musées de France, pl. 6; and see p. 56, note 663.
747. B.M. E 3 (with pelta and trumpet); Louvre G 89.
748. B.M. E 539.
749. Millin-Reinach, i. 20.
750. Inghirami, Mus. Chius. 208.
751. B.M. E 487.
752. B.M. E 108.
753. See Vol. I. p. 216, Fig. 68.
754. Berlin $2589=$ Baumeister, iii. p. 1684, fig. 1766.
755. Helbig, 186 = Mus. Greg. ii. 80, 1E.g..
756. Berlin 2550.
757. B.M. B 148.
758. Berlin 2578.
759. B.M. B 168; Reinach, ii. 98; with a mouse, Reinach, i. 500.
760. B.M. E 102; B 168.
761. B.M. E 139, E 338.
762. Millingen-Reinach, 59.
763. Boston Mus. Report, 1900, No. 14.
764. Inghirami, Vasi Fitt. ii. 199.
765. Berlin 2240; B.M. F 363; Wiener Vorl. C. 7, 1; Hartwig, Meistersch. pl. 45, p. 28; Forman Sale Cat. 331.
766. B.M. E 24, E 261; Hartwig, E.g.
767. Munich 139; Reinach, i. 460; Hartwig, pls. 7 and 44, 1.
768. B.M. E 35, E 530, E 768.
769. Berlin 2267 = Hartwig, E.g. pl. 2, 1.
770. Reinach, ii. 303.
771. Bourguignon Cat. 57; Louvre G 91.
772. B.M. E 387, E 467.
773. B.M. B 560, E 583; Berlin 2243; Louvre F 204 = Amer. Journ. of Arch. 1896, p. 14; Baumeister, i. p. 555, fig. 592.
774. Naples $3235=$ Reinach, i. $103=$ Roscher, iii. 861.
775. J.H.S. vii. pl. 62, p. 54.
776. B.M. F 273; Reinach, ii. 201, 235; Naples 2846; Bourguignon Cat. 41, 57.
777. See Loeschcke in Ath. Mitth. 1894, p. 521.
778. Vol. I. pp. 353, 355, and p. 208 below.
779. See generally Heydemann, Satyr- u. Bakchennamen.
780. Cat. 2471.
781. Reinach, ii. 268.
782. E 65.
783. See also Jatta Coll. 1093; B.M. E 253; Naples 2369; Roscher, iii. p. 2118; De Witte, Coll. à l'Hôtel Lambert, pls. 13, 27. For Terpon see also Reinach, i. 203, and Hartwig, Meistersch. pl. 6.
784. B.M. E 253.
785. Reinach, i. 249; Roscher, iii. p. 2115.
786. De Witte, Coll. à l'Hôtel Lambert, 27.
787. Reinach, ii. 200.
788. Munich 384 = Reinach, i. 130 (see Heydemann, E.g. pp. 25, 36: cf. Hydris, B.M. E 65).
789. Heydemann, Satyr- u. Bakchennamen, p. 29 (E.g.).
790. B.M. E 82; Berlin 2471, 2532; Naples 2369; Reinach, i. 426, ii. 6, 38, 200.
791. Berlin 2532.
792. Reinach, ii. 287 (name also read as Molpos).
793. Ibid. ii. 302.
794. Berlin 2160.
795. Munich 780; Naples 2369, 3235; Jatta 1093; Reinach, ii. 268.
796. Naples 3235.
797. Bologna 286.
798. Naples 2369.
799. Heydemann, E.g. p. 28 (x).
800. Jatta 1093; Reinach, ii. 302.
801. Jatta 1093.
802. Berlin 3257.
803. B.M. E 253.
804. Reinach, ii. 6.
805. Jatta 1093.
806. Reinach, ii. 3 = Millin-Reinach, i. 9; Reinach, ii. 38.
807. Heydemann, E.g. p. 29 ( $\beta$ ).
808. Ibid. ( $\alpha$ ).
809. B.M. E 492; Naples 2419; Karlsruhe 208; De Witte, Coll. à l'Hôtel Lambert, 13.
810. B.M. E 350: cf. Nymphe on Berlin 2471.
811. Jatta 1093.
812. B.M. E 182; Heydemann, p. $20(\mathrm{X})=$ Dubois-Maisonneuve, Introd. 22.
813. Naples S.A. 316; Heydemann, p. 19 (U).
814. Heydemann. p. 19 (U).
815. Gerhard, Ant. Bildw. pl. 59.
816. Naples S.A. $172=$ Reinach, i. 498.
817. Pourtalès Cat. 29, 2.
818. Naples 3235, 2419.
819. Heydemann, p. 29 (z).
820. Naples 2883.
821. Strena Helbigiana, p. 111 = Boston Mus. Report, 1900, No. 20.
822. B.M. E 183.
823. B.M. B 261, B 425, F 332 (Plate XLV.).
824. Munich 728; Mus. Greg. ii. 21, 1; and see Nos. 1-7 in the list given below.
825. B.M. E 82, F 68.
826. B.M. B 425: cf. Mus. Greg. ii. 21, 1.
827. Millin-Reinach, ii. 10; Ber. d. sächs. Gesellsch. 1855, pls. 1-2.
828. Roscher, i. p. 1802.
829. See below, p. 99, and J.H.S. xviii. p. 296 (Hades is frequently present).
830. See Nos. 1-4, 7, 8, 11; for Eurydike, Nos. 7-9.
831. See Nos. 1-3 and 12-14; also Munich 153, and Louvre F 382.
832. See No. 1; for the rock version of the legend, cf. Pind. Ol. i. 90.
833. Nos. 2, 3, 5, 6; B.M. F 210; Munich 153 = Baumeister, iii. p. 1924, fig. 2040; Reinach, i. 408 (parody).
834. Nos. 3, 4, 9 (P. only), and 11.
835. No. 10.
836. No. 1.
837. Nos. 1, 2, 5, 9.
838. Nos. 1-6, 10, 11.
839. Nos. 1, 4, 10.
840. No. 2 (see Baumeister, iii. p. 1928).
841. No. 3.
842. Nos. 1-5, 8.
843. Nos. 3, 6, 10.
844. Nos. 2, 3, 9.
845. No. 11.
846. See Nos. 5 and 8.
847. Nos. 1-3: cf. Od. xi. 269, and Paus. x. 29, 7.
848. No. 2.
849. No. 1.
850. Reinach, i. 408 (parody): cf. Paus. x. 29, 1.
851. B.M. E 155; Berlin 3023 = Reinach, i. $330=$ Baumeister, i. p. 767, fig. 821; and No. 5 above.
852. B.M. D 61; Berlin 2455, 2680, 2681 (= Reinach, i, 457); Munich $209=$ Baumeister, i. p. 378, fig. 414 (Fig. 122); Athens 1660-62 (= Ant. Denkm. i. 23); ibid. 1663, 1665 (= Bull. de Corr. Hell. i. pls. 1-2).
853. B.M. F 486; Vienna $448=$ Reinach, i. 343; Reinach, i. 220; Helbig, $121=$ Reinach, ii. 121 is doubtful.
854. Bibl. Nat. 918 = Reinach, i. 395 = Dennis, Etruria, ii. frontispiece.
855. Bibl. Nat. $920=$ Reinach, i. 88.
856. See above, p. 69, note 838.
857. See No. 5 above.
858. See below, p. 138.
859. Boston Mus. Report for 1899, No. 38.
860. Reinach, i. 475.
861. Ibid. i. 204, 290 (Berlin 3072).
862. Naples 3221 = Ibid. i. 402.
863. B.M. F 155: see below, p. 141.
864. No. 8 above.
865. Bibl. Nat. 269.
866. See above, p. 69, note 843.
867. B.M. F 68; Petersburg $525=$ Reinach, i. 11.
868. B.M. E 183; Reinach, ii. 324.
869. Petersburg 1792 = Reinach, i. 1: cf. Rev. Arch. xxxvi. (1900), p. 93.
870. B.M. F 277; Reinach, i. 99 (and see i. 155); E.g. i. 522, 1, and Baumeister, i. p. 423, fig. 463.
871. Él. Cér. iii. 37 A.
872. See Ubell, Thanatos, p. 22 ff. He doubts the possibility of the identification of Thanatos on Greek vases.
873. Athens 1093 = Roscher, ii. 2678; Reinach, i. 149 = Baumeister, i. p. 727, fig. 781: cf. Louvre F 388 (where Pottier identifies the warrior as Sarpedon).
874. B.M. D 58 (= Fig. 123), E 12 ( $=$ Wiener Vorl. D. pl. 3, figs. 1-2); Athens $1654=$ DumontPottier, i. pl. 29; Arch. Anzeiger, 1893, p. 86 (in Berlin); with body of woman, Athens $1653=$ Dumont-Pottier, i. pls. 27-28, and Jahrbuch, 1895, pl. 2. All but two of these are funeral lekythi.
875. Reinach, i. 278.
876. B.M. E 155.
877. Berlin 2157 = Jahrbuch, i. p. 211; Arch. Anzeiger, 1895, p. 37 (see under Herakles, p. 103, note 1172).
878. See J.H.S. xii. p. 340 (Ker seizing soul of fallen warrior); also for a Ker in combats, Reinach, ii. 63, 126 (Munich 781), 97 (in the latter case protecting Aeneas against Diomede); also i. 113 (Berlin 1713, 1714), 223, where they represent demons of good or evil according to the will of the gods.
879. See Robert, Thanatos, and J.H.S. xii. p. 345. The Ker hovering over Alkyoneus (see below, p. 100) in Reinach, i. 255, 451, may be a Hypnos (see Koepp in Arch. Zeit. 1884, p. 42 ff.).
880. B.M. D 54; Benndorf, Gr. u. Sic. Vasenb. pls. 14, 33; Athens $688=$ Reinach, i. $165=$ Roscher, ii. 1147; Stackelberg, pl. 48: and cf. Reinach, i. 347 ( $=$ Bourguignon Cat. 19) and Benndorf, E.g. pl. 42, 2; in the former the soul is armed; in the latter the winged figure may be the Kíp. There often seems to be a confusion between the $\varepsilon \ell \delta \omega \lambda o \nu$ or ghost and the Kń $\rho$ or $\Delta \alpha i ́ \mu \omega \nu$, both in its functions and its art-form. Thus, on the vase given in J.H.S. xx. p. 101 (see p. 52), small winged figures like souls are seen flying out of the jar, which are here intended to
represent evil spirits or maleficent ghosts, like the evils let out of the jar by Pandora.
881. B.M. B 639; Reinach, i. 89; Millin-Reinach, i. 19.
882. B.M. B 240, B 543; Berlin 1921.
883. Fig. 112, p. 14; Naples 2883 = Reinach, i. 181: cf. the beautiful conception on the Pergamene frieze.
884. B.M. E 182 and Petersburg 1792 = Reinach, i. 1; Reinach, i. 66, 113, 208.
885. B.M. E 278, Reinach, i. 244 (Louvre E 864), 245, 249; B.M. B 196.
886. B.M. B 168, B 213; Él. Cér. ii. 1, 2.
887. Bibl. Nat. $298=$ Reinach, i. 249, $4=$ J.H.S. xx. p. 106, fig. 2 (and cf. ibid. xix. p. 235); Naples $3355=$ Reinach, i. 248; Él. Cér. i. $53=$ Reinach, i. 249, 6: cf. also B.M. F 147; Froehner, Musées de France, p. 69; Harrison, Prolegomena to Gk. Religion, p. 277; and see above, p. 29.
888. As on the vase J.H.S. xxi. pl. 1, p. 5: cf. Schol. in Ar. Av. 971, and Sophocles' drama of Pandora or the Hammerers ( $\Sigma \varphi$ роко́пои): see also Jahrbuch, vi. (1891), p. 113 ff., and for another explanation, Robert, Arch. Märchen, p. 194 ff. A vase in Berlin (Cat. $2646=$ Reinach, i. $229=$ J.H.S. xix. p. 232) represents the 'Avoסoc of Ge-Pandora, with Satyrs astonished at the sight.
889. Munich 558; Naples S.A. 287; Reinach, i. 129.
890. Hes. Theog. 116; Ar. Av. 696 ff.
891. Gaz. Arch. 1875, pl. 9.
892. Roscher, ii. p. 1550.
893. B.M. E 246: see J.H.S. xi. p. 343.
894. Berlin $2538=$ Reinach, ii. 162.
895. Petersburg 1793 = Reinach, i. 3; but see below, p. 125.
896. Petersburg $1807=$ Reinach, i. 7.
897. B.M. B $49=$ Reinach, ii. 122; Millin-Reinach, i. 50.
898. See Ath. Mitth. xiii. (1888), p. 412 ff. and J.H.S. xiii. p. 77 ff.; also Vol. I. p. 391.
899. Ath. Mitth. 1888, pl. 9.
900. B.M. F 270: see Daremberg and Saglio, Dict., E.g. Cabeiri.
901. See above, p. 73, note 888, for representations of Ge-Pandora rising from the earth, which may be considered in connection with the creation of Pandora.
902. D 4.
903. E 467, 789; J.H.S. xxi. pl. 1 (here P. rises out of the ground, assisted by Epimetheus with his hammer; Zeus and Hermes are present).
904. J.H.S. xx. p. 101: see above, p. 52.
905. Bibl. Nat. $542=$ Reinach, i. 141.
906. Berlin 1722 = Wiener Vorl. D. 9, 8, and another B.F. vase in Reinach, i. 388; Jahrbuch, iv. (1889), pls. 5-6, fig. 1.
907. Helbig, $275=$ Reinach, ii. $48=$ Baumeister, iii. p. 1411, fig. 1567.
908. B.M. F 148; Naples $3255=$ Reinach, i. 236.
909. Berlin $3245=$ Gerhard, Ges. Akad. Abhandl. pl. 19; Athens $957=$ J.H.S. xiii. pl. 3 (H. bears the heavens).
910. Reinach, i. 471.
911. Athens $1926=$ Reinach, i. 515. Possibly also on a Berlin vase (Arch. Anzeiger, 1890, p. 89) with a similar subject, which may, however, denote a "sepulchral banquet." See Harrison, Prolegomena to Gk. Religion, p. 349.
912. B.M. E 224, E 698.
913. B.M. B 218, 244 (Fig. 113), E 410; Louvre E 861 and Berlin 1704 = Reinach, i. 156, 198.
914. Athens 1962.
915. Ibid. $466=$ Plate XLVII.
916. B.M. E 720; Munich 351 = Reinach, ii. 46; Berlin 2248 = Benndorf, Gr. u. Sic. Vasenb. 27, 2; Bibl. Nat. 841 = Millin-Reinach, i. 62; Roscher, ii. p. 350 (with tablets; B.F. in Louvre).
917. Reinach, ii. 324 ; ibid. $325=$ Él. Cér. i. 32 (may be Nike).
918. B.M. E 67; Bibl. Nat. 444; Reinach, i. 99, 339, 463: and see Arch. Anzeiger, 1895, p. 38 (Berlin).
919. B.M. E 65 = Reinach, i. 193; Berlin 2591: cf. Bibl. Nat. $840=$ Reinach, ii. 260.
920. J.H.S. i. pl. 3.
921. B.M. E 467.
922. Berlin 1895.
923. François vase.
924. Reinach, i. 301.
925. B.M. R.F. amphora (uncatalogued).
926. Reinach, ii. 34.
927. Ibid. ii. 296: see p. 39.
928. Ibid. ii. 47.
929. Ibid. ii. 279.
930. B.M. E 381 (?); Él. Cér. i. 20, 31 (= Reinach, ii. 9), 33 (= E.g. ii. 321).
931. B.F. (H. in chariot): B.M. B 201, 317; Bibl. Nat. 253 = Reinach, i. 399; Reinach, ii. 76, 161. In Olympos: B.F.: B.M. B 379. R.F.: Reinach, ii. 186.
932. Berlin 3257 = Baumeister, i. p. 630, fig. 700; Forman Sale Cat. 364; Reinach, ii. 8: see p. 108.
933. Berlin 2278 = Ant. Denkm. i. 9; Reinach, i. 157, 203; Roscher, iii. p. 2119 (with Aphrodite).
934. Jatta 1093; Reinach, i. 175.
935. Petersburg $1807=$ Reinach, i. 7.
936. Mon. Grecs, 1889-90, p. 5 ff.: see also on the subject generally the article Personifikationen in Roscher's Lexikon.
937. Él. Cér. ii. $62=$ Reinach, ii. 287: see above, p. 32.
938. B.F.: Berlin 1983; Bibl. Nat. 220 and Reinach, ii. 211 = Él. Cér. ii. 115-116 (in the former case the solar disc is on his head). Late: B.M. F 305; Reinach, i. 258 (Karlsruhe 388), 368; MillinReinach, i. 16, ii. 49.
939. Reinach, i. 99, 100, 312 (Naples 3222), 291 = Él. Cér. ii. 114 (Hemera); Inghirami, Vasi Fitt. 394 (?see p. 79, note 954). In the last but one they step out of a boat.
940. Reinach, i. 232.
941. B.M. E 466 = Plate LIII. A general view in colours, Art Journal, Sept. 1904.
942. Reinach, i. 99.
943. Ibid. i. 100.
944. Ibid. i. 125.
945. Wiener Vorl. E. 11 = Jahrbuch, 1894, p. 252.
946. Reinach, i. 236.
947. Ibid. i. 109.
948. Cambridge $100=$ Stackelberg, pl. 15; Athens $900=$ J.H.S. xix. pl. 9.
949. B.M. E 252, 466, 776; Berlin 2519 = Coll. Sabouroff, i. 63; Reinach, i. 312 (Naples 3222), 451.
950. Berlin 2293 = J.H.S. xix. p. 268 (a fine R.F. kylix); Athens 1345 = J.H.S. xix. pl. 10. The figure
in the chariot may be perhaps identified as Nyx; see Berlin 2519, where Selene rides a horse and another goddess drives a chariot; also B.M. E 776. See Art Journal, Sept. 1904, p. 290.
951. Petersburg $1793=$ Reinach, i. 3.
952. Reinach, i. 402.
953. Ibid. ii. $319=$ Él. Cér. ii. 118.
954. B.M. E 466 (Plate LIII.); Naples $3256=$ Reinach, i. 100 (here as stars).
955. B.M. E 466; Reinach, i. 236, 291 (?), 339; Inghirami, Vasi Fitt. iv. 394 (?).
956. Bibl. Nat. 449 = Reinach, i. 129: cf. B.M. F 573, E 658, E 659, and Art Journal, Sept. 1904, p. 289.
957. But see above, note 950; p. 30, note 239 .
958. R.F.: B.M. E 449, E 776 (? Nyx; see above); Helbig, 132 = Reinach, ii. 46. Late: Millin-Reinach, ii. 37 (with Hermes; vase by Lasimos in Louvre).
959. Millingen, Anc. Uned. Mon. i. $6=$ Él. Cér. ii. 108 A $=$ Roscher, i. 1257; De Witte, Coll. à l'Hôtel Lambert, pl. 6.
960. B.F.: Louvre E 702 = Reinach, i. 354. R.F.: B.M. E 72, 466; Reinach, i. 463 (= Bibl. Nat. 423), and ii. 81 (= Helbig, 80); Reinach, i. 107 = Hartwig, Meistersch. pls. 39-40 (by Hieron; may be either K. or T.); Bibl. Nat. 374 = Millin-Reinach, ii. 34. Late: Millin-Reinach, i. 48. Eos carrying K.: Berlin 2537 = Reinach, i. 208.
961. Oxford 275 = J.H.S. xiii. p. 137; Bibl. Nat. 846.
962. B.M. F 149.
963. Reinach, ii. 105; B.M. E 468: see Reinach, i. 144, ii. 254 (Bibl. Nat. 207).
964. Reinach, i. 156, 1.
965. Reinach, i. 347 = Bourguignon Sale Cat. 19; Millingen, Anc. Uned. Mon. i. pl. 5; Roscher, i. 1265 = Wiener Vorl. vi. 7.
966. B.M. B $104=$ Vol. I. p. 351; and cf. Él. Cér. iii. 31 ff .
967. B.M. B 431, B 445; Forman Sale Cat. 318.
968. B.M. F 237.
969. B.M. B 212.
970. B.M. F 39; Berlin 2305 = Hartwig, Meistersch. pl. 72, 1; ibid. pl. 22, 1 (see p. 47, note 50612); and cf. Reinach, ii. 248; Philologus, 1893, p. 211.
971. B.M. D 59.
972. B.M. E 480, E 512; J.H.S. xviii. pl. 6; Berlin $2165=$ Reinach, i. 352; Munich $376=$ Reinach, i. $240=$ Baumeister, i. p. 352, fig. 373; Reinach, i. 305; Helbig, $101=$ Reinach, ii. $78=$ Wiener Vorl. ii. 9; Rayet and Collignon, p. 299 (in Louvre).
973. Berlin $2165=$ Reinach, i. 352.
974. Reinach, i. 346: cf. Serv. ad Aen. iii. 209; Ann. dell' Inst. 1882, p. 90 ff.; Roscher, iii. p. 1566.
975. B.M. B 4, B 104: see Studniczka, Kyrene, p. 26, and J.H.S. xiii. p. 109 ff.
976. See below pagelink?], pp. 115, 116.
977. B.M. E $804=$ J.H.S. xiii. p. 135.
978. B.M. F 277.
979. B.M. F 149.
980. Munich $384=$ Reinach, i. 130; Reinach, i. 481.
981. De Witte, Coll. à l'Hôtel Lambert, pl. 11: cf. Reinach, i. 1.
982. B.M. E 228 (see note in Cat.); F 381.
983. See especially Studniczka, Kyrene, and on the subject generally, J.H.S. ix. p. 47 ff .
984. Naples $3253=$ Reinach, i. 194.
985. Naples $3256=$ Reinach, i. 98.
986. B.M. F 271.
987. B.M. E $140=$ Plate LI.
988. Naples $3226=$ Millingen, Anc. Uned. Mon. i. pl. 27; Millin-Reinach, ii. 7 (in Louvre); Berlin $2634=$ Roscher, ii. 837.
989. G 104.
990. B.M. B 319; Naples $3255=$ Reinach, i. 235; ibid. i. 466 (Petersburg 523), ii. 51.
991. B.M. E 48, 74, 84; Ant. Denkm. ii. 1: see Arch. Zeit. 1885, p. 116, and Loeschcke in Dorpater Programm for 1887.
992. Boston Mus. Report, 1900, p. 63.
993. B.M. B 4, B 6. See Vol. I. p. 341 ff.
994. See above, pp. 19, 24.
995. See above, p. 19.
996. Reinach, ii. 144: see Paus. iii. 1, 2, and 18, 10; Apollod. iii. 10, 3, 1; Hartwig, Meistersch. p. 491, note.
997. De Witte, Coll. à l'Hôtel Lambert, pl. 28.
998. Jatta $1501=$ Furtwaengler and Reichhold, pl. 38.
999. Naples $3235=$ Reinach, i. $103=$ Roscher, iii. 861.

1000B.M. E 437 (fish-body); and see p. 101.
1001 Petersburg $350=$ Reinach, i. 12.
1002Naples 3226 = Millingen, Anc. Uned. Mon. i. pl. 27 (Ismenos and Krenaia): cf. Millin-Reinach, ii. 7. The nymph Dirke is, according to Robert, represented in the figure rising from the ground to receive the child Dionysos at his birth on the vase Petersburg $1792=$ Reinach i. 1 (otherwise Gaia): see his Arch. Märchen, p. 185.

1003Él. Cér. ii. 86; Munich $805=$ Reinach, i. 391 (see ibid. p. 277) $=$ Wiener Vorl. iv. 4.
1004François vase (at Peleus and Thetis' nuptials); B.M. E 805; Berlin 2391, 2401 (Klio and Terpsichore): cf. Bull. de Corr. Hell. 1895, p. 102 (in Louvre; three figures named Ourania, Kalliope, and Melpomene).

1005B.M. E 271.
1006 Reinach, i. $526=$ Jatta 1538.
1007See p. 32.
1008F 478; and see Jatta $654=$ Gaz. Arch. 1880, pl. 19, for a possible instance.
1009Berlin $2278=$ Ant. Denkm. i. 9.
1010 Petersburg $350=$ Reinach, i. 12.
1011Louvre E 861 = Reinach, i. 156.
1012See p. 70; and also p. 137, under Orestes.
1013B.M. E 290.
1014Reinach, i. 255, 451 (but see note 879 on p. 72).
1015Reinach, i. 222 = Plate XXXIX.; Boston Mus. Report, 1900, No. 25.
1016B.M. E 12; Reinach, i. 149 = Baumeister, i. p. 727, fig. 781.
1017B.M. D 58 = Fig. 123; Jahrbuch, 1895, pl. 2; Dumont-Pottier, i. pls. 27-8.
1018Berlin 2661 = Rayet and Collignon, p. 257. For Ploutos see also Reinach, i. 1 (at birth of Dionysos), and the following notes.

1019Munich 291 = Reinach, ii. 47 (more probably Iris).
1020Rev. Arch. xxxvi. (1900), p. 93.

1021See e.g. B.M. E 287, E 574 (Plate XXXVI.), E 643; Oxford 312-314.
1022Studniczka, Siegesgöttin (1898), and in Roscher's Lexikon, iii. p. 318: see also Sikes, Nike of Archermos (Cambridge, 1890), and J.H.S. xiii. p. 111 ff. Studniczka regards the following as certain B.F. instances: B.M. B 1, B $106_{3}$, B $125_{2}$, B 334; Jahrbuch, 1889, pls. 5-6, figs. 2, 2a; Jahn, Entführung d. Europa, pl. 5. The instances on late careless B.F. vases, such as B 356, B 357, B 652 in B.M., are not to the point, as these belong to the fifth century.

1023B.M. E 444; Reinach, i. 157, 1; Mus. Greg. ii. 21, 1; Berlin 2278 = Ant. Denkm. i. 9.
1024Él. Cér. i. 14 (in B.M.); Reinach, i. 66, 194, 417, ii. 266 (N. crowning Z.); Berlin 2167 (Z. and Poseidon).

1025Él. Cér. i. 32 and iii. 38 ( $=$ Berlin 2317); Petersburg $355=$ Reinach, i. 14.
1026Naples 3373; Él. Cér. i. 76 A: cf. Reinach, i. 1, 3, 5, 37, 158; B.M. B 608, 610, E 523; Él. Cér. i. 68.

1027B.M. E 445.
1028Reinach, i. 14, 253 (Bibl. Nat. 392), 406, 511, ii. 310; Naples 1891 = Él. Cér. ii. 35; ibid. ii. 48.
1029B.M. E 432.
1030Reinach, ii. 290.
1031B.M. E 262; Reinach, i. 22, 251; B.M. F 178, Athens 1346 = Dumont-Pottier, i. pl. 15, Jahrbuch, 1892, p. 69 (N. crowning H.).

1032See p. 107, note 1222.
1033Mon. Grecs, 1875, pls. 1-2; Petersburg $523=$ Reinach, i. 467.
1034B.M. E 410.
1035Reinach, i. 286 (?), 398 (Berlin 2521).
1036B.M. F 109; Reinach, i. 7.
1037B.M. E 182; Reinach, i. 1, 3.
1038Reinach, i. 113; and cf. BM. E 788.
1039Berlin $3023=$ Reinach, i. 330.
1040Overbeck, Her. Bildw. 18, 7.
1041Millingen, Anc. Uned. Mon. i. 22; Reinach, i. 358 (unwinged figure; may be Eris).
1042Naples 3231 = Reinach, i. 299.
1043Reinach, i. 236.
1044Ibid. i. 361 (crowning them); Inghirami, Vasi Fitt. 187.
1045Reinach, ii. 49; i. 108, 195.
1046Ibid. i. 390.
1047 Ibid. i. 98.
1048B.M. F 163; Reinach, i. 197, 8, ii. 198, 287.
1049B.M. E 574 = Plate XXXVI.; B.M. E 287, E 643; Reinach, ii. 7.
1050Reinach, i. 254 (Bibl. Nat. 392), 340, Athens 1018 = Benndorf, Gr. u. Sic. Vasenb. 19, 3 (torch); B.M. E 251, E 513, Roscher, iii. 329, Benndorf, op. cit. 47, 2 (incense-burner); B.M. E 574 (lamp); Oxford 274, Athens 1362, Reinach, ii. 235, 310, De Witte, Coll. à l'Hôtel Lambert, pl. 4, Benndorf, op. cit. 47, 1 (lyre); Athens 1362, Reinach, i. 410 (tripod); Benndorf, op. cit. 48, 1 (wreath). On Oxford 312 she plays on a lyre. On her costume and attributes generally see Roscher, iii. p. 330.

1051Munich 351 = Reinach, ii. 46: see above, p. 76, note 1048.
1052Petersburg 355 = Reinach, i. 14; B.M. F 109; Jatta 1050.
1053B.M. E 455-56; Reinach, i. 195, ii. 180; ibid. i. 403, 428; Roscher, iii. 330; Cab. Pourtalès, pl. 6.

1055B.M. F 66 = Fig. 124; Naples 2684 = Reinach, i. 474; Reinach, ii. 206; Boston Mus. Report, 1898, No. 51.

1056J.H.S. vii. p. 275 ff.
1057Munich $386=$ Reinach, ii. $46=$ Furtwaengler and Reichhold, pl. 19.
1058Inghirami, Vasi Fitt. 361.
1059Athens 1026 = Benndorf, Gr. u. Sic. Vasenb. 23, 2.
1060Oxford 265; B.M. E 538; Él. Cér. i. 100.
1061Reinach, ii. 216.
1062B.M. B 608; Berlin 2211 = Él. Cér. i. 96.
1063B.M. E 700; Reinach, ii. 326 = Roscher, iii. 326 (here she is putting on the inscription).
1064B.M. F 550.
1065Berlin 2661 = Rayet and Collignon, p. 257.
1066Reinach, ii. 4; Millin-Reinach, i. 24; Jatta 1050.
1067B.M. E 264, 275, 476, 576.
1068B.M. E 379.
1069B.M. E 128; Reinach, i. 268.
1070B.M. F 170; Reinach, i. 45, 378, 2, ii. 187, 230, 292.
1071Reinach, ii. 262 (Bibl. Nat. 364), 291; and see 298.
1072Millin-Reinach, ii. 72.
1073B.M. B 607; Stackelberg, pl. 25 (Hegias); Oxford 288 (Cat. pl. 15); Louvre F 109 (? Agon).
1074Reinach, ii. 320; Tyszkiewicz Coll. pl. 35 (now in B.M.); Inghirami, Vasi Fitt. 363.
1075Reinach, i. 322.
1076B.M. E 460, 469; Reinach, i. 49, 378, ii. 274.
1077Vol. I. p. 223.
1078Reinach, i. 63.
1079B.M. B 1 (?); Petersburg 183 = Micali, Storia, pl. 87; Reinach, ii. 126 (?); Daremberg and Saglio, Dict. s.v. Agon, fig. 180; Louvre F 109: see also Burlington Fine Arts Club Cat. (1903), pp. 92, 97.

1080B.M. F 20; Berlin 3023; Millingen-Reinach, 36; Helbig, $90=$ Mus. Greg. ii. 60, 3; and see Knapp, Nike, p. 37.

1081See above, p. 49.
1082See p. 43.
1083Jahreshefte, 1899, p. $16=$ Reinach, i. 279; but more probably the scene refers to Orestes and Pylades in Tauris.

1084Vienna $319=$ Reinach, i. 353: for Dike in under-world see p. 69.
1085Naples $3253=$ Reinach, i. 194.
1086Naples $3233=$ Reinach, i. 239.
1087Berlin 1732 = Reinach, ii. 66; B.M. B 364, B 365: see Reinach, i. 223.
1088See Roscher, iii. p. 2934.
1089Louvre E 723: see Ath. Mitth. 1902, p. 255.
1090Reinach, ii. 26, 4 (in Louvre).
1091B.M. B 334; Berlin 1775; Karlsruhe 259; Petersburg 1807 = Reinach, i. 7 (at Judgment of Paris); Reinach, i. 100 (with Pelops), ii. 26, 1, 161; Baumeister, i. p. 18, fig. 20.

1092For unidentified winged deities see Louvre F 54 = Wiener Vorl. 1888, pl. 5, fig. 2 (Exekias); Wiener Vorl. 1890-91, pl. 3, fig. 2 (Nikosthenes).

1093Naples 3222 = Baumeister, iii. p. 1927, fig. 2042 A: see p. 69.
1094Reinach, ii. 100 (now in B.M.: see Class. Review, 1899, p. 468).
1095 Naples 3237 = Baumeister, ii. p. 834, fig. 918 (?): see below, p. 91, note 1098, for other interpretations.

1096Millingen-Reinach, 23.
1097Reinach, i. 173.
1098 Ibid. i. 229 (in Boston); B.M. F 279; B.M. F 271 and Naples 3237 = Baumeister, ii. p. 834, fig. 918: cf. Reinach, i. 331, 1. The name of Typhlosis (Blindness) has also been suggested for the figure on the Naples vase.

1099Vol. I. p. 480 (Assteas vase in Madrid).
1100 Munich $810=$ Reinach, i. 363.
1101See above, p. 65, for instances.
1102B.M. E 492; Naples 2419; Karlsruhe 208.
1103Berlin 2471.
1104B.M. B 210: see p. 58, note 701.
1105B.M. E 224.
1106Naples 2873 (Assteas).
1107B.M. E 455.
1108Munich 378.
1109Naples $3255=$ Reinach, i. 235.
1110Berlin $2658=$ Reinach, i. 375.
1111B.M. F 111.

## CHAPTER XIV HEROIC LEGENDS

Kastor and Polydeukes-Herakles and his twelve labours-Other contests-Relations with deities-Apotheosis-Theseus and his labours-Later scenes of his life-Perseus-Pelops and Bellerophon -Jason and the Argonauts-Theban legends-The Trojan cycle-Peleus and Thetis-The Judgment of Paris-Stories of Telephos and Troilos-Scenes from the Iliad-The death of Achilles and the Fall of Troy-The Odyssey-The Oresteia-Attic and other legends-Orpheus and the Amazons-Monsters-Historical and literary subjects.

In treating of the subject of heroic legends, we propose to deal first with the more prominent heroes, such as Kastor and Polydeukes, Herakles, Theseus, and Perseus, and with the tales of Thebes and Troy; next with the series of myths connected specially with Attica or other localities; then with semi-mythical personages, such as Orpheus and Thamyris, which lead us on to the next division of the subject-scenes connected with Greek history.

Kastor and Polydeukes do not play a very extensive part on vases; and as they are not further characterised than by the petasos and two spears, which are the ordinary equipment of young horsemen, they are not always to be identified with certainty, except in mythological scenes. Among these they appear in the Gigantomachia, ${ }^{[1112]}$ or in company with Herakles are initiated into the lesser mysteries at Agra ${ }^{[1113]}$; they are also seen at the apotheosis of Herakles. ${ }^{[1114]}$ They are present when Leda discovers the egg laid by Nemesis, ${ }^{[1115]}$ and on two B.F. vases appear with Leda and Tyndareus in a family group ${ }^{[1116]}$; they are also seen in company with Hermes, ${ }^{[1117]}$ with Paris and Helen, ${ }^{[1118]}$ with Danaos taking refuge in Attica, ${ }^{[1119]}$ in a scene from the Merope of Euripides, ${ }^{[1120]}$ and at the slaying of the Sphinx by Oedipus. ${ }^{[1121]}$ They take part in the hunt of the Calydonian boar, ${ }^{[1122]}$ and in many scenes from the Argonautika, such as the death of Talos, ${ }^{[1123]}$ the punishment of Amykos, ${ }^{[1124]}$ and others of doubtful meaning. ${ }^{[1125]}$ There is more than one representation of their carrying off the Leukippidae, ${ }^{[1126]}$ the best being the beautiful Meidias vase in the British Museum (Plate XLI.), where all the figures are named. ${ }^{[1127]}$ They appear as hunters, ${ }^{[1128]}$ as deified beings present at a Theoxenia (lectisternium), or feast of the gods, ${ }^{[1129]}$ and are crowned by Nike (with stars over their heads). ${ }^{[1130]}$

## Herakles

Of all the heroic legends the most numerous and the most important are those of the Herakleid. They appear on vases of all periods, though in the largest proportion on the black-figured varieties, and include every event in his life, from his birth to his deified life in Olympos. Of the visit of Zeus to his mother Alkmena we have already spoken, as also of her apotheosis. ${ }^{[1131]}$ As an infant we see Herakles engaged in strangling
the serpents sent by Hera, while his brother Iphikles recoils in terror ${ }^{[1132]}$; later on Hera appears to be reconciled to his existence, for she is actually seen suckling him at her breast. ${ }^{[1133]}$ Next he is carried off by Hermes to Cheiron the Centaur for his education, ${ }^{[1134]}$ and we see him undergoing instruction on the lyre from Linos, ${ }^{[1135]}$ or on his way, accompanied by an old woman carrying his lyre. ${ }^{[1136]}$ By the time when his series of labours begins he is usually represented as a full-grown bearded man, especially on the archaic vases; but he appears in a few instances as a quite youthful beardless figure.
Of all the achievements of Herakles the most famous are the Twelve Labours, to which he was subjected by Hera at the hands of Eurystheus. We find them all represented on vases, with the exception of the cleansing of the Augean stables, which may be presumed to have offered too many difficulties to the painter; it only occurs once in the whole history of Greek art, on a metope at Olympia. The horses of Diomede only occur once, the Keryneian stag thrice, and the Stymphalian birds five times; but the rest may be described as common. In all these scenes Herakles is usually accompanied by Athena; also, but less frequently, by Iolaos and Hermes.

## I. The Nemean Lion.

Of this subject we find two "normal" types on B.F. vases, ${ }^{[1137]}$ with one or two abnormal versions; on R.F. vases the treatment is less stereotyped.
B.F. (1) Standing type:-Herakles plunges sword into lion's neck (both upright): B.M. B 160, B 232, B 621 (Plate XXX.). H. strangles lion: Berlin 1720 = Wiener Vorl. 1888, 6, 3 (Exekias); Wiener Vorl. 1889, 6, 3 (Charitaios).
(2) Crouching type:-Herakles stoops and strangles lion: B.M. B 159, B 199, B 318 (Fig. 125); Petersburg 68 = Wiener Vorl. 1889, 4, 6 (Taleides).
(3) Abnormal:-Lion on its back; Herakles slays it with club: Reinach, ii. 52. Herakles pursues lion: Louvre F 108 = Wiener Vorl. 1890-91, pl. 1, 5 (Nikosthenes).
R.F. (1) Herakles with lion over shoulder about to hurl it on Eurystheus (type borrowed from Erymanthian Boar, see below): B.M. B 193 = Plate XXXII. (Andokides).
(2) Crouching type: Munich 415 = Reinach, i. 150 = Baumeister, i. p. 656, fig. 723; B.M. E 168; Röm. Mitth. v. (1890), pl. 12 = Wiener Vorl. 1890-91, 7, 2 (Nikosthenes, in Boston). See also B.M. E 104 (abnormal).


FIG. 125. HERAKLES AND THE NEMEAN LION (BRITISH MUSEUM).

We may also note here a curious B.F. vase, on which Herakles is seen in the forests of Nemea preparing the lion's skin for his own wear. ${ }^{[1138]}$

## II. The Cretan Bull.

Type: Herakles seizes the bull from the front and ties its legs with a cord.
B.F. B.M. B 309; Berlin 1886, 1898; Helbig, 31; Reinach, ii. 55, 5 = Baumeister, i. p. 660, fig. 727.
R.F. B.M. E 104; Wiener Vorl. 1890-91, pl. 7, 2 (Nikosthenes, in Boston) = Röm. Mitth. v. (1890), p. 324.

Late. Berlin 3145 = Millingen-Reinach, 11; Athens 1931.
See also a very remarkable vase in Forman Sale Cat. No. 305 (now at Boston), where the same subject appears each side, one B.F., the other R.F. (by Andokides). ${ }^{[1139]}$
III. The Erymanthian Boar (see Klein, Euphronios, p. 87).
(1) The capture:
B.M. B 462; Louvre F 236; Berlin 1981, 2034; Naples 2705 and S.A. 150; Athens 858, 860 (all B.F.).
(2) The bringing back of the boar (Eurystheus absent; Athena usually receives the hero):
B.M. B 447, 492; Cambridge 57; Munich 694; Athens 1097 (all B.F.).


FIG. 126. HERAKLES BRINGING THE BOAR TO EURYSTHEUS (BRITISH MUSEUM).
(3) Herakles hurls the boar upon Eurystheus, who hides himself in a large sunk jar (ní 0 oc):
B.F. B.M. B 161 (Fig. 126); Reinach, ii. 55, 1; Helbig, 37; Louvre F 59, 202.
R.F. B.M. E 44 (Euphronios) = Furtwaengler and Reichhold, pl. 23; Louvre G 17 = Wiener Vorl. 1890, pl. 10.
IV. The Keryneian Stag.
B.F. B.M. B 169, B 231.
R.F. Reinach, i. 233.

A dispute between Apollo and Herakles over a stag (Rein. ii. 56, 3: see p. 34) may perhaps be referred to this subject, as the myth is not otherwise known, but it is more usually Artemis who endeavours to thwart Herakles' capture.
$=$ Reinach, ii. 58) and one late example (Reinach, ii. 297). Herakles shoots the birds with bow and arrow.

## VI. The Lernaean Hydra.

This subject, occurring only on archaic vases, has no very fixed type; the Hydra has seven or nine heads, and the body of a serpent or of a cuttle-fish. Iolaos sometimes assists Herakles, and in two cases the crab sent by Hera is also visible.
B.F. Early: Reinach, i. 389; Jahrbuch, 1898, pl. 12; Reinach, i. 118 (6) = Louvre E 851.

Later: Reinach, i. 118 (1) = Berlin 1854 (crab); ibid. 118 (3); 118 (5) = Louvre F 386 = MillinReinach, ii. 75 (Athena slays crab); Reinach, ii. 53 = Baumeister, i. p. 657, fig. 724; Berlin 1801 = Wiener Vorl. 1889, 7, 3: see also Athens 792 = Heydemann, Gr. Vasenb. pl. 4, 1, where two successive scenes are given.
R.F. Reinach, ii. 76. Hydra has cuttle-fish body and ten or eleven heads.

## VII. The Horses of Diomede.

Naples 2506; Reinach, ii. 297 (?).

## VIII. The Augean Stables.

Not found on vases.

## IX. The Combat with Geryon and Capture of his Cattle.

A very favourite subject on B.F. and early vases, including some of the finest specimens. Geryon is at first winged and only three-headed, then triple-bodied, represented as three armed warriors united, ${ }^{[1140]}$ one or two of whom generally fall wounded. Herakles attacks with bow.

Early B.F. "Proto-Corinthian": B.M. A 487 = J.H.S. v. p. 176. Chalcidian: B.M. B 155; Bibl. Nat. $202=$ Reinach, ii. 58 and $253=$ Plate XXII.
Late B.F. B.M. B 156, B 194; Louvre F 53 = Reinach, ii. 59 = Baumeister, i. p. 662, fig. 729 (Exekias); J.H.S. xviii. p. 299, and Bibl. Nat. 223 (abnormal types).
R.F. Munich 337 (Plate XXXVIII.) = Furtwaengler and Reichhold, 22 (Euphronios); Noel des Vergers, Étrurie, pl. 38.
Late. Berlin 3258; Naples 1924 = Millingen-Reinach, 27.
The driving off of the cattle by Herakles is also represented:
B.M. E 104; Reinach, ii. 58, 5; and see Klein, Euphronios, p. 61.

## X. The Girdle of Hippolyta.

B.F. B.M. B 533.

Late. Naples $3241=$ Reinach, i. 384.
Besides the scenes in which Herakles is evidently capturing the girdle, there are many vases on which he is seen in combat with Hippolyte and other Amazons, such as Andromache or Alkaia, assisted himself by Iolaos or Telamon.
B.F. B.M. B 154, B 426; Louvre E 875; Cambridge 44; Bourguignon Sale Cat. 18 (Exekias); Berlin 3988 = Coll. Sabouroff, i. pl. 49.
R.F. B.M. E 45; Reinach, i. 166; Bibl. Nat. $535=$ Reinach, ii. 265; Bologna 322; Reinach, i. $353=$ Wiener Vorl. vii. 4, 1 (Duris).
Late. Jatta 423 = Reinach, i. 206.

## XI. Fetching Kerberos from Hades.

The various types and methods of representing this subject have been collected in J.H.S. xviii. p. 296; as typical examples may be given:

Early B.F. Louvre E 701 = Reinach, i. 153; Reinach, i. 389, ii. 32.
Late B.F. J.H.S. xviii. p. 295 (in B.M.); Reinach, ii. 69.
R.F. Jahrbuch viii. (1893), pl. 2 (in Berlin) and p. 160 (in Boston).

Late. On several of the "under-world" vases, see p. 68, Nos. 1-4, 11.

## XII. Fetching the Golden Apples from the Garden of the Hesperides.

There are two versions of this myth. In one, which seems to be the earlier, Atlas fetches the apples, while Herakles supports the universe for him (see above, p. 75). The vases representing Herakles in the Garden surrounded by the Nymphs (for whom see p. 92) are almost all of the later period:
B.F. Benndorf, Gr. u. Sic. Vasenb. pl. 42, 1.
R.F. B.M. E 224 = Furtwaengler-Reichhold, 8-9 (Plate XLI.).

Late. B.M. F 148; Naples 2873 = Millin-Reinach, i. 3 = Wiener Vorl. viii. 12, 3 (Assteas); and Naples $3255=$ Reinach, i. $236=$ Baumeister, i. p. 686, fig. 745.

Parody. Athens 1894 = Reinach, i. 506 (?).
Besides the somewhat insignificant part that he plays in the Gigantomachia, ${ }^{[1141]}$ Herakles had several independent combats of his own with gigantic monsters and such-like beings. Of these the most popular subjects are Antaios and Alkyoneus. The legend of Herakles' wrestling with the former is familiar from Pindar ${ }^{[1142]}$; on the vases Antaios is not characterised as a giant in size or otherwise, but his mother Gaia is generally present. ${ }^{[1143]}$
Alkyoneus, on the other hand, is represented as a being of gigantic size, lying asleep in a cave ${ }^{[1144]}$; a small winged figure which sometimes hovers over him has been interpreted by some as Hypnos (Sleep), but might also be a Kǹ $\rho \Theta \alpha \nu \alpha ́ t o ı o, ~ o r ~ h a r b i n g e r ~ o f ~ d e a t h . ~ . ~[145] ~ H e r a k l e s ~ g e n e r a l l y ~ a t t a c k s ~$ him with club or bow and arrow, but on one vase is depicted gouging out his eye ${ }^{[1146]}$; on another he is assisted by Telamon with a stone. ${ }^{[1147]}$ Another giant with whom we find the hero contending is Cacus, whose oxen he carried off. This is a purely Roman myth, and belongs rather to the legends of the Roman Hercules, but curiously enough it finds a place on one Greek vase of Sicilian origin, which represents Cacus in a hut with the oxen and Herakles playing a lyre in triumph. ${ }^{[1148]}$

One of the commonest subjects connected with Herakles is his combat with Kyknos, the son of Ares, described at length in the Hesiodic Scutum Herculis. It is mostly found on B.F. vases, the usual "type" showing the two combatants supported by Athena and Ares respectively in their chariots, while Zeus appears in the midst to interrupt them. ${ }^{[1149]}$ One late R.F. vase seems to show the preparations for the combat, in the presence of an Amazon, a Fury, and other personages ${ }^{[1150]}$; another vase, the subsequent attack made on Athena by Ares. ${ }^{[1151]}$
We find him in combat with Acheloös, the river-god, represented as a bull with the face of a bearded man, ${ }^{[1152]}$ or occasionally, by confusion with a sea-deity, with the body and tail of a fish. ${ }^{[1153]}$ This latter form is assumed by Triton, with whom also the hero contends, ${ }^{[1154]}$ though the myth is unknown in literature. Of similar import is his combat with Nereus, the old man of the sea (A $\lambda$ ios Гर́ $\rho \omega \nu$ ), who appears in human form as an aged man ${ }^{[1155]}$; the "type" employed on B.F. vases is similar to that of Peleus wrestling with Thetis (see below, p. 120), with similar indications of the sea-god's transformation into animals. In one case an air of humour is imparted to the scene, and Herakles is represented smashing the furniture in Nereus' house. ${ }^{[1156]}$
Another important group of subjects is concerned with Herakles' adventures with the Centaurs, which fall under several headings. Allusion has already been made to his early education by Cheiron, and again we see him paying a visit of a peaceful nature to the aged Pholos, who entertains him by opening a jar of wine. ${ }^{[1157]}$ The smell therefrom attracted the other Centaurs and led to a combat, which we see vividly depicted on many early B.F. vases, on which it was a favourite subject, as also on later ones. ${ }^{[1158]}$ We also find him in combat with particular Centaurs, from whom he rescues a woman carried off by them. Thus we see Hippolyta delivered from Eurytion, ${ }^{[1159]}$ and Deianeira from Nessos ${ }^{[1160]}$ or Dexamenos ${ }^{[1161]}$ (the latter appears on later vases only, and there seems to be no distinction between them in the myth).
Other adventures in which he engages include the freeing of Prometheus from the vulture, which he slays with his bow ${ }^{[1162]}$; the bringing back of Alkestis from Hades ${ }^{[1163] ;}$; the seizure of the Kerkopes, a pair of brigands, whom he carries off head downwards over his shoulders ${ }^{[1164]}$; and his capture by Busiris in Egypt, ${ }^{[1165]}$ with his escape after slaying the king's negro attendants. ${ }^{[166]}$ Among rarer myths may be mentioned the destruction of the vines of Syleus ${ }^{[1167]}$; a possible representation of his contest in drawing water with Lepreos ${ }^{[1168]}$; and his combat with Erginos, the king of Orchomenos, and the capture of his heralds. ${ }^{[1169]}$ A vase in Athens, on which he is depicted dragging two Satyrs in a leash, ${ }^{[1170]}$ depicts an unknown myth; as do those which represent him contending with Geras, a personification of Old Age, ${ }^{[1171]}$ and beating a winged Ker with his club. ${ }^{[1172]}$ In company with Athena he attacks an unknown man, ${ }^{[1173]}$ and he is also seen leading a Sphinx. ${ }^{[1174]}$
Next we turn to the relations between the hero and the Olympian or other deities, which often take the form of disputes or combats. Of these the most famous and important is his capture of the Delphic tripod, for which he fights with Apollo, generally in the presence of Athena and Artemis ${ }^{[1175]}$; in one instance Herakles is seen in Athena's chariot, carrying the tripod off with him ${ }^{[1176]}$; other vases represent the final reconciliation with Apollo. ${ }^{[1177]}$ There is a curious representation of a combat between Herakles and Hera (depicted as the Roman Juno Sospita, wearing a goatskin on her head), with Athena and Poseidon assisting on either side. ${ }^{[1178]}$ Another rare and interesting subject is that of his attack on Helios, whom he interrupts at sunrise to prevent his journey after Geryon's cattle from becoming known. Herakles is shown waiting for the chariot of the sun-god as it rises from the waves, and preparing to discharge his arrows. ${ }^{[1179]}$ A later stage of the story is illustrated by a fine R.F. vase, where he voyages over the sea in the golden bowl given him by Helios. ${ }^{[1180]}$ Lastly, he defends Hera and Iris against the attacks of a troop of Seileni. ${ }^{[1181]}$ In other scenes where he is associated with the gods, it is in his divine capacity after his apotheosis.
His relations with women are not so frequently depicted but we have at least one representation of his visit to Omphale ${ }^{[1182]}$; or, again, of his entertainment by Eurytos, ${ }^{[1183]}$ the carrying off of his daughter Iole, ${ }^{[1184]}$ and the subsequent fight with Eurytos. ${ }^{[1185]}$ His rescue of Deianeira from the Centaur has already been alluded to, and there may also be a reference to his carrying her off from her father Oineus. ${ }^{[1186]}$ Hesione is not found with him on vases, but he is seen carrying off Auge ${ }^{[1187]}$; he is also associated with a Nymph, who may be Nemea. ${ }^{[1188]}$ On one vase he pursues, with amorous intention, a woman, who may possibly be intended for Athena. ${ }^{[1189]}$
A remarkable vase-painting by Assteas of Paestum depicts Herakles in a fit of madness destroying his children by hurling them on a fire, on which he has already thrown the household furniture; his mother and others look on, expressing various emotions. ${ }^{[1190]}$ In more peaceful mood he is seen grouped with his wife Deianeira and their son Hyllos, ${ }^{[1191]}$ or with Oineus, his father-in-law. ${ }^{[1192]}$

We now proceed to note a few subjects which do not admit of more exact classification. Herakles is initiated into the lesser mysteries at Agra, together with Kastor and Polydeukes, ${ }^{[1193]}$ and is conducted by Hermes to the revels of the Scythian Agathyrsi (cf. p. 179). ${ }^{[1194]} \mathrm{He}$ is also sometimes seen carrying Hades on his back, the latter bearing a large cornucopia ${ }^{[1195]}$; but the signification of this subject is unknown. He accompanies the Argonauts on their wanderings,, ${ }^{[1196]}$ and appears as a single figure shooting from a bow. ${ }^{[1197]} \mathrm{He}$ is often represented performing an act of sacrifice, either as a single figure ${ }^{[1198]}$ or in groups, sacrificing a ram or other animal. ${ }^{[1199]}$ Some of these scenes, where he sacrifices to the xoanon of Chryse, ${ }^{[1200]}$ a local Lemnian goddess, must refer to the story of Philoktetes, with which he was connected. Or, again, conversely, we see a statue of Herakles made the subject of offerings from others. ${ }^{[1201]}$ A scene from the story of Antigone (see below, p. 119) is represented as taking place before a shrine, in which stands the deified hero interceding with Kreon for her life. ${ }^{[1202]}$ He also appears as protecting god of Attica, ${ }^{[1203]}$ and also of the palaestra, with reference to his traditional founding of the Olympian games. ${ }^{[1204]}$ Finally, there is a series of subjects which (as in the case with most of the preceding section) may be concerned with Herakles either before or after his apotheosis.
Among these are the numerous vases (especially B.F.) where he is represented as being greeted by Athena or conversing with her, ${ }^{[1205]}$ or receiving a libation from her. ${ }^{[1206]}$ These may either refer to his receiving visits of encouragement from her in the intervals between his labours, or to his reception by her in Olympos (see below). Many vases represent him banqueting, usually in company with Dionysos and other deities. ${ }^{[1207]}$ With Hermes and Iolaos he takes part in a procession accompanied by music ${ }^{[1208]}$; and he is also represented overcome with wine and forming a subject for mockery, ${ }^{[1209]}$ while Satyrs steal his weapons ${ }^{[1210]}$ (this subject being probably taken from a Satyric drama). Or he is represented bathing at a fountain ${ }^{[1211]}$; and in one case fishing with Hermes and Poseidon. ${ }^{[1212]}$ He also takes part in the Gigantomachia, ${ }^{[1213]}$ and is present at the birth of Athena, ${ }^{[1214]}$ in both cases by a curious anticipation of his deified character. Exceedingly common are his appearances with a lyre, as Kitharoidos. ${ }^{[1215]}$
The last scenes of Herakles' earthly life are his last sacrifice on Mount Kenaion, ${ }^{[1216]}$ the wearing of the poisoned robe which led to his death, ${ }^{[1217]}$ and the subsequent burning of his body on the funeral pyre. The last scene is occasionally combined with his apotheosis; the Hyades quench the flames among which his body is consuming, while the deified hero ascends in the chariot of Athena or Nike to Olympos. ${ }^{[1218]}$
The vases relating exclusively to his apotheosis fall into two main classes, which admit of more than one sub-division: (1) his ascent into heaven in the chariot of Athena or Nike; (2) his reception in Olympos. The ascent in the chariot of Athena is almost confined to B.F. vases; on those of the R.F. period it rarely occurs; and on the Italian vases her place is usually taken by Nike, who is also represented crowning him with a wreath. On the B.F. vases the "type" is almost invariable (see Plate XXIX.): Herakles mounts the four-horse chariot in which the goddess stands ready; on the farther side of it stand various deities, the commonest being Apollo, Dionysos, and Hebe, with Hermes at the horses' heads; more rarely Zeus, Hera, and Artemis are seen. ${ }^{[1219]}$ In one or two cases Iolaos acts as charioteer, Athena standing at the side ${ }^{[1220]}$; or, again, Hebe performs the same office. ${ }^{[1221]}$ On the late red-figured vases the attendant deities are almost limited to Hermes and Eros; the chariot is here usually represented as on its way. ${ }^{[1222]}$


From Arch. Zeit.
FIG. 127. RECEPTION OF THE DEIFIED HERAKLES BY ZEUS, FROM A VASE AT PALERMO.

The first stage of the hero's introduction into Olympos is his introduction to Zeus by Athena, a scene common on both B.F. and R.F. vases (Fig. 127). The attendant deities vary very greatly: Hermes, Apollo, Hebe, and Artemis are most often seen; also Hera, Poseidon, Ares, and Dionysos. ${ }^{[1223]}$ Besides these there are numerous scenes in which he is grouped with various deities, usually Athena and Hermes, but also Poseidon, Ares, Dionysos, and Hebe, apparently in the enjoyment of his new life among the welcoming gods ${ }^{[1224]}$; and to this group may be added the scenes in which he is crowned by Nike. ${ }^{[1225]}$ The completion of his bliss is the marriage with Hebe, found on two or three fine R.F. vases, ${ }^{[1226]}$ with a numerous company of attendant deities.

The adventures of Theseus, the peculiarly Attic hero, are portrayed on vases of all dates; they are rare on the later kinds, but are most popular on the R.F. vases of the "strong" and "fine" periods, as would naturally be expected at a time when his cult was coming into special prominence in Athens (see Vol. I. p. 418). Of his seven labours the only one commonly found on the B.F. vases is the combat with the Minotaur, but some of the finest R.F. kylikes give a complete series. They are given in the order of his progress from his birthplace Troezen through the Isthmus to Athens. It should be noted that the Cretan legends, which alone are common on the early vases, are clearly older than the more purely Attic.

The first subject to be mentioned in connection with the story of Theseus is that of his father Aigeus consulting the oracle of Themis. ${ }^{[1227]}$ His finding of Aigeus' sword and sandals beneath the stone (cf. Plate LXII.) is not depicted on vases, but we have a possible representation of his recognition by Aigeus, ${ }^{[1228]}$ and an unintelligible scene where he pursues or attacks his mother Aithra, apparently wielding the newly found sword. ${ }^{[1229]}$
There are only two R.F. kylikes which give the complete series of adventures, including that in Crete; the Duris kylix in the British Museum (Vol. I., frontisp.) omits two (the bull and Prokrustes), and others give a varying number of scenes, omitting sometimes one, sometimes another. The adventure with Periphetes appears to be confined to literature. We give the list as follows, with the vases on which they may be seen ${ }^{[1230]}$ :
(1) The pine-bender Sinis.
B.F.: Athens 879. R.F.: Reinach, i. 313 (= Naples R.C. 180) and ii. 280.
(2) The sow of Krommyon, sometimes accompanied by a Nymph or old woman, the personification of the locality.

Reinach, i. 459; Noel des Vergers, Étrurie, pl. 14.
(3) The brigand Skiron (in Megara); this scene is usually to be identified by the foot-pan and the tortoise.

Reinach, i. 119.
(4) The wrestling with Kerkyon (at Eleusis).

Reinach, i. 324.
(5) Prokrustes and his bed (near Athens).
B.F.: Athens 879. R.F.: B.M. E 441-42; Athens 1166 = J.H.S. 1889, pl. 1; Millingen-Reinach, 910.
(6) The Marathonian bull.
B.F.: Bibl. Nat. 174. R.F.: B.M. E 442; Naples 2865 = Inghirami, Vasi Fitt. 54; Millin-Reinach, i. 43: Noel des Vergers, Étrurie, pl. 35 (in Brussels).
(7) The slaying of the Minotaur.

A very early representation (about 610 в.с.) on the Polledrara hydria in the British Museum (J.H.S. xiv. pl. 7: see Chapter XVIII.).
B.F.: B.M. B 148, B 205; Munich 333 = Reinach, ii. 119 = Wiener Vorl. 1889, 2, 2, and $1155=$ Wiener Vorl. iii. 7, 2; Berlin 1698 = Wiener Vorl. iii. 7, 1; Millin-Reinach, ii. 61 (Taleides).
R.F.: B.M. E 441; Helbig, $80=$ Reinach, ii. $81=$ Baumeister, iii. p. 1790, fig. 1874.

The complete set of seven is to be found on the following:
B.M. E 84, where the scenes are duplicated on the exterior and interior of the kylix; here the Minotaur forms the central scene of the interior.
Ant. Denkm. ii. 1 (kylix by Aeson).
The following are more or less complete:
B.M. E 48 = Frontispiece, Vol. I. (by Duris; five scenes).

Louvre G 104 (Euphronios).
Reinach, i. 528-32.
After the labours on his journey comes the purification of Theseus on reaching Athens. ${ }^{[1231]}$ To this time may perhaps be referred a scene in which he receives a palm-branch from Athena. ${ }^{[1232]}$ There is a subject which cannot be placed in literary tradition, but probably comes in point of time immediately before or after the labours; this is the visit to Poseidon and Amphitrite under the sea, whither he is borne by Triton. It occurs on the beautiful Euphronios kylix in the Louvre (G 104) and elsewhere. ${ }^{[1233]}$
Next in point of time we have to deal with the story of Theseus' voyage to Crete and his marriage with and desertion of Ariadne. It begins with a scene in which he bids farewell to Aigeus ${ }^{[1234]}$; then on his arrival in Crete he slays the Minotaur, as already described. We next see the meeting with Ariadne, ${ }^{[1235]}$ followed by the nuptial ceremonies; the latter scene, together with the subsequent arrival at Delos, and a dance of boys and maidens liberated by Theseus, is vividly depicted on the François vase. His desertion of the sleeping Ariadne in Naxos and the appearance of Dionysos as her consoler form the subjects of two very beautiful R.F. vases ${ }^{[1236]}$; but the return to Athens and the death of Aigeus are not depicted.

The reign of Theseus at Athens is signalised by his combats with the Amazons and Centaurs. In the former story he carries off their leader Hippolyta as his queen, assisted by his friend Peirithoös ${ }^{[1237]}$; and in another version it is Antiope whom he overcomes, ${ }^{[1238]}$ or the subject is treated in a more general fashion. ${ }^{[1239]}$ This scene is supposed to take place in Attica; but the story of the Centaurs belongs to Thessaly, the home of Peirithoös. The Centaurs are represented interrupting a banquet, throwing everything into confusion, and carrying off Laodameia and other female victims. It occurs on the François vase, and is treated in a vivid pictorial fashion on several vases of a later period. ${ }^{[1240]}$ The episode of the death of Kaineus (see p. 145) belongs to this group of subjects. To the same period belongs a vase representing the rape of a girl named Korone by Theseus and his friend. ${ }^{[1241]}$ In the story as told by Plutarch (Thes. 31) it was Helene ${ }^{[1242]}$ whom Theseus carried off; curiously enough, a figure thus inscribed is also present on this vase, ${ }^{[1243]}$ as well as Antiope (see above). The rape (as described by Plutarch) was followed by their descent into Hades to seize Persephone. For this they were doomed to punishment, to sit for ever with hands bound behind them ${ }^{[1244]}$; but in one version Theseus is allowed to depart after a time, as is seen on one of the Apulian under-world vases. ${ }^{[1245]}$ A vase signed by Xenotimos represents Peirithoös seated in a chair holding two spears ${ }^{[1246]}$; but its mythological significance is open to question.
Closely linked with the story of Theseus is that of the love of Phaidra for Hippolytos and the death of the latter, confined to late Italian vases; but Phaidra has not been certainly identified in any case. ${ }^{[1247]}$ There is, however, an undoubted representation of the appearance of the bull which overthrew Hippolytos' chariot. ${ }^{[1248]}$

Next in importance as a hero of Greek legend comes Perseus, born from the golden shower in which Zeus visited Danae (see p. 19). We find representations of the scene so touchingly sung of by Simonides, the placing of Danae and her child in the wooden chest and sending them adrift ${ }^{[1249]}$; and next we find Perseus as a full-grown youth, about to set forth on his mission of slaying the Gorgon, and receiving from the Naiads the cap, sandals, and wallet, which were to aid him in his quest. ${ }^{[1250]}$ On later vases he receives from Athena the sickle (harpe) with which he slays the monster. ${ }^{[1251]}$ On his way he seizes the eye and tooth of the Graiae, a subject rarely depicted in art. ${ }^{[1252]}$ The actual slaying of the Gorgon ${ }^{[1253]}$ is not so often represented as the subsequent flight of Perseus, generally accompanied by Athena and Hermes ${ }^{[1254]}$; in one or two instances we see Perseus approaching his victim unobserved. ${ }^{[1255]}$ Other vases depict the headless corpse of Medusa, from which springs the young Chrysaor or Pegasos, and the other two Gorgons, Stheno and Euryale, either pursuing Perseus or remaining with the corpse ${ }^{[1256]}$; in one instance they appeal to Poseidon for help. ${ }^{[1257]}$
We next see Perseus arriving at the court of Kepheus to deliver Andromeda ${ }^{[1258]}$; she is generally represented chained to a column in the palace itself. On other vases he is depicted in the act of slaying the monster, but this is a somewhat rare subject. ${ }^{[1259]}$ Finally, we have the return to Seriphos and the petrifaction of the king Polydektes by showing him the Gorgon's head. ${ }^{[1260]}$ Perseus is also represented showing the head to Satyrs, ${ }^{[1261]}$ or placing it in the wallet (kíßıoıৎ), ${ }^{[1262]}$ or in combat with Maenads ${ }^{[1263]}$; or, again, he is accompanied by Athena, who holds the Gorgon's head while he looks at the reflection. ${ }^{[1264]}$ Lastly, on some small R.F. vases, a bust of Perseus is depicted wearing his winged cap. ${ }^{[1265]}$

The story of Pelops is chiefly connected with Olympia, and his visit to Oinomaos; but the subjects are almost exclusively confined to the later Apulian vases. On one B.F. (Cyrenaic) kylix Pelops is depicted with the winged horses given him by Poseidon, ${ }^{[1266]}$ but this is exceptional. The Olympia scenes include five episodes: (1) the arrival of Pelops at Olympia ${ }^{[1267]}$; (2) the sacrifice or compact with Oinomaos ${ }^{[1268]}$; (3) the race ${ }^{[1269]}$; (4) the death of Myrtilos ${ }^{[1270]}$; (5) the carrying off of Hippodameia. ${ }^{[1271]}$ Pelops also occurs with Myrtilos and Hippodameia in the under-world. ${ }^{[1272]}$

The adventures of Bellerophon are not so popular as those of other heroes, especially in the R.F. period. The story told in the sixth Iliad appears in several scenes, beginning with Bellerophon's taking leave of Proitos ${ }^{[1273]}$; next we see him delivering the letter with its $\sigma \eta \eta^{\prime} \mu \alpha \tau \alpha \lambda \nu \gamma \rho \alpha{ }^{2}$ to Iobates, the king of Lycia, ${ }^{[1274]}$ and then, mounted on Pegasos, slaying the Chimaera. ${ }^{[1275]}$ Subsequent events represented on vases are the death of the perfidious Stheneboia, who falls from the back of Pegasos, ${ }^{[1276]}$ and the marriage of Bellerophon with Philonoë. ${ }^{[1277]}$

Nor need the story of Meleager detain us long. Scenes from his life are practically confined to the Calydonian boar-hunt, a subject popular at all periods, especially on early vases. ${ }^{[1278]}$ Kastor and Polydeukes, Peleus, and other heroes, together with Atalante, are represented as taking part, as well as Meleager. There is also a vase on which Meleager is represented with the boar's hide, accompanied by Atalante, Peitho, and Eros. ${ }^{[1279]}$ Other scenes where a boar-hunt is represented, but no names given, or only names of a fanciful kind, may or may not be identified in this way. ${ }^{[1280]}$ There is one vase which appears to represent the death of Meleager. ${ }^{[1281]}$

The next of the Greek heroes with whom we have to deal is Jason, with whom we must include the whole cycle of subjects relating to the Argonautika-such as the stories of Helle, Phineus, and Talos. The legend of the golden fleece which gave rise to the famous quest of Jason is first illustrated by scenes representing Helle or Phrixos in flight on the ram, ${ }^{[1282]}$ or the former grouped with her mother Nephele and her brother Phrixos, ${ }^{[1283]}$ who accompanied her on her flight. The pursuit of Phrixos and the ram by Ino is also represented. ${ }^{[1284]}$ Lastly, there is a vase which may represent the setting out of Jason. ${ }^{[1285]}$

In the earlier history of the Argonautic expedition the most interesting subject found on the vases is the story of Phineus, who had been blinded for impiety by Boreas, ${ }^{[1286]}$ and was subsequently deprived of his food by the Harpies until he was delivered by the sons of Boreas, Zetes, and Kalais. ${ }^{[1287]}$ Another event is the chastisement of Amykos by Kastor and Polydeukes, ${ }^{[1288]}$ and a fine vase of "Polygnotan" style in the Louvre represents a group of Argonauts apparently without any special signification. ${ }^{[1289]}$ In all these scenes Kastor and Polydeukes and the Boreades are present together with Jason. There is also a scene which has been interpreted as belonging to the Argonautika: Herakles is represented sacrificing to a statue of Chryse on the island of Lemnos. ${ }^{[1290]}$
Then we have the arrival of Jason and his companions in Kolchis, ${ }^{[1291]}$ and the subsequent feats performed by the hero-his slaying the dragon ${ }^{[1292]}$ (in one version he enters into its mouth ${ }^{[1293]}$ ), his contest with the bull, ${ }^{[1294]}$ and finally the capture of the fleece, ${ }^{[1295]}$ which he is also represented as bringing to Pelias on his return. ${ }^{[1296]}$ The only important event relating to the homeward journey is the death of Talos. ${ }^{[1297]}$
Among the events of his later life are the boiling of the ram by Medeia, ${ }^{[1298]}$ and the subsequent destruction of the aged Pelias ${ }^{[1299]}$; the renewal of Jason's own youth ${ }^{[1300]}$; the death of his wife Glauke by Medeia's agency ${ }^{[1301]}$; and the latter's slaughter of her children, ${ }^{[1302]}$ with her pursuit by Jason. ${ }^{[1303]}$ Medeia also appears in another connection at Theseus' leave-taking of his father Aigeus, ${ }^{[1304]}$ and among the Athenian tribal heroes on the vase by Meidias. ${ }^{[1305]}$ Though not necessarily connected with Jason, the funeral games held after the death of Pelias ${ }^{[1306]}$ must also find mention here. Scenes therefrom are represented on more than one vase-such as the chariot-race conducted by Kastor and others in the presence of three judges (Pheres, Akastos, and Argeos), and the wrestling of Peleus and Hippalkimos. ${ }^{[1307]}$ On another Zetes is victorious over Kalais in the foot-race. [1308]

## The Theban Legend

The "tale of Thebes" falls into various episodes, more or less connected, especially those which relate to the story of Oedipus and his line. ${ }^{[1309]}$ Conspicuous as founder of the city is the Phoenician Kadmos, whose encounter with the dragon is depicted on vases of various periods. On some he receives from Athena the stone with which he is to slay the monster ${ }^{[1310]}$; on others he is seen approaching the fountain of Ares, where he was to meet it ${ }^{[1311]}$; and, lastly, we have the actual slaying of the dragon, ${ }^{[1312]}$ sometimes in the presence of Harmonia and various deities and personified figures, including Thebes. After the slaying of the dragon Kadmos sacrifices to Athena Onka. ${ }^{[1313]}$ The completion of the story is seen in his marriage with Harmonia. ${ }^{[1314]}$ A rarer subject is the punishment of Dirke by her brothers Amphion and Zethos, who tied her to a wild bull ${ }^{[1315]}$; while a later episode of the story is the pursuit of her sister Antiope by her lover Phokos. ${ }^{[1316]}$
The story of the Oidipodia is introduced by the subject of Laios (the father) carrying off the young Chrysippos. ${ }^{[1317]}$ Then we have the exposure of the infant Oedipus and his discovery by the shepherd Euphorbos. ${ }^{[1318]}$ Of later events in the life of Oedipus, the only one that attained to any popularity is the slaying of the Sphinx. The actual deed only occurs once, ${ }^{[1319]}$ and the usual "type" is that of Oedipus (usually a young man) standing before the Sphinx, which is seated on a rock or column. ${ }^{[1320]}$ It is not always to be identified with certainty. ${ }^{[1321]}$ In one instance Oedipus is represented with Teiresias ${ }^{[1322]}$; in another with persons named Sikon and Kalliope-a subject hitherto unexplained. ${ }^{[1323]}$ We need only make passing reference here to a vase supposed to represent the tomb of Oedipus, inscribed with a couplet of verses, at which stand two youths. ${ }^{[1324]}$
Before continuing the story of the house of Oedipus, we must digress to that of Amphiaraos, the warrior-seer, whose departure from his wife Eriphyle to the Theban War is a favourite subject on vases. ${ }^{[1325]}$ It becomes, in fact, a "type" adopted in ordinary scenes. ${ }^{[1326]}$ We also find on the reverse of one of the vases with this subject the departure of another warrior, perhaps intended for the hero's son Alkmaion, or for Adrastos. ${ }^{[1327]}$ On an early vase Amphiaraos is seen bringing home Eriphyle in his chariot. The names of his horses, Thoas and Dion, are given. ${ }^{[1328]}$ A curious subject is that of the hero in the bosom of his family, with his wife Eriphyle suckling her son Alkmaion, and a maiden spinning. ${ }^{[1329]}$ His death is represented on one B.F. vase ${ }^{[1330]}$; on another his slaying of Eriphyle. ${ }^{[1331]}$ Another event is the death of the child Archemoros, caused by a serpent. ${ }^{[1332]}$ A fine late vase in Naples depicts the prothesis or laying out of his body by his mother Eurydike and others. ${ }^{[1333]}$ The subsequent fight of Tydeus and Lykourgos, interrupted by Adrastos, also occurs, ${ }^{[1334]}$ and the reception of the fugitive Tydeus by Adrastos. ${ }^{[1335]}$ Tydeus appears once more as the slayer of Ismene ${ }^{[1336]}$; but according to another version she and her sister Antigone are attacked by Laodamas when the Epigoni return to Thebes many years later. ${ }^{[1337]}$ We can only point to one possible representation of the combat of Eteokles and Polyneikes on vases, ${ }^{[1338]}$ though it is common enough, e.g. in Etruscan art; but there is at least one representation of Antigone being brought before Kreon after the burial of her brother, ${ }^{[1339]}$ which also forms a burlesque subject on the comic stage. ${ }^{[1340]}$

## The Trojan Cycle

We now come to the story of the Trojan War, linked with which are the events which led up to it and those which immediately followed upon it-such as the Judgment of Paris on the one hand, and the stories of Odysseus and Orestes on the other. These events are so numerous that they require careful classification. They may be divided into three main sections: (1) Ante-Homerica, including the events that led to the war and those that took place during the first nine years of it; (2) Homerica, or the events of the Iliad; (3) Post-Homerica, or the stories of the death of Achilles, the fall of Troy, the Odyssey and other Nootoí, and the Oresteia. The literary authorities for these
events, on the lines of which our classification follows, are discussed elsewhere (p. 4 ff .).
In spite of the warning of Horace that in writing of the story of Troy it is not necessary to begin $a b$ ovo, it is impossible here to avoid reference to the earliest event which bears at all on the subjectnamely, the birth of Helen from the egg, which was the result of Zeus' amour with Nemesis. The subject is referred to on several vases, the moment chosen being that when the egg is found by Leda. ${ }^{[1341]}$ Her husband Tyndareus and her other offspring, Klytaemnestra and the Twin Brethren, are usually present. There is one undoubted instance of the nuptials of Helen and Menelaos. ${ }^{[1342]}$
The first event, however, which can be regarded as having a direct effect on the outbreak of the war is the marriage of Peleus and Thetis, at which the apple of discord was flung by Eris among the goddesses, and which brought about the birth of the hero of the war, Achilles. In ancient art, especially on vases, ${ }^{[1343]}$ Peleus is depicted forcibly capturing Thetis from the company of her sister Nereids, while she tries to elude him by assuming various shapes, all conventionally indicated in the vase-paintings. Some vases represent the approach of Peleus and his pursuit of Thetis, ${ }^{[1344]}$ the majority the actual struggle (Fig. 128), ${ }^{[1345]}$ and one or two the announcement of the issue to Nereus and the company of Nereids (who are named). ${ }^{[1346]}$
The next stage is the introduction of Thetis to the Centaur Cheiron by Peleus. ${ }^{[1347]}$ Then we have the celebration of their nuptials, with the assembling of the gods, as described by Catullus, and vividly, if quaintly, depicted on the François vase, ${ }^{[1348]}$ followed in due course by Peleus bringing the young Achilles to be educated by Cheiron, ${ }^{[1349]}$ and his subsequent sojourn in Skyros. ${ }^{[1350]}$ There is one possible representation of the seething of Achilles in the caldron to secure his immortality. ${ }^{[1351]}$


FIG. 128. PELEUS SEIZING THETIS (BRITISH MUSEUM).

The next event is the Judgment of Paris, perhaps of all the scenes from the story of the Trojan War the most popular with the vase-painters of all periods. The story of the forsaken Oenone, in the telling of which Tennyson has familiarised us with the scene of the Judgment, did not appeal to the unromantic Greeks in the same way. We only find one vase on which she is possibly represented. ${ }^{[1352]}$ Curiously enough, the vase-paintings seldom show the central act of the story-the award of the golden apple. In fact, in the earlier examples Paris is omitted altogether, and we only see the three goddesses led in procession by Hermes. One vase, again, represents the preparations of the goddesses for the trial, Athena washing at a fountain and Aphrodite performing her toilet with the assistance of Eros. ${ }^{[1353]}$ The rest may be classified as follows (the order adopted showing a rough chronological development of the type ${ }^{[1354]}$ ):


From Wiener Vorlegeblätter
FIG. 129. THE JUDGMENT OF PARIS (CUP BY HIERON IN BERLIN).
(1) Hermes leads the three goddesses, Athena alone being characterised; Paris absent. Only on B.F. vases. ${ }^{[1355]}$
(2) Procession-type preserved, but Paris is present, standing. Type modified on R.F. vases. ${ }^{[1356]}$
(3) Procession-type; Paris seated; landscape introduced (see Fig. 129). ${ }^{[1357]}$
(4) Procession-type abandoned; goddesses picturesquely grouped, with attendant figures. Only on R.F. and later vases. ${ }^{[1358]}$ In one instance two stages seem to be represented: first, the goddesses grouped for the Judgment, accompanied by Apollo, Helios, and Selene; secondly, the victorious Aphrodite crowned by Eros. ${ }^{[1359]}$

## Parodied renderings of the subject also occur. ${ }^{[1360]}$

The reward of Paris for his judgment was, as we know, "the fairest wife in Greece." Accordingly we next find him arrived at Sparta and carrying off the fair Helen as his bride. The vases (all of the R.F. and late periods) depict him on his arrival at Menelaos' palace introduced to Helen, ${ }^{[1361]}$ or else we see Helen at her toilet making preparations for her new consort ${ }^{[1362]}$; next, Paris leads away Helen or carries her off in his chariot, ${ }^{[1363]}$ and finally introduces her to his father Priam on his return home. ${ }^{[1364]}$
The war having now broken out, we are introduced to the two chief heroes on the Greek side, Achilles and Ajax, as they bid farewell to their family and friends and set out in full equipment. Achilles, accompanied by Patroklos, Menoitios, and other heroes, bids farewell to his parents Peleus and Thetis ${ }^{[1365]}$; he also pays a farewell visit to his grandfather Nereus, who presents him with a crown, ${ }^{[1366]}$ and receives a valedictory libation from a Nereid. ${ }^{[1367]}$ Again, we see Achilles and Patroklos taking leave of Nestor, accompanied by Antilochos. ${ }^{[1368]}$ Ajax is represented taking leave of Lykos, ${ }^{[1369]}$ and also of his father Telamon ${ }^{[1370]}$; but as in one of the latter cases the names are wrongly applied on the vase, it may only represent an idealised departure of an ordinary warrior. There is also a vase which represents Nestor arming (putting on a greave) in presence of Euaichme. [1371]

We next find the warriors gathered in Aulis, waiting for the favouring breeze, and whiling away the time (as Euripides describes ${ }^{[1372]}$ ) in the game of пعббоoí or draughts, which is played by Ajax and Achilles (names usually given) seated at a raised board in full armour, with the statue of Athena behind them. ${ }^{[1373]}$ There is another variety of the type, in which the presence of Athena seems to have more meaning. Here the two heroes cast lots with dice before the statue, and there may be some reference to the dispute of Ajax and Odysseus for the arms of Achilles, which was settled by Athena. ${ }^{[1374]}$ The story of the sacrifice of Iphigeneia, though popular with poets and painters, for some reason never found its way on to the vases until the influence of great pictures and plays was beginning to make itself felt; and then only appears in one instance, where the transformation into a deer is indicated. ${ }^{[1375]}$ The only other incident of the voyage which concerns us is the halt at Lemnos and the sacrifice to the local goddess Chryse, where Philoktetes is bitten by the serpent and has to be left behind on account of his wound. ${ }^{[1376]}$ This island was also the scene of the carrying off by Achilles of Chryseis, the daughter of Chryses, the priest of the local goddess, of which there is one possible representation. ${ }^{[1377]}$
Two doubtful references to opening scenes of the war are to be found in a supposed consultation of Zeus with Themis among the Olympian deities, ${ }^{[1378]}$ and a representation of the Greeks formally demanding back Helen, ${ }^{[1379]}$ a demand which of course was not granted. The story of Telephos also belongs to an early stage, and three incidents therefrom are found. In one case he is represented as wounded by the spear of Achilles ${ }^{[1380]}$; again, entering the Greek camp disguised as a beggar, in order to apply to Agamemnon for aid ${ }^{[1381]}$; and, lastly, he is seen seizing the infant Orestes, whom he threatens to destroy if his request is not granted. ${ }^{[1382]}$ A R.F. kylix in Boston represents in the interior Odysseus persuading Achilles to heal Telephos' wound; on the exterior the wounded hero comes, not to Agamemnon's tent, but to his palace at Mycenae. ${ }^{[1383]}$
At a much later stage of the war comes the incident of Troilos, a subject which attained to great popularity, especially with the B.F. vase-painters. It falls into five distinct scenes: (1) the departure of Troilos, with his two horses ${ }^{[1384]}$; (2) the ambuscade of Achilles behind the fountain to which Polyxena comes to draw water ${ }^{[1385]}$; (3) the flight of Troilos and Polyxena, and pursuit by Achilles ${ }^{[1386]}$; (4) the death of Troilos ${ }^{[1387]}$; and (5) the fight over his body. ${ }^{[1388]}$ Of these, the ambuscade and the pursuit are the most commonly represented.

A few incidents which are not to be traced in literature probably belong to the Ante-Homeric period. They are (1) Achilles bandaging the wounded Patroklos, on the well-known Sosias cup ${ }^{[1389]}$; (2) the wounded Achilles tended by Patroklos and Briseis ${ }^{[1390]}$; (3) a combat of Hector and Achilles attended by Sarpedon and Phoinix (in one case Phoinix interrupts) ${ }^{[1391]}$; (4) a general combat of Greeks and Trojans. ${ }^{[1392]}$
It will be most convenient to deal with the various scenes which can be traced to the Homeric poems (or to co-ordinate traditions) in tabular form, noting where possible the actual passages which they appear to illustrate. But it must be borne in mind that the vase-painter was never an illustrator; he rather looked to literature for suggestions, which he worked out on his own lines, and consequently coincidences with or divergencies from the Homeric text must not be too closely insisted upon.
Book I. 187 ff. The dispute of Agamemnon and Achilles.
Possibly to be identified in such scenes as on B.M. B 327, 397, and E 13; but very doubtful: see below, p. 133, and Robert, Bild u. Lied, p. 213.
320 ff . Agamemnon and Briseis.
Reinach, i. $148=$ Baumeister, i. p. 721, fig. 776 (Hieron in Louvre); and see B.M. E 76. Achilles and Briseïs are found grouped together on two R.F. vases, but without any particular allusion: see B.M. E 258 and Helbig, $84=$ J.H.S. i. pl. $6=$ Reinach, ii. 91.

430 ff . Chryses propitiating Apollo.
Engelmann-Anderson, Atlas to Iliad, iii. 12.
Book II. 50 ff. Agamemnon in council.
B.M. B 149.

212 ff. Thersites insulting Agamemnon.
B.M. E 196.

Book III. 259 ff. Priam setting out in his chariot.
Jahrbuch, iv. (1889), pl. 10.
340 ff . Combat of Menelaos and Paris.
B.M. E 20; Duris kylix in Louvre (Wiener Vorl. vi. 7 = Engelmann-Anderson, vi. 23).

Book V. 95-296. Combat of Diomedes and Pandaros (a reminiscence of).
Berlin 764 = Ant. Denkm. i. pl. 7, fig. 15; and see Hermes, 1901, p. 388; actually here Diomedes and Aeneas fight over the body of Pandaros.
312 ff . Combat of Diomedes and Aeneas, the latter protected by Aphrodite.
B.M. E 73; Tyszkiewicz Coll. pl. 18 (very fine R.F. vase, now in Boston); Reinach, i. $120=$ ii. 97 (B.F.).

Book VI. 215 ff. Diomedes and Glaukos exchanging arms.
Stackelberg, pl. 11, 1.
258 ff. (1) Hector arming.
Munich $378=$ Reinach, ii. $94=$ Furtwaengler and Reichhold, pl. 14.
(2) Hector bidding farewell to Priam and Hecuba.

Helbig, 134 = Reinach, ii. 94 = Engelmann-Anderson, iii. 38.
(3) Hector bidding farewell to Andromache and Astyanax. ${ }^{[1393]}$
J.H.S. ix. pl. 3 = B.M. E 282; Reinach, ii. $255=$ Bibl. Nat. 207.
(4) Departure of Hector.
B.M. B 76, B 235 (?); Louvre E 638 (= Reinach, i. 243), E 642; Reinach, ii. 160; Jahrbuch, iv. (1889), p. 260.

321 ff. Hector conducting Paris to battle.
Bibl. Nat. $207=$ Reinach, ii. 255.
Book VII. 162 ff. Combat of Ajax and Hector.
Munich 53; Helbig, $6=$ Reinach, i. 104 (see under xiv. 402 ff.); Baumeister, i. pl. 13, figs. 779-80; B.M. E 438 (Smikros); and see Duris kylix in Louvre (Wiener Vorl. vi. $7=$ Engelmann-Anderson, vii. 42).
Book VIII. 89 ff. Combat of Hector and Diomedes.
Reinach, ii. 96.
261 ff. Teukros and Ajax son of Telamon.
Robert, in Hermes, 1901, p. 390, mentions a fragment of a Corinthian pinax in Berlin with these two figures, which may either belong to the above passage, or to xii. 370 ff ., or to xv. 415 ff .
397 ff. Iris interrupting Athena (see pp. 39, 77).
Reinach, ii. 296.
Book IX. Achilles lying sick (apparently a contaminatio or confusion of ix. 168 ff . and xviii. 35 ff .). [1394]

Jahrbuch, vii. (1892), pl. 1.
173 ff. Embassy of Odysseus and Phoinix to Achilles (R.F. vases only).
B.M. E $56=$ Wiener Vorl. C. 3, 3; Berlin 2176 (= Reinach, i. 282), 2326 (= Reinach, i. $431=$ Roscher, iii. 658); Millin-Reinach, i. 14; Reinach, i. $148=$ Wiener Vorl. C. 6 (Hieron) and 149.
Book X. 330-461. Episode of Dolon; his capture by Odysseus.
Oxford 226; Munich 583 = Jahrbuch, v. (1890), p. 143; Bibl. Nat. 526 = Reinach, i. 89 = Wiener Vorl. v. 5 (Euphronios); Reinach, i. $334=$ Petersburg 879; B.M. F $157=$ Fig. 130. Dolon as single figure: Reinach, i. $306=$ Wiener Vorl. iii. 1.

469-525. Rhesos and his horses.
B.M. B 234-35; Naples 2910 = Baumeister, i. p. 728, fig. 782 (Odysseus and Diomedes with the horses); Wiener Vorl. C. 3, 2.

566 ff . The horses of Rhesos brought to the tent of Diomedes.
Munich 583 = Jahrbuch, v. (1890), p. 146 (a slave waters the horses; another brings drink to Diomedes).
Book XI. The fight at the ships.
Munich $890=$ Reinach, ii. $99=$ Baumeister, i. p. 729, fig. 783.
Book XIV. Combat of Ajax and Aeneas (? l. 402 ff.).
Reinach, i. $306=$ Wiener Vorl. iii. 1; id. i. $104=$ Helbig, No. 6 (? see above, under vii. 162 ff.).


FIG. 130. CAPTURE OF DOLON (LUCANIAN KRATER IN BRITISH MUSEUM).

Book XVI. 666 ff. Sarpedon carried off by Hypnos and Thanatos.
See Louvre F 388; but this scene is hardly to be distinguished from those with Memnon (see below, p. 132).
Book XVII. 60 ff . Combat of Menelaos and Euphorbos, and fight over his body.
B.M. A $749=$ Baumeister, i. p. 730, fig. $784^{[1395]}$; and see E 20.

123 ff . Combat over body of Patroklos.
Exekias kylix (Munich 339 = Reinach, ii. 36); Reinach, ii. 95; Millin-Reinach, i. 49; Berlin 2264 (Oltos and Euxitheos) = Wiener Vorl. D. 2, 1 = Engelmann-Anderson, xiv. 76.
Book XVIII. 367 ff. (1) Thetis in the smithy of Hephaistos.
Berlin 2294 = Overbeck, Her. Bildw. 18, 6.
(2) Hephaistos polishing Achilles' shield.

Röm. Mitth. ii. (1887), p. 242.
Book XIX. 1-18. Thetis and the Nereids bringing the armour to Achilles.
(a) Riding on sea-monsters over the waves (all late vases).
B.M. F 69; Jatta $1496=$ Reinach, i. 112; Roscher, iii. 221-24; and see Heydemann, Nereiden mit Waffen.
(b) Presenting the weapons to Achilles.
B.M. E 363; Millin-Reinach, i. 14.

364 ff . Achilles arming.
Athens 671 = Wiener Vorl. ii. 6; Overbeck, Her. Bildw. xviii. 4, 7; vase by Amasis at Boston (Report for 1901, No. 5).
Book XXI. 114 ff . Combat of Achilles and Lykaon.
B.M. F 173

Book XXII. 188 ff. Achilles pursuing Hector round the walls of Troy.
Reinach, ii. 102 (now in Boston: see Museum Report for 1898, No. 42).
209 ff . Zeus weighing the heroes' souls in his scales. ${ }^{[1396]}$
B.M. B 639; Bibl. Nat. 385 = Reinach, i. 89; Millin-Reinach, i. 19 = Baumeister, ii. p. 921, fig. 994.

306 ff . Death of Hector.
B.M. E 468; Munich 421; Reinach, ii. 101 = Helbig, 106; Boston Mus. Report for 1899, p. 79, No. 31 (parody). Cf. Millingen, Anc. Uned. Mon. i. 4 = Engelmann-Anderson, Odyss. iii. 15.

437 ff. Andromache suckling Astyanax (compare only).
B.M. E 509.

Book XXIII. 157 ff. Funeral games for Patroklos.
François vase (chariot-race, etc.).
175 ff . Sacrifice of Trojan captives on the pyre of Patroklos.
Naples 3254 = Reinach, i. 187.
Book XXIV. 16 ff. Achilles dragging Hector's body past the tomb of Patroklos.

B.M. B 543 and Forman Sale Cat. 306 = Reinach, ii. 100 (now in B.M.) ${ }^{[1397]}$; Berlin 1867 = Reinach, ii. 99; Naples 2746.

141 ff . Achilles offering his hair to the river Spercheios.
B.M. E 555 (?).

448 ff . Priam begging Achilles for the body of Hector; the Achaean princes deliberating over the ransom.
Munich 404 (= Overbeck, Her. Bildw. pl. 20, 3), and 890 (= Reinach, ii. 99); Petersburg $422=$ Reinach, i. $138=$ Baumeister, i. p. 739, fig. 792; Reinach, i. 172 = Vienna 328; Athens 889 = Ath. Mitth. 1898, pl. 4 (B.F., but poor).
580 ff . Hector's body carried out to prepare for burial.
Petersburg 422 (as above).
Among the events of the war between the death of Hector and the final fall of Troy, those which relate to the final exploits of Achilles are most prominent, and especially the encounters with Memnon, and with Penthesileia, his death and the events arising out of it. The story of Achilles' fight with Penthesileia, and the death of the Amazon queen, is less frequently depicted, but there are some very fine examples remaining. ${ }^{[1398]}$ Other representations of Amazons arming, setting out, or in combat may be placed here, but except where Penthesileia is specially indicated it is better to regard them as having no definite reference to the Trojan story. ${ }^{[1399]}$ A remarkable painting on an Apulian amphora depicts the slaying of Thersites by Achilles in the presence of Phoinix and Diomedes. Thersites had insulted Achilles after his slaying of Penthesileia. ${ }^{[1400]}$
The story of Memnon is related on the vases in several scenes, beginning with his equipment and departure for the fray. ${ }^{[1401]}$ Next we see the great fight of Achilles and Memnon over the body of Antilochos, ${ }^{[1402]}$ at which the respective mothers of the heroes, Thetis and Eos, are usually present as spectators. ${ }^{[1403]}$ The result of the fight was fatal to Memnon, whose body we see carried off by Thanatos and Hypnos, ${ }^{[1404]}$ or by Eos herself, ${ }^{[1405]}$ for burial in his native land. Eos is also represented mourning over him. ${ }^{[1406]}$ The Psychostasia, or weighing of souls by Zeus (see p. 130), has also been referred to this event. The body of Antilochos is finally rescued and carried off by Nestor. ${ }^{[1407]}$
Lastly, we find a few possible representations of the death of Achilles, ${ }^{[1408]}$ and others, more certainly to be identified, of the battle raging round his body, in which Diomedes is wounded ${ }^{[1409]}$; also of Ajax carrying the body off out of the battle, ${ }^{[1410]}$ and the subsequent mourning of the Nereids over it. ${ }^{[1411]}$ A representation of the ghost of a warrior, winged and fully armed, flying over a ship, ${ }^{[1412]}$ is to be regarded as that of Achilles, though to what event it alludes is not clear. The dispute over the hero's armour and the suicide of the disappointed Ajax are introduced by a scene representing the fetching of Neoptolemos, his son, from Skyros, where he bids farewell to Lykomedes and Deidameia ${ }^{[1413]}$; of the quarrel between Ajax and Odysseus there are also several representations. ${ }^{[1414]}$ It was decided finally by Athena, who is represented presiding over the Greek chiefs as they vote ${ }^{[1415]}$; or, according to another version, they cast lots before her statue. ${ }^{[1416]}$ The armour is then awarded to Neoptolemos, ${ }^{[1417]}$ who, according to an oracle, was indispensable for the capture of Troy. Ajax goes mad with disappointment, and finally commits suicide by falling on his sword ${ }^{[1418]}$; the episode of his slaying the sheep is not, however, represented.
The 'İíou Пع́poıs, or sack of Troy, which is so vividly represented on many of the vases of advanced and late style, may be said to begin with the episode of the seizure of the Palladion by Odysseus and Diomede. ${ }^{[1419]}$ It is rapidly followed by the construction of the wooden horse and its entry into the city. ${ }^{[1420]}$ There is, however, only one certain representation of the death of Laokoön to be traced, ${ }^{[1421]}$ and none of the traitorous Sinon.
Several vases, especially of the later epoch, collect the chief episodes in a frieze or in a series of groups, including the rape of Kassandra by Ajax, son of Oileus, the death of Priam and Astyanax, the recapture of Helen by Menelaos, and the flight of Aeneas; other scenes represented are the leading back of Aithra by Akamas and Demophon, and the sacrifice of Polyxena and subsequent blinding of Polymestor by Hecuba.

## I. General.

Berlin 1685 (= Overbeck, Her. Bildw. pl. 26, 1) and 2281; Plate LIV. = Furtwaengler and Reichhold, pl. 25 (Brygos in Louvre); Naples $2422=$ Furtwaengler and Reichhold, pl. 34 = Baumeister, i. pl. 14, fig. 795; B.M. F 160, F 278.
II. (a) Ajax seizing Kassandra at the altar of Athena.
B.F. B.M. B 242, 379; Berlin 1698; Roscher, ii. p. 979.
R.F. B.M. E 336, E 470; Reinach, i. 221, 338 = Roscher, ii. pp. 985, 981; Bourguignon Sale Cat. 33.

Late. B.M. F 209; Roscher, ii. p. 983.
(b) Death of Priam and Astyanax. ${ }^{[1422]}$
(1) Priam only.
B.M. B 241; Röm. Mitth. iii. (1888), pp. 108-9; Reinach, ii. 109; Berlin 3996. [Priam dead in all except second.]
(2) Priam usually seated on altar; Neoptolemos swings body or head of Astyanax.
B.M. B 205; Berlin 2175, 3988; Reinach, i. 221, ii. 109; J.H.S. xiv. pl. 9. [See also under I.]
(3) Andromache or Hecuba with body of Astyanax.

Millin-Reinach, ii. 37 (Lasimos in Louvre; also identified as Archemoros: see p. 118).
(c) Menelaos and Helen.
B.M. E 161, 263; Reinach, i. 437, 3 (Hieron), ii. 34; Helbig, 43 (= Mus. Greg. ii. 49, 2), and ii. p. 325 (= Baumeister, i. p. 746, fig. 798); Millingen, Anc. Uned. Mon. pl. 32; Louvre G 3 (Pamphaios); Reinach, i. 222 = Wiener Vorl. D. 8, 1; Noel des Vergers, Étrurie, iii. pl. 39.
(d) Akamas and Demophon with Aithra.
B.M. B 244 (?), E 458; Overbeck, Her. Bildw. pl. 26, 13.
(e) Flight of Aeneas with family.
B.M. B 173, B 280; Reinach, ii. 110 (= Munich 903), 116, 273; Baumeister, i. p. 31, fig. 32; Helbig, 201 = Mus. Greg. ii. 85, 2; Naples 2481; Bibl. Nat. 261; Louvre F 122 = Wiener Vorl. 1890-91, pl. 5, 1.
(f) Sacrifice of Polyxena.

Plate XXIII. = J.H.S. xviii. pl. 15 (B.M.); Overbeck, Her. Bildw. pl. 27, 19.
( $g$ ) Polymestor blinded.
Reinach, i. 91 = Hill, Illustrations of School Classics, p. 170 (now in B.M.).
(h) Ajax stabbing a captive (?).

Reinach, i. 88.


From Furtwaengler and Reichhold.
The Sack of Troy; Kylix by Brygos in Louvre.

Among the various adventures described by the Cyclic poets in the Nootoí, few seem to have found their way into the vase-paintings except the fate of Agamemnon, the interview of Menelaos with Proteus (told in the Odyssey), and, of course, the adventures of Odysseus.
The house of Atreus and its story will be dealt with later under the heading of the Oresteia: we turn now to the Odyssey, scenes from which are surprisingly few in Greek art, and appear to have attracted the painter less than the more stirring events of the Iliad. The following, however, have been identified:
Book II. 94 ff. Penelope at her loom.
Reinach, i. 191.

Book III. 12 ff. Arrival of Telemachos at Nestor's house in Pylos.
Berlin 3289 = Roscher, iii. 298 = Engelmann-Anderson, iii. 13.
Book IV. 349 ff. The story of Menelaos' interview with Proteus.
Naples 1767 = Mus. Borb. xiii. 58 = Engelmann-Anderson, iv. 22.
Book V. 228 ff. Odysseus navigating the sea on a raft.
Oxford 262, Cat. pl. 26 (burlesque). See also B.M. E 156 (Odysseus and Leukothea).
Book VI. 126 ff. Nausikaa washing clothes.
Munich $420=$ Reinach, ii. $110=$ Roscher, s.v.
Alkinoös and Nausikaa (parody).
Reinach, i. 153.
Book IX. 345 ff. Odysseus offering wine to Polyphemos.
Boston Mus. Report, 1899, p. 60.
371 ff . Odysseus putting out the eye of Polyphemos.
Plate XVI. $=$ Helbig, i. p. 435, No. 641 (Aristonoös); Bibl. Nat. $190=$ Reinach, i. 64; B.M. B 154; Louvre F 342 = Gaz. Arch. 1887, pl. 1; Berlin 2123; Arch. Anzeiger, 1895, p. 35; Jahrbuch, 1891, pl. 6: see Bolte, Monum. ad Odyss. pert. p. 2.

420 ff . Odysseus escaping under the ram.
B.M. B 407, 502, 687; Karlsruhe 167 = J.H.S. iv. p. 249; Louvre A 482; Reinach, i. 64: see also Ath. Mitth. 1897, pl. 8 (a very early instance); generally, J.H.S. iv. p. 248 ff., and Rev. Arch. xxxi. (1897), p. 28 ff .

Book X. 210 ff. Odysseus and Kirke (see J.H.S. xiii. p. 82).
(a) Arrival of Odysseus.

Reinach, i. $142=$ Roscher, ii. 1195.
(b) Transformations of comrades.

Reinach i. 396; Berlin 2342 = ibid. i. 418; Boston Mus. Report, 1899, pp. 59, 61 (both early B.F.). (c) Odysseus and Kirke.
J.H.S. xiii. pls. 2 (Athens 956), 4 (in B.M.), p. 81 (Oxford 262); and see Reinach, i. 142.

Book XI. 23 ff. Odysseus sacrificing before his visit to Hades.
Bibl. Nat. 422 = Reinach, i. 126 = Baumeister, ii. p. 1040, fig. 1254.
Book XII. 164-200. Odysseus passing the Sirens.
Athens 958 = J.H.S. xiii. pl. 1; B.M. E 440; and see J.H.S. vi. pl. 49, p. 20 (= Louvre F 123); Corinthian aryballos in Boston (Strena Helbigiana, p. 31).
Scenes from the last twelve books are even rarer:
Book XVIII. 35 ff. Odysseus and Iros.
Reinach, ii. 357.
Book XIX. 385 ff. Odysseus recognised by Eurykleia.
Reinach, i. 191.
394 ff . The story of Autolykos.
In connection herewith see Munich $805=$ Reinach, i. 277 for a possible representation of the betrothal of Laertes and Antikleia (Hermes, 1898, p. 641; Robert, Homer. Becher, p. 90 ff.; Hyginus, Fab. 201).
Book XXI. 393-XXII. 5 ff. The slaying of the suitors.
Berlin $2588=$ Reinach, i. 217.
The scenes from the Oresteia cover roughly the same ground as the great trilogy of Aeschylos, together with the Iphigeneia in Tauris and the Andromache of Euripides. We have first the murder of Agamemnon by Klytaemnestra with her axe. ${ }^{[1423]}$ Next, Elektra making her offerings at the tomb of Agamemnon, sometimes accompanied by her sister Chrysothemis. ${ }^{[1424]}$ It must be borne in mind that the "type" of this scene does not differ in any respect from ordinary scenes of "offering at a stele," and therefore, where the names are not given or are obviously modern additions, this interpretation is at best a doubtful one. The same applies to the next series of vases, on which Orestes meets Elektra at the tomb ${ }^{[1425]}$; but there seems to be one undoubted instance of Orestes and Pylades with the urn containing the supposed ashes of the former (cf. Soph. Electra, 1098 ff .). ${ }^{[1426]}$ The next group to be dealt with shows us Orestes slaying Aegisthos, ${ }^{[1427]}$ while Klytaemnestra is held back by Talthybios ${ }^{[1428]}$; and, finally, the death of Klytaemnestra herself. ${ }^{[1429]}$
Orestes is then pursued by the Furies, ${ }^{[1430]}$ and seeks refuge at Delphi, where he is purified by Apollo at the Omphalos ${ }^{[1431] ;}$ and he is also seen at Athens, where he afterwards sought the protection of Athena. ${ }^{[1432]}$ Other vases, nearly all of late date, and therefore under the influence of the Euripidean tragedy, represent Orestes accompanied by Pylades, arrived at the temple of the Tauric Artemis, where Iphigeneia presents Pylades with the letter. ${ }^{[1433]}$ Lastly, we have the death of Neoptolemos at the hand of Orestes at Delphi. ${ }^{[1434]}$

It will now be necessary to deal with sundry isolated subjects, which do not admit of being grouped together round the name of any one great hero or any particular legend. There are, however, a certain number which may perhaps be regarded as having a special connection with Athens, and with these we will begin. ${ }^{[1435]}$ Some of the specially Athenian myths have already been discussed in other connections, notably the story of Theseus (p. 108), the dispute of Athena and Poseidon (p. 24), the sending of Triptolemos (p. 27), and the rape of Kephalos by Eos ${ }^{[1436]}$ and of Oreithyia by Boreas (p. 80). There remain then the following:
(1) The birth of Erichthonios, who is represented as received by Athena from Gaia emerging out of the earth, in the presence of Kekrops and his daughters. It only occurs on the later R.F. vases; the type closely resembles that of the birth of Dionysos (p. 19).
B.M. E 372; Berlin 2537 = Reinach, i. 208 = Wiener Vorl. B. 12; Munich $345=$ Reinach, i. 66; and Reinach, i. 113 = Wiener Vorl. iii. 2. Also a scene from the childhood of Erichthonios: B.M. E 788.
(2) The reception of Dionysos in Attica (by Ikarios or Amphiktion).

B 149, B 153, and E 166 in the British Museum appear to refer to this, but not certainly. See above, p. 56.
(3) The story of Tereus and his daughters, Prokne and Philomela. ${ }^{[1437]}$
(a) Tereus meeting Apate (Deceit); Prokne and Philomela in chariots.

Naples 3233 = Reinach, i. 240.
(b) Prokne and the dumb Philomela:

Reinach, i. 308 (in Louvre).
(c) Aedonaia slaying Itys.
J.H.S. viii. p. 440 (= Munich 799a).
(4) The three sons of Pandion, Lykos, Nisos, and Pallas, ${ }^{[1438]}$ with Orneus the son of Erechtheus.

Reinach, i. $510=$ Roscher, ii. 2187.
(5) The death of Prokris by the agency of Kephalos.
B.M. E 477 (with Siren as soul of Prokris or death-deity).
(6) Kreousa defended by Apollo from the attack of Ion.

Reinach, i. 375: cf. Eur. Ion. 1250 ff.
(7) Danaos taking refuge in Attica (?).

Reinach, i. $244=$ Wiener Vorl. iii. 4, 2 (in Louvre).
(8) Echelos carrying off Basile. ${ }^{[1439]}$

Arch. Anzeiger, 1895, p. 39: see p. 27.
(9) The story of Diomos, the eponymous deme-hero (?).
B.M. B $178=$ J.H.S. xiii. p. 116.
(10) Kodros, the last king of Athens.

Bologna 273 = Baumeister, iii. p. 1998, fig. 2148 = Jahrbuch, 1898, pl. 4.
The Kodros cup (completely published in Wiener Vorl. i. 4) is decorated with groups of figures intended to illustrate the legendary history of the great Attic families, in accordance with the genealogising tendencies of the period (about 450 в.c.). The outer scenes represent Theseus taking leave of Aigeus, and Ajax taking leave of Lykos; and Aigeus and Ajax (Aias) are eponymous heroes of two Attic tribes. On the Meidias vase in the British Museum ${ }^{[1440]}$ we see a group of Athenian tribal heroes, such as Akamas, Antiochos, Demophon, and Hippothon, together with Medeia, who is also connected with Athens in the Theseus scene of the Kodros cup.

Other isolated myths which occasionally appear on vases, but defy more exact classification, may be briefly recorded here:
(1) Admetos and Alkestis.

Bibl. Nat. $918=$ Reinach, i. $395=$ Dennis, Etruria${ }^{2}$, ii. frontispiece. See also p. 69.
(2) Agamedes and Trophonios as prisoners fed by Augias.

Louvre E 632 = Reinach, i. 349 (see Paus. ix. 37, 5; Ann. dell' Inst. 1885, p. 130).
(3) Agrios seized by Oineus and bound on the altar.
B.M. F 155: see Anton. Liber. 37 and Vogel, Scenen Eur. Trag. p. 125.
(4) Atalante offering a cup to her antagonist Hippomenes.
R.F. kotyle in B.M.
(5) Atreus and Thyestes (the latter as suppliant in the former's palace?).

Millingen-Reinach, $23=$ Wiener Vorl. B. 4, 1.
(6) Daidalos and Ikaros, flight of.

Naples 1767 = Gaz. Arch. 1884, pls. 1-2.
(7) Glaukos in the tomb brought to life by the seer Polyeidos.
B.M. D 5 = Plate XL.: see Apollod. iii. 3, 1 .
(8) Kanake's suicide.

Reinach, i. 448.
(9) Laios, Keleos, Kerberos, and Aigolios stung by bees when stealing the honey on which the infant Zeus was fed.
B.M. B 177: cf. Anton. Liber. 19 and Roscher, i. p. 154.
(10) Lykourgos destroying his children in a frenzy.
B.M. F 271; Naples 3219 = Reinach, i. 125, and 3237 = Baumeister, ii. pp. 834-35. See also Reinach, i. 333: Lykourgos slaying Thoas; and p. 56.
(11) Melampus healing the daughters of Proitos from their madness at the altar of Artemis Lusia, in the presence of Dionysos.

Naples $1760=$ Millingen-Reinach, $52=$ Wiener Vorl. B. 4, 3.
(12) Merope (a scene from the tragedy of that name).

Munich 810 = Reinach, i. 363: see Vogel, Scenen Eur. Trag. p. 118.
(13) Pandareos with the golden dog of Zeus, which he stole.

Louvre A 478 = Hermes 1898, p. 638; Bull. de Corr. Hell. 1898, p. 586.
(14) Peleus wrestling with Atalante.

Munich 125 (= Reinach, ii. 120 = Furtwaengler and Reichhold, pl. 31), and $584=$ Reinach, ii. 88; Bibl. Nat. 818 = Gaz. Arch. 1880, pl. 14; Micali, Mon. Ined. pl. 41.
(15) Peleus hunting a stag.

Berlin 2538 = Reinach, ii. 162: cf. Apollod. iii. 13, 3.


FIG. 131. PENTHEUS SLAIN BY MAENADS (BRITISH MUSEUM).
(16) Pentheus torn to pieces by his mother Agave and the frenzied Maenads.
B.M. E 775 = Fig. 131; Munich 807 = Baumeister, ii. p. 1204, fig. 1396; Jatta 1617 = MüllerWieseler, Denkmaeler, ii. 37, 436; Jahrbuch, 1892, pl. 5 (and see p. 154); Gaz. Arch. 1879, pls. 4-5 (?).
(17) Phaon with Chryse and Philomele.

Furtwaengler and Reichhold, pl. 59 (vase in Palermo, formerly interpreted as Dionysos and Ariadne: see text, p. 296, for the correct interpretation).
(18) Phineus invoking the gods.
B.M. E 291 = Wiener Vorl. C. 8, 1. For other Phineus scenes, see pp. 81, 115.
(19) The madness of Salmoneus.

Amer. Journ. of Arch. 1899, pl. 4 (interpreted as Athamas): cf. Class. Review, 1903, p. 276 and
(20) Thoas placed in the chest by Hypsipyle.

Berlin 2300 = Reinach, i. 273: see Ap. Rhod. i. 622, and Hartwig, Meistersch. p. 374.
(21) Aktor and Astyoche (uncertain reference).

Jahrbuch, 1902, pl. 2 (in Boston): see ibid. p. 68, Il. ii. 513 and 658; Schol. in Pind. Ol. vii. 42.
(22) The foundation of Boiae in Laconia by the appearance of a hare.

Reinach, ii. 333 = Inghirami, Vasi Fitt. 120 (this is exceedingly doubtful).
(23) Two boys delivered to a Nymph (unknown myth).

Wiener Vorl. E. 12, 3.
The story of Orpheus often finds a place on vases of the R.F. period, ${ }^{[1441]}$ but is chiefly confined to two episodes, his playing the lyre among a group of Thracians ${ }^{[1442]}$ (the men recognisable by their costume, see p. 179), and his pursuit by the Thracian women ${ }^{[1443]}$ and subsequent death at their hands. ${ }^{[1444]}$ In one scene his head after his death is made use of as an oracle. ${ }^{[1445]} \mathrm{He}$ is often present in under-world scenes (see p. 68), but not always in connection with the fetching back of Eurydike. [1446]

Thamyris, a quasi-legendary figure, appears contending with the Muses for pre-eminence with the lyre ${ }^{[1447]}$; on one fine R.F. vase he is accompanied by Sappho, ${ }^{[1448]}$ who, though strictly an historical personage, appears among the Muses in quasi-mythical guise; he also plays the lyre among Amazons. ${ }^{[1449]}$ Other semi-historical persons enveloped in a cloud of fable are: Taras, the founder of Tarentum ${ }^{[1450]}$; Midas, who is generally represented with asses' ears, and is depicted judging the Seilenos who was caught in his rose-garden and is led before him with hands tied ${ }^{[1451]}$; and Minos, who appears at the slaying of the Minotaur by Theseus, ${ }^{[1452]}$ and in the under-world as one of the judges of souls. ${ }^{[1453]}$

Nor must we omit to mention the Amazons, who play such a large part on Greek vases; besides their connection with various legendary events, they are often employed purely as decorative figures. Mention has already been made of their combats with Herakles and Theseus, and of the part played by their queen Penthesileia in the Trojan War ${ }^{[1454]}$; and we also find them in such scenes as the Judgment of Paris ${ }^{[1455]}$ and Herakles' fight with Kyknos. ${ }^{[1456]}$ They also contend with Gryphons ${ }^{[1457]}$; and many battle scenes in which they are opposed to Greek warriors may also be here alluded to as not admitting of more definite identification. ${ }^{[1458]}$ They are further represented arming and preparing for the fray, ${ }^{[1459]}$ or setting out on horseback, ${ }^{[1460]}$ or defending a besieged city ${ }^{[1461]}$; and as decorative figures we see them charging, ${ }^{[1462]}$ stringing bows ${ }^{[1463]}$ and discharging arrows, ${ }^{[1464]}$ blowing a trumpet, ${ }^{[1465]}$ running by the side of a horse or checking a restive animal, ${ }^{[1466]}$ or fastening a shoe ${ }^{[1467]}$; or in peaceful converse with a Greek warrior, ${ }^{[1468]}$ or else without any distinguishing action. ${ }^{[1469]}$ Nearly all these subjects belong to the R.F. and later periods.

We may conclude this section with an account of the monstrous semi-human, semi-bestial creatures, which play a large part in the decoration of Greek vases, and appear in connection with many legends. Such are the Centaurs, half man, half horse; the Gorgons, winged women with snaky locks; the Harpies, also found on early vases in the form of winged women; and mythical creatures like Pegasos, the Chimaera, or the Minotaur.
The Centaurs, who probably symbolise mountain torrents or other forces of nature, appear (mostly on early vases) in combat with Herakles, either in troops or in single combat, as in the stories of Nessos, Dexamenos, and Eurytion ${ }^{[1470]}$; or, again, in the scenes so often celebrated in the sculptured friezes and metopes of Greek temples, where they contend with Theseus and Peirithoös, ${ }^{[1471]}$ or with the Thessalian Lapiths. ${ }^{[1472]}$ Among the latter a common episode is the death of Kaineus, whom the Centaurs buried in the earth, showering rocks upon him. ${ }^{[1473]}$ In a more peaceful aspect appear the aged Centaurs, Pholos and Cheiron, especially in the stories of Herakles and Achilles, ${ }^{[1474]}$ both of whom are brought to the latter for their youthful education. ${ }^{[1475]}$ As the friend of Peleus Cheiron often assists at his capture of Thetis. ${ }^{[1476]}$ Centaurs, especially Pholos, are sometimes represented returning from the chase, ${ }^{[1477]}$ or as single decorative figures ${ }^{[1478]}$; in one case they fight with cocks. ${ }^{[1479]}$ Nike in one or two instances is drawn in her chariot by male or female Centaurs ${ }^{[1480]}$; and, finally, representations of youthful Centaurs are found, though usually they are middle-aged. ${ }^{[1481]}$
The Gorgons appear almost exclusively in connection with the Perseus legend, ${ }^{[1482]}$ but are besides frequently found as decorative figures, especially on B.F. vases, ${ }^{[1483]}$ in the running attitude characteristic of archaic art, in one case between two Sphinxes. ${ }^{[1484]}$ Besides these, the head or mask of the Gorgon Medusa, familiar at all periods as a decorative motive of Greek art-first with an ugly and grotesque face, afterwards refined and beautiful-is often found by itself on Greek vases, especially as an interior central ornament of B.F. kylikes. ${ }^{[1485]}$
Harpies, conventionally associated through the medium of the Roman poets ${ }^{[1486]}$ with the humanheaded bird-form which really denotes the Siren, are found invariably on vases in the form of winged women. ${ }^{[1487]}$ They are, as has been elsewhere noted (p. 81), associated with the Boreades ${ }^{[1488]}$ as symbolical of evil and good influences of winds, and probably should be regarded as personifications of the southern breezes (the malevolent influence of which is seen in the sirocco). Traditionally they were supposed to guard the Garden of the Hesperides in Africa, whence the hot baleful winds come. The story of Phineus is probably to be explained on these lines. ${ }^{[1489]}$ A Harpy appears at the recovery of Zeus' golden dog from Pandareos. ${ }^{[1490]}$

That the human-headed bird represents a Siren in Greek art is amply attested by the representations of Odysseus' adventure with the vocal enchantresses. ${ }^{[1491]}$ Their appearance on the so-called Harpy monument of Xanthos, however, shows them in another aspect, that of deathdeities ${ }^{[1492]}$ —not necessarily of a violent and rapacious character, as on a vase in Berlin, ${ }^{[1493]}$ but gentle and kindly. So, again, a Siren is represented in connection with a tomb ${ }^{[1494]}$; and in a scene representing a banquet in Elysium they are depicted crowning the dead. ${ }^{[1495]}$ On some vases we find a Siren playing a flute or a lyre (probably merely fanciful subjects) ${ }^{[1496]}$; or, again, two Sirens kissing each other. ${ }^{[1497]}$ As mere decorative motives their appearances are countless, and many early vases are modelled in the form of Sirens ${ }^{[1498]}$; sometimes they have human arms ${ }^{[1499]}$; in one case a bird's wings and a fish-tail ${ }^{[1500]}$; or, again, more anomalously, bearded masculine heads. ${ }^{[1501]}$ More rarely they are seen flying. ${ }^{[1502]}$

The Sphinx is familiar in the first place as the monster, half woman, half dog, which vexed the city of Thebes till slain by Oedipus; this story is often alluded to on vases, ${ }^{[1503]}$ but many groups of a man and a Sphinx have probably no special meaning. ${ }^{[1504]}$ The Sphinx has sometimes a sepulchral reference, ${ }^{[1505]}$ and is grouped with other figures, such as Atlas ${ }^{[1506]}$ or a Seilenos ${ }^{[1507]}$ (the latter probably a scene from a Satyric drama). Like the Siren, she is exceedingly common as a decorative figure, ${ }^{[1508]}$ especially in the friezes of animals and monsters so dear to the early vase-painters. Her invariable form is that of a winged lion or dog with a woman's bust.
The Gryphon, a kind of dragon composed of an eagle's head and lion's body and legs (occasionally a bird's), is almost exclusively decorative ${ }^{[1509]}$; but on the later vases we find the fabulous combat of the Oriental Arimaspi with the Gryphons who guarded the mountain of gold in the Far East (cf. Plate XLII. $)^{[1510]}$; or, again, they contend with the Amazons, ${ }^{[1511]}$ with Scythians, ${ }^{[1512]}$ or with ordinary Greek warriors. ${ }^{[1513]}$ In one instance an Arimasp woman is seen shooting at a Gryphon of curious type. ${ }^{[1514]}$ Further, they draw the chariots of deities, such as Persephone, ${ }^{[1515]}$ and Dionysos ${ }^{[1516]}$; and we have already seen Apollo coming on a Gryphon from the Hyperborean regions. ${ }^{[1517]}$
Pegasos, the winged steed of Bellerophon, and the monster Chimaera which he slew, also appear as decorative figures ${ }^{[1518]}$; and the former draws the chariots of Apollo and of a woman, ${ }^{[1519]}$ and also appears as a constellation with the moon and stars. ${ }^{[1520]}$ A human-headed monster attacked by a hero seems to have been suggested by the Chimaera on a companion vase. ${ }^{[1521]}$ The Minotaur is generally seen in connection with Theseus, but also appears as a single or decorative figure, ${ }^{[1522]}$ and one vase appears to represent the youthful monster in his mother's lap. ${ }^{[1523]}$ Other monsters found occasionally on vases are Skylla, who appears, not in connection with the story of Odysseus, but with those of Perseus and Andromeda, ${ }^{[1524]}$ and Phrixos and Helle, ${ }^{[1525]}$ or as a single figure ${ }^{[1526]}$; and Lamia, a vampire or ogress in the form of a hideous old woman, who is seen undergoing torture from Satyrs, ${ }^{[1527]}$ and in another unexplained scene. ${ }^{[1528]}$ Another type of monster, the serpent-footed giant Typhon, has already been mentioned. ${ }^{[1529]}$ Yet another and a unique type is that of the Nymphs with serpent bodies which protect vines from the attacks of goats. ${ }^{[1530]}$
Lastly, another creation of fancy, though not strictly mythological, is the inח $\boldsymbol{i} \lambda \varepsilon \kappa \tau \rho v \omega^{\omega} \omega$ or "cockhorse," a bird with horse's head, which appears on some B.F. vases ridden by a youth. ${ }^{[1531]}$ This may also be a convenient place for mentioning the common decorative subject of Pygmies fighting with cranes. ${ }^{[1532]}$

## Historical Subjects

The number of vases on which undoubted historical subjects have been discovered is very limited, though the old systems of interpretation exerted much ingenuity in eliciting an historical meaning from many scenes of daily life, with or without names inscribed over the figures. In the instances given below, the names are given in most cases, obviating all doubts. It is worth noting that the subjects chosen are not as a rule those that would most obviously suggest themselves. They fall into two classes, one relating to historical events and persons, the other to literary celebrities:
I. (1) The weighing of silphium by Arkesilas, one of the descendants of Battos, who ruled at Kyrene -probably the second of the name (в.c. 580-550). This scene occurs on a Cyrenaic cup in the Bibliothèque at Paris (Cat. 189: see Vol. I., p. 342, Fig. 92), which is probably a contemporary production.
(2) Kroisos, the king of Lydia, on the funeral pyre (b.c. 545). See above, p. 6.

Fig. 132 = Reinach, i. 85 = Baumeister, ii. p. 796, fig. 860 (in Louvre).


From Baumeister.
FIG. 132. KROISOS ON THE FUNERAL PYRE (VASE IN LOUVRE).
(3) Harmodios and Aristogeiton slaying the tyrant Hipparchos (в.с. 510).
B.F.: Arch.-epigr. Mitth. aus Oesterr. iii. (1879), pl. 6. R.F.; Reinach, i. 449; and see a late Panath. amph. in B.M. (B 605).
(4) Diitrephes shot to death with arrows, B.c. 479 (?). See Paus. i. 23, 3, and Frazer's note.

Bibl. Nat. 299 = Jahrbuch, 1892, p. 185 (but see Reinach, ii. p. 255, and p. 15 under Gigantomachia).
(5) The Persian king and queen.

Helbig, p. 281 = Reinach, i. 275 (see Hartwig, Meistersch. p. 525).
(6) The Persian king hunting.

Petersburg, 1790 = Reinach, i. 23 (Xenophantos): cf. Naples 2992.
(7) Dareios in council, with various deities and personifications as spectators.

Naples 3253 = Reinach, i. 194 = Baumeister, i. pl. 6, fig. 449.
(8) Battle of Greeks and Persians (with spectator-deities, etc.).

Naples $3256=$ Reinach, i. 98: see also p. 179; Reinach, ii. 84; Hartwig, Meistersch. pls. 55-56 and p. 518.
(9) Battle of Greeks and Messapians.

Berlin 3264 = Reinach, i. 270.
II. (1) Sappho.
(a) As single figure.

De Witte, Coll. à l'Hôtel Lambert, pl. 3.
(b) With Alkaios.

Fig. 133 = Munich 753 = Baumeister, iii. p. 1543, fig. 1607.
(c) Reading her poems.

Athens 1241 = Dumont-Pottier, pl. $6=$ Reinach, i. 526.
(d) In rivalry with Muses.

Jatta $1538=$ Reinach, i. 526.
(e) With Eros (named Talas).

Abhandl. d. k. sächs. Gesellsch. viii. (1861), pl. 1, fig. 1: see p. 49.
(2) Aesop.

Helbig, 154 = Jahn, Arch. Beitr. pl. 12, fig. 2.
(3) Anakreon.
B.M. E 18: cf. E 266-67, 314-15; and see generally Jahn, Gr. Dichter auf Vasenb. in Abhandl. d. k. sächs. Gesellsch. viii. (1861), p. 699 ff.

(4) Kydias of Hermione (a lyric poet: cf. Schol. in Ar. Nub. 967) and Nikarchos (a contemporary flute-player) are to be seen, according to Jahn (op. cit. p. 740) on a psykter in the British Museum (E 767), on which these names are inscribed over two revellers; but the identification is exceedingly doubtful. See also Munich 1096 = Jahn, op. cit. pl. 4, fig. 1.
III. Mention should also here be made of the names of historical renown which often appear on R.F. vases with the word ка入óc (see Vol. I. p. 403, and below, p. 267), such as Alkibiades, Glaukon, Hipparchos, Kleinias, Leagros, Megakles, and Miltiades. The question is dealt with elsewhere, and it has been shown that only in one or two cases-e.g. Leagros, Glaukon, and Kleinias (the father of Alkibiades)-can an identification with the historical personages be certainly maintained; it is, however, of sufficient interest for reference in this chapter, because the inscribed names may in some cases possibly refer to the figures depicted on the vases. ${ }^{[1533]}$

## CHAPTER XV SUBJECTS FROM ORDINARY LIFE

Religious subjects-Sacrifices-Funeral scenes-The Drama and burlesques-Athletics-Sport and games-Musical scenes-Trades and occupations-Daily life of women-Wedding scenesMilitary and naval subjects-Orientals and Barbarians-Banquets and revels-Miscellaneous subjects-Animals.

It is hardly possible to give within brief limits all the illustrations that the vases afford, either directly or indirectly, of the religious and secular life of the Greeks. It is, however, feasible to classify these subjects under several headings, and to give a list of the most typical and popular in each case. Thus we have:

1. Religious ceremonies and sacrifices.
2. Funeral scenes and offerings at tombs.
3. Subjects connected with the drama.
4. Athletic contests, games and sport, and musical scenes.
5. Trades and occupations.
6. Scenes from daily life of women and children.
7. Military and naval subjects.
8. Oriental and barbarian figures.
9. Miscellaneous subjects and compositions of no particular import.
10. Animals (mostly only decorative).

## 1. Religious Subjects

These mostly appear in the form of sacrifices, either before a simple altar, or before the statue of some deity, a cult-image, or terminal figure. Thus we have representations of the offering of a bull to Athena, ${ }^{[1534]}$ sacrifices to a primitive image of Dionysos ${ }^{[1535]}$ or to a terminal figure of Hermes, ${ }^{[1536]}$ or a sacrifice or libation to Persephone, Apollo, or other deities. ${ }^{[1537]}$ A procession of six maidens carrying chairs and a boy with game is probably in honour of Artemis ${ }^{[1538]}$; and in another scene we have the Dioskuri coming to the Theoxenia or feast prepared in their honour. ${ }^{[1539]}$ Many other examples may be found under the heading of the various Olympian deities. In other instances we see the preparations for a sacrifice, ${ }^{[1540]}$ or a procession of figures with victims and sacrificial implements ${ }^{[1541]}$; the victims are either rams, ${ }^{[1542]}$ bulls, ${ }^{[1543]}$ goats, ${ }^{[1544]}$ or pigs. ${ }^{[1545]}$ Other scenes of sacrifice represent the roasting of a piece of meat held on a spit over a blazing altar ${ }^{[1546]}$; or two men stand over a large krater on a stand, accompanied by a flute-player. ${ }^{[1547]}$ In many cases the sacrifice is doubtless intended to celebrate a dramatic, agonistic, or other victory. ${ }^{[1548]}$
Among other religious scenes we have the dedication of a tripod, ${ }^{[1549]}$ religious festival dances, ${ }^{[1550]}$ praying figures, ${ }^{[1551]}$ men or women burning incense over an altar or incense-burner ${ }^{[1552]}$; or scenes of libation, ${ }^{[1553]}$ a Metragyrtes or mendicant priest praying before devotees, ${ }^{[1554]}$ and a priest examining the entrails of a ram. ${ }^{[1555]}$ An ephebos is initiated and purified by the $\Delta$ ò̀ $\kappa \underline{\varphi} \delta \iota o \nu^{[1556]}$; oaths are taken over a tomb, ${ }^{[1557]}$ or omens from birds on a tumulus ${ }^{[1558]}$; and here perhaps may be mentioned a man making a gesture against the evil eye. ${ }^{[1559]}$ There is also a scene illustrative of the $\Pi \imath \theta o i ́ \gamma \iota \alpha$, an Athenian feast ${ }^{[1560]}$; and a possible representation of the feast of Adonis, and the "gardens" or pots of flowers exhibited on that occasion. ${ }^{[1561]}$ Lastly, there are scenes relating to votive offerings, such as a figure of a child on a column offered to Athena, ${ }^{[1562]}$ a youth carrying a votive tablet, ${ }^{[1563]}$ and others in which similar votive tablets occur. ${ }^{[1564]}$ The number of scenes which can be shown to relate to Athenian festivals, or bear on Greek religious belief and ritual, might be greatly expanded and multiplied, but at present little has been done in this direction. ${ }^{[1565]}$

## 2. Funeral Scenes

Closely connected with these religious subjects are those which played so large a part in the life of the Greeks, and found such a strong reflection in their decorative art-namely, those which relate to the burial and cult of the dead. The relation of Greek vases to the tomb has been discussed elsewhere (Vol. I. p. 141 ff .), and it is sufficient here to repeat that there are only three or four classes of vases which yield undoubted evidence that they were expressly made for funeral purposes, each belonging to a different period of the art.
In the earliest period we have the great Dipylon vases (Vol. I. p. 285), many of which represent funeral processions and rows of mourning women ${ }^{[1566]}$; these were made for standing outside the tomb. In the B.F. period there are the prothesis-amphorae, made likewise for placing first round the bier and then on the tomb, as plainly shown in one instance ${ }^{[1567]}$; and in the R.F. period the Athenian white lekythi are decorated almost exclusively with sepulchral scenes. Among the vases of the decadence a whole series of Lucanian and Campanian hydriae and Apulian kraters and amphorae, as well as some late Athenian vases, the Apulian examples being usually of enormous size, equally betray the special purpose for which they were made.
On the B.F. vases the commonest subject is the prothesis or conclamatio, where the body is exposed on the bier and the mourners stand round in attitudes of grief, ${ }^{[1568]}$ a subject also occasionally found on the lekythi. ${ }^{[1569]}$ Elsewhere we have the carrying of the bier to the tomb, ${ }^{[1570]}$ accompanied by warriors, and the depositio or placing of the body therein. ${ }^{[1571]}$ On the vases of this period the tomb invariably assumes the form of a mound ( $\chi \tilde{\omega} \mu \alpha$ or tumulus), ${ }^{[1572]}$ as it appears in some mythical
scenes already described. ${ }^{[1573]}$ On the lekythi, on the other hand, the tomb is in the form of a tall plain stele, on a stepped base, crowned with an ornament of acanthus-leaves or a palmette, and wreathed with coloured sashes, while vases and baskets of flowers are sometimes placed on the steps. ${ }^{[1574]}$ On the vases of Southern Italy it is developed either into a tall column with altar-like base, ${ }^{[1575]}$ or into a large shrine or heroön, with columns in front and gabled roof, within which stands the figure of the deceased, ${ }^{[1576]}$ or sometimes an acanthus-plant ${ }^{[1577]}$ or several vases. ${ }^{[1578]}$
The subjects on the white lekythi and later vases almost invariably take the form of mourners, ${ }^{[1579]}$ or men and women making offerings to the dead, or placing sashes, wreaths, and vases on the tomb. ${ }^{[1580]}$ Or, again, we may note interesting parallels with the Athenian sepulchral reliefs of the fourth century, which are mostly contemporaneous with the vases. ${ }^{[1581]}$ Thus we have "farewell scenes" between a man and woman, ${ }^{[1582]}$ or between two women ${ }^{[1583]}$; or the equestrian figure of a warrior, as on the famous stele of Dexileos, ${ }^{[1584]}$ or a warrior charging with his spear ${ }^{[1585]}$; or, again, a hare-hunt at a tomb, perhaps with reference to the occupations of the deceased. ${ }^{[1586]}$ Sometimes the tomb of a warrior is indicated by his armour. ${ }^{[1587]}$ The interior of a tomb is occasionally shown, with a dead boy in it, ${ }^{[1588]}$ or a series of vases, ${ }^{[1589]}$ or as in the story of Polyeidos. ${ }^{[1590]}$ In one instance a group of figures is placed on the top of the tomb. ${ }^{[1591]}$ Mythological figures are sometimes introduced, as Charon ferrying the dead in his bark, ${ }^{[1592]}$ or Hermes Psychopompos ${ }^{[1593]}$; or the type of Thanatos and Hypnos (or that of Boreas and Zephyros) with Memnon is borrowed for that of a warrior, a youth, or a woman whom they place in the tomb. ${ }^{[1594]}$ Occasionally we see the soul of the deceased as a small flitting winged figure. ${ }^{[1595]}$ On the Italian vases the figure of the deceased usually appears inside the heroön, painted white, as if to indicate a sculptured marble figure: a warrior with armour, ${ }^{[1596]}$ or a youth with his horse or dog, ${ }^{[1597]}$ or pouring a libation from a kantharos. ${ }^{[1598]}$ These heroa are always surrounded by figures of women bearing baskets of offerings, unguent-vases, and wreaths, and by youths as mourners. ${ }^{[1599]}$


Scenes from Funeral Lekythi (British Museum).
1, Prothesis; 2, Cult of Тоmb.

Apart from the under-world scenes already described, ${ }^{[1600]}$ the future life is not illustrated by the vases, except in a curious scene on a B.F. Cyrenaic cup, representing a banquet of the blessed, attended by Sirens. ${ }^{[1601]}$ There is also one single representation of the subject so common on later Greek reliefs-the sepulchral banquet. ${ }^{[1602]}$

## 3. The Drama

The relation of vase-paintings to the drama has already been discussed in Chapter XI., in which it has been shown how the tragedies of Euripides and the farces of Rhinthon influenced the artists of Southern Italy. It may, however, be worth while to recapitulate here the actual representations of actors or of scenes taking place on a stage, together with some account of the numerous burlesques of mythical subjects.
On one curious B.F. vase (probably late and imitative) we see a rude representation of a tragic and
a comic chorus, ${ }^{[1603]}$ and occasionally on vases of this period we find figures of actors dressed up as birds, or otherwise in comic fashion. ${ }^{[1604]}$ More important in this connection are the fifth-century vases found on the site of the Cabeiric temple at Thebes, several of which have parodies of wellknown subjects, such as Odysseus and Kirke, or Peleus bringing the young Achilles to Cheiron. ${ }^{[1605]}$ It seems probable that these scenes are actual reproductions of burlesque performances connected with the worship of the Kabeiri.
We look in vain for representations of scenes from Aristophanes and the Old Comedy, though there are one or two vases which recall (if nothing more) episodes in the Acharnians ${ }^{[1606]}$ and Frogs. ${ }^{[1607]}$ But for the rest, these comic scenes are almost confined to the vases of Southern Italy, especially those made at Paestum, with their presentations of the $\varphi \lambda$ v́ $\alpha \kappa \varepsilon \varsigma$ or fourth-century farces. A fairly exhaustive list of these was made some years ago by Heydemann, ${ }^{[1608]}$ and probably requires little emendation as yet; we repeat below a number of the more interesting subjects, and others may be collected from the foregoing pages in which myths are burlesqued (the Judgment of Paris, the apotheosis of Herakles, Oedipus and the Sphinx, etc.). ${ }^{[1609]}$
(1) Zeus visiting Alkmena: Schreiber-Anderson, 5, $8=$ Heydemann, loc. cit. p. 276: cf. B.M. F 150.
(2) Apollo healing the Centaur Cheiron: B.M. F 151.
(3) Herakles at Delphi; Apollo takes refuge on the roof of the temple: Reinach, i. 153, $2=$ Rayet and Collignon, p. 318.
(4) Combat of Hephaistos (Daidalos) and Ares (Enyalios): B.M. F 269.
(5) Herakles with the Kerkopes: Schreiber-Anderson, 5, $2=$ Heydemann p. 281.
(6) Herakles seizing Auge: Fig. 105, Vol. I. p. $474=$ Reinach, i. $123=$ Heydemann, p. 279.
(7) Burlesque of the story of Antigone: Reinach, i. 273.
(8) Rape of the Palladion: B.M. F 366.
(9) Death of Priam: Berlin $3045=$ Reinach, i. 370, 8.
(10) Odysseus and Kirke: Jatta 901 = Heydemann, p. 271.
(11) Odysseus in Phaeacia: Reinach, i. 153, 1.


FIG. 134. SCENE FROM A FARCE (BRITISH MUSEUM, F 189).

Other scenes represent single figures, such as Herakles, ${ }^{[1610]}$ or Taras on the dolphin ${ }^{[1611]}$; or subjects from farces of daily life, such as an actor with a table of cakes ${ }^{[1612]}$ or the drunken return from a revel. ${ }^{[1613]}$ Many scenes, again, have some reference to the Satyric drama, as on the fine vase in Naples, where Dionysos and other figures attend the preparations for a performance of that kind ${ }^{[1614]}$; or such scenes as that of Hera and Iris attacked by Seileni, ${ }^{[1615]}$ or those relating to adventures of Herakles and Perseus with Satyrs. ${ }^{[1616]}$ Other subjects have no particular significance, such as an actor attired as a Seilenos playing on the flute, or dancing, or with a Sphinx, ${ }^{[1617]}$ groups of actors ${ }^{[1618]}$ (in one case dressing ${ }^{[1619]}$ ), a comic actor among Satyrs and Maenads, ${ }^{[1620]}$ and single figures. ${ }^{[1621]}$ Some, which are apparently mythological, defy explanation. ${ }^{[1622]}$

The influence of Tragedy on vase-paintings is an indirect one, and entirely confined to the vases of Southern Italy on the one hand, and to the plays of Euripides on the other. The subject has been discussed at length elsewhere in this work, ${ }^{[1623]}$ and it is unnecessary here to give a list of the subjects on South Italian vases which can be traced to the influence of Euripides. It has also been pointed out that this influence made itself felt, not only in the actual choice of subjects, but generally in their treatment and arrangement, in the quasi-architectural setting of many scenes, and in the elaborate costumes of the figures.


FIG. 135. ATHLETES ENGAGED IN THE PENTATHLON (BRITISH MUSEUM, B 134).

## 4. Athletics and Sport

From the theatre we naturally turn to the palaestra and gymnasium, which played so important a part in the public and private life of the Greeks, and, like the former, may be said to be vested with a religious significance, as exemplified in the Olympic and other great games. Hardly any class of subject is found so frequently and consistently on the vases. The series of Panathenaic amphorae alone supply instances of every form of athletic exercise in which the Greeks indulged. ${ }^{[1624]}$ Many vases, especially the R.F. kylikes, represent groups of athletes in the palaestra engaged in various exercises, such as boxing, wrestling, running, and leaping ${ }^{[1625]}$; in other cases we have single groups of boxers ${ }^{[1626]}$ or wrestlers, ${ }^{[1627]}$ or of the поүкро́́tıov, a somewhat brutal combination of the two. ${ }^{[1628]}$ A boxer is sometimes seen putting on his caestus. ${ }^{[1629]}$ The п $\quad$ र́v $\alpha \theta \lambda o \nu$, which played so important a part in the national games, is not infrequently found, though often only three or four out of the five contests appear. ${ }^{[1630]}$ Here, again, we also find single figures of diskos-throwers ${ }^{[1631]}$ or javelinthrowers, ${ }^{[1632]}$ representations of the long-jump, ${ }^{[1633]}$ and men marking the ground with a pick-axe or poles. ${ }^{[1634]}$ An athlete is seen binding round his javelin the cord or $\dot{\alpha} \gamma \kappa v ́ \lambda \eta$ by which it was thrown, ${ }^{[1635]}$ and the pick-axe afore-mentioned also appears in such a way as to indicate its general use by athletes-viz. for digging up the ground over which jumps were made, by way of exercising the limbs. ${ }^{[1636]}$ A variation of the javelin contest was one in which the competitors were mounted, and aimed at a shield set up as a target as they rode past. ${ }^{[1637]}$ Other important contests are the footrace ${ }^{[1638]}$; the horse-race, generally taken part in by boys (кќ $\left.\lambda \eta \tau \varepsilon \varsigma\right){ }^{[1639]}$; the chariot-race ${ }^{[1640]}$; the torch-race $(\lambda \alpha \mu п \alpha \delta \eta \delta \rho о \mu i ́ \alpha){ }^{[1641]}$; and the race of armed warriors (óплıтобронí $)$. ${ }^{[1642]}$ In the latter contest various types may be distinguished: the arming for the race ${ }^{[1643]}$; the start ${ }^{[1644]}$; the race itself, with runners turning at the end of the stadion ${ }^{[1645]}$; the finish ${ }^{[1646]}$; and a variation in which the runner carried his armour. ${ }^{[1647]}$ On the earlier vases this race is run in full armour; on the later, only with helmets and shields. Frequently the victorious athlete, horseman, or hoplite is seen proclaimed as winner, ${ }^{[1648]}$ and receiving his prize ${ }^{[1649]}$; also receiving a crown from Nike. ${ }^{[1650]}$
Among more miscellaneous scenes may be mentioned athletes anointing themselves ${ }^{[1651]}$ and using the strigil ${ }^{[1652]}$; the $\kappa \omega \rho \cup к о \mu \alpha \chi^{\prime} \alpha$ or quintain ${ }^{[1653]}$; an athlete expiring ${ }^{[1654]}$; a girl-runner wounded in the foot ${ }^{[1655]}$; men rolling discs ${ }^{[1656]}$; acrobats ${ }^{[1657]}$ and female tumblers performing contortions over swords, or lifting objects with their feet. ${ }^{[1658]}$ To the list of palaestra scenes may be added those where Nike or another deity appears as patron of the palaestra watching the athletes, ${ }^{[1659]}$ and scenes of ephebi washing or bathing in preparation for or after their contests. ${ }^{[1660]}$ The athletes are often accompanied by trainers, who use a forked stick to direct their movements. ${ }^{[1661]}$ On the later R.F. and the Italian vases it is a regular thing to find on the reverse a roughly painted group of two or three athletes or ephebi, usually wrapped in himatia and conversing together ${ }^{[1662]}$; in such cases the palaestra is indicated by a pair of jumping-weights or a ball suspended.
Subjects coming under the heading of what we call Sport are not so common, and are practically limited to hunting scenes. They include hare-hunts, ${ }^{[1663]}$ stag-hunts, ${ }^{[1664]}$ wolf-hunts and fox-hunts, ${ }^{[1665]}$ lion-hunts, ${ }^{[1666]}$ and boar-hunts ${ }^{[1667]}$; in the latter on early B.F. vases the figures often have fancy names, with a reference in some cases to the hunt of the Calydonian boar, which created the type. Some, especially B.F. vases, depict the departure of a hunter for the chase, ${ }^{[1668]}$ or his return loaded with game ${ }^{[1669]}$; or we see a party of hunters resting (all with fancy names). ${ }^{[1670]}$ A group of youths capturing and taming a bull may also be mentioned here, ${ }^{[1671]}$ and horse-taming is similarly
depicted. ${ }^{[1672]}$ We see horses being unharnessed, groomed, and watered, ${ }^{[1673]}$ or exercised, ${ }^{[1674]}$ and a man with a backing horse ${ }^{[1675]}$; and we may also perhaps include among these subjects scenes representing riding-lessons, a school for ephebi, ${ }^{[1676]}$ or a boy learning to mount a horse. ${ }^{[1677]}$ A favourite subject for the interiors of R.F. cups is that of a young Athenian on horseback, ${ }^{[1678]}$ often in Oriental or Thracian costume (see p. 179). ${ }^{[1679]}$ On the B.F. vases a horseman or a chariot is sometimes depicted in front view, a notable exception to the preference of the time, ${ }^{[1680]}$ and sometimes a three-horse chariot takes the place of the quadriga. ${ }^{[1681]}$ Among miscellaneous chariotscenes may be mentioned a goddess (?) and a hero mounting chariots, ${ }^{[1682]}$ a girl in a chariot drawn by hinds ${ }^{[1683]}$; and people travelling in a country cart. ${ }^{[1684]}$
Among the various Games popular with Greek youths the favourite is, perhaps, that of ball, which was often played by men mounted on each other's shoulders in two parties, this being known as $\dot{\varepsilon} \varphi \varepsilon \delta \rho \iota \sigma \mu o \varsigma^{[1685]}$; a rougher variant, in which the ball was omitted and victory was probably gained by overthrowing the opponent pair, was known as $\dot{\varepsilon} \gamma к о т ט ́ \lambda \eta .{ }^{[1686]}$ Women and children also play at ball, as does Eros. ${ }^{[1687]}$ Equally popular was cock-fighting ${ }^{[1688]}$; and we also see a group of boys shooting with bow and arrows at a popinjay or figure of a bird. ${ }^{[1689]}$ Of indoor amusements the favourite is the кótт $\alpha \beta$ os, a popular relaxation after a banquet, often seen on kylikes and other R.F. vases. ${ }^{[1690]}$ Other games, more suitable to younger boys, are top-spinning ${ }^{[1691]}$ and bowling a hoop ${ }^{[1692]}$; others, again, in which boys and girls join, or even occasionally Eros and Satyrs, are the games of morra (micare digitis, or "How many fingers do I hold up?"), ${ }^{[1693]}$ and its variant, the $\check{\omega} \mu \mathrm{L} \lambda \lambda \alpha$, played with knucklebones ${ }^{[1694]}$; swinging ${ }^{[1695]}$ and see-sawing ${ }^{[1696]}$; and flying a kite. ${ }^{[1697]} \mathrm{A}$ game of similar character to the morra is played by a winged girl, who places her hands over the eyes of a boy in a chair. ${ }^{[1698]}$ The so-called magic wheel, which was twirled on a string, is almost exclusively used by Eros on the vases of Southern Italy. ${ }^{[1699]}$ Children with their toys, such as gocarts, vases of various shapes, etc., are often depicted on the smaller R.F. vases of the fine style, some of which were perhaps actually made for playthings ${ }^{[1700]}$; and we often see them accompanied by pet dogs, tortoises, and other animals. ${ }^{[1701]}$ Similarly there are representations of birds and beasts kept in cages, ${ }^{[1702]}$ and of grown-up people playing with pets: a youth and girl with a mouse or jerboa, ${ }^{[1703]}$ or a man with a Maltese dog. ${ }^{[1704]}$
Equal in importance in the eyes of the Greeks was the other great division of their education, цоטбוкף́; the wider sense in which they used the word, the culture of the mind as opposed to that of the body ( $\gamma \cup \mu \nu \alpha \sigma \tau \iota \kappa \eta)$, admits of including under this heading school scenes as well as musical performances. Among the former is the well-known kylix of Duris in Berlin (Plate XXXIX.), ${ }^{\text {[1705] }}$ where a teacher is seen unrolling a manuscript on which appears an epic hexameter (see Chapter XVII.); a pupil is about to write on tablets; and others undergo instruction on the flute and lyre. Elsewhere we see a youth writing on a tablet, ${ }^{[1706]}$ or on his way to school ${ }^{[1707]}$; a man reading from a roll ${ }^{[1708]}$; and a vivid representation of a schoolmaster giving a writing lesson. ${ }^{[1709]}$
Lessons in music, ${ }^{[1710]}$ singing, ${ }^{[1711]}$ and dancing ${ }^{[1712]}$ are by no means infrequently represented, especially on R.F. vases; we have already seen the young Herakles and Iphikles receiving instruction of this kind, ${ }^{[1713]}$ and on the vases both boys and girls take part in the lessons. Dancing scenes include dances of maidens (very common on early B.F. vases), or single figures of dancers ${ }^{[1714]}$; a girl dancing to the flute or with castanets, ${ }^{[1715]}$ or a youth to the music of a girl ${ }^{[1716]}$; a woman dancing the Pyrrhic dance in the attire of a warrior, ${ }^{[1717]}$ and a sacred Lydian dancer with her wicker head-dress. ${ }^{[1718]}$ The grotesque dancers on some early B.F. vases appear to be performing the kordax. ${ }^{[1719]}$
Groups of musicians with no particular signification are often found, generally playing the lyre and flute, ${ }^{[1720]}$ or single figures, such as a lyre-player in female costume, ${ }^{[1721]}$ or in the distinctive ó $\rho \theta$ ootó $\delta 10 \nu$ of the musician. ${ }^{[1722]}$ Other scenes relate to agonistic and musical competitions, which often formed part of the great games; thus we have on some Panathenaic vases and elsewhere contests for victory with the lyre ${ }^{[1723]}$ or flute. ${ }^{[1724]}$ Sometimes the victorious musician appears receiving the prize ${ }^{[1725]}$ or a crown from Nike ${ }^{[1726]}$; he usually stands on a bema or raised platform. On one vase a poet recites an epic to the sound of the flute; the opening words appear proceeding from his mouth. ${ }^{[1727]}$ On another a man is seen tuning his lyre. ${ }^{[1728]}$ Singing was a common recreation of banqueters or revellers, especially as seen on R.F. vases. ${ }^{[1729]}$


## 5. Trades and Occupations

The trades and occupations represented on vases are very varied, ranging from mining to shoemaking. The representations of miners in caves which appear on some of the early Corinthian pinakes ${ }^{[1730]}$ most probably refer to the digging out of the clay for the potteries rather than to mining for metals. This seems the more probable when it is taken into consideration that potters' workshops and furnaces are so frequently depicted in the same series. ${ }^{[1731]}$ Besides these we find later instances of potters turning vases on the wheel, ${ }^{[1732]}$ painting them, or finishing them off, ${ }^{[1733]}$ as already described in a previous chapter: one vase represents the interior of a potter's workshop with vases in various stages ${ }^{[1734]}$; another, a man painting the design with a sort of quill. ${ }^{[1735]}$ Young men and girls are depicted negotiating the purchase of completed vases in the shop. ${ }^{[1736]}$ Another of the Corinthian pinakes ${ }^{[1737]}$ represents the exportation of vases in a ship. Metal-work is represented by a well-known R.F. kylix in Berlin, ${ }^{[1738]}$ showing a bronze foundry, with statues in various stages of completion; there are also representations of a smithy, ${ }^{[1739]}$ in some of which writers have seen an allusion to Hephaistos and the Kyklopes (see p. 37). A man is depicted finishing off a bronze helmet, ${ }^{[1740]}$ or carrying a completed terminal figure ${ }^{[1741]}$; and of similar import is the subject of Athena modelling a horse. ${ }^{[1742]}$
Agriculture is represented by vases in Berlin and the Louvre with scenes of men ploughing with oxen (Fig. 136) or hoeing, sowers, and mules carrying sacks of grain ${ }^{[1743]}$; and certain vase-paintings have been interpreted as referring to the digging of a well. ${ }^{[1744]}$ A man is seen cutting down a tree, ${ }^{[1745]}$ and another birds'-nesting. ${ }^{[1746]}$ Shepherds with flocks of sheep and goats are seen on two early Boeotian vases, ${ }^{[1747]}$ and also fishermen, ${ }^{[1748]}$ and men crushing grapes in a wine-press. ${ }^{[1749]}$ The various stages of oil-making include the gathering of the olives from a tree, ${ }^{[1750]}$ the pressing in an oil-press, ${ }^{[1751]}$ and lastly the merchant measuring out and selling his oil. ${ }^{[1752]}$ A butcher is represented cutting up meat, ${ }^{[1753]}$ and also the preparing and cutting up of a tunny-fish, ${ }^{[1754]}$ and the baking of bread ${ }^{[1755]}$; on a B.F. vase two men weigh goods in a balance ${ }^{[1756]}$; and the export of the silphium (?) on the Arkesilas vase may also be mentioned here. ${ }^{[1757]}$ Lastly, we have a shoemaker in his shop, ${ }^{[1758]}$ a carpenter working with an adze, ${ }^{[1759]}$ and a boy going to market with two baskets carried on a pole. ${ }^{[1760]}$

## 6. Daily Life of Women

Scenes from the daily life of women form our next heading, and we include therewith those relating to marriage or preparations for nuptials, which play so important a part in woman's life. The "type" of a marriage procession on B.F. vases is, as we have seen (p. 16, and Vol. I. p. 378), liable to be confused with the subject of the marriage of Zeus and Hera; the bride and bridegroom appear in a four-horse chariot, accompanied by persons who, if not deities, at any rate bear similar attributes, such as the caduceus of Hermes or the torches of Artemis (as pronuba). ${ }^{[1761]}$ In scenes of simpler character the wedding party walk in procession or drive in a cart. ${ }^{[1762]}$ On later vases the bride is generally led by the hand by her husband, accompanied as before in appropriate fashion. ${ }^{[1763]} \mathrm{We}$ also find scenes representing the bridal pair on their marital couch (lectus genialis), ${ }^{[1764]}$ and the return of the bride after the ceremonies. ${ }^{[1765]}$ Other scenes may possibly represent a betrothal, ${ }^{[1766]}$ a bridal toilet, ${ }^{[1767]}$ or a nuptial sacrifice, ${ }^{[1768]}$ and, finally, the arrival of the bridal pair at their house, with a servant preparing the marriage-bed. ${ }^{[1769]}$

More common, especially on R.F. vases of the fine style, are scenes taken from the life of the women's apartments ( $\gamma \mathrm{v} \boldsymbol{\alpha} \alpha \kappa \kappa \nu \nu \tau ̃ \tau \iota \varsigma),{ }^{[1770]}$ such as women at their toilet, ${ }^{[1771]}$ spinning wool, ${ }^{[1772]}$ or bleaching linen, ${ }^{[1773]}$ or embroidering. ${ }^{[1774]}$ Under the heading of toilet scenes are included single figures of women arranging their hair, ${ }^{[1775]}$ painting their faces, ${ }^{[1776]}$ fastening on their girdles ${ }^{[1777]}$ or shoes, ${ }^{[1778]}$ or putting clothes in a wardrobe. ${ }^{[1779]}$ They also play with cats or dogs ${ }^{[1780]}$ or pet birds, ${ }^{[1781]}$ and there is a subject identified as a "consolation" scene. ${ }^{[1782]}$ Again, we see women bathing both in private and public baths, ${ }^{[1783]}$ or even swimming ${ }^{[1784]}$; but in some of these scenes the bath merely forms part of the toilet. Many of these toilet scenes may perhaps be idealised and regarded as groups of Aphrodite, the Graces, etc. ${ }^{[1785]}$
A favourite subject, but almost confined to the B.F. hydriae, is that of maidens with pitchers on their heads fetching water from a fountain, which is usually in the form of a building with columns and lion's-head spouts of water; the maidens, five or six in number, carry the empty hydriae flat on their heads, the full ones upright. ${ }^{[1786]}$ Women are sometimes seen in gardens or orchards, gathering fruit ${ }^{[1787]}$ or (on late R.F. vases) frankincense. ${ }^{[1788]}$ Other miscellaneous scenes which cannot be classified are: a woman in bed, ${ }^{[1789]}$ woman with foot-pan, ${ }^{[1790]}$ at a meal, ${ }^{[1791]}$ reading from a scroll, ${ }^{[1792]}$ burning incense, ${ }^{[1793]}$ spinning a top, ${ }^{[1794]}$ balancing a stick, ${ }^{[1795]}$ riding in a mule-car ${ }^{[1796]}$; two or more women wrapped in one large cloak ${ }^{[1797]}$; and an accouchement scene. ${ }^{[1798]}$ Those in which children appear include a nurse and child ${ }^{[1799]}$; a child learning to walk ${ }^{[1800]}$; a mother, and a child in a high chair ${ }^{[1801]}$; and a woman beating a child with a slipper ${ }^{[1802]}$; subjects of children playing with toys, etc., have already been discussed (p. 167). Finally, there are the scenes in which women appear as jugglers ${ }^{[1803]}$ or performing dances in armour, ${ }^{[1804]}$ of which mention has been made; these were probably amusements associated with banquets (see p. 182; also ibid. for banquets in which women, i.e. courtesans, take part).
A very common decoration of vases, especially the inferior ones of Apulia, is that of a woman's head, either as the main subject or in some subsidiary part of the decoration; these, however, are so common that they hardly call for detailed description. ${ }^{[1805]}$

## 7. Military and Naval Subjects

Subjects of a military character on vases are chiefly confined to three-the arming of warriors, ${ }^{[1806]}$ their setting out in chariots, on horseback, or on foot, ${ }^{[1807]}$ and combats of two or more figures. ${ }^{[1808]}$ In all these cases we are confronted with the often-recurring difficulty as to when such subjects have a mythological significance. Especially on B.F. vases, familiar types-such as the departure of Hector or the combat of Achilles and Memnon, to be identified in other cases by inscriptions-occur again and again in the same form, only diversified by the varying number of bystanders, which is generally regulated by the space at the painter's disposal. Even when names are added they are often of a fanciful kind; and thus, for instance, we find combats between Homeric heroes which have no counterpart in literary record. ${ }^{[1809]}$

In the scenes of warriors arming we may note certain motives as recurring with more or less frequency-such as that of a warrior putting on his greaves, ${ }^{[1810]}$ helmet, ${ }^{[1811]}$ or cuirass (Fig. 137), ${ }^{[1812]}$ or lacing up his helmet. ${ }^{[1813]}$ Kindred subjects are that of a warrior taking his shield out of his case, ${ }^{[1814]}$ or an archer drawing an arrow from his quiver, ${ }^{[1815]}$ testing an arrow, ${ }^{[1816]}$ or stringing his bow. ${ }^{[1817]}$ We may also note the rarer occurrence of such scenes as the harnessing of a chariot (Frontispiece) ${ }^{[1818]}$ or the equipping of a war-horse. ${ }^{[1819]}$ In the departure scenes the usual type on B.F. vases is that of a four-horse chariot to the right, which the warrior is mounting or has mounted; a woman sometimes give him drink, and an old man stands at the horses' heads. This "type" is used for the departure of Amphiaraos (cf. Berlin 1655), Hector, or other heroes. ${ }^{[1820]}$ It is sometimes varied by placing the quadriga to the front. ${ }^{[1821]}$ Or, again, the warrior is seen on horseback, accompanied by his groom, ${ }^{[1822]}$ or a company on foot set out in marching array. ${ }^{[1823]}$ On later vases the more usual version is that of a warrior receiving a libation or "stirrup-cup" from a woman before his departure, but the same scenes might be interpreted as referring to his successful return. ${ }^{[1824]}$ Unmistakable instances of the return are those scenes where he receives a crown, ${ }^{[1825]}$ or is brought back as a corpse by his comrades. ${ }^{[1826]}$ There are scenes representing warriors taking oaths or omens at a tomb, or omens by the inspection of the liver of a victim, all before departure for battle ${ }^{[1827]}$; and single figures are countless, especially inside R.F. kylikes. ${ }^{[1828]}$


From Hoppin.
FIG. 137. WARRIOR ARMING; SCYTHIAN ARCHERS (AMPHORA BY EUTHYMIDES
IN MUNICH).

Among the various scenes incident to warfare may be mentioned an ambuscade, ${ }^{[1829]}$ a wounded warrior dragged out of battle, ${ }^{[1830]}$ a warrior protecting himself from darts, ${ }^{[1831]}$ the capture of a prisoner, ${ }^{[1832]}$ warriors carrying dead bodies, ${ }^{[1833]}$ or human heads as trophies of victory. ${ }^{[1834]}$ Besides single figures of warriors, heralds, ${ }^{[1835]}$ trumpeters, ${ }^{[1836]}$ slingers, ${ }^{[1837]}$ and archers ${ }^{[1838]}$ often appear; or representations of the armour of a warrior ${ }^{[1839]}$; or of the $\Delta o k ı \mu \alpha \sigma i \alpha$ or parade of Athenian knights. ${ }^{[1840]}$ Of a somewhat burlesque character is a scene depicting warriors riding on ostriches and dolphins. ${ }^{[1841]}$

Naval scenes are very rare, but we find occasional early representations of sea-fights, ${ }^{[1842]}$ as on the Dipylon vases, the vessels on which appear to be biremes. ${ }^{[1843]}$ On the B.F. and R.F. vases we find war-galleys ${ }^{[1844]}$ or merchant-vessels, ${ }^{[1845]}$ usually in places suitable for a row of ships-such as the outer edge of a kylix ${ }^{[1846]}$ or the broad rim of a deinos or large bowl. ${ }^{[1847]}$ These are specially common on vases of "mixed" technique. The subject of "keel-hauling," the punishment administered to refractory sailors, must also find a place here. ${ }^{[1848]}$

## 8. Orientals and Barbarians

Oriental figures which can neither be classified as mythological, historical, or genre subjects sometimes appear on vases. We have already made mention of such quasi-mythological subjects as combats of Gryphons with Arimaspi or other figures in Oriental attire. ${ }^{[1849]}$ Phrygian warriors, too, may be seen in some Trojan scenes-such as the sack of Troy or the flight of Aeneas ${ }^{[1850]}$-but their presence in scenes of departure or combat does not necessarily make the subject mythological. ${ }^{[1851]}$ It is not always easy to identify the nationality of these barbarians, and the names usually given to them-Persian, Phrygian, or Scythian-must in many cases be regarded as somewhat conventional, except where details of costume are unmistakable. ${ }^{[1852]}$
Archers in Oriental costumes, wearing peaked caps with long lappets, and close-fitting costume of jerkin and trousers ( $\dot{\alpha} \nu \alpha \xi \cup \rho i ́ \delta \varepsilon \varsigma)$ ), stippled over to indicate skin, are seen shooting arrows, on foot or on horseback, ${ }^{[1853]}$ or accompanying the chariots of Greek warriors, ${ }^{[1854]}$ or taking part in general combats ${ }^{[1855]}$; as also warriors blowing trumpets. ${ }^{[1856]}$ Persian warriors in combat with Greeks appear on R.F. vases of the strong period, ${ }^{[1857]}$ and may have some reference to the historical events of the time. It is even suggested that one is copied from the famous painting by Mikon of the battle of Marathon. ${ }^{[1858]}$ One vase represents a sort of triumphal procession, perhaps of a Persian king, riding on a camel ${ }^{[1859]}$; and others depict Persians riding. ${ }^{[1860]}$ Those of undoubted historical signification have already been mentioned. ${ }^{[1861]}$ Scythians appear as mounted or unmounted archers, ${ }^{[1862]}$ a Scythian horseman is attacked by a lion, ${ }^{[1863]}$ a Scythian pursues two courtesans, ${ }^{[1864]}$ and there is a curious scene depicting the revels of the Scythian Agathyrsi. ${ }^{[1865]}$ Thracians, in the typical local costume of $\zeta \varepsilon i ̃ \rho \alpha$ (a thick cloak) and $\dot{\alpha} \lambda \omega \Pi \varepsilon \kappa \tilde{\eta}$ (a fox-skin cap), appear by themselves or with Orpheus and Boreas ${ }^{[1866]}$; Thracian horsemen are represented setting out ${ }^{[1867]}$; and after the conquests of Miltiades the local costume appears to have become fashionable among the Athenian youth, as they are depicted wearing it on some contemporary vases. ${ }^{[1868]}$ The Thracian custom of tattooing is suggested in some of the Orpheus scenes. ${ }^{[1869]}$
Figures of negroes are not very common on vases, though many of fifth-century date and later are modelled in the form of negroes' heads; but there is a small class of B.F. alabastra on which they are represented in the traditional barbarian costume of trousers, etc., and are armed with the Oriental battle-axe. ${ }^{[1870]}$ In one case a negro accompanies a camel. ${ }^{[1871]}$ Ethiopians are seen conveying the body of Memnon or an ordinary warrior to his grave, ${ }^{[1872]}$ and one vase represents an Ethiopian with a jug. ${ }^{[1873]}$ A pair of Egyptian combatants can be identified on a fragmentary vase from Daphnae (Defenneh). ${ }^{[1874]}$ Lastly, many of the vases of Southern Italy, especially those of Campania, represent combats or leave-takings of native Osco-Samnite warriors, in their typical costume of triangular cuirass, gaily plumed helmet, and scanty tunic. ${ }^{[1875]}$


FIG. 138. BANQUETERS PLAYING KOTTABOS (BRITISH MUSEUM, E 70).

## 9. Banquets and Revels

A group of subjects which play an important part on vases of all periods, especially the height of the R.F. style, but which do not exactly fall under any of the headings so far enumerated, is that of scenes connected with banquets and revels, especially of Athenian ephebi. In the ordinary "type" of banquets at all periods (as in other branches of art) the participants recline on couches on their left elbows, the right arm being free to use, and that hand often holding a drinking-cup or other appropriate attribute. ${ }^{[1876]}$ In this fashion the gods-such as Dionysos, Hermes, or Herakles after his apotheosis-indulge in the pleasures of the banquet and the wine-cup. ${ }^{[1877]}$ There are scenes which represent the preparations for a banquet, ${ }^{[1878]}$ or young men on their way thither ${ }^{[1879]}$; and in those depicting the feast itself a table is often placed before the couch, on which viands of various kinds are seen ${ }^{[1880]}$; or the krater (mixing-bowl) stands by, ready for the drinkers to replenish their cups. ${ }^{[1881]}$ Vases are also filled by means of a funnel. ${ }^{[1882]}$ The results of over-indulgence are sometimes realistically indicated on the R.F. cups. ${ }^{[1883]}$ After the drinking-bouts come amusements of various kinds, notably the game of the kottabos. ${ }^{[1884]}$ No instances of this occur before the middle of the R.F. period, and on the cups of that time it is usually only indicated by the manner in which the banqueters twirl their kylikes with a finger crooked in the handle, ${ }^{[1885]}$ preparatory to throwing the remaining drops of liquid at the little figure on the top of the kottabos-stand, the hitting of which caused part of the apparatus to fall with a ringing noise. ${ }^{[1886]}$ On the latest Athenian and many Apulian vases the stand is often represented as well, ${ }^{[1887]}$ not only in position for the game, but borne along by revellers. ${ }^{[1888]}$ It is also carried by Seileni, Maenads, or Eros, and used by Dionysos at his banquets. ${ }^{[1889]}$
Other amusements take the form of music and dancing. The banqueters themselves play the lyre or flute, ${ }^{[1890]}$ or listen to male and female performers on those instruments, ${ }^{[1891]}$ or a young girl dances for their amusement. ${ }^{[1892]}$ The women jugglers, tumblers, and acrobatic sword-dancers who often appear on late vases ${ }^{[1893]}$ no doubt often contributed to the entertainment of the "gilded youth" of their day. Sometimes a banqueter is represented reclining on his couch and singing, the words in one or two cases being inscribed as proceeding out of his mouth. ${ }^{[1894]}$ Not only men but women are represented banqueting, as on the psykter by Euphronios at Petersburg, which has a group of courtesans. ${ }^{[1895]}$ This character also appears on the R.F. vases at the men's banquets. ${ }^{[1896]}$
The к $\tilde{\omega} \mu \mathrm{o}$ or revel is equally popular with the banquet. It usually takes the form of a procession of young and elderly men in various unrestrained attitudes, ${ }^{[1897]}$ dancing, ${ }^{[1898]}$ singing, ${ }^{[1899]}$ playing the lyre, flute, or other instruments, ${ }^{[1900]}$ carrying drinking-cups and other vessels, ${ }^{[1901]}$ or balancing them in sportive manner. ${ }^{[1902]}$ Frequently these к $\tilde{\mu} \mu$ oc scenes are of a Dionysiac character, the god himself, Seileni, Satyrs, and Maenads taking part, ${ }^{[1903]}$ and sometimes human beings are mingled with them. On a vase of the series connected with the comic stage (Fig. 134, p. 161) a father is seen dragging a drunken youth home from a banquet; but these scenes of rioting are not always necessarily conceived as taking place before or after social festivities. On a red-figured cup at Petersburg the subject of the return from the feast of the Brauronian Dionysos is depicted in most realistic fashion, the revellers indulging in all sorts of buffoonery and fantastic actions, which suggest an Athenian counterpart of modern Bank Holiday amusements ${ }^{[1904]}$ !
To turn to a subject of a quieter character, what may be termed "love scenes" are not uncommon on vases, especially of the later period. On the Apulian vases indeed such subjects are innumerable. The usual type, occasionally found on earlier vases, ${ }^{[1905]}$ is that of a youth and a seated girl exchanging presents, such as mirrors, wreaths, baskets of fruit or jewel-boxes, Eros being
frequently present. ${ }^{[1906]}$ Scenes of this kind were originally interpreted somewhat fantastically, as having some reference to the Eleusinian or other mysteries, ${ }^{[1907]}$ an idea which no one would now seriously hold. Similar scenes which have no particular import, such as groups of women, often with Eros, occur on many R.F. vases of the later fine style, especially the pyxides and lekythi. ${ }^{[1908]}$ They are all clearly fanciful, and belong to an age when tastes resembled those of the eighteenth century in their artificiality. There are also some instances, especially on the R.F. vases, where the sentiment is more definitely expressed, and couples are seen embracing or caressing one another in amorous fashion. ${ }^{[1909]}$ It is not necessary to make more than passing allusion to the many vases on which this harmless sentiment is replaced by coarseness and open indecency of treatment, some of which, however, belong to the very finest stage of red-figure painting.

Finally, we may mention here a few subjects of a genre character which seem to defy classification, and yet are sufficiently definite to require separate mention. Such are the scenes so common on the interiors of R.F. kylikes, which represent ephebi in all kinds of attitudes, or carrying all sorts of objects, the great aim of the artist being to find the most suitable design to fill in the circular space. ${ }^{[1910]}$ Thus we have such subjects as a youth putting on a greave or sandals, ${ }^{[1911]}$ carrying a wineamphora ${ }^{[1912]}$ or a lyre, ${ }^{[1913]}$ playing with castanets, ${ }^{[1914]}$ or pursuing a hare ${ }^{[1915]}$; reclining at a banquet ${ }^{[1916]}$; armed with a club or a large stone ${ }^{[1917]}$; a man leading a leopard, ${ }^{[1918]}$ and a man who seems from his gestures to be treading unawares on a snake ${ }^{[1919]}$; and others of an athletic or military character, of which mention has already been made. There are also many subjects which appear to have a meaning, yet are not mythological, and cannot be satisfactorily explained; such instances it would, however, hardly be profitable to describe in detail.

## 10. Animals

The last class of subjects with which this section has to deal is that of animals, as considered apart from human beings, or objects of what modern painters term "still life." In the historical chapters of this work it has been shown what a large part the animal world played in the decoration of vases down to the sixth century b.c., and also which were the animals most frequently selected for the friezes and other decorations of early vases. Most noteworthy in this respect are the Mycenaean vases (Vol. I. p. 273), with their representations of cuttle-fish (Plate XV.), the nautilus or argonaut, ${ }^{[1920]}$ and other marine subjects. But to these early vases in the present case no further allusion need be made; as subjects they have not as a rule sufficient interest. On the Attic vases of the B.F. and R.F. periods animals rarely form a principal subject on vases, though they still sometimes appear in small friezes on the less important parts of the vase; it may, therefore, be of interest to note a few typical instances in which this feature retains its prominence. Sometimes we have subjects with action: as, for instance, one in which a panther tears a stag, and is attacked by an archer and an armed warrior ${ }^{[1921]}$; or a lion attacks a panther, a bull, or a deer. ${ }^{[1922]}$ Again, the interior of a B.F. kylix is sometimes filled with an animal subject, such as a wounded stag, ${ }^{[1923]}$ or a deer scratching itself or grazing, ${ }^{[1924]}$ or other animals ${ }^{[1925]}$; and in a similar position on one R.F. kylix we have an ass with its pack. ${ }^{[1926]}$ Other animal subjects worth mentioning are a sea-serpent, ${ }^{[1927]}$ goats browsing on vines, ${ }^{[1928]}$ a fox caught in a trap, ${ }^{[1929]}$ cats and mice, ${ }^{[1930]}$ the appearance of the swallow. ${ }^{[1931]}$
There is a class of ware made in Southern Italy which takes the form of flat plates or dishes, decorated with representations of fish and molluscs, such as the pike or mullet, the cuttle-fish and various shell-fish; these were clearly used for eating fish off, and they have in the centre a hollow to receive the sauce. ${ }^{[1932]}$ Friezes of fish are not infrequently found on the vases of Apulia. Animals, especially birds, sometimes appear in friezes on the early Ionic vases, such as geese, quails, or guinea-fowl ${ }^{[1933]}$; cocks and hens confronted are more common, especially in the B.F. period, ${ }^{[1934]}$ and one late Italian vase has an amusing group of a cock and goose greeting one another with the words, "Ah, the goose!" "Oh, the cock!" ${ }^{[1935]}$
Lastly, of subjects from still life, distinct from their appearance in figure subjects, we find the armour of a warrior, ${ }^{[1936]}$ a washing-basin, ${ }^{[1937]}$ a flute-case, ${ }^{[1938]}$ a lyre, ${ }^{[1939]}$ a table with bread upon it, ${ }^{[1940]}$ and a collection of objects for the toilet. ${ }^{[1941]}$

1112Athens 1259 = Reinach, i. 506; Mon. Grecs, 1876, pls. 1-2.
1113B. M. F 68.
1114Reinach, ii. 186.
1115 Petersburg $2188=$ Reinach, i. 8; Reinach, i. 279 (= Baumeister, i. p. 635, fig. 706) and 380. In Ant. Denkm. i. 59 (now at Boston) and in Berlin 2430 they do not appear in this connection.

1116B.M. B 170; Helbig, $78=$ Reinach, i. $96=$ Wiener Vorl. 1888, pl. 6, 1 (Exekias).
1117Millin-Reinach, ii. 44 (doubtful; perhaps Zethos and Amphion).
1118Petersburg 1924 and $1929=$ Reinach, i. 9.
1119Reinach, i. 244.
1120Ibid. i. 363.

1122François vase; Reinach, i. 230, ii. 119.
1123Reinach, i. $361=$ Furtwaengler and Reichhold, pls. 38-39.
1124Bibl. Nat. $442=$ Reinach, ii. $79=$ Wiener Vorl. 1889, 12, 5.
1125Jatta 1095 = Reinach, i. 119 (Phineus scene); Reinach, i. 226 (in Louvre).
1126Reinach, i. 231, 507 (= Athens 853), ii. 1: see generally Roscher's Lexikon, s.v. Leukippiden.
1127B.M. E 224 = Furtwaengler and Reichhold, pls. 8-9; probably influenced by the painting by Polygnotos of this subject (see Vol. I. p. 443).

1128Reinach, i. 484: cf. Bibl. Nat. 388.
1129B.M. B $633=$ Wiener Vorl. iv. 9, 3.
1130Inghirami, Vasi Fitt. ii. 187: cf. Reinach, i. 361 (rev. of vase).
1131See p. 19.
1132B.M. F 479; Reinach, i. 229; Gaz. Arch. 1875, pl. 14 (in Louvre).
1133B.M. F 107.
1134Munich 611 and $291=$ Reinach, i. 419, ii. 47.
1135 Munich 371 = Ber. d. sächs. Gesellsch. 1853, pl. 10, 1, p. 145. He is represented as attacking Linos, who had found fault with his playing.

1136Reinach, i. 326 (Iphikles here with Linos).
1137See B.M. Cat. of Vases, ii. p. 13.
1138Reinach, ii. 70.
1139Furtwaengler, however, thinks the subject is Herakles sacrificing a bull (Gr. Vasenmalerei, p. 16: see below, p. 106).

1140Cf. Paus. v. 19, 1: т $\rho \varepsilon i ̃ \varsigma ~ \alpha ̛ \nu \delta \rho \varepsilon \varsigma ~ \alpha ̀ \lambda \lambda \eta ́ \lambda o ı \varsigma ~ п \rho о \sigma \varepsilon \chi o ́ \mu \varepsilon v o ı . ~$
1141See p. 106.
1142Isthm. iii. 90.
1143B.F.: B.M. B 196, B 322; Munich 3 = Reinach, ii. 62; an early Athenian example in J.H.S. xxii. pl. 2. R.F.: Reinach, i. $242=$ Wiener Vorl. v. $4=$ Louvre G 103 (Euphronios); Athens 1166. See also Vienna 322 = Reinach, i. 339 and Munich 605 = Ber. d. sächs. Gesellsch. 1853, pl. 8, fig. 1.

1144B.M. B 314; Berlin 2057; Louvre F 208 = Reinach, i. 452; Munich $1180=$ Reinach, i. 255, 2, and Helbig, 228 = Ber. d. sächs. Gesellsch. 1853, pls. 5, fig. 2, and 8, fig. 2; Reinach, i. 255, 1 $=$ Baumeister, i. p. 49, fig. 56; Reinach, i. 451. The only R.F. examples published are Munich 401 (= Furtwaengler and Reichhold, pl. 32) and 605 (= Ber. d. sächs. Gesellsch. 1853, pl. 7, fig. 1).

1145See above, p. 72.
1146Bibl. Nat. 322.
1147Cambridge 43: cf. Pind. Nem. iv. 46.
1148J.H.S. xiii. pp. 71-2.
1149B.F.: B.M. B 197, B 364 ( $=$ Wiener Vorl. 1890-91, pl. 6, 1, Nikosthenes); Berlin $1732=$ Reinach, ii. $66=$ Wiener Vorl. 1889, 1, 2 (Kolchos). R.F.: B.M. E 73; Reinach, ii. 47, 68, 1 (?), and i. $223=$ Wiener Vorl. D. pl. 5 (Pamphaios).

1150Jatta $1088=$ Reinach, i. $475=$ Wiener Vorl. iii. 4: see Röm. Mitth. 1894, p. 285.
1151Arch. Anzeiger, 1898, p. 51 (vase in Boston).
1152B.F.: B.M. B 228, B 313; Berlin 1851-52. R.F.: Munich 251 = Reinach, i. 259.
1153B.M. E $437=$ Reinach, ii. $62=$ Wiener Vorl. D. 6, 2.
1154B.F.: B.M. B 223, B 311; Berlin 1906; Louvre F $38=$ Wiener Vorl. 1889, pl. 5, fig. 3 (Timagoras); Reinach, i. 227. No good R.F. examples (see Reinach, i. 346).

1155B.F.: B.M. B 225; Bibl. Nat. $255=$ Reinach, ii. 61. R.F.: B.M. E 162; Athens $1202=$ Benndorf,

Gr. u. Sic. Vasenb. pl. 32, 4.
1156Reinach, i. 339 (R.F.).
1157B.M. B 226; Helbig, 27; Reinach, ii. 64 (one = Bologna 195). R.F.: Reinach, i. 221 and i. 41 (= Petersburg 1272, curious).

1158B.F.: Amer. Journ. of Arch. 1900, pl. 6 (Proto-Corinthian); J.H.S. i. pl. 1; Berlin 336 (= Reinach, i. 448), 1670 (= ibid. ii. 64, 1), 1737. R.F.: Reinach, i. 221. Late: B.M. F 43; Millin-Reinach, i. 68.

1159Petersburg $1787=$ Reinach, i. 40.
1160B.F.: B.M. B 30; Berlin 1702; Helbig, 5; Athens 657 = Ant. Denkm. i. 57; Louvre E $852=$ Reinach, i. 156. R.F.: B.M. E 42, E 176; Boston Mus. Report for 1900, p. 49, No. 17 (Aristophanes and Erginos).

1161 Mon. Antichi, ix. pl. 3 (in B.M.); Naples 3089 = ibid. p. $10=$ Millingen-Reinach, 33.
1162Berlin 1722; Reinach, i. 388.
1163Louvre F 60.
1164Oxford 249; Berlin 766-67; Munich 783; Reinach, ii. 59, 10. Late R.F.: Berlin 2359. Parody: Schreiber-Anderson, pl. 5, 2 = Jahrbuch, i. p. 280.

1165Bibl. Nat. $393=$ Reinach, i. 397.
1166B.F.: Vienna $217=$ Reinach, i. 169 (Caeretan hydria). R.F.: B.M. E 38; Athens $1175=$ DumontPottier, i. pl. 18; Berlin 2534. See Hartwig, Meistersch. p. 53, note 1.

1167B.M. E 364; Reinach, i. 229, 338, 392.
1168Berlin $4027=$ Reinach, i. 338: cf. Aelian, Var. Hist. i. 24.
1169Reinach, i. 384, and see i. 475 and ii. p. 423; Louvre E 633 (capture of heralds): see for the myth, Paus. ix. 17, 2, ix. 25, 4; Diod. Sic. iv. 10; Apollod. ii. 4, 11.

1170Athens 970.
1171Berlin 1927 (?); B.M. E 290.
1172Arch. Anzeiger, 1895, p. 37 (R.F. in Berlin).
1173Bibl. Nat. 174.
1174Boston Mus. Report for 1898, No. 33.
1175B.F.: B.M. B 195, B 316; Bibl. Nat. 251 = Reinach, ii. 252. R.F.: B.M. E 255 (= Hoppin, Euthymides, pl. 5); E 318, E 458; Berlin 2159 = Wernicke-Graef, Ant. Denkm. pl. 27, fig. 3; Munich $401=$ Furtwaengler and Reichhold, pl. 32 (Phintias); Reinach, i. 224. Late: Naples $1762=$ Millingen-Reinach, 30.

1176Stackelberg, pl. 15.
1177 Munich $1294=$ Reinach, i. 403 ; ibid. ii. $4=$ Wiener Vorl. ii. 8.
1178B.M. B 57.
1179Cambridge 100; and see J.H.S. xix. pl. 9.
1180Helbig, $232=$ Reinach, ii. 59; a B.F. example in Röm. Mitth. 1902, pl. 5.
1181B.M. E $65=$ Reinach, i. 193.
1182B.M. F 494; Berlin 3291; heads of Herakles and Omphale, Bibl. Nat. 866.
1183Louvre E 635 = Reinach, i. 151 = Rayet and Collignon, pl. 6; Mon. Grecs, 21-2 (1893-94), pl. 14 (in Louvre).

1184B.M. B 165; Athens 477 = Reinach, i. 519 (Melian vase): see note 1186 below.
1185J.H.S. xii. pl. 19; Jahreshefte, 1900, p. 64. The slaying of Iphitos is represented on a whiteground cup in the Louvre, Monuments Piot, ii. p. 53.

1186Athens 477, according to Pottier in Revue des Études Grecques, 1895, p. 389.
1187Anzeiger, 1891, p. 119 (in Berlin); a burlesque of the subject is given in Fig. 105, Vol. I. p. 474.
1188Millin-Reinach, ii. 71.

1189Reinach, ii. 75.
1190Fig. 107, Vol. I. p. 480.
1191Oxford 322; Reinach, ii. $62=$ Roscher, iii. p. 762.
1192 Naples $3359=$ Reinach, i. 400; and see note 1186.
1193B.M. F 68.
1194Hartwig, Meistersch. pl. 38, p. 422.
1195Bibl. Nat. 822 = Millin-Reinach, ii. 10; Ber. d. sächs. Gesellsch. 1855, pls. 1-2. See above, p. 67.

1196Reinach, i. 226.
1197Berlin 2164: cf. Athens 1119 = Ath. Mitth. 1901, pp. 146, 149.
1198B.M. B 473; Berlin 1856, 1919.
1199Berlin 3256 (Argonautic?).
1200B.M. E 494 (? see p. 106, note 1216); Reinach, ii. $180=$ Millingen-Reinach, 51. On Chryse see Class. Review, 1888, p. 123; the same figure occurs on the B.M. vase E 224 in connection with the rape of the Leukippidae.

1201B.M. E 505: cf. for statue B.M. F 233.
1202Jatta $423=$ Reinach, i. 205.
1203Millin-Reinach, ii. 25.
1204Reinach; i. 257; and cf. B.M. F 211, F 278 for H. at Olympia; also Stackelberg, pl. 42.
1205B.M. B 198, B 498; Reinach, ii. 74-5; Louvre F 116-117 = Reinach, i. 297 (Nikosthenes); Helbig, 93 = Mus. Greg. ii. 54, 2.

1206B.M. D 14; Munich 369 = Furtwaengler and Reichhold, pl. 24 (Duris); Benndorf, Gr. u. Sic. Vasenb. 42, 4; Reinach, ii. 298.

1207B.M. B 301, B 497, E 66; Berlin 1961 = Reinach, ii. 43; Berlin 2534 (with Seilenos); Munich 388 = Furtwaengler and Reichhold, pl. 4 (B.F. and R.F. "bilingual"); Reinach. ii. 39; MillinReinach, i. 37; Athens $764=$ Heydemann, Gr. Vasenb. pl. 3, 1.

1208B.M. B 167.
1209Benndorf, Gr. u. Sic. Vasenb. pl. 44 (in Petersburg).
1210Reinach, ii. 318; Helbig, ii. p. 327 = Millingen-Reinach, 35; Philologus, 1868, pl. 2.
1211B.M. B 229: cf. Berlin 4027 and B.M. E 814.
1212Él. Cér. iii. 14.
1213Berlin 2293, 3988; Petersburg 523 = Reinach, i. 467; Él. Cér. i. 1; Mon. Grecs, 1875, pl. 1.
1214B.M. B 147; Reinach, ii. 21.
1215B.M. B 228; Berlin 1857; Helbig, 25; Reinach, ii. 43: cf. Athens 791 = Heydemann, Gr. Vasenb. pl. 3, 2.

1216See B.M. E 494; J.H.S. xviii. p. 275; Roscher, Lexikon, i. p. 2235; Bacchylides, Od. 16; also p. 96, note 1211.

1217B.M. E 370.
1218 Munich $384=$ Reinach, i. $130=$ Baumeister, i. p. 307, fig. 322; Reinach, i. 481.
1219B.F.: B.M. B 199-201, 211 (Pl. XXIX.), 230, 317-21; Reinach, ii. 72; Oxford 212 (no deities). R.F.: Helbig, 230 (A. about to mount chariot).

1220Bibl. Nat. $253=$ Reinach, i. 399 and 254.
1221Berlin 1827 = Reinach, ii. 74; Reinach, ii. 161.
1222With Athena: B.M. F 238; Millingen-Reinach, 36. With Nike: B.M. F 64, F 102; Reinach, i. 368, 481, and ii. 204; Wiener Vorl. E. pls. 7, 8, fig. 3 = Mon. Grecs, 1876, pl. 3 (in Louvre; parody; chariot drawn by Centaurs).

1223B.F.: B.M. B 166, B 379, B 424; Berlin 1691, 1857; Reinach, i. 359, 1, ii. 76 (in Berlin). R.F.: B.M. E 262 = Reinach, ii. 75; Berlin 2278 = Reinach, i. 70 = Ant. Denkm. i. 9 (Sosias); Furtwaengler and Reichhold, pl. 20; Reinach, i. 222, 408 (Fig. 127). Late: Naples $2408=$ Reinach, i. 323; Petersburg $1775=$ Reinach, i. 302 (parody).

1224B.F.: Louvre F $30=$ Rev. Arch. xiii. (1889), pl. 4 (Amasis); F 116-117 = Reinach, i. $297=$ Wiener Vorl. 1890-91, pl. 4, figs. 1-2 (Nikosthenes); Bibl. Nat. 254; Berlin $1961=$ Reinach, ii. 43. R.F.: Berlin 2626; Reinach, ii. 76, 186.

1225B.M. E 262; Bonn 720 = Jahrbuch, 1892, p. 69; Athens 1346 = Dumont-Pottier, i. pl. 15; B.M. F 178; Reinach, i. 251 (all R.F. or late).

1226B.M. E 244; Berlin 3257; Forman Sale Cat. 364: see p. 77.
1227Berlin 2538 = Reinach, ii. 162.
1228B.M. E 264 = Wiener Vorl. 1890-91, 8, 1; a similar vase in Röm. Mitth. 1894, pl. 8, has been otherwise interpreted (see below, p. 110, note 1233).

1229 Petersburg $830=$ Reinach, i. $150=$ Wiener Vorl. A. 8 (Hieron).
1230See on the subject generally Museo Ital. iii. p. 235.
1231Gaz. Arch. 1884, pls. 44-6.
1232Wiener Vorl. E. 12, 2.
1233See J.H.S. xviii. pl. 14, and pp. 277-79 for three other instances; the last, however, is susceptible of other interpretations.

1234Bologna 273 = Baumeister, iii. p. 1999, fig. 2149. The B.M. vase E 264 (see p. 108, note 1228) may have the same meaning, in which case the woman holding the clue is a sort of "shorthand" allusion to the adventure awaiting him. See also Reinach, ii. 81 (Theseus receiving libation from Aithra).

1235B.M. E $41=$ Reinach, i. 532 (Chachrylion).
1236Berlin 2179 = Wiener Vorl. iii. 6; Reinach, i. 222 = Plate XXXIX. (also interpreted as Peleus and Thetis, see p. 120); Harrison and Verrall, p. cxxxi (in Vienna): see also Boston Mus. Report for 1900, p. 67, No. 25.

1237Reinach, i. 91; ii. 264 (= Bibl. Nat. 421).
1238Munich 7; B.M. E 41; Reinach, i. 87.
1239B.M. E 157, 272, 450; Reinach, ii. 163 (now in B.M.; a complete and magnificent example); Millin-Reinach, i. 10; Naples 2421, 3253, and R.C. $239=$ Reinach, ii. 278, i. 330, i. 482 (the first of these given by Furtwaengler and Reichhold, pls. 26-8).

1240B.M. F 272; Munich $368=$ Hartwig, Meistersch. pls. 59, 60, and $805=$ Reinach, i. 391; Reinach, ii. 181-82; Boston Mus. Report for 1900, p. 50, No. 17 (Erginos and Aristophanes); and see under Centaurs, p. 145.

1241Munich $410=$ Reinach, ii. $86=$ Furtwaengler and Reichhold, pl. 33.
1242Berlin 1731 = Roscher, iii. p. 1782, has been interpreted as the rape of Helene.
1243See Furtwaengler, op. cit. p. 177; and cf. Bibl. Nat. 256 = Reinach, ii. 254. Berlin $3143=$ Reinach, i. 373, may also represent a rape by Theseus.

1244Jatta 1094 = Reinach, i. 356: see also Reinach, i. 108, 455, and above, p. 68.
1245Munich $849=$ Reinach, i. 258.
1246Ant. Denkm. i. 59 (in Boston).
1247See B.M. F 123 and F 272; also a vase in Berlin (Arch. Anzeiger, 1890, p. 89), where Eros shoots with his bow at Phaidra; Hippolytos is present. Cf. also Naples $2900=$ MillingenReinach, 41.

## 1248B.M. F 279.

1249 Petersburg $1357=$ Reinach, i. 244, and $1723=$ Baumeister, i. p. 406, fig. 448; Naples $3140=$ Mus. Borb. ii. 30, 4; Monuments Piot, x. pl. 8 (in Boston); and cf. Berlin $2300=$ Reinach, i. 273.

1252Athens $1956=$ Ath. Mitth. xi. (1886), pl. 10.
1253B.M. B $471=$ Fig. 97, Vol. I. p. 382; Berlin $3022=$ Reinach, i. 172; Munich $1187=$ Reinach, ii. 109: cf. Bibl. Nat. 456.

1254B.M. B 248, B 380; E 181, E 399; F 500; Berlin 1682 = Reinach, i. 441 ; Bibl. Nat. $277=$ Reinach, i. 290; Munich $619=$ Reinach, ii. 48.

1255B.M. E 493; Mon. Grecs, 1878, pl. 2 (a fine example in the Louvre).
1256Munich 619, $910=$ Reinach, ii. 48-9; Ant. Denkm. i. 57. For Chrysaor see Reinach, i. 172 (Louvre E 857), ii. 49, and Stackelberg, 39.

1257Millin-Reinach, ii. 4.
1258B.M. E 169 = J.H.S. xxiv. pl. 5, and F 185; Engelmann, Arch. Studien, p. 6; and cf. Naples 3225; Millin-Reinach, ii. 3; Jahrbuch, xi. (1896), pl. 2 (in Berlin). For the correct explanation of the first-named vase see Petersen in op. cit. p. 104 ff .

1259Berlin $1652=$ Reinach, i. 217; Roscher, iii. p. 2053 (in Berlin; a fine instance); Naples 3225, S.A. 24, S.A. $708=$ Reinach, i. 188.

1260Reinach, i. 344; Jahrbuch, vii. (1892), p. 38: cf. Philologus, 1868, pl. 1, fig. 1, and pl. 3.
1261Millingen-Reinach, 3: see Philologus, 1868, pl. 1, figs. 2-3, p. 16.
1262Berlin $2377=$ Reinach, i. 289.
1263Jahrbuch, 1892, p. 33.
1264Naples 2202 = Dubois-Maisonneuve, Introd. pl. 46; Reinach, i. 284.
1265B.M. E 610, E 715 (Plate XLVI., fig. 4).
1266B.M. B 2: cf. Bibl. Nat. 977 for a similar figure inaccurately (?) inscribed Oinomaos.
1267B.M. F 331; Naples 1982 = Reinach, i. 292 (very doubtful; Oinomaos absent: see p. 123, note 1361).

1268B.M. F 271, 278; Naples $2200=$ Reinach, i. 379; Athens 968 = Jahrbuch, 1891, p. 34 (B.F.); Reinach, i. $290=$ Wiener Vorl. i. pl. 10, 2; Naples 2858 = ibid. pl. 10, 1 (subject doubtful).

1269 Naples 3255 = Reinach, i. 235; Reinach, i. 163 = Baumeister, ii. p. 1203, fig. 1395; Naples S.A. 697.

1270Berlin $3072=$ Reinach, i. 204.
1271 Naples $2200=$ Reinach, i. 379.
1272Naples $3222=$ Reinach, i. 167.
1273Jatta 1499 = Reinach, i. 127 = Wiener Vorl. viii. 8; Boston Mus. Report, 1900, p. 68, No. 25.
1274Naples 2418 = Dubois-Maisonneuve, Introd. pl. 69; Wiener Vorl. viii. 9, $1=$ Roscher, ii. 282; Reinach, i. 287, ii. 318.

1275Amer. Journ. of Arch. 1900, pl. 4; Louvre A 478; Reinach, i. 108 (Karlsruhe 388), 517 (Athens 1589), 331 (four late examples), and ii. 279; and see B.M. B 105, B 162; Naples $3253=$ Reinach, i. 195; Berlin 3258.

1276Petersburg 427 = Inghirami, Vasi Fitt. 3 (see Vol. I. p. 478 and Ann. dell' Inst. 1874, p. 35).
1277Baumeister, i. p. 303, fig. 319; and see Reinach, i. 331, and Munich $805=$ ibid. i. 277 (the latter so interpreted by Flasch, Angebl. Argonautenbilder, p. 30 ff.).

1278B.F.: François vase; Munich 333 = Reinach, ii. $119=$ Wiener Vorl. 1889, 2, 2; Berlin 1705; Helbig, $34=$ Mus. Greg. ii. 90; Reinach, i. 230. R.F.: Reinach, ii. 162, 210.

1279Roscher, iii. p. 1811.
1280E.g. B.M. B 37 (Plate XXI.), F 154; Vienna 217 = Reinach, i. 170. See also p. 166.
1281Naples S.A. $11=$ Reinach, i. 401.
1282 Naples $3412=$ Reinach, i. $498=$ Wiener Vorl. B. 2, 1 (Assteas; Phrixos also on ram); Reinach, ii. 309. For Phrixos on ram see Berlin 3345, and Festschr. für Overbeck, p. 17.

1283Tyszkiewicz Coll. pl. 12 (the antiquity of this vase is very questionable).
1284Naples S.A. $270=$ Reinach, i. 319.

1285Reinach, i. 226, 1-3: see Festschrift für O. Benndorf, p. 67 and p. 133, note 5.
1286See p. 81.
1287Ionic cup in Würzburg, Reinach, i. 201 = Furtwaengler and Reichhold, pl. 41; B.M. E 302; Jatta $1095=$ Reinach, i. 119; Stackelberg, pl. $38=$ Millingen, Anc. Uned. Mon. i. 15; and see Berlin 1682.

1288Bibl. Nat. $442=$ Reinach, ii. $79=$ Wiener Vorl. 1889, 12, 5.
1289J.H.S. x. p. $118=$ Reinach, i. 226.
1290Millingen-Reinach, 51 = Reinach, ii. 180: see above, p. 105.
1291Munich $805=$ Reinach, i. 277 = Wiener Vorl. iv. 3; but see Flasch, Angebl. Argonautenb. p. 30 ff., and p. 137 (Laertes and Antikleia).

1292 Petersburg $422=$ Reinach, i. 139; Baumeister, i. p. 123, fig. 128; Millingen-Reinach, 6.
1293Helbig, ii. p. $328=$ Reinach, i. $102=$ Baumeister, i. p. 124, fig. 129; Reinach, i. 137; but see Flasch, Angebl. Argonautenb. p. 24 ff .

1294 Naples $2413=$ Roscher, ii. 81, and $3252=$ Reinach, i. 449.
1295Naples $3248=$ Roscher, ii. 83.
1296Millingen-Reinach, $7=$ Wiener Vorl. ii. 8.
1297Jatta 1501 = Reinach, i. $361=$ Furtwaengler and Reichhold, pls. 38-39.
1298Helbig, 179 = Reinach, i. 359 (ram led to caldron). B.M. B 221, B 328; Berlin 2188; Reinach, ii. 81 (ram placed in caldron; daughters of Pelias usually present).

1299Reinach, i. 336; ibid. 359 = Helbig 179 (P. led to slaughter by daughters; M. waiting with knife).

1300B.M. E 163 (J. as old man; ram in caldron).
1301Naples S.A. 526.
1302 Munich $810=$ Reinach, i. $363=$ Baumeister, ii. p. 903, fig. 980; Reinach, i. 402.
1303Naples $3221=$ Reinach, i. 402.
1304Bologna 273 = Baumeister, iii. 1999, fig. 2149.
1305B.M. E 224.
1306Cf. the poem by Stesichoros, 'Athla épì Pelía
1307Berlin 1655 = Reinach, i. 199: see Vol. I. p. 319.
1308Bull. de Corr. Hell. xxiii. p. 158; but see Burlington Fine Arts Club Cat. (1903), p. 92, for another explanation; also p. 47.

1309The only literary source for these stories (before Roman times) is in the tragic poets. But subjects from the Septem of Aeschylus are not found on vases; and it is not until the Hellenistic period that any real references to the Sophoclean and Euripidean plays occur. On some of the Megarian bowls (Vol. I. p. 500) the subjects adhere very closely to the text.
1310B.M. E 81; Petersburg $2189=$ Reinach, i. 5.
1311B.M. B 505-6.
1312Louvre E 669 = Reinach, i. 435, 1; Berlin 2634 = Wiener Vorl. i. 7 = Roscher, ii. 837; Naples 3226 = Millingen, Anc. Uned. Mon. i. pl. 27 (Assteas); Millin-Reinach, ii. 7 (in Louvre); Röm. Mitth. v. (1890), p. 343.

1313Athens $1858=$ Reinach, i. 396: see p. 155, note 1548, for another interpretation; also Arch. Zeit. 1865, p. 68, and Frazer, Pausanias, v. p. 49.

1314Wiener Vorl. C. 7, $3=$ Roscher, ii. 842.
1315Berlin $3296=$ Reinach, i. $421=$ Baumeister, i. p. 456, fig. 502. The vase given in MillinReinach, ii. 44, may represent Zethos and Amphion with Antiope.

1316Reinach, i. 379.
1317Berlin 3239; Naples 1769; Wiener Vorl. vi. 11 = Roscher, i. p. 903.

1318Bibl. Nat. $372=$ Reinach, i. $92=$ Baumeister, ii. p. 1049, fig. 1266.
1319B.M. E $696=$ J.H.S. viii. pl. 81.
1320B.F.: B.M. B 539; Stackelberg, pl. 16. R.F.: B.M. E 156; Vienna $336=$ Reinach, i. 177; J.H.S. xxiv. p. 314 (Oxford); Helbig, $186=$ Hartwig, Meistersch. pl. 73. See also parodies in Philologus, 1897, pl. 1 (in Boston), and Arch. Anzeiger, 1891, p. 119 (Berlin).

1321See p. 147; q.v. also for Sphinx seizing Theban youth.
1322Wiener Vorl. 1889, 9, 6.
1323Ibid. pl. 8, $8=$ Reinach, i. 376: see Roscher, iii. p. 736.
1324Naples $2868=$ Wiener Vorl. 1889, 9, 10. See also Chapter XVII.
1325B.F.: Berlin $1655=$ Reinach, i. $199=$ Wiener Vorl. 1889, 10; Kopenhagen $112=$ MillingenReinach, 20; J.H.S. xviii. pl. 16 (?); Roscher, i. p. 295. R.F.: Munich 151 = Overbeck, op. cit. iii. 5; Petersburg $1650=$ Reinach, i. 120 , and $406=$ ibid. i. 480.

1326B.M. B 247; Berlin 1712.
1327Millingen-Reinach, 20.
1328Ath. Mitth. 1899, p. 361.
1329Berlin 2395 = Reinach, i. 461: see Arch. Zeit. 1881, p. 258.
1330Athens $960=$ Wiener Vorl. 1889, 11, 8.
1331Jahrbuch, viii. (1893), pl. 1: see Thiersch, Tyrrhen. Amphoren, p. 56.
1332B.M. D 7; Petersburg 523 = Reinach, i. 466 = Wiener Vorl. 1889, 11, 1.
1333 Naples $3255=$ Reinach, i. $235=$ Baumeister, i. p. 114, fig. 120; perhaps also Millin-Reinach, ii. 37 (Lasimos in Louvre).

1334Munich 144: cf. Naples 1766 = Overbeck, Her. Bildw. pl. 4, 4; and see Reinach, ii. 284, Roscher, i. p. 296, and Stat. Theb. v. 699 ff.

1335 Kopenhagen $64=$ Reinach, i. $259=$ Baumeister, i. p. 17, fig. 19.
1336Louvre E $640=$ Reinach, i. 147 = Wiener Vorl. 1889, 11, 4; Millingen-Reinach, 22 (?).
1337Petersburg $452=$ Reinach, i. $161=$ Wiener Vorl. iii. 3.
1338J.H.S. xviii. pl. 17, 1 (?).
1339Jatta 423 and Berlin $3240=$ Reinach, i. 205, $409=$ Wiener Vorl. 1889, pl. 9, figs. 14, 12; B.M. F 175 (?): see also Jatta 414 = Reinach, i. 467 = Wiener Vorl. B. 4, 2.

1340Reinach, i. 273.
1341 Petersburg $2188=$ Reinach, i. $8 ;$ Berlin $2430=$ ibid. i. 287 (Helen coming forth); Reinach, i. 279 (= Baumeister, i. p. 635, fig. 706) and 380; Micali, Mon. Ined. 38; Ant. Denkm. i. 59 (in Boston). For the various versions of the myth see Roscher, s.v. Helena.

1342Boston Mus. Report for 1900, p. 70, No. 27; and cf. Reinach, i. 173.
1343For a collected list of all vase-paintings connected with this story see Jahrbuch, i. (1886), p. 201 ff.

1344B.M. E 647; Munich 807 = Millingen-Reinach, 4; Louvre E 639 = Jahrbuch, 1886, pl. 10, 1; Reinach, ii. 91; and see ibid. i. 222 = Plate XXXIX. (otherwise interpreted, p. 111).

1345B.F.: B.M. B 215 (Fig. 128); Munich $380=$ Reinach, ii. 115 = Baumeister, iii. p. 1799, fig. 1882. R.F.: B.M. E 424; Berlin 2279 = Baumeister, iii. p. 1797, fig. 1881 (Peithinos); Athens $1202=$ Benndorf, Gr. u. Sic. Vasenb. 32, 4; Athens $1588=\$ 1 \$ 2$ 1897, pl. 9; Munich $369=$ Furtwaengler and Reichhold, pl. 24 (Duris); Overbeck, Her. Bildw. pl. 7, fig. 8 (in Vatican).

1346B.M. E 9, E 73; and see above, pp. 25, 26.
1347Palermo 1503 = Overbeck, Her. Bildw. pl. 8, fig. 6: see also for Cheiron p. 146.
1348Furtwaengler and Reichhold, pl. 1.
1349B.M. B 620; Berlin 4220; De Witte, Coll. à l'Hôtel Lambert, pl. 1; Athens 966 (with Athena and Hermes); Louvre G 3 (Pamphaios); Micali, Storia, pl. 87; B.M. B $77=$ Fig. 98 (parody).

1350Bibl. Nat. $538=$ Reinach, i. 90 (doubtful); Jahn. Arch. Beitr. pl. 11 (?), and see p. 352 ff.

1351Reinach, ii. 43.
1352Bibl. Nat. $1047=$ Reinach, i. 87.
1353Reinach, i. $126=$ Bibl. Nat. 422.
1354See J.H.S. vii. p. 196 ff., whence this classification is taken.
1355B.M. B 236-38; early Ionic vase in Munich, $123=$ Furtwaengler and Reichhold, pl. 21; Overbeck, Her. Bildw. pl. 9, fig. 2 (Xenokles); J.H.S. vii. pl. 70, p. 198.

1356B.F.: B.M. B 312. R.F.: B.M. E 445; Berlin 2536 = Roscher, iii. p. 1615.
1357B.F.: B.M. B 171; Munich 1269 = Overbeck, op. cit. 9, 6. R.F.: Berlin 2291 = Fig. 129 (Hieron); Reinach, i. $246=$ Roscher, iii. p. 1610 (Brygos, in Louvre); Roscher, iii. p. 1617 (fine pyxis in Kopenhagen; the goddesses in chariots).

1358Berlin 2633; Petersburg 1807 = Reinach, i. 7; B.M. F 109, F 167; Berlin 3240; Karlsruhe $259=$ Furtwaengler and Reichhold, pl. 30; Ath. Mitth. xxiv. (1899), p. 67 (R.F. kotyle in Berlin, Hermes omitted).

1359Wiener Vorl. E. 11 = Jahrbuch, ix. (1894), p. 252.
1360Boston Mus. Report for 1899, No. 30, and 1901, p. 35 (both from the Kabeirion, Thebes).
1361B.M. F 175; Athens $1942=$ Reinach, i. 402; Petersburg $1924=$ Reinach, i. $9=$ Wiener Vorl. C. 1, 3; Naples $1982=$ Reinach, i. 292 (? See p. 113, note 1267); Reinach, i. 375.

1362B.M. E 226; Jatta 1619 = Él. Cér. iv. $72=$ Roscher, i. 1961.
1363B.M. E 69 = Wiener Vorl. vi. 2; Berlin 2291 = Reinach, i. 437, 1 = Baumeister, i. p. 637, fig. 709 (Hieron); Petersburg 1929 = Reinach, i. 9; Reinach, i. 437, 2 (Hieron and Makron): see also Rev. Arch. xxxiii. (1898), p. 399.

1364B.M. F 175 (?).
1365Millingen, A.U.M. i. 21 (fine R.F. vase in Louvre); Röm. Mitth. ii. (1887), pls. 11-12, 4; Berlin $1737=$ Wiener Vorl. B. 9, 4.

1366 Naples $3352=$ Reinach, i. 485 ; and see Bibl. Nat. $418=$ Reinach, i. 83; also Roscher, s.v. Nereus.

1367Reinach, i. $286=$ Bibl. Nat. $851=$ Wiener Vorl. B. 9, 2 (Epigenes).
1368Berlin 2264 (Oltos and Euxitheos) = Wiener Vorl. D. 2, 1; Bibl. Nat. 851 = Reinach, i. $287=$ Roscher, iii. 295: see also Roscher, iii. 1697-99 (setting out of Patroklos). As Nestor himself went to the war, it is possible that this scene is to be regarded as taking place during and not before it.

1369Bologna $273=$ Wiener Vorl. i. 4.
1370B.M. E 16; Baumeister, i. p. 683, fig. 743; and see Overbeck, Her. Bildw. pl. 13, 7, p. 276.
1371Jahrbuch, 1902, pl. 2 (in Boston).
1372Iph. in Aul. 192 ff.
1373B.M. B 193 (Plate XXXI.), B 211, E 10; Helbig, 78 = Reinach, i. 96 = Wiener Vorl. 1888, 6, 1 (Exekias). A "bilingual" example in Boston (by Andokides? B.F. and R.F.): see Amer. Journ. of Arch. 1896, pp. 40-41, figs. 15-16. The latest example seems to be Arch. Anzeiger, 1892, p. 102.

1374B.M. B 541, E 160: see below, p. 133, and B.M. Cat. iii. p 36.
1375B.M. F $159=$ Wiener Vorl. v. 9, 3.
1376Reinach, i. 358 = Millingen-Reinach, 50; ibid. i. 145 = Baumeister, iii. p. 1326, fig. 1479; Milani, Mito di Filottete, frontispiece.

1377Bibl. Nat. $256=$ Reinach, ii. 254: see p. 111, note 1243.
1378 Petersburg $1793=$ Reinach, i. 3: for a more probable interpretation (birth of Dionysos) see p. 19.

1379Dubois-Maisonneuve, Introd. pl. 63; Engelmann, Arch. Stud. zu den Trag. p. 17; and see Urlichs, Beiträge, pl. 4.

1380Petersburg 1275 = Reinach, i. 152: cf. Millingen, Anc. Uned. Mon. i. pl. 22 (Overbeck, Her. Bildw. p. 296).

1381Overbeck, Her. Bildw. 13, 9.
1382B.M. E 382; Naples 2293 and R.C. 141 = Baumeister, iii. p. 1725, fig. 1807.
1383Boston Mus. Report for 1898, No. 40 (signed by Hieron).
1384B.M. B 153.
1385B.M. B 324, 542; Forman Sale Cat. 282 (= Reinach, i. 285, 1) and 308 (both in B.M.); Athens $620=$ Reinach, i. $394=$ Wiener Vorl. 1888, 1, 1 (Timonidas); B.M. F 493 (caricature).

1386Louvre E 703 = Reinach, ii. 92 (early Ionic); B.M. B 307; François vase; Berlin 1685; Helbig, 130 = Mus. Greg. ii. 22, 1; B.M. E 10, E 13, and Forman Sale Cat. 339.

1387Reinach, ii. 114-15 = Baumeister, iii. p. 1901, fig. 2000 (Euphronios); Reinach, i. 285, 3; Louvre G 18 = Reinach, i. 203, 3; Louvre E 703 = Reinach, ii. 92; B.M. B 326.

1388Munich $124=$ Reinach, ii. 113.
1389Berlin 2278 = Ant. Denkm. i. 10; and see Overbeck, Her. Bildw. p. 297.
1390Reinach, ii. 198.
1391 Ibid. i. $306=$ Wiener Vorl. iii. 1 (the names may be fanciful); ibid. i. 77 (cf. Overbeck, Her. Bildw. p. 333).

1392Louvre E $609=$ Reinach, i. $395=$ Wiener Vorl. 1888, 1, 3 (Chares pyxis).
1393Like others of the Homeric scenes on B.F. vases, this type is sometimes used for an ordinary warrior taking leave of his family, and unless names are given it is difficult to distinguish.

1394Robert, in Hermes, 1901, p. 391, connects this scene with Book xix. 320 ff.
1395The text is not exactly followed here. Menelaos kills Euphorbos in the Iliad, but does not fight over his body with Hector as he does on the vase. Possibly there is a confusion with the Patroklos episode below.

1396The "Psychostasia" is also referred to the combat of Achilles and Memnon (p. 132).
1397See, for a revised drawing of this vase, Hill, Illustrations of School Classics, p. 105.
1398B.M. B 209-10 (= Wiener Vorl. 1888, pl. 6, 2, 1889, pl. 3, $3=$ Reinach, ii. 105), B 323 (?), E 280; Munich $478=$ Reinach, ii. 105, and $370=$ Furtwaengler-Reichhold, 6.

1399See below, p. 144.
1400Boston Mus. Report, 1903, No. 70: cf. Quint. Smyrn. i. 741 ff.
1401Overbeck, Her. Bildw. 21, $16=$ Roscher, ii. 2674; and see B.M. B $209=$ Reinach, ii. 105.
1402Millingen, A.U.M. i. 4 = Engelmann-Anderson, Atlas to Od. iii. 15 (? see above, under Il. xxii. 306 ff.); Reinach, ii. 105, 2.

1403B.F.: Berlin 1147; Helbig, 8, 31 = Mus. Greg. ii. 28, 1, and 38, 1; Bibl. Nat. $207=$ Reinach, ii. 254. R.F.: B.M. E 468; Millingen-Reinach, 49 = Reinach, i. 358; Tyszkiewicz Coll. pl. 17 (now in Boston). In the last-named the subject is slightly varied.

1404B.M. E 12 = Wiener Vorl. D. 3, 1; Reinach, i. 149; Louvre F 388 (?): see p. 71.
1405Millingen, A.U.M. i. 5; Wiener Vorl. vi. $7=$ Roscher, i. p. 1265 (in Louvre); Reinach, i. $347=$ Bourguignon Cat. 19: cf. also Athens 1093 = Roscher, ii. 2678 (Eos, together with Thanatos and Hypnos, two Keres).

1406Helbig, $43=$ Mus. Greg. ii. 49, 2.
1407Reinach, ii. 106.
1408B.M. E 808 (?).
1409Reinach, i. 82.
1410B.M. B 172; Munich $380=$ Reinach, ii. 115; Helbig, 77 = ibid. ii. 107 (see below, p. 177); Bibl. Nat. 537 = Reinach, i. 90; Boston Mus. Report for 1899, No. 28 = Arch. Anzeiger, 1898, p. 51. (Thetis present)

1411Louvre E $643=$ Reinach, i. 311; ibid. ii. 107 (?).
1412B.M. B $240=$ Reinach, ii. 99.
1413Reinach, i. 304 (and i. 226, 1-3 (?), see p. 115); Engelmann, Arch. Stud. zu d. Trag. p. 37: cf.

Sale Cat. Hôtel Drouot, 11 May, 1903, No. 100.
1414Athens $475=$ Baumeister, iii. p. 1955, fig. 2086 (Melian vase); B.M. B 327, B 397, E 13; Forman Sale Cat. 298; Berlin $2000=$ Robert, Bild u. Lied, p. 217; Baumeister, i. p. 29, fig. 30; Wiener Vorl. 1889, 5, 2 (in Louvre); Naples 3358 = Reinach, i. 313 = Wiener Vorl. C. 8, 2. The type is derived from that of Herakles and Kyknos (p. 101).

1415B.M. E 69 = Wiener Vorl. vi. 2; Millin-Reinach, i. 66.
1416B.M. B 541, E 160: see above, p. 124.
1417Vienna $325=$ Reinach, i. $174=$ Wiener Vorl. vi. 1.
1418Two Corinthian vases, Arch. Anzeiger, 1891, p. 116, and Boston Mus. Report, 1899, No. 12; Louvre E $635=$ Reinach, i. $151=$ Rayet and Collignon, p. 69; B.M. F $480=$ Plate LVIII.; Reinach, i. 278.

1419 Petersburg $830=$ Reinach, i. $150=$ Wiener Vorl. A. 8; Naples $3231,3235=$ Reinach, i. 299, 102; parody, B.M. F 366.

1420Bibl. Nat. $186=$ Jahrbuch, vii. (1892), pl. 2; Munich $400=$ Reinach, ii. 116; Roscher, i. 1279.
1421 Mon. Antichi, ix. pl. 15: see Jahrbuch, 1891, pl. 4, p. 190.
1422See for the various types J.H.S, xiv. p. 171.
1423Berlin $2301=$ Reinach, i. 381; Petersburg $812=$ Reinach, i. $381=$ Millin-Reinach, i. 58 (doubtful).

1424Reinach, ii. 16; Naples 2858 = Overbeck, Her. Bildw. pl. 28, 5; ibid. 1755 = Baumeister, iii. p. 1848, fig. 1939; ibid. 1761 = Millingen-Reinach, 16.

1425B.M. D 33, F 57.
1426Reinach, ii. 175: cf. Boston Mus. Report for 1899, No. 38.
1427Vienna 333 = Reinach, i. 169; Berlin 2184 = Reinach, i. $296=$ Baumeister, ii. p. 1113, fig. 1310; Reinach, i. 143; Roscher, iii. 969 (in Berlin).

1428Vienna $333=$ Reinach, i. 169 = Roscher, iii. 971; Reinach i. 381; Millin-Reinach, ii. 24.
1429B.M. E 446.
1430 Petersburg $349=$ Reinach, i. 19; ibid. ii. 9, 316; Naples 1984 = Baumeister, ii. p. 1116, fig. 1313.

1431B.M. F 166; Reinach, i. 132 (in Louvre); Millin-Reinach, ii. 68; Naples 1984; Helbig, $117=$ Reinach, i. 390; Arch. Anzeiger, 1890, p. 90 (Berlin); and cf. B.M. B 641 (possibly Orestes and Pylades at Omphalos?).

1432 Petersburg 2189 (according to Roscher, iii. p. 993); but see Reinach, i. 5, and above under Kadmos.

1433Reinach, i. $105=$ Naples 3223; ibid. $133=$ Baumeister, i. p. 757, fig. 808; ibid. i. $158=$ Petersburg 420; Naples S.A. 24; and see B.M. F 155, and Reinach, i. 279.

1434Reinach, i. 321 = Baumeister, ii. p. 1009, fig. 1215 (Jatta Coll.).
1435See generally on Athenian cults, as illustrated by vase-paintings, Harrison, Mythol. and Mon. of Athens, Introd. p. xxi ff.

14360n one of these vases the scene (in the interior of a cup) is watched by a group of Athenians at the foot of a hill, round the outside of the cup (Reinach, i. $107=$ Hartwig, Meistersch. pls. 3940).

1437See Harrison, op. cit. p. lxxxiv ff.
1438Cf. Strabo, ix. § 392, and see for Lykos in another connection p. 124 above. In the vase here given they witness the exploits of their kinsman Theseus (on the obverse).

1439Cf. \$1\$2 1893, pl. 9, p. 130 ff., and Frazer's Pausanias, ii. p. 203.
1440E $224=$ Plate XLI. $=$ Furtwaengler and Reichhold, pls. 8-9.
1441Furtwaengler ( $50^{\text {tes }}$ Winckelmannsfestprogr. p. 163) refers the Orpheus scenes to the Aeschylean tetralogy of the Lykourgeia.

1442B.M. E 390; Naples 1978, 2889, 3143 (see Reinach, i. 176); Reinach, i. $403=$ Roscher, iii. p. 1181; Roscher, iii. p. 1179 (in Berlin).

1443Munich 383; Reinach, i. 63; ii. 80.
1444B.M. E 301; Naples 3114; Reinach, i. 186, 327 (= Roscher, iii. p. 1185-86); Roscher, iii. p. 1184: see also J.H.S. ix. p. 143.

1445Reinach, i. $493=$ Roscher, iii. p. 1178.
1446She occurs on B.M. F 270, Petersburg 498, and Karlsruhe 256.
1447Reinach, i. $96=$ Helbig, 99; Röm. Mitth. 1888, pl. 9; and see Naples $3143=$ Reinach, i. 176.
1448Jatta $1538=$ Reinach, i. 526.
1449Athens $1344=$ Dumont-Pottier, i. pl. 14.
1450Schreiber-Anderson, Atlas, pl. 5, $10=$ Reinach, ii. 333, 5 (burlesque scene with actor as Taras on dolphin: see p. 160).

1451B.M. E 447; Louvre F 166; Helbig, 189 = Reinach, i. 268; Reinach, i. 122; Benndorf, Gr. u. Sic. Vasenb. 53, 2; Naples 1851 = Jahrbuch, 1887, p. 113; Ath. Mitth. xxii. (1897), pl. 13: see for the myth, Hdt. viii. 138 and Roscher, s.v.

1452Reinach, i. 147, 509; ii. 81, 271.
1453Munich $849=$ Reinach, i. 258.
1454See pp. 99, 111, 132.
1455.Wiener Vorl. A. 10, 3.

1456Ibid. iii. 4: see Röm. Mitth. 1894, p. 285.
1457B.M. F 6, 85, 230; Reinach, i. 492, ii. 295.
1458B.M. F 158, 278; Naples R.C. 239 (= Reinach, i. 482), 3253 (= Reinach, i. $330=$ Wiener Vorl. vii. 6b, 1), and 2421 (= Reinach, ii. 278 = Furtwaengler and Reichhold, pls. 26-8); MillinReinach, i. 56 (= Bibl. Nat. 427) and 61; Millingen-Reinach, 37.

1459B.M. E 12; Naples 2613; Louvre F 203; Munich 4 = Reinach, ii. 57; Reinach, ii. 56.
1460Wiener Vorl. 1889, 6, 2; B.M. B 158, 566; Micali, Storia, 91.
1461Inghirami, Vasi Fitt. iv. 304 = Thiersch, Tyrrhen. Amph. p. 64.
1462B.M. E 40; Hartwig, Meistersch. pl. 2, fig. 2 (Louvre G 35); ibid. pl. 22, 2; Reinach, i. 166.
1463Engelmann-Anderson, Iliad, v. 24, vi. 25.
1464B.M. E 19; Vienna 231 = Wiener Vorl. 1890-91, 1, 6.
1465B.M. B 591; Berlin $2264=$ Reinach, i. 508, 4.
1466Boston Mus. Report for 1899, No. 22: see Hartwig, Meistersch. p. 119, note 1.
1467Louvre A 256 = Jahrbuch, 1887, pl. 11.
1468B.M. E 253, E 295.
1469B.M. E 573.
1470See above, p. 102.
1471See above, p. 111.
1472François vase; B.M. B 176, F 162, F 277; Reinach, i. 154 (= Naples 2411), 309 (Louvre E 700), 391 (Munich 805); Furtwaengler and Reichhold, pl. 15 (a fine R.F. example).

1473François vase; B.M. E 473; J.H.S. xvii. pl. 6; Munich $846=$ Millingen-Reinach, 8; Mon. Antichi, ix. pl. 2; Reinach, i. 22, 474, ii. 272.

1474For Herakles and Pholos see p. 102.
1475B.M. B 620 (Achilles); Munich 611 = Reinach, i. 419 (Herakles); Reinach, ii. 91 (Achilles); B.M. B $77=$ Fig. 98 (parody).

1476See Jahrbuch, 1886, pp. 202-4, Nos. 51-9, 94.
1477Reinach, ii. 209, 289; Athens 1246: cf. B.M. B 226.
1478Reinach, i. 58, 452; Helbig, 237 = Mus. Greg. ii. 82, 2 ; Benndorf, Gr. u. Sic. Vasenb. 8, 2.

1479Arch. Anzeiger, 1890, p. 2.
1480B.M. F 550; Wiener Vorl. E. pls. 7-8, fig. 3 (cf. p. 88).
1481B.M. F 370.
1482See above, p. 112.
1483François vase; Athens 644; Reinach, i. 332, 429.
1484Reinach, i. 259.
1485E.g. B.M. B 427, 428, 430, 436, 679, 680: cf. E 180.
1486Cf. Virgil, Aen. iii. 216 (virgineae vultus) and 241 (obscenae volucres).
1487See, J.H.S. xiii. p. 103 ff.
1488B.M. B 4, B 16 (?): see Vol. I. p. 344.
1489See p. 115; B.M. E 302; Reinach, i. 119, 201; and for two Harpies, with name inscribed, in connection with this story, Berlin 1682 = Reinach, i. 441.

1490Louvre A 478.
1491B.M. E 440; J.H.S. xiii. pl. 1; Strena Helbigiana, p. 31.
14920n Sirens generally, and especially as death-deities, see Weicker, Der Seelenvogel (1902).
1493Berlin 2157 = Jahrbuch, 1886, p. 211; on B.M. E 477 a Siren of the ordinary decorative type appears with allusion to the death of Prokris, perhaps as indicating her departing soul.

1494B.M. B 651.
1495Louvre E 667 = Bull. de Corr. Hell. 1893, p. 238.
1496B.M. B 510: cf. Weicker, p. 48.
1497Weicker, p. 120, fig. 46.
1498E.g. B.M. A 1135; Cat. of Terracottas, B 291, 292, 479.
1499Louvre E 667, 723; Vienna 318; Munich 1077.
1500Munich 1050.
1501B.M. B 215; Louvre A 441, E 858; Berlin 1727: cf. Athens 531 and Wilisch, Altkor. Thonindustrie, pl. 3, fig. 38.

1502B.M. B 429.
1503See above, p. 117; and cf. Bibl. Nat. 278 and Athens $1480=$ Wiener Vorl. 1889, 9, 8.
1504B.M. B 125, B 539, etc.
1505B.M. B 650; Reinach, i. 319; J.H.S. xix. p. 235.
1506Reinach, i. 471.
1507Naples $2846=$ Festsehr. für Overbeck, p. 103.
1508B.M. B 32 and Athens 592 (with Hermes); Naples 3254 = Reinach, i. 327 = Wiener Vorl. 1889, 9, 7.

1509Reinach, i. 54, 258, 480, ii. 236.
1510B.M. E 434; Reinach, i. 23, 53.
1511See above, p. 144.
1512Ath. Mitth. 1887, pl. 11.
1513Reinach, ii. 319.
1514Boston Mus. Report, 1899, p. 64, No. 21 (B.F.).
1515Reinach, i. 220; and see ii. 314.
1516Bourguignon Cat. 57.
1517See p. 29 above.

1518B.M. B 45, B 65, E 11, E 35, Bibl. Nat. 177, Benndorf, Gr. u. Sic. Vasenb. 8, 1 (Pegasos); B.M. B 105, B 417, and Louvre A 307 (Chimaera).

1519B.M. E 170; Reinach, ii. 309.
1520Bibl. Nat. $449=$ Reinach, i. 129.
1521Amer. Journ. of Arch. 1900, pl. 5 (cf. pl. 4).
1522Benndorf, Gr. u. Sic. Vasenb. 12, 2; B.M. B 308 (three Minotaurs).
$1523 B i b l$. Nat. $1066=$ Gaz. Arch. 1879, pl. 3: see, J.H.S. xi. p. 349.
1524Reinach, i. 188.
1525 Ibid. i. 498.
1526B.M. F 218.
1527Athens 961 = Ath. Mitth. xvi. pl. 9 (probably taken from a Satyric drama).
1528Reinach, i. 459.
1529See above, p. 12.
1530 Munich $468=$ J.H.S. xix. p. $217=$ Philologus, 1898, pl. 1.
1531B.M. B 433; Berlin 1770; Athens 713 = Heydemann, Gr. Vasenb. pl. 8, 4; Louvre F 100, 104 (between Sirens): cf. Ar. Av. 800.

1532François vase; Reinach, i. 27, 54, 61, 470, ii. 295; B.M. B 77; Millin-Reinach, i. 63; Wiener Vorl. ii. 5, 2; and cf. B.M. G 178 and Jahn, Arch. Beitr. pl. 12, 1.

1533Cf. Naples 2609 (Hipparchos); B.M. E 46, Athens 1162, and Louvre G 103 (Leagros); Athens $1020=$ Jahrbuch, ii. p. 163 (Glaukon); B.M. E 300 and Oxford 309 (Kleinias); Reinach, i. 513, 6 (Megakles).

1534B.M. B 80; Berlin $1686=$ Rayet and Collignon, pl. 7, and $1882=$ Reinach, ii. 122.
1535See p. 60.
1536See p. 53; also Reinach, i. 472 and ii. 198, 4 (both Dionysiac).
15370xford 292 (Persephone); Reinach, ii. 321, 4; ibid. 122, 2 (= Berlin 2129): see Hartwig, Meistersch. p. 48, note; also Él. Cér. ii. 108, and Reinach, ii. 286.

1538Anzeiger, 1895, p. 36 (in Berlin).
1539B.M. B 633.
1540B.M. E $284=$ Mon. Antichi, ix. pl. 1.
1541B.M. B 80, В 585, В 648.
1542Naples 2858; Mus. Greg. ii. 71, 1 a.
1543B.M. B 79; Louvre F 10; Reinach, i. 428; Mus. Greg. ii. 71, 1 a; Munich $386=$ Furtwaengler and Reichhold, pl. 19; and see under Nike, p. 87.

1544Bologna 275; B.M. B 362.
1545Berlin 1727 = Reinach, i. 429; Athens 1428 = Heydemann, Gr. Vasenb. pl. 11, 3 (sacrifice to Hekate?); Hartwig, Meistersch. pl. 3, fig. 2.

1546B.M. E 455, 456, 494; Él. Cér. ii. 105, 108; Millin-Reinach, i. 8; Micali, Storia, pl. 97, fig. 2; Bull. de Corr. Hell. 1895, p. 100 (Louvre).

1547B.M. B 3.
1548B.M. E 455; Athens $1858=$ Baumeister, i. p. 211 , fig. $165=$ Reinach, i. 396.
1549B.M. E 284; Bologna 286; Reinach, i. $403=$ Schreiber-Anderson, 25, 8 (referred to the Thargelia by Reisch, Gr. Weihgeschenke, p. 80).

1550Berlin 1727, 2010.
1551B.M. E 114, E 291; Bibl. Nat. 94; Reinach, ii. 135.
1552B.M. E 88; Mus. Greg. ii. 78, 2 b; and see Stackelberg, pl. 35.

1553Reinach, ii. 286; Wiener Vorl. 1890-91, pl. 7, 2 = Röm. Mitth. v. (1890), p. 324; Mus. Greg. 71, 1 b .

1554Naples $3358=$ Reinach, i. $313=$ Schreiber-Anderson, 20, 3: see Miss Harrison's Prolegomena to Gk. Religion, p. 157.

1555De Witte, Coll. à l'Hôtel Lambert, pl. 29.
1556De Witte, op. cit. pl. 22.
1557J.H.S. xix. p. 228 (in Naples).
1558Naples $2458=$ J.H.S. xix. p. 227: cf. B.M. B 641.
1559Athens 695.
1560J.H.S. xx. p. 101.
1561Karlsruhe $278=$ Reinach, i. 271.
1562Benndorf, Gr. u. Sic. Vasenb. pl. 31, 1.
1563Fig. 17, Vol. I. p. $140=$ Munich 51.
1564B.M. E 494, E 585; Bull. de Corr. Hell. 1895, p. 103; Berlin 2213; Naples 1760 (= MillingenReinach, 52), and S.A. 647 (= Él. Cér. iv. 19); Gerhard, Akad. Abhandl. pl. 63, figs. 1, 4, 5; Él. Cér. iii. pls. 79, 80. They appear to be especially associated with terminal figures.

1565Miss Harrison’s comprehensive Prolegomena to Greek Religion (Cambridge Press, 1903) appeared too recently for the writer to be able to make detailed use of it in this section. It must, of course, be borne in mind that many of the interpretations in that work are only conjectural.

1566Athens 199, 200 = Jahrbuch, 1899, p. 201; ibid. $214=$ Reinach, i. $190=$ Baumeister, iii. p. 1943, fig. 2071.

1567Athens $688=$ Reinach, i. 165.
1568B.M. B 63 = Plate LVIII.; Forman Sale Cat. 279 (now in B.M.); Baumeister, i. p. 238, fig. $217=$ Benndorf, Gr. u. Sic. Vasenb. pl. 1; Athens $688=$ Reinach, i. 164.

1569B.M. D 62 = Plate LV. fig. 1; Athens 1651 = Dumont-Pottier, i. pl. 32; Benndorf, Gr. u. Sic. Vasenb. pl. 33. A fine R.F. example in Monuments Piot, i. pls. 5-6 (in Louvre).

1570Bibl. Nat. 353; Micali, Storia, pl. 96, figs. 1-2.
1571Athens $688=$ Baumeister, i. p. 306, fig. $321=$ Reinach, i. 164; Anzeiger, 1893, p. 86 (Berlin). Cf. Fig. 123, p. 71.

1572Jahrbuch, 1891, pl. 4; J.H.S. xix. p. 228; Athens 688.
1573B.M. B 543, D 5 = Plate XL.
1574B.M. D 65 ff. and Athens 1672-1836 passim: cf. B.M. F 93. Plate LV. fig. $2=$ B.M. D 70.
1575B.M. F 93 (Fig. 20, Vol. I. p. 144), 212.
1576B.M. F 276, 279-85, 352 (Fig. 106, Vol. I. p. 477).
1577B.M. F 353.
1578Millin-Reinach, ii. 29.
1579B.M. D 39, 41, 43-45, 56, 70, F 93-96; Benndorf, Gr. u. Sic. Vasenb. pl. 34. See Plate LV. fig. 2 and Fig. 19, Vol. I. p. 143.

1580B.M. D 54, 65, 67-86; F 212-13, 336; Athens 1692 = J.H.S. xix. pl. 2, and $1694=$ Benndorf, op. cit. pl. 18, 1; ibid. pl. 19, 2.

1581A unique instance of a sculptured stele copied on a white lekythos is Burlington F.A.C. Cat. (1903), p. 104, No. 25.

1582B.M. D 51.
1583B.M. F $352=$ Fig. 106.
1584B.M. (uncatalogued).
1585B.M. D 21.

1586B.M. D 60.
1587B.M. D 58.
1588B.M. D 35; Engelmann-Anderson, Odyssey, iii. 10.
1589B.M. D $56=$ Fig. 19.
1590B.M. D $5=$ Plate XL.
1591Athens $1689=$ Reinach, i. 512.
1592See above, p. 69.
1593See p. 52; also B.M. (uncatalogued).
1594B.M. D 58-9; Athens 1093 (= Roscher, ii. 2678), 1653-54 (= Dumont-Pottier, i. pls. 27-9); Jahrbuch, 1895, pl. 2. Cf. Fig. 123, p. 71.

1595B.M. D 54; Benndorf, Gr. u. Sic. V. pls. 14 and 33. See above, p. 72.
1596B.M. F 279, 280, 282.
1597B.M. F 276, 284; Millin-Reinach, ii. 32-33.
1598B.M. F 281.
1599B.M. F 276, 279-84, 352 (Fig. 106); Millin-Reinach, ii. 38.
1600See p. 68.
1601Louvre E 667 = Bull. de Corr. Hell. 1893, p. 238.
1602Anzeiger, 1890, p. 89 (Berlin); but see p. 76, under Asklepios.
1603B.M. B 80: see for other parodies of processions or sacrifices Athens 1132, 1136, 1138.
1604B.M. B 509; Berlin $1830=$ J.H.S. ii. pl. 14, and 1697 (as horses).
1605J.H.S. xiii. pl. 4, and p. 81; B.M. B $77=$ Fig. 98: see generally J.H.S. xiii. p. 77 ff. and Vol. I. p. 391.

1606Vienna 321 (cf. Ar. Ach. 729 ff.), Hermes with dog got up as a pig.
1607B.M. F 99; Berlin 3046 = Baumeister, ii. p. 821, fig. 904 (see Jahrbuch, i. p. 283).
1608Jahrbuch, i. (1886), p. 260 ff.
1609See for instance pp. 107, 118, 123.
1610B.M. F 233: cf. Reinach, i. 114.
1611Schreiber-Anderson, 5, $10=$ Heydemann, p. $307=$ Reinach, ii. 332, 5.
1612B.M. F 543.
1613B.M. F $189=$ Fig. 134.
1614 Naples $3240=$ Reinach, i. $114=$ Baumeister, i. pl. 5, fig. 422.
1615B.M. E 65.
1616See Philologus, 1868, pls. 1-4, p. 1 ff.
1617Jatta 1528 = Jahrbuch, 1886, p. 273; B.M. E 790; Naples 2846 = Festschr. für Overbeck, p. 103.

1618B.M. E 467 (Satyric chorus); Reinach, ii. 324, 5; ii. 288.
1619Boston Mus. Report, 1898, No. 50.
1620Jatta $1402=$ Reinach, i. 413.
1621B.M. F 233, F 289.
1622Wiener Vorl. B. 3, 5 c; Millin-Reinach, i. 20.
1623Vol. I. p. 472: see also B.M. Cat. of Vases, iv. p. 10; Vogel, Scenen Eurip. Tragödien (where an exhaustive list is given), and Huddilston, Gk. Tragedy in the Light of Vase-paintings, where the subject is also treated in detail.

1624See Vol. I. p. 389, and Plates XXXIII.-IV.; for a complete series of illustrations, Mon. dell' Inst. x. pls. 47-8 = Reinach, i. 210-15.

1625B.F.: B.M. B 48, B 64; Berlin 1655, 1805; Bibl. Nat. 252, 354; Reinach, ii. 129. R.F.: Reinach, i. 223 (= Wiener Vorl. D. 5), 424 (Berlin 2180), 454, ii. 134 (Berlin 2262), 137 (men with dogs); Hartwig, Meistersch. pls. 15-6 = Bibl. Nat. 523.

1626B.M. B 271, B 295, B 607; E 39, 63 (parade of boxers before judges); Athens 1169 = Benndorf, Gr. u. Sic. Vasenb. 31, 2 a; Reinach, ii. 292.

1627B.M. B 191, B 295, B 603; E 94, 95; Bibl. Nat. 522 = Hartwig, Meistersch. pl. 15, 2; Mus. Greg. ii. 16, 2 a; Vienna 332 = Wiener Vorl. 1890-91, 1, 4.

1628B.M. E 78 (very realistic), B 604, B 610; Louvre F 276, 278, 314; Hartwig, Meistersch. pl. 64.
1629Arch.-epigr. Mitth. aus Oesterr. 1881, pl. 4.
1630B.M. B 48, B 134 (= Fig. 135), B 326; Munich $795=$ Reinach, i. $422=$ Baumeister, i. p. 613, fig. 672; Reinach, i. 433, $1=$ Baumeister, i. p. 573, fig. 611; Reinach, i. 272, ii. 128. See on the subject generally J.H.S. xxiii. p. 54 ff .

1631B.M. B 136, E 164; Louvre F 126; Athens 1188 = Reinach, i. 511; Hartwig, Meistersch. pl. 21 (Duris, in Boston); De Witte, Coll. à l'Hôtel Lambert, pl. 23; Mus. Greg. ii. 43, 2 b.

1632B.M. B 380; Louvre F 126, G 37; Mus. Greg. ii. 69, 4 c, 70, 2 a; De Witte, op. cit. pl. 24.
1633B.M. B 48; Reinach, ii. 145, 175, 330; Mus. Greg. ii. 70, $1 a, 2 b ; 73,1 b$. Athlete exercising with halteres: Louvre G 15; Forman Sale Cat. 332.

1634B.M. B 361. See J.H.S. xxiv. p. 70.
1635B.M. E 164.
1636B.M. E 63, 113, 164; Forman Sale Cat. 358; and see Bull. de Corr. Hell. xxiii. p. 164.
1637Athens 1478; Millin-Reinach, i. 45; Panathenaic amphora in B.M.
1638B.M. B 137, B 609; Munich $498=$ Reinach, i. 215; Mus. Greg. ii. 42, 2 b; 43, 1 a. Starter in foot-race: B.M. E 6, E 101; Reinach, i. 433, 2; Hartwig, Meistersch. p. 45, fig. 6; Jahrbuch, 1895, pp. 185-88; J.H.S. xxiii. p. 268 ff.

1639B.M. B 133, B 144; Berlin 1655, 1722, 2282; Munich 805; Athens 1546; Reinach, i. 12, 100, 199, ii. 61, 253; and see Hartwig, Meistersch. p. 491, note 2.

1640B.M. B 130-32, B 677; Berlin 1655; Louvre F 216, F 283; Reinach, ii. 68, 70, 125, 133; François vase.

1641B.M. E 389, F 59; Tyszkiewicz Coll. pl. 35; Reinach, ii. 298, 320; Baumeister, i. p. 522.
1642B.M. B 143; E 6, E 22; B 608; Benndorf, Gr. u. Sic. Vasenb. 43, 4 b; Reinach, ii. 128, 129 (= Berlin 2307); Munich 476 = ibid. ii. 127, and 803 = Jahrbuch, 1895, p. 196; Hartwig, op. cit. pl. 62, 1. Runner with trainer: Bourguignon Sale Cat. 31. See on the subject generally J.H.S. xxiii. p. 268 ff ., and Jahrbuch, 1895, p. 182 ff .

1643Hartwig, op. cit. pl. 1 and pl. 16 (= Bibl. Nat. 523); B.M. E 22; Burlington Fine Arts Club Cat. (1903), p. 100, No. 17.

1644Berlin 2307 (one fig.); Reinach, i. 494 (Louvre); Jahrbuch, 1887, p. 99: cf. B.M. B 628.
1645Bourguignon Sale Cat. 49; Berlin 2307 = Reinach, ii. 129; Hartwig, op. cit. pl. 16 (Bibl. Nat. 523); Jahrbuch, 1895, p. 190; J.H.S. xxiii. p. 278.

1646See J.H.S. xxiii. p. 285 (runners with helmet in hand).
1647Mus. Greg. ii. 71, 4 b; Jahrbuch, 1895, p. 191; Munich 803 and 1240; Hartwig, op. cit. pl. 12. See J.H.S. loc. cit.

1648B.M. B 144; Reinach, ii. 262, 291, 298, 320 (horsemen): cf. B.M. B 628.
1649Reinach, i. 346 = Bourguignon Cat. 17; Louvre G 17, G 36.
1650 See under Nike, p. 88, note 1070.
1651 Berlin $2180=$ Reinach, i. 424, and 2314; Karlsruhe 242 (Psiax and Hilinos).
1652Berlin 2178; Louvre G 38 = Hartwig, Meistersch. p. 25; Arch.-epigr. Mitth. 1881, pl. 4; Reinach, i. 324.

1653Petersburg 1611 = Baumeister, i. p. 247, fig. 226.

1654Munich $895=$ Reinach, ii. 106.
1655Millin-Reinach, i. 47: cf. the athlete extracting a thorn on Berlin $2180=$ Reinach, i. 424.
1656Bibl. Nat. 283 (unexplained subject).
1657Salzmann, Nécropole de Camiros, pl. 57, 2 = Schreiber-Anderson, 24, 2.
1658B.M. F 232; Naples 2854; Reinach, i. 473; Baumeister, i. p. 585.
16590xford 288; B.M. B 607; Louvre F 109 (with judges): and see p. 88.
1660B.M. E 83; Louvre G 36; Athens 1156 = Reinach, i. 514; ibid. ii. $292=$ Baumeister, i. p. 242,
fig. 219 (basin inscribed $\triangle$ HMOEIA); Schreiber-Anderson, 21, $9=$ Reinach, ii. 275; Hartwig, Meistersch. pl. 67, 1, p. 206 (using sponge); Reinach, ii. 134, 275. Youth with bath utensils: Berlin 2314.

1661B.M. B 271; E 78, 94, 164; Hartwig, op. cit. pp. 416-17; Wiener Vorl. vi. 9; B.C.H. xxiii. p. 158 (trainer marking goal).

1662See B.M. Cat. of Vases, iv. passim.
1663Three types:-(1) Hare seized by birds: Louvre E $701=$ Reinach, i. 153; Naples 2458; Athens 618. (2) Hare pursued by dogs: B.M. B 119; Berlin 340, 1753, 1799; Karlsruhe 170; Petersburg 310, 386; Reinach, i. 34; Bull. de Corr. Hell. 1893, p. 227. (3) Dogs accompanied by hunters: B.M. B 678, D 60; Berlin 306, and 1727 = Reinach, i. 431; Oxford 189 (Oikopheles); Bibl. Nat. 187; Naples S.A. 200; B.M. A 1050 = Plate XIX. fig. 3; Reinach, ii. 333; Ant. Denkm. ii. 44-5.

1664B.M. B 147 (cover); Helbig, 7; Munich 411 (Amasis); Reinach, ii. 275; Millingen, Anc. Uned. Mon. i. 23; Anzeiger, 1895, p. 40.

1665B.M. B 7; Schreiber-Anderson, pl. 80, 3.
1666Ant. Denkm. ii. 44-5.
1667B.M. B 37 (= Plate XXI.), F 154; Louvre E $696=$ Reinach, i. 162; Vienna 217 = Reinach, i. 170; Munich 211 = Fig. 90, Vol. I. p. 316: cf. Burlington Fine Arts Club Cat. 1903, p. 115, No. 62, for B.F. jug with man hiding in tree and attacked by boar and lion.

1668Reinach, ii. 144, 223.
1669B.M. B $52=$ Rev. Arch. xviii. (1891), p. 367; Louvre F $26=$ ibid. p. 369; Millin-Reinach, i. 18.
1670Millin-Reinach, ii. 11.
1671Berlin 1900; Reinach, ii. 293.
1672Louvre F 223.
1673Munich $583=$ Jahrbuch, 1890, p. 146 (see p. 129); Forman Sale Cat. 285.
1674Mélanges Perrot, p. 252 (in B.M.).
1675Boston Mus. Report, 1899, No. 22; Mon. Grecs, 14-16 (1885-88), p. 10.
1676Hartwig, Meistersch. pl. 53; Bibl. Nat. 277 = Reinach, i. 290.
1677B.M. E 485; Berlin 2357 = Reinach, i. 423; ibid. ii. 179.
1678B.M. E 3 (Hischylos), E 60; Munich 111; Forman Sale Cat. 336; Reinach, i. 454, 4 (Pamphaios): see p. 177.

1679Munich 337 = Reinach, i. 238 = Furtwaengler and Reichhold, pl. 22 (Euphronios); Hartwig, Meistersch. pls. 53-4; Jahrbuch, 1888, pl. 4 (Onesimos); Mon. Grecs, 14-16 (1885-88), pl. 5, and see p. 1 ff.; Monuments Piot, i. pls. 5-6 (in Louvre). Cf. also Louvre G 26.

1680See under Warriors, p. 176.
1681B.M. F 70, F 306; Berlin 2154: cf. Benndorf, Gr. u. Sic. Vasenb. pl. 32, 5.
1682B.M. B 127; Reinach, ii. 125.
1683Benndorf, Gr. u. Sic. Vasenb. pl. 32, fig. 5.
1684B.M. B 17; Munich 903: see J.H.S. xxiii. pp. 139, 142.
1685B.M. B 182; Berlin 2417 = Reinach, i. 425 = Baumeister, ii. p. 781, fig. 836; Reinach, ii. 191; Oxford 250.

1687B.M. E 467 (Satyrs); E 339, F 197, F 245; Berlin 2710 = Reinach, i. 425 (Eros); Naples $2872=$ Millingen, Anc. Uned. Mon. pl. 12 = Reinach, ii. 169 (Eros); Louvre G 36 (ephebos).

1688Louvre F 90 and F $368=$ Rev. Arch. xxi. (1893), pl. 5; Helbig, p. $327=$ Baumeister, i. p. 622, fig. 695; Reinach, i. 310, 423 (Berlin 2030).

1689Naples $922=$ Schreiber-Anderson, 80, 7.
1690B.M. E 70, 453-54, 495, F 37, 273, 275; Berlin 2416 and Jatta $1291=$ Reinach, i. 337, 178; Baumeister, ii. p. 793, fig. 857; Archaeologia, li. pl. 14; Louvre G 30. See also below, p. 181.

1691 Branteghem Sale Cat. 167 (here a woman); Hartwig, Meistersch. pls. 27, 72, 2.
1692Louvre G 81; Reinach, i. 420; Hartwig, op. cit. pl. 27, 2.
1693Berlin 2177; J.H.S. xviii. p. 130.
1694B.M. E 205 (?).
1695B.M. F 123; Louvre F 60; Berlin 2589 (= Harrison, Mythol. and Monum. of Athens, p. xliv) and 2394; Millingen, Anc. Uned. Mon. pl. 30; Boston Mus. Report, 1898, No. 27.

1696B.M. E 387 (Seileni); Baumeister, iii. p. 1573, fig. 1633 (Eros); Gerhard, Ant. Bildw. pl. 53.
1697Naples $3151=$ Reinach, i. 400.
1698Anzeiger, 1890, p. 89 (in Berlin).
1699See B.M. Cat. of Vases, iv. p. 110 (F 223, etc.), and Jahn in Ber. d. sächs. Gesellsch. 1854, p. 256.

1700B.M. E 527, 534-37, 548-53 (see Plate XLII.); Baumeister, ii. p. 779; Él. Cér. ii. 89; Gaz. Arch. 1878, pl. 7; Stackelberg, pl. 17; Reinach, i. 425: see generally Jahn in Ber. d. sächs Gesellsch. 1854, p. 243 ff., pl. 12.

1701B.M. F 101 = Fig. 15, Vol. I. p. 137; Reinach, i. 294.
1702Bibl. Nat. 361 = Reinach, ii. 262; Bourguignon Cat. 52 (in B.M.); Reinach, i. 207 (hare).
1703Inghirami, Vasi Fitt. iv. 387.
1704Reinach, i. 294: cf. ii. $137=$ Baumeister, i. p. 705, fig. 765, and for women with pets see below, p. 173.

1705Berlin 2285 = Reinach, i. 196: cf. B.M. E 525 and Brit. School Annual, 1898-99, p. 65 (Fig. 177).

1706 Naples $2004=$ Reinach, i. 323.
1707 Ibid. ii. 333.
1708Berlin 2322 = Micali, Storia, 103, 1.
1709Hartwig, Meistersch. pl. 46.
1710B.M. E 171-72; Oxford 266; Baumeister, i. p. 554, fig. 591 (flute): cf. ibid. iii. p. 1993, fig. 2138 (Iphikles taught the lyre by Linos) and the Duris kylix (Plate XXXIX.).

1711Reinach, i. 248.
1712B.M. E 185; Gerhard, Ant. Bildw. pl. 66.
1713See p. 95.
1714Athens 467 = Ath. Mitth. 1892, pl. 10; B.M. E 467, E 804; Furtwaengler and Reichhold, pls. 17-8. Single figure: B.M. F 343.

1715B.M. E 61; Louvre G 18 (castanets).
1716Forman Sale Cat. 361 (in Boston).
1717Stackelberg, pl. 22; Reinach, i. 61, 372, 469 (Naples 3010); Rev. Arch. xxvi. (1895), p. 221.
1718Anzeiger, 1895, p. 40: cf. B.M. Cat. of Terracottas, p. 412.
1719B.M. B 42, 44; Berlin 1662; and see J.H.S. xviii. p. 287.
1720B.M. E 271; Berlin 1686; Bologna 271 = Reinach, ii. 150; Él. Cér. ii. 16; Athens 1019 = Ath. Mitth. 1891, pl. 10, 2; Anzeiger, 1892, p. 172. Girls playing lyre: Monuments Piot, ii. pls. 5-6 (in Louvre).

1721B.M. E 308; and see Reinach, ii. 187, 3.
1722B.M. E 270, E 469; Hartwig, Meistersch. pls. 65-6.
1723B.M. B 139, B 141; Louvre G 1 = Amer. Journ. of Arch. 1896, p. 9; Petersburg $1603=$ Schreiber-Anderson, 7, 14; Vienna 234.

1724B.M. B 188, E 354; Reinach, ii. 274; Louvre G 103 = Atlas, pl. 101 (Euphronios).
1725B.M. E 460; Bologna 286; Athens $1260=$ Dumont-Pottier, i. 16; Helbig, $90=$ Mus. Greg. ii. 60, 3; Benndorf, Gr. u. Sic. Vasenb. 43, 4 a.

1726Mus. Greg. ii. 22, 2 a.
1727B.M. E 270.
1728B.M. E 132.
1729B.M. B 192, B 299, E 37; Athens 1158 = Baumeister, iii. p. 1984, fig. 2127; Él. Cér. ii. 16: see also Hartwig, Meistersch. p. 255, note 2.

1730Berlin 639, 871, 885 = Ant. Denkm. i. pl. 8, Nos. 7, 14, 23.
1731Berlin 608 ff.; 800 93: cf. op. cit. pl. 8, Nos. 14 b, 17, 18 ( $=885,869,868$ ); also Nos. 1, 4, 12, 19 b, 22, 26 (= Berlin 608, 802, 616, 893, 827, 611). See also Chapter V., Figs. 65, 69.

1732B.M. B 432; Munich 731 = Fig. 67, Vol. I. p. 213; Gaz. Arch. 1880, p. 106.
1733Figs. 67, 71, Vol. I. pp. 213, 223.
1734Fig. 70, Vol. I. p. 218.
1735Fig. 74, Vol. I. p. 228.
1736Hartwig, Meistersch. pl. 17, 1, and see ibid. p. 174; Kopenhagen 125; Millingen, Anc. Uned. Mon. pl. 37.

1737Berlin 831 = Ant. Denkm. i. pl. 8, fig. 3 a. See on the subject Rev. Arch. iii. (1904), p. 45 ff.
1738Berlin $2294=$ Baumeister, i. p. 506, fig. 547.
1739B. M. B 507; Reinach, i. 224 = Baumeister, iii. p. 1582, fig. 1639 (in Boston).
1740J.H.S. xxiv. p. 305; Branteghem Cat. 44. See also Él. Cér. i. 83.
1741Kopenhagen $119=$ Schreiber-Anderson, 73, 7.
1742See p. 40: cf. also for a sculptor, p. 16, note 53.
1743 Berlin $1806=$ Fig. 136 (Nikosthenes); Louvre F 77 = ibid. fig. 13; Froehner, Musées de France, pl. 13, 1 (sowing).

1744B.M. F 147: see p. 73, and Robert, Arch. Märchen, pl. 5, p. 198 ff.
1745 Berlin $2274=$ Él. Cér. ii. 74.
1746Louvre F 68.
1747Louvre F 69 = Wiener Vorl. 1888, pl. 1, figs. 9-10; ibid. pl. 1, figs. 2, 7.
1748Vienna $335=$ Schreiber-Anderson, pl. 64, figs. 1, 3; ibid. pl. 64, fig. 6 (in Naples); Hartwig, Meistersch. pl. 5; and see under Hermes and Seilenos.

1749Reinach, ii. 90.
1750B.M. B 226; Berlin 1855 = Baumeister, ii. p. 1047, fig. 1259.
1751 Forman Sale Cat. 323 (now in Boston): cf. B.M. Cat. of Terracotta, D 550.
1752 Helbig, $70=$ Reinach, i. $106=$ Baumeister, ii. p. 1047, figs. 1260-1261; Boston Mus. Report, 1899, p. 69, No. 24.

1753Louvre E 635 = Reinach, i. 151; Boston Mus. Report, 1899, p. 70, No. 25.
1754Berlin $1915=$ Reinach, ii. 155.
1755Froehner, Musées de France, pl. 13, 2; Eranos Vindobonensis, p. 381 (woman kneading dough).

1757Vol. I. p. 342: see also p. 149.
1758B.M. E 86; Reinach, i. 224 = Baumeister, iii. p. 1587, fig. 1649 (in Boston).
1759B.M. E 23.
1760Micali, Storia, pl. 97, fig. 3.
1761B.M. B 339; Louvre F 10, F 56.
1762B.M. В 160, В 174, В 257; В 485; J.H.S. xxiii. pp. 133, 137, 142.
1763B.M. E 810, D 11 (Plate XLIII.); Berlin 2372 (= Coll. Sabouroff, i. pl. 58), 2373 (= Reinach, i. 440); Athens 1224 and 1225 = Heydemann, Gr. Vasenb. pl. 10, 1, and Reinach, i. 206; Athens $1588=\$ 1 \$ 2$ 1897, pl. 10, 2 (preparations for marriage, with fancy names): see generally Wiener Vorl. 1888, pl. 8.

1764Baumeister, i. p. 313, fig. 328.
1765Millingen-Reinach, 44 (in Louvre); Inghirami, Vasi Fitt. iv. 314.
1766Berlin $2374=$ Reinach, i. 128.
1767Reinach, i. 173; J.H.S. xxiii. p. 133.
1768Athens 693.
1769Petersburg $151=$ Thiersch, Tyrrhen. Amph. pl. 5.
1770Berlin $1841=$ Reinach, ii. 44 (B.F.); Athens $1552=$ Heydemann, Gr. Vasenb. pl. 8, 5; Berlin 2261 = Reinach, i. 440, and 2720 = Coll. Sabouroff, i. pl. 64; Reinach, i. 2 (Petersburg 1791), 472 (= Jatta 1526), 477 (= Naples S.A. 316, with fancy names).
1771B.M. E 225, 773-74, F 308, 310; Schreiber-Anderson, 83, 4.
1772B.M. B 598, E 87, E 193, E 215, D 13; Athens 1550, 1552, and $1589=$ Reinach, i. 517 (note the use of the غ́nívŋт $\rho$ р ); Louvre F 224 = Él. Cér. iii. 36 B; Stackelberg, 34; Reinach, i. 420, ii. 7, 4: see Hartwig, Meistersch. p. 340.

1773Dumont-Pottier, i. pl. $8=$ Schreiber-Anderson, 82, 4.
1774Baumeister, iii. p. 1711, fig. 1796.
1775Boston Mus. Report, 1900, p. 41, No. 10.
1776Baumeister, iii. p. 1583, fig. 1641.
1777 Ibid. i. p. 609, fig. 668.
1778B.M. E 18; Louvre G 2; Berlin 2272 = Hartwig, Meistersch. p. 89; Reinach, ii. 146, 7.
1779Baumeister, iii. p. 1919, fig. $2034=$ Reinach, ii. 148.
1780Louvre F 114 = Plate XXX.; B.M. F 101, 207.
1781Schreiber-Anderson, 82, 12; B.M. F 139, 207, 342.
1782Schreiber-Anderson, 83, 14.
1783Berlin 1843 (= Baumeister, i. p. 243, fig. 221), and 2707 (= Coll. Sabouroff, i. 62, 2); Jatta 654 $=$ Gaz. Arch. 1880, pl. 19; Millin-Reinach, ii. 9 (frontispiece); Reinach, ii. 146, 328, 1; Baumeister, i. p. 242, fig. 220; B.M. D 29, E 90, 201-2; and see generally Hartwig, op. cit. p. 599.

1784Louvre F 197 and F 203 = Amer. Journ. of Arch. 1896, p. 3 = Schreiber-Anderson, 57, 5.
1785B.M. F 311; and see Él. Cér. iv. 10-22.
1786B.M. B 329-38; Louvre F 296; Reinach, ii. 151: cf. B.M. E 159 and Athens 1429 = Heydemann, Gr. Vasenb. pl. 9, 2.

1787B.M. D 6; Munich 142: cf. Berlin 1841 = Reinach, ii. 44.
1788B.M. E 241, E 721; Branteghem Sale Cat. 98-9.
1789Athens $1550=$ Heydemann, op. cit. pl. 9, 5.
1790B.M. E 34.
1791B.M. E 769.

1792B.M. E 190.
1793B.M. E 88.
1794 Branteghem Cat. 167.
1795Naples R.C. 117 = Reinach, i. 490, 22.
1796Munich $903=$ Reinach, ii. 110.
1797B.M. B 53, B 163, B 409; Berlin 3993 = Coll. Sabouroff, i. pl. 51.
1798Bibl. Nat. 94; Athens $466=$ Plate XLVII.
17990xford 320.
1800B.M. E 396.
1801 Branteghem Cat. 163.
1802Petersburg 875 = Reinach, i. 39: cf. Hartwig, Meistersch. pl. 27.
1803B.M. F 232; Athens 1031 = Heydemann, Gr. Vasenb. pl. 9, 3; Reinach, i. 473; Mus. Borb. vii. 58; Mon. Barone, pls. 3, 9; and see pp. 165, 182.

1804See p. 169.
1805See on the subject Winter in Arch. Zeit. 1885, p. 187 ff.; and Mon. Grecs, 1885-88, p. 25 ff.
1806B.F.: B.M. B 165, B 657; J.H.S. xviii. p. 293; Bibl. Nat. 172 and $203=$ Reinach, ii. 95. R.F.: Louvre G 47-8; Bologna 274; Helbig, 167 and 174 (= Reinach, ii. 133); Reinach, ii. 114; Vienna $324=$ Wiener Vorl. vii. 1 (Duris).

1807B.F.: B.M. B 147, B 309, B 360; Louvre F 12, F 39, F 53, F 150; Reinach, ii. 124, 131. R.F.: B.M. E 254, E 276, E 448; Louvre G 44; Baumeister, iii. p. 2034, fig. 2207 (Duris). Late: B.M. F 158, F 174; Munich 382 = Furtwaengler and Reichhold, pl. 35.

1808B.F.: Ant. Denkm. ii. 44-5 (Proto-Cor.); B.M. B 75, B 199, B 212, B 400; Athens 623; Bourguignon Cat. 14. R.F.: B.M. E 7, E 33, E 43, E 808; Röm. Mitth. 1890, p. 332. Late: B.M. F 175, F 215. Horseman and foot-soldier: two uncatalogued in B.M.

1809See pp. 3, 7, 126.
1810B.M. B 224, B 243; Athens 1161 = Hartwig, Meistersch. p. 87; Reinach, ii. 129, 131, 4, 133.
1811J.H.S. xviii. p. 293; Bibl. Nat. $203=$ Reinach, ii. 95.
1812Munich 374 = Fig. 137; Millin-Reinach, i. 39; and see under Hector, p. 127.
1813B.M. E 405.
1814Anzeiger, 1892, p. 165: cf. Reinach, ii. 133 and Ar. Ach. 574.
1815Louvre G 5: see Hartwig, Meistersch. p. 122, note.
1816B.M. E 33; Munich 1229; Forman Sale Cat. 337 (in Boston); Hartwig, op. cit. pl. 14, 1: cf. Berlin $2296=$ Reinach, i. 428, and B.M. E 598.

1817See note 1815; also Festschrift für O. Benndorf, p. 66.
1818B.M. B 303-05; Berlin 1897 = Reinach, ii. 124; Jahrbuch, iv. (1889), pl. 10; Louvre F 285, F 345.

1819Reinach, ii. 198.
1820See pp. 118, 127.
1821B.M. B 15, B 206, B 523; Louvre F 9; Reinach, i. 462, 1; ii. 255 = Bibl. Nat. 227; Burlington Fine Arts Club Cat. 1888, No. 108 = 1903, No. 21, p. 102 (Andokides).

1822Athens 618 = Baumeister, iii. p. 1963, fig. 2098.
1823Reinach, ii. 128; B.M. B 24; Louvre E 609 = Reinach, i. 395 (Chares); and Fig. 88, Vol. I. p. 297.

1824B.M. E 476: Louvre G 54 = Reinach, ii. 7; Petersburg 1692, 1711 = Reinach, i. 43-4: see B.M. E 65, Louvre F 19, F 70, and Vienna 324 = Wiener Vorl. vii. 1 (Duris).

1825B.M. B 51: see under Nike, p. 88.

1826 Berlin $1718=$ Reinach, i. 393; Helbig, ii. p. 301, No. $77=$ Reinach, ii. 107 (may be Ajax with body of Achilles).

1827J.H.S. xix. pp. 227-28; and cf. B.M. B 171 (inspection of liver), B 641; Bibl. Nat. 400; Reinach, ii. 131, 1 (hoplite taking oath); Louvre G 46.

1828Reinach, i. 203 = Wiener Vorl. D. 2, 2-3; B.M. B 380; Louvre F 127, G 5: bust of warrior, Louvre F 137.

1829B.M. B 470, B 618; Louvre F 292, G 25; Engelmann-Anderson, Od. xiii. 71: see Hartwig, Meistersch. pl. 9, p. 106, note.

1830Berlin 1879.
1831Berlin 2304.
1832Reinach, i. 372.
1833See Jahrbuch, 1901, pl. 3.
1834B.M. B 658.
1835B.M. В 149, В 360.
1836B.M. B 590-91; Louvre G 70; Helbig, 292; Munich 4 = Reinach, ii. 57; Jahrbuch, iv. (1889), pl. 4. As shield-device: Vienna 332 (a negro); Reinach, i. 77; Benndorf, Gr. u. Sic. Vasenb. pl. 46, 1.

1837B.M. E 285; Hartwig, Meistersch. pl. 18, 1, and see p. 185.
1838See p. 179, note 1853; also Plate XXXVII. fig. 2, and Jahrbuch, 1889, pl. 4.
1839Anzeiger, 1889, p. 93; B.M. E 759; Hartwig, p. 368, note: cf. p. 186.
1840B.M. B 426; Berlin 2296 = Reinach, i. 428; Helbig, 54; Mon. Grecs, 1885-88, p. 11: see also Helbig, Eine Heerschau des Peisistratos, and Les 'Іппغĩऽ Athéniens, p. 71 ff.

1841Reinach, i. $486=$ Boston Cat. p. 137.
1842B.M. B 60; Louvre A 526; Plate XVI. (Aristonoös krater); Reinach, i. 190, 4, 328, 6, and 459 (Dipylon).

1843J.H.S. xix. pl. 8; Louvre A 525-532; Mon. Grecs, ii. (1882-84), pl. 4, pp. 44-57; and see Chapter VII.

1844B.M. B 436; Berlin 836; Louvre E 735 and F 123 (= J.H.S. 1885, pl. 49); Forman Sale Cat. 322; Reinach, ii. 19 = Baumeister, iii. p. 1599, fig. 1662.

1845B.M. B 436; Berlin 646 ff., 831; Louvre F 145 (?).
1846B.M. B 679, E 2 (Plate XXXVII.); Bibl. Nat. 322; Bourguignon Sale Cat. 14; Louvre F 123, F 145.

1847Louvre F 62; Vienna 235; Naples R.C. 246; Munich 781 = Reinach, ii. 126; Petersburg 10 and 86; Würzburg 337 = Reinach, ii. 141; Rev. Arch. xxxvi. (1900), p. 323; Wiener Vorl. 1888, pl. 5, 3.

1848Athens $969=$ Reinach, i. 415.
1849See above, p. 148.
1850B.M. B 173, B 280, B 323; F 278.
1851Cf. B.M. B 184, 207, 243, 246, etc.
1852See generally Zahn, Die Barbaren, and Hartwig, Meistersch. passim.
1853B.M. E 6; Louvre F 126, F 388, G 45; Jahrbuch, 1889, pl. 4; and see above, p. 177.
1854B.M. B 184, B 207, B 426; Reinach, i. 376 (?).
1855Wiener Vorl. vi. 5; Bourguignon Cat. 14.
1856B.M. B 590-91.
1857B.M. E 233; Berlin 2295; Reinach, ii. 84; Hartwig, Meistersch. pls. 55-56.
1858Ath. Mitth. 1898, pl. 5.
1859B.M. E 695.

1860Ath. Mitth. 1892, pl. 1; Oxford $310=$ Klein, Lieblingsinschr. ${ }^{2}$ p. 87.
1861See p. 151.
1862Röm. Mitth. ii. (1887), pl. 9, p. 172; Munich 374 = Fig. 137; Plate XXXVII. fig. 2.
1863Bibl. Nat. $473=$ Reinach, i. 131.
1864Boston Mus. Report, 1900, p. 72.
1865Hartwig, Meistersch. pls. 38-9; and see ibid. p. 422.
1866B.M. E 481-82; and see pp. 80, 143.
1867Louvre G 26: cf. Mon. Grecs, 1885-88, pl. 6, p. 11.
1868Munich 337 = Klein, Euphronios, p. 82; Mon. Grecs, 1885-88, pl. 5; and see pp. 166, 177.
1869B.M. E 301; J.H.S. ix. pl. 6; Reinach, i. 63.
1870B.M. B 673-74; Athens 1088; Ath. Mitth. 1889, p. 45: cf. Louvre G 93; another unarmed, G 100. On Vienna 332 a negro trumpeter occurs as a shield-device.

1871Petersburg 1603.
1872Benndorf, Gr. u. Sic. Vasenb. pl. 42.
1873Louvre G 100.
1874B.M. B 106_1.
1875B.M. F 197, 241-42 (see Plate XLIV.), 297, 301, 525; Reinach, i. 292-93.
1876B.F.: B.M. B 46, B 382, B 679; Louvre F 2, F 216, F 314; Gaz. Arch. 1887, pl. 14, 1. R.F.: B.M. E 38, 49, 68, 70; Munich 272 = Hartwig, Meistersch. pl. 15, 1; Helbig, 225 and 227; Reinach, ii. 4. Late: B.M. E 495, F 303; Naples 2202 = Dubois-Maisonneuve, Introd. pl. 45, and R.C. $144=$ Schreiber-Anderson, 76, 2; ibid. pl. 76, 4 = Millingen-Reinach, pl. 8; Millin-Reinach, ii. 58.

1877See pp. 57, 105.
1878Bibl. Nat. 94.
1879B.M. E 351, E 474.
1880B.M. B 46, 301-2, 382, 679, E 66, E 454.
1881Louvre G 98; Athens $691=$ Ath. Mitth. 1889, pls. 13-4 (Xenokles and Kleisophos); Cab. Pourtalès, 34; Mus. Greg. ii. 81, 1 a.

1882Reinach, ii. 247: see Jahrbuch, 1893, p. 180.
1883Louvre G 25; Mus. Greg. ii. 81, 1 b; Hartwig, Meistersch. pls. 14, 2, 48, and p. 332; Wiener Vorl. viii. 5.

1884See Klein, Euphronios, ${ }^{2}$ p. 115, for a collected list of examples; also the following notes.
1885Louvre G 30; B.M. E $70=$ Fig. 138, E 161, E 454, E 795; Berlin 4221; Naples 822, 965, 972, 2415, S.A. 281.

1886It is worth noting that on the best R.F. vases mortals play the game; on the later ones gods and Satyrs. It must have disappeared from social life about the end of the fifth century.

1887B.M. F 37; Naples 903, S.A. 302, R.C. 144, 145, 2308; Berlin $2416=$ Reinach, i. 337; Archaeologia, li. pl. 14; and see Vol. I. p. 452 for a curious variant.

1888B.M. F 50, 175-77; Inghirami, Vasi Fitt. ii. 197.
1889B.M. F 161, F 273, F 275, F 304, F 425; F 579 = Fig. 118 (Eros).
1890Louvre G 30; Mus. Greg. ii. 83, 1 b, and 85, $2 b$.
1891Louvre F 216; Reinach, ii. 329, 5: see also ibid. ii. 6, 304, 5; Mus. Greg. ii. 81, 1a; Inghirami, Vasi Fitt. pls. 273, 356.

1892B.M. E 14, 38, 61, 68; Reinach, ii. 4.
1893See pp. 165, 174.
1894Athens 1158; and see p. 169.

1895 Petersburg $1670=$ Reinach, i. $32=$ Wiener Vorl. v. 2; Reinach, ii. 290, 2 ( $\kappa \tilde{\omega} \mu \circ \varsigma$ of women).
1896B.M. E 61 (Hieron).
1897B.M. E 71, 474, 484, 489, 506, 767; Reinach, ii. 94, 7; Mus. Greg. ii. 84, 2 a; Hartwig, Meistersch. pl. 11 and p. 41; Wiener Vorl. viii. 5 (Brygos in Würzburg).

1898B.M. E 33, 46, 53, 508; Forman Sale Cat. 317; Reinach, ii. 120.
1899B.M. B 299; and see above, p. 169.
1900B.M. E 137, E 488; Reinach, ii. 68, 290, 301, 313; Mus. Greg. ii. 54, 1 a, 2 a; 78, 2 a; Hartwig, op. cit. pl. 36, pp. 333, 335; Inghirami, Vasi. Fitt. 198.

1901B.M. E 54; Hartwig, op. cit. pls. 11, 20.
1902B.M. E 37; Louvre F 129, G 73; Hartwig, op. cit. pls. 8, 11; and see Berlin 2265, and Jahrbuch, 1891, pl. 5, fig. 2.

1903See above, p. 57 ff.
1904Hartwig, op. cit. pl. 49.
1905B.M. B 41; Berlin 2171; Froehner, Musées de France, pl. 40, 2.
1906B.M. Cat. of Vases, iv. passim; Bibl. Nat. 905 is a good typical example.
1907See Vol. I. p. 21: cf. Christie, Disquisitions, passim.
1908B.M. E 648, 705-9, 778-83 (see Plate XLII.); Athens 1941 = Jahn, Vasen mit Goldschmuck, pl. 1.

1909B.M. E 61; Munich 819 = Millingen-Reinach, 26; Berlin 2279 = Hartwig, Meistersch. pl. 25 (very fine); Reinach, i. 207; Helbig, 218 = ibid. ii. 146; and see Hartwig, p. 238.
1910See Klein, Euphronios, p. 26, and Hartwig, Meisterschalen, passim; also Vol. I. p. 426.
1911Athens 1161 = Hartwig, op. cit. p. 87; Hartwig, pl. 27 (from exterior of kylix).
1912B.M. E 2: cf. E 16, E 27; Louvre F 129 (youth balancing amphora).
1913Athens 1162 = Hartwig, op. cit. p. 87; Hartwig, pl. 19, 2 (in Louvre), and p. 178; Louvre G $17=$ Wiener Vorl. 1890, pl. 10.

1914Cambridge $71=$ Hartwig, pl. 2, fig. 3.
1915B.M. E 46; Hartwig, p. 86; and see Wiener Vorl. vi. 8.
1916Louvre G 40.
1917Louvre G 70, 96.
1918B.M. E 57.
1919Hartwig, pl. 70, 1: cf. Il. iii. 33.
1920J.H.S. xvii. p. 75 = Fig. 82; Amer. Journ. of Arch. 1890, pl. 22, p. 437 ff.; Arch. Anzeiger, 1893, p. 9 (vase in Marseilles).

1921Berlin 2324 = Wiener Vorl. 1890-91, pl. 7, 1.
1922B.M. E 1; Bibl. Nat. 128; Boston Mus. Report, 1899, No. 21; Mus. Greg. ii. 31, 2; Reinach, ii. 225 (lion and panther fighting).

1923Gsell, Fouilles de Vulci, pl. 9 (in Boston).
1924B.M. B 382, E 4; Louvre F 84 and F 54 = Fig. 96, Vol. I. p. 381.
1925Louvre F 125 (ram); Berlin 4042 (bull) and 2266 (horse); Munich 1171 and Mus. Greg. ii. 64, 3 a (cock). Also on exterior of B.F. kylikes: cocks and hens, B.M. B 391-92; Louvre F 92, F 380; Bibl. Nat. 317; Reinach, ii. 171. Lion and bull, Louvre F 313. Apes, Sale Cat. Hôtel Drouot, May 1903, No. 71. See generally Hartwig, Meistersch. p. 565.

1926Hartwig, op. cit. pl. 63, 1.
1927Bibl. Nat. 175-76.
1928Munich 468 = Philologus, 1898, pl. 1.
1929Schreiber-Anderson, pl. 80, 3.

1930Berlin 2517 = Coll. Sabouroff, i. pl. 65.
1931Reinach, i. $96=$ Baumeister, iii. p. 1985, fig. 2128. For the inscription on this vase, see Chapter XVII.

1932See Schreiber-Anderson, pl. 63, 6; B.M. Cat. of Vases, iv. p. 19, F 254-68, and references there given; also Vol. I. pp. 194, 487, Plate XLIV.

1933B.M. B 57, B 58; Louvre E 703 = Reinach, ii. 92; Bibl. Nat. 172.
1934B.M. B 28, B 31; and see p. 185, note 1925.
1935Rayet and Collignon, p. $330=$ Reinach, i. 503: see p. 273.
1936R.F. kalpis in Louvre; Anzeiger, 1889, p. 93; B.M. E 759: see for this and the following subjects Hartwig, Meistersch., p. 368, note; also p. 177 above.

1937Louvre F 127 (Pamphaios).
1938Munich 1170.
1939Munich 1223.
1940B.M. E 771.
1941In South Kensington Museum.

# CHAPTER XVI DETAILS OF TYPES, ARRANGEMENT, AND ORNAMENTATION 

Distinctions of types-Costume and attributes of individual deities-Personifications-Heroes-Monsters-Personages in every-day life-Armour and shield-devices-Dress and ornamentsPhysiognomical expression on vases-Landscape and architecture-Arrangement of subjectsOrnamental patterns-Maeander, circles, and other geometrical patterns-Floral patterns-Lotos and palmettes-Treatment of ornamentation in different fabrics.

It may be profitable to supplement the foregoing account with a few general considerations, such as the attributes, emblems, and costume by which the different figures may be distinguished, the general treatment of the subjects at different periods, and the use of ornamental motives in the various stages of Greek vase-painting.

## § 1. Distinctions of Types

In the earlier vase-paintings deities are often not only indistinguishable from one another, but even from kings and other mortal personages, attributes and subtle distinctions of costume being ignored; and in the period of decline a similar tendency may be noted, due in this case not so much to confusion of ideas as to a general carelessness of execution and indifference to the meaning of the subject. In the former vases it was, doubtless, largely the result of conventionality and limitation in the free expression of forms; but it is a peculiarity not confined to painting, and may be observed not only in the minor arts, in terracotta and bronze figurines, but even in sculpture of a more exalted kind-as, for instance, in the female statues from the Athenian Acropolis. Thus, all the deities are draped, and their costume differs in no respect from that worn by mortals; all alike wear the chiton, himation, or chlamys, and ornamentation of the drapery with embroidered patterns is no mark of distinction. It is only as the art advances in the B.F. period that the necessity for differentiation makes itself felt, and each deity becomes individualised by some peculiarity of costume or special attribute which makes it possible to recognise them without difficulty. To give a brief survey of these characteristic marks will be the object of the following pages. ${ }^{[1942]}$
Among the Olympian deities, Zeus is generally bearded, and fully draped in long chiton and mantle; on R.F. vases he wears a laurel-wreath. He fights the giants from his chariot, but otherwise is standing, or seated on a throne, which is often carved and ornamented with figures. ${ }^{[1943]}$ He usually holds a thunderbolt, or a sceptre, surmounted by an eagle or otherwise ornamented; in one or two cases the termination is in the form of a lotos-bud, curiously conventionalised. ${ }^{[1944]}$ Hera is distinguished by the stephane or broad diadem, often ornamented, and covered with the bridal veil, the edge of which she draws forward with one hand in the attitude considered typical of brides. Her sceptre is sometimes surmounted by her emblem-the cuckoo.
Poseidon, on the Corinthian and Attic B.F. vases-on which he is but a rare figure-is often hardly to be distinguished from Zeus, the approximation of the types extending even to their emblems. Where he holds in addition a dolphin or tunny-fish, there is, of course, no doubt as to his presence; nor, again, in the Gigantomachia, where he wields a rock (see p. 13, and Fig. 112); but his trident, which subsequently becomes the unmistakable evidence of his identity, often assumes (as on the Corinthian pinakes) the form of a sceptre ending in a lotos-bud, ${ }^{[1945]}$ which is typical of Zeus, and, indeed, of Olympian deities generally. The other sea-deities are, however, of a more clearly defined type. The essential feature of Triton is the fish-tail in which his body terminates. Nereus, on the other hand, is represented as an old man, bald and grey-bearded. In this form he contends with Herakles (see p. 101), and it may be that the differentiation was necessary to avoid confusion with the Triton type. As attributes he often holds a dolphin or tunny-fish, and a trident or sceptre. The winged deity with a long sinuous fish-tail seen on early Corinthian vases is probably Palaemon (see p. 26); but in one case this deity is feminine. ${ }^{[1946]}$ Amphitrite, as the feminine consort of Poseidon, holds a sceptre or tunny-fish, and Thetis and the Nereids appear in ordinary female form. The former, however, in her struggles with Peleus, is accompanied by lions, serpents, and other animals, which indicate the transformations she was supposed to assume. Skylla appears as described in Homer, with fish-tail and the fore-parts of dogs issuing from her waist, which is encircled by a fringe of scales or feathers.
Demeter and Persephone are not always distinguishable from one another, both having the same attributes-a torch or ears of corn (cf. Plate LI.). Their identification depends rather on the nature of their respective actions in the scenes where they appear. Triptolemos is always seen in his winged two-wheeled car (sometimes drawn by serpents), and usually holds ears of corn or a libation-bowl; on B.F. vases he is bearded. The other Eleusinian deities, on the late R.F. vases where they occur, are marked by the large torches which they hold.
Apollo on the B.F. vases almost invariably occurs in his character of Kitharoidos, ${ }^{[1947]}$ the lyre which he holds being of the form known as kithara (on later vases it is a chelys); he is therefore, like all musicians, fully draped in long chiton, and his hair falls in curls on his shoulders, or is gathered in a $\kappa \rho \omega \beta \nu \lambda o \varsigma$. Unlike most gods, he is at all times youthful and beardless. ${ }^{[1948]} \mathrm{He}$ is also represented holding a laurel-branch, shooting an arrow from his bow, or riding on a swan or Gryphon, or accompanied by a hind or other animal. His sister Artemis is draped in long chiton and mantle, and often wears a high cap on B.F. vases; it is not until the later R.F. period that she appears in hunting costume, with knotted-up hair, short chiton, and high laced-up hunting-boots or endromides; sometimes also a fawn-skin. She is usually distinguished by her bow and arrows, and is accompanied by a hound, deer, goat, or other animal. ${ }^{[1949]}$

Hephaistos is usually bearded, ${ }^{[1950]}$ and often appears in the workman's dress of the exomis or short chiton covering one shoulder, and high conical cap; his craft is further symbolised by a hammer or tongs, or by the axe with which he brings Athena forth from the head of Zeus. In the Gigantomachia he uses his tongs with savage violence against an unfortunate opponent (see p. 14). Ares is the typical Greek fully-armed warrior, bearded, with helmet, short chiton, cuirass, and greaves, sword, spear, and shield; but is not otherwise to be distinguished. Hermes, as the messenger of the gods, appears in appropriate costume of chlamys and petasos (the Greek travelling-hat), and carrying the caduceus or herald's staff; he usually wears high boots, and on the earlier vases a short chiton in addition. He is occasionally winged, but it is more usual to find the wings attached to his petasos or boots. On B.F. vases he is always bearded, but not after the sixth century. Hestia, who but rarely occurs on vases, forms a pair to Hermes in assemblies of the gods, but is not distinguished further than by the Olympian lotos-sceptre.
Athena on the earlier B.F. vases is not always distinguished from an ordinary woman; later, the helmet, spear, shield, and aegis become inseparable adjuncts of her costume, the shield being always circular in form. The spear, which is sometimes her only characteristic, is usually brandished or couched in her right hand, and sometimes she holds her helmet in her hand (see Plate XXXVI. and p. 40). Her costume consists of a long girt chiton, over which the peplos or small mantle is thrown, and the aegis round her chest. The latter is covered with scales and has a fringe of rearing serpents, and sometimes, on later vases, the Gorgon's head in the centre of the front. On the Panathenaic amphorae she is always represented in the Promachos attitude, at first to left, but later to right, brandishing her spear. At either side of her are columns surmounted by an owl, a cock, or other emblems. On the later specimens her figure is greatly elongated, and her drapery is often elaborately embroidered with patterns in purple and white. Her statue when represented is usually a mere reproduction of the living type; but on some later vases there seems to be a reminiscence of the Parthenos or other statues (see p. 40).
Aphrodite is less individualised than any other deity, at any rate on the earlier vases, on which she is invariably draped in the ordinary manner. She sometimes carries a lotos-headed sceptre (as in Judgment of Paris scenes). Occasionally she is represented armed. On the later vases the influence of fourth-century sculpture becomes apparent in the treatment of this, as of other deities. She now first appears nude (when bathing or washing), scantily clad or half draped, and in transparent Coan draperies, through which the outlines of her form are visible. She has no characteristic attribute, but is frequently represented with a dove or other bird. The types of Eros have already been fully discussed (p. 45); briefly it may be said that on the Attic R.F. vases he is a full-grown nude youth with wings; on those of Southern Italy the type is more boyish, though never the child or putto of the Hellenistic Age, and in Apulia the androgynous type, with hair arranged in feminine fashion and jewellery profusely adorning his person-earrings, necklace, chains, and anklets-is invariable.
Dionysos is distinguished primarily by the ivy-wreath which crowns his head; he generally wears a long chiton and mantle, but on the latest vases is frequently nude. On all B.F. vases, and often on those of the R.F. period, he is bearded, and it is only on those of Southern Italy that he appears as a somewhat effeminate youth, half draped like Apollo, with rounded and graceful limbs. His attributes are the rhyton or keras (only on B.F. vases), the kantharos, a form of drinking-cup specially associated with him, a vine-branch, and the thyrsos; he is accompanied by panthers and other animals, or swings the limbs of a kid ( $\chi$ ц $\alpha \iota \rho о \varphi o ́ v o \varsigma)$. Usually he maintains a calm and unmoved attitude amid the wild revelries of his followers. Ariadne is undistinguished except by her association with him. Pan, who only occurs on later vases, is almost invariably represented as a beardless youthful figure, with goat's horns, but human legs; when, however, he has goat's legs or feet, he is usually called Aegipan, and in this aspect he assumes a somewhat dwarfish and more bestial aspect. ${ }^{[1951]}$
Satyrs are either elderly and bearded, or youthful; in all cases with pointed ears and horses' tails, and undraped except for the fawn-skins which they frequently wear. They carry a thyrsos, drinkingcups, or musical instruments, according to the circumstances in which they are depicted. In Ionic art (Vol. I. p. 353 ff.) the Satyrs invariably have horses' feet as well as tails, and are usually of repulsive appearance. The Seileni are really aged Satyrs, depicted as bald or white-haired, but not otherwise differentiated, except in the case of Papposeilenos, who is covered with shaggy skin. ${ }^{[1952]}$ The Maenads are often represented (especially on B.F. vases) as ordinary draped women, or only with the addition of a fawn-skin or panther-skin over their chiton; they carry the thyrsos, or frequently on later vases a large tambourine (tympanon).
Of the personages associated with the under-world, Hades is usually an elderly bearded deity of the Zeus type. He carries a sceptre, often with ornamented top, and sometimes from his Chthonian association with Dionysos holds a kantharos, vine-branch, or cornucopia. Kerberos has three heads only on two Cacretan hydriae and the Apulian under-world vases; his usual number is two, but once or twice he has only one. ${ }^{[1953]}$ Hekate has torches for her customary attribute, and the Furies, who only occur on South Italian vases, wear short chitons with cross-belts and have rough hair, in which and round their arms serpents are intertwined. Charon the ferryman is represented as an elderly man in short chiton and conical cap (cf. Fig. 122), but the grim Etruscan Charun is a repulsive and savage hook-nosed demon, wielding a hammer. Thanatos and Hypnos, the two Death-deities, are both winged men, but only the former is bearded (cf. Fig. 123); there is usually nothing forbidding in his appearance. The question of the representation of ghosts or souls ( $\varepsilon$ í $\delta \omega \lambda \alpha$ ) has been fully discussed (p. 72); most commonly they are diminutive winged figures, and in other cases they appear as in ordinary life, ${ }^{[1954]}$ but possibly they sometimes appear in the form of birds. ${ }^{[1955]}$
Gaia is represented half rising out of the earth, a beautiful but not young woman, with long hair (Fig. 112); or, as Pandora, her head alone is seen (see p. 73). Kybele occasionally appears, with her
attendant lion, and an even rarer figure is Asklepios, with his serpent. The Eileithyiae, who attend at the birth of Athena, are ordinary women, distinguished by the appropriate gestures of their hands (Fig. 113). Iris, the female messenger of the gods, appears winged, with short chiton to allow of rapid movement, and carrying the caduceus or herald's staff; Hebe, on the other hand, is an ordinary woman. Nike is usually to be distinguished from Iris by her long flowing draperies, even when in flight; the various attributes usually associated with her have already been dealt with in detail (p. 87). ${ }^{[1956]}$
Among personifications, Helios is a youthful figure in a chariot, usually with rays round his head (as on Plate LIII.); in one or two cases his head is surmounted by a white disc; Selene appears on horseback, and is sometimes indicated by a crescent moon; where Helios is accompanied by a goddess in a chariot, it is probable that Nyx (Night) is intended (see p. 79). The Stars are represented as nude youths. The Aurae or breezes appear as girls floating through the air; the Hyades or rain-Nymphs are identified by their water-pitchers. A group of winged gods and goddesses is formed by Eos, Agon (the masculine counterpart of Nike), Eris, Lyssa (Frenzy), ${ }^{[1957]}$ and the various wind-gods, such as Boreas and Zephyros. These are found at all periods, but the types vary. Eris, who is only found on B.F. vases, resembles the Gorgons (see below), a somewhat grotesque figure with wings, rough hair, and short girt chiton; Lyssa only occurs on Apulian vases, and is akin in type to the Furies-in two instances her figure is enclosed in a circle of rays of light, perhaps to express the blinding effect of her action, and she holds a goad. ${ }^{[1958]}$ Oistros, a kindred figure, rides in a car drawn by serpents, and carries torches. The type of Agon is assimilated to that of Eros on R.F. vases; on those of earlier date (if this is the correct interpretation) he wears a short girt chiton and holds a wreath. The Wind-gods on B.F. vases wear the petasos and high boots, and short girt chiton; Zephyros is represented as a youth; and Boreas, who only occurs on R.F. vases, wears Thracian costume; he is bearded, and his hair is often rough and shaggy. But these winged deities cannot always be identified with certainty. Among other personifications, Geras is a somewhat ugly old man; the Muses are distinguished by their various musical instruments; and Cities and Countries are occasionally individualised. For instance, Thebes, on a vase by Assteas, wears a turreted crown; Sparta appears as a Nymph on horseback; and, generally speaking, their presence is usually indicated not only by inscriptions, but by their relation to the scene depicted. ${ }^{[1959]}$ River-gods, such as Acheloös, appear as human-headed bulls, with horns, but the last-named on a stamnos by Pamphaios (E 437 in B.M.) has a fish-tail.
Kastor and Polydeukes usually appear on horseback and in hunting costume, with petasos, chlamys, and spears; on later vases they sometimes wear the pileus, a conical cap which often appears as their emblem on coins. Herakles on earlier vases is always bearded, and wears the lion's skin fastened round his waist with a belt, the forepaws knotted round his throat ${ }^{[1960]}$; the head covers his head like a cap, leaving his face only exposed, and under it he wears a short girt chiton; he is armed with his club, or bow and quiver, and sometimes with a sword. On R.F. vases he is often nude, or only wears the skin in chlamys fashion. On the earlier vases he is often less characterised, and the same applies to the later R.F. vases, on which he is frequently beardless; in many cases he is only to be identified by his club. Theseus always appears as a youth, and on the R.F. cups usually wears a short loose chiton of crinkly material (cf. Vol. I., Frontisp.); his arms are a sword, or sometimes a club. Perseus wears the winged petasos or cap of darkness and high boots (the shoes of swiftness), sometimes winged; he carries the wallet or кíßıбıs, and sometimes the ớ $п п \eta$ or curved sword with which he slew Medusa. Pelops on the Apulian vases is usually characterised as an Oriental, with richly embroidered costume and a tiara or embroidered cap. The Homeric heroes are only to be identified by inscriptions, or by the actions in which they take part, but Paris is usually in Oriental costume; in Judgment scenes he holds a lyre, but when he takes part in combats he is attired as an archer, with bow and quiver, Phrygian cap, jerkin, and trousers. Kekrops, the mythical king of Athens, usually ends in a serpent's tail, to denote his autochthonous origin; Midas has ass's ears; Orpheus is recognised by his lyre, and sometimes wears, as a musician, feminine costume (see below, p. 197). ${ }^{[1961]}$
Of other mythological types the Amazons are, of course, always armed, frequently in the Oriental fashion, with Phrygian cap or kidaris and trousers; their weapons are the crescent-shaped shield or pelta, and a peculiar type of battle-axe, the sagaris. The Giants on B.F. vases are ordinary armed warriors, not even of exceptional size, but in later times they often end in serpents, as on the Pergamene frieze. Typhon appears in this form on a Chalcidian vase. ${ }^{[1962]}$ Geryon is represented in the manner described by Pausanias (vi. 19, 1), as "three men joined together," with distinctive arms and legs; on Chalcidian vases he has four wings, and is only triple from the waist upwards. The Centaurs on the more archaic vases, as on those of Ionia, appear as men with the body and hind legs of a horse attached behind; by the middle of the sixth century they appear in the familiar form of a human bust conjoined with a horse's body. The Gorgons are always rendered in grotesque fashion, with grinning faces and dishevelled hair intertwined with serpents; they wear short girt chitons and high winged boots, and have four wings, the upper pair recurved; usually on B.F. vases they appear in what is known as "the archaic running attitude," or, as the Germans more expressively phrase it, "Knielaufschema," the figures being represented as if kneeling on one knee. The same grotesque type of face, ${ }^{[1963]}$ with the protruding tongue and teeth, appertains to the Medusa's head or Gorgoneion, which is at all periods such a favourite decorative motive on vases, either as the interior design of a B.F. kylix, or as a medallion in relief on late vases. The more beautiful type of Medusa head is a creation of later date than most of the painted vases, but in the medallions on Italian vases much of the grotesqueness has disappeared.
Much confusion at one time existed between the conceptions of the Harpy and the Siren, both names being indiscriminately applied to the female-headed bird so common on vases of all periods. But there is ample evidence for the representation of the Harpy more in the style of the Gorgons, as
a purely feminine type, with the short chiton suited for rapid movement, high boots, and wings, and often in the conventional running attitude. ${ }^{[1964]}$ In this form they appear in one instance as feminine counterparts of the male Boreades. ${ }^{[1965]}$ The Siren types vary at different times, the earlier Sirens frequently having human arms. ${ }^{[1966]}$ The Sphinx is always a woman-headed winged four-footed beast; sometimes on Corinthian and Ionic vases she wears a high head-dress. The Gryphon ${ }^{[1967]}$ is a winged lion with eagle's beak, and often with erect ears; the winged Pegasos and the bull-headed Minotaur require no description.

Turning now to personages concerned in events of every-day life, we find great variety of costume and equipment, especially at different periods and under different circumstances. The vases, in fact, may be said to supply the most instructive locus classicus for Greek dress and ornament, as well as for minor details-such as weapons, implements, and furniture-of which they provide contemporary illustrations.
Kings are usually distinguished by dignified flowing robes, by the wearing of a wreath or headdress, or by the sceptre which they hold. ${ }^{[1968]}$ Oriental potentates wear the costume of their country, with lofty ornamented tiaras, or the Persian kidaris or kyrbasia-a peaked cap decorated with fringes and lappets. Their dress is often very elaborate on the later vases. Actors and musicians both wear appropriate costumes. The former, who hardly occur except on the Italian vases, wear the dress of the Old Comedy, with grotesque mask, padded stomach, loose jerkin, and trousers. ${ }^{[1969]}$ Tragic actors are seldom represented; but it has already been pointed out ${ }^{[1970]}$ that in the setting of the mythological scenes on the vases of Southern Italy there is an unmistakable reflection of the tragic stage, especially in the elaborate and somewhat exaggerated details of costume. Musicians invariably wear a long chiton, over which on R.F. vases they sometimes wear a short loose garment
 performers (recognisable by their beards) in distinctively feminine costume. ${ }^{[1972]}$
Athletes are invariably nude when performing their exercises, except in the case of the armed footrace (see p. 164); in the torch-race they seem to have worn high crowns; on the reverse of late R.F. vases they appear inactive, wrapped in mantles and conversing in groups. Hunters wear a distinctive costume of petasos and chlamys, and usually carry two spears. Boys on horseback are usually represented nude, and on Ionic vases have their hair tied in a tuft behind. ${ }^{[1973]}$ Charioteers are always attired in a long girt chiton reaching to the feet, which on Attic B.F. vases is painted white. They usually hold a goad in the right hand, the reins in the left. Heralds wear the attributes of Hermes-the petasos, caduceus, and high boots, with a chlamys or short girt chiton. Warriors on the early and B.F. vases are equipped in a fashion which tallies to some extent with the descriptions of Homer. ${ }^{[1974]}$ Their armour usually consists of a crested Corinthian helmet, a metal cuirass, under which is a short chiton, and greaves, to which are sometimes added the thigh-coverings known as parameridia. Some peculiarities may also be noted-such as the hooked projection on the front of helmets on the Ionic vases of Daphnae and the Clazomenae sarcophagi, ${ }^{[1975]}$ the linen cuirasses (indicated by white paint) sometimes worn on Attic B.F. vases, ${ }^{[1976]}$ or the heavy helmets with large cheek-pieces seen on the Caeretan hydriae (Plate XXVI.). The R.F. vases often represent the fully armed Athenian hoplite equipped in the same fashion as the B.F.; but in these, and more especially in the Italian vases, there is a tendency to omit much of the defensive armour. Cuirasses on R.F. vases are often decorated with patterns of scales or panelling. ${ }^{[1977]}$ Helmets on Italian vases often assume a local character, with conical crowns and two or three lofty plumes. ${ }^{[1978]}$
Of offensive armour, the full equipment consists of sword, spear, and shield. The two former call for no comment, but the shields, which are of two forms, the circular Argive or the indented oval Boeotian, present one feature of great interest-the devices with which they are adorned. ${ }^{[1979]}$ Investigations have failed to discern in these any symbolical or heraldic significance; they are not appropriated to particular personages, and all that can be noted about them is that they usually seem to suggest rapid movement. Thus we find an eagle or other flying bird, wheels, balls, chariots, a bent leg, a serpent, Pegasos, and so on. The passage in the Septem of Aeschylus ( 387 ff .), in which the shield-devices of the combatants are described, is of course familiar, and similar allusions are not wanting in Greek writers. ${ }^{[1980]}$ They are universal on B.F. vases, being painted in white on black ground, and are often found on the earlier R.F. vases in black on red; but they seem to disappear at an early stage of the R.F. period. Sometimes they consist only of letters of the alphabet, as on a Panathenaic amphora, where Athena's shield has the letters A to $\Theta$; on a B.F. vase in the British Museum are the letters A $\Theta E .{ }^{[1981]}$ Other peculiar subjects are a winged boar, two rams butting, a figure of Artemis, a white-bordered square, and a ladder. ${ }^{[1982]}$ Some of those on R.F. vases are somewhat elaborate-a Seilenos, ${ }^{[1983]}$ a fox eating grapes, ${ }^{[1984]}$ an armed runner, ${ }^{[1985]}$ or a warrior blowing a trumpet. ${ }^{[1986]}$ A variation is when the device takes the form of an object in relief-a Satyrmask, ${ }^{[1987]}$ Gorgoneion, ${ }^{[1988]}$ mask of Phobos (Panic), ${ }^{[1989]}$ or a Gryphon, ${ }^{[1990]}$ or a rearing serpent ${ }^{[1991]}$; or when a shield is surrounded by a fringe of serpents. ${ }^{[1992]}$ Shields frequently have a piece of fringed and embroidered stuff suspended from them, which seems to have served as a protection to the legs. ${ }^{[1993]}$
Archers are depicted in Oriental costume, wearing peaked caps with long lappets and a close-fitting dress of leather, consisting of jerkin and trousers, usually embroidered with various patterns. The different barbarian types which appear on vases-Persians, Scythians, Arimaspi, and Thraciansare more or less individualised, especially on the R.F. vases. Such subjects, indeed, were not really popular until the Persian wars. The details of Oriental costume have already been noted. Thracians on R.F. vases wear a long loose cloak known as the zeira and a cap of foxskin (alopeke) with long flaps, which dress is also worn by Boreas (see above). In the first half of the fifth century Oriental costumes seem to have had a period of popularity among the fashionable young men of Athens,
especially the knights; and they are often depicted riding in the zeira or striped and embroidered dresses of outlandish style (see pp. 166, 179). Egyptians are often realistically rendered, with shaven heads, ${ }^{[1994]}$ as are negroes and Aethiopians. The latter, like all barbarians on vases, usually wear trousers. On the vases of Southern Italy details of local (Osco-Samnite or Messapian) costumes often appear (see p. 180, and Vol. I. p. 483), especially in the case of helmets and breastplates worn by warriors on Campanian vases.
On the earlier vases, down to the end of the B.F. period, there is frequently no distinction between the dress of men and women, and to this fact may have been due the practice of painting the latter white to differentiate them. Both wear the long Doric chiton, with a mantle or himation thrown over it; but men often wear the smaller chlamys over the shoulders in place of the himation. Women, again, on the earlier B.F. vases, often appear without the himation, and wear a long chiton tightly girt at the waist, with a short apoptygma or fold falling over the breast. On R.F. vases the Doric chiton is sometimes worn by women, open down one side (known as the $\chi i ́ t \omega \nu \sigma \chi \imath \sigma$ óc). Men in the "strong" R.F. period wear a short loose chiton of fine crinkly linen. Generally in the R.F. period there is greater freedom of costume and variety of material and arrangement. The Ionic chiton is introduced about 500 b.c., but its vogue does not seem to have lasted long at Athens. In place of the apoptygma women sometimes wear a loose over-garment, known as the diplois. On the earliest vases men are often nude, with the exception of a loin-cloth or pair of tight-fitting "bathingdrawers." Women are practically never nude on vases, except when occupied in bathing or washing, or in the case of hetairae and jugglers.
The draperies, especially the chitons, are often richly embroidered with patterns, represented by incising and purple and white colours on the B.F. vases, by black paint on the R.F. On the former the women's chiton is often covered with a sort of diaper pattern of squares, filled in with circles and stars, or the dresses (both of men and women) are covered with groups of dots and flowers in white and purple. In the late fine R.F. period and on the vases of Lucania and Apulia the patterns become exceedingly rich and varied ${ }^{[1995]}$ : chequers, wave-pattern, palmettes, stars, egg-pattern, maeander, and all kinds of borders are introduced. A further extension of the principle is seen in the introduction of borders of figures, the most notable instances of which are on the François vase and the Hieron kotyle. ${ }^{[1996]}$ On the former the technique is remarkable as a kind of anticipation of red figures on black. Aristotle speaks of a garment made for Alkimenes of Sybaris on which deities were represented between borders decorated with Oriental figures, the subjects being the sacred animals of the Medes and Persians. ${ }^{[1997]}$ We may also cite the remarkable statue of Demeter found at Lykosura in Arcadia, the drapery of which is decorated with inlaid borders of figures, ${ }^{[1998]}$ and the mantle of Jason described by Apollonius Rhodius. ${ }^{[1999]}$
The hair of women on B.F. vases, and frequently also that of men, usually falls loose or in tight curls on the shoulders, with a fringe over the forehead. On the early R.F. vases men often wear their hair looped up behind in the fashion known as the $\kappa \rho \omega \dot{\beta} \nu \lambda o \varsigma,{ }^{[2000]}$ which, as we know from Thucydides, went out about 480 в.c. Women, on the other hand, have theirs knotted up and confined under a cap. On later R.F. vases and on those of Apulia their hair is usually gathered up in the opisthosphendone, or in a broad coif or fillets, and arranged in bunches of curls in front and behind. On late R.F. vases a radiated diadem, painted white, is often seen. Men are seldom represented with long hair after 480 b.c., but they usually wear a wreath or plain fillet. Head-coverings are rarely worn by ordinary persons, with the exception of the traveller's and huntsman's petasos; but Oriental personages usually wear a high cap of some kind (see above, under Barbarians). Jewellery -such as necklaces, earrings, armlets, or anklets-is comparatively rare on B.F. vases, but becomes more and more common, until it reaches profusion on those of Apulia. Bracelets and anklets are often in the form of serpents. Various forms of sandals or shoes are seen on later vases, but on the black-figured the only kind of footgear is the high boot or endromis, with a curved tag in front.

The extent to which physiognomical expressions are rendered on vases varies at different periods ${ }^{[2001]}$; but it is not true, as has sometimes been thought, that the artists altogether ignored such expressions in their figures; it was only in the earlier phases that this was the case, and even during the fifth century the advance was timid and slow, much more so than in sculpture. As a rule, in the same vase all the faces are alike, and no physiognomical distinction can be drawn between gods and heroes, or even between men and women, except (on the Attic vases) in the treatment of the eye. On the B.F. vases the ordinary type of face has a long nose, with a tendency to turn up, a pointed chin, deep rounded jaw, and large eyes, while the limbs are sinewy, angular, and tapering. Beards of some length are invariable for grown or elderly men; otherwise distinctions of age are hardly observed until the R.F. period. And as in sculpture of the archaic period all figures have the same conventional smile, so on the B.F. vases gods, heroes, and mortals alike all pursue the actions in which they are engaged with the same unvarying expression. The contrast of violent action and calm unmoved physiognomy is often quaint, and almost grotesque.
Indications of expression or sentiment are, in fact, rather implicit than explicit. They are given in a sort of shorthand fashion, just as Polygnotos in his great paintings, by some subtle touch-by a change of attitude or the action of a hand-indicated the emotion he wished to convey. In the different treatment of the male and female eye there is, no doubt, an attempt to give to the man a more lively expression by means of the round pupil, while the oval form of the woman's eye gives her a softer and less intense look. The neglect of this principle on Ionian vases, where the male eye is oval, seems to be a reflection of the effeminate tendencies of the Ionian races. ${ }^{[2002]}$ At an early date we may observe a special treatment of the eye to represent it as closed, in the case of a blind or dying person. Thus the Phineus of the Würzburg cup has merely an angular mark in place of an eye, representing the fall of the upper eyelid over the lower, or the eye is represented as a vacant
space without pupil. ${ }^{[2003]}$ The mouth is sometimes open to express pain or anger, as in the Nessos of the Proto-Attic vase, ${ }^{[2004]}$ or the quarrelling heroes on a vase in the Louvre (F 340). It is also used to express the agony of a dying or injured person, as on a vase with the outraged Polyphemos, ${ }^{[2005]}$ with which we may compare the dying warrior of the Aegina pediment. But all these are rather exceptions than the rule on B.F. vases.
After the time of Polygnotos the influence of painting makes itself felt, and we may recall that he perfected the advances of Kimon in this respect. Not only did the vase-painters learn from him how to dispose figures en face or in three-quarter view, but they also learned how to mark different expressions. It has also been observed that the influence of tragedy must have been strong at this time. The krater from Orvieto in the Louvre (Vol. I. p. 442) is a good instance of the progress made in the fifth century in this direction. On one side of the vase (see Fig. 103, ibid.) we have a dying Niobid and a youth with face to the front and eyes closing; on the other, in the Argonautic scene, a warrior holding his knees, with lower lip fallen, giving him a melancholy expression, and Herakles with a face of sadness, marked by wrinkles. Other figures show exactly in what direction they are looking (compare Kimon's figures "looking down or upwards"). ${ }^{[2006]}$ In the later developments of the Apulian vases, with their scenes drawn from tragic themes and represented in such dramatic fashion, there is plenty of ability to represent emotion, and in several cases it is accurately expressed, as in some of the scenes from the sack of Troy. But in other cases, as on the Assteas vase in Madrid (Fig. 107), much of the old quaintness and grotesqueness is apparent.

It is also necessary to treat of the methods adopted by the artist for indicating locality or landscape in his pictures, a thing which is often done in the briefest and most cursory manner. The germs of this principle are perhaps to be observed (as noted elsewhere, Vol. I. p. 312) in the floral groundornaments of the Corinthian and other early vases. In the more developed vase-paintings a sort of shorthand system is customary, a system which in some degree probably prevailed on the Greek stage, as on that of the Elizabethan drama. Thus a temple or a house is represented by a column, or two columns supporting a pediment, a wood or grove by a single tree, water by two dolphins swimming in the lower part of the design, and so on. A notable exception is in the palace depicted on the François vase, in which Thetis awaits the arrival of the bridegroom Peleus. So much of the building is given in detail that it is even possible to attempt a restoration. ${ }^{[2007]}$ On the same vase the walls of Troy are depicted, with a double door studded with nails. In the Hydrophoria scenes (p. 173) considerable attention is paid to the architectural details of the well-house, which was probably in the form of a small temple, perhaps circular, surrounded by a colonnade. The water issues from spouts in the form of lions' heads, and statues are often depicted in different parts of the building. The François vase also gives an illustration of a well-house, with portico supported by columns. The architecture is almost invariably Doric. In outdoor scenes rocks occasionally appear, but only where they are necessary to the subject, as in the ambuscade of Achilles for Troilos. The branches of trees which frequently cover all the vacant spaces of the design on later B.F. vases, especially in Dionysiac scenes, may be mainly intended for decorative effect.
In the R.F. period more and more attention is paid to landscape and architectural detail as the style develops, but there is still a strong tendency to adhere to the shorthand system-a tendency which increases rather than disappears, especially on the white-ground vases. The artist's object was always to make his figures stand out, as far as possible, clear against the background, and he therefore deliberately avoided anything likely to interfere with the desired effect. Landscape proper, with indications of ground-lines, rocks, and trees, was only introduced when the Polygnotan influence became strong, and the Orvieto krater in the Louvre may be once more cited as a good and early instance of a new development. Scenes in architectural settings are rare, but an exception may be noted in the case of some of the late R.F. vases with scenes in women's apartments, where careful attention is paid to the details of the door-ways, even to the locks and key-holes. ${ }^{[2008]}$ For the rest, it usually sufficed to indicate the palaestra by a strigil or oil-flask suspended, or a pair of jumping-weights; musical gatherings by a lyre or a flute in a case; banqueting-rooms by cups and other vases hung up, or by rows of boots. Similarly, women's apartments are represented by a window, door, or column, or by sashes, hoods, mirrors, wreaths, and wool-baskets scattered about. [2009]

In the vases of Southern Italy this principle is carried almost to excess. Not only is the old idea of rosettes and flowers scattered about the scene revived, but the whole surface of the design is often covered with miscellaneous objects, such as balls, sashes, and mirrors. On the Apulian vases the use of a double line of white dots to indicate the ground is invariable, and loose stones are scattered about where it is intended to be rocky. Flowers grow about in rich profusion. In the mythological scenes an elaborate architectural background is frequent, and altars, tripods, and columns serve the same end; the heroa or shrines and other forms of tomb in the sepulchral scenes have already been described. In athletic scenes, especially on the reverse of the kraters, a ball, a stylus and tablets, or a pair of jumping-weights are suspended in the air to indicate the palaestra; and on Lucanian vases subjects of a military nature are suggested by a suspended shield only partly visible. The "courting-scenes" on Apulian vases usually have a representation of a window in a corner of the design.
§ 2. Arrangement of Subjects
The next point to be considered is the method of arrangement and composition of the figures in general on Greek vases. As regards the Mycenaean, Geometrical, and other early wares, they may be left out of consideration,-firstly, because their ornamentation is mainly composed of decorative motives or single figures of animals; secondly, because even where compositions of figure subjects
are found, as on the great Dipylon vases, the method of arrangement is still tentative and without system. The figures are arranged in haphazard groups and bands, and all the remaining spaces are filled in with ornament.
The first attempt at an organised method of decoration is seen in the vases of Corinth and Ionia, and is exemplified principally in the arrangement of the friezes of animals. Roughly speaking, there are two main tendencies, one characteristic of each line of development-the procession and the heraldic group. Both are essentially Oriental (i.e. Assyrian) in origin, the prototype of the latter being the familiar motive of the two animals and the sacred tree, which is so frequently found on Mycenaean gems, and is best exemplified in the famous Lion Gate of Mycenae. ${ }^{[2010]}$ Yet this typically Mycenaean and Oriental motive was not the one adopted by its natural inheritors, the Ionians, and it is in Dorian Corinth that we find its reflection on the painted vases. On one Corinthian vase ${ }^{[2011]}$ it actually occurs in the form of a conventional palmette and lotos-pattern (representing the tree), on either side of which two lions are confronted in true Mycenaean fashion. Later, it becomes a common device on the necks of vases, the ornament taking the form of a decorative combination of palmettes (see below, p. 226). Even when on Corinthian vases a whole frieze of animals is found, there is always a central "heraldic" group of two, towards which the whole seems to lead up, or else the frieze is broken up into several isolated heraldic groups. ${ }^{[2012]}$ But on the Ionic vases, as on those of Rhodes and Naukratis, we have over and over again regular processions of animals all facing the same way, or, as at Daphnae, solemn dances of women, similarly placed and joining hand-in-hand (see Plate XXV.).
In the developed B.F. vases the same principles are observed to some extent, especially where friezes of animals are introduced; but there is much greater freedom of treatment within the limits of the field available. Generally speaking, however, all designs on B.F. vases may be regarded as following one of the three methods of architectural composition-the frieze, the pediment, or the metope. The frieze style, which is seen on the shoulders of hydriae, the exteriors of kylikes, and sometimes on the bodies of amphorae, oinochoae, or lekythi, implies a series of figures, all turned in the same direction, but without any central point for the action, as in processions of warriors, dances of Satyrs and Maenads, and so on. In the pediment style of composition the essential feature is a centre-point, in which the interest of the subject is concentrated, as in such scenes as the Birth of Athena ${ }^{[2013]}$ or Theseus killing the Minotaur. ${ }^{[2014]}$ The central group is then flanked by figures immediately interested in the action (Eileithyia and Hephaistos, or Ariadne, in the instances quoted; Athena and Iolaos at the labours of Herakles); and the ends of the pediment, so to speak, are occupied by groups of bystanders, often nameless and uncharacterised, who are in fact only included to fill up the space required.
The metope style, which only admits of three, or at most four, figures, was found convenient for all the vases with subjects on panels, where space was restricted, and also on the kylikes of the "minor artist" class, on which a limited use of figures was preferred, and on those of later date where the space was mainly taken up by the large eyes. But in all these cases-friezes, pediments, or metopes -one thing was held to be essential: the correspondence of the two halves of the design (except in friezes), producing perfect symmetry in the composition.
Lastly, there are a limited number of cases where a single figure was found sufficient, as in the interior of kylikes, on the circular pinakes, ${ }^{[2015]}$ and sometimes on the vases where the large eyes take up most of the space. ${ }^{[2016]}$
Subordinate designs, bordering the main design of an amphora above or below, or decorating the cover, are usually in the form of animals or chariot-races, in the frieze style of composition. Similar friezes are sometimes also found (in the old B.F. method) on R.F. vases, and even on the kraters of Southern Italy.
The earlier R.F. vases preserve the principles of the preceding period; and, in regard to the kylikes, the system of decoration has been discussed in detail elsewhere (Vol. I. p. 427). In all of them we see particular attention paid to arrangement, and the variations in the principles of composition form one of our guides in determining the development of the style. In the amphorae and hydriae of the transition from the severe to the strong period the number of figures employed in one scene was diminished, while they became larger in their proportions and were treated with more care; the usual number on the Nolan amphora is one or two each side. On the smaller vases, such as the oinochoë, the number of the figures never exceeds three. Sometimes the hydriae have an elongated composition on the shoulder, containing a frieze of several figures ${ }^{[2017]}$; but usually the design runs into both shoulder and body. Designs in framed panels are rare, except on the earlier amphorae and hydriae, and on the column-handled kraters. The latter are unique in preserving the older methods of decoration right through the R.F. period down to the fourth-century specimens from Southern Italy.
The influence of Polygnotos and his contemporaries brought about, as we have seen, a great change in the arrangement of the compositions, by the introduction of landscape and perspective, and the depicting of figures at different levels. This new development was subsequently exemplified in the large vases of Kertch and Apulia, but in the late fine period at Athens small vases with single friezes or simple subjects were the rule. In the pyxides and other vases with frieze subjects the figures are often crowded together and of dwarfish proportions (Plate XLII. fig. 3). A return to the old system of several friezes is seen where the figures are arranged in two or more rows divided by bands of ornaments, as in the Meidias hydria, or the early Apulian and some of the Lucanian vases. ${ }^{[2018]}$
The earlier vases of Southern Italy, especially those of Lucania, preserve in some measure the spirit of the best R.F. vases, in the arrangement of the figures, and at all times the composition is one of the best features of these vases; but in the later examples the purely decorative element obtrudes
itself; single figures of little more than ornamental character abound, and the old preference for mere ornament asserts itself, the patterns encroaching all over the scenes.

## § 3. Ornamental Patterns

Although by far subordinate to the subjects in point of artistic or archaeological interest, the ornamental patterns which are employed on the vases are by no means without their value in both respects. ${ }^{[2019]}$ They are, indeed, intimately interwoven with the subjects themselves, which they frame in, relieve, or embellish. Numerous vases are decorated with ornaments only, even in the advanced stages of the art; and this is, of course, an extremely common occurrence in the earlier fabrics, such as the Geometrical and Rhodian. Others, again, are only ornamented in the simplest fashion, with plain bands of red left to show through the black varnish round the body or foot. That the artist took a pride even in this form of ornamentation is shown by the fact that some potters, such as Nikosthenes and the "minor artists," have left their names on vases only decorated with simple patterns.
From the very beginning of Greek vase-painting there may be observed an endeavour to dispose the ornamental patterns in accordance with some system; and even though in some cases, as in the Cypriote Geometrical vases, there is an offence against the canons of art, yet at all periods the prevailing effect is one of symmetry and taste. It may be thought that in some respects there is a poverty in the variety of ornaments employed-as compared, for instance, with mediaeval art; but it should be remembered that-as their architecture shows-the Greek principle was to achieve the highest results within a limited sphere. Their system was conventional, but its conventions are forgotten in the artistic effect that it produces.
It is on the earliest vases that the greatest variety and richness of ornament occurs; as the art is developed the ornamentation becomes more and more subsidiary, until on the vases of the finest R.F. period it has almost disappeared. But in the later phases it again comes to the fore, tending more and more to obscure and finally to supersede the subjects. To set forth as briefly as possible the growth and development of Greek ornament, both as a whole and in the case of individual motives, will be the object of the succeeding summary. It will be found advisable to treat the subject in a twofold aspect,-firstly, dealing with individual forms and their development; and, secondly, in their relation to the decoration of the vases and their subjects, as exemplified in the different periods and fabrics.
Various theories have been propounded as to the origin of the ornaments found on Greek vases. Some have seen in the patterns architectural adaptations, suggested by the ornamentation of the different members of a temple, such as the maeander, egg-and-tongue pattern, or the astragalus, just as the disposition of the subject is often a reminiscence of the frieze or metopes. But this is no real explanation. In the first place, the patterns are found on vases at a period when they were hardly as yet used in architecture; and, secondly, their use on vases and in architecture must undoubtedly be traced to a common source. Others, again, have regarded them as conventional symbols, the kymation or wave-pattern representing water, a flower or rosette the ground on which the figures stand, and so on. Or, again, it has been thought that they were originally derived from textile patterns, being produced mechanically by the ways in which the threads ran in the loom, whence they were applied with deliberate artistic intention to the surface of a vase.
It is, in fact, impossible to put forward any one theory which will account for the whole system of decorative ornament. As has been pointed out in our introductory chapter, many of these patterns are not only spontaneous, but universal in their origin among primitive peoples; every nation has begun with its circles, triangles, spirals, or chevrons. We are also, in regard to the Greeks, met with the remarkable fact that in its earliest form their painted pottery presents a very elaborate and highly developed system of ornamentation-purely geometrical, it is true, yet none the less of an advanced character. It is a composite system, formed partly from Mycenaean and pre-Mycenaean local elements, and partly from the decorative ideas introduced by the Dorians from Central Europe; subsequently the range of Greek vase-ornament was yet further enlarged by the introduction of vegetable patterns, the palmette, the lotos-flower, and the rosette, which are due to the growth of Oriental influences, both from Egypt and from Assyria.


FIG. 139. MAEANDER OR EMBATTLED PATTERN.

In order to deal with the various ornaments and patterns in detail, it may be found convenient to divide them under three heads-rectilinear, curvilinear, and vegetable or floral. Of the first class the most consistently popular is the typically Greek pattern known as the maeander, key, or fret pattern. It first appears with the


FIG. 140. MAEANDER OR KEYPATTERN (ATTIC). Geometrical style, in which it plays an important part, often covering a large proportion of the surface of a vase, arranged in broad friezes. Three varieties are found-a simple battlement pattern (Fig. 139), and the slightly more elaborate forms, Fig. 140, and the pattern given in Vol. I. p. 283, Fig. 83. In the Boeotian Geometrical, Phaleron, and ProtoCorinthian fabrics it is seldom found, or only in a debased form, as $\quad$, but one or two forms occur in the "Rhodian" and "Samian" fabrics of Ionia; one of these is given in Fig. 141, and another consists of squares of the same alternating with crosses or stars in panels. We meet with a most interesting development of the latter variety in the vases of the so-called Pontic class and on the Clazomenae sarcophagi, where an elaborate maeander pattern, usually in two rows, is interspersed
with stars or rosettes (Fig. 142). It thus becomes almost a distinguishing characteristic of the later Ionian fabrics.


FIG. 141. MAEANDER OR KEYPATTERN (IONIC).

In the Attic B.F. vases there is a return to simplicity. Here we find it for the most part in the form Fig. 140 above, and its usual position is below the designs on the red-bodied amphorae; but it is sometimes found on other vases, as above the panels on the bodies of hydriae or oinochoae. In the


FIG. 142. MAEANDER AND STAR PATTERN (LATER IONIC). R.F. period its development is most important for determining the succession of the kylikes, on which it almost becomes a datemark, so regular is its evolution. This has, however, been already dealt with in the chapter on the history of the style (Vol. I. p. 416). After the severe period it is of frequent appearance on all forms of vases, the kylix, amphora, krater, and pelike in particular; the usual arrangement is a group of three to five maeanders, either of the simple Fig. 140 type, or of a more complicated form (Fig. 143), divided by rectangular panels or squares composed of chequers, or of crosses (diagonal and vertical) with dots or strokes between the arms. ${ }^{[2020]}$ A curious variety of the maeander is used by Duris; it consists of a double intersecting maeander interspersed with squares ${ }^{[2021]}$ (Fig. 144).
The invariable place for this ornament is below the design on the large vases, and it is usually continued the whole way round (except on the earlier Nolan amphorae); it is also found on the R.F. and white lekythi along the top of the design. It is always painted in black on the clay ground. ${ }^{[2022]}$


FIG. 143. MAEANDER (ATTIC, 5TH CENTURY).


FIG. 144. MAEANDER (ATTIC, ABOUT 480 B.C.).

A similar form
of maeander prevails on the vases of Southern Italy (except in Campania); it is found on the krater, amphora, lebes, kotyle, etc., and is almost invariable. But there is one unique variety which is occasionally found on the great Apulian kraters, as on F 278 in the British Museum; the type is that of the pattern in Fig. 144, but the maeander is represented in perspective, being painted in white on the black, the shaded edges left in the colour of the clay.
Of patterns akin to the maeander, the so-called swastika or hook-armed cross, 164swastika occurs in panels on the Geometrical vases, but subsequently it is only found as a ground-ornament in the field, as frequently at Naukratis, in Rhodes, and elsewhere. It is, strictly speaking, to be regarded as a fragmentary piece of maeander, without any of the symbolical meaning which it bears in the art of northern nations, with whom it was the emblem of the Scandinavian god Thor. Another pattern, 16
 frequently found as a continuous border on early vases, such as the Phaleron and Proto-Corinthian wares, and occasionally in the B.F. period.
Next there is the chevron, zigzag, or herring-bone pattern, consisting of systems of V-shaped patterns, arranged in two ways, either $20 \approx$ chevron or 16 WW zigzag these patterns are practically only found on the earlier fabrics of Greece and Cyprus, or on the native wares of Apulia. On the incised vases of the early Bronze Age found at Hissarlik and in Cyprus this is the prevailing motive, the lines of zigzag being either single, or arranged in groups of four or five parallel:


On the Geometrical vases such patterns are of very frequent occurrence, and panels or bands of chevrons arranged vertically, 20 ǎchevron or 20 後zigzag occur in many instances (Fig. 83). These groups of chevrons or zigzags are also a distinguishing mark of the Boeotian Geometrical fabrics (cf. Fig. 85); they occur to a lesser extent on the Melian, Proto-Corinthian, and Early Corinthian vases, and even in the Chalcidian fabrics. They are either employed as ground-ornaments to fill in spaces, or as panels forming part of the subsidiary decoration. A variation, or rather development, of the chevron, sometimes employed as a ground-ornament on early Ionic vases, is composed of a cross, 22 齿cross with sets of chevrons between the arms.

FIG. 145. NET-PATTERN.
from a simple arrangement of cross lines 22 mesh to an elaborate diaper-pattern, and in such forms found even in later times. Beginning with the simple intersecting lines, or bands filled in with hatching, of the primitive incised vases, further developed in the white slip ware of Cyprus (Vol. I. p. 243), we next come to their use on the vases of the Geometrical period, both in Greece and in Cyprus. The variety of these patterns is so great that they can hardly be described in any detail; the usual method of treatment is in a band or panel of lozenges, squares, or triangles, filled in with a reticular pattern formed by the short intersecting lines. Sometimes dots are inserted in the spaces to enrich the general effect. Some very good examples of these patterns are to be seen in the Geometrical vases of Apulia (p. 327). In the B.F. period plain bands or panels of intersecting lines are not infrequent; sometimes small amphorae or lekythi are decorated entirely in this fashion. ${ }^{[2023]}$ A variation of the motive is the border of network which often surrounds the panels on hydriae or oinochoae, in which the points of intersection are ornamented with studs, resembling the knots of a net (Fig. 145). It is also frequently found on the later Corinthian vases. Chequer-patterns are often used with great effect, at all periods from the Geometrical vases down to the fourth century, their usual position being on the neck of a vase (Fig. 146). ${ }^{[2024]}$


FIG. 146. CHEQUER-PATTERN


FIG. 147. PROTOTYPE OF GEOMETRICAL TANGENT-CIRCLES.

The circle as an ornament occurs comparatively rarely, but there are two exceptions. In the Geometrical vases we find a use both of concentric circles and of rows of single circles joined by straight lines forming tangents, a motive which is obviously derived from the Mycenaean spirals (Fig. 147). Secondly, in the Graeco-Phoenician pottery of Cyprus, especially in its later phases and in the smaller vases, such as the jugs and lekythi, the decoration is practically confined to systems of concentric circles, of a character quite peculiar to this fabric. ${ }^{[2025]}$ The chief feature of these systems is that the ordinary principles of vase-decoration are entirely ignored, and the circles, arranged in series of five or six, forming a band about three-quarters of an inch in width, are placed not only at right angles to the axis of the vase, but parallel to it. The illustrations in Plate XIII. and Fig. 75 (Vol. I. p. 251) will give a better idea of the arrangement than any description; it is clear that the circles were easily produced by applying a fine brush to the vase while turning on the wheel, first in its natural position and then on its side. Artistically, of course, the principle is a wrong one, and this is most glaringly conspicuous in the barrel-shaped lekythi, in which the axis of the vase is regarded as horizontal rather than vertical. Groups of small concentric circles are also arranged vertically or otherwise on the bodies and necks of vases.


FIG. 148. SPIRALS UNDER HANDLES (EXEKIAS).

The spiral, which forms such a conspicuous element in Mycenaean decorative art, appears again prominently in a class which, as we have seen (Vol. I. p. 302), owes much to that source-the Melian amphorae. Systems of spirals are arranged to fill the spaces at the sides of the design, ${ }^{[2026]}$ especially in combination with floral ornaments and reticulated lozenges; and the same feature may also be observed in the Proto-Attic vases. It occurs similarly, combined with a flower, on the Samian

FIG．149．WAVE－PATTERN（SOUTH ITALY）．
or Fikellura vases（Vol．I．p．337）．In later times the spiral passes from the sphere of inorganic to that of organic ornament，being combined in various ways with vegetable patterns，and merging in the tendril or volute．But it occasionally reverts to its old form，notably in the red－bodied amphorae of Exekias，${ }^{[2027]}$ who，in place of the usual palmette－and－lotos ornament under the handles，contrives an elaborate system of large spirals to fill the space between the designs（Fig．148）．A variation of this is the figure－of－eight ornament， $15888 f$ figure－eight sometimes continuous， 15888888 continuous figure－eight which is found on vases of the Proto－Attic class，such as the Burgon lebes in the British Museum（Fig．87）．


FIG．150．SCALE－PATTERN（DAPHNAE）．

The wave－pattern or kymation moulding，shown in Fig．149，is one which constantly occurs in Greek architectural decoration，but on the vases at any rate seems to be found only at a late period．On the Campanian vases it is the regular border below the design；it is also found on those of Lucania and Apulia．The crescent is only found on early Ionic vases，including those which have been attributed to a Samian origin（Vol．I．p． 336 ff．），and some of the Daphnae and Naukratis fragments， which probably borrowed it from Samos；it is arranged in bands alternating in colour，black or purple and white．Another typically Ionic ornament is the scale－pattern，which occurs on many of the so－called Rhodian vases，and also on those from Daphnae（Fig．150）．In the former it is produced by means of incising on the black varnish，the alternate scales being often coloured purple；but in the latter it is painted in outline．Curiously enough，it also occurs in the incised form on an early group of Corinthian vases（Plate XIX．fig．3）．Like other patterns，it can be traced to a Mycenaean origin，being very common in that style．Subsequently it occurs but rarely，but is sometimes employed on the neck or shoulder of a vase．${ }^{[2028]}$ It differs from most other patterns in that it does not lend itself to the panel or frieze，but covers a surface of indefinite extent．It is also known as the ＂imbricated＂pattern，from its likeness to overlapping tiles（imbrices）．


FIG．151．GUILLOCHE OR PLAIT－BAND（IONIC），FROM THE EUPHORBOS PINAX．


FIG．152．TONGUE－PATTERN（B．F．PERIOD）．


FIG．153．EGG－PATTERN（R．F．PERIOD）．

The guilloche or plait－band（Fig．151）is characteristic of early fabrics，such as those of Naukratis and Samos，the Clazomenae sarcophagi（Plate XXVII．），and the small Proto－ Corinthian lekythi，but is not often found in later times．${ }^{[2029]}$ It is typically Ionic，and seems to be derived from Mycenae（cf． A 209 in B．M．）．Lastly，there is the so－called tongue－pattern， which is exclusively used as an upper border to designs．On its first appearance in the Geometrical vases it is rectilinear in form， 15 亚而而tongue－pattern and formed of alternating bars；but from the beginning of the sixth century onwards it assumes a curvilinear form，all the tongues pointing downwards，broader，and close together，as in Fig．152．In the Daphnae vases and the later Corinthian wares it is treated in polychrome fashion，black，purple， and white alternately．On the lip and shoulders of Caeretan hydriae it appears in an exaggerated form，painted red，with black edges，as on Plate XXVI．In the Attic B．F．vases it forms the invariable upper border of the designs，below the necks of the amphorae and hydriae，and is also used as a
border to the interior designs of the kylikes; here, too, purple is often applied to the alternate tongues. Occasionally the rectilinear form reappears. In the R.F. period it changes its character again, and the tongues become short and semi-oval in form, with black centre and narrow outlined edge; in this form it is usually described as an egg-pattern (Fig. 153). It is found in the smaller hydriae, and in many other shapes above or below the designs; also round the lip of the vase. The same form and arrangement obtain in the South Italian vases, especially in Apulia and Lucania, except that a dot is often placed between each pair of tongues. In some cases it approximates closely to the egg-and-dart, as on F 179 in the British Museum. Both tongue and egg-patterns are often ranged round the base of the handles. The egg-and-tongue, with its variants, is a typically Ionic architectural pattern; hence its non-appearance in Attic vases before the fifth century. In later Roman pottery (Chap. XXIII.) it becomes very common. The variety known as the Lesbian kymation is found in a few late instances. ${ }^{[2030]}$

Having surveyed the various types of inorganic patterns, whether rectilinear or curvilinear, we now come to the consideration of those which are not only derived from vegetable ornament, but still preserve, in greater or less degree, a naturalistic character. To begin with the simple leafornament, which is of too conventional a type to associate with any particular plant, this occurs most frequently in the form of of a calyx, placed round the lower part of the body, immediately above the foot, so that the leaves radiate from the foot, pointing upwards. ${ }^{[2031]}$ This ornament begins at a very early period, and is found in most fabrics, continuing down to the latest stages. It is, however, specially associated with the B.F. period, in which it is invariable on the large vases with a more or less marked stem, the amphorae, hydriae, and kraters. On the smaller ones, however, it does not occur. In the "affected" B.F. amphorae (Vol. I. p. 388) the calyx is double, with two tiers of rays. ${ }^{[2032]}$
An arrangement of four leaves saltire-wise in a panel sometimes occurs on the Geometrical vases, a remarkable instance of vegetable ornament in this style (cf. Vol. I. p. 282); an analogous pattern is also found on many early Corinthian aryballi (Vol. I. p. 314; B.M. A 1086 ff.), the leaves not being united at the base, and usually interspersed with reticulated or other motives.
Another form of leaf-pattern is of rare occurrence, and is found now and then on Attic vases; in this small leaves are joined together in a sort of ribbon or chain-pattern ${ }^{[2033]}$ (Fig. 154). The peculiarity of this ornament is that even in the B.F. period it is red-figured in technique, being left in the colour of the clay with a background of black.


FIG. 155. IVY-WREATH (B.F. PERIOD).

The ivy-leaf was not adopted as a

FIG. 154. LEAF- OR CHAINPATTERN. decorative pattern before the middle of the sixth century; it seems to be Ionic in origin. ${ }^{[2034]}$ Single large leaves occur on the necks of B.F. lekythi, on late Ionic B.F. vases, and to a considerable extent on the imitations made in Etruria. ${ }^{[2035]}$ These are usually treated in a very naturalistic manner. Double rows of smaller leaves, forming a straight wreath, constantly occur as borders to the panels on B.F. hydriae, kraters, and oinochoae (Fig. 155); and similar ivy-wreaths are found along the flat edges of the flange-shaped handles on the larger panel-amphorae, as well as on the volutehandles of kraters. ${ }^{[2036]}$ These patterns preserve their vogue in the R.F. amphorae of the earlier period, and in the kraters of Lucania, and it should be noted that they are always painted in the B.F. method (black leaves on red ground) except in the vases of Apulia and Paestum. But as a rule on the South Italian vases the ivy-leaf is treated in a naturalistic manner, with tendrils and berries, occupying a large panel on the necks of the column-handled kraters, or forming a border on the lip of the vase (Fig. 156). ${ }^{[2037]}$ The vine as an ornament is very rare, but there is a good instance on a late phiale in the British Museum (F 503), where it is treated in a very naturalistic manner, forming the sole decoration of the interior; it is also of frequent occurrence on the vases from the Kabeirion at Thebes (Vol. I. p. 391). The pomegranate occurs only on the Cyrenaic cups (Fig. 93), where it forms a continuous frieze of buds round the exterior, united by interlacing lines. The acanthus is only introduced quite late (except where it appears as an ornament on the top of a stele), and is found on the necks of kraters and other large Apulian vases, forming a rich and luxuriant mass of foliage, often with a flower in the centre, on which rests a female head. Myrtle or olive-wreaths occur at all times, especially on the flat rim of the mouth of a vase; the myrtle seems to be a typically Ionic motive, and is found at Daphnae, Samos, Rhodes, and on the Caeretan hydriae. ${ }^{[2038]}$ In the Rhodian vases it is either roughly painted in black on red, or else in red and white on a black ground. It was also adopted at Athens-e.g. by Nikosthenes. Laurelwreaths form the regular decoration of the neck in the bell-shaped kraters and wide-bellied amphorae of the late R.F. period and the decadence (Fig. 157). These wreath-patterns on the late vases, it should be noted, are either treated in R.F. technique or painted in opaque white on the black varnish. They are often drawn with great care and accuracy.


FIG. 156. IVY-WREATH (SOUTH ITALIAN VASES).


FIG. 157. LAUREL-WREATH (SOUTH ITALIAN VASES).

The history of the development of the palmette (or honeysuckle), the lotos-flower and bud, and of continuous foliated patterns in general, has been skilfully treated by Riegl. ${ }^{[2039]}$ To write a complete account of this class of ornamentation would be impossible within the limits of the present work; only a few main features can be noted, to show the form the patterns assume at different periods, so universal is their appearance on vases of all shapes and dates. The lotos-flower or bud is, of course, a motive of purely Oriental origin, which found its way into Greece probably through the medium of Phoenicia; the palmette, on the other hand, is purely Greek, although it may possibly be derived from a Mycenaean prototype, the Vallisneria spiralis plant, which is so frequently found on Mycenaean vases (Fig. 158). ${ }^{[2040]}$ They are found not only as single motives, isolated or repeated, but also combined together, or forming part of elaborate systems of floral ornament, with stems and tendrils often conventionalised, which link them together, either in continuous bands or in groups occupying a limited space, on the neck or under the handle.


FIG. 158. VALLISNERIA SPIRALIS (MYCENAEAN).


FIG. 159. LOTOSFLOWER ON CYPRIOTE VASE.

In the Graeco-Phoenician pottery of Cyprus the lotos-flower often appears in a purely Egyptian form (Fig. 159, from C 165 in B.M.), but it is more often combined with and almost merged in some elaborate system of patterns too complicated to describe or define by any name. ${ }^{[2041]}$ But in Greek vasepaintings, in which it first makes its appearance in the seventh century, it is always more or less conventional. It is thus found on the Melian amphorae in combination with systems of spirals ${ }^{[2042]}$; though on the shoulder of the example given by Riegl there occurs a band of lotos-flowers alternately upright and inverted, linked together by scrolls, where the form is almost that of Egyptian art, except that the cup of the flower is rounder, the petals shorter and blunter. It is obviously as yet in the transitional stage. Next we meet with it in the vases of Ionia, especially in those of the so-called Rhodian and earlier Naukratite styles, which have friezes of lotos-flowers alternating with closed buds or with palmettes, connected by tendrils (Fig. 160). A similar pattern, on an exceptionally large scale and treated in polychrome (white and purple), surrounds the lower portion of the body on several of the later Caeretan hydriae (cf. Plate XXVI.). But in most of the fabrics of the sixth century the bud seems to have been preferred to the open flower of the ornament. ${ }^{[2043]}$ Rows of lotos-buds linked by tendrils, upright or inverted, are found on the Cyrenaic cups, on the vases of the Chalcidian type, and on the later Ionic fabrics, such as the Rhodian kylikes in the British Museum (B 379-81). Sometimes, too, a single bud appears in the design itself, overhanging the scene or rising from the ground. On the so-called Pontic vases the buds are isolated, and placed alternately upright and pendent. In the Corinthian and early Attic fabrics the lotos-flower is found, combined in various ways with palmettes and tendrils, as a neck-ornament, or above a panel, or under the handles, and also as a centre in heraldic compositions (Fig. 161); but subsequently the buds resume their sway, and are found bordering the panels of black-bodied amphorae (as in Fig. 162), forming a lower border to the designs on the red-bodied, and also on the shoulder of lekythi. These motives linger on in the earlier R.F. amphorae and hydriae, and in the column-handled kraters; rows of buds of a degenerate elongated form, on the lip, neck, or shoulder, are continued well into the period of the


FIG. 160. LOTOS-FLOWERS AND BUDS (RHODIAN).


FIG. 161. PALMETTE- AND LOTOS-PATTERN
(EARLY B.F.).


FIG. 162. LOTOS-BUDS (ATTIC B.F.).


FIG. 163. CHAIN OF PALMETTES AND LOTOS (EARLY B.F.).]

The palmette or honeysuckle ornament is not usually found as an independent ornament before the middle of the sixth century. ${ }^{[2044]}$ Its development in this direction really belongs to the R.F. period. But in combination it is found, as we have seen, in Corinthian and Attic B.F. vases, and also in Chalcidian. Before the Athenian unification of styles it usually appears linked with lotos-flowers in a sort of double chain, each pattern being alternately upright and reversed, as in Fig. 163; in this form it is usually found on the neck, or as an upper border to the design. This type of ornament is favoured in the Proto-Attic, Corinthian, and Corintho-Attic vases, and the earlier panel-amphorae; the palmette is here regarded as the foliage of the lotos-flower, which at first always predominates. Subsequently the palmette gains the upper hand, as on the necks of the red amphorae (see Fig. 165), and the lotos-flower is gradually ousted altogether. It, however, returns occasionally on R.F. hydriae and amphorae. ${ }^{[2045]}$ Another variety, which may be described as a metope-like treatment, compared with the frieze-like treatment above, consists of an interlacing arrangement filling the space of a square, with two palmettes and two lotos-flowers respectively opposed, or a symmetrical arrangement of palmettes and lotos-flowers, connected by tendrils, as in Fig. 164. This is found under the handle, or on the neck, or in the middle of a frieze of the Corinthian "heraldic" type. ${ }^{[2046]}$ On the red-bodied B.F. amphorae the universal neck-ornament is a band of large palmettes vertically opposed, linked by a continuous chain passing between them and separated by elongated lotos-flowers (Fig. 165); this is also found on the Panathenaic vases and the earlier R.F. amphorae. Towards the end of the sixth century, however, there is a tendency to drop these composite ornaments, and attention is devoted to the palmette alone. The method of its application to the kylikes as a handle-ornament, linked thereto by a scroll, has already been treated in detail (Vol. I. p. 413); it first appears on the Cyrenaic cups, and is usually employed by the "minor artists" of the B.F. period. The chief feature of the new advance is that the palmette is no longer a stiff upright design with straight unenclosed petals, the form to which it adheres down to the end of the sixth century; but now assumes a more flexible and graceful form, being encircled and linked to its fellows by means of slender scrolls or tendrils, which thus form a series of elliptical or oval forms capable of great variety of arrangement and position (Fig. 166). This framed palmette is first found
in the Fikellura or Samian ware. It occurs in the form of a frieze, with linking scrolls, on the later B.F. hydriae. ${ }^{[2047]}$ The number of leaves or petals of which the palmette is composed is usually limited to seven. Another important and very effective improvement is achieved by placing opposed pairs of palmettes no longer vertically, but obliquely, forming an upper or lower border to the design (Fig. 167). These are frequently found on the krater and hydria, and appear constantly on the vases of Apulia and Lucania, especially on the lip. Great attention is paid to the effective grouping of the framed palmettes in the spaces under the handles, the object aimed at being more and more naturalism rather than symmetry. ${ }^{[2048]}$


FIG. 164. PALMETTES AND LOTOS UNDER HANDLES (ATTIC B.F.).


FIG. 165. PALMETTE PATTERN ON NECK OF RED-BODIED AMPHORAE.


FIG. 166. ENCLOSED PALMETTES (R.F. PERIOD).


FIG. 167. OBLIQUE PALMETTES (LATE R.F.).

In the later R.F. period, on the other hand, there is a certain reaction in the direction of conventional ornament, combined with exaggeration and lack of refinement. The palmette under the handle returns to the old erect unframed type, and increases enormously in size, so that one or at most two vertically opposed suffice to fill the space. In this form it appears on the bell-shaped kraters and hydriae of Southern Italy, and especially those of Campania, surrounded by elaborate scrolls and tendrils. In the latter fabric the palmette, which has become almost gross and ugly, is usually flanked by two large convolvulus or other flowers rising from the ground, and drawn in
profile (Fig. 168). In the Apulian and Lucanian vases there is no rule as to the number of the palmettes, and sometimes the effect is exceedingly rich and elaborate. Speaking generally, there is no ornament which prevails so universally and in such varied forms and systems on Greek vases, but to give an exhaustive account of all its uses would be far beyond the limits of this work.


FIG. 168. PALMETTE UNDER HANDLES (SOUTH ITALIAN
VASE).

There remains only to be discussed the rosette, which, in spite of its often purely formal character, may be reckoned as in its origin a floral motive, even if it is not obvious that it is derived from any particular plant. It may be said to have two distinct forms, the star and the disc, ${ }^{[2049]}$ the former consisting of an indefinite number of radiating arms or leaves, the latter of a simple disc surrounded by a row of dots. In both forms it is found at all periods, not so much as a formal pattern in bands or groups, but as a decorative adjunct to surfaces within or without the field of the design, especially as a ground ornament on Ionic, Corinthian, and other early fabrics, or as an embellishment of the draperies worn by the figures on the vases.


FIG. 170.
ROSETTE (APULIAN).

In the Mycenaean period it is found usually in the dotted disc form, as a ground ornament, but the star form is by no means rare. ${ }^{[2050]}$ In later Cypriote pottery the star-shaped rosette sometimes occurs in a band of ornament, left in the colour of the clay on a black background ${ }^{[2051]}$; but the other type is more common in conjunction with the concentric circles. In Hellenic pottery the rosette at first appears exclusively as a ground-ornament, and this function it fulfils both in Corinthian and early Ionic pottery to a large extent, as well as in some of the smaller groups. In the Rhodian and Naucratite wares it assumes very varied


FIG. 169. ROSETTE (RHODIAN).
hook-armed crosses and bits of maeander; in the early Corinthian wares it takes the shape of an approximately circular flower of six petals, which covers every available vacant space over the area of the design ${ }^{[2052]}$; these are often rendered with great carelessness, the artist's only object being apparently to insert a patch of colour where it would fill in a space. Subsequently the rosettes become both more symmetrical and at the same time fewer in number, and by the beginning of the Attic B.F. style have altogether disappeared. Occasionally they are employed for a band of ornament on the lip, neck, or handles of a B.F. vase. ${ }^{[2053]}$ Lost sight of for a period of some two hundred years, the rosette springs again to life in the vases of Apulia, resuming its old functions as a ground-ornament, and also being employed in bands on the neck or elsewhere. It usually appears in the form of a star-shaped flower of six or eight petals, in red edged with white on the black ground (Fig. 170).

It may also be found convenient to treat the ornamentation of Greek vases from a different point of view, in order to give an outline of the decorative system adopted in each of the principal styles, and as considered appropriate to the various forms.
In the vases of the prehistoric period, from the primitive incised wares down to the end of the Mycenaean style, there is an entire absence of anything like rule or formalism. The principle observed in the very early classes, such as the Cypriote relief and white slip wares (Vol. I. p. 241 ff.), is the imitation of other substances, of metal or leather. The object of the artist was to cover the surface of the vase as far as possible with decorative designs; and if, as was generally the case, his artistic capacity restricted him to linear or simple vegetable patterns, the utmost he could achieve was to adapt these to the whole of the space at his disposal-i.e. the whole body of the vase. Mycenaean vases, however, are usually only decorated on the upper part, as far as the middle of the body, which was encircled with one or more plain bands of black. Thus there remained a sort of panel between the handles, of varying extent.
In the Geometrical period, however, a great change takes place, which from the artistic point of view is a reaction in the direction of formalism, but nevertheless forms the basis of the decorative systems of later times. Here we see for the first time a regular partition of the surface of the vase by means of bands and panels of ornaments, without indeed any restriction of particular patterns to
any part of the vase, but yet a deliberate endeavour to establish a decorative system. ${ }^{[2054]}$ With the increase of animal and human subjects the ornament becomes more subsidiary, merely a framework to the design, but even in the succeeding Proto-Attic and Melian classes it plays a very important part. In the Melian vases the system is Geometrical, but the ornamentation is curvilinear and Mycenaean. The ground-ornaments, however, are derived from the former source as well (hookcross and zigzags in conjunction with rosettes). In both these classes the space under the handles is selected for the display of a grouping of ornamental motives, such as spirals or palmettes, or the two combined in a series of heart-shaped motives or panel-compositions; similar patterns cover the neck and the lower part of the body. The ornamentation of Phaleron and Proto-Corinthian vases is an echo of the Geometrical system. The ground-ornaments are the hook-cross, rosettes of dots, and bits of maeander; the bands of pattern consist of zigzags, chequers, double rows of dots, and toothed patterns. The early Ionic vase-painters treat the subsidiary ornamentation as they do their principal subjects, adopting the frieze principle in most cases; the only exception is in the Rhodian pinakes, where it is usually confined to simple patterns round the rim, with a sort of fan-pattern in the exergue below the central design. ${ }^{[2055]}$ The ground-ornaments are really the chief feature of Rhodian ornamentation, as in Corinthian vases. The decoration of the Fikellura or Samian ware is very characteristic, and demands separate mention. The patterns are highly developed, and suggest a late date-as, for instance, the scroll, the ivy-leaf, and the framed palmette. In later Ionic vases the ornamentation is not very prominent, except in the Caeretan hydriae, in which the broad bands of palmette-and-lotos ornament, and the exaggerated tongue-pattern on the lip and shoulder, occupy a proportion of the surface unusual at this period. Besides the typical ground-ornaments (rosette and hook-crosses) of the earlier vases, the favourite Ionian patterns are the maeander, the guilloche, and wreaths of ivy and myrtle. At Corinth, as we have seen, for a long time ornament is confined to the ground-filling rosettes, with some simple motives, such as zigzag lines or tonguepattern, on the mouth and shoulder, or bordering the design; even in the later examples, when the rosettes have disappeared, it is practically confined to the interlacing palmette-and-lotos pattern on the neck, above the design, or inserted in the subordinate friezes of animals. ${ }^{[2056]}$ The same principle applies in the Corintho-Attic and Chalcidian fabrics. ${ }^{[2057]}$
In Athenian B.F. vases we at last find a stereotyped system of ornament for each kind of vase, from which there is little or no variation. Generally the system is as follows:-On the panel-amphorae, an interlaced palmette-and-lotos pattern or a row of inverted lotos-buds above the panel, and a calyx of leaves round the foot, those with flanged handles having also ornaments thereon, ivy-leaves or rosettes. On the red-bodied, a chain of double palmettes round the neck, tongue-pattern on the shoulder, a grouping of palmettes, tendrils, and lotos-flowers under the handle, and a row of three or four narrow bands of ornament below the design (lotos-buds upright or inverted, maeander, zigzags), terminating with the calyx round the foot. The Panathenaic amphorae have the same neckornament as the red-bodied, with tongues above the panel, and thick rays round the foot; the fourth-century examples have palmettes on the neck, with elongated tongue-pattern immediately below. On the hydriae, tongue-pattern above the shoulder-design, borders to the panels (maeander above, ivy or network down the sides, lotos-buds or framed palmettes below), and calyx round the foot. On the oinochoae, panel-borders like those of the hydriae, but on the olpae (Vol. I. p. 178) only two or three rows of chequer, maeander, etc., on the neck above; on the lekythi, lotos-buds, ivyleaves, and palmettes on the shoulder, and a double row of dots above the design. The kylixornament is practically limited to the handle-palmettes of the "minor artist" class, and a circle of straight-edged rays, alternately black and outlined, round the stem on the later varieties (together with the large eyes).
In the R.F. period the same system of appropriate patterns for each form of vase is in the main adhered to, but with greater freedom; there is also a wide difference between the earlier amphorae and hydriae, which cling to the old panel-system with its ornamental borders, and the vases of the fine period, in which there is an absence of all restraint on the one hand, and a tendency to dispense with ornament almost entirely on the other (as in the Nolan amphorae). On the kylix, the ornament is throughout confined to the palmettes under the handles and the maeander encircling the interior design, which have been dealt with already (Vol. I. p. 413 ff .). The earlier amphorae and hydriae, as we have seen, have panels with borders as in the B.F. period, usually in the older technique; those of the fine style (including the wide-bellied amphorae) have a short noncontinuous border, such as egg-pattern or maeander, above and below the figures, with similar patterns on the lip and round the bases of the handles. The stamnos has egg-patterns round the lip and handles, tongue-pattern round the shoulder, and a system of palmettes between the designs. The red lekythi have egg-pattern or palmettes on the shoulder, and maeander-pattern (with crosses) above or below the design; the white have black rays on red ground or black and red palmettes on white on the shoulder, and maeander above the designs. The bell-krater and wide-bellied amphora of the late R.F. period, as also those of Southern Italy, have a band of oblique palmettes or a laurel-wreath round the top, maeander with crosses below the design, palmettes grouped under the handles, and egg-pattern round their bases. The column-handled krater, on the other hand, adheres throughout to the B.F. system of ornamentation, with ivy-wreaths and elongated lotos-buds on the rim, similar lotos-buds on the neck, panels bordered with tongue-pattern and debased ivy-wreaths, and the calyx round the foot. The wide-bellied lekythi have palmettes or egg-pattern above the design, and maeander below.

In the vases of Southern Italy there is, as a rule, no system observed in the ornamentation; in the large vases of Lucania and Apulia it is used with great profusion and variety, chiefly in bands on the neck. In the smaller Apulian vases and in those of Campania it is often confined to a wave-pattern below the designs; the Campanian hydriae usually have in addition a wreath of myrtle or laurel round the shoulder. Generally speaking, the large vases, such as the bell-krater, the hydria, and the
wide-bellied amphora, continue the principles adopted in the R.F. period. The systems of palmettepatterns under the handles have already been discussed, and for other details the reader is also referred to what has already been said in discussing the individual patterns.

1942To give detailed references throughout may be considered superfluous, the order of subjects followed being that of the preceding chapters, to which reference may in all cases be made without difficulty by the reader.

1943Cf. B.M. B 147; for other representations of Zeus, Figs. 111, 113, 114; Plate LI.
1944See J.H.S. xiii. p. 19.
1945See J.H.S. loc. cit.
1946Él. Cér. iii. pl. 32 B.
1947Cf. the type created by Skopas in the fourth century.
1948An exception is Él. Cér. i. pl. 62, where he is bearded (on a B.F. vase).
1949See for these two, Fig. 116.
1950Exceptions are B.M. D 4; Él. Cér. i. pls. 46 A, 47, 63.
1951Cf. for the two together on a vase, B.M. E 228.
1952For an attempted distinction of the various Satyr-types, see Loeschcke in Ath. Mitth. 1894, p. 521 ff .

1953See J.H.S. xviii. p. 296.
1954Cf. the Greek heroes on B.F. vases (B.M. B 240, B 543).
1955See B.M. E 477 and Weicker, Seelenvogel, passim.
1956See also Roscher, iii. p. 330.
1957Only on B.M. F 271 and Naples 3237; elsewhere unwinged.
1958See p. 91.
1959See J.H.S. ix. p. 47 ff.
1960Note that the vase-painters are careful never to represent him wearing the skin when contending with the lion.

1961E.g. Reinach, ii. 80.
1962Munich 125.
1963See Six, De Gorgone.
1964See above, p. 146.
1965B.M. B 4.
1966See Weicker's Seelenvogel, passim.
1967See the article Gryps in Roscher's Lexikon, vol. i.
1968E.g. B.M. E 198.
1969See Körte in Jahrbuch, 1893, p. 61 ff.; also Figs. 105, 134.
1970Vol. I. p. 472.
1971E.g. B.M. E 270; Hartwig, Meistersch. pls. 65-6.
1972Él. Cér. ii. 16 and iv. 90-93; B.M. E 308.
1973E.g. B.M. B 59, B $103_{14}$.
1974See Helbig, Hom. Epos², pp. 284 ff., 342.
1975Vol. I. p. 353.
1976As on the Exekias amphora, B.M. B 209: see J.H.S. iv. p. 82.
1977E.g. B.M. E 263, E 469.

1978Cf. B.M. Cat. of Bronzes, 2823-24.
1979On this subject generally see T. Ely in Archaeologia, li. p. 477 ff .
1980Xen. Hell. iv. 4, 10, vii. 5, 20; Paus. iv. 28, 5; Plut. Apophth. Lacon. 234 D; Vit. Demosth. 20; Bacchyl. frag. 41 (Bergk).

1981B.M. B 574: cf. B 608 and Urlichs, Beiträge, pl. 14.
1982Berlin 1698, 1852; Munich 1121; Reinach, i. 453; Inghirami, Vasi Fitt. pl. 109, 2.
1983B.M. E 575.
1984Cambridge 70.
1985Jahrbuch, 1895, pp. 191, 198.
1986Reinach, i. 77; Vienna 332.
1987Reinach, i. 508, 6; ii. 94, 270.
1988Ibid. i. 126, 181.
1989See above, p. 90, and Roscher, iii. p. 2389 ff.
1990Reinach, i. 181; Berlin 1701.
1991Berlin 3988, 3992; B.M. B 364; Reinach, ii. 63.
1992Reinach, i. 513; Louvre E 732 = Fig. 111.
1993Cf. B.M. E 167-68, 295, etc.
1994Cf. B.M. B 1061, and the Busiris vases (p. 102).
1995See especially the Meidias vase and the Python krater (B.M. E 224, F 149).
1996See Plate LI.; also Furtwaengler and Reichhold, pl. 3; \$1\$2 1883, pl. 3; 1885, pl. 5, fig. 3; Röm. Mitth. 1890, pl. 11 (on head-band).

1997Auscult. Mirab. 96.
1998Kavvadias, Fouilles de Lycosura, pl. 4.
1999Argonautica, i. 729 ff.
2000Jahrbuch, 1896, p. 248 ff.
2001See on this subject throughout Mon. Grecs, 1895-97, p. 7 ff.
2002Cf. a funerary plaque in the Louvre, where the male mourners, no doubt intentionally, have the oval form of eye; also Louvre F 256 (figure of Aeneas).

2003For other instances M. Girard (Mon. Grecs, loc. cit.) refers to Louvre E 753, 754; E 643, 808; Jahrbuch, 1893, pl. 1; see also B.M. E 440 (R.F. period).

2004Ant. Denkm. i. pl. 57.
2005Anzeiger, 1895, p. 35, fig. 9: cf. Louvre E 612 bis, and Ant. Denkm. ii. 24, 15.
2006See also Mon. Grecs, 1895-97, p. 16.
2007Furtwaengler and Reichhold, Gr. Vasenm. p. 8.
2008E.g. B.M. E 773, 774, 779, 780.
2009See on the subject P. Gardner in J.H.S. xix. p. 254.
2010See on this motive and other heraldic groups, Jahrbuch, 1904, p. 27 ff .
2011B 18 in B.M.: cf. also the fragment from Naukratis, B $103_{17}$.
2012This principle in its most developed form may be observed on the Chalcidian and Tyrrhenian amphorae: see Vol. I. p. 321 ff .

2013B.M. B 147.
2014Ibid. В 313.
2015B.M. B 589-91.

2016E.g. B.M. B 264, B 428, etc.
2017Cf. B.M. E 164 ff.
2018See Winter, Jüngere Attische Vasen, p. 69; Röm. Mitth. 1897, p. 102; also Plate XLV.
2019This subject has hitherto received little or no general scientific treatment from archaeologists. Riegl's Stilfragen (1893) contains an interesting study of vegetable ornament on Greek vases; but the plates of Brunn and Lau's Gr. Vasen, though intended to illustrate the system of ornamentation, are not very instructive.

2020For the various types of these patterns see Vol. I. p. 416, Fig. 102.
2021This is also found on a B.F. vase in the British Museum (B 330): see Hartwig, Meistersch. p. 220; also B.M. E 84; Thiersch, Hell. Vasen, pl. 5; Arch. Zeit. 1873, pl. 9.

2022The Pamphaios hydria in the British Museum (B 300) has bits of red-on-black maeander down the sides of the design on the shoulder.

2023See examples from Cyprus and Rhodes in Cases 24, 25, 28, Second Vase Room, B.M.
2024E.g. B.M. B 205, 474, 476, 620, D 15, E 151, F 178.
2025It appears, however, to be of Mycenaean origin: cf. the B.M. vases A 253, 323, 324, and Excavations in Cyprus, p. 6, fig. 6, from Ialysos and Cyprus, decorated in this fashion with vertical concentric circles.

2026Riegl, p. 155.
2027E.g. B.M. B 209, В 210.
2028E.g. B.M. E 564.
2029For its use on a B.F. kylix see B.M. B 382 (probably Ionic work).
2030Munich 810, 849 = Brunn-Lau, Gr. Vasen, pls. 35-6: cf. B.M. F 278.
2031Examples may be seen in Plates XXIII., XXVIII.-XXXIII.
2032B.M. B 148-49, 151, 153; J.H.S. xix. p. 163.
2033E.g. B.M. B 212, B 593, B 677, B 679: see also Jahrbuch, 1899, p. 161.
2034See Bull. de Corr. Hell. 1898, p. 298.
2035E.g. B.M. B 63 (Plate LVIII.).
2036E.g. B.M. B 364.
2037As on the Python krater, B.M. F 149.
2038See Jahrbuch, 1895, p. 44, note 15.
2039Stilfragen, passim, especially p. 48 ff. and p. 178.
2040See Riegl, p. 115 ff., and Houssay in Rev. Arch. xxx. (1897), p. 91 ff.
2041For the Egyptian types of lotos-flower and bud see Riegl, p. 48 ff .
2042Riegl, p. 155: see also an early Boeotian example in the B.M. (A $564=$ Riegl, p. 173).
2043Thiersch, Tyrrhen. Amphoren, p. 70, points out that the form of lotos-flower with two large points is Peloponnesian (Corinthian, etc.) and Ionic; the form found in Attic, Boeotian, and Proto-Corinthian fabrics has three principal points.

2044See generally Riegl, p. 155 ff.
2045E.g. B.M. E 169.
2046The varieties of this pattern should be carefully distinguished. Corinthian vases have a composition of lotos-flowers only; Chalcidian, palmettes only (cf. Vienna 219; B.M. B 34). In the "Tyrrhenian" amphorae, and subsequently in Attic red-bodied amphorae, the two principles are seen to be united, and palmettes alternate with lotos-flowers. See also Fig. 161.

2047Cf. also an elegant oinochoë with white ground in the British Museum (B 631). On a similar jug at Munich ( $334=$ Brunn-Lau, Gr. Vasen, pl. 22) the palmettes are enclosed in heart-shaped borders. For other vases which, like these, have palmettes for their sole decoration, see British Museum, Second Vase Room, Case 28, and Laborde, Vases de Lamberg, ii. pl. 41.

2049They are distinguished by German writers as "Blattrosette" and "Punktrosette."
2050Cf. Furtwaengler and Loeschcke, Myken. Vasen, pls. 4, 25, 28, 37, 38; J.H.S. xxiii. pl. 5 (Crete). 2051E.g. C 244 in B.M., and Fig. 76 (Vol. I. p. 254).

2052See Riegl, op. cit. p. 197. He points out that the rosette, although Assyrian in origin, is not here used in a strictly Assyrian fashion.

2053E.g. B.M. B 51, B 197 ff.: cf. also the Proto-Attic vase, Ant. Denkm. i. 57.
2054See what has already been said on this subject in Vol. I. Chapter VII. p. 282: cf. also Perrot, Hist. de l'Art, vii. p. 165.

2055Cf. a similar pattern on the Daphnae situlae (B.M. B 105-6).
2056See generally Wilisch, Altkor. Thonindustrie, p. 41 ff., for Corinthian ornamentation.
2057See on the ornamentation of the former Thiersch, Tyrrhen. Amphoren, p. 69 ff .; on the latter Riegl, p. 187.

# CHAPTER XVII <br> INSCRIPTIONS ON GREEK VASES 

Importance of inscriptions on vases-Incised inscriptions-Names and prices incised underneath vases-Owners' names and dedications-Painted inscriptions-Early Greek alphabets-Painted inscriptions on early vases-Corinthian, Ionic, Boeotian, and Chalcidian inscriptions-Inscriptions on Athenian vases-Dialect-Artists' signatures-Inscriptions relating to the subjects-Exclamations-K $\lambda$ ós-names-The Attic alphabet and orthography-Chronology of Attic inscriptions-South Italian vases with inscriptions.

The practice of inscribing works of art with the names of persons and objects represented was one of some antiquity in Greece. The earliest instance of which we have historical record is the chest of Kypselos, which dated from the beginning of the sixth century b.c., and concerning which Pausanias ${ }^{[2058]}$ tells us that "the majority of the figures on the chest have inscriptions written in the archaic characters; and some of them read straight, but other letters have the appearance called by the Greeks 'backwards-and-forwards' (ßоибтоочПбóv), which is like this: at the end of the verse the second line turns round again like a runner half through his course. And any way the inscriptions on the chest are written in a tortuous and hardly decipherable fashion." There is, however, no mention of inscribed vases until a much later date; Athenaeus speaks of a cup with the name of Zeus Soter

Inscriptions on Greek vases are found in comparatively early times, even prior to the date to which the chest of Kypselos is attributed. This question will receive more attention subsequently; meanwhile, we may point out some of the ways in which they have proved important in the study of archaeology. In the first place, they were originally among the principal, perhaps the strongest, arguments in the hands of Winckelmann, Sir W. Hamilton, and the other upholders of the true origin of Greek vases against Gori and the other "Etruscans" (see Vol. I. p. 19). They are, in fact, if such were required, an incontestable proof of Greek manufacture. Secondly, in more modern times, they have been of inestimable value in enabling scholars to classify the early vases according to their different fabrics. The alphabets of the different cities and states being established by inscriptions obtained from trustworthy sources or found in situ, it was an easy matter to apply this knowledge to the vases. In Chapters VII.-VIII. numerous instances have been given of the value of this evidence (see also below, p. 247 ff .), perhaps the best being that of the Chalcidian class, for which the inscriptions have been a more important criterion even than style. Thirdly, the inscriptions are sometimes of considerable philological value. Those on Attic vases may fairly be said to represent the vernacular of the day; and thus we learn that the Greeks of the Peisistratid age spoke of 'Oגvtтєús, not 'Oठvoбعv́s, and of $\Theta \tilde{\eta} \sigma u \varsigma, ~ n o t ~ \Theta \eta \sigma \varepsilon v ́ s ; ~ t h a t ~ t h e y ~ u s e d ~ s u c h ~ f o r m s ~ a s ~ v i v ́ s ~$ for viós, ${ }^{[2060]}$ and пícı for пí (see below, p. 255). Traces of foreign influence in the inscriptions, as in the frequently occurring Doric forms, imply that many of the vase-painters were foreigners, probably of the metic class. We shall also see that one class of inscriptions gives some interesting information on the subject of the names and prices of vases in antiquity.

The whole subject has been treated exhaustively-especially from a philological point of view-in a valuable treatise by P. Kretschmer, ${ }^{[2061]}$ to which we shall have occasion to make constant reference in the following pages. He classifies them under two main headings: (a) inscriptions incised with a sharp tool in the hard clay; (b) inscriptions painted with the brush after the final baking. They are also found in very rare instances impressed in the soft clay and varnished over. ${ }^{[2062]}$ In later times inscriptions in relief are actually found, sometimes painted with thick white pigment, sometimes gilded. ${ }^{[2063]}$ On the so-called Megarian bowls and on the Arretine and other wares of the Roman period they are stamped from the moulds. Lastly, there are the stamps imprinted on the handles of wine-amphorae, which have been discussed in Chapter IV.

The incised inscriptions are of three kinds: (1) those executed by the maker of the vase; (2) those scratched under the foot; (3) those incised by the owner. As these represent a much smaller class than the painted ones, they shall be dealt with first.
(1) Inscriptions incised by the maker before the final baking. These are found on the handles and feet, round the edge of a design, or interspersed therewith like the painted inscriptions. Generally they represent the signature of the potter, as in the case of the early Boeotian vase signed by Gamedes, ${ }^{[2064]}$ the vases of the fifth-century artist Hieron, ${ }^{[2065]}$ and those of Assteas, Python, and Lasimos in Southern Italy. ${ }^{[2066]}$ On the vases of the latter class explanatory inscriptions seldom occur, but when they do (as on the vases of Assteas) they are always incised. Of their palaeographical peculiarities we will speak later. On a vase in the South Kensington Museum ${ }^{[2067]}$ the words Bра $\quad \tilde{\alpha} \varsigma$ ка入ós are incised and painted red, and on the pottery found on the site of the Kabeirion at Thebes the same process is often adopted, except that the paint used is white. ${ }^{[2068]}$
(2) Of inscriptions scratched under the foot a considerable number remain, especially on B.F. vases. They are often difficult to decipher, being in the form of monograms, and frequently appear to be meaningless. In many cases they may have been private marks of the potter or his workmen; others, again, are evidently private memoranda made by the workman, relating to the number of forms of vases in his batch, or by the merchant respecting the price to be paid. Commonly they take the form
 for $\sigma к и ́ \varphi \rho \varsigma$ (skyphos), ${ }^{[2070]}$ and so on. Many of the inscriptions give the words in full, with numbers and prices, and we may obtain from them some curious information.
Among the more elaborate examples given by Schöne in his valuable monograph is one from a krater in the Louvre ${ }^{[2071]}$ :

That is，six kraters，value four drachmae；eight oxides；twenty bathea（an unknown form），one drachma one obol．The bathea were probably deep cups or ladles；the oxides（lit．vinegar－cups） were small vessels，probably answering to our wine－glasses．

Another instance given by Schöne ${ }^{[2072]}$ is：

```
^HKY\ThetaIA \triangle \lambda\etaKv́Ө\imath\alpha \deltá́K\alpha
OINOXOAI II
oivo\chio\alphaì \deltav́o
```

or ten lekythi and two oinochoae．
Another good example is on a krater in the British Museum（E 504）：

```
KPATEPE \GammaI: rH&t к\rho\alpha\tau\etã\rho\varepsilon(ৎ)\dot{\varepsilon}\xi т\varepsiloń\sigma\sigma\alpha\rho\varepsilonৎ
ПEMAINIA : \triangleI| : III п\varepsilon\lambda\lambdaí\nul\alpha [2073] \delta\omegá\delta\varepsilonK\alpha т\rho\varepsilonĩৎ
Oモ|\triangleE{:\triangle\triangle:II| ỏ}í\delta&ৎ \varepsilonikó\sigmal т\rho\varepsilonĩৎ
```


i．e．six kraters at four drachmae，twelve cups at three obols，twenty oxides at three obols，twenty oxybapha at one drachma one obol．

Another in Vienna ${ }^{[2074]}$ ：
KPATEPE ：ГI ：TIME ：トトトト K $\quad$ к $\alpha \tau \tilde{\eta} \rho \varepsilon \varsigma \dot{\varepsilon} \xi$ тı $\mu \eta$ т $\varepsilon \sigma \sigma \alpha \rho \varepsilon \varsigma ~(4 ~ d r)$.
BA®EA ：$\triangle \triangle:$ TIME ：H $\quad \beta \alpha \theta \varepsilon ́ \alpha$ cikooı tı $\mu \grave{\mathrm{H}} \mathrm{I}$（1 dr． 1 ob．）
．OIII $\triangle$ E ：$\Delta$
is to the same effect as the two preceding．On a hydria at Petersburg ${ }^{[2075]}$ we find：

## Y $\triangle T P I \triangle P A X \Gamma O I ~ A V$

$$
\text { ப́ర( } \rho i ́ \alpha \imath) \tau \rho(\varepsilon) \tau ̃(\varsigma) ~ \delta \rho \alpha \chi(\mu \tilde{\nu} \nu) \Pi(\varepsilon ́ \nu \tau \varepsilon) \text { ỏ(ßó入ov) } \dot{\varepsilon} \nu o ́ \varsigma
$$

or three hydriae worth five drachmae one obol．The last example that need be mentioned is from a vase at Berlin ${ }^{[2076]}$ ：

$\AA \cdot \wedge Y \triangle I A$ MEI $\Omega: I: E: \wedge C \Gamma A\{T I \Delta E\{: K: I$

Here the letters probably stand for numerals of the ordinary kind，denoting the numbers of the batch（ $1 \varepsilon^{\prime}=15, \mathrm{k} \xi^{\prime}=27$ ）．
The form of the letters in all these cases is that of the fifth century．In the case of the second，third， and fourth examples given，it will be noted that the shape of the vase itself corresponds with the first item．Jahn and Letronne originally held the view that these marks were made by the potter on the feet of the vases before they were attached to their respective bodies．${ }^{[2077]}$ Schöne，in the light of the examples already quoted，makes the ingenious suggestion that each list represents a different＂set＂of so many vases of different forms，and used for different purposes，sold together in a batch，like a modern＂dinner－set＂or＂toilet－set＂of china．Thus we have in our fourth example a set of six mixing－bowls at four drachmae（3s．）apiece，ten wine－glasses at（probably）three obols or $4 \frac{1}{2} d$ ．apiece，and twenty cups or ladles at about $101 / 2 d$ ．apiece．
Some of the shorter inscriptions also throw light on the prices at which different vases were sold． For instance， $15 \wedge H K V: \Lambda \Delta: \wedge H \Lambda H K V: \Lambda \Delta: \Lambda H$ would denote thirty－four lekythi for thirty－seven obols， or roughly $1 \frac{1}{2} d$ ．apiece； $15 \wedge H K V:|\Gamma:| A \Lambda H K V: I \Gamma: I A$ thirteen lekythi for eleven obols，at a slightly lower price．${ }^{[2078]}$ Aristophanes ${ }^{[2079]}$ tells us that one obol would purchase quite a fine lekythos，just as elsewhere ${ }^{[2080]}$ he mentions three drachmae as the cost of a kódo $\delta$ or cask．This latter statement is borne out by the inscription on a vase，$\Gamma \cdot K A \triangle I A \cdot \Delta \|$ ，or five $\kappa \alpha \alpha^{\prime} \delta \alpha$ value twelve drachmae，i．e．at about $21 / 2 d r$ ．apiece．${ }^{[2081]}$ An inscription quoted below shows that the owner of a cup valued it at one drachma．Other examples of the same kind are collected by Schöne．The cup from Cerigo in the British Museum，on which is incised EEMIKOTVAION（ $\dot{\eta} \mu$ ккотט́ $\lambda$ ıov）${ }^{[2082]}$ does not strictly come into this category，but may be mentioned as having an inscription of the same class．
（3）Inscriptions incised by the owner，and subsequently to the completion of the vase．These usually take the form of the word EIMI（EMI），with the owner＇s name in the genitive，as I $\triangle A M E N H O E ~ H M I ~(" I ~$ am Idamenes＇＂），or A\｛TYO＋I $\triangle$ A HMI（＂I am Astyochidas＇＂），on two B．F．cups from Rhodes．${ }^{[2083]}$ Sometimes this appears in an extended and metrical form，as on another B．F．kylix from the same site：
"I am the painted cup of the fair Philto." ${ }^{[2084]}$
Another metrical inscription runs:
 п $\rho \alpha \grave{~ \Xi ~ \Xi ~}$
"I am the cup of Kephisophon; if any one breaks me, let him pay a drachma; the gift of Xeno(krates)." ${ }^{[2085]}$

A yet more remarkable example is on an early lekythos from Cumae in the British Museum, ${ }^{[2086]}$ which, in the manner favoured by modern schoolboys, invokes an imprecation on the head of a thief:


FIG. 171.

"I am Tataie's oil-flask, and he shall be struck blind who steals me."
Others, again, record the gift of the vase, as: "Epainetos gave me to Charopos"[2087]; TENAISOI ®OAEMOS $\triangle I \triangle O S I:$ "Lo, this Thoudemos gives to thee." ${ }^{[2088]}$ A boat-shaped vase (kymbion) in the British Museum has incised on it the exhortation ПРOПINE MH KAT ӨH乏, "Drink, do not lay me down." ${ }^{[2089]}$ The owner's name is found in the nominative on a vase from Carthage at Naples: XAPMINO乏 ӨEOФAMIAA K $\Omega I O \Sigma$, "Charminos, son of Theophamidas, a Coan" ${ }^{[2090] ;}$ similarly in the
 A $\lambda \varepsilon \xi$ ı $\delta \alpha ́ \alpha$ on. ${ }^{[2091]}$
Under the same heading comes the class of votive or dedicatory inscriptions, found in such large numbers on the pottery of certain temple-sites, such as that of Aphrodite at Naukratis, ${ }^{[2092]}$ and that of the Kabeiri at Thebes. ${ }^{[2093]}$ The usual formula at Naukratis is oj $\delta \varepsilon i ̃ \nu \alpha \dot{\alpha} \nu \varepsilon ́ \theta \eta \kappa \varepsilon \tau \tilde{n} A \varphi \rho o \delta i ́ t \eta$ (or т $\tilde{\varphi}$ Aпó $\lambda \lambda \omega \nu \tau)^{[2094]}$; but sometimes we find the formula Aпó $\lambda \lambda \omega \nu$ on $\varepsilon i \mu i ́$, where the god as the recipient of the gift is regarded as the owner.
Y

FIG. 172.

One of the most interesting, and certainly the most ancient, of all incised inscriptions on Greek vases is that engraved on a jug of "Dipylon" ware found at Athens in 1880. ${ }^{[2095]}$ It runs: ôৎ vũv oj $\rho \chi \eta \sigma \tau \tilde{\nu \nu ~ п \alpha \nu \tau \omega \nu ~ \dot{\alpha} \tau \alpha \lambda \omega \tau \tau \alpha \tau \alpha ~ п \alpha i ́ \zeta \varepsilon ı, ~ \tau v ̃ v ~ \tau o ́ \delta \varepsilon . . . . ~ " H e ~ w h o ~ n o w ~ s p o r t s ~ m o s t ~ d e l i c a t e l y ~ o f ~ a l l ~ t h e ~}$ dancers," etc. Though probably not contemporary with this eighth-century vase, it is still of great antiquity, and the earliest Athenian inscription known.
In studying these graffiti, it must always be borne in mind that they lend themselves easily to forgery, and that many are open to grave suspicion. Instances of these doubtful inscriptions are the Kleomenes vase in the Louvre ${ }^{[2096]}$ and a late vase signed by Statics in the British Museum (F 594).

The painted inscriptions are practically limited to a period extending over two centuries, from the time at which the primitive methods of painting were slowly emerging into the black-figured style, down to the finest stage of red-figure vases. Rare at first, they rapidly spring into popularity, being constantly found on the sixth-century fabrics; but throughout the red-figure period they gradually become rarer and rarer, until they drop out almost entirely. In the vases of the Decadence they have for the most part fallen into disuse; at any rate, they are comparatively scarce. Some of the latest inscriptions are in the Oscan and Latin languages, showing the increasing influence of the Romans over Southern Italy, and especially Campania. The inscriptions always follow the laws of palaeography of the region and period to which they belong.

Generally speaking, it may be said that they have some reference to the design painted on the vase; at least, the majority are explanatory of the subject represented. Sometimes not only is every figure accompanied by its name, but even animals and inanimate objects, instances of which are given below. On the François vase there are no less than 115 such inscriptions. In almost all cases we can be certain that they are original, and contemporaneous with the vase itself.
The explanatory inscriptions are generally small in size, the letters averaging one-eighth of an inch in height. On B.F. vases they are painted in black; on R.F. vases of the "severe" style, in purple on
the black ground，or in black on the red portions；on later R．F．vases，in white．There is no rule for their position，or indeed for their presence；but，as a general rule，it may be said that they are oftener found on the finer and larger vases，and that they are placed in close juxtaposition to the figures to which they refer．The direction in which they are written may be either from left to right or right to left（as generally on Corinthian or Chalcidian vases）；on the Panathenaic amphorae are the only known examples of kıovךరóv inscriptions，in which the letters are placed vertically in relation to each other．They are occasionally found on the objects depicted，as on stelae or lavers （see pp．260，272），on shields，${ }^{[2097]}$ or even on the figures themselves．${ }^{[2098]}$ Signatures of artists are occasionally found on the handle or foot of a vase．${ }^{[2099]}$
Kretschmer（p．5）illustrates the practice of employing inscriptions on vases from the art of the Semitic nations．He instances clay vases from Cyprus with painted Phoenician inscriptions，${ }^{[2100]}$ for which the same pigment is used as for the decoration of the vases themselves．But none of these are likely to be earlier than the first Greek inscriptions，and it is more than probable that the Cypriote Phoenicians borrowed the practice from the Greeks．In order，therefore，to obtain information as to the date of these painted inscriptions，we are entirely dependent upon internal evidence．

The importance of these inscriptions may，perhaps，be best realised when it is pointed out that they are one of the chief guides to the age of the vases，and have contributed more than any other feature to the establishment of a scientific classification of the earlier fabrics，as will be fully indicated in the succeeding account．
The Greek alphabet，as is well known，is derived from the Phoenician，and this is attested not only by tradition，but by the known existing forms of the latter，the signs being twenty－two in number． The invention of the two double letters，and of the long $\eta$ and $\omega$ ，which are purely Greek，was attributed by popular tradition to various personages without any authority．With the question of the introduction of writing into Greece this is not the place to deal．Recent discoveries，especially in Crete，have greatly modified all preconceived notions on the subject，and for the present we are only immediately concerned with the earliest use of the Greek alphabet，as we know it．
This can be traced as far back as the seventh century b．c．on various grounds，and in all probability the traditional view which placed its introduction into Greece at about 660 b．c．is fairly correct．The earliest inscriptions on the vases are certainly not later，perhaps earlier than this（see below，p． 254）．At Abou－Simbel in Egypt，Greek inscriptions have been found in which the name of Psammetichos occurs，and this king is generally supposed to be the second of that name（594－589）． ${ }^{[2101]}$ In Thera and other Aegean islands，and on the coast of Asia Minor，inscriptions are known which，for various reasons，have been placed even earlier than this，and the vase with Arkesilaos， the inscriptions on which are discussed below，is hardly later，as it can be shown to date between 580 and 550 в．с．
Before proceeding to discuss the early inscriptions，it may be as well to note，for the benefit of those to whom Greek Epigraphy is an unfamiliar subject，the chief peculiarities of the earlier alphabets．${ }^{[2102]}$ They fall into two principal groups，the Eastern and Western，each of which has many subdivisions．Certain forms，such as $\downarrow$ for $X$ ，are characteristic of one or the other division；but the distinction is not so clearly marked on the vases，on which many alphabets，such as the Ionic and Island varieties，are scarcely represented．The vase－inscriptions fall mainly under three heads： Corinthian and Athenian in the Eastern group，Chalcidian in the Western．During the fifth century （or even earlier）there is a rapid tendency to unification in the Greek alphabet，which is chiefly brought about by the growing supremacy of Athens．This acted in two ways：firstly，by the fact that Attic became the literary and therefore the paramount language in Greece；secondly，by the fact of her artistic pre－eminence，which crushed out the other local fabrics．Finally，by the time of the archonship of Eukleides in 403 в．c．，the alphabet，if not the language，had become entirely unified， and the Ionic forms universally adopted for public and official purposes．For private use they had，of course，long been known at Athens；but the official enactment of that year only set the seal to a long recognised practice．Throughout the fifth century the old Attic and the Ionic forms are found side by side on R．F．vases．${ }^{[2103]}$
In the later archaic period the coins come in as an important source of evidence．${ }^{[2104]}$ None of the inscribed ones appear to be earlier than the sixth century，the oldest being perhaps the electrum stater usually attributed to Halikarnassos，with the name of Phanes（？）．The only characteristic letter （the alphabet belonging to the Ionic group）is the sign E in place of H to denote eta，which has not been found on any vase with the Ionic alphabet，and therefore betokens a very early date．Next comes an Attic stater of about 560 b．C．，with the legend（A）$\circ E$ ，which may be fitly compared with the oldest Panathenaic amphora，${ }^{[2105]}$ on which the dotted $\odot$ is also found．The earliest coins of Haliartos in Boeotia have the curious form 15Gcurious asper for the spiritus asper or H ，dating apparently before 550 в．с．；the succession can thence be traced through 14月asper2 14月asper3 and 日，down to about 480 в．с．，when it is dropped entirely．At Himera in Sicily в occurs in the fifth century for the spiritus asper，and is followed by the HH form，which in the West is employed down to about 400 B．c．On the early coins of Poseidonia（Paestum）the $M$ form of $\Sigma$ is found（550－480 b．c．），being also characteristic of Corinthian vases of the sixth century；it also lingers on in Crete，but in Sicily and elsewhere the $\leq$ form of Attic and other alphabets is more usual，until replaced in the fifth century by $\Sigma$ ．Of the specially Ionic letters，H（＝eta）is found generally at an early date，as at Teos（540－400 b．c．），and also $\Omega$ ．At Corinth the koppa Q for K is in use from the earliest times down to the days of the Achaean League，and does not therefore afford evidence of date by itself，but only of a local peculiarity，being equally universal on vases．The digamma is only found on coins of Elis and Crete， whereas it often occurs on early Greek vases．${ }^{[2106]}$
It may also be of interest to note that the $\quad$ form for the rough breathing occurs on the helmet of Hiero in the British Museum，${ }^{[2107]}$ which can be dated $480-470$ в．c．，and that the use of H for eta and
of the four-lined $\Sigma$ at Athens previous to the archonship of Eukleides can be deduced from the wellknown fragment of Euripides ${ }^{[2108]}$ in which the letters forming the name 0 HIEY $\Sigma$ are carefully described.
In the following pages illustrations of the points above noted will be fully detailed where occurring on the vases. The annexed scheme of alphabets used on vases (Fig. 173) will serve to give a general idea of the variations of form in different fabrics.

The painted inscriptions on vases first appear, as already noted, about the beginning of the seventh century в.с. The earlier fabrics-Mycenaean, Cretan, and Cycladic-generally belong to an epoch when writing, if not unknown, was at any rate little practised ${ }^{[2109]}$; nor have any inscriptions been found on the Dipylon or Geometrical vases, except the incised one which we have already discussed. The oldest known painted inscriptions are found on a Proto-Corinthian lekythos (see p. 254), the Euphorbos pinax from Kameiros (B.M. A 749), and the krater signed by Aristonoös, which is perhaps of Ionic origin, strongly influenced by Mycenaean art.

SCHEME OF ALPHABETS USED ON GREEK VASES


FIG. 173.

With the great impulse given to vase-painting at the beginning of the sixth century by the development of the art in Corinth, Chalkis, and Athens (especially in Corinth), the number of inscribed vases rapidly increases. Among the earliest examples are those remarkable painted pinakes found at Corinth (Vol. I. p. 316), nearly all of which have dedicatory inscriptions, while in most cases the names are given of the deities, Poseidon and Amphitrite, to whom they were dedicated, and whose figures appear on them. They may be dated 600-550 b.c. The custom of inscribing names on works of art is illustrated by other products of this period, as we have already noted in the case of the chest of Kypselos; and they occur on the early bronze reliefs from Olympia, ${ }^{[2110]}$ the Samothrace relief in the Louvre, ${ }^{[2111]}$ the archaic reliefs at Delphi, and the newly found painted metopes at Thermon, ${ }^{[2112]}$ as well as later on the paintings of Polygnotos.
On the Euphorbos pinax already mentioned ${ }^{[2113]}$ appear the names of Menelaos (MENEFAM), Hector (
 the characteristic form $r$ of the $\Lambda$ in Menelaos. ${ }^{[2114]}$ Although its date cannot be exactly ascertained, it is probably about 620-600 в.с. It is a vase important in more than one respect, as it may be said to foreshadow the beginnings of the black-figure style.
The vase of Aristonoös ${ }^{[2115]}$ was found at Cervetri, and bears the artist's signature,

in an alphabet from which, unfortunately, all characteristic letters are wanting, so that its origin is uncertain. It is, however, as we have said, probably a seventh-century product of an Ionian fabric,
on the coast of Asia Minor．The $14 \oplus$ halved circle has been taken by several scholars ${ }^{[2116]}$ to denote $F$ as in the Phrygian alphabet，but Kretschmer（ p .11 ）prefers to read it as $\vartheta 14 \oplus$ halved circle $=14 \oplus$ quartered circle We have，however，already seen that it is most probably a superfluous letter．
Early in the sixth century must be placed another remarkable vase，the Arkesilaos cup of Cyrenaean fabric．${ }^{[2117]}$ The inscribed names on this vase are as remarkable as its subject；there are nine in all， two only fragmentary．The only proper name is that of Arkesilas（APk\＆$\{\wedge \wedge \xi)$ ，who was king of Kyrene 580－550 в．с．；the others seem to be titles，such as ІОФортоя，＇Ió $\varphi$ ортоц or $\Sigma \omega \varphi$ ортоৎ，＂Keeper of the burdens＂；乡лøомачоя，$\Sigma \lambda ı \varphi о ́ \mu \alpha \chi \circ \varsigma$ ，a word having some reference to silphium，the subject of the vase；
 inanimate object（a balance）．The dialect is Doric，Kyrene having been colonised by that race．
Next we have to deal with a very important class of inscriptions－those found on Corinthian vases． ${ }^{[2118]}$ They are too numerous to be dealt with in detail；Kretschmer mentions nearly fifty inscribed vases，exclusive of the pinakes．Wilisch attributes the earliest to the latter half of the seventh century，the latest to the middle of the sixth century；but they certainly do not become common before the sixth．${ }^{[2119]}$ They include several artists＇signatures－viz．Chares，Milonidas，and Timonidas （Vol．I．p．315）．One of the most famous of the inscribed vases is the Dodwell pyxis at Munich，${ }^{[2120]}$ representing a boar－hunt．The figures are inscribed with fanciful names，such as ASAMEMNON （Agamemnon），$\triangle O D\{$ MAXOM（Dorimachos，or＂spearman＂），「AYON（Pakon），and so on．A krater in the British Museum（Plate XXI．）represents a similar scene，also with fancy names，such as Polydas and Antiphatas．Another famous vase is the Amphiaraos krater in Berlin，${ }^{[2121]}$ representing the setting out of Amphiaraos and the funeral games of Pelias；no less than twenty names are inscribed．Of these，इATON（Baton）and вггГАгмом（Hippalk（i）mos）illustrate other palaeo graphical peculiarities． Other good examples are the vase by Chares，${ }^{[2122]}$ another in the British Museum with the name of the owner（A\＆NBTA BM\｛，Ailveta $\dot{\varepsilon} \mu i ́ \dot{\varepsilon}$ ），${ }^{[2123]}$ and that by Timonidas representing Achilles lying in wait for Troilos．${ }^{[2124]}$ A study of the pinakes in Berlin is also instructive in this respect．One is signed by Timonidas，another by Milonidas，while others bear interesting inscriptions，such as Fig．174：


FIG． 174.

> "We have come from Peiraeus" ${ }^{[2125]}$;
> TV $\triangle B \triangle O M \times A P\{B M A N ~ A \Phi O P M A N$

$$
\begin{aligned}
& \text { "And do thou make a graceful repayment" }{ }^{[2126]} \text {; }
\end{aligned}
$$

and so on．The majority have only the names of Poseidon and Amphitrite，or（ó $\delta \varepsilon i ̃ \nu \alpha$ ）$\dot{\alpha} \nu \varepsilon ́ \theta \eta \kappa \varepsilon \nu$ ，
In view of the palaeographical importance of these inscriptions，it may be worth while to dwell briefly on their peculiarities．The dialect is of course Doric，and consequently the names often differ widely from the forms to which we are accustomed；and this is increased by divergencies of spelling，which produce many anomalous results．For instance，（kBMANDPA）（Kと $\sigma \alpha{ }^{\prime} \nu \delta \rho \alpha$ ）appears for Kassandra on a vase in the Louvre．${ }^{[2127]} \mathrm{AE}$ is used for AI，as in $A B \oplus O N$（ $\mathrm{A} \varepsilon \dot{\varepsilon} \theta \omega \nu=A$＇$\theta \omega \nu$ ）on the Chares pyxis，and in $\lceil B P A \& O \otimes B N(\Pi \varepsilon \rho \alpha \varepsilon o ́ \theta \varepsilon v$ for $\Pi \varepsilon(\mathrm{\imath}) \rho \alpha \iota o ́ \theta \varepsilon \nu)$ on the pinax already quoted．A nasal is dropped before a consonant，as in the names of Amphiaraos（AфऽAPBOM）and Amphitrite（ A $\Phi$ STPITA）The digamma lingers as a medial（more rarely as initial）in many words，such as faxús， $\Delta \alpha \mu \circ f \alpha \alpha^{\prime} \nu \alpha \sigma \sigma \alpha$ ，Потєı $\delta \alpha f \omega \nu$ ，and $\Delta ı \delta \alpha i ́ f \omega \nu$ ；its written form is $15 \vDash F$ or $15 \vDash f$ The use of $\quad$ for the rough breathing is invariable．${ }^{[2128]}$
One or two vases have been recognised as of Sicyonian fabric by the use in inscriptions of the unique 158 E for E ，peculiar to that place（Vol．I．p．321）．The only certain example，however，is a krater in Berlin（Cat．1147），with the names of Achilles（MYZ1I＋A）and Memnon（MZMNON）．It may also be noted that an Athenian sixth－century vase，signed by Exekias，has a Sicyonian inscription incised upon it by its owner ${ }^{[2129]}$ ：
$Z \Gamma A I N Z T O M M Z \triangle O K Z N+A P O \Gamma O I$

Boeotian vases never attained to the importance of the Corinthian fabrics，though，on the other hand，the manufacture lasted longer；but there are several instances of early signed vases from this district．Two，of which one is in the British Museum，are by Gamedes，the others by Theozotos， Gryton，Iphitadas，Mnasalkes，and Menaidas．${ }^{[2130]}$ They are recognised as Boeotian by the use of typical letters，as well as by origin，style，and dialect；such are the A for A，$\psi$ for X，and so on．There is also a fifth－century vase with the Boeotian alphabet．${ }^{[2131]}$ The Kabeirion vases have inscriptions in the local alphabet，with a few exceptions，which are Ionic．${ }^{[2132]}$
A unique vase，from the epigraphical point of view，is E 732 in the Louvre，found at Cervetri，to
which allusion has been made elsewhere（Vol．I．p．357，and see Fig．111）．It bears eleven names（of gods and giants）in an alphabet which has been recognised as Ionian，and is according to Kretschmer most probably that of the island of Keos．The great uncertainty as to the E sounds presented by this vase finds parallels in the stone inscriptions found on that island，while in the use of B for $C$（the older form of that letter），the four－stroke $\Sigma$ and $\odot$ ，with a central dot，this attribution finds further support．The only other islands that would fit the conditions are Naxos and Amorgos．
 again＇E $\varphi$ Ió́ $\lambda$ tņ appears as HICIA「TEs！But this confusion does not occur in Naxos or Amorgos．
Other vases are undoubtedly of Ionic origin，but their actual home is uncertain；they are usually assigned to the coast of Asia Minor．For some reason，however，it is very rare for these vases to bear inscriptions；in all the numerous instances now collected，only some half－dozen with inscriptions can be found．${ }^{[2133]}$ One of these is the well－known Würzburg kylix with Phineus and the Harpies（see Vol．I．p．357）；another is a vase from Vulci，published by Gerhard，${ }^{[2134]}$ which has since disappeared．On both of these we find the characteristic Ionic letters $\Omega$ for $\omega, \mathrm{H}$ for $\eta, \mathrm{X}$ for $\chi, \Lambda$ for $\lambda$ ，and $\Sigma$ with four strokes．Both vases are of the sixth century，and other details attest their Ionic origin．
We now come to a very important but somewhat puzzling class of inscriptions，those in the Chalcidian alphabet．${ }^{[2135]}$ The number of these is hardly more than a dozen，but such as they are they have enabled archaeologists to establish a Chalcidian school of painting by comparisons with other uninscribed vases．In all cases the inscriptions relate exclusively to the figures in the designs．


 represented by $\subseteq \varepsilon$ in one instance（ $М П О \odot ६ О ६ ~=~ М<\Pi>o ́ \psi о \varsigma) . ~ . ~$
Kretschmer has compiled a list of twelve vases with inscriptions in this alphabet，to which one or two may be added，but for a fuller treatment of the questions involved in studying this group the reader is referred to Chapter VII．This，however，may be a more suitable place for a few remarks relating to the inscriptions alone．
In one or two instances the dialect alone is peculiarly Chalcidian，as the characteristic letters happen to be wanting．In some instances，as Kretschmer points out，the Aeolic fondness for the vowel $v$ is to be traced，as in ivnpvp，for Kúkvos，which finds parallels in the Chalcidian colony of Cumae，and probably influenced the Latin language through that means．Hence，too，the preference for the Q sound of the Q，as in English and other languages when v is preceded by a guttural．On the British Museum Geryon vase（ B 155）there is a curious mixture of dialect in the forms Г $\alpha \rho$ vóvךऽ，Nךíסєऽ．
It must be borne in mind，in speaking of the Chalcidian alphabet，that it really extended over a wide area，including not only Chalkis in Euboea，but Chalkidike in Northern Greece，and the colonies on the coast of Italy，such as Cumae，and this may partly account for the mixed character of the dialect on some of these Chalcidian vases．But although an attempt has been made to connect them with Cumae，it cannot be said at present that any certainty has been attained as to the place of their manufacture．

Though not belonging to the Chalcidian group，there is a vase which must be mentioned here，on account of its inscription，which is partly in the alphabet of the Chalcidian colonies．The vase is of the＂Proto－Corinthian＂class（see Vol．I．p．308），and dates about 700－650 в．c．；it bears the name of the maker，Pyrrhos ${ }^{[2136]}$ ：

$$
\begin{aligned}
& \text { Пир( } \rho \text { )оऽ } \mu^{\prime} \text { єпоוךбєь Aү } \alpha \sigma ı \lambda \varepsilon f o u
\end{aligned}
$$

and is therefore one of the oldest existing signatures．

## Athenian Vases

Under this heading are included all remaining vase－inscriptions，except a few from Italy．Their value to us，as Kretschmer points out，is not to be measured only by the mythological information they provide，or by the list of Athenian craftsmen and popular favourites which can be drawn up from them，but it is also largely philological．In other words，they illustrate for us the vernacular of Athens in the sixth and fifth centuries，just as the Egyptian papyri have thrown light on the Hellenistic vernacular of the second．In countless small details the language of the vase－painters varies from the official language of state documents and the literary standard of Thucydides， Sophocles，and even Aristophanes．The reason is，of course，a simple one－namely，that the vase－ artists occupied a subordinate position in the Athenian state；they were mere craftsmen，of little education，and in all probability their spelling was purely phonetic．${ }^{[2137]}$ Hence we constantly find such forms as пí $\imath$ for пíع，viv́s for viós，or $\Theta \tilde{\eta} \sigma u$ for $\Theta \eta \sigma \varepsilon v ́ \varsigma ~(s e e ~ a b o v e, ~ p . ~ 237) ; ~ a n d ~ e v e n ~ t h e ~ r i c h ~$ potter Hyperbolos is ridiculed by the comic poet Plato ${ }^{[2138]}$ for saying ó入íov（SC．oliyon）for ỏ入ípov， and $\delta \eta ฺ \tau \omega \dot{\mu} \eta \nu$ for $\delta ı \eta ̣ \tau \omega ́ \mu \eta \nu$.

Another interesting point is that many of the artists who have signed their vases were obviously not Athenians by birth．Thus we find such names as Phintias，Amasis，Brygos，Cholkos，Sikanos，Thrax， ${ }^{[2139]}$ and even such signatures as ó $\Lambda \nu \delta$ ós（or ó $\Sigma \kappa v ́ \theta \eta \varsigma$ ）$\varepsilon \varepsilon_{\gamma} \rho \alpha \psi \varepsilon \nu$ ．It is，then，evident that many of them were $\mu$ ќtoוкоı or resident aliens，and consequently occupied but a humble rank in the social order of the city．${ }^{[2140]}$ One name，indeed，that of Epiktetos，is actually a slave＇s name（＇Eпíктๆтоৎ＝ ＂acquired＂）．

We need not, then, be surprised at meeting with many un-Attic forms or spellings in the vaseinscriptions, which sometimes give a clue to the origin of the artist, and of which it may be interesting to give some specimens. Kretschmer notes that these variations are always Doric, never Ionic.

The commonest Doricism on Attic vases is the use of A for H , of which there are many instances,

 the other hand, the names Menelaos and Iolaos always appear in their Attic form Mعve入 $\varepsilon$ ćc, 'Io $\lambda \varepsilon$ ќ $\omega$. The above instances are all from proper names; but there are other remarkable instances, such as the use of к $\alpha \lambda \alpha$ for $\kappa \alpha \lambda \eta$ in $\Gamma A N T O$ IENA $K A \wedge A K O P|N \Theta \Omega| \cdot{ }^{[2143]}$ On one of his signed vases Exekias uses the un-Attic form TESAPA, т $\varepsilon \sigma(\sigma) \alpha \rho \alpha$, but, as Kretschmer notes, he also uses 'Ió $\lambda \alpha 0$, for 'Io $\lambda \varepsilon \varepsilon^{\prime} \omega$, and was probably not an Athenian. On a B.F. amphora in Rome (see below, p. 263) occurs the form п $\rho \beta$ ќ $\beta \alpha к \varepsilon \nu$.
Perhaps the most remarkable use of non-Attic Greek on a vase is in the case of the artist Brygos, who, as we have already pointed out, was of foreign origin. On a kylix in his style (B.M. E 69) we
 Macedonian origin, ${ }^{[2144]}$ but Kretschmer points out that that people used B, not $П$, for $\Phi$. He aptly
 giving a likely clue to the home of this dropping of the aspirate. ${ }^{[2146]}$
The painted inscriptions on the Attic vases may be divided into three classes: (1) those relating to the whole vase and its purpose, such as artists' signatures; (2) those relating to the designs on the vase, i.e. explanatory inscriptions, and those found on Panathenaic amphorae; (3) those which stand in no direct relation to the vase, such as the so-called "love-names" or "pet-names," and interjections such as "hail," "drink deep," etc. The incised inscriptions have already been discussed.
The artists' signatures first call for consideration. In relation to their works they are fully discussed elsewhere (Chapters IX., X.), but the present may be regarded as a convenient opportunity for some general outline of the style and palaeography of these inscriptions.
Klein in his Meistersignaturen (2nd edn.) reckons a total of ninety-five signatures, a number which has probably been largely increased since he wrote in 1887. These names he finds distributed over some 424 vases, one name, that of Nikosthenes, occurring on no fewer than seventy-seven; he divides them into four classes, as follows: (1) masters in the B.F. method; (2) masters combining the two methods; (3) masters in the R.F. method (including S. Italy vases); (4) masters whose names appear on vases without subjects. These four classes are not mutually exclusive, as names in (1) and (3) appear again in (2) and (4).

The form which the signature takes is usually (1)-
ó $\delta \varepsilon i ̃ \nu \alpha$ غ́поíŋбعノ (of the potter);
or (2) -
है $\gamma \rho \alpha \psi \varepsilon \nu$ (of the painter);
or (3), the two combined, either under one name, as-

or (4), with separate names, as on the François vase-


FIG. 175.

The form (3) may possibly indicate the priority of the artist, but it is more probable that it was adopted as forming an iambic trimeter. When $\dot{\varepsilon} \Pi o i ́ \eta \sigma \varepsilon \nu$ only occurs on a painted vase, it is generally to be assumed that the potter is also the painter.
The older artists avoided, as a rule, the imperfect $\varepsilon$ ह́ $ү \rho \propto \varphi$ or $\dot{\varepsilon} п о$ о́ $\varepsilon$, but its use came into fashion for a short time among the early R.F. artists, such as Andokides, Chelis, and Psiax, who use غ́поíعı (Vol. I. p. 430); it was again adopted by the Paestum and Apulian schools, as a modest affectation that their work was as yet unfinished. ${ }^{[2147]}$ But the majority preferred the more decided aorist, indicating completeness. The word $\mu \varepsilon$ or $\dot{\varepsilon} \mu \varepsilon ́$ is usually added by the earlier artists, as in the instance already quoted from Exekias. Generally speaking, $\varepsilon \neq \rho \alpha \psi \varepsilon \nu$ rarely occurs on B.F. vases, غ́поínoعv being the


Statios ${ }^{[2148]}$; and even more unique is the use of the word $\kappa \varepsilon \rho \alpha \mu \varepsilon v ́ \varepsilon ı \nu$ by the early Attic potter Oikopheles, ${ }^{[2149]}$ as a synonym for noєعĩv. Other peculiarities of signature are to be seen on the

The potter sometimes added the name of his father, either as being that of a well-known man, or to distinguish himself from others of the same name. Thus Timonidas of Corinth signs
 Eucheiros, 'Opүotífou vívs (the son of Ergotimos); Euthymides, $\mathrm{HO} \Gamma \mathrm{O} \wedge \mathrm{OV}$, ó Пo入íou. The latter in one instance not only gives his patronymic, but challenges comparison with his great rival
 "Euphronios never made anything like this." ${ }^{[2151]}$ Other peculiarities are: the omission of the verb, as was sometimes done by R.F. artists (e.g. Psiax); or, on the contrary, the simple ह́noínoعv, without a name, sometimes found on R.F. kylikes of the Epictetan school ${ }^{[2152]}$; or the addition by the artist of his tribe or nationality. Among the latter we have Kleomenes, Teisias, and Xenophantos, who style themselves AӨŋvoĩoc, and Nikias, who not only gives his father's name, but also his deme in Attica:

## 

FIG. 176.

## 

Two other artists call themselves ó $\Lambda$ vठóc (the Lydian) and ó $\Sigma \kappa v ́ \theta \eta \varsigma$ (the Scythian). Smikros signs one of his vases in the Louvre ${ }^{[2153]} \triangle$ OKEI ${ }^{215}$ MIKP $\Omega E I N A I$, "It seems to be Smikros' work." There are also frequent vagaries of spelling, as in $\Phi \iota t i ́ \alpha \varsigma ~ f o r ~ Ф ı \tau t i ́ \alpha \varsigma, ~ П \alpha ́ \nu \varphi \alpha ı o \varsigma ~ o r ~ \Pi \alpha ́ v \theta \alpha ı o \varsigma ~ f o r ~ П \alpha ́ ~ \mu \varphi \alpha ı о \varsigma, ~$
 koppa Q for K. Fuller information in regard to this subject may be found in Klein's admirable work; there is also much of interest relating to the R.F. cup-painters in Hartwig's exhaustive treatise. A complete list of all known artists' names is given at the end of this chapter.

We now come to the inscriptions which have relation to the subjects depicted on the vases. These are seldom of a general kind, having reference to the whole composition; but on a Panathenaic amphora in Naples a boxing scene is entitled $\Gamma$ ANKPATION, "general maul," ${ }^{[2154]}$ and on another in Munich over a foot-race is written, sTA $\triangle 1 O$ AN $\triangle P O N$ NIkE, $\sigma \tau \alpha \delta i ́ o u ~ \alpha \dot{\alpha} \delta \delta \rho \tilde{\nu} \nu$ vík ${ }^{[2155]}$ while B.F. lekythos in the same collection with Dionysos and dancing Maenads is inscribed $\triangle$ IONVs|A(k)A. ${ }^{[2156]}$ On a vase with a Homeric subject is $\Gamma A T P O K \wedge I A$, and on one with a scene from Theban legend kPEONTEIA. ${ }^{[2157]}$ Localities are sometimes hinted at by the use of such words as KP[NE (к $\rho \eta \eta^{\prime} \eta \eta$ ) on the François vase, where Polyxena goes to the fountain, or by the KALIPEKPENE K $\alpha \lambda \lambda \iota \rho(o ́) \eta$ кр $\eta \eta \eta$ on the British Museum hydria (B 331) with girls drawing water at the fountain of Kallirrhoë. More often names are given to inanimate objects like the $\theta \tilde{\alpha} к о \varsigma$ (seat) and vibpí (pitcher) on the François vase, $\sigma \tau \alpha \theta \mu$ ós on the Arkesilas cup, the $\beta \tilde{\omega} \mu \circ \varsigma$ (altar) on a vase in Munich (Cat. 124), $\lambda$ úp $\alpha$ (lyre) on a cup in Munich (333), and $\theta$ povós (throne) on an amphora in the Louvre. ${ }^{[2158]}$ On a washing-basin on a R.F. vase published by Tischbein appears the word $\triangle H M O \& \mid A$, i.e. "public baths." ${ }^{[2159]}$ The word $\tau \varepsilon ́ \rho \mu \omega \nu_{\tilde{\sim}}$ sometimes appears on a stele on later vases. ${ }^{[2160]}$ Animals are also occasionally named, such as the $\tilde{u} \varsigma$ on the Munich vase already quoted (333). ${ }^{[2161]}$
But the greater majority of these inscriptions refer to the names of persons, deities, and mythological figures, the name being usually in the nominative, but occasionally in the genitive, with $\varepsilon \tilde{\delta} \delta o \varsigma$ or $\varepsilon i \kappa \omega \nu$ understood. ${ }^{[2162]}$ Sometimes generic names or nicknames are given to ordinary figures in genre scenes, as Ap ${ }^{\prime} \varepsilon \nu \alpha v ́ t \eta \varsigma, ~ " t h e ~ s h i p ’ s ~ c a p t a i n " ; ~ K \omega ~ \mu \alpha \rho \chi o \varsigma, ~ " l e a d e r ~ o f ~ t h e ~ r e v e l s " ; ~ o r, ~$
 real contemporary persons are occasionally introduced, as on a hydria by Phintias, on which his comrade Euthymides and the "minor artist" Tlenpolemos are represented, with names inscribed ${ }^{[2164]}$; and on a stamnos by Smikros at Brussels the artist introduces himself and the potter Pheidiades at a banquet. ${ }^{[2165]}$ Although proper names usually stand alone, they are sometimes


 Pylos" ${ }^{[2170]}$; $\Delta I O S ~ \operatorname{DOS} \Delta \mathrm{lò} \varphi \tilde{\omega} \varsigma$, for Dionysos ${ }^{[2171]} ; \triangle I O S$ ГAIS, "the son of Zeus," for Herakles ${ }^{[2172]}$; т $\alpha$ ט̃pos $\varphi о \rho \beta \alpha ́ \varsigma$, "the grazing bull," for the metamorphosed Zeus (a doubtful instance). ${ }^{[2173]}$
Besides the names of figures and objects, words and exclamations are sometimes represented as proceeding from the mouths of the figures themselves, in the same manner as on the labels affixed to the figures of saints in the Middle Ages. They vary in length and purport, but in some cases they appear to be extracts from poems or songs, or expressions familiar at the time, but now unintelligible or lost in the wreck of Hellenic literature. They are found on both B.F. and R.F. vases, but more commonly on the former, and generally read according to the direction of the figure, as if issuing from the mouth.
Thus a boy pouring wine out of an amphora cries, ENXE H $\triangle$. OINON, $\varepsilon$ é $(\gamma) \chi \varepsilon \imath \dot{\eta} \delta[v ̀ \nu]$ oĩvov, "Pour in sweet wine" ${ }^{[2174]}$; over the first of three runners in a race appears $\nu \iota \kappa \tilde{\alpha} \varsigma, ~ \Pi о \lambda \nu \mu \varepsilon ́ \nu \omega \nu, ~ " P o l y m e n o n, ~$ you win" ${ }^{[2175]}$; again, Amphiaraos is exhorted to mount his chariot with the word $\dot{\alpha} \nu \alpha \alpha^{\beta} \beta \alpha{ }^{[2176]}$ or one personage says to another, $\chi \alpha$ ĩ $\rho \varepsilon$ or пĩ $\nu \varepsilon$ k $\alpha \grave{~} \sigma$ ט́. ${ }^{[2177]}$ Sometimes the words are evidently those of a song, as on a R.F. kylix at Athens, where a man lying on a couch sings an elegy of Theognis beginning $\tilde{\omega}$ п $\alpha i ́ \delta \omega \nu$ K $\alpha \lambda \lambda \iota \sigma \tau \varepsilon$, "Fairest of boys!" ${ }^{[2178]}$ Another sings MAMEKAIПOTEO, which has been
recognised as an inaccurate version of an Aeolic line，к $\alpha$ і̀ поӨŋ́ $\omega$ к $\alpha \grave{1} \mu \alpha \alpha_{0} \mu \alpha \mathrm{l} .{ }^{[2179]}$ On a red－figured vase in the British Museum（E 270）a man accompanied by a flute－player has an inscription proceeding from his open mouth，which runs，HO $\triangle E \sqcap O T E N T V R I N \odot I, \dot{\omega} \delta \varepsilon ́ ~ п о т ' ~ \varepsilon ̇ \nu ~ T v ́ \rho ı \nu \theta ı ; ~ e v i d e n t l y ~$ the beginning of a song，＂Here once in Tiryns．．．．＂On a stamnos in the British Museum（E 439）the letters NON appear before the mouth of a Seilenos，and evidently represent notes of music．${ }^{[2180]}$
On a psykter by Euphronios ${ }^{[2181]}$ a courtesan playing at kottabos casts the drops out of a cup with
 drops．＂Another kylix（Munich 371）represents a surfeited drinker on a couch，saying，ov̉ סv́vá＇ov̌， ＂I can no more！＂

To turn to another class of these expressions，we have a Panathenaic amphora in the British Museum（B 144），on which a herald proclaims a victor in the horse－race as follows：
 another of the same class ${ }^{[2183]}$ is an acrobat on horseback before judges，of whom one cries， KALOSTOIKVBISTEITOI，K $\alpha \lambda \omega \tilde{\varsigma} \tau \tilde{\varphi}$ KUßıot $\tilde{n}^{[2184]}$ Tol，＂Bravo，then，to the acrobat．＂A boy walking with his dog calls to it，MEAITAIE，Mع入ıt $\alpha$ ĩ（i．e．＂Maltese（？）dog＂）．${ }^{[2185]}$ A charioteer calls to his horses，

 occur，evidently with reference to the well－known riddle．${ }^{[2188]}$
An interesting bit of dialogue appears on a B．F．vase，${ }^{[2189]}$ which represents boys and men watching a swallow，evidently the first of the returning spring；one boy says，iठov̀ $\chi \varepsilon \lambda \iota \delta \omega{ }^{2} v$, ＂See，the swallow＂；to which a man replies，vض̀ тòv＂Нрак入є́ $\alpha$ ，＂Yes，by Herakles！＂Another boy joins in with
 the Vatican．${ }^{[2190]}$ On one side we see the proprietor of an olive garden extracting oil from the olives，
 Zeus，may I be rich！＂while on the other he sits over a full vessel，and cries to the purchaser， EDEMENEDE CLEOI ГARBEBAKEN，そ̌ $\delta \eta ~ \mu \varepsilon ́ v, ~ そ ̌ \delta \eta ~ \Pi \lambda \varepsilon ́ o(\nu) ~ п \alpha \rho ß \varepsilon ́ \beta \alpha к \varepsilon \nu, ~ " A l r e a d y, ~ a l r e a d y ~ i t ~ h a s ~ g o n e ~ f a r ~$ beyond my needs．＂［2191］
To conclude with a few miscellaneous and unique inscriptions，we have firstly，on a vase in the
 showing that it is intended for a monument in honour of a choragic victory，with the name of the victorious tribe．On a sepulchral stele on a B．F．funeral amphora at Athens ${ }^{[2192]}$ are the words（now
 a dead man．＂Similarly，on a sepulchral plaque at Athens are the words，दHMATO $\triangle E S T I N: A P E I O Y$ ， ＂This is the grave of Areios．＂${ }^{[2193]}$ In a representation of Sappho reading from her poems，she holds
 птєрóع $\tau \alpha^{[2194]}$ ；and in the well－known school－scene on the Duris vase in Berlin ${ }^{[2195]}$ a teacher holds a roll，on which are the words（in Aeolic dialect，and combined from the openings of two distinct hymns）：
MOISAMOI
ADISKAMANARON
EVR $\Omega N A R+O M A I ~$
AEINAEN


A small fragment of a red－figure kylix（？）of fine style，found at Naukratis in 1899 （and now in the Ashmolean Museum at Oxford），${ }^{[2197]}$ has a similar scene of a dictation lesson．A seated figure unrolls
 another figure，of which the right hand alone remains，is writing on a tablet（Fig．177）．


FIG．177．FIGURE WITH INSCRIBED SCROLL．

In a very puzzling scene on a R．F．vase of fine style，generally supposed to have some reference to the Argonautic expedition，one figure holds up an object inscribed with the name $\leqslant \mid \xi \curlyvee ф 0 ร .{ }^{[2198]}$ This object has generally been interpreted as a tessera hospitalis，or＂letter of introduction，＂as we should say．
Lastly，there is the class of Panathenaic vases with their inscriptions．${ }^{[2199]}$ They fall into two groups： （1）the words TON A®ENE®EN A®LON，to which EMI is sometimes added，＂（I am）from the games at Athens＂；（2）the names of archons，which only occur on the fourth－century examples．They form a unique instance of inscriptions which give direct information as to the date of a vase，and range from 367 to 313 b．c．（see Vol．I．p．390）．
Sometimes vases（especially in the B．F．period）are covered with meaningless collocations of letters， either separate or in the form of words．Some ingenious explanations of these have been
propounded, but none are very satisfactory. They are often found on the class known as "CorinthoAttic" or "Tyrrhenian amphorae," and it is just possible that in this case they are attempts by an Athenian workman to copy the unfamiliar Corinthian alphabet.

The third class of inscriptions on Attic vases is composed of those which have no direct relation to the vase itself. They include invocations to deities such as were used in making libations, e.g. $\Delta$ tò $\varsigma$ $\Sigma \omega t \tilde{\eta} \rho o \varsigma$, "To Zeus the Saviour" ${ }^{[2200] \text {; or, again, the exhortations so frequently found on B.F. kylikes }}$ of the "Minor Artists'" school, of which the commonest is $\chi \alpha i ̃ \rho \varepsilon$ каì пí $\varepsilon \iota ~ \varepsilon \tilde{v}$, "Hail, and drink deep!"[2201] or $\chi \alpha i ̃ \rho \varepsilon$ ккì пíعı тŋ́vסє, "Hail, and drink this!" ${ }^{[2202]}$ On a number of R.F. kylikes appears the word пробкүорєv́ $\omega$, "I salute you." ${ }^{[2203]}$
But the most numerous and important inscriptions of this class are those conveniently named by German archaeologists "Lieblingsnamen," or "Lieblingsinschriften," for which we have no satisfactory equivalent in English, though "pet-name" and "love-name" have been suggested, and latterly "к $\alpha \lambda$ ós-name." The latter title has been adopted from the fact that the usual form which these inscriptions take is that of a proper name in the nominative case, generally masculine, with the word к $\alpha \lambda$ ós attached. Sometimes, but not so frequently, the name is feminine, with $\kappa \alpha \lambda \eta^{[2204]}$; the superlative form ко́ $\lambda \lambda \iota \sigma \tau$ о̧ is also found. ${ }^{[2205]}$ In other cases $\dot{\text { o }}$ or $\dot{\varepsilon}$ п $\alpha$ ĩ appears in place of the proper name, or the word ठокєĩ is added, and sometimes also voí or voxıí, emphasising the statement. The most remarkable instance is a B.F. jug at Munich, round the shoulder of which is the
 $\kappa \alpha \lambda o ̀ \varsigma \varphi ı \lambda o ́ c{ }^{[2206]}$ It is not quite certain how far the word k $\alpha \lambda$ òs should be interpreted in a physical sense as "handsome" or "fair," or in an ethical sense as "good" or "noble"; but having regard to the manners and customs of fifth-century Athens, ${ }^{[2207]}$ it is more likely that the physical meaning of the word is to be inferred.
These inscriptions are often found on B.F. vases, but far more frequently in the succeeding period, and generally in more or less direct connection with artists' signatures, from which fact interesting results have been obtained. Special attention has been drawn to them of late years, from the fact that many of the names are those borne by historical personages, such as Miltiades, Megakles, Glaukon, and so on, and attempts have been made to connect them with those characters (see Vol. I. p. 403).

Klein, the chief writer on this subject, has collected in the second edition of his valuable work no less than 558 instances of these k $\alpha \lambda$ òs-inscriptions, ${ }^{[2208]}$ as against 424 signatures of artists; and there are besides these the numerous instances in which no proper name is given.
The chief question which calls for consideration in regard to these inscriptions is their purport, and the reason why they occur exclusively on vases, and of these exclusively on Attic vases covering a period of not more than one hundred years. The custom was not, of course, an unfamiliar one at Athens, as two references in Aristophanes indicate. In the Acharnians ${ }^{[2209]}$ he describes the Thracian Sitalkes as being such a "lover" of the Athenians that he wrote on the walls, "The Athenians are fair"; and, again, the slave Xanthias, in the Wasps, speaking of his master's litigious proclivities, says that if ever he saw $\Delta \tilde{\eta} \mu$ оऽ к $\alpha \lambda$ ó $\begin{gathered}\text { written on a door he promptly wrote by the side кпиò к к } \alpha \text { ós. }\end{gathered}$ ${ }^{[2210]}$ But the most interesting and apposite instance recorded is that of Pheidias, who scratched on
 was no doubt intended to refer to the personal beauty of boys (as indicated by the use of ó поĩs), or at any rate of young athletes, and was applied to popular favourites of the day, ${ }^{[2212]}$ whose occupations in the gymnasium, at the banquet, and elsewhere were matters of every-day talk.
These names may have been placed on the vases with the view of attracting the public to purchase them, or may even have been the subject of special orders from customers. Some light seems to be thrown on the matter by a cup signed by the painter Phintias, ${ }^{[2213]}$ which represents a young man, purse in hand, making purchases of vases in a potter's workshop. This vase has the inscription X $\alpha$ ıí $\alpha \varsigma$ к $\alpha \lambda$ ós, but whether it is intended as a representation of Chairias or his admirer it is impossible to say. The names, however, are not always those of every-day life. They may have relation to the figures on the vase, as HEKTOP KAへOS. ${ }^{[2214]}$
We have already noted that historical names frequently occur in this series, and it is obvious that if they can be identified with the actual historical owners of such names much valuable information in regard to the chronology of Greek vases will be gained. The question has already been discussed in a previous chapter (Vol. I. p. 403), and the principles there laid down need not be repeated. It is sufficient to say that so far only two or three names have been identified with those of historical personages, though more results may yet be obtained. Of these one is Stesileos, occurring on two vases in Berlin, and identified with a strategos who fell at Marathon in 490. ${ }^{[2215]}$ On two lekythi (one late B.F., the other R.F.) the name of Glaukon son of Leagros ${ }^{[2216]}$ appears, and these two names have also been identified with Athenian strategi, Leagros having fallen in battle against the Edones in 467, while Glaukon commanded at Kerkyra in 433-432 в.c. It may be roughly inferred that Leagros was a boy (паĩ¢) about 510 в.c., and his son Glaukon about 470 b.c., which gives an approximate date (within ten years or so) for these two groups of vases. It is, however, obvious that much at present only rests on hypothesis.
It is curious to note that nearly all these names have an aristocratic sound: thus we have Alcibiades, Alkmaeon, Hipparchos, and Megakles, besides those already quoted. Miltiades к $\alpha \lambda$ óc occurs on a R.F. plate at Oxford, ${ }^{[2217]}$ but there seems hardly sufficient evidence for referring it to the youth of the conqueror of Marathon (cf. Vol. I. p. 403). The table at the end of this chapter may be found useful as giving a conspectus of the principal names and their relation to the artists.

It is now necessary to discuss some of the principal peculiarities of the Attic vase－inscriptions，in regard to palaeography，orthography，and grammar．${ }^{[2218]}$ The variety in the forms and uses of the letters is somewhat surprising at first sight，but it must be remembered that non－Attic influences were always strong，as has indeed already been pointed out．
A usually appears either in that form or as $A A_{\text {；}}$ but such variations as $15 \AA R F$ Attic alpha $15 \AA R F$ Attic alpha $15 \wedge$ RF Attic alpha are found on R．F．vases，while at a later period even 15 ARF Attic alpha occurs．$\Delta$ on the vases of Duris generally appears as $15 \wedge$ RF Attic alpha $\vdash$ is found for $v$ ，the Attic form of $\Lambda$ ．$\Sigma$ varies between $s$ and $\Sigma$ while such abnormal forms as 15 srounded $S$ （Oikopheles），and $15 \varepsilon E$－shaped sigma are not unknown．The minor artist Xenokles uses a sort of cursive handwriting for his signature．H is used for $\dot{\varepsilon}$ and $\dot{\eta}$ ，as in HPMES for HEPMES，HPAKLES for HEPAKLES，which seems to be a confusion of ideas resulting from its use for eta in Ionic，and for $h$ in Chalcidian（i．e．Western）alphabets．${ }^{[2219]}$ The sign for the aspirate occurs first as 日，afterwards as H， and is sometimes introduced without apparent reason，as in HILEIOVA for Eỉcíधula，and EACPPO $\triangle I T E$ for A A $\rho$ oóítท．The digamma is unknown on Attic vases，but the François vase and the allied＇Tyrrhenian＇group give some interesting examples of the use of Q for K ．Thus we find popats
 are two curious instances of dittography，due no doubt to Corinthian influence，Kvi入ŋ́vios being written kpyevnios（Kqueגdios）and Zev́c as $\triangle B E V$ s，where the Corinthian and Attic forms of $K$ and E stand side by side．So on a vase in the Louvre（E 852）we have $I \Delta E V S=$ Zסcúc．。 ${ }^{[2220]}$
As a result no doubt of the unsettled state of the alphabet in the fifth century，a confusion in the use of $\varepsilon$ and $\eta$ ，and o and $\omega$ respectively，often arises，and we find $A \lambda \kappa \iota \mu \alpha ́ \chi \omega \varsigma$ к $\alpha \lambda \omega \varsigma$ for $A \lambda к i ́ \mu \alpha \chi о \varsigma$

 rendered by E，as in the name ALKMEON for A $A \lambda \kappa \mu \alpha i \omega \nu$ and $\Pi E N \odot E S I L E A$ for Пعv $\theta \varepsilon \sigma i ́ \lambda \varepsilon \imath \alpha$ ，or $\alpha \iota$ by A， as in A®ENAA for AӨŋvoía．In a few words，such as＋IPON（Xcíp $\omega \nu$ ）and sILENOS（ $\Sigma \varepsilon i ́ \lambda \eta \nu o c$ ），the diphthong $\varepsilon$ l is represented by its other member I．On the other hand，we find EIO＾EOS for＇Io $\lambda \varepsilon$ ć $\omega$ S （B．M．B 301）．The general vagueness of the Attic craftsmen＇s orthography is well illustrated by Kretschmer in the word＇Oठvoбعv́s，which is not only invariably spelled with a $\Lambda$ ，reminding us of the
 O $\Omega \angle V \leqslant \Sigma E V \leqslant \Omega \Lambda Y \Sigma \Sigma E Y \Sigma$ this order being roughly chronological．The ordinary $\delta$－form is，however，found． ［2223］

A tendency to assimilation of aspirated consonants，always avoided in literary Greek，is seen in such
 reverse tendency is curiously illustrated in KAPIOAIOS for X X $\rho \iota \tau \alpha i ̃ o s$ ．Unassimilated forms occur，as
 consonants，as in ATALATE for At $\alpha \lambda \alpha \dot{\alpha}(\nu) \tau \eta$ ，TYTAPEO乏 for Tv（ $\nu) \delta \alpha \rho \varepsilon ́ \omega \varsigma,{ }^{[2225]} \mid A \phi \vee$ y for Nú $(\mu) \varphi \alpha \imath$ ， $L A \Gamma O N$ for $\Lambda \alpha ́(\mu) \Pi \omega \nu$ ，and EkELA $\triangle O$ § for＇$E(\gamma) K \varepsilon ́ \lambda \alpha \delta o \varsigma$ ．There is also a tendency to avoid double consonants，as in MESILA for Mvŋ́бוג $\lambda \alpha$ ，APIANE for Apló́סvך，KLVTAIMESTPA for K ГЕРОФАТА for Пعроє́ $\varphi \alpha \tau \tau{ }^{[2226]}$ ；this is especially common in the case of double $\Lambda$ or double $\Sigma$ ，as in OLVTEVS and MESILA just quoted．On the other hand，on later vases consonants are often doubled without reason，as in KASSTOP for Ká $\sigma t \omega \rho,{ }^{[2227]}$ TRIППTOLEMOS for Tpuпtó $\lambda \varepsilon \mu o \varsigma, ~ M E M M N O N ~ f o r ~$ Mé $\mu \nu \omega \nu$ ，this being commonest with $\Sigma$ and $\Gamma$ ．王 and $\psi$ ，originally absent from the Attic alphabet，are represented usually by $+\delta$ and $\Phi S$ ，exceptionally by $k s$ and $\Gamma \zeta$ ，as in $+A P O \Gamma \zeta$ ，$K S E N O K L E S^{[2228]}$ ；also occasionally by metathesis，as EAPASQEN，$S+A N \odot O S$ ，$\Gamma$ ISTOS + ENOS.${ }^{[2229]}$ Attic contractions，such as ＋ATEPO乏 for Kんì ह́t

Among peculiarities of inflection（some of which may of course be mere misspellings）may be mentioned HVIVS＝viós for viós，ГAVS for paĩs，©ESVS for $\Theta \eta \sigma \varepsilon$ v́s，and ГEPSES for Пع open form－$\varepsilon \varepsilon \varsigma$ for－hs，as in HEPAKLEES，＋SENOKLEES，and the form ní $\begin{aligned} & \text { for ní } \text { ；to some of these }\end{aligned}$ allusion has already been made．

From this mass of detail it is possible to deduce certain chronological results，${ }^{[2231]}$ which are not without their value for the dating of the various Athenian fabrics．Excluding the doubtful Dipylon vase，the inscriptions extend from the seventh century ${ }^{[2232]}$ down to the time of Xenophantos and the late Panathenaic amphorae，a period of over three hundred years．
In the François vase we meet with the closed $\quad$ for the aspirate，the Q and K together，and the two forms $\otimes$ and $O$ of $\Theta$ ；as the $\otimes$ form dropped out of private use earlier than out of official documents， and is found in the latter down to 520 b．c．，we can date the François vase about the middle of the sixth century（not later，as the closed $\boxminus$ shows）；the same date will also apply to the earliest Panathenaic amphora（B．M．B 130），and the cup of Oikopheles．The fact that Eucheiros，a＂minor artist，＂calls himself the son of Ergotimos，who made the François vase，permits us to place him some thirty years later，about 520 B．C．，and this point may be regarded as the zenith of the B．F． period．In the later B．F．vases the H and $\Omega$ for E and O begin to make their appearance ${ }^{[2233]}$ ；but the conservative Panathenaic amphorae，like the coins，adhere to the original spelling right down to the end．
The existence of the R．F．style for some time previous to 480 в．c．has now been established by the discoveries on the Athenian Acropolis．This is also borne out by the appearance on vases by Euthymides of the $\otimes$ form for $\odot$ ，and the complete absence in the earlier vases of the $H$ and $\Omega$ forms，which are not found among the Acropolis fragments．The hydria of Meidias（B．M．B 224）， which marks the zenith of the＂fine＂period，has a purely Ionic alphabet．The Ionic forms seem to have come in with the＂fine＂R．F．style after 480 b．c．，and for some time we find a mixed alphabet on the vases．${ }^{[2234]}$ It is also interesting to note the appearance in some cases of the Thasian alphabet，
with its use of $\Omega$ for O（as in A $\lambda \kappa \iota \mu \alpha{ }_{\chi} \omega \varsigma$ к $\alpha \lambda \omega$ ¢，В．М．E 318），which has been traced to the influence of Polygnotos．${ }^{[2235]}$

We conclude our account of inscriptions on Greek vases with a brief survey of those found on the vases of Southern Italy ${ }^{[2236]}$ ；it will be seen that they are neither numerous nor specially interesting．
The inscriptions are for the most part in the Doric dialect and Ionic alphabet，with the addition of the Doric sign $\vdash$ for the aspirate．Generally speaking，these Doric forms are found on the Apulian vases，whereas on the products of Paestum they are mainly Ionic，with admixtures of Doric．Attic forms also occur．It seems probable that the Doric tendencies of the Apulian inscriptions are due to the influence of the great Laconian colony of Tarentum（although the vases were not made there）， while Paestum was influenced，on the other hand，by the neighbouring Ionic colonies，such as Cumae．

The latter，being for the most part of earlier date，will first occupy our attention．They include two artists＇signatures，which appear in the form AГ remarked on the use of the imperfect tense（p．258）；there are five vases by Assteas and one by Python，on all of which the figures also have their names inscribed．${ }^{[2237]}$ The Ionic forms appear in MEF $\wedge P H, ~ M \varepsilon \gamma \alpha ́ \rho \eta, A \wedge K M H N H, A \lambda \kappa \mu \eta ́ v \eta$ ，and so on；on the other hand，Python uses the Doric form
 found on a few Apulian vases，as for instance Berlin 3257 （from Ceglie），which has Eјyөymir and EYNOMIH for EủӨupía and Ev̉vouía，or Naples 2296 with NH乏AIH for Nךб人ía．
Some of the inscribed Apulian vases are not without interest，as for instance that in the Louvre， which bears the signature of Lasimos：$\triangle A \Sigma I M O \Sigma$ EГPA a Greek，but of Messapian origin．On the great Dareios vase in Naples（No．3253）several names are inscribed，such as $\vdash E \wedge \wedge A \xi$ for ${ }^{\prime \prime} E \lambda \lambda \alpha \varsigma$ ，$A \Sigma I A, \triangle A P E I O \Sigma$ ，and the general title of the scene，ГEP $\Sigma A I$ ．On a well－known burlesque scene in the British Museum（F 269）the characters are inscribed 1 HPA （＂Hpo），$\triangle \mathrm{AI} \triangle \mathrm{A} \wedge O \Sigma(\Delta \alpha i ́ \delta \alpha \lambda o \varsigma=$ Hephaistos），and ENEYANIO乏（＇Ev＜$\gg$ vó $\lambda \iota o \varsigma=$ Ares）；and on the fine amphora F 331，representing Pelops at Olympia，are numerous incised inscriptions：$\Gamma \mathrm{E} \wedge О \Psi$ ，
 sc．＂the altar of Zeus．＂
A curious inscription is that on a krater in Naples（No．2872），which represents Eros and a woman playing at ball；the latter leans on a stele on which is inscribed＋H\｛ANMOITAN interpreted by Cavedoni，probably correctly，as íņ ơv $\mu$ ol tờ $\nu \sigma \varphi(\alpha) \tilde{i} \rho \alpha \nu$ ，＂You might send me the ball．＂The + is an error for $\vdash$ ，the $\dashv$ for $H$ ．This inscription，be it noted，is painted，contrary to the general rule in these vases，as they are generally incised；but an exception seems to be made in favour of inscriptions on stelae and similar objects，which are not uncommon，though many are open to suspicion．In the British Museum there are several examples，${ }^{[2239]}$ but by far the most curious is on an amphora in Naples（No．2868），where a stele is inscribed：
$N \Omega T \Omega I M O A A X H N T E K A I A \Sigma \phi O \triangle O A O N T O A V P I Z O N$
$K O A \Pi \Omega I \triangle O I \triangle I \Pi O \triangle A N A A I O V I O N E X \Omega$

> "On my back I bear mallow and many-rooted asphodel, but in my bosom Oedipus, Laios' son."[2240]

A curious and unique inscription is found engraved on a kotyle from Chiusi：oṹto̧ tòv $\delta \tilde{\alpha} \mu 0 \nu$ है $\varphi \alpha$ пор $\rho$ óv，＂This fellow said that the people were a depraved lot．＂${ }^{[2241]}$ The $\eta$ of порทюóv was first written E，and then corrected into A，the Doric form．It may be supposed that the inscription is due to a workman who did not approve of the democracy under which he lived．

On an amphora from Gnatia（Fasano），with a goose and a cock，in white on the black ground，is the quaint dialogue：

> גi̋ tòv $\chi \tilde{\eta} \nu \alpha, \tilde{\omega}$ ANHXMOTIA, OTONEAETPYГONA
> "Oh, the cock!"[2242]

Etruscan inscriptions do not come within the scope of this chapter，but an Oscan inscription should be mentioned here，which is incised on a vase in the British Museum（F 233），over an actor：AITVAr $=$ Santia，the Oscan form of $\Xi \alpha \nu \theta$ í $\alpha \varsigma$ ，which was a common name for the slave of comedy．

## LIST OF ARTISTS＇SIGNATURES FOUND ON GREEK VASES

I．Early Fabrics（Chapter VII．）

| Aristonoös | غ̇поíqбє | Uncertain fabric |
| :---: | :---: | :---: |
| Pyrrhos | غ̇поíךбє | Proto－Corinthian |
| Chares | ¢ $¢$ | Corinthian |

ع̌ $ү \rho \propto \psi \varepsilon$
Corinthian

See Vol．I．p． 297
Rev．Arch．xl．（1902），p． 41
Klein，Meistersig．p． 29

| Timonidas | ع̌ $¢ \rho \propto \psi \varepsilon$ | do. |
| :---: | :---: | :---: |
| Gamedes | غ่поínбє | Boeotian |
| Gryton | غ̇поí $\dagger \sigma \varepsilon$ | do. |
| Iphitadas | غ̇поínбє | Boeotian |
| Menaidas | غ̇поínбє | do. |
| Mnasalkes | غ̇поínǫ | do. |
| Theozotos | غ่поínбє | do. |

Klein, p. 28
Ibid. p. 31
Boston Mus. Report, 1898, p. 54
Röm. Mitth. 1897, p. 105
Wiener Vorl. 1889, pl. 1, fig. 1
Boston Mus. Report, 1899, p. 56
Louvre F 69
II. Attic Black-figured Vases (Vol. I. p. 379).

| Amasis | $\dot{\varepsilon} п \frac{1}{}$ | Amphorae and oinochoae | Klein, p. 43; Vol. I. p. 383 |
| :---: | :---: | :---: | :---: |
| Anakles | غ̇поín $\sigma \varepsilon^{[2243]}$ | Minor artist | Ibid. p. 75 |
| Antidoros | غ̇поíعı | Minor artist | Notizie degli Scavi, 1897, p. 231 |
| Archikles | غ่поíך $\sigma \varepsilon$ | Minor artist | Klein, p. 76 |
| Charitaios | غ̇поíŋ $\sigma \varepsilon$ | Hydria and kylix | Ibid. p. 51 |
| Cheiron | غ่поí $\sigma^{\prime}$ | Minor artist | Ibid. p. 79 |
| Epitimos | غ́поín $\sigma \varepsilon$ | Minor artist | Ibid. p. 84 |
| Ergoteles | غ̇поíŋ $\sigma \varepsilon$ | Minor artist | Berlin 1758 |
| Ergotimos | غ่поíך $\sigma \varepsilon$ | Potter of François vase; kylix | Klein, p. 37 |
| Eucheiros | غ̇поín $\sigma \varepsilon$ | Minor artist | Ibid. p. 72 |
| Euphiletos | غ̌ $¢ \rho \propto \psi \varepsilon$ | Pinax | Ibid. p. 49 |
| Exekias | $\{\varepsilon ้ \gamma \rho \alpha \psi \varepsilon$ \} <br> \{غ่поí $\sigma \varepsilon$ \} | Amphorae and kylikes | Ibid. p. 38 |
| Glaukytes | غ่поíךбє | Minor artist (with Archikles) | Ibid. p. 77 |
| Hermogenes | غ̇поíŋ $\sigma \varepsilon$ | Minor artist | Ibid. p. 82 |
| Kaulos | غ̇поíך $\sigma \varepsilon$ | Potter for Sakonides | Notizie degli Scavi, 1903, p. 35 |
| Kittos | غ่поíך $\sigma \varepsilon$ | Panathen. amph. (4th cent.) | B.M. B 604 |
| Kleisophos | ع̌ $¢ \rho \propto \psi \varepsilon$ | Oinochoë (Xenokles as potter) | Athens 691 |
| Klitias |  | François vase (painter) | Klein, p. 32; B.M. B 6014-5 |
| Kolchos |  | Oinochoë | Berlin 1732 |
| Mnesikleides | ع̌ $¢ \rho \propto \psi \varepsilon$ | Aryballos | Athens 669 |
| Myspios | غ่поíך $\sigma \varepsilon$ | Minor artist | Klein, p. 84 |
| Neandros | غ̇поíך $\sigma \varepsilon$ | Minor artist | Ibid. p. 79 |
| Nearchos | غ̇үр. к. غ̇п. | Situla | Ibid. p. 38 |
| Nikosthenes | غ̇поíך $\sigma \varepsilon$ | About eighty vases | Ibid. p. 51 |
| Oikopheles |  | Kylix | Oxford 189 |
| Paseas | үро́儿 $\mu \boldsymbol{\alpha}$ | Pinax | Klein, p. 49 |
| Phrynos | غ̇поínбє | Minor artist | B.M. B 424 and Boston |
| Priapos | غ่поíך $\sigma \varepsilon$ | Doubtful | B.M. В 395 |
| Psoieas | غ́поі́ๆбє(?) | Minor artist | B.M. B 60040 |
| Sakonides | ع̌ү $\rho \alpha \psi \varepsilon$ | Minor artist | Klein, p. 85 |
| Sikelos | $\varepsilon$ к̌ү $\rho \alpha \psi \varepsilon$ | Panathen. amphora | Ibid. p. 86 |
| Skythes |  | Pinax | Ibid. p. 48 |
| Sokles | غ่поíך $\sigma \varepsilon$ | Minor artist | Ibid. p. 79 |
| Sondros | غ̇поíך $\sigma \varepsilon$ | Minor artist | B.M. B 6016 |
| Sophilos | ع̌ү $\rho \alpha \psi \varepsilon$ | Fragment | Ath. Mitth. 1889, pl. 1 |
| Taleides | غ่поí $\sigma \varepsilon$ | Various shapes | Klein, p. 46 |
| Thrax | غ̇поíך $\sigma \varepsilon$ | Minor artist | Notizie degli Scavi, 1903, p. 36 |
| Timagoras | غ́поíך $\sigma \varepsilon$ | Hydriae | Klein, p. 50 |
| Tlenpolemos | غ่поíך $\sigma \varepsilon$ | Minor artist; potter for Sakonides | Ibid. p. 84 |
| Tleson | غ̇поíŋ $\sigma \varepsilon$ | Minor artist | Ibid. p. 73 |
| Tychios | غ́поíך $\sigma \varepsilon$ | Hydria | Ibid. p. 50 |
| Xenokles | غ̇поíך $\sigma \varepsilon$ | Minor artist; potter for Kleisophos | Ibid. p. 80 |


| Andokides | \{ غ̇поíๆбє \} <br> \{ غ̇поíعı \} | Amphorae, etc. | See Vol. I. p. 386 |
| :---: | :---: | :---: | :---: |
| Chelis |  | See below |  |
| Epiktetos |  | See below |  |
| Epilykos |  | See below |  |
| Hischylos | غ̇поín $\sigma \varepsilon$ | Potter for Epiktetos, Sakonides, Pheidippos | Klein, p. 97 |
| Nikosthenes |  | See above; two mixed; three R.F. ${ }^{[2244]}$ |  |
| Pamphaios | غ̇поín $\sigma \varepsilon$ | Various shapes | Ibid. p. 87 |
| Pasiades | غ่поí $\sigma \boldsymbol{\varepsilon}$ | White-ground | B.M. B 668 |
| Thypheithides | غ̇поí $\sigma \boldsymbol{\varepsilon}$ | Doubtful | See B.M. E 4 |

IV. Attic Red-figured Vases (see Vol. I. p. 420 ff.)

| Aeson | है ${ }^{\prime} \rho \propto \psi \varepsilon$ | Kylix | Ant. Denkm. ii. pl. 1 |
| :---: | :---: | :---: | :---: |
| Amasis II |  | Kylix | Bibl. Nat. 535; Hartwig, Meistersch. chap. xvi. |
| Apollodoros | है ${ }^{\text {¢ }}$ ¢ $\alpha \psi \varepsilon$ | Kylikes | Ibid. chap. xxii. |
| Aristophanes |  | Kylikes | Berlin 2531; Boston Mus. Report, 1900, p. 49 ff. |
| Brygos | غ̇поín $\sigma \varepsilon$ | Kylikes | Hartwig, chap. xiii. |
| Chachrylion | غ̇поíŋ $\sigma \varepsilon$ | Kylikes | Ibid. chap iv. |
| Chelis | \{ غ̇поíך $\sigma$ \} | Kylikes (one "mixed") | Klein, Meistersig. p. 116 |
|  | \{ غ̇поíعı \} |  |  |
| Deiniades | غ̇поíך $\sigma \varepsilon$ | Potter for Phintias |  |
| Duris | है ${ }^{\text {¢ }}$ ¢ $\alpha \psi \varepsilon$ | Various shapes | Hartwig, chaps. x., xxi. |
| Epigenes | غ่поíך $\sigma \varepsilon$ | Kantharos | Klein, p. 186 |
| Epiktetos | हैү $\alpha \boldsymbol{\psi}$ | Kylikes and plates | Ibid. p. 100 |
| Epilykos | $\varepsilon ์ \gamma \rho \alpha \psi \varepsilon$ | Kylikes | Ibid. p. 114: see Monuments Piot, ix. p. 135 ff. |
| Erginos | غ̇поínбє | Potter for Aristophanes |  |
| Euergides | غ่поí $\sigma$ б | Kylikes | Klein, p. 99 |
| Euphronios | \{ ع̌ $\gamma \rho \alpha \psi \varepsilon$ \} <br> \{غ่поíqбє \} | Various shapes | Hartwig, chaps. vii., xviii. |
| Euthymides | غ̌ү $\rho \alpha \psi \varepsilon$ | Various shapes | Hoppin, Euthymides |
| Euxitheos | غ่поі́ך $\sigma \varepsilon$ | Amphora; potter for Oltos | Klein, p. 135 |
| Hegesiboulos | غ̇поíך $\sigma \varepsilon$ | White-ground cup | Branteghem Cat., No. 167 |
| Hegias | غ̌ү $\rho \alpha \psi \varepsilon$ | Kylix | Klein, p. 186 |
| Hermaios | غ่поíך $\sigma \varepsilon$ | Kylikes | See Vol. I. p. 424 |
| Hermonax |  | Stamni and "pelikae" | Klein, p. 200 |
| Hieron | غ่поíך $\sigma \varepsilon$ | Kylikes and kotylae; potter for Makron | Hartwig, chap. xii. |
| Hilinos | غ̇поín $\sigma \varepsilon$ | Potter for Psiax |  |
| Hischylos | غ่поí $\quad \sigma \varepsilon$ | See above |  |
| Hypsis |  | Hydria | Klein, p. 198 |
| Kalliades | غ่поі́ך $\sigma \varepsilon$ | Potter for Duris: see Table V. |  |
| Kleophrades | غ̇поíך $\sigma \varepsilon$ | Potter for Duris and Amasis II. |  |
| Makron | है ${ }^{\text {¢ }}$ ¢ $\alpha \psi \varepsilon$ | (With Hieron) |  |
| Maurion | غ̇поí¢ı | Pyxis | B.M. E 770; Class. Rev. 1894, p. 419 |
| Megakles | غ̇поíך $\sigma \varepsilon$ | Pyxis | Klein, p. 205 |
| Meidias | غ̇поíך $\sigma \varepsilon$ | Hydria | B.M. E 224 = Plate XLI. |
| Mys | غ̇поíך $\sigma \varepsilon$ | Lekythos | Athens 1362 |
| Nikias | غ่поí $\sigma$ б | Krater in B.M | See p. 259 above |
| Oltos |  | Kylikes | Hartwig, chap. v. |
| Onesimos | है $¢ \rho \alpha \psi \varepsilon$ | Kylikes (Euphronios as potter) | Ibid. chap. xix. |
| Peithinos | है ${ }^{\text {¢ }}$ ¢ $\alpha \psi \varepsilon$ | Kylikes | Ibid. chap. xi. |
| Pheidippos |  | Kylix | B.M. E 6 |
| Phintias |  | Various shapes | Hartwig, chap. ix. |


| Pistoxenos | غ่поíךбє | Kotylae; potter for Euphronios | Ibid. chap. xiv. |
| :---: | :---: | :---: | :---: |
| Polygnotos |  | Amphorae; stamni | Mon. Antichi, ix. p. 1 ff. |
| Praxias | غ̌ $¢ \rho \alpha \psi \varepsilon$ | (Non-Athenian?) | Klein, p. 31 |
| Psiax | غ̌ $¢ \rho \alpha \psi \varepsilon$ | Kylix and alabastron | Amer. Journ. of Arch. 1895, p. 485 |
| Python I. | غ่поíך $\sigma \varepsilon$ | Potter for Epiktetos and Duris |  |
| Sikanos | غ่поíךбє | Plate | Klein, p. 116 |
| Smikros | غ́ $¢ \rho \alpha \psi \varepsilon^{[2245]}$ | Stamni | Monuments Piot, ix. p. 15 ff . |
| Sosias | غ่поíך $\sigma \varepsilon$ | Kylix | Berlin 2278; Klein, p. 147 |
| Sotades | \{ غ́поí $\sigma \varepsilon$ \} <br> \{ غ̇поíعı \} | White-ground vases | \{ Branteghem Cat. 159-166 <br> \{ Klein, p. 187 |
| Syriskos | غ̇поínбє | Astragalos vase | Hartwig, chap. xxiv. |
| Xenophantos | غ̇поíך $\sigma \varepsilon$ | Lekythos | Petersburg 1790 |
| Xenotimos | غ่поíך $\sigma \varepsilon$ | Kylikes | Branteghem Cat. 84-85 |
| V. Unfigured and Modelled Vases |  |  |  |
| Charinos | غ̇поíך $\sigma \varepsilon$ | Modelled vases | Klein, p. 215; Röm. Mitth. 1890, p. 316 |
| Kalliades | غ̇поíך $\sigma \varepsilon$ | Modelled vases; potter for Duris | Klein, p. 216 |
| Kleomenes | غ̇поín $\sigma \varepsilon$ | Modelled vase in Louvre | Mon. Grecs, 1897, pls. 16-17 |
| Kriton | غ̇поíŋ $\sigma \varepsilon$ | Jug; no subject | Klein, p. 213 |
| Lydos | غ่поí $\sigma \varepsilon$ | Fragment; painter's name lost | Ibid. p. 217 |
| Lykinos | ท̇ןүóб ${ }^{\text {coto }}$ | Pyxis | Ibid. p. 213 |
| Lysias | غ̇поíŋбє | Jug; no subject | Ibid. p. 213 |
| Myson | غ̇үр. к. غ̇п. | Fragment | Ibid. p. 217 |
| Prokles | غ่поíך $\sigma \varepsilon$ | Modelled lekythos | Berlin 2202 |
| Teisias | غ̇поínoє | Vases without subject | Klein, p. 212 |
| Therinos | поí $\mu \boldsymbol{\alpha}$ | Chytra | Ibid. p. 214 |
| VI. South Italian (see Vol. I. p. 478) |  |  |  |
| Assteas | है ${ }^{\text {¢ }}$ ¢ $\alpha \psi \varepsilon$ | Kraters, etc. | See Vol. I. p. 478 |
| Lasimos |  | Krater | Klein, p. 210 |
| Python | غ́ү $\rho \alpha \varphi \varepsilon$ | Krater | B.M. F 149 |
| Statios | غ̌pүоь | Doubtful | See B.M. F 594 |
| LIST OF KA $\Lambda$ O $\Sigma$-NAMES ON GREEK VASES |  |  |  |

Names in parentheses denote the artists with whom they are associated
I. Black-figured Vases

| Aischis | Myia |
| :--- | :--- |
| Andokides (Timagoras) | Mys |
| Anthylle | Neokleides (Taleides) |
| Automenes | Onetor |
| Chairaia? (Nikosthenes) | Onetorides (Exekias) |
| Chares | Pyles |
| Dorotheos (Charinos? also R.F.) | Pythokles I. |
| Eresilla | Rhodon |
| Euphiletos | Rhodopis |
| Hippokrates (also R.F.) | Sibon (Kabeirion vase: see Vol. I. p. 218) |
| Hippokritos (Glaukytes) | Sime |
| Hippon I. | Sostratos |
| Kallias I. (Taleides) | Stesias (Exekias) |
| Kallippe | Stesileos |
| Klitarchos (Taleides) | Stroibos |
| Leagros (Exekias; also R.F.) | Timotheos |
| Lysippides | Xenodoke (Charinos) |
| Mnesilla |  |

## II. Red-figured Vases

Aisimides
Akestor
Akestorides
Alexomenos
Alkides
Alkimachos
Antias

Athenodotos (Peithinos; with Leagros)
Brachas
Chairestratos
Chairias (Phintias)
Chairippos
Charmides
Damas
Diogenes (see Hartwig, chap. xv.)
Diokles
Dion
Dionokles
Diphilos
Dorotheos (also B.F.)
Dromippos
Elpinikos
Epidromos (Chachrylion?)
Epileios
Epimedes
Erosantheo
Erothemis (Euphronios and Onesimos)
Euaion
Eurymachos
Euryptolemos (Apollodoros)
Glaukon (Euphronios)
Heras
Hermogenes (Duris)
Hiketes
Hipparchos (Epiktetos)
Hippodamas (Duris and Hieron)
Hippon II.
Hygiainon
Kallias II.
Kallides
Kallikles
Kallisto (Hieron)
Karton
Kephisios
Kephisophon
Kleinias
Kleophon (with Megakles I.)
Krates
Laches (see Hartwig, chap. xx.)
Leagros (Chachrylion, Euphronios, Euxitheos) Xenophon.
[The foregoing list is not exhaustive, but only gives the more frequently occurring names; reference should be made throughout to Klein's Lieblingsinschriften, 1898 edition.]

2058v. 17, 6.
2059xi. 466 D-E.
2060Hence the oblique cases viعĩ, viعĩs, etc., of classical usage.

2061 Die griechischen Vaseninschriften, Gütersloh, 1894.
2062See Berlin 2891; Arch. Zeit. 1879, p. 96.
2063Cf. Berlin 2866 and the vase of Xenophantos (Reinach, i. 23).
2064B.M. A 189* = Plate XVII. fig. 6.
2065Vol. I. p. 436; Klein, Meistersig. p. 162 ff.
2066Vol. I. p. 478; Klein, ibid. p. 206 ff.
2067Klein, Lieblingsinschr. ${ }^{2}$ p. 118.
2068Ath. Mitth. 1890, p. 396.
2069For the explanation of these names see Chapter IV.
2070B.M. E 497; Schöne in Comm. Phil. in hon. Mommseni, p. 658, Nos. 29-32.
2071 Op. cit. p. 651, No. 5. In this and the other examples it will be understood that $\Delta$ denotes 10 ( $\delta \varepsilon ́ к \alpha$ ), Г 5 (пе́vтє), and so on; $\vdash$ being the sign for a drachma.

2072Op. cit. No. 17.
2073A diminutive of пह́ $\lambda \lambda \alpha$, a large deep cup or bowl (see Vol. I. p. 186).
2074Schöne, op. cit. p. 650, No. 3.
2075 Ibid. No. $7=$ Cat. 1206.
2076Cat. 2188; Schöne’s No. 8. The meaning of $\Lambda v ́ \delta \iota \alpha \mu \varepsilon i \zeta \omega$ is uncertain.
2077Ber. d. sächs. Gesellsch. 1854, p. 36.
2078B.M. B 310; Munich 693. See Jahn in Ber. d. Sächs. Gesellsch. 1854, p. 37.
2079Ran. 1236.
2080Pac. 1202.
2081Schöne, op. cit. p. 655, No. 13.
2082F 595: see Vol. I. p. 135.
2083B.M. B 451; J.H.S. vi. p. 374 ff.
2084B.M. B $450=J . H . S$. vi. p. 372.
2085Boeckh, C.I.G. i. 545.
2086A 1054 = Roehl, I.G.A. 524, p. 151. See also Kretschmer, pp. 3-4.
2087I.G.A. 22: see below, p. 252.
2088 Ibid. 2 = B.M. A 1512.
2089B.M. F 596: see Vol. I. p. 186.
2090Heydemann's Cat. 1212.
2091B.M. F 605-6.
2092Naukratis I., pls. 32-4, p. 54 ff.; Naukratis II., pl. 21, p. 62 ff.; Brit. Sch. Annual, 1898-99, p. 53.

2093Ath. Mitth. xv. p. 395 ff.
2094See Vol. I. pp. 139, 345.
2095Ath. Mitth. 1881, p. 107; 1893, p. 225; Kretschmer, p. 110; also Vol. I. p. 291.
2096Mon. Grecs, 1897, pls. 16-7, p. 55; and see Vol. I. p. 493.
2097B.M. B 134; Urlichs, Beiträge, pl. 14.
2098Berlin 2314.
2099Examples in the B.M. are E 12 and E 457 (Pamphaios), E 61 (Hieron), E 65 (Brygos), E 258 (Euxitheos); and cf. Fig. 129.

2100Perrot, Hist. de l'Art, iii. p. 670. They have been found at Larnaka, Paphos, Dali, and Amathus.
2101Roberts, Gk. Epigraphy, i. p. 154.
2102On the subject generally see Roberts, Greek Epigraphy, vol. i. (Cambridge Press).
2103See the table given by Kretschmer, p. 105.
2104See Hill, Handbook of Greek and Roman Coins, p. 208 ff.
2105B.M. B 130.
2106See for other details of coin-inscriptions Hill, op. cit.
2107Cat. of Bronzes, No. 250.
2108No. 385 (Didot).
2109It should be borne in mind that Mycenaean vases have been found in Argolis, Cyprus, and elsewhere, with characters incised on the handles, of contemporaneous execution, and forming parallels to the Cretan script and the later Cypriote syllabary.

2110Olympia, iv. pl. 39, p. 102.
2111Roehl, I.G.A. 377.
2112\$1\$2 1903, pls. 2-6: see Vol. I. p. 92.
2113See also Vol. I. p. 335.
2114Jahrbuch, 1891, p. 263; Kretschmer, p. 7.
2115Vol. I. p. 297 and Plate XVI.; for the latest interpretation of the name, as here adopted, see Class. Review, 1900, p. 264.

2116E.g. Ramsay in J.H.S. x. p. 187.
2117Studniczka, Kyrene, p. 11 ff.; Vol. I. p. 342.
2118Collected by Blass, Dialektinschr. iii. 3120 ff., and Wilisch, Altkorinthische Thonindustrie, p. 156.

2119Roberts (Gk. Epigraphy, i. p. 134) distinguishes three periods in the Corinthian alphabet from 700 to 400 b.c., but the vases seem to belong almost entirely to the first, down to 550 b.c.

2120Vol. I. p. 316, Fig. 90.
2121Cat. 1655: see Vol. I. p. 319.
2122Louvre E $600=$ Reinach, i. 395.
2123B.M. A $1080=$ Reinach, i. 306.
2124Athens $620=$ Reinach, i. 394.
2125Roehl, I.G.A. 20, 5.
2126Ibid. 20, 63.
2127E $638=$ Mon. dell' Inst. 1855, pl. 20. It has been suggested that the name is originally a corruption of Alexandra $=$ Xandra $=$ Ksandra $=$ Kesandra $($ Kretschmer, p. 28).

2128The general peculiarities of the Corinthian alphabet are not touched on here, as examples have been given of all characteristic letters. See Roberts, Gk. Epigraphy, i. p. 134.

2129Kretschmer, p. 51; Roehl, I.G.A. p. 14, No. 22.
2130See Vol. I. p. 300; Klein, Meisters. p. 30; Boston Mus. Report, 1898, p. 54, 1899, p. 56; Röm. Mitth. 1897, p. 105.

2131Ath. Mitth. 1892, pl. 6, p. 101.
2132Ath. Mitth. 1890, p. 411.
2133See Vol. I. p. 357; Karo in J.H.S. xix. p. 156; Ath. Mitth. 1900, p. 93, note.
2134Auserl. Vasenb. 205, 3, 4: see Vol. I. p. 357.
2135See Vol. I. p. 322 and Kretschmer, p. 62.

2136Rev. Arch. xl. (1902), p. 41.
2137As is often the case with English seventeenth-century inscriptions.
2138Frag. Com. Gr. (Script. Gr. Bibl., xlii.), p. 248.
2139Notizie degli Scavi, 1903, p. 34.
2140For the language spoken by the $\mu$ ќтоוкои cf. Kretschmer, p. 76, and Philostratus, Vit. Soph. ii. 1, 14; also Plat. Lys. 223a, 宀́поß $\rho \beta \alpha \rho i ́ \zeta о \nu t \varepsilon \varsigma ~ п \alpha ı \delta \alpha \gamma \omega \gamma о i ́ . ~$

2141Naples $3089=$ Millingen-Reinach, 33-4.
2142Bibl. Nat. $372=$ Reinach, i. 92.
2143Bibl. Nat. $846=$ Klein, Lieblingsinschr. ${ }^{2}$ p. 129.
2144Hartwig, Meistersch. p. 320; Dümmler in Berl. Phil. Woch. 1888, p. 20; Kretschmer, p. 81.
2145Ar. Thesm. 1084-1225.
2146Kretschmer also hints that it seems to indicate the pronunciation of $\Phi$ by the Athenians as PH in "hap-hazard," not as F.

2147There are also isolated instances of $\varepsilon$ है $\rho \alpha \varphi \varepsilon$; Timonidas of Corinth, Pheidippos, Euthymides, and Aristophanes. See Klein, Meisters. p. 13.

2148B.M. F 594.
 the jest about Chairestratos made by the comic poet Phrynichos, who speaks of "Chairestratos soberly pottering ( $\kappa \varepsilon \rho \alpha \mu \varepsilon v ́ \omega \nu)$ at home" (Athen. xi. 474 B).

2150See list at end of chapter, and Klein, op. cit. pp. 49, 213, 214.
2151 Munich $378=$ Furtwaengler and Reichhold, pl. 14. See Vol. I. p. 428.
2152Klein, Meistersig. p. 111.
2153 G 107: see Monuments Piot, ix. p. 33.
2154Naples 3415.
2155Munich $498=$ Reinach, i. 215.
2156 Cat. 1152.
2157Munich 380, $810=$ Reinach, ii. 115, i. 363.
2158Louvre E $852=$ Reinach, i. 156.
2159Reinach, ii. 292.
2160E.g. B.M. F 62.
2161See also Kretschmer, p. 84.
2162E.g. B.M. B 164, B 254; Louvre F 297 = Reinach, ii. 26.
2163Kretschmer, p. 85: see p 92.
2164Munich 6: see Vol. I. p. 428, and Hoppin, Euthymides, p. 18.
2165Monuments Piot, ix. pl. 2.
2166Berlin 1737.
2167Munich $333=$ Reinach, ii. 119.
2168Berlin $1704=$ Reinach, i. 198; Vol. I. p. 326.
2169Berlin $1732=$ Reinach, ii. 66.
2170Plate XXIII.: see Vol. I. p. 326.
2171Bibl. Nat. 219.
2172 Louvre F 385 = Millingen, Anc. Uned. Mon. pl. 38.
2173Reinach, ii. 49.

2174Kretschmer, p. 86.
2175Reinach, ii. 128.
2176Kretschmer, pp. 86, 197.
2177See Kretschmer, p. 86.
2178 Cat. 1158 = Ath. Mitth. 1884, pl. 1.
2179Kretschmer, loc. cit.: cf. Bergk, Poet. lyr. Gr. iii. ${ }^{4}$ p. 97, frag. 23.
2180See Hartwig, Meistersch. p. 255.
2181Petersburg 1670. The Doric dialect is explained by Kretschmer as due to the Sicilian origin of the game.

2182Sc. "hard to beat."
2183Kretschmer, p. 88.
2184I.e. кטßıбтŋтท̃คı.
2185Reinach, i. 294. Probably, as Kretschmer points out, a dog of Melita off Illyricum, not of Malta.
2186Kretschmer, p. 91.
2187Benndorf, Gr. u. sic. Vasenb. pl. 1.
2188Helbig, $186=$ Wiener Vorl. 1889, pl. 8, 6.
2189Reinach, i. 96.
2190Reinach, i. 106.
2191This translation is somewhat doubtful: see Reinach, loc. cit.
2192Cat. $688=$ Reinach, i. 164.
2193Reinach, i. 513.
2194Athens $1241=$ Dumont-Pottier, i. pl. 6.
2195Plate XXXIX.
21960n the form of the $\Delta$ see below, p. 268.
2197Brit. Sch. Annual, 1898-99, p. 65.
2198Reinach, i. 277: see on the subject, Hermes, 1898, p. 640; Notizie degli Scavi, 1895, 86 ff.; and above, pp. 115, 137.

2199See on this subject, Urlichs, Beiträge, p. 33 ff., and Vol. I. p. 389.
2200Athen. xi. 466 D; not found on Attic vases, but cf. B.M. F 548.
2201B.M. B 415, 422; Berlin 1775-76.
2202Berlin 1764; Munich 37. For variations see Kretschmer, p. 195.
2203See Klein, Meisters. p. 110; Kretschmer, p. 82.
2204Instances are B.M. B 330, B 339, B 631, E 182, E 718.
2205E.g. B.M. B 400.
2206 Cat. $334=$ Reinach, i. 79. The vase is probably by Charinos.
2207Cf. the story of Pericles and Sophocles told by Cicero, De Offic. i. 40, 144.
2208.Vasen mit Lieblingsinschriften, 2 nd edn., 1898. Of these, 528 are masculine names, and only 30 feminine.

2209143 ff . There is, of course, a play here on the word $\dot{\varepsilon} \rho \alpha \sigma \tau \eta{ }^{\prime} \varsigma$.
221097 ff. Demos is here a proper name; кпиó¢ means the ballot-box, in which the juries recorded their votes.

2211Cf. Frazer's note on Paus. vi. 10, 6 (vol. iv. p. 37).
2212Such as the Laches к $\alpha \lambda$ ós on Berlin 2314, a name which recalls the Platonic dialogue with that
title.
2213Hartwig, Meistersch. pl. 17, 1.
2214Reinach, ii. 94.
2215Hartwig in Mélanges d'Arch. 1894, p. 10 note.
2216The name of Leagros occurs on many vases by Euphronios and other artists: see Klein, Lieblingsinschr. ${ }^{2}$ p. 70 ff .

2217Klein, Lieblingsinschr. ${ }^{2}$ p. $87=$ Ashmolean Vases, No. 310.
2218See for this section, Kretschmer, p. 94 ff .
2219See Kretschmer, p. 98.
2220See Vol. I. p. 326.
2221But see p. 271 for the probable explanation of this use of $\omega$.
2222Kretschmer, p. 146.
2223Naples 2899; B.M. E 156.
2224Louvre F 53 = Reinach, ii. 59 (Exekias).
2225Berlin 2291.
2226Munich $340=$ C.I.G. 7433.
2227B.M. E 224; Karlsruhe 209: cf. Berlin 2184 (OPE 2 ITEL) and 1906 (tPItonnos).
2228Kretschmer, p. 179.
2229Ibid. p. 180.
2230Munich 334.
2231See generally Kretschmer, p. 110 ff.
2232The two Proto-Attic inscribed vases (Berlin 1682 and Art. Denkm. i. 57: see Vol. I. p. 293).
2233Berlin 2008; Röm. Mitth. 1886, p. 21.
2234See the table given by Kretschmer, p. 105.
2235See Vol. I. p. 443, and Dümmler's article in Jahrbuch, 1887, p. 168 ff.
2236See Kretschmer, p. 211 ff.
2237For the proof that Assteas and Python worked at Paestum, see Vol. I. p. 479.
2238The name is perhaps a by-form of Dasimos (see Vol. I. p. 478). The correspondence of D and L
is not uncommon, as in $\delta \alpha к \rho$ v́c = lacrima.
2239F 62, TEPM $\Omega$; F 92, OPE $\Sigma$ TA. See also Millingen-Reinach, pls. 14, 17, 18.
2240Cf. the version given by Eustathius ad Odyss. p. 1698, 25.
2241Kretschmer, p. 218; Rev. Arch. xii. (1888), p. 344.
2242Rayet and Collignon, p. 330 (in Louvre): see above, p. 186; also Vol. I. p. 488.
22430ne kylix in partnership with Nikosthenes.
2244In one case as potter for Epiktetos.
2245 See also Vol. I. p. 440.

PART IV
ITALIAN POTTERY

# CHAPTER XVIII <br> ETRUSCAN AND SOUTH ITALIAN POTTERY 

Early Italian civilisation—Origin of Etruscans-Terramare civilisation-Villanuova period—Pit-tombs -Hut-urns-Trench-tombs-Relief-wares and painted vases from Cervetri-Chamber-tombsPolledrara ware-Bucchero ware-Canopic jars-Imitations of Greek vases-Etruscan inscriptions -Sculpture in terracotta-Architectural decoration-Sarcophagi-Local pottery of Southern Italy -Messapian and Peucetian fabrics.

In the succeeding section of this work we propose, by a natural transition, to deal with Italian pottery, that is, Etruscan and Roman, as distinct from Greek. The subject naturally falls under three heads-the first two dealing with the pottery of the period previous to the Roman domination of Italy, and therefore contemporaneous with the Greek pottery; the third with Roman pottery from the second century b.c. onwards, and of necessity including also remains of similar pottery from Gaul, Britain, and other countries over which that civilisation extended.
In the present chapter the first two branches of the subject-namely, Etruscan pottery, and the local fabrics of Southern Italy-will be discussed; the period of time which they cover is, as has been said, coincident with that covered by the history of Greek pottery, extending from the Bronze Age down to the end of the third century b.c.

## § 1. Etruscan Pottery

## BIBLIOGRAPHY

Helbig, Die Italiker in der Poebene; Ann. dell' Inst. 1884, p. 108 ff., 1885, p. 5 ff.; Karo, Cenni sulla cronologia preclassica, Parma, 1898; Von Duhn in Bonner Studien, p. 21 ff., and in J.H.S. xvi. p. 125 ff.; Martha, L'Art Étrusque, passim; Dennis, Cities and Cemeteries of Etruria, 2nd edn. (good for topography; archaeology out of date); J.H.S. xiv. p. 206 ff. (C. Smith on Polledrara ware); Gsell, Fouilles de Vulci; Pottier, Cat. des vases ant. du Louvre, ii. p. 285 ff. (the best general survey); Notizie degli Scavi, passim, for excavations; Brit. Mus. Cat. of Bronzes, p. xliv ff.

## (1) EARLY ITALIAN CIVILISATION

As regards Etruria, it will be seen that the art of the people was largely imitative, being derived mainly from Greece, but in some measure also from the East. Few remains of their productions have reached the present day, with the exception of large numbers of vases, bronzes, and jewellery; these, however, afford a very clear notion of the characteristics of Etruscan art. It is hardly possible to treat the subject of working in clay in Etruria with such fulness as can be done in the case of Greece and Rome, owing to the greater dearth of literature; but in our previous chapter (III.) on this subject much has already been said with reference to what is known on this head. In regard to the pottery, careful scientific excavations, such as those undertaken by M. Gsell at Vulci (Vol. I. p. 77), have done much to increase our knowledge of all periods, and to place chronological certainty within the reach of the inquirer.
In dealing with the history of art in Italy, we are naturally first met with two questions: (1) Who were the earliest inhabitants of the country, particularly in the region afterwards known as Etruria, in which the first signs of artistic development appear? (2) At what period and from what quarter did the Etruscans occupy this region, or are they aboriginal? It will therefore be necessary to devote a few preliminary paragraphs to these much-debated questions, ${ }^{[2246]}$ in order to gain a better understanding of the subsequent history.
The question of the origin of the Etruscans, to take the second first, is as old as Herodotos. ${ }^{[2247]}$ As is well known, the Father of History held to the view that they originally came from Lydia, a view which found general support in antiquity, and is referred to by Horace, ${ }^{[2248]}$ and many other writers. His fellow-townsman Dionysios was, however, of the opinion that they were autochthonous. ${ }^{[2249]}$ However much of truth there may be in either of these theories, the fact remains that with certain modifications each of the two alternatives has found supporters even down to the present day, though to Niebuhr first is due the suggestion that the immigration of the Etruscans was by land and not by sea, and that they came from Central Europe by way of the Rhaetian Alps. He has been followed by most writers since-above all by Mommsen, who was the first to point out the absurdity of identifying the Lydian Tupןŋvoí or Tuppŋßoí with the Italian Tusci or Etrusci. It follows from this that the whole of the civilisation of Northern and Central Italy is due to this race, which would obviously have left its impress on each district as it passed through it; and, secondly, that it was this same race that was afterwards known by the name of Etruscan.
The chief objection to the theory of an autochthonous origin is that, as we shall presently see, a break in the civilisation of Northern Italy which can be traced about the beginning of the ninth century b.c. is of such a marked and rapid character that it cannot be regarded as due to any cause but the irruption of a new race. Moreover, there is probably, as M. Pottier points out, ${ }^{[2250]}$ more truth in the words of Herodotos than appears at first sight. It is true that there are no grounds for accepting the Lydian theory absolutely; but apart from this, it is to be noted that Herodotos nowhere states that the Tyrrhenians landed on the west coast of Italy-i.e. in Etruria. What he does say is that, "after having visited (or coasted along) many nations, they arrived at the Umbrians, where they founded cities and inhabit them to this day; and instead of Lydians, their name was changed to that of Tyrrhenians." Additional evidence is given by Hellanikos, ${ }^{[2251]}$ who explicitly
states that they landed at the mouth of the Po; and as the Umbrians probably occupied a larger territory in prehistoric than in classical times, ${ }^{[2252]}$ we may fairly place here the city of Tyrsenia or Tyrrhenia, which Herodotos gives as the name of their first new home. Thus the Umbrians will represent the early aborigines whose civilisation, known as the Terramare, we shall presently describe, and it was this civilisation, transformed and developed, which was carried by the invaders over the Apennines into the region now to be known as Etruria. It will be noted that this theory at least satisfactorily combines the land and sea migrations of the Etruscans into Etruria, though it does not profess to dogmatise as to the region whence they first started. The idea that they first landed on the west coast is entirely due to Roman ideas, fostered by poets like Virgil; and though it is in one passage accepted by Dionysios of Halicarnassos, he expressly contradicts himself in another. ${ }^{[2253]}$
The two chief characteristics of this new Etrusco-Umbrian civilisation are the development of geometrical decoration and the predominance of a metallurgic element, both of which are obviously derived from Eastern sources, whether Hellenic or Oriental. It will suffice here to point out that the "Tyrrhenians" during their previous voyages (see above) might well have come in contact with the other civilisations of the Eastern Mediterranean, such as Cyprus, Asia Minor, Mycenae, and the Greek islands, and that their natural acquisitiveness and capacity for imitation, which we shall find illustrated throughout their history, enabled them to pick up and use artistic ideas from all these quarters. Even their earliest art yields many points of comparison with that of the Eastern Mediterranean.
The earliest civilisation of which traces have survived in Italy is, as we have already seen, that of the Terramare, so called from the remains discovered in that district, covering the basin of the Eridanus or Po, but chiefly between Piacenza and Bologna. We have further seen that the aboriginal people to whom these remains belong are probably to be identified with the Umbrians, but it is perhaps safer to style them Italiotes. They were lake-dwellers, living in wooden houses built on piles in the water or in the marshy lagoons of the district which they inhabited, and their civilisation was of the rudest description.
We find among their remains, besides rude objects in bronze and other substances, pottery of the very simplest kinds, hand-made and roughly baked. This is not found in tombs, but mingled with the débris of the dwellings. The shapes comprise cups and pots, and there are few attempts at decoration beyond rows of knobs or bosses. A crescent-shaped or lunulated handle is attached to many of the vases, serving as a support for the thumb; but this is a feature also found in other parts of Italy and in Sicily. Iron, glass, and silver are quite unknown, and gold only represented by a doubtful specimen; on the other hand, along with the finds of bronze, which include weapons, tools, and objects of toilet, are survivals of the Neolithic Age in the shape of axes, spear-heads, and tools of stone. In several of the settlements actual moulds for bronze-casting were found.
The Neolithic remains are sufficient to indicate the early date of this civilisation, and it is probably contemporary in point of development (if not of date) with the earliest remains from Hissarlik and Cyprus. It may thus be traced back as far as 1500 b.c. at least, and seems to extend down to about the end of the tenth century b.c. The analogous pottery found at Thapsus in Sicily is mixed with Mycenaean vases, and may therefore be more precisely dated; but it is altogether more advanced than that of the Terramare. The influence of the latter no doubt spread gradually downwards during these thousand years through Central and Southern Italy. ${ }^{[2254]}$
(2) THE VILLANUOVA PERIOD (TOMBS A POZZO)

The next stage in the development of civilisation in Italy, probably separated from the preceding by a period of transition, is what is known as the Villanuova period, from a site of that name at Bologna. It begins with the ninth century b.c., and lasts for some two hundred years; its traces are much more widely spread than those of the Terramare people, being found not only to the north of the Apennines, but all over Etruria. It is interesting to note that the chief finds have been made in what afterwards became the principal centres of Etruscan civilisation, such as Bologna, Corneto, Vetulonia, etc. In almost every respect it shows a marked development on the preceding stage. Iron is already known, and the working of bronze better understood, the processes of hammering plates ( $\sigma \varphi \cup \rho \eta \dot{\lambda} \lambda \alpha \tau \nu)$ and working in repoussé being introduced to supplement that of casting. ${ }^{[2255]}$
We now for the first time meet with tombs, the characteristic form of which is that of a well or pit, ending in a small circular chamber, in which the remains are deposited. Italian archaeologists have given to these tombs the name of a pozzo. The method of burial practised was almost exclusively that of incineration, but it appears certain that the inhabitants of Etruria never showed a special preference either for one method or the other, and the alternative method of inhumation already appears at Corneto before the next stage is reached with the eighth century.

It has been sometimes objected that the introduction of inhumation must connote the first arrival of the Etruscan people in these regions, on the ground that they did not practise incineration; but this idea rests on no sound basis. The introduction of the new system, which never entirely ousted incineration, can easily be explained as due to external influences; not indeed to the Phoenicians (although it was a universal Oriental custom), for their influence in Italy has been much exaggerated; but rather to the Greeks, who colonised Cumae in the middle of the eighth century, from which time onwards Hellenic influence gradually becomes more and more apparent.
We have seen, then, that the Villanuova civilisation may be fairly regarded as Etruscan. It was not, however, by any means confined to Etruria, for it is spread all over the country to the north of the Apennines, and two of its most important centres were at Bologna and Este. The whole of this
region shows traces of having been for a long time under the early Etruscan domination. It is, in fact, in close dependence on the Terramare civilisation which here preceded it, the difference, as we have indicated, being brought about by commerce and foreign influences.
The pozzo tombs usually contain a large cinerary urn or ossuarium, in which the ashes were placed after being burnt (Fig. 178). ${ }^{[2256]}$ These urns are fashioned by hand from a badly levigated volcanic clay, generally known as impasto Italico. It is to be distinguished from the later bucchero nero (see p. 301) by its quality, and by the fact that vases of the latter clay are always wheel-made. The clay is irregularly baked over an open fire, and the colour of the surface varies from red-brown to greyish black. It is covered with a polished slip, and there is no doubt that it was the intention of the potter to give the vases a metallic appearance as well as form.
As regards their shape, they are of a peculiar but uniform type, with a small handle at the widest part, and cover in the form of an inverted bowl or saucer with handle (Fig. 179: see also Fig. 178). ${ }^{[2257]}$ The ornamentation consists of geometrical ornaments incised or stamped in bands round the neck and body-such as maeanders, chevrons, stars, and dots-the incisions being made while the clay was moist. In rare cases we meet with painted ornaments in white applied directly to the surface. Besides the urns, which often almost fill the chamber, accessory objects in the form of common pottery, fibulae, and other bronze objects, spindlewhorls and amber objects, are found in the tombs.


From Ann. dell' Inst. FIG. 178. TOMB A POZZO WITH CINERARY URN.

The common pottery does not in its character exhibit much advance on that of the Terramare. The difference, indeed, consists not so much in development of technique as in a greater variety of decoration. It has points of resemblance with the far earlier pottery of Hissarlik and the early Bronze Age tombs of Cyprus (see Chapter VI.), and there are not wanting evidences of commercial intercourse with and importation from the Eastern Mediterranean. But two salient features of the Italian wares are the employment of handles and the unique form of the hut-urn (see below).


From Notizie degli Scavi.
FIG. 179. CINERARY URNS FROM TOMBS OF VILLANUOVA PERIOD AT CORNETO.

The clay is mostly of the same kind as that of the urns, and the smoked and irregularly fired surface shows that furnaces were not yet in use, but that an open fire sufficed for the purpose. The technique is exceedingly primitive, and the forms are simple but heavy. In the latter respect the striking difference in the inherent artistic capacity of the Greeks and Italians is already apparent. The latter never at any time displayed that unfailing eye for form which distinguishes the Greeks in all their products. The shapes include saucers like the urn-covers, bowls with a flat vertical or highlooped handle, flasks with long beak-like necks like the early Cypriote vases, bowls with small feet, jars with one or two handles, aski, and kerni, or groups of vases united on one stem.
Many of these are quite plain, but the majority are decorated with geometrical patterns, like the ossuaria or urns already described. Some of the patterns show quite a mechanical regularity, as if produced from a stamp. These take the form of circular sinkings and other patterns formed by circles, an early instance of a motive which afterwards became common in Etruria. There are even some instances of designs in colour, a sort of cream pigment being used. A peculiarity of this class is the fondness for protuberances in the form of horns on the handles (ansae lunulatae), which are also found in the Terramare, as already mentioned; or knobs round the body of the vase, in order to hold cords for suspension, which afterwards served a merely decorative purpose, like the bosses on cups described by Homer. ${ }^{[2258]}$ Sometimes are to be seen rude attempts at modelling horses or heads of oxen, or at giving the whole vase the form of a bird, as is seen in some of the aski. ${ }^{[2259]}$

The absence of accessory vases in Villanuova tombs, as is sometimes the case at Vulci, ${ }^{[2260]}$ seems to show either very great antiquity or else a long survival of an older type. On the whole, however, a chronological classification is hardly possible. Generally speaking, the pit-tombs were still in use
throughout Etruria at the end of the eighth century, and no tombs of the next stage can be dated earlier than 700 b.c. The line of demarcation for the latter end of the period is therefore the seventh century, coincident with the first undoubtedly Greek importations found in the tombs.
The real interest of the Villanuova period is, however, centred in remains which do not come within our province-namely, the objects in bronze which have been found in such enormous numbers at Bologna, Vetulonia, and elsewhere. ${ }^{[2261]}$ They fall into line with the earliest remains on Hellenic sites -such as Olympia, Rhodes, and Crete-and a connection can often be traced, as in the fibulae, with the Hallstatt civilisation. ${ }^{[2262]}$ On the other hand, they are entirely free from any Oriental influence.
Sometimes the cinerary urns in the tombs of this period take the form of huts (tuguria), though these are more often found in the neighbourhood of Rome, as at Alba Longa. They represent, in fact, the civilisation of the Italiote people on their first arrival in Latium, which they probably colonised by moving southward through Umbria and Picenum, leaving Tuscany to the Etruscans. One of the best examples of these hut-urns is that from the Hamilton collection in the British Museum (Plate LVII. fig. 4), which still contains ashes. The ashes were inserted through a little door, which was secured by a cord passing through two rings at its side and tied round the vase. The ornamentation suggests the rude carpentry which was applied to the construction of the dwellings of this primitive people, the cover or roof being vaulted, with raised ridges intended to represent the beams of a house or cottage. These urns have no glaze on their surface, but a polish was produced by friction. They are occasionally painted with patterns in white, inlaid in grooves. On the Museum example are fragments of maeander. They are usually found inside large vases, which protected them from falling earth and other accidents. The fact that they were found under beds of lava originally led to an exaggerated opinion of their antiquity, but in any case the nature of their contents confirms their very primitive use. ${ }^{[2263]}$

An interesting account of the early settlements in the southern extremity of Etruria is given by Von Duhn, ${ }^{[2264]}$ as the result of exploration by local archaeologists on the sites of Falerii (Civita Castellana) and Narce. ${ }^{[2265]}$ The most interesting feature of these results is the gradual migration of the peoples from the hill-tops to the valleys as they became more civilised. Thus many modern cities, such as Florence, are direct descendants of the early hill-settlements of primitive Italy. In Etruria it was usually the reclaiming of the marshes for cultivation that enabled the population to settle in the lower and more accessible situations.
The Faliscan region well illustrates this principle, as does Narce. In the earliest graves on the hilltops cremation is the rule, and the urns are of the Villanuova type. Nothing of later date than the eighth century is found, and no importations. The hut-dwellings at Narce seem to have been of the hut-urn type. The common pottery is of the primitive hand-made greyish black clay; but after the eighth century the position of the settlement was shifted lower down, and in these later tombs a remarkable series of red-glazed wares is found (see below, p. 301), and Greek and Oriental importations soon make their appearance. Narce soon fell under Etruscan sway, but Falerii retained its individuality for some time longer.

## (3) THIRD PERIOD: TOMBS A FOSSA; FIRST GREEK INFLUENCES

The next stage in the development of Etruscan civilisation is marked by a change in the form of the tomb. The pit is now replaced by a trench; in other words, the vertical form is exchanged for a horizontal one. Concurrently with this change the practice of inhumation becomes fairly general. This period may be regarded as extending from the eighth century в.c. to the beginning of the sixth, and is marked by the first signs of importations from Greece in the shape of Geometric pottery and bronzes. In general character it is not strongly marked off from the preceding. The great advance is in the development of art in the objects found in the tombs. Not only do we witness the first beginnings of what is destined to become the typical species of Etruscan pottery-namely, the bucchero nero-but towards the end of the period the Greek influence, as evidenced by finds of wheel-made vases with Geometrical decoration, or even of the so-called Proto-Corinthian type, becomes widely felt. It was no doubt largely due to the foundation of colonies in the south of Italy, such as Cumae. Altogether it is a most important period for the history of Etruscan pottery. Of Oriental influence there are at present hardly any signs, and all wheel-made vases found in these tombs are probably of Greek origin, as it does not appear that the wheel was in regular use before the middle of the sixth century. ${ }^{[2266]}$
It is now necessary to turn our attention to the local hand-made varieties. And, in the first place, it is worthy of note that pottery of the Villanuova type actually survives the transition from the pittombs to the trenches, as is seen at Corneto, Vetulonia, and elsewhere. Probably it indicates the pottery in common use, the imported objects being only regarded as de luxe; or else, as Prof. Helbig suggests, ${ }^{[2267]}$ the former types were preserved for religious reasons connected with burial rites, as was often the case in Roman religion.
In the earlier types of pottery from the fossa tombs, such as are common at Vulci, the hand-made pottery of impasto Italico still continues, preserving the same shapes and the same simple linear decoration; but it is better baked, and the surface is somewhat better polished. Red wares are also found, and yellow wares with Geometrical ornaments painted in red, which are evidently local imitations of the Greek Geometrical fabrics (see below).
Later, while the technique remains unaltered, a difference is seen in the forms, which become lighter, more varied, and more symmetrical. Such shapes as the stamnos, kantharos, and trefoilmouthed oinochoë now for the first time appear. The methods of ornamentation are also modified; new varieties of incised patterns are seen, and the bodies of the vases are sometimes fluted or
ribbed; while such motives as friezes of ducks, which are also found on the contemporary bronzes, ${ }^{[2268]}$ now first find a place. M. Gsell, describing in detail the various fabrics found in the Vulci tombs of this period, ${ }^{[2269]}$ speaks of pottery of a grey clay baked to red, perhaps in a furnace, forming urns and jars of a considerable size. He thinks that some primitive kind of wheel (see above) must have been used to produce these. In some of the impasto wares there is a decided advance in technique, the clay being better levigated and the walls of the vases thinner. Some black wares seem to have been fumigated like the later bucchero. Generally speaking, both incineration and inhumation are still practised.
The ornaments are incised, stamped, or painted, and the decoration almost exclusively linear, the stamped patterns being usually in the form of stars. This pottery is, in fact, merely a continuation of that of the pit-tombs, except that the imitation of metal-work is much more strongly in evidence.
Yet another variety preserves the methods and forms of the Villanuova class, but introduces a new kind of clay, altogether black, as distinguished from the earlier reds and browns. A remarkable specimen of this early black ware found at Orvieto has incised upon it the subject of Bellerophon and the Chimaera, the style being, as we should expect, childish to the verge of the ludicrous. ${ }^{[2270]}$ Later, the black wares acquire a very fair glazed surface, and are ornamented with incised linear patterns of zigzags, chevrons, etc.; these are mostly small vases. It is in these two particularly that we see the forerunners of the highly developed bucchero ware.
Besides these local fabrics, there are found Greek imported wares with Geometrical decoration of pale yellow clay, with ornaments in brown turning to red; the commonest form is the oinochoë, and the patterns include circles, zigzags, wavy lines, embattled patterns, etc. These are all wheel-made, and are, in fact, the same types as are found in the Dipylon cemetery at Athens and in Boeotia (Chapter VII.); the earliest instances belong to the end of the eighth century, in some late pit-tombs at Caere, in which also "Proto-Corinthian" pottery was found. They coincide with the great impetus given to Greek colonisation in Sicily and Southern Italy, and probably came by that way into Etruria. It should be borne in mind that these vases were imported not for their own merit, but for the value of their contents. It has already been mentioned that local imitations of them are found in the trench-tombs.

To the seventh century belong also two classes of pottery which are more or less connected, and are chiefly associated with Caere. ${ }^{[2271]}$ The first class consists of a series of vases of red ware, mostly large jars and ní $\theta$ oı, ornamented with designs in relief, the lower part of the body being usually ribbed. The designs take the form of bands of figures stamped round the upper part of the vase, either in groups on the principle of the metope or in extended friezes. In the former case the design was produced from a single stamp for each group; in the latter, it was rolled out from a cylinder resembling those in use in Assyria for sealing documents. Besides the jars, plates of this ware are not uncommon; they may have formed either covers like those of the Villanuova ossuaria, or stands for the jars, in order to hold drippings of liquid, etc. The use of the ní 0 or in tombs is not quite clear, though they were doubtless in daily use for holding grain or liquids. ${ }^{[2272]}$
The subjects are always of an Orientalising character, similar to those found on Greek vases under Oriental influence, and comprising animals, monsters, hunting scenes, combats, and banquets. The origin of these vases is doubtful; they may be either indigenous or imported, as similar examples have been found in Rhodes, Boeotia, Sicily, and elsewhere; but they are rare outside Etruria. The suggestion of a Sicilian origin ${ }^{[2273]}$ has found some favour, but it is more likely that they are native productions after Greek models (see Vol. I. p. 496); some are undoubtedly of local make, ${ }^{[2274]}$ and they were probably made at Caere or in the neighbourhood. Their prototypes go back almost to the Mycenaean period, but were hardly imported before 700 b.c., after which time the local imitations begin, being one more instance of the invariable rule that all Etruscan pottery is more or less imitative. Similar vases in metal were manufactured on the coast of Asia Minor, and the $\dot{\alpha} \nu \alpha \theta \dot{\eta} \mu \alpha \tau \alpha$ of the Lydian kings at Delphi ${ }^{[2275]}$ were probably examples of this class. ${ }^{[2276]}$


From Gaz. Arch.
FIG. 180. PAINTED ETRUSCAN PITHOS FROM CERVETRI (IN LOUVRE): BIRTH OF ATHENA; BOAR-HUNT.

The second class shows some affinities to the other in regard to the shape and the nature of the clay; but the important difference is that the vases are decorated with painted subjects instead of reliefs. The subjects are painted in white outline on a brick-red glazed ground, the process being as
follows: The clay, which resembles the impasto Italico, is first hardened by baking, and then a mixture of wax and resin and iron oxide is applied to it, and a lustre given to the surface by polishing. The pigment, a mixture of chalk and lime, is then laid on. The process can hardly be said to be Greek, and yet the subjects are purely Greek, being borrowed in part from the Greek Geometrical vases, such as sea-fights, and in part from later (Ionian) sources ${ }^{[2277]}$; we actually find representations of the Birth of Athena and the Hunt of the Calydonian Boar (Fig. 180). ${ }^{[2278]}$ The shapes of the vases again are certainly local, as are the animal forms, which resemble those incised on the bucchero wares. The drawing is usually crude in the extreme. It is interesting to note that on the vase from which Fig. 180 is taken the potter has painted in white an Etruscan inscription (not shown in the cut). Another vase of the same class was found in the Polledrara tomb (see Plate LVI. and p. 300 below). The method of painting in opaque pigment on a red or black ground is, it would seem, an Ionian characteristic, being found at Naukratis in the seventh century (Vol. I. p. 347), and also, as we shall see on other quasi-Ionic fabrics in Etruria.
Generally speaking, the tombs a fossa are not later than the middle of the seventh century; evidence of this is given by the absence of bucchero proper and of Corinthian fabrics. There are, however, traces of their lingering on even down into the sixth century, as at Vulci, where Helbig mentions a tomb found in 1884 containing Corinthian vases of that date. ${ }^{[2279]}$ At Corneto the latest belong to the end of the seventh century.

## (4) FOURTH PERIOD: CHAMBER TOMBS; ORIENTAL INFLUENCE

Our fourth period, which in many respects shows a close continuity with that of the tombs a fossa, is nevertheless clearly defined by two circumstances: firstly, the adoption of a new type of tomb, doubtless developed out of the fossa, which takes the form of a large chamber, and is therefore known as a camera; secondly, the influence of Oriental art, concurrently with an increased influx of importations from Greece. The period covers about a century of time, from 650 to 550 b.c., and includes several of the largest and most important tombs that have been found in Etruria, which will demand more or less detailed treatment. In none, however, were any great finds of pottery made; but one of these tombs, the Grotta d' Iside or Polledrara tomb at Vulci, contained several specimens of exceptional interest.
The simplest form of chamber-tomb consists of a narrow corridor or $\delta \rho$ ó $\mu o \varsigma$ leading into a larger chamber; next, the $\delta \rho o ́ \mu o \varsigma$ opens into a square or rectangular vestibule, round which various sidechambers are attached; finally, the tomb assumes the form of a vast subterranean edifice composed of several wings, and used for more than one corpse-in fact, a "family vault."
While on the one hand the ceramic types of the Villanuova period still linger on, as in the retention of ossuaria for the receipt of ashes, on the other the painted Greek vases and the local bucchero wares increase more and more, and altogether there is a great advance in the direction of variety and richness. This period saw not only the general introduction of the wheel into Etruria, but also the introduction of the alphabet of Western Greece, through Cumae. A vase of bucchero ware found at Vetulonia bears an Etruscan inscription, which can hardly be much later than 700 b.c., ${ }^{[2280]}$ and we have already seen an instance on a vase from Caere.
In the earlier chamber-tombs no bucchero is found, and the pottery is of the same types as in the trench-tombs; but with the enlarged arrangement of the tomb come the Corinthian vases of Orientalising style, to be followed later by the Ionian and later Corinthian fabrics, and finally by the Athenian wares. The vestibule disappears after the sixth century, and all later tombs have the simple $\delta \rho o ́ \mu o \varsigma$. The typical contents of a chamber-tomb are, as regards local pottery, in the earlier tombs impasto Italico wares, in the later bucchero. The former is hand-made, the shapes similar to those found in the trench-tombs-i.e. pots incised with zigzags, circles, and other patterns, or painted in white. The latest varieties are wheel-made, of bucchero forms. The latter wares, which are much more numerous, are evolved from the impasto: (1) by the use of the wheel; (2) by the introduction of the furnace; (3) by extensive imitation of Greek ceramic and metal forms. The earliest bucchero vases at Vulci and Corneto synchronise with Corinthian pottery of the middle style, about 630-600 в.с., and they last down to the end of the fifth century.
The appearance of the alphabet seems to point to a marked incursion of Greek influence in the early part of the seventh century. The story of the arrival of Demaratos of Corinth, about 665 b.c., with the three artists whom he brought in his train, Diopos, Eucheir, and Eugrammos, ${ }^{[2281]}$ is no doubt an echo of this. The progress of Hellenism was, however, momentarily arrested by the growing power of Carthage, which may partly account for the temporary Orientalising of Etruscan civilisation. It is certainly to the Carthaginian influence in Italy that the Phoenician objects found in the seventh century tombs, such as the silver bowls of Praeneste, are due. Oriental influence is also seen in the large tombs at Vulci, Caere, and Vetulonia, but it is hardly so strong as was at one time supposed; and of late years scholars have generally recognised that Ionian art and commerce played a much larger part throughout in the civilisation of Etruria ${ }^{[2282]}$; and, further, that Oriental art found its way mainly through these channels. At all events there was throughout the seventh and sixth centuries a keen struggle for supremacy in the Western Mediterranean, in which the Etruscans, the Phoenicians of Carthage, and the Ionian and Continental Greeks alike shared; and hence the diverse influences at work in Etruria.

But it was not long before Greece, with its rising colonies of Cumae, Sybaris, and Syracuse, made its predominance to be felt in the Western Mediterranean, and this was consummated by the final victory of Hiero over the combined fleets of Carthage and Etruria off Cumae in 474 b.c. A monument of this exists to the present day in the bronze helmet dedicated by that king at Olympia, now in the British Museum.

We may further define as the second great period of Greek importations, that extending over the sixth and fifth centuries, a period which saw the development not only of the local bucchero fabrics, but also of the Greek black- and red-figured vases, which, heralded by the Corinthian wares, now pour in a continuous stream into Etruria. To this same period belong the paintings of the Etruscan tombs.
The earliest influences from Greece came, as has been hinted, through colonies like Chalcidian Cumae, which were the chief agents in the Hellenisation of Etruria; but at Cervetri, at any rate, the prevailing influence was Corinthian, as testified by the remarkable series of Corinthian and quasiCorinthian vases in the Campana collection at the Louvre. Later in the sixth century came the connection with Athens, the chief results of which are to be seen in the contents of the tombs of Vulci (Vol. I. p. 76). It extends from the time of the Peisistratidae (540-520 b.c.) down to about 450 B.c., being probably brought to an end by the Peloponnesian War and the destruction of the Athenian maritime supremacy; but isolated instances of importations occur down to the time of Alexander the Great, in the Panathenaic amphorae of which dated examples of 336 в.c. have been found at Cervetri (Vol. I. p. 390).
In sketching this outline of Hellenic influence in Etruria we have overstepped the limits of chronological sequence, and must retrace our steps in order to deal first with the local products of the period from 650 в.c. onwards, and secondly with the effects of the Greek civilisation on the same.

Polledrara ware.-The Grotta d' Iside or Polledrara tomb at Vulci has been dated, on the authority of a scarab of Psammetichos I. (656-611 в.c.) which it contained, towards the closing years of the seventh century. This dating has been generally accepted, and there seems no reason to doubt it, although the evidence of an isolated scarab is not always as trustworthy as appears at first sight. Besides local bronze work and objects of Egyptian or quasi-Egyptian character, it contained one vase of unique character which calls for special consideration. ${ }^{[2283]}$

This is a hydria of somewhat peculiar, if not unique form, with a very wide body and rudimentary foot. In some details, especially in the treatment of the handles, it exhibits obvious evidence of imitation of metal-work. Although at first sight resembling bucchero ware, the clay is seen on examination to be of a different type, not being grey but reddish brown in fracture, while the lustrous black surface is produced by a thin coating or slip. It is decorated with designs in three colours, red, blue, and a yellowish white, which were laid on the black and then fired. The red is best preserved, the blue fairly so, but the white has almost entirely disappeared. ${ }^{[2284]}$ The designs are arranged in three friezes, of which the lower consists only of isolated bits of key-pattern. On the two upper rows are scenes from the story of Theseus and Ariadne, together with Centaurs, Sphinxes, and other accessory figures. On the upper row Theseus slays the Minotaur; on the lower, Theseus and Ariadne are seen, firstly in a chariot, secondly leading a dance of four other figures, the hero playing a lyre, while Ariadne holds the clue. ${ }^{[2285]}$ The colouring scheme is most elaborate, and cannot be detailed here; an occasional use of incised lines may also be noted.

A small two-handled cup or kylix, ${ }^{[2286]}$ of a type often found at Naukratis decorated with eyes, was also found in this tomb, and appears to belong to the same class. The clay is similar to that of the hydria, as is the decoration, which however, owing to the flaking off of the black slip, has largely disappeared. Although in its technique it resembles the hydria, the subjects and motives are probably derived from Naukratis. Only a few other examples of this "Polledrara" ware are known: an oinochoë in Berlin, ${ }^{[2287]}$ two vases in the Louvre, ${ }^{[2288]}$ and a vase found at Cervetri, unpublished. ${ }^{[2289]}$ From the contents of the tomb in which the last-named was found, it may fairly be dated early in the sixth century.
Mr. Cecil Smith regards the Polledrara hydria as the result of an Italian attempt to imitate the new bucchero technique which was at this time being perfected (see below), the form of the vase being borrowed from an Ionic source. ${ }^{[2290]}$ Ionic influence (see above, p. 296) is visible in more than one respect in this vase, as also in the reliefs decorating the bronze bust from the same tomb. Other details, such as the imitation of metal-work, are rather to be referred to a Corinthian source; and it is worthy of note that two Corinthian vases were among the contents of the tomb.

The striving after a gaudy effect by the use of polychrome decoration, and especially the employment of blue, a colour otherwise unknown in vase-painting before the end of the fifth century, finds a parallel in the sixth century poros-sculptures from the Athenian Acropolis, in which even more violent effects of colour are attained, as in the bright blue beard of the Triton. But in this case there seems little doubt that the idea is borrowed from Egypt, with its fondness for brightly decorated mummy-cases and bright blue images of faïence and porcelain. Other details which betray an Egyptian origin are the lions' masks, the all-pervading lotos-flower, and the seated dog or jackal. The connecting link is no doubt the great trading centre of Naukratis, through whose agency the Egyptian scarabs, porcelain objects, and ostrich eggs found in this tomb also came to Etruria.
As a parallel to the Polledrara finds should here be cited the painted terracotta panels from Caere now in the British Museum and Louvre, which are certainly local products, and give a realistic representation of the Etruscan people. They are described below (p. 319). These again, both in subject and style, lead to a comparison with the large Etruscan terracotta sarcophagi, of which the most remarkable is that in the British Museum. ${ }^{[2291]}$ Here, as in the Polledrara bronze bust, the rude native attempts at sculpture in the round are combined with reliefs which successfully reflect the style of Ionic art. Lastly, we note another parallel in the paintings of animals on the walls of a tomb at Veii. ${ }^{[2292]}$
combined influence of Ionian and Naukratite imports, acting on an artistic basis principally derived from Corinth." Developed pari passu with the red impasto ware (of which a painted example was found in the Vulci tomb), it gradually gave way to the bucchero ware with which we deal in our next section. It only remains to note that similar ware has been found in Rhodes, ${ }^{[2293]}$ where also later wares of a genuine bucchero type, unpainted, have come to light; and these appear to be instances of a counter-importation from Etruria to Asia Minor.
The only other piece of pottery from the Polledrara tomb which calls for special comment is one to which reference has just been made, a large pithos of the primitive impasto red ware, made on the wheel (Plate LVI.). It falls into line with the painted and stamped fabrics from Caere already described (p. 292 ff .), and is, like the hydria, painted in polychrome, but the colours are much faded. The subjects are a frieze of animals and a ship.
Three other tombs which rival the Polledrara in size and importance are the Regulini-Galassi tomb at Caere, ${ }^{[2294]}$ the Tomba del Duce at Vetulonia, ${ }^{[2295]}$ and the Bernardini tomb at Praeneste. ${ }^{[2296]}$ Although the finds of pottery herein were small, they are yet of great interest for the history of Etruscan art in general, especially as they afford evidence for approximate dating. In the two former Etruscan inscriptions were found. The Caere and Praeneste tombs are probably the earliest, about 650 b.c., and the Del Duce and Polledrara tombs are not later than the end of the seventh century.


In the Regulini-Galassi tomb the pottery takes the form of large caldrons of red glazed ware, which mark a transitional stage between the impasto and bucchero. They are characterised by the large Gryphons' heads projecting in relief round the sides, to which are attached chains. Sometimes they are supported on high open-work stands. In 1892 the British Museum acquired a series of these and similar vases (Plate LVI.), including some plain specimens of bucchero ware from early tombs at Civita Castellana (Falerii: see Vol. I. p. 75).

Bucchero ware.-This may be called the national pottery of Etruria. Its technique is not at present perfectly known, and analysis does not show certainly whether the black paste is natural or artificial. Modern experiments have been made which seem to indicate that this result may be obtained by fumigating or smoking the clay in a closed chamber after the baking, which process blackens the clay throughout. ${ }^{[2297]}$ But M. Pottier ${ }^{[2298]}$ thinks that the black surface was obtained not by fumigation of the vase, but by applying a slip of pounded charcoal already smoked, which at a moderate temperature would permeate the clay. The surface was then covered with wax and resin, and polished, like the Polledrara hydria. A combination of analyses of the paste made by Brongniart ${ }^{[2299]}$ gives the following result:

| Silica | $60-70$ | parts. |
| :--- | :---: | :---: |
| Clay earth | $12-16$ | $„$ |
| Carbonate of lime | $2-4$ | $»$ |
| Magnesia | $1-2$ | $»$ |
| Water | $8-10$ | $»$ |
| Carbon | $1-3$ | $»$ |

The oldest bucchero vases go back to the tombs a fossa of the end of the seventh century. They are small and hand-made, ornamented, if at all, with geometric patterns, incised. The engraving was done by a sort of toothed wheel or a sharp tool; more rarely, hollowed out in grooves. Obviously the process is an imitation of metal engraving. Oriental influence soon appears, first of all in the chalice-shaped cups found at Cervetri, the surface of which is covered with figures of lions, deer, etc., in Oriental style. Both form and decoration are derived from metallic prototypes. The projecting Gryphons' heads mentioned above are also typical of this class.

In tombs of 560-500 b.c., along with Corinthian vases, a different type occurs, the vases being wheel-made, of light and elegant forms-cups, chalices, pyxides, amphorae, and jugs. ${ }^{[2300]}$ The ornament is in the form of reliefs, either stamped from a cylinder on a narrow band, as in the red ware from Caere (see p. 292), or composed of a series of medallions separately modelled or made from moulds and stuck on. This, again, is an imitation of metal. Examples of these types are given in Plate LVII. figs. 1-3, 5.
The subjects are not very varied. They range from animals such as stags and lions, or monsters such as Sphinxes and Centaurs, to winged deities, suppliants with offerings before deities, and other mythological figures-Chimaera, the Asiatic Artemis, or the Minotaur. Egyptian masks are also common. Episodes of hunts or banquets occur, ${ }^{[2301]}$ and also groups of figures in meaningless juxtaposition. Some vases have only curvilinear patterns, such as palmettes, all of a vegetable rather than a geometrical type. In this group the general tendency is rather Hellenic than Oriental, especially towards Ionian art. ${ }^{[2302]}$ This is only a temporary phase, and is practically confined to Cervetri, Veii, and Corneto-i.e. the maritime region in which the Corinthian vases are found.


Etruscan Black Ware: Hut-urn and Bucchero
(British Museum).

At Chiusi an extraordinary development is manifested, which gradually obtained a monopoly. The city was far from the sea and Hellenic influences, and retained Oriental traditions. After the end of the sixth century all the varieties of bucchero were fused into one type, which lasted down to the end of the fourth century. ${ }^{[2303]}$ The shapes include amphorae, trefoil-mouthed oinochoae, various forms of cups, bowls with raised handles and ladles (kyathi), table-utensils, basins imitating metal forms, braziers, and vases in the form of birds or fishes. They are ornamented with reliefs from top to bottom, the subjects being much the same as in the last group. The tops or covers are often in the form of female or cows' heads, or surmounted by birds (cf. Plate LVII. fig. 5). The figures and ornaments are stamped in from moulds and fixed by some adhesive medium, incised designs being inserted to fill up the spaces. These reliefs are never found earlier than the period of Attic importations.
The subjects are derived as before from Greek, Egyptian, and Assyrian sources, the Oriental types being so much combined that they must evidently have come through the Phoenicians. Among the Greek subjects we find Theseus and the Minotaur, Perseus and the Gorgons, Pegasos and the Chimaera, warriors, etc. The animals and the four-winged figures are Assyrian in type, while Egypt supplies such types as Ptah, Anubis, and other animal-headed deities, and the female heads on the so-called Canopic jars.
There are here no signs of inventive genius. The technique is purely native, but all is founded on foreign models. ${ }^{[2304]}$ The shapes are those of Ionia and the coast of Asia or of Athens. On the other hand, the development of the technique from the Villanuova pottery is certainly apparent. The Greeks, indeed, tried to imitate it at times, and bucchero ware is found at Rhodes and Naukratis. We may fairly lay down that Etruscan invention is limited to the perfecting of the technique and the combination of the borrowed elements and art-forms. Many of the flat reliefs seem to be copied from ivories, and the rounded reliefs are certainly from bronze repoussé work; in some cases we find traces of gilding, silvering, and colour, which have been intended to reproduce the appearance of metal. Again, in many respects the bucchero vases are merely the counterparts of works in
bronze，as in the case of the braziers and the bowl with Caryatid supports given in Plate LVII．fig． 2. ${ }^{[2305]}$ In short，they reproduce for us what is wanting in our knowledge of early Greek metal ware． ［2306］

There seem to be some references to this early black ware in the Roman poets，for Juvenal ${ }^{[2307]}$ mentions it as being in use in the time of Numa：＂Who dared then，＂he says，＂to ridicule the ladle （simpuvium）and black saucer of Numa？＂Persius ${ }^{[2308]}$ styles it Tuscum fictile，and Martial ${ }^{[2309]}$ imagines Porsena to have been quite content with his dinner－service of Etruscan earthenware．

A peculiarly Etruscan type of vase which deserves some separate attention is that known as the Canopic jar，resembling the so－called ко́⿱亠䒑⿱日十月， mummies．${ }^{[2310]}$ These Etruscan canopi are rude representations of the human figure，the heads， which are often attired in Egyptian fashion，forming the covers．The eyes are sometimes inlaid，and the female heads have large movable earrings and other adornments．In the tombs it was customary to place these vases on round chairs of wood，bronze，or terracotta．An example may be seen in the Etruscan Room of the British Museum，where the chair is plated with bronze，covered with archaic designs in repoussé relief，${ }^{[2311]}$ and another is shown in Fig．181．Similar chairs were discovered in the Tomba delle Sedie at Cervetri；but the Canopic jars are almost confined to Chiusi．The type finds a parallel in the so－called＂owl－vases＂from the second city at Hissarlik（Vol．I．p．258），in which the same combination of the vase－form with the human figure is to be observed．The lower portion of the jar was intended to receive the ashes of the dead，like the ossuaria，this method of placing the mortal remains of a person within a representation of himself being peculiarly Egyptian．
Signor Milani ${ }^{[2312]}$ has traced the origin of the Canopic jars to the funeral masks placed over the faces of the dead，which are sometimes found in the earliest Etruscan tombs．This practice may have been derived from Mycenae，where Schliemann found gold masks in the shaft－tombs of the Agora；but in Etruria the examples are all in bronze，except a few of terracotta．${ }^{[2313]}$ A gradual transition can be observed from the mask，at first placed on the corpse and then attached to the urn containing its ashes，to the head fashioned in the round and assimilated with the cover；while in later times a further transition may be observed from the vase with human head to the complete human figure．Finally，its place was taken by the reclining effigies on the covers of the sarcophagi （p．320）．The earliest jars are found in the pozzo tombs of the eighth century，the evolution of the head modelled in the round being accomplished by the seventh century，and the archaic types last down to about 550 в．c．，when the severe perfected style comes in，to be succeeded by the free style of the fifth century，after which time the Canopic jars cease to be manufactured．


From Mus．di ant．class．
FIG．181．CANOPIC JAR IN CHAIR PLATED WITH BRONZE．

The types are both male and female throughout，the latter being usually distinguished by wearing earrings and necklaces．Towards the end of the series the handles are gradually converted into rudimentary arms，and finally into fully developed human arms，sometimes holding attributes．They are probably placed on chairs as emblems of the power and authority which the deceased enjoyed during his life．In the Berlin Museum ${ }^{[2314]}$ there is a remarkable example of the sixth century in which the jar is placed on a chair of the same clay，covered with graffito ornamental designs and figures of animals．The jars are always made of a plain red unglazed clay，and are uncoloured．In the British Museum ${ }^{[2315]}$ there are two seated female figures on detached square bases，wearing bright red chitons and large circular earrings，which seem to represent the period of transition from the jar to the sarcophagus，the style in which they are modelled being that of the fifth century． Some of the later examples have strongly individualised features，and seem to be genuine portraits； it is possible that they are actually from moulds taken from the faces of the dead．
（5）PERIOD OF GREEK INFLUENCE；PAINTED POTTERY
of engraving gems, and produced such refined specimens of filagree-work in gold, they never attained to high excellence in their pottery. The vases already described belong to plastic rather than pictorial art, and are mostly imitations of work in metal. Down to the end of the sixth century в.с. their attempts at painting vases have been, as we have seen, limited practically to two fabrics, the Polledrara ware and the Caere jars with paintings in a similar technique. These methods have, however, nothing in common with Greek vase-paintings of the ordinary kind on a glazed surface, a method which was never popularised in Etruria.

The total failure of the Etruscans in vase-painting finds a curious parallel in their sculpture; all their best work is to be sought in their engraving or figures in low relief, as in the mirrors and cistae. Yet the same mirrors and cistae show clearly that it was from no lack of ability in drawing that they failed; wherefore it is the less easy to understand, not only the absence of all originality in their painted vases, but also the rarity of instances of their imitative tendencies in this respect.
Apparently the red-figured vases which were imported into Etruria in such large numbers in the fifth century served as prototypes, not for their paintings, but for the engraved mirrors to which we have alluded. It may have been that they shrank from the task so successfully achieved by Greek painters of suitably decorating the curved surfaces of a vase, and preferred the flat even surfaces supplied by the circular mirrors and the sides of the cistae. Moreover, the interior designs of the kylikes, perfected by Epiktetos, Euphronios, and their contemporaries, served as obvious models for disposing a design in a circular space; and they had in the subjects of the vases a mythological repertory ready to hand.
It now remains to be seen to what extent they actually were influenced in their pottery by the imported Greek vases.

For considerably over a century painted pottery, at all times rare in Etruria, is practically unrepresented in the tombs except by Greek importations, Corinthian, Ionic, and Attic; the only local attempts in this direction are the Polledrara and Cervetri vases. As we have seen, early Corinthian vases appear in the fossa tombs, and later Corinthian in the chamber tombs, in which, towards the middle of the sixth century, the Attic B.F. fabrics begin to make their appearance. The latest developments of the Corinthian wares are, indeed, almost unrepresented, but their place is taken by what appear to be local imitations of the Corinthian vases, a large series of which was found at Cervetri, and now forms part of the Campana collection in the Louvre. These are, however, for the most part certainly Greek, being presumably made by the Greek settlers in that town-at any rate, an Etruscan origin cannot be proved for them. ${ }^{[2316]}$
We have also seen that the Ionian fabrics exercised a great influence on Etruscan art, and this leads us to another series of vases found at Cervetri, the Caeretan hydriae discussed in Chapter VIII. Some years ago it was noticed by the late F. Dümmler ${ }^{[2317]}$ that there were in many museums examples of a class of vases which stood in close relation to the Caeretan hydriae, yet were obviously a different fabric. Having collected and examined these vases, he was able to demonstrate satisfactorily that they were direct imitations by the Etruscans of the Caeretan hydriae, ${ }^{[2318]}$ thereby proving at the same time that the latter were imported from other sources (sc. Ionia), and not, as had hitherto been supposed, themselves of Italian origin. It is not unlikely that the Ionic influence in Etruria is due to the Phocaean migration of 544 в.c.; on reaching Italy the Ionian fugitives would naturally hand on their art-traditions there.


Etruscan Imitations of Greek Vases (British Museum).

These Etruscan vases are not exclusively hydriae, some being amphorae, others kyathi; but they all bear the unmistakable stamp of Etruscan art in the drawing of the figures and other small details, such as the treatment of the incised lines. It will further be noticed that the drawing is in most cases quite free from archaism, figures being often drawn in full face or correct profile; and this
consequently proves that they belong to a considerably later date than the fabrics which they imitate，although the figures are always in black on a red ground．The style in some cases is not unlike that of the later Panathenaic amphorae of the fourth century，and may also be compared with some of the bronze cistae from Palestrina．Accessory pigments are rare，and the incised lines are sketchy and careless；great prominence is given to the bands of ornament bordering the designs， this being a feature borrowed from the Caeretan hydriae．On a large amphora in the British Museum（ B 64）the characteristic Caeretan band of lotos－flowers and palmettes is exactly reproduced，though in black instead of polychrome．${ }^{[2319]}$ Other typical ornaments are the maeander and chevrons；ivy－leaves and sprigs shooting up from the ground；lotos－buds，and wreaths of all kinds．The subjects are limited in range，and thoroughly Etruscan in feeling；Pegasi and beardless Centaurs with human forelegs，Bacchic subjects，and genre scenes，such as athletic contests， combats，or funeral ceremonies（Plate LVIII．），almost complete the list．The turned－up shoes and the pointed tutuli worn by the women，as well as the physiognomy of the figures，with their receding foreheads，are all characteristically Etruscan，though the two former details are borrowed from Ionia．${ }^{[2320]}$ The shapes of the vases are heavy and inartistic，and the effect altogether unpleasing．A list of the principal examples is here appended．${ }^{[2321]}$
When at last the imitative instincts of the Etruscans did in course of time impel them to turn their fancy to copying the red－figured vases，we find the same characteristics reproduced．The number of such imitations is not large，but they are unmistakable，not only from the style，but from the pale yellow clay，dull black glaze，and bizarre character of the ornamentation．Nevertheless，in some cases fairly good results are obtained，as in the B．M．kylix F 478，which in its interior design at all events is an obvious attempt to imitate the work of the great Athenian kylix－painters．The artist seems to have learned his art from the school of Hieron and Brygos，but his Etruscan instincts are revealed in the over－elaboration and stiff mannerisms of the drawing．The Museum also possesses a very fine krater from Falerii（F 479），which appears to be an example of a local school，${ }^{[2322]}$ imitating the red－figured vases of the＂fine＂period and large style．But these comparatively successful imitations are exceptional．
The other red－figured Etruscan vases are far inferior，and are executed in a style which none can fail to recognise．It is dry and lifeless in the extreme，the drawing helpless，and the whole effect repulsive and disagreeable，as is so often the case with Etruscan art．These vases are not earlier than the third century b．c．，and may be later．In them we observe，besides Greek mythological subjects，the introduction of local deities such as Charun and Ker．The British Museum possesses some ten examples of this class，in addition to the two already described．The most interesting is a krater（F 480 ＝Plate LVIII．），with，on one side，the death of Aktaeon，designated by his Etruscan name Ataiun；on the other，Ajax，designated Aifas，throwing himself upon his sword，after the award of the armour of Achilles．
Another vase of this class has for its subject the farewell of Admetos and Alkestis，，${ }^{[2323]}$ with Etruscan inscriptions accompanying the figures，and a speech issuing from the mouth of one of them．Behind Admetos is one of the demons of the Etruscan hell，probably intended for Hades or Thanatos， wearing a short tunic and holding in each hand a snake．Behind Alkestis is Charun with his mallet． On another vase found at Vulci ${ }^{[2324]}$ Ajax is represented slaying a Trojan prisoner in the presence of Charun；and on the reverse the latter appears again with Penthesileia and two other women．On a third ${ }^{[2325]}$ Leda is represented showing Tyndareus the egg from which Helen and Klytaemnestra were destined to be born；it is inscribed Elinai，the Etruscan form of Helen．
The latest specimens of these fabrics，which have been found at Orvieto and Orbetello，positively degenerate into barbarism ${ }^{[2326]}$ ；the figures are carelessly and roughly painted，and white is extensively used as an accessory，as in the later Apulian and Campanian vases．The subjects are usually borrowed from the infernal regions，and the gruesome figure of Charun is common．
Inscriptions on Etruscan vases are rare as compared with Greek，and in many cases have only been scratched in after the vase was made．There are also instances of imported Greek vases on which Etruscan inscriptions have been incised in this manner，as in the case of a vase in the form of a lion in the British Museum（A 1137，from Veii），on which is incised $\operatorname{REL} \oplus V P$ 日A $\oplus \mid \xi N A S$ ，felthur hathisnas． The earliest known are incised on plain pots of black ware，and several of these take the form of what are known as abecedaria，or alphabets．Strictly speaking，some of these alphabets are of Hellenic origin，and do not give the forms of the Etruscan letters as they are known to us；but as the latter are derived from the Greek（western group），probably through Cumae（see above，p．295） these inscriptions would naturally represent their original forms in Etruria．
In 1882 an amphora was discovered at Formello near Veii，${ }^{[2327]}$ on which this Greek alphabet is written twice from left to right，together with a retrograde Etruscan inscription，and a＂syllabary＂ or spelling exercise．The alphabet is as follows：$\alpha, \beta, \gamma, \delta, \varepsilon, f, \zeta, h, \theta, \tau, \kappa, \lambda, \mu, \nu, ⿴ 囗, o, \Pi, M, \rho, \rho, \sigma$ ， $\tau, v,+, \varphi, \psi$ ．This is the most complete abecedarium extant，containing twenty－six letters and illustrating the archaic Greek forms of the twenty－two Phoenician letters in their Semitic order．The four additional ones are $v,+(=\xi), \varphi$ ，and $\psi(=\chi)$ ．The character + is the representative of samech，and is not found in Greek inscriptions；M is shin or san（cf．p．247）．
The Caere alphabet，on a vase now in the Museo Gregoriano，is also combined with an Etruscan syllabary，consisting of such forms as bi，ba，bu，be，gi，ga，gu，ge，etc．${ }^{[2328]}$ ；the alphabet resembles that from Formello，except for the omission of the $\varphi$ ，and the 4 ，of the same type，extending as far as o，was found at Colle near Siena．${ }^{[2329]}$ On another small black jar also found at Caere，and now in the Museo Gregoriano，${ }^{[2330]}$ is incised an Etruscan inscription in two lines，in which also the letters are certainly early Greek rather than Etruscan；these two from Caere must be of the same date as the Regulini－Galassi tomb，about 650－600 в．с．

The two following，however，are genuine Etruscan abecedaria：one from the foot of a cup found at Bomarzo，${ }^{[2331]}$ on which the alphabet runs（retrograde）：$\alpha, \gamma, \varepsilon, f, \zeta, \eta, \theta, \tau, \lambda, \mu, \nu, \Pi, M, \rho, \sigma, \tau, \nu, \varphi$ ， $\chi, \varphi$ ，the other in the museum at Grosseto，${ }^{[2332]}$ in which the letters are practically the same，but with the addition of k and $\rho$ ．In the first named the form $\zeta$ for $Z$ should be noted，and in both occur the san and two forms of $\varphi$ ，which in Etruscan generally appears as $\S$ ．Among other instances of early Etruscan inscriptions are that on the Louvre vase from Caere，with white paintings on red ground（D 151：see p．294），which dates from the seventh century；and on objects from the Regulini－ Galassi and Del Duce tombs（pp．295，300）．They are，however，very rare on the pottery of the next two centuries，with the exception of those incised on the plain pottery，which bear no essential relation to the vase itself．${ }^{[2333]}$ These，as has been noted，are also found on imported Greek wares， one of the best instances being the kylix of Oltos and Euxitheos，at Corneto，${ }^{[2334]}$ on the foot of which is an inscription of thirty－eight letters not divided into words．Occasionally also painted inscriptions are found．${ }^{[2335]}$
When，however，we come to the imitation Greek vases of the third and second centuries，we find a curious reversion to the old Greek practice of inscribing the names of the figures and even sentences on the paintings themselves．Some of these have already been mentioned．The best example is afforded by the krater with Admetos and Alkestis，on which the names of the two principals are given as $\lambda_{T I M T A, ~ A t m i t e, ~ a n d ~ I T Z \supset J A, ~ A l c s t i ; ~ w h i l e ~ b y ~ t h e ~ s i d e ~ o f ~ t h e ~ f i g u r e ~ o f ~ C h a r u n ~}^{\text {I }}$
 $\Phi \Lambda E \Delta O \Delta \Gamma E$ On the vase with Ajax and Penthesileia the names are given as alFas，qadv，「ENTASILA， and EINOIAL TVPMVCAS．On a vase mentioned by Gerhard，Nike inscribes on a shield the word AN 2 A ，Lasna．${ }^{[2336]}$

## § 2．Etruscan Terracotta Work

It remains to say a few words on the other uses of clay among the Etruscans．This subject has indeed been discussed to some extent in Chapter III．，regarding the use of clay in general in classical times．But there are some features of work in terracotta which are peculiar to this people． For their extensive use of this material we are quite prepared by the evidence of the pottery found in their tombs，which shows that they understood the processes of manufacture perfectly，even if they failed in their attempts at decoration．As we shall see，they employed it constantly，not only for finer works of art，but for ordinary and more utilitarian purposes．This we know not only from the existing remains，but from many passages of ancient writers，who speak of the Etruscan preference for clay and their skill in its use．
Pliny，in particular，speaks of the art of modelling in clay as＂brought to perfection in Italy，and especially in Etruria．${ }^{[2337]}$ He attributes its introduction to the three craftsmen whom Demaratos brought with him from Corinth in the seventh century B．C．－Eucheir，Eugrammos，and Diopos－ whom he styles fictores．${ }^{[2338]}$ This story of its origin need not，of course，be implicitly believed；nor， on the other hand，need the statement of Tatian，${ }^{[2339]}$ who，followed in modern times by Campana and other Italian writers，claimed for Italy a priority over Greece in the art of making terracotta figures．For their statues the Etruscans certainly seem to have preferred clay to any other material． Although few of these have descended to us，there are many passages in Roman literature which imply their excellence，and it is chiefly from these that our knowledge of Etruscan statues in terracotta is derived．The Romans，unable themselves to execute such works，were obliged to employ Etruscan artists for the decoration of their temples，as in the notable instance of that of Jupiter on the Capitol．A certain Volca of Veii ${ }^{[2340]}$ was employed by Tarquinius Priscus，about 509 B．C．，to make the statue of the god，which was of colossal proportions，and was painted vermilion， the colour being solemnly renewed from time to time．The same artist made the famous chariot on the pediment of the temple，which，instead of contracting in the furnace，swelled to such an extent that the roof had to be taken off．This circumstance was held to prognosticate the future greatness of Rome．${ }^{[2341]}$ Volca also made a figure of Hercules in the Forum Boarium，and we read that Numa consecrated a statue of Janus ${ }^{[2342]}$ ；but the material in the latter case is not actually specified as terracotta．
Pliny goes on to say that such statues existed in many places even in his day．He also speaks of numerous temples in Rome and other towns with remarkable sculptured pediments and cornices； the existing remains of some of these will presently be discussed．There is no doubt that the use of terracotta for the external decoration of temples was even more general in Etruria than in Greece； and，whereas in Greece it ceased in the fifth century，in Etruria it lasted down to Roman times．The use of bricks in Etruria seems to have belonged entirely to the time when it had lost its independence，under Roman dominion．For instance，the brick walls of Arretium，which are highly spoken of by Pliny and Vitruvius，${ }^{[2343]}$ do not belong to the Etruscan，but to the later city；and although Gell alleged that he saw tufa walls with a substructure of tiling at Veii，Dennis sought for these in vain ${ }^{[2344]}$ ；even a pier of a bridge resting on tiles which he found there proved to be later work．For buildings and for tombs the principal material seems to have been tufa，but the tiles of the roofs were probably of terracotta，as were sometimes those used for covering tombs．${ }^{[2345]}$
Etruscan temples were also largely built of wood，with a covering of terracotta slabs，as the evidence of recent excavations shows．This method of decoration，which，as we saw in a previous chapter（Vol．I．p．100），was largely practised in Italy and Sicily，and even spread thence to Greece，
as at Olympia, is not alluded to by Vitruvius in his description of Etruscan temples (iv. 7), although he speaks of the wooden construction of the roofs; but he alludes to antepagmenta fixed on the front of the temples, which may refer to the terracotta slabs. ${ }^{[2346]}$ Earlier restorations made after his descriptions are imperfect in this respect, only regarding construction and not decorative effect. ${ }^{[2347]}$ It is at any rate clear that the roof had a pediment on the front only, the other three sides projecting over and forming eaves, round which hung the pendent slabs (see below); they were not required in front because of the portico. Araeostyle temples, the same writer tells us, had wooden architraves and pediments, ornamented with sculpture in terracotta. The cinerary urns often supply evidence as to the construction of the roofs, with their exact imitation of tiles.
We have now remains of at least four temples built in this method, or, rather, of their terracotta decoration: from Cervetri in Berlin, from Civita Lavinia in the British Museum (Plates II.-III.), from Alatri (1882), and from Falerii or Civita Castellana (1886). ${ }^{[2348]}$ Other remains of architectural terracotta work come from Orvieto, ${ }^{[2349]}$ Pitigliano, ${ }^{[2350]}$ and Luni (see below), and from Conca or Satricum, ${ }^{[2351]}$ the latter being chiefly antefixal ornaments of the ordinary Italian types. The Cervetri remains consist of roof-tiles, antefixal ornaments with figures in relief in front, and friezes with chariots and warriors. ${ }^{[2352]}$ Portions of a similar frieze from the same site are in the British Museum, ${ }^{[2353]}$ as are also three antefixes in the same style as one in Berlin from Cervetri (Plate LIX.). ${ }^{[2354]}$ They belong to the fifth century, and illustrate a later development from the ordinary archaic typeidealised female heads or heads of Satyrs with rich polychrome decoration. Another example in Berlin appears to represent Juno Sospita. ${ }^{[2355]}$ The friezes are a good example of the Italo-Ionic style of the end of the sixth century, the points of comparison with the Chalcidian and other B.F. vases being particularly noteworthy. ${ }^{[2356]}$
But for information on the form of the Etruscan temple these are too fragmentary to be of any use. The remains from Alatri, Civita Castellana, and Civita Lavinia are much more illuminating. The lastnamed, of which some description has already been given (Vol. I. p. 101), are partly archaic, partly of the fourth century, the two former wholly of the later date; but allowing for differences of style, the general arrangement was in all cases practically the same. The front of the temple was in the form of a pediment supported on columns, with ornamental raking cornices, and akroteria in the form of figures or groups. Along the sides and back ran gutters, with lion-head spouts at intervals, faced by upright cornices, with pendent plates of terracotta, or "barge-boards" hanging free and ornamented with patterns in relief. These were for protection against weather, like the edgings to the roofs of Swiss châlets and modern railway stations. The practice was quite un-Greek, and peculiar to Etruria. The antefixal ornaments were continued along the sides above the cornice. The architraves were also ornamented with terracotta slabs, on which were palmette patterns; and thus the whole formed a rich and continuous system of terracotta plating which completely covered the woodwork of the architraves and roof. All the slabs were ornamented with coloured patterns in relief, or simply painted on a white slip, such as maeanders, tongue, scale-pattern, lotos-flowers, or various forms of the palmette.


1. Etruscan Antefix (Fifth Cent.)
2. Etruscan Sarcophagus (Third Cent.)
(British Museum).

The existing remains of Etruscan monumental sculpture in clay are, as has been indicated, not large. Some of the architectural antefixes are almost important enough to be included under this head, especially those in the form of figures or groups modelled almost in the round. These belong mostly to the fifth century b.c., and the finest example is the group in the Berlin Museum from the Cervetri find already mentioned, representing Eos carrying off Kephalos ${ }^{[2357]}$; it is in the style of about 480 в.c. A smaller but still very effective example is the antefix from Civita Lavinia in the British Museum, representing a Satyr and Maenad awaiting the advent of Dionysos (Plate II.). [2358] With these must be reckoned the sculptured friezes from Cervetri in the British and Berlin Museums, and the reliefs on the British Museum sarcophagus from the same site. ${ }^{[2359]}$ In all these
the same prevalence of Ionic Greek influence may be observed, which is characteristic of so much Etruscan work of the late archaic period, both in terracotta and bronze, as in the reliefs of the Polledrara bust. ${ }^{[2360]}$ This influence, which is due to the strong Hellenic element in the civilisation of Caere and the Campanian cities, we have also seen at work in the vase-paintings of the period. ${ }^{[2361]}$

One of the earliest instances, and perhaps the most remarkable, of Etruscan clay modelling in the round, for its size and execution, is the group on the top of the famous sarcophagus in the British Museum (Fig. 183). ${ }^{[2362]}$ The figures, a man and woman reclining on a couch, are life-size, of somewhat slender proportions, with smiling features, the drapery of the woman stiff and formal. Sir Charles Newton has described the style as "archaic, the treatment throughout very naturalistic, in which a curious striving after truth in anatomical details gives animation to the group, in spite of the extreme ungainliness of form and ungraceful composition." The same difficulties that beset the sculptor of the Polledrara bust, in working in the round instead of relief, are visible here; and the contrast with the Hellenic style of the reliefs round the lower part is very marked. There are similar sarcophagi in the Louvre, and in the Museo Papa Giulio at Rome. ${ }^{[2363]}$ M. Martha notes in regard to the figures on the former that the faces are remarkable for individuality and precision of type, but the limbs are stiff and rude. This is not an infrequent feature of early Greek art. ${ }^{[2364]}$ Signor Savignoni claims these three monuments as purely Ionic Greek work, but repudiates much of the British Museum sarcophagus as un-antique.


FIG. 183. ARCHAIC TERRACOTTA SARCOPHAGUS (BRITISH MUSEUM).

Of later sculpture in terracotta the instances are comparatively few, by far the best being the pedimental sculptures from Luni in Northern Tuscany, discovered in 1842, and now at Florence. ${ }^{[2365]}$ Their date is about 200 b.c., and they include figures of the Olympian deities, Muses, and a group of Apollo and Artemis slaying the Niobides. A few remains of similar figures were found at Orvieto. ${ }^{[2366]}$

It may be convenient to speak here of a small group of monuments in terracotta which illustrate in an interesting manner the achievements of Etruscan painting in the archaic period. This is a series of terracotta slabs, which were inserted into the walls of small tombs at Cervetri to receive the painted decoration which the Etruscans considered such an important feature of their sepulchral arrangements. ${ }^{[2367]}$ Two sets have been found, one of which is in the Louvre, the other in the British Museum; both are of similar character, and belong to the beginning of the sixth century, but the style varies in some degree. Fig. 184 gives one of the slabs in the Louvre.
The surface of the slabs was covered with the usual white slip or $\lambda \varepsilon v ́ \kappa \omega \mu \alpha$ of early Greek paintings, ${ }^{[2368]}$ on which the designs were sketched with a point and filled in with red and black outlines or washes. The white ground was left for the flesh of women and for white drapery, the flesh of the men being coloured red. Of the two the Louvre slabs seem the more advanced, and more directly under Ionic influence, while the others are more provincial in character. The Caeretan hydriae seem to have left some traces on the former, and in the latter it is interesting to note the use of borders of white dots for the drapery, such as we see on the Daphnae vases (Vol. I. p. 352).
These paintings may also be compared with those in the Grotta Campana at Veii (Vol. I. p. 39), which, in spirit at any rate, if not in date, are the oldest examples of Etruscan painting, while still under Oriental influence. But not being works in terracotta, they do not strictly concern us here.

Although the more important sarcophagi of the Etruscans were made of alabaster, tufa, and peperino, a considerable number, principally of small size, were of terracotta. All of these belong to a late stage of Etruscan art. Some few were large enough to receive a body laid at full length. Two large sarcophagi, from a tomb at Vulci, now in the British Museum, may be taken as typical. ${ }^{[2369]}$ The lower part, which held the body, is shaped like a rectangular bin or trough, about three feet
high and as many wide. On the covers are recumbent Etruscan women, modelled at full length. One has both its cover and chest divided into two portions, probably because it was found that masses of too large a size failed in the baking. The edges at the point of division are turned up, like flange tiles. These have on their fronts in one case dolphins, in the other branches of trees, incised with a tool in outline. Other sarcophagi of the same dimensions are imitations of the larger ones of stone. Many of the smaller sort, which held the ashes of the dead, are of the same shape, the body being a small rectangular chest, while the cover presents a figure of the deceased in a reclining posture. They generally have in front a composition in relief, freely modelled in the later style of Etruscan art, the subject being often of funeral import: such as the last farewell to the dead; combats of heroes (Plate LIX.), especially that of Eteokles and Polyneikes; a battle in which an unarmed hero is fighting with a ploughshare ${ }^{[2370]}$; the parting of Admetos and Alkestis in the presence of Death and Charun; and the slaying of the dragon by Kadmos at the fountain of Ares. ${ }^{[2371]}$ Some few have a painted roof. All these were painted in tempera upon a white ground, in bright and vivid tones, producing a gaudy effect. The inscriptions were also traced in paint, and rarely incised. A good and elaborate example of the colouring of terracotta occurs in the recumbent figure on a small sarcophagus in the British Museum (Plate LIX.). ${ }^{[2372]}$ Here the flesh is red, the eyes black, the hair red, the wreath green, and the drapery of the figure is white, with purple and crimson borders; the phiale which the figure holds is yellow (to


FIG. 184. PAINTED TERRACOTTA SLAB FROM TOMB (LOUVRE). imitate gilding), and the cushions on which he reclines are red and blue. This system of colouring is maintained to an even greater degree in the relief on the front of the sarcophagus, the subject of which is a combat of five warriors. The background is coloured indigo, and every detail is rendered in colour, except the nude parts, which are covered with a white slip throughout. The pigments employed are red, yellow, black, green, and purple, and the inscription above is painted in brown on white, all the colours being marvellously fresh and well preserved; but the general effect is gaudy, fantastic, and scarcely appropriate. It may also be said in regard to the whole series that the subjects are monotonous and unpleasing, and the compositions crowded to excess.
By far the finest example of these terracotta sarcophagi is one found at Cervetri not many years ago, now in the British Museum (Plate LX.). ${ }^{[2373]}$ It is known from the inscription in front to be the last resting-place of a lady named Seianti Thanunia, whose effigy, life-size, adorns the top-a most realistic specimen of Etruscan portrait-sculpture, and in splendid preservation. Within the lower part her skeleton is still preserved, together with a series of silver utensils. A very similar specimen, that of Larthia Seianti, is in the Museum at Florence, ${ }^{[2374]}$ and from the coins found therewith the date of these two may be fixed at about 150 b.c. The figure of the lady was cast in two halves, the joint being below the hips; she is represented as a middle-aged matron, her head veiled in a mantle which she draws aside with her right hand. In her left she holds a mirror in an open case; she wears a sphendone in her hair, and much jewellery. On the right arm are bracelets, and on the left hand six rings, the bezels of which are painted purple to imitate sard-stones; in her ears are pendants painted to imitate amber set in gold. The nude parts are painted flesh-colour, and colouring is freely employed throughout, the cushions being painted in stripes. The dimensions of the sarcophagus itself are 6 ft . by 2 ft . by 1 ft . 4 in .; it has no reliefs on the front, but is ornamented with pilasters, triglyphs, and quatrefoils.
For antefixal ornaments, masks, and the decoration of the smaller sarcophagi and other products of ordinary industry, the clay seems to have been invariably made in the form of a mould; but for the larger sarcophagi and the Canopic figures a rough clay model was made by hand and itself baked. Probably both processes were employed concurrently-large statues, for instance, being made in several pieces; in these it will generally be noted that the head and torso are modelled more carefully than the limbs.


Sarcophagus of Seianti Thanunia (Second Cent. B.C.) (Brit. Mus.)
M. Martha ${ }^{[2375]}$ explains the invariable colouring of Etruscan terracottas on the supposition that the Etruscans did not profess to make figures in this material, but looked down on it as a common substance, to be concealed wherever possible. However this may be, the polychromy was not only a necessary artifice, but an admirable means of imparting life and realism to the figures. In the archaic period there is much less variety, yellow, red, brown, and black being the only colours employed as a rule. ${ }^{[2376]}$ The dark red pigment usually applied for flesh-colour on the sarcophagi may suggest the minium with which the statue of Jupiter Capitolinus was smeared. In later work the tints are lighter and much more varied, as we have seen, and this is especially noticeable on the figures from the Luni pediments, in which rose, yellow, green, and blue are employed with the same delicate nuances that we see in the Tanagra figures.

## § 3. Southern Italy

In dealing with the indigenous non-Hellenic people of Southern Italy and their pottery, we are almost more at a disadvantage than in regard to the Etruscans. The peoples are almost unknown to us, and are vaguely characterised as "Iapygian," "Messapian," "Oscan," and so on; but this does not really carry us much further. Moreover, this part of Italy has never been scientifically or thoroughly excavated, like Etruria, and even where finds have been made they are small and poor; nothing of very remote date appears to have come to light, and very few early Greek importations. Hence there has been until quite recently no attempt made at a scientific study of the pottery, or even to distinguish local from imported wares; in Heydemann's catalogue of the Naples vases it is practically ignored. Recently, however, Herr Max Mayer, and Signor Patroni, whose laudable investigations of the Graeco-Italian vases have already received attention (Chapter XI.), have turned their attention to the study of the less promising indigenous fabrics. ${ }^{[2377]}$
The region with which the present section deals is that comprised by the three districts of Apulia, Lucania, and Campania. The barbarian races by which it was occupied in classical times were known by various names, used with some vagueness; but roughly we may divide them into two groups: the Iapygians or Messapians and the Peucetians, occupying the south-east portion of the peninsula from modern Bari to the end of the "heel" ${ }^{[2378]}$; and the Osco-Samnites, who occupied Campania and the mountainous district of Samnium on its north-eastern border. In Lucania the district of Sala Consilina has yielded local pottery. ${ }^{[2379]}$ The Osco-Samnites appear to have been more amenable to the influence of Greek civilisation than the others, owing to the existence in their midst of such centres of culture as Cumae, Capua, and Poseidonia (Paestum); hence we find that the pottery of that region shows a much more Hellenic character than that of Apulia, and is more like that of Etruria in its attempts to imitate the Greek imported fabrics (see Vol. I. p. 484).
Greek painted vases are found in Southern Italy as early as the seventh century b.c., though even in "Aegean" times they had penetrated as far as Sicily, and even Marseilles (see Vol. I. pp. 69, 86). ${ }^{[2380]}$ At Cumae in particular, and also at Nola, "Proto-Corinthian" and Corinthian wares have been found; during the sixth century Ionic and Attic B.F. wares make their appearance, but never in large quantities, as in Etruria. They, however, gave rise to a class of imitative fabrics found chiefly in Campania: small amphorae and other forms rudely painted with black silhouettes, dating from the fifth century. At Tarentum the finds of vases have been mainly Greek, but even these are comparatively rare. The principal examples of local wares are to be seen in the museums of Bari, Lecce, Taranto, and Naples; the British Museum, Louvre, and Berlin only possess isolated specimens. ${ }^{[2381]}$ The general scarcity of imports is due, Signor Patroni thinks, to the restricted intercourse between the colonies on the coast and the interior districts peopled by hostile local tribes. After the fifth century, when large numbers of Greek artists were established in the towns of

Southern Italy, the circumstances became different, and we have already made in Chapter XI. a general survey of the various fabrics produced from that time in the various centres down to the total decay of the art.
All Italiote pottery, before this direct influence of Hellenism made itself felt, may be called "archaic"; but it must at the same time be borne in mind that these archaic types still went on during the time of Greek influence. They formed, in fact, a "domestic" style, as opposed to the "high-art" style of the Graeco-Italian wares, just as the early Geometrical pottery of Athens is thought to have been in relation to the Mycenaean vases (see Vol. I. p. 279). They must not, however, be regarded-as has been done by some writers-as deliberate archaistic revivals of older fabrics. It is true that they bear a remarkable resemblance in many cases to Aegean, Cypriote, and Geometrical wares; but this likeness is due to other causes, being the result of development, not of direct imitation. A learned Italian, on first seeing some of the local pottery excavated in Apulia, exclaimed, "This is the Mycenaean style of Italy." Chronologically and ethnographically he was wrong, but artistically he was right; and as Signor Patroni has pointed out, parallels to nearly all the ornamental motives of local Apulian fabrics may be traced in Mycenaean pottery.
There is also a favourite shape, that of a large double-mouthed askos, examples of which may be seen in the British Museum (F 508 = Fig. 185, and F 509), which is obviously derived directly from the Mycenaean "false-necked amphora" (see Vol. I. p. 271). It is not a Hellenic type, although it is the forerunner of a form of askos found among the painted vases of Apulia. ${ }^{[2382]}$ Another favourite form, which Signor Patroni calls the orcio appulo, a jar with three vertical handles round the nearly spherical body, and wide-spreading mouth, may similarly be derived from the Mycenaean threehandled pyxis (Vol. I. p. 272). Other forms, again, are parallel with those of Cyprus, as is in some cases the system of geometrical decoration, a figure or pattern in a panel with borders of geometrical ornament.
The writers above-mentioned distinguish two main classes of the local pottery of Apulia (including the south-eastern extremity or "heel" of Italy). The central portion of this district was inhabited by a tribe known as the Peucetii, and the extremity by Messapians, or, as they are also styled, Iapygians. The vases, which appear to be the product of the latter race, are found in various places-such as Brindisi, Egnazia or Fasano, Lecce, Nardo, Ostuni, Otranto, Putignano, Rugge, Taranto, and Uzento -and they may best be studied in the museum at Bari. The pottery of the Peucetii, which Signor Patroni calls Apulian, covers the region round Bari, including Putignano on the south, Bitonto and Ruvo on the north, where the local civilisation seems to have been modified by the influence of such centres as Canosa.


FIG. 185. ASKOS OF LOCAL APULIAN FABRIC (BRITISH MUSEUM).

The typical form of Messapian pottery is a krater with high angular handles, at the highest and lowest points of which are pairs of discs (rotelle), a spherical body, and neck sloping inwards, without lip. The form is one which, as we have seen in Chapter XI., was adopted by the Greek vasepainters in Lucania at a later date. ${ }^{[2383]}$ Mayer states that this form is only found in the "heel" of Italy, but Patroni seems to imply that it is typical of Central Apulia. ${ }^{[2384]}$ It is painted in two colours-purple-red and dark brown or black; but the former colour is not found in the earlier examples. The decoration includes simple geometrical or vegetable patterns, such as wreaths, panels of lozengepattern, zigzags, and an ornament composed of two triangles point to point 8 , which Mayer calls the
"hour-glass" ornament. The more developed examples have figures in panels, ranging from rows of ducks to human figures. Among these are a man gathering fruit from a tree and two stags confronted. Lenormant published two very interesting specimens in the Louvre, one of which has two cocks confronted, the other a man swimming accompanied by a dolphin. ${ }^{[2385]}$

The latter, with others of the same class, styled by Lenormant "Iapygian," appear to be imitations of B.F. amphorae ${ }^{[2386]}$; but if they are imitations they must be almost contemporaneous with their prototypes, and cannot be later than the fifth century. The man with the dolphin recalls the story of Taras and the coin-types of Tarentum; but Lenormant pointed out that a similar legend was current relating to Iapys, the eponymous hero of Iapygia, ${ }^{[2387]}$ and he may therefore be intended. Some of these vases have painted inscriptions, one of which runs, IAP; but they are apparently nothing more than names, partly Hellenised.
Among other shapes are a kind of askos with simple decoration, a jug or pitcher with discs attached to the handles, also with simple patterns, and a unique variety of the krater with four flat-topped column-handles. Signor Patroni ${ }^{[2388]}$ calls attention to another class of Messapian vases from which the geometrical decorative element is absent, the ornament being arranged in bands of equal width, and varying between linear and natural forms. A characteristic motive is a sort of chain-pattern. The wave and rows of pomegranate-buds also occur, and animals, such as dogs and dolphins; also human heads and figures. The shapes are either the double-necked askos, as given in Fig. 185, with an arched handle between the mouths, or a kind of double situla, formed of two jars on a cylindrical stand with a vertical handle between.

As Mayer has pointed out, there cannot here be any question of a very ancient class of vases, but rather of one of eclectic character. The Geometrical tendency appears chiefly in the north of the district, where the influence of Peucetia (see below) was felt. The vegetable ornaments, he suggests, have affinities with those of "Rhodian" vases. ${ }^{[2389]}$ The date can hardly be earlier than the fifth century.


From Notizie degli Scavi.
FIG. 186. KRATER OF "PEUCETIAN" FABRIC WITH GEOMETRICAL DECORATION.

The fabrics of Central or Peucetian Apulia centre, as has been noted, round Bari. They are all of a strongly Geometrical type, but the system of ornamentation is freer and more varied than in the Messapian class. They are easily recognisable by their forms and characteristic designs, painted only in brown or black. Here, again, the typical form is a krater, in which the handles are either arched in vertical fashion or else form flat bands. It has a shallow, spreading lip. The patterns are arranged in panels and bands, and are often executed with great care. Fig. 186 gives an example from Sala Consilina in Lucania. ${ }^{[2390]}$ The favourite motives are chequers, zigzags, the "hour-glass," hook-armed crosses, and lozenges filled with reticulated pattern, neatly arranged in friezes or saltire-wise. Round the lower part of the vase is often found what may be described as a comb-pattern, and on some vases is a curious rudimentary form of the maeander, arranged in triangles or diagonal crosses. Among the other shapes are a small askos with ring-handle on the back, a sort of high stand like a fruit-dish, large cups and bowls, and the orcio already mentioned. One of the finest examples is a krater from Ruvo in the Jatta collection, ${ }^{[2391]}$ with twisted handles and a very elaborate system of ornamentation, chiefly diaper and maeander patterns.
Like the Messapian, the Peucetian or Apulian pottery seems to have flourished during the fifth century ${ }^{[2392]}$; but there are some vases which seem to form connecting-links with their Hellenic prototypes, and probably belong to the sixth century. ${ }^{[2393]}$ In any case, both fabrics must be regarded as much earlier than previously supposed; they are certainly not late archaistic work, and time must be allowed for their disappearance when the Hellenic fabrics of Apulia begin. In placing the majority of the products between 600 and 450 в.с., we shall probably not be far from the truth, although M. Pottier ${ }^{[2394]}$ would throw the origin of the fabrics as far back as the eighth century.

2246See especially Pottier, Louvre Cat. ii. p. 285 ff., and Gsell, Fouilles de Vulci, p. 315 ff.
2247i. 94.
2248Sat. i. 6, 1.
2249i. 30.
2250Op. cit. p. 297.
2251Frag. Hist. Graec. ed. Didot, i. p. 45: દ̇пl̀ $\Sigma \Pi \iota \nu \tilde{\eta} \tau \iota ~ п о т \alpha \mu \tilde{\mu}$ (the name of one of the mouths). He calls them here Pelasgians.

2252Bertrand and Reinach, Les Celtes dans les vallées du Po et du Danube, p. 73 ff .: cf. Bertrand, Arch. celtique et gauloise, p. 205.

2253Cf. i. 27 with vii. 3.
2254See Helbig, Die Italiker in der Poebene, for a full account of this period; also Von Duhn in
J.H.S. xvi. p. 128, whose ethnographical views seem to differ in many details from those of other writers previously cited.

2255See Brit. Mus. Cat. of Bronzes, p. xlv.
2256See Ann. dell' Inst. 1884, p. 111.
2257Notizie degli Scavi, 1881, pl. 5, Nos. 15, 16.
2258II. xi. 633; Od. iv. 615, vi. 232. See Dumont-Pottier, i. p. 152.
22590n the ornamentation of the Villanuova period general reference may be made to Böhlau's Zur Ornamentik der Villanovaperiode (1895).

2260Gsell, Fouilles de Vulci, p. 254.
2261See Brit. Mus. Cat. of Bronzes, p. xlv, and references there given.
2262The objects found at Hallstatt date from about the tenth to ninth centuries b.c., and are sometimes "sub-Mycenaean" in character.

2263See on the subject of hut-urns the bibliographies given in Gsell, Fouilles de Vulci, p. 258; Bonner Studien, p. 24 (Von Duhn); and J.H.S. xvi. p. 127 (id.).

2264J.H.S. xvi. p. 125.
2265See also for Narce Mon. Antichi, iv. pt. 1, p. 105 ff.
2266M. Pottier states that a primitive kind of wheel was used for making the impasto in the eighth century, and Helbig and Martha are certainly wrong in stating that it was not introduced till the sixth (see Louvre Cat. ii. p. 294).

2267Bull. dell' Inst. 1885, p. 118.
2268E.g. Brit. Mus. Cat. Nos. 347 ff.
2269Op. cit. p. 345 ff.
2270Notizie degli Scavi, 1884, p. $186=338$ : cf. for the style a vase from Tamassos, Cyprus, in the British Museum (Rev. Arch. ix. 1887, p. 77).

2271See generally Pottier, Louvre Cat. ii. p. 363 ff.
2272See Vol. I. p. 153, and cf. Perrot, Hist. de l'Art, vi. p. 211, fig. 57, for examples from Troy.
2273Abeken, Mittelital. p. 362 ff.; but see Arch. Zeit. 1881, p. 41.
2274E.g. Ann. dell' Inst. 1884, pl. C.
$2275 H$ dt. i. 14,25 ; Paus. x. 16.
2276For Greek examples of early vases with reliefs see Vol. I. p. 497, and Plate XLVII.
2277See for specimens Gaz. Arch. 1881, pls. 28, 29, 32-3; Pottier, Vases du Louvre, pls. 33-4.
2278Louvre D 151.
2279Bull. dell' Inst. 1884, p. 163.
2280Röm. Mitth. 1886, p. 135.
2281See Pliny, H.N. xxxv. 152. The names are doubtless descriptive.
2282Cf. B.M. Cat. of Bronzes, p. xlvii, and references there given.
2283Nearly all the contents of this tomb are now in the British Museum (Etruscan Saloon, Cases 126-35): see Micali, Mon. Ined. pls. 4-8; Dennis, Etruria ${ }^{2}$, i. p. 457 ff.; C. Smith in J.H.S. xiv. p. 206.

2284A most trustworthy reproduction of this vase and its decoration, made by Mr. F. Anderson, is given in J.H.S. xiv. pls. 6-7.

2285Cf. throughout the François vase.
2286Micali, op. cit. pl. 5, fig. 2.
2287Cat. 1543.
2288Cat. C 617-18.

2289Bull. dell' Inst. 1881, p. 167, No. 26.
2290The hydria is a form of essentially Ionic origin, the earliest examples being found in the "Caeretan" and Daphnae fabrics (see Chapter VIII.).

2291Cat. of Terracottas, B $630=$ Fig. 183.
2292Micali, Mon. Ined. pl. 58; Dennis, Etruria, i. p. 34 ff.
2293Cf. an oinochoë in the British Museum, A 633; and see J.H.S. x. p. 126.
2294Mus. Greg. i. pl. 15 ff.; Helbig, Führer, 1899, ii. p. 344 ff.
2295Notizie degli Scavi, 1887, pls. 14-18.
2296Bull. dell' Inst. 1876, p. 117 ff., and Mon. dell' Inst. x. pls. 31-33. The art of Praeneste, though a Latin town, was wholly Etruscan. Cf. the later series of bronze cistae found here.

2297Martha, L'Art Étrusque, p. 462.
2298Louvre Cat. ii. pp. 294, 315.
2299Traité, i. p. 414: see Blümner, Technologie, ii. p. 62. It may be compared with the analysis of the clay of Greek vases given in Vol. I. p. 203.

2300Cf. Micali, Mon. Ined. pls. 28-30.
2301Micali, op. cit. pls. 28-32.
2302Cf. Arch. Zeit. 1884, pl. 8, fig. 1, and the reliefs from Sparta, Ath. Mitth. 1877, pls. 20-4.
2303Cf. Ann. dell' Inst. 1877, pls. u, v; Micali, op. cit. pls. 27-32.
2304See Pottier, Louvre Cat. ii. p. 324 ff.
2305Cf. B.M. A 379 with Bronze Cat. Nos. 385, 436-37.
2306See also on the subject generally, Gaz. Arch. 1879, p. 99 ff.; Pottier, Louvre Cat. ii. p. 314 ff.; Martha, L'Art Étrusque, p. 462 ff.; and Gsell, Fouilles de Vulci, p. 445 ff.

2307vi. 343: cf. Pliny, H.N. xxxv. 158-59, and Chapter XXI.
2308ii. 60.
2309xiv. 98: cf. p. 479.
2310See Perrot, Hist. de l'Art, i. p. 308.
2311See Cat. of Bronzes, No. 600, and Cat. of Terracottas, D 215 . The bronze plates were formerly made up into the shape of a shield, with many restorations; but on removing these, the true form was discovered. The body of the chair is modern.

2312Mus. di Ant. Class. i. p. 299 ff., with many examples on pls. 9, 9a, 11-13. Fig. 181 is from pl. 9, figs. 9,9 a.

2313H 148 in the British Museum is a curious terracotta example, covered with incised designs: see Benndorf, Gesichtshelme und Sepuleralmasken, pl. 11, p. 42.

2314Cat. 3976-77.
2315Cat. of Terracottas, D 219-220.
2316See Vol. I. p. 321.
2317 Röm. Mitth. 1888, p. 174 ff.: see also Endt, Ion. Vasenm. p. 71.
2318They also show the influence of the "Pontic" class (Vol. I. p. 359).
2319It may be compared with B 59 in the same case (Plate XXVI.).
2320See Endt, Ion. Vasenm. p. 51; Pottier, Louvre Cat. ii. p. 413.
2321B.M. B 61-74; Louvre E 754-81 (some of these do not show distinctive Etruscan features, although made in Italy); Naples 2522, 2717, 2757; Würzburg 81-2; Micali, Mon. Ined. 36. 1, 37, 1, and 43, 3; id. Storia, 82, 3; Dubois-Maisonneuve, Introd. 34; Inghirami, Mus. Chins. 72; Gsell, Fouilles de Vulci, pl. 18-9; Anzeiger, 1893, p. 87. According to Endt, loc. cit., about 200 examples are known. B 63 in the B.M. is reproduced in Plate LVIII.

2323Bibl. Nat. 918 = Dennis, Etruria, ii. frontispiece.
2324Reinach, i. p. 88.
2325Micali, Mon. Ined. pl. 38.
2326Cf. Mon. dell' Inst. xi. pls. 4-5; also Inghirami, Vasi Fitt. iv. 358.
2327Roberts, Gk. Epigraphy, i. p. 16 (q.v. for facsimile); Bull. dell' Inst. 1882, p. 91.
2328Roberts, p. 17: for a facsimile see Dennis, i. p. 271.
2329Roberts, p. 18.
2330Dennis, i. p. 273; Deecke, Etr. Forsch. u. Stud. iv. (1883) p. 39.
2331Dennis, i. p. 172.
2332 Ibid. ii. p. 224.
2333See for instances Micali, Mon. Ined. pl. 55, 7; ibid. Storia, pl. 101; Mus. Greg. ii. pl. 99. 2334Reinach, i. 203.

2335E.g. Fabretti, C. I. Ital. 2606, 2609.
2336Ann. dell' Inst. 1831, p. 176: cf. also Fabretti, Nos. 2222, 2583.
2337H.N. xxxv. 157.
2338Ibid. 152.
2339Orat. ad Graec. 1.
2340Pliny, H.N. xxxv. 157.
2341The story is told by Pliny, H.N. xxviii. 16, and Plutarch, Poplicola, 13. See Vol. I. p. 116.
2342Pliny, H.N. xxxiv. 33.
2343H.N. xxxv. 173; Vitr. ii. 8, 9.
2344Etruria, i. p. 12.
2345See Durm, Handbuch d. Architektur, 2. Theil, Bd. 2 (Die Baukunst der Etrusker), p. 5.
2346See Wiegand, Puteolanische Bauinschr. (Jährb. für Philol. Suppl.-Bd. 20, p. 756 ff.); Borrmann in Durm's Handbuch, 1. Theil, Bd. 4, p. 40.

2347For a recent restoration of an Etruscan temple see Anderson and Spiers, Architecture of Greece and Rome, p. 126.

2348Notizie degli Scavi, 1887, p. 92 ff.
2349Ann. dell' Inst. 1881, p. 48.
2350Notizie, 1898, p. 429 ff.; Class. Review, 1899, p. 329.
2351 Notizie, 1896, p. 33.
2352Mon. dell' Inst. Suppl. pls. 1-3.
2353Cat. of Terracottas, B 626.
2354Cat. of Terracottas, B 621-23: cf. Arch. Zeit. 1871, pl. 1. B 621 is illustrated in Plate LIX.
2355Panofka, Terracotten des k. Mus. pl. 10.
2356See Furtwaengler, Meisterwerke, p. 250.
2357Arch. Zeit. 1882, pl. 15: cf. also Martha, L'Art Étrusque, p. 324 (in Louvre).
2358J.H.S. xiii. p. 316.
2359Murray, Terracotta Sarcophagi, pls. 9-11.
2360B.M. Cat. of Bronzes, No. 434, and p. xlvii.
2361See p. 308, and Furtwaengler, Meisterwerke, p. 250.
2362For full description of this sarcophagus see Cat. of Terracottas, B 630; Murray, Terracotta

Sarcophagi, pls. 9-11, p. 21. It is interesting to note that the figures must be contemporaneous with the Capitoline statues made by Volca.

2363Mon. dell' Inst. vi. pl. 59; Mon. Antichi, viii. pl. 13, p. 521 ff. (Savignoni). The latter was found in the same group of tombs as the painted slabs in the Louvre described below.

2364Cf. Mon. Antichi, viii. p. 531.
2365Mus. Ital. di Ant. Class. i. p. 89 ff., pls. 3-7.
2366Dennis, Etruria, ii. p. 48.
2367Martha, L'Art Étrusque, pl. 4 = Mon. dell' Inst. vi.-vii. pl. 30; J.H.S. x. pl. 7, p. 243 ff.; Pottier, Louvre Cat. ii. p. 412.

2368Cf. the Thermon metopes, $\$ 1 \$ 2$ 1903, pls. 2-6 (Vol. I. p. 92).
2369Cat. of Terracottas, D 799, 800.
2370This subject has been interpreted as Kadmos (or Jason), contending with the armed men who sprang from the sown teeth of the dragon: see Dennis, Etruria${ }^{2}$, ii. p. 165.

2371See generally Brunn and Körte, I rilievi dell' urne Etruschi, 2 vols.; B.M. Cat. of Terracottas, D 787-98.

2372Cat. of Terracottas, D 795.
2373Martha, L'Art Étrusque, p. 351; Ant. Denkm. i. pl. 20; Cat. of Terracottas, D 786.
2374 Mon. dell' Inst. xi. pl. 1.
2375L'Art Étrusque, p. 300.
2376Blue occurs on the B.M. sarcophagus (B630) (as also on the Polledrara hydria).
2377Röm. Mitth. 1897, p. 201 ff., 1899, p. 13 ff.; Patroni, Ceramica Antica, chap. i., and id. in Mon. Antichi, vi. p. 349 ff.: see also Pottier, Louvre Cat. ii. p. 371.

2378A line drawn across from Taranto to Fasano roughly divides the two districts, the Peucetians being on the north, the Messapians on the south.

2379Notizie degli Scavi, 1897, p. 167.
2380For Marseilles see also Déchelette, Vases Céramiques de la Gaule rom. i. p. 7.
2381See also Reinach, ii. 242-43, for those in the Imperial Museum at Vienna.
2382E.g. B.M. F 414-16, 584-85.
2383See also Vol. I. p. 172, Fig. 40.
2384Ceram. Ant. p. 27.
2385Gaz. Arch. 1881-82, pl. 19, p. 107.
2386Ibid. pls. 19, 21; Sale Cat. Hôtel Drouot, May 11, 1903, No. 20.
2387Serv. ad Virg. Aen. iii. 332.
2388Ceramica Antica, p. 19 ff.
2389Cf. Röm. Mitth. 1897, pl. 10, p. 222.
2390Notizie degli Scavi, 1897. p. 168.
2391 Röm. Mitth. 1899, pl. 3, fig. 32.
2392Patroni puts the limits of date for both fabrics at 600-450 в.с.
2393Röm. Mitth. 1899, p. 46, pls. 4-5.
2394 Louvre Cat. ii. p. 372.

# CHAPTER XIX TERRACOTTA IN ROMAN ARCHITECTURE AND SCULPTURE 

Clay in Roman architecture-Use of bricks-Methods of construction-Tiles-Ornamental antefixae-Flue-tiles-Other uses-Inscriptions on bricks and tiles-Military tiles-Mural reliefs-List of subjects-Roman sculpture in terracotta-Statuettes-Uses at Rome-Types and subjectsGaulish terracottas-Potters and centres of fabric-Subjects-Miscellaneous uses of terracotta-Money-boxes-Coin-moulds.

The uses of clay among the Romans were, as may be supposed, much the same as among the Greeks and Etruscans, in architecture, in sculpture, and for household implements. The main differences are that in some cases-as in architecture-its use was more extensive at Rome, in others less; and that generally the products of this material in Roman workshops are inferior to those of the Greeks. But the technical processes are in the main identical with those employed by the Greeks, and consequently much that has been said in Chap. III. of this work need not be here repeated.

## I. Architecture

## 1. BRICKS AND TILES

The Romans divided the manufacture of objects in clay into two classes: opus figlinum or fine ware, made from argilla or creta figularis; and opus doliare, for tiles and common earthenware. ${ }^{[2395]}$ We begin, then, as in the chapter on the Greek uses of clay, with the latter division, including the use of this material in Roman architecture, and primarily in the making of bricks and tiles. It must be borne in mind, however, that the structural use of bricks of clay, such as we employ at the present day, was unknown to the Romans; they only used what we should call tiles, and even these were only employed structurally, as a facing to walls and vaults of concrete; no walls were ever built of solid brick, and even in those of seven inches thickness the bricks are built on a core of concrete. Nor were the bricks allowed to appear on the outer face of the building, at least before the second century of the Empire; they were always faced with a coating of marble or stucco.

Nevertheless, the general use of bricks or tiles was most extensive, and they were employed as tiles for roofing houses, as bricks for walls and vaults, and even for columns, as slabs for pavements, for furnaces and for covering graves, and in tube form for conveying water or hot air; they are found in temples, theatres, and baths, and are used for cisterns and fountains, and in aqueducts and military fortifications. They were called lateres, because, says Isidorus, "they were broad, and made by placing round them four boards." ${ }^{[2396]}$ The kilns were called laterariae, and the makers laterarii; to make bricks was lateres ducere, fingere, ${ }^{[2397]}$ or (with reference to the baking only) coquere. The word later seems to be employed indiscriminately for sun-dried (crudi) and baked bricks (coctiles), ${ }^{[2398]}$ without the qualifying epithet, but testa is also used when burnt brick is intended. ${ }^{[2399]}$ The sundried bricks were the earlier and simpler form, used for building walls and cemented together with clay or mud. ${ }^{[2400]}$ Vitruvius in his account of brick-making (ii. 3) only refers to this kind, and apparently never mentions baked bricks except in passing allusions. He describes three kinds, to which he says the Greeks gave the respective names of genus Lydium, pentadoron, and tetradoron (see Vol. I. p. 95). The two latter are exclusively Greek, but the first-named, $1 \frac{1}{2}$ by 1 foot in dimensions, answers to the Roman tegula sesquipedalis. ${ }^{[2401]}$ A frequent arrangement, he says, was to employ half-bricks in alternate courses with the ordinary sizes, which served to bind the walls together and present an effective as well as a stable appearance. This information is repeated by Pliny, copying almost word for word. ${ }^{[2402]}$
Among the Romans two dimensions were in general use, as may be inferred from the frequent mention in inscriptions or elsewhere of the sesquipedales and of bipedales, ${ }^{[2403]}$ or two-foot bricks, as we shall have occasion to show later. Being very flat and thin in proportion to their size, these bricks rather resemble tiles, as has been already noted; they are generally square, or at least rectangular. But there were also tegulae bessales or bricks measuring two-thirds of a foot square, i.e. about 8 inches, and triangular bricks, equilateral in form, with a length varying from 4 to 14 inches. The latter are the kind used in all existing Roman walls of concrete with brick facings. The thickness varies from $1 \frac{1}{4}$ to 2 inches. They are not always made with mechanical accuracy, the edges being rounded and the sides not always parallel. In military works they were often used alternately with flint and stone (see below, p. 337), as we see them in England, at Colchester, Dover, Verulam, and many other places. ${ }^{[2404]}$ At Verulam the tiles are arranged in three horizontal layers at intervals of about 4 feet, with flint and mortar between. They were also used for turning the arches of doorways, and for this purpose tegulae bipedales were cut into pieces, so as only to tail a few inches into the concrete which they cover. Complete squares were introduced at intervals to improve the bonding. ${ }^{[2405]}$
The pillars of the floors of hypocausts were formed of tegulae bessales, and sometimes also of two semicircular bricks joined so as to form a circle, varying from 6 to 15 inches in diameter. ${ }^{[2406]}$ Occasionally the upper bricks diminished in size, in order to give greater solidity to the structure. The bricks or tiles forming the upper floors were from 18 to 20 inches square; in some cases, as at Cirencester, ${ }^{[2407]}$ these were flanged tiles (see below).
The general size of Roman bricks was, in the case of the sesquipedales, $1 \frac{1}{2}$ by 1 Roman foot; but variations are found, such as 15 by 14 inches. For the bipedales Palladius recommends 2 feet by 1 foot by 4 inches. The great building at Trier known as the Palace of Constantine is built of burnt
bricks, 15 inches square by $11 / 4$ inch thick. ${ }^{[2408]}$ Prof. Middleton notes tiles in Rome of 12,14 , and 18 inches square, ${ }^{[2409]}$ and Marquardt ${ }^{[2410]}$ states that bricks found in France measure 15 by 8 to 10 inches; others (the bessales) 8 by 8 by 3 inches. A complete circular brick, measuring $71 / 2$ inches across by $31 / 4$ inches thick, and impressed with the stamp of the eleventh legion, was found at Dolae near Gardun, and is now in the museum at Spalato. ${ }^{[2411]}$
Vitruvius ${ }^{[2412]}$ gives elaborate instructions about the preparation of the clay for sun-dried bricks, and counsels in the first place a careful choice of earth, avoiding that which was sandy or stony or full of loose flints, which made the bricks too heavy, and so liable to split and fall out when affected by rain; it also prevented the straw from binding properly. Clay which was either whitish or decidedly red (from a prevalence of ochre) was preferred, and that combined with coarse sand (sabulo masculus) made light tiles, easily set. The process of manufacture was a very simple one. The clay was first carefully cleaned of foreign bodies, and then moistened with water and kneaded with straw. It was then moulded by hand or in a mould or frame of four boards, and perhaps also pressed with the foot. ${ }^{[2413]}$ The bricks were then dried in the sun and turned as required, the usual process also adopted in the modern brickfield. Some bricks actually bear the marks of the feet of animals and birds which had passed over them while the clay was soft, and there is one in the Shrewsbury Museum with the imprint of a goat's feet. Others at York and Wiesbaden show the nails of a boy's shoes. ${ }^{[2414]}$ These impressions of feet (where human) may also be referred to the practice of using the feet to knead the bricks.
The bricks were then ready for use, but were kept for two years before being employed, otherwise they were liable to contract, which caused the stucco to break off and the walls to collapse. At Utica, Vitruvius tells us, they had to be kept five years, and then could only be used if passed by a magistrate. Altogether, much care was taken in their preparation, and it was generally considered that spring and autumn were the most favourable times for making them, probably because they dried more slowly and were less liable to crack during the operation. In summer the hot sun baked the outer surface too fast, and this appeared dry while the interior was still moist, so that when the inside dried the outside contracted and split. ${ }^{[2415]}$ It was also, of course, advisable to avoid seasons of rain and frost. But the bricks could not be properly tested until they had undergone some exposure to the weather, and for this reason Vitruvius recommends the employment of old roof-tiles where possible in building walls. ${ }^{[2416]}$
For baked bricks the processes must have been much the same, with, of course, the addition of the baking in the furnace. Existing Roman bricks are nearly always of well-tempered clay and well baked; but the clay exhibits a great variety of colour-red, yellow, and brown. The paste is remarkably hard, breaking with an almost vitreous fracture, and sometimes shows fragments of red brick (pozzolana) ground up with it to bind it together, and prevent warping. This may be seen in the Flavian Palace on the Palatine, and in an archway in the Aurelian Wall near the Porta Latina. As an instance of varieties of brick found in the same building, Nero's Aurea Domus may be cited. ${ }^{[2417]}$ The durability of Roman tiles is ascribed to their careful preparation and seasoning, which give them a much longer life than modern tiles; hence they were frequently used up again in early mediaeval buildings and in Romanesque churches in England, as at St. Albans, St. Mary-in-Castro, Dover, and St. Botolph's and Holy Trinity, Colchester. ${ }^{[2418]}$
During the period of the Republic private houses and public buildings alike were built of unburnt brick in Rome, as we learn from the words of Dio Cassius, ${ }^{[2419]}$ Varro, ${ }^{[2420]}$ and Cicero ${ }^{[2421]}$; Varro speaks of domus latericiae, and Cicero of "the brick (latere) and concrete of which the city is constructed." After the Republican period this material was still employed outside Rome with burntbrick cornices, ${ }^{[2422]}$ but even this was exceptional. Pliny mentions walls of sun-dried bricks at Arretium and Mevania. ${ }^{[2423]}$ Henceforth, then, burnt brick was employed more and more as Rome grew more populous. ${ }^{[2424]}$ In Vitruvius' time (the beginning of our era) the materials used for building were stone for substructures, burnt brick (structura testacea) for the outer walls, concrete for the party-walls, and wood for the roofs and floors. He explains the cessation of the use of unburnt brick as due to the legal regulations of his time, which prohibited party-walls of more than $11 / 2$ foot in thickness, and unburnt bricks could only support one story above them in that size. ${ }^{[2425]}$
Baths, either public or private, walls and military fortifications, were built of bricks, the latter being thus better able to resist attacks than if they were of stone. Temples, palaces, amphitheatres, the magnificent aqueducts and the cisterns with which they communicated, were also usually of this material. Of these, numerous remains exist in Rome and other places, such as Cumae and Pozzuoli. The aqueduct made by Nero from the Anio to Mons Caelius is of brick, that of Trajan partly so; the aqua Alexandrina of Severus Alexander (A.D. 229) and that existing at Metz are wholly of brick, and so are the castella or reservoirs made by Agrippa when he constructed the Julian conduit over the Marcian and Tepulan. ${ }^{[2426]}$ It is true that Augustus boasted that he had found Rome of brick and left it marble ${ }^{[2427]}$; but it must be remembered, firstly, that Suetonius uses the term latericiam, which may denote unburnt brick; secondly, that the phrase is probably to be limited to public buildings and monuments, in which there was an increased use of marble for pillars and roofs. For walls brick and concrete continued to be used, as in private buildings, with a covering of stucco in place of marble incrustation.

In the first century of the Empire brick-making was brought to perfection, and its use became universal for private and public buildings alike; the mortar of the period is also of remarkable excellence. The Romans introduced brick-making wherever they went; and even their legions when on foreign service used it for military purposes. But of pure brick architecture, as we see it, for instance, in the Byzantine churches of Northern Italy, there was no question until comparatively late times. It was always covered over with marble or stucco until the second century of the Empire. Examples of sepulchral buildings wholly in brick, of the time of Hadrian, may be seen in the tomb
before the Porta San Sebastiano at Rome, known as the temple of Deus Rediculus. This has Corinthian pilasters with a rich entablature, red bricks being used for architectural members, yellow for the walls; the capitals are formed of layers of bricks. Of Hadrian's time are also the guard-house of the seventh cohort of Vigiles across the Tiber, of which a small part remains, and the amphitheatrum castrense on the walls of Aurelian. ${ }^{[2428]}$
One of the most remarkable instances of Roman brick construction is the Pile Cinq-Mars, as it is called, a tower still standing on the right bank of the Loire, near Tours. It is about 95 feet high and 13 feet square, expanding at the base, being built of tiles to a depth of 3 feet each side, with a body of concrete; the tiles are set in mortar composed of chalk, sand, and pounded tiles. On one side there are eleven rectangular panels with tile-work of various patterns, like those on the flue-tiles (see p. 348), and as also seen on the Roman wall at Cologne; the patterns include squares, triangles, and rosettes. The history and purpose of this building are quite unknown. ${ }^{[2429]}$

At Pompeii bricks are used only for corners of buildings or doorposts, and sometimes for columns, as in the Basilica and the house of the Labyrinth. ${ }^{[2430]}$ There are also late examples of brick columns with capitals in tiers of bricks as in the tomb mentioned above. Brick walls are not found, but bricks occur as facing for rubble-work. These are less than an inch thick, triangular in form, with the hypotenuse (about 6 inches long) showing in the face of the wall. Sometimes fragments of roof-tiles are used (cf. p. 334). The earlier bricks contain sea-sand, and have a granular surface; the later are smooth and even in appearance. Later, what is known as opus mixtum (see below) is used, as in the entrance of the Herculaneum gate; this implies courses of stone and brick alternating, ${ }^{[2431]}$ which, as we have seen, was common in military works, as in the Roman walls in Britain. In this country, owing to the absence of good material for concrete, the use of stones or brick throughout for building was general from the first; hence, too, the bricks are always flat and rectangular in form (bipedales). ${ }^{[2432]}$
The arrangement of triangular bricks (made by dividing a medium-sized brick into four before baking), laid flat in regular horizontal courses, is characteristic of the earliest examples of Roman methods. It is found in the Rostra ( 44 в.с.) and in the Regia ( 35 в.с.), the earliest existing examples. ${ }^{[2433]}$ The back wall of the Rostra is of concrete faced with triangular bricks $1 \frac{1}{2}$ inch thick, the sides 10 inches long. The same arrangement may be seen in the Pantheon, in the Thermae of Diocletian, and in some of the aqueducts (see below). The brickwork in the Pantheon was formerly thought to belong to the building of Agrippa in 27 b.c., but has been now shown to belong to the second century. ${ }^{[2434]}$ At Ostia, in the temple of Honos and Virtus, the walls are built of triangular bricks or with red and yellow bricks with moulded cornices.


Section of Angle.

FIG. 187. CONCRETE WALL,
Faced with (A) opus incertum, (в) opus reticulatum. с shows the horizontal section, similar in both.

About the year 80 в.с. the method known as opus reticulatum was introduced, in which the bricks presented square faces (about 4 inches each way), and were arranged diagonally to form a network pattern (Fig. 187). At Pompeii the opus reticulatum dates from the time of Augustus; it is laid on concrete, and the bricks are small four-sided pyramids with bases 3 to 4 inches square. ${ }^{[2435]}$ This method lasted down to about A.D. 130 in Italy. It should, however, be noted that it was commoner in stone than in brick, the latter material not having come into general use for building at the time when it was employed. ${ }^{[2436]}$ But even when tufa was used for the reticulated work, bricks or tiles were used for quoins at the angles, and for bonding courses through the walls, as well as for arches and vaults (Fig. 188). This combination of opus reticulatum and brickwork is well illustrated in the palace of Caligula. ${ }^{[2437]}$ In the case of vaults, indeed, the use of brick seems to have been general, as in the baths of Caracalla, and many other buildings (cf. Fig. 189). Vitruvius ${ }^{[2438]}$ advises the use of tegulae bipedales to protect the wooden joists over the


FIG. 188. CONCRETE WALL (VERTICAL SECTION), FACED WITH BRICK. vaults from being rotted by the steam from the hot bathrooms; they were to be placed over the whole under-surface of the concrete vault, supported on iron girders, which were suspended from the concrete by iron clamps or pins. Over the whole was laid a coating of cement (opus tectorium) in which pounded pottery was the chief constituent, and this was stuccoed. ${ }^{[2439]}$
The opus mixtum (the term is not classical) prevailed regularly under the later Empire, from the fourth to the sixth century; the earliest example which can be dated is the circus of Maxentius. It is also used in work of the time of Theodoric. ${ }^{[2440]}$ The method of construction is shown in Fig. 190.
The reason for the limited use of brick in Rome may have been the scarcity of wood for fuel for the kilns. But in any case the pointed backs of the bricks made a good bonding with concrete, and


FIG. 189. CONCRETE ARCH; HALF WITH BRICK FACING REMOVED.
presented a large surface with a comparatively small amount of clay. The secret of the wonderful durability of Roman buildings is that each wall was one solid coherent mass, owing to the excellence of the concrete. In the Pantheon the concrete of the dome is nearly 20 feet thick, the brick facing only about 5 inches. The character of the brick facing often indicates the date of a wall, the bricks in early work being thick and the joints thin; later, the reverse is the case. But caution must be exercised in dating on this principle, owing to the great variety of methods employed during the same reign, and even in the same building. ${ }^{[2441]}$


FIG. 190. DIAGRAM SHOWING CONSTRUCTION OF WALL OF OPUS MIXTUM.

The word for a tile, tegula, is derived from tegere, to cover, or, as Isidorus says, they are so called quod aedes tegant ${ }^{[2442]}$; the curved roof-tiles were known as imbrices because they received rainshowers (imbres). The maker of roof-tiles was known as tegularius ${ }^{[2443]}$ or figulus ab imbricibus. ${ }^{[2444]}$ Tegulae or flat roof-tiles were usually made with vertical flanges ( $21 / 2$ inches high) down the sides, and these flanges, which fitted into one another longitudinally, when placed side by side served to hold the covering-tiles placed over them. There were also roof-tiles known as tegulae deliciares ${ }^{[2445]}$ and colliciares, which formed the arrangement underneath the surface of the roof by means of which the water was collected from the tegulae and carried off in the front through spouts in the form of lions' heads. ${ }^{[2446]}$
Besides the various rectangular forms we find triangular tiles used, either equilateral or rightangled; semicircular or curved tiles, used for circular walls, ovens, tombs, and cornices, or other parts of buildings; cylindrical tiles (tubuli fictiles), ${ }^{[2447]}$ which were used for drains and conduits; and, finally, the rectangular hollow flue-tiles, employed for hot air in hypocausts. ${ }^{[2448]}$ Another form was the tegula mammata, a plain square tile with four knobs or breast-like projections (mammae), which was often used in party-walls with the object of keeping out damp. ${ }^{[2449]}$ The tiles were inserted by the points of the projections into the concrete, thus leaving a space between in which the warm air could circulate freely.
Existing examples of tiles are composed of a compact dense clay, less fine than that of the bricks, and of a pale salmon or light straw colour when baked. They were probably made in moulds-but these may only have been a couple of boards placed together-and after being dried in the sun were baked in kilns. The flanged tiles were, of course, produced by turning up the edges before drying. Besides the arrangement described above, it is probable that roofs were sometimes tiled in the manner prevalent in the present day, with flat or curved tiles overlapping like scales; and for this purpose the tiles seem to have been pierced with holes at one corner, and so attached to one another. The same method obtained in the Roman villas in Britain, except that Stonesfield slate was used in place of tiles. An inscription found at Niederbrunnen in Germany speaks of attegia tegulicia, or huts roofed with tiles, erected in honour of Mercury. ${ }^{[2450]}$
Tiles with turned-up edges or flanged tiles were principally employed, as has been indicated, for roofing; but some were also placed in walls where required, especially where a space was required for the passage of air. ${ }^{[2451]}$ They were also employed for the floors of bath-rooms, in which case they were laid on the pilae of the hypocaust in an inverted position, and the cement flooring was laid upon them. The flanges are generally about $21 / 4$ inches higher than the lower surface of the tile; they are bevelled on the inner side in order to diminish the diameter of the imbrex, but have no holes for nailing to the rafters. The ends of the sides were cut away in order that the lower edge of one tile might rest on the upper edge of the one adjoining. Those found in France are said to be distinguished by the sand and stones found in their composition. ${ }^{[2452]}$ There are flange tiles of red and yellow clay from the Roman Thermae at Saintes in the Museum of Sèvres, and others from
ancient potteries at Milhac de Nontron, as well as tiles of red clay from Palmyra. ${ }^{[2453]}$ In the military castra in England flange tiles of a red or yellow colour have been found, the latter with fragments of red tiles mixed in the clay. They are also often found in the ruins of villas. A flange tile from Boxmoor, Herts, now in the British Museum, measures $15 \frac{1}{2}$ by 12 inches, the flange being $21 / 4$ inches high; and it will be seen that these dimensions correspond roughly with the tegulae bipedales. Flanged tiles with holes in them appear to have been used at Pompeii for lighting passages, the flanges serving to keep out rain. ${ }^{[2454]}$

The imbrices or covering-tiles which held the flat tiles together, thus rendering the roof compact, were quite plain, with the exception of the end ones over the gutters. These were in the form of antefixal ornaments like the Greek examples (Vol. I. p. 98), an upright semi-oval termination ornamented with a relief or painted pattern, with an arched support at the back. Many examples exist at Pompeii (see below), Ostia, ${ }^{[2455]}$ and elsewhere; but artistically they are far inferior to the Greek examples, and of simpler design. Most of them have a simple palmette or acanthus pattern in low relief, but on or below this an ideal head or the head of a deity is sometimes added, such as Zeus Ammon, Medusa, a Bacchic head, or a mask, or even a figure of Victory. Of the last-named there is a good specimen in the British Museum (D $690=$ Fig. 191); she carries a trophy from the battle of Actium, and stands on a globe from which spring two Capricorns (the symbol of Augustus). [2456]


FIG. 191. ROMAN TERRACOTTA ANTEFIX: VICTORY WITH TROPHY (BRITISH MUSEUM).

No better example of the various uses of ornamental tiles in architecture can be selected than the remains found at Pompeii, which are exceedingly numerous. Terracotta seems to have been used here especially for such parts of the decoration as were exposed to wet, as well-mouths, gutters, and antefixal tiles. ${ }^{[2457]}$ A characteristic feature of the decoration of Pompeian houses was the trough-like gutter which surrounded and formed an ornamental cornice to the compluvium or open skylight of the atrium and peristyle, through and from which the rain-water was collected in the impluvium or tank sunk in the ground below. These were adorned with spouts in the form of animals' heads or foreparts, ${ }^{[2458]}$ usually lions and dogs, with borders of palmettes between; the gutter behind was virtually a long tank of square section.
Antefixes and gutter-cornices, where they occur, must always be regarded as serving ornamental rather than necessary purposes. All early work in terracotta at Pompeii is of coarse clay, but good execution; later, the reverse is the case. The only public building in which many remains of terracotta tiles and cornices have been preserved is the temple of Isis; but the Basilica may also have had terracotta decoration. Many fragments also remain from private houses, some actually in situ, having been neglected by early explorers as unimportant. In the house of Sallust a kymation cornice from one of the garden courts has scenic masks forming the spouts; this is not earlier than the rebuilding of the house A.D. 63. There is also much terracotta work in the house of the Faun. ${ }^{[2459]}$ Comic masks were used both as spouts and as antefixes, the exaggerated mouth of the mask serving admirably for the former purpose. ${ }^{[2460]}$ These date from the reigns of Nero and Vespasian, and all seem to be from the same fabric, although there is considerable variety in the types; the use of masks for these purposes is not earlier than Nero's reign (cf. the house of Sallust, above). Besides the ornaments above mentioned the patterns on the cornices include palmettes and floral scrolls, dolphins and Gryphons.
The roof-tiles were of the usual kinds, flat oblong tegulae with flanges, measuring 24 by 19 by 20 inches, ${ }^{[2461]}$ with semi-cylindrical imbrices. They were laid in lines parallel to the long ridges of the roofs, so that the water converged into the gutter-tiles at the angles, whence it fell into the impluvium. These gutters, however, were not confined to the angles of the openings, but were sometimes ranged along the whole length of the sides, as we have seen; those at the angles only
seem to be earlier in date. They are not found on the exteriors of buildings. The front of the gutter was usually in the form of a vertical kymation moulding, but was sometimes simply chamfered. Antefixal ornaments terminating the covering or ridge-tiles are not invariable, but are found at different periods. The earliest examples are in the form of palmettes, but the later exhibit a great variety ${ }^{[2462]}$ : comic masks, a head in low relief on a palmette, or a head surmounted by a palmette. Of the latter class thirty-eight were found in 1861. In the Augustan period ideal heads of gods and demi-gods are sometimes found. ${ }^{[2463]}$
Von Rohden, in summing up (p. 14), is of the opinion that terracotta roof-decoration at Pompeii was comparatively rare. In the whole record of excavations only twenty-three water-spouts are mentioned, though it is probable that many were never registered. In scarcely more than twelve private houses have as many pieces been found as would suffice for the whole of the atrium and peristyle roofs, and nearly all of these are of late date. The discovery of isolated pieces in a house seems to show that they were used up again in the restorations after the earthquake of a.d. 63.
There are also some good examples of roof-tiles among those which have been found at Ostia, both in baths and private houses; some of the latter came from a house of which the brickwork bore inscriptions with the names of consuls of Hadrian's reign. The arrangement of the roof-tiles is that described on p. 341; the antefixal ornaments are usually in the form of palmettes or acanthus leaves, with maeander below; but heads of deities, such as Venus and Neptune, ${ }^{[2464]}$ or of Medusa, and tragic masks were also found. Two exceptional examples had groups in relief of Neptune drawn over the sea by hippocamps, and of the statue of Cybele in the ship drawn by the Vestal Virgin Claudia. ${ }^{[2465]}$

Tiles of the size known as bipedales are also used for lining the walls of rooms. They are found in Roman villas in Britain, and are ornamented on one side with various incised patterns, made with a tool in the wet clay. On some found at Ridgewell in Essex the decoration consists of lozenges, rosettes, and other ornaments, ${ }^{[2466]}$ like those on the Pile Cinq-Mars already described; they are often found covered with the stucco with which the walls were plastered. At Pompeii, Orvieto, and elsewhere the stucco-painted walls were constructed with tegulae mammatae placed edgewise, and connected with the main walls by leaden cramps, the brick lining being thus detached from the walls by a narrow interval which served as an air-cavity. ${ }^{[2467]}$ This was a frequent proceeding, and was also contrived with flanged tiles; it corresponds with the system prescribed by Vitruvius for keeping damp from the painted walls of rooms. ${ }^{[2468]}$ It was also largely employed in baths and bathrooms, the object being both to keep the walls dry and to allow hot air to circulate from the hypocausts and warm the rooms. In the cold climate of Britain the Romans found this a universal necessity, and instances may be observed in many of their villas; but, as far as can be observed, the general method of warming was by an extensive system of pipes under the floors rather than up the walls. ${ }^{[2469]}$ These tiles are pierced with holes, by means of which they were attached to the walls by plugs or nails of lead. In the castrum at Jublains a chamber is yet partly standing with one of its sides coated with tiles of this kind. ${ }^{[2470]}$


From Middleton.
FIG. 192. METHOD OF HEATING THE BATHS IN THE THERMAE OF CARACALLA.

A A Concrete wall, faced with brick, shown in vertical and horizontal sections.
B Lower part of wall, with no brick facing.
C C Suspensura, or upper floor of Hypocaust, supported by pillars.

D D Another floor, with support only at edges.
E E Marble flooring.
F F Marble plinth and wall lining.
G G Under floor of Hypocaust, paved with large tiles.

Horizontal and vertical sections of flue-tiles lining wall of Calidarium.
a a Iron hold-fasts.
J J Socket-jointed flue-pipe of Tepidarium.
K Rain-water pipe (in horizontal section).
L L Vaults of crypt, made of pumice-stone concrete.
More commonly, however, a peculiar kind of tile was used for warming the hot rooms (sudationes) of baths, and in villas when required. They were hollow parallelopipeds, known as tubi, with a hole in the side for the escape of the air which traversed them, the usual dimensions being about 16 by 6 by 5 inches. ${ }^{[2471]}$ Seneca speaks of pipes inserted in walls, which allowed the warmth to circulate and warm both the upper and lower stories equally ${ }^{[2472]}$; and the younger Pliny mentions the airholes (fenestrae) in the pipes which warmed his bedroom, by means of which the temperature could be regulated at pleasure. ${ }^{[2473]}$ Sometimes, as in the baths of Caracalla and the house of the Vestals, the whole side of a wall was composed of flue-tiles covered with cement, ${ }^{[2474]}$ which was made to adhere by scoring the sides with wavy or diagonal lines, as in the flat tiles described above, and as is often done in modern building. The whole system of heating, which may be seen in the baths of Caracalla, is very instructive (Fig. 192): the walls were of concrete with brick facing, through which a system of flues of socket-jointed tiles passes upwards from the hypocaust below, effectually warming every part. ${ }^{[2475]}$


FIG. 193. FLUE-TILE WITH ORNAMENTAL PATTERNS.

The hollow tiles often assume a more ornamental appearance (as in Fig. 193), the patterns scratched on them taking the form of lozenges and diapers, chevrons, chequers, and rosettes, as may be seen in a Roman villa at Hartlip in Kent, where other tiles are simply scored with squares. ${ }^{[2476]}$ This villa is remarkable for the extensive use of tiles throughout; even the staircases are constructed with them. Others found in Essex and Surrey have dogs, stags, and initial letters among foliage; one found in London had among the wavy lines of pattern the letters Px Tx ${ }^{[2477]}$; and another, from Plaxtol in Kent, the local maker's name, cabriabanti. ${ }^{[2478]}$ These hollow tiles, which are generally of the same clay as the roof-tiles, were also occasionally used as pillars of hypocausts, ${ }^{[2479]}$ but for this purpose columns of tegulae bessales were more usual, as Vitruvius implies. ${ }^{[2480]}$ Many examples may be seen in the Roman villas of Britain, as at Cirencester, Chedworth, Lympne, and Wroxeter. In a villa found at Carisbrooke, Isle of Wight, the whole bath was constructed of tiles, the floor supported by pilae of the same. ${ }^{[2481]} \mathrm{At}$ Bath the hollow tiles are actually used as voussoirs for arches and vaults. [2482]

Through these chimneys-for this is what they practically were-the hot air circulated and gave an imperfect warmth to the rooms, the heat radiating from the walls or penetrating through the air-holes. ${ }^{[2483]}$ The pipes standing close to one another virtually made up the wall; but the exact method by which the warming was accomplished, without great inconvenience to the occupiers of the rooms, is not quite clear. It is not difficult to imagine that the tiles would have warmed rooms merely by the introduction of hot air circulating through them, even though covered with stucco. On the other hand, the apertures for admitting the air into the rooms, if of any size, must also have admitted smoke from the hypocausts, and interfered with the ventilation. It may be that they were not made for this purpose at all, but only for fastening the pipes together or to the walls. Another difficulty is the method in which the flues made their exit into the open air. It has been suggested, partly on the analogy of a mosaic found in Algeria, that they ended above in an arrangement like a chimney-stack. There is, moreover, a terracotta roof-tile in the Museo delle Terme at Rome with a circular pipe, 8 inches in diameter, projecting from its upper surface. ${ }^{[2484]}$

Terracotta pipes, or tubuli, of cylindrical form, were sometimes employed by the Romans for conveying or distributing water, but the more usual material for this purpose, especially for drinking-water, was lead; the latter were called fistulae. ${ }^{[2485]}$ The Venafrum inscription, an edict of the Emperor relating to the water-supply of the town, mentions canales, fistulae, and tubi. ${ }^{[2486]}$ Vitruvius calls the canales structiles, implying that they were of masonry. ${ }^{[2487]}$ Pliny speaks of tubi fictiles used for conduits from fountains, ${ }^{[2488]}$ and Vitruvius recommends the use of terracotta pipes (tubuli fictiles) in aqueducts. ${ }^{[2489]}$ Examples of clay piping are preserved in the Museo delle Terme at Rome. At Marzabotto, near Bologna, terracotta pipes were used for carrying off the water from the roof of a house, by means of a straight tube through the wall fitting into another which curved upwards inside. ${ }^{[2490]}$ These date from the fifth century B.C. Other examples have been found in Rome and Italy, ${ }^{[2491]}$ and specimens found on the Rhine were $21 \frac{1}{2}$ inches long, of which $3 / 4$ inch was inserted into the adjoining pipe, and $31 / 2$ to $41 / 2$ inches in diameter. Terracotta was also used for cisterns, as at Taormina, ${ }^{[2492]}$ and for aqueducts; but Lanciani has pointed out that its use in these ways was confined to irrigating purposes. The Campagna of Rome was formerly extensively drained with these tiles, and owed to that circumstance much of its ancient healthfulness.
Of the use of tiles in pavements there is frequent mention in Roman writers. ${ }^{[2493]}$ For this purpose complete tiles were seldom used, at any rate in Italy; but in Britain it was not at all uncommon, as in the villa at Hartlip already mentioned. On the other hand, hypocausts were regularly paved with tiles, as in the Baths of Caracalla (Fig. 192 above), ${ }^{[2494]}$ and in an example found at Cirencester, where the tiles are flanged. ${ }^{[2495]}$ But in another form tiles played a considerable part in Roman
methods of paving. Pliny and other writers ${ }^{[2496]}$ speak of pavimentum testaceum or opus signinum as the usual pavement for rooms, especially those liable to damp, such as kitchens and outbuildings, or for baths and cisterns. This was made of a layer of fragments of tiles stamped and pounded into a firm solid mass, combined with mortar. It corresponds to the nucleus ex testis tunsis of Vitruvius, which (to a depth of six inches) was laid on the rudus or coarser concrete. On this was laid the flooring, consisting either of tiles or marble slabs, or more generally of mosaic. The Baths of Caracalla again afford a good illustration of the process. ${ }^{[2497]}$ In the mosaics too fragments of clay were often used, especially for producing red or black colour. ${ }^{[2498]}$ Vitruvius and other writers allude to this practice, ${ }^{[2499]}$ and the former also speaks of testacea spicata, a kind of false mosaic made with small bricks about 4 inches by 1 inch, set on edge to form a herring-bone pattern. In the Guildhall Museum is part of a tesselated pavement of concrete, faced with small bricks about an inch square.
One of the most interesting uses of tiles by the Romans is in connection with their tombs. Not only are they used in the construction of the more magnificent edifices (cf. p. 336), but they were also often employed (as in Greece) for the humbler graves. For the latter, three, or sometimes six, tegulae bipedales were set up in the form of a prism, one forming the floor, the other two the gabled covering which protected the body from the superincumbent earth. Within this were laid the ollae or sepulchral urns which held the ashes of the dead, and other vases. A tomb found at Litlington in Cambridgeshire was covered with a large flanged tile, which protected the pottery buried underneath ${ }^{[2500]}$; and at Eastlow Hill in Suffolk a tomb was found roofed with twelve rows of flanged tiles, each side in rows of four. ${ }^{[2501]}$ In some of the tombs of Greece belonging to the Roman period semi-cylindrical tiles were used for this purpose. In the provinces the tiles often have impressed upon them in large letters the names of the legions which garrisoned the various cities. The tiles of Roman tombs at York are inscribed with the names of the sixth and ninth legions which were quartered there: as LEG • VI • VICT • P • F, legio sexta victrix pia fidelis; LEG • IX • HISP (or VICT), legio nona Hispana (or victrix). ${ }^{[2502]}$ At Caerleon (Isca Silurum) the bricks bear the name of the second or Augustan legion: LEG $\cdot$ II $\cdot$ AVG. ${ }^{[2503]}$ The stations of the twentieth legion may also be traced at Chester in this manner; the tiles are inscribed LEG $\cdot \mathrm{Xx} \cdot \mathrm{V} \cdot \mathrm{V} \cdot{ }^{[2504]}$ They were placed at the foot of the tomb like tombstones, in order to indicate who was buried beneath, the inscriptions being written across the breadth of the tile. They are of very different dates, some of those in Britain being apparently as late as the introduction of Christianity.

The extent to which bricks and tiles were used in Roman buildings under the Empire may be gauged by the number of those with inscriptions which remain; a whole section of the Latin Corpus (see below) is devoted to those found in Rome alone, numbering some two thousand. Many of them have been removed to the museums from the principal edifices, such as the Pantheon, the Coliseum, the Circus Maximus, the Baths of Titus and Caracalla, the Basilica of Constantine, and the Praetorian Camp. Other inscriptions have been found on tiles removed from such buildings and used to repair the roofs of churches in Rome. Such places as Bologna, Cortona, Tibur, and Ostia have also produced numerous inscribed tiles of this class. The use of such stamps was to guarantee the quality of the clay. To the topographer, as will be seen, these stamps are often of great value; and had the custom of placing on them the names of the buildings for which they were intended been less rare, they might often have afforded valuable evidence as to doubtful sites. Besides their topographical value, the tiles also help to settle the succession of consuls, and throw great light on the economy of the Roman farms and the possessions of the great landed proprietors. The uninterrupted series, extending from the times of the Caesars to the age of Septimius Severus, of names of proprietors, potters, and estates, tells much of the internal condition of Italy, and of one of the sources of revenue to the Roman nobility. ${ }^{[2505]}$
The stamps found on bricks and tiles are of four kinds-rectangular, semicircular, circular, and crescent-shaped. The inscriptions are in raised letters in all cases, but instances are also known of incised inscriptions, written without frames across the tile. After the time of Diocletian the only forms found are square, circular, and octagonal; the square stamps always have straight inscriptions. On the circular stamps the inscriptions are placed in a circle, in one or two lines, and the beginning is determined by a small cut-out circle at the edge of the stamp, thus 20 orbiculus known as the orbiculus; apart from this its object is uncertain. In later stamps the inscription often reads backwards, or certain letters are reversed. The letters were cut straight in a mould and lie in the plane of the surface, being of rectangular section, not wedge-shaped, as in inscriptions on marble. During the Republican period and the first century of the Empire a plain "block" type is used; then the letters become smaller and more elegant, with bars at the ends of the hastae, as 20 E, ME, M etc. Finally they show a tendency about a.d. 200 to become broader and shorter: 20 e, m, sE, M, S At and after the time of Diocletian the forms become very varied. Punctuation in the best period takes the form of a 15 triangle afterwards the mark becomes vague in form. Ligatured letters are rarely found after the time of Diocletian, but are common in the best period; sometimes more than two are combined. ${ }^{[2506]}$ The stamps with which the letters were made were usually of wood or bronze, but have not been preserved.
In the centre of the stamp it was customary to place an emblem or device of some kind, perhaps in view of a law which obliged brick and tile makers to affix distinctive marks or emblems on their bricks; but the devices are not peculiar to individual workshops, and some potteries, such as the Terentian (see below), used several. They may be compared with the countermarks or small adjuncts on the coins of the Republic, and the seals and stamps on the wine-amphorae of Thasos (Vol. I. p. 158). Figures of gods, such as Mars, Cupid, and Victory, animals, and even groups of figures, occur, and after the third century Christian emblems are often found. It is most probable that they were merely ornamental and without significance, except in certain cases of canting or
punning allusions. Thus M. Rutilius Lupus has a wolf; Flavius Aper a boar; Aquilia an eagle; C. Julius Stephanus a wreath; and Aelius Asclepiades a serpent, with reference to the god Asklepios. [2507]


The most complete stamps have the date of the emperor or the consulship, the name of the estates (praedia) which supplied the clay, that of the pottery where it was baked (figlinae or officina), and that of the potter who prepared it; sometimes even of the slave who moulded the tile, and even its very dimensions. Two typical examples may be given from the British Museum collection, ${ }^{[2508]}$ of which the first (Fig. 194) is said to have been found in the Catacombs at Rome. It has in the centre of the stamp a figure of Victory, round which is the inscription in two lines, beginning with the outer band:

FIG. 194. STAMPED TILE (BRITISH MUSEUM)

OPVS DOL(iare) DE FIGVL(inis) PVBLINIANIS (ex) PREDIS AEMILIAES SEVERAES
"Pottery ${ }^{[2509]}$ from the Publinian works, (the clay) from the estate of Aemilia Severa."

The other has no device, but the last word of the inscription is in the centre:
IMP ANTONINO II E $(t)$ BALBINO COS
D P Q S P D O ARABI SER( $v i)$
"The Emperor Antoninus for the second time and Balbinus consuls; from the estates (de praediis) of Q. Servilius Pudens, pottery (doliare opus) from the hand of the slave Arabus."
The earlier stamps exhibit more method and precision; the later betray comparative carelessness. In the latter the name of the emperor sometimes occurs alone, and unusual expressions are introduced. Contractions are invariable at all periods, and even the consuls are sometimes only mentioned by initials; but by comparison of examples it is possible to place them in the right order. Those found in Rome cover the period from the reign of Trajan to that of Theodoric (a.D. 500), but in other parts of Italy they are found dating as early as 50 b.c. We are told that Theodoric, when he repaired the walls of Rome, made a present of twenty-five thousand tiles for the purpose, ${ }^{[2510]}$ and on the tiles bearing his name he is styled "The good and glorious king," with the additional exclamation, "Happy is Rome!"[2511]
The estates on which the clay for the tiles was produced are called possessiones; privata (private property); rationes (shares); insulae (blocks); or more generally, praedia. The latter word, indeed, is almost invariably used down to the third century, the others being more characteristic of the time of Diocletian. The praedia not only provided the clay, but in some cases also contained the potteries. On some tiles fundus, which means a country farm, is found. The proprietors of these estates were imperial personages, persons of consular dignity or equestrian rank, and sometimes imperial freedmen. Many tiles give merely the name of the imperial estates, without mentioning the reigning emperor; in the later ones, as in the Basilica of Constantine, it is usual to find the expression OFF • aVGG et caes nn, Officina Augustorum (duorum) et Caesarum (duorum) nostrorum. ${ }^{[2512]}$ Several names of the Antonines occur; also Annius Verus and his wife Domitia Lucilla, the parents of M. Aurelius. Septimius Severus owned many praedia which supplied bricks for his palace on the Palatine. ${ }^{[2513]}$ The Empress Plotina was evidently a large landed proprietor, and we also find the names of Aelius Caesar (Hadrian's adopted heir), M. Aurelius, Faustina II., and Julia Procula. Among the names of inferior proprietors, unknown to fame, occur Q. Servilius Pudens, T. Statilius Severus, and L. Aemilius Julianus, priest of the sun and moon. ${ }^{[2514]}$ Such names as Q. Agathyrsus, Rutilius Successus, and Sulpicius Servandus seem to denote imperial freedmen; the first-named styles himself AVG • LIB. ${ }^{[2515]}$
A remarkable fact in connection with these inscriptions is the prevalence of feminine names, the quantity of tiles on which these are found being enormous. The causes are various,-partly the renunciation by emperors of their private fortunes in favour of their female relations; partly the proscriptions which, from the failure of male heirs, caused estates to devolve upon women; partly the gradual extinction of great families. The important position held by freedmen under the Empire is well known to the student of Roman history.
The potteries of the tile-makers were of two kinds-figlinae and officinae; but the former seems to be a wider and inclusive term-that is to say, that one figlina included several officinae or workshops. In the inscriptions, ex figlinis is usually followed by the name of the owner, ex officinis by the name of the potter (officinator). The former expression is by far the commoner, and the latter (of or offic) is more usually found on lamps and vases, although after the third century it is
invariable on the tiles. The figlinae are always mentioned in a subordinate manner to the praedia, when both are mentioned, as is usually the case. The potteries were mostly outside the city, even at some distance. Localities are not often mentioned, but we have the Salarian potteries on the Via Salaria, ${ }^{[2516]}$ and also mention of the Via Nomentana, ${ }^{[2517]}$ and such expressions as Ad Aureliam, Ad Mercurium felicem, or Ad viam triumphalem. Stamps found in the walls along the Appian and Latin ways show that potteries existed in the direction of the Alban and Tusculan hills, and in other parts of Latium, as at Praeneste and Ostia. On the north side they extended as far as Narnia and Ocriculum ${ }^{[2518]}$ on the Tiber. They are also found in Etruria and Campania. Tiles from Latium were exported to Liguria, the Adriatic, Sardinia, Africa, Gaul, and Spain.
Usually a descriptive epithet is associated with the word figlinae, either of a geographical or personal character. Examples of the former are Macedonianae, Rhodianae, and Oceanae. The latter give either the name of an emperor, as Neronianae, Domitianae; or a Gentile or family name, as Favorianae, ${ }^{[2519]}$ Furianae, Publinianae, Terentianae, or Voconianae. One of the names which occurs most frequently is that of L. Brutidius Augustalis, a freedman; others are stamped ex figlinis PRIMIGENI SERVI DNI NOSTRI IMP-"From the potteries of Primigenius, slave of our lord the Emperor." Imperial slaves owned many potteries, and others were owned by the emperors or other wealthy proprietors, and administered by freedmen or slaves. The officinae served to distinguish the functions of the different figlinae. Thus the establishment of M. Publicius Januarius, a freedman, is styled doliariae officinae; or they are distinguished by separate names, as Claudianae, Domitianae, and so on. The tiles from the potteries of Asinius Pollio bear the name of C. Cosconius as maker, as do those of Julia Procula's potteries, being further distinguished as doliares, bipedales, and sesquipedales. ${ }^{[2520]}$ It would appear that the potteries of private proprietors were under the direction of freedmen, while those of the imperial estates were chiefly managed by slaves, from whose labours large revenues were obtained.
There were many private potteries in Gaul and Germany. ${ }^{[2521]}$ In the neighbourhood of Saarbrück many tiles have been found with the maker's name, L. Valerius Labeius. Others with private names have been found at Trier, one with the stamp of the colonia. Several potters with Gaulish names are known, and probably fidenatis on a tile at Zulpich, SECVNDANVS F (igulus or fecit) and PaCATVS F from Seligenstadt, refer to craftsmen of that nationality. ${ }^{[2522]}$ Often the master's name only occurs, of which possible instances are bellicianvs on a tile from Caerwent, and PRIMV(s) on another from Colchester. ${ }^{[2523]}$ In the British Museum are tiles with the initials T $\mathrm{P} \cdot \mathrm{F} \cdot \mathrm{A}, \mathrm{T} \cdot \mathrm{P} \cdot \mathrm{F} \cdot \mathrm{C}, \mathrm{T} \cdot \mathrm{P} \cdot \mathrm{F} \cdot \mathrm{P}$, from Rodmarton in Gloucestershire. ${ }^{[2524]}$ Tiles found in the provinces also have the maker's name simply, without indications of date or the owner of the pottery, as on those from Seligenstadt already cited. The makers must in all cases have been of inferior condition, as implied in the example already quoted of the slave Arabus (p. 354); and other names-Daedalus, Peculiaris, Primigenius, Zosimusbelong to the same rank of life. Yet the occurrence of a single name for a private individual is everywhere very common. On the other hand, imperial slaves usually have two names given, and freedmen three. ${ }^{[2525]}$

On the tiles of the freedmen of the Gens Domitia (dating about the reign of Hadrian) is frequently stamped the formula valeat qvi fecit, "May he who made it prosper," with the name of the representative of the family in the genitive. ${ }^{[2526]}$ On other tiles we find such expressions as vtamvr FELICES, "May we use it and be happy"[2527]; FORTVNA COLENDA, "Fortune is to be worshipped" (a second-century tile ${ }^{[2528]}$; and on others of post-Diocletian date, VRBIS ROMAE, "The city of Rome" ${ }^{[2529]}$; secvlo constantiniano, "The age of Constantine"; felix roma (on the tiles of Theodoric), "Happy is Rome." ${ }^{[2530]}$ Even on sepulchral tiles of late Imperial times are stamped such aspirations as, vTI FELIX VIVAS, "May you live happily." ${ }^{[2531]}$


FIG. 195. INSCRIBED TILE FROM LONDON (GUILDHALL MUSEUM).

Again, memoranda are found incised on the tiles, as on one at Hooldorn in Holland, KAL • IVNIS . QVARTVS LATERClos N(umero) CCXiIII, "Quartus (made) 214 tiles on the first of June"; and on another, found in Hesse in 1838, stratvra tertia latercvli capitvlares nvm • leg • xxir, "In the third layer large tiles of the number of the twenty-second legion." ${ }^{[2532]}$ A tile found in Hungary had scratched upon it two metrical lines in cursive writing:
and on others names such as Tertius, Kandidus, Verna, were incised. ${ }^{[2534]}$ Idle boys in the brickfields often seem to have scratched the alphabet or other words in the soft clay, and complete Roman alphabets are found at Hooldorn ${ }^{[2535]}$ and Stein on the Anger ${ }^{[2536]}$; the letters I к L m on one at Winchester ${ }^{[2537]}$; on another at Silchester is ... E PVELLAM. ${ }^{[2538]}$ On a tile in the Guildhall Museum (Fig. 195), found in Warwick Square, E.C., are the words AVSTALIS \| DIBvs • III \| VAGATVRSIB | COTIDIM, of which no satisfactory translation has been given, but it has been usually regarded as the gibe of a fellowworkman at a devout individual. ${ }^{[2539]}$ On another, now at Madrid, the first two lines of the Aeneid are written in excellent cursive characters of the first century after Christ. ${ }^{[2540]}$

The Roman tiles, if rightly used, are found very useful for judging the dates of buildings. For instance, a study of those in the Pantheon showed that the walls were neither the original ones nor those built by Agrippa in 27 b.c., but were restored in the second century or supplied then with new brickwork. On the other hand, the stamps from the Flavian amphitheatre and Thermae Antoninianae confirm the dates of those buildings. Those tiles which bear the name M. Aurelius Antoninus as consul ${ }^{[2541]}$ seem to be the Emperor Caracalla's. In the time of Diocletian the dates cannot be definitely ascertained, but before his time the shape of the stamp is a good criterion. Rectangular stamps are found in the best period, and in the first century b.c. only one line of inscription is usual. Two lines denote the period 50-100 A.D. or later; semicircular or lunate forms came into use under Claudius, and lasted to the end of the first century; perfect circles belong to the same period. The type with the cut-out orbiculus came in about Nero's reign, and the size of the orbiculus gradually diminishes down to that of Severus, while the inscriptions gradually increase in length. ${ }^{[2542]}$
A considerable number of the Roman tiles are inscribed with the names of the consuls of the current year in which they were made, presenting a long and interesting series, from the consulship of L. Licinius Sura and C. Sosius Senecio (A.D. 107) to that of Severus Alexander (A.D. 222). Many of these consulships do not, however, appear to have been recorded in the regular fasti consulares or official lists, and they were probably suffecti, whose names were not recorded after their temporary elevation. It seems likely that the occurrence of consuls' names implies that such tiles were destined for public buildings, and were so marked to prevent their being stolen with impunity. They are fewer in number than those which have merely the names of praedia or potteries, but are yet sufficiently numerous to be an invaluable aid in tracing the succession for upwards of sixty years. Inscriptions of this class are only found on opus doliare, and chiefly in Italy. Their appearance is probably due to some law passed by the Senate about the reign of Trajan to regulate the potteries. As an example may be given a tile from Hooldorn in the Netherlands, inscribed svb • didio - ivLiano . $\operatorname{coss}{ }^{[2543]}$; the date is A.D. 179, the name being that of the future emperor (coss is a mistake for cos).
The following examples are taken from Dr. Dressel's scheme of the chronological order of the stamps, ${ }^{[2544]}$ and show the style of inscription characteristic of the different periods:
I. First century after Christ.

1. (a) With name of master only (either of praedia or figlinae):

Asini Pollionis.
(b) With name of officinator or potter:

## C. Cosconi.

2. (a) Master and potter (often a slave):

Felicis Domiti Afri.
(b) Master and conductor (lessee of the pottery), or potter:

Tegula C. Cosconi, figuli Asini Pollionis.
3. (a) Master, potter, and name of pottery:

Amoeni duorum Domitiorum Lucani et Tulli, ex figlinis Caninianis.
(b) Master, lessee or potter, name of pottery:

## T. Grei Ianuari ex figlinis Caninianis duorum Domitiorum.

II. Second century to third century.

1. (a) Ex praedis L. Memmi Rufi.
(b) Opus doliare L. Bruttidi Augustalis.

## L. Lurius Martialis fecit.

2. (a) Ex figlinis (vel praedis) Domitiae Lucillae, opus doliare Terti Domitiae Lucillae (vel ab Tertio servo).
(b) C. Comini Proculi ex praedis Domitiae Lucillae.

Ex figlinis Q. Asini Marcelli doliare opus fecit C. Nunnidius Fortunatus.
Opus doliare ex praedis domini n(ostri) ex conductione Publiciaes Quintinae.
3. (a) Ex figlinis (vel praedis) Caepionianis Plotiae Isauricae, fornace Peculiaris servi.
(b) Opus doliare ex praedis duorum Augustorum nostrorum, figlinis Domitianis minoribus, Fulvi Primitivi.

During the greater part of the third century chronological indications are absent, but about the time of Diocletian the practice of signatures is revived. The inscriptions, however, differ now from the earlier ones, not only in the forms of the letters and of the stamp, but also in style; they are less regular in form, and present several peculiarities. The expressions opus doliare and ex figlinis are now no longer found, and in place of the latter officina is invariable. Many of the officinae are the same as in the former period, but new ones, such as the Britannica, Claudia, Gemella, and Jobia, occur, the latter with the cognomen Diocletiana. Officina is sometimes used twice over, for the pottery and for the workshop. In place of praedia we have such expressions as statio, rationes, or possessiones. Formulae are introduced in an abbreviated form which give the method of administration or character of the estates: as $\mathrm{R} \cdot \mathrm{s} \cdot \mathrm{P}$, ratio summae patrimonii or privatae; $\mathrm{s} \cdot \mathrm{P} \cdot \mathrm{C}$, stationis patrimonii Caesaris; $\mathrm{S} \cdot \mathrm{R}$ for summae rei or stationis Romanae; $\mathrm{s} \cdot \mathrm{P}$ for summae privatae or stationis patrimonii; $\mathrm{S} \cdot \mathrm{R} \cdot \mathrm{F}$ for sacrae rationis fisci; or simply s for stationis or summarum. ${ }^{[2545]}$ Apparently several stationes might be united in one officina, or several officinae in one administratio; the number of the statio is given in some instances. The name of the statio may be replaced by that of the potter; or merely the administratio is given, as OFF . PRIVATA. Besides the names of master, lessee, and potter, that of the negotiator is sometimes mentioned. We also find the portus or depôt in which the tegulae were stored for distribution, as PORTU LICINI, ${ }^{[2546]}$ or the name of the building for which they were destined, as PORTVS AVGVSTI, ${ }^{[2547]}$ CASTRIS PRAETORI( $s$ ) avg (usti) n (ostri), horreis postvmianis. ${ }^{[2548]}$ Some tiles dug up in Lambeth Hill, London, on the site of the Post Office, now in the British and Guildhall Museums, ${ }^{[2549]}$ were impressed with the letters P P P BR $\cdot$ LON or PR • BR • LON (Fig. 196), which have been interpreted as publicani provinciae Britanniae Londinienses. ${ }^{[2550]}$
Tiles made for military purposes are exceedingly common in the later period, and the stamps probably had a double use. In the first place, they show that they were made by the soldiers, from which we learn that in the legions, as in a modern army, there were many men acquainted with handicrafts. Secondly, they prevented theft or removal of the tiles, and served as a "broad arrow" to denote public property. They are not, of course, found in Rome, where there was no necessity for the legions to make bricks or tiles; here the camp seems to have been supplied by private individuals.
Of special interest are the inscriptions stamped on tiles which relate to the military divisions stationed throughout the provinces of the vast empire. These are found in soldiers' graves (see above, p. 351), as well as in their


FIG. 196. INSCRIBED TILE FROM LONDON camps and quarters; they contain the names and titles of the legions, and mark the extent of Roman conquest. Thus the route of the thirty legions through Germany has been traced; and in Britain an examination and comparison of such tiles shows the distribution of military force and the migrations of different legions from one quarter to another. The stamps are in the form of long labels (tesserae), circles, or crescents, occasionally surrounded by a wreath, or else in the shape of a foot, an ivy-leaf, or a vase; the letters are in relief, sharply impressed, as if from a metal die. The names and titles of the legions are given either in initials or in contractions, as LEG • II • P(arthicae), and so on (see above, p. 351); sometimes the potter's name is added, with FIGVLVS or FECIT. ${ }^{[2551]}$

The tiles of the first legion have been found at Mainz and Nimeguen; those of the second, or Parthian, at Darmstadt, Ems, Hooldorn, Caerleon, and the Lake of Nemi ${ }^{[2552]}$; of the third, in Scotland; of the fourth, at Mainz; of the fifth, in Scotland, and at Baden, Cleves, Xanten, and Nimeguen; of the sixth, at Nimeguen, Neuss, Aix-la-Chapelle, Darmstadt, and Windisch; the seventh, at Aix-la-Chapelle and Xanten; the eighth, at Mainz, Baden, and elsewhere; the ninth, at Baden and York; the tenth, at Nimeguen, Hooldorn, Vienna, and Jerusalem; the twentieth, at Chester ${ }^{[2553]}$; and so on down to the thirtieth. ${ }^{[2554]}$ At Bonn tiles have been found of the Legio Cisrhenana on the left bank of the Rhine, and of the Legio Transrhenana on the right bank. Cohorts have also left their names on tiles: the second Asturian at Acsica on the Roman Wall ${ }^{[2555]}$; the fourth (Breucorum), at Huddersfield ${ }^{[2556]}$; the fourth Vindelician, at Frankfurt, Mainz, and Wiesbaden ${ }^{[2557]}$; the Ulpian Pannonian at Buda-Pesth. ${ }^{[2558]}$ The vexillationes, whose main body was at Nimeguen, are similarly recorded; a British vexillatio was attached to the army at Hooldorn ${ }^{[2559]}$ and Nismes, and another to that of Lower Germany, as instanced by tiles inscribed VEX • EX • G • INF (vexillatio exercitus Germaniae inferioris), found at Utrecht and Nimeguen in the Netherlands, and at Xanten in Germany. ${ }^{[2560]}$ Tiles of the British fleet, CL(assis) BR(itannica), have been found at Boulogne, Lympne, and Dover. ${ }^{[2561]}$

## 2. TERRACOTTA MURAL RELIEFS

Terracotta mural decoration was largely employed by the Romans for the interior and exterior of their buildings, in the form of slabs, ornamented with reliefs, which were placed round the impluvium or on the walls. Sometimes they seem to have formed a sort of hanging "curtain" round the lower edge of the cornice, as the open-work patterns along the edges seem to imply, a method of decoration which we have already met with at Civita Lavinia (Vol. I. p. 101), where also the hanging slabs are bordered with patterns in outline or open-work. But, as also at Civita Lavinia, these slabs seem to have been frequently used as antepagmenta, ${ }^{[2562]}$ being pierced with holes, which imply that they were nailed against the walls. In the Casa dei Cecilii at Tusculum there is evidence that they were used as wall-friezes, ${ }^{[2563]}$ and those found at Pompeii (where they are very rare) also have holes for fastening to walls. It may be to the first-named variety that Festus refers when he speaks of antefixa of fictile work which are affixed to the walls underneath the gutters. ${ }^{[2564]}$

There is also a reference to them in Cicero, who, in writing to Atticus, says, "I entrust to you the bas-reliefs (typos) which I shall insert in the cornice of my little atrium."[2565]
The slabs are usually about 18 inches long by 9 or more high, and 1 to 2 inches thick; they have nearly all been found at Rome, but specimens are also known from Civita Lavinia, Cervetri, Nemi, Pompeii, and Atri in Picenum. ${ }^{[2566]}$ The British Museum possesses a very fine series, numbering, with fragments, one hundred and sixty, nearly all of which were collected by Mr. Charles Towneley at Rome ${ }^{[2567]}$; and there is an equally fine collection in the Louvre, which came from Signor Campana, who devoted a large work to the illustration of them. ${ }^{[2568]}$ Other good examples, some of which were found in the Baths of Caracalla, are in the various collections at Rome. ${ }^{[2569]}$

The reliefs were evidently cast in moulds, as many subjects are repeated over and over again, or at least with only slight differences; moreover, the relief is low, with sharp and definite outlines, such as a mould would produce. Among the British Museum examples a group of Eros, a Satyr, and a Maenad is repeated in three cases (D 520-522), with no variations except in the colouring; another of Dionysos and Satyr three times (D 528-530), with only one small variation. It is evident that in the latter, as in some other cases, the relief had been retouched before baking. Reliefs entirely modelled are of much rarer occurrence, but exhibit considerable artistic feeling and freedom, as in an instance in the British Museum (D 651), which represents the sleeping Endymion; the hair is so fine and deeply cut that it could not possibly have been produced from a mould. The moulds may have been made of various materials-wood, stone, metal, or gypsum, as well as terracotta. Circular holes are left in the slabs for the plugs-usually of lead-by which they were attached to the woodwork or masonry. The clay varies in quality and appearance, being often coarser than that of Greek reliefs, and mixed with coarse sand in order to make it stronger and more durable; in tone it varies from a pale buff to dark reddish-brown. Traces of colouring are often found on the slabs, ${ }^{\text {[2570] }}$ and the background in some cases (as B.M. D 577, 623) was coloured a bright blue; the figures, or more often details such as hair, etc., were usually painted red, yellow, purple, or white. These colours are not fired, as in the earlier terracotta reliefs, but painted in tempera, and their use is entirely conventional. The slabs are ornamented above and below with bands or cornices in the form of egg-and-tongue mouldings, or a system of palmettes and intersecting arches; these are sometimes in low relief on a band, sometimes partly in outline or open-work.


Roman Mural Reliefs.

1. Zeus and the Curetes; 2. Dionysos in the Liknon-Cradle (British Museum).

The figures are mostly in low relief, being usually grouped with large flat surfaces between, in the manner of Hellenistic art; in some cases the design is composed in such a way that the whole surface (except the principal figures) is occupied by patterns of scroll-work or foliage, more or less conventional. The compositions are either in the form of narrow friezes, usually with rows of busts or figures of Cupids, or square metope-like groups with two or three figures on a large scale. For the narrower slabs the busts were preferred, owing to the scope they gave for high relief, which better suited the distance from the eye; but this rule is not invariable. The style is, in general, bold and vigorous, and, though essentially architectural, not devoid of dignity and beauty; but it is somewhat conventional, and at times even archaistic. ${ }^{[2571]}$ Those found at Pompeii are usually of remarkably good style, especially the Nereid frieze, ${ }^{[2572]}$ with its rich colouring. These are earlier than the earthquake of A.D. 63, and probably belong to the Augustan period, to which also the majority may be assigned. On one or two names of potters are found, such as Annia Arescusa(na) and M. Antonius Epaphras in the British Museum. ${ }^{[2573]}$
The subjects on these reliefs cover a very wide field, almost as wide as those on the painted vases, and quite as wide as those on the Roman lamps. In many cases they are doubtless copies of wellknown works of art, and may even go back to prototypes of the fifth century, as in the case of a figure of a girl in the British Museum (D 648), or one of Eros, conceived as a full-grown youth, in the Campana collection. ${ }^{[2574]}$ Others, again, present points of comparison with the Hellenistic reliefs,
as is the case with that representing the visit of Dionysos to a mortal (B.M. D 531). Lastly, we find in the reliefs, as also on the Arretine vases (below, p. 492), a series of types closely related to the New Attic reliefs, in which it was sought to revive an older style ${ }^{[2575]}$; among the types borrowed from these originals are Maenads in frenzy or dancing in various attitudes, ${ }^{[2576]}$ and the figures of the four Seasons. ${ }^{[2577]}$ Among those which reflect the character of their time rather than the spirit of Greek art, we have representations of Egyptian landscapes, or Egyptian deities and emblems; scenes from the circus or gladiatorial arena; and quasi-historical subjects, such as triumphs over barbarian enemies. Of mythological subjects, the most popular are Dionysiac scenes or groups; next to these, Apollo, Aphrodite, Eros, and Victory. Heroic legend is represented by the labours of Theseus, Herakles, Perseus, and Jason, and occasional scenes from the Iliad and Odyssey. Lastly, there are a certain number which are purely decorative, with a single figure of Eros or Victory (treated in archaistic fashion), or an ideal head surrounded by elaborate and graceful scrolls or acanthus foliage; others, again, have conventional groups of two priestesses or canephori, with a candelabrum or a foliated pattern between (Plate LXII.), a mask between two Cupids, and so on. Even the figures in some cases tail off into conventional patterns. ${ }^{[2578]}$
To mention a few of the more interesting subjects in detail, it may suffice to quote examples from the two best-known collections-those of the British Museum and Louvre. Beginning with the Olympian deities, we have the infant Zeus in the cave on Mount Ida, protected by the Curetes, who dance above him, wielding swords and shields (Plate LXI.); in one instance he is in his nurse's arms. ${ }^{[2579]}$ On a narrow frieze the busts of Zeus, Ares, Hera, and Athena are represented ${ }^{[2580]}$; Apollo receives a libation from Victory, ${ }^{[2581]}$ or a warrior consults his oracle, indicated by a bird in a cage ${ }^{[2582]}$; Aphrodite is seen riding on a sea-horse or on a goose. ${ }^{[2583]}$ Eros or Cupid appears in various attitudes and combinations of figures: flying, embracing Psyche, or being embraced by a Satyr; accompanying Aphrodite, Triton, and the Nereids; a pair on either side of a mask of Triton or Medusa; or a group of three struggling under the weight of a heavy garland of fruit and flowers. ${ }^{[2584]}$ Busts or masks of Demeter, ${ }^{[2585]}$ Zeus Ammon, and Triton are also found; a group of Aphrodite and Peitho; and the three Eleusinian deities, Demeter, Persephone, and Iacchos. ${ }^{[2586]}$
The Dionysiac scenes are very frequent, though often of little interest, and mere groups without definite action. The best known is the reception of Dionysos in the house of a mortal, ${ }^{[2587]}$ a subject formerly interpreted as his reception by Ikarios at Athens (cf. p. 139); this type is remarkable for its rich and elaborate composition, probably derived from a Hellenistic original. A very effective composition is that of a dancing Satyr and Maenad swinging the infant Dionysos in a גíkvov (vannus) or winnowing-van, which serves as his cradle (Plate LXII.). ${ }^{[2588]}$ Among other scenes may be mentioned Dionysos giving drink to a panther; two Satyrs standing on tiptoe to peep into a laver; Satyrs gathering or pressing grapes (of which many replicas exist), or working an oil-press; Ampelos (the personified vine) between two Satyrs ${ }^{[2589]}$; Bacchic processions, sacrifices, or ceremonies ${ }^{[2590]}$; and friezes of Bacchic masks and masks of Pan. ${ }^{[2591]}$
Among other deities Victory is by far the most common. She is usually represented slaying a bull for sacrifice, a subject of which there are two principal varieties, according as she turns to right or left. The motive is a well-known one, and found in fifth- and fourth-century art, from the balustrade of the Nike temple at Athens onwards. ${ }^{[2592]}$ She is also depicted flying with a wreath, or as a conventional archaistic figure between tendrils and scrolls. ${ }^{[2593]}$ Of the figures of the Seasons we have already spoken; they are characterised by the attributes they carry, as a kid for Spring, corn for Summer, fruit for Autumn, and a hare and boar for Winter. Masks of Medusa, Sirens, and Sphinxes (both male and female) are found in compositions of a decorative character.
Of heroic legends, the rape of the Leukippidae by Castor and Pollux is repeated more than once ${ }^{[2594]}$; Herakles is seen contending with the Nemean lion, the hydra, and the Cretan bull, and with Apollo for the Delphic tripod ${ }^{[2595]}$; Theseus raises the rock which discloses his father's weapons (Plate LXI.), contends with the Marathonian bull, or overcomes a Centaur; Jason builds the Argo, superintended by Athena, and, assisted by Medeia, obtains the golden fleece; Perseus rescues Andromeda, and brings the Medusa's head to Athena; Aktaeon is slain by his hounds. ${ }^{[2596]}$ The Homeric scenes include Paris carrying off Helen from Sparta (or, as some interpret it, Pelops with Hippodameia); Nestor healing the wounded Machaon with a potion ${ }^{[2597]}$; Priam bringing offerings to Achilles; Penelope mourning for the absent Odysseus; Odysseus recognised by Eurykleia; and Orestes on the Delphic omphalos. ${ }^{[2598]}$ There are also numerous semi-mythical scenes, such as combats between Amazons and Gryphons, between Amazons and Greeks, or between Arimaspi and Gryphons. ${ }^{[2599]}$


Roman Mural Reliefs.

With the exception of the Roman subjects from the circus and arena, the remaining subjects are purely decorative, and of little interest; the former, some of which have reference to the conquest of Dacia, admit of the dating of the reliefs in the reign of Trajan. Others depict gladiators contending with lions; chariots racing in the circus, which is indicated by the obelisks and other adornments of the spina; or colonnades adorned with statues of boxers and victorious athletes. ${ }^{[2600]}$ Some of the Egyptian subjects are interesting for their local colouring, with their representations of the Nile, on which pygmies ply a boat, among hippopotami, crocodiles, and lotos-flowers, and ibises ${ }^{[2601]}$; but these compositions are more curious than artistically effective.

## II. Sculpture

## 1. ROMAN STATUES AND STATUETTES

In the earlier ages of Rome the laws and institutions, based without doubt on the sentiments of the people, were unfavourable to art. Numa was said to have prohibited the representation of the deity in human form, ${ }^{[2602]}$ and the statues of great men were not allowed to exceed three Roman feet. To women the privilege of having statues was not conceded until much later. Pliny constantly compares the luxury of his own day with the simplicity of early times, to the disadvantage of the former, dwelling fondly on the times when men could be content with plain terracotta images, and it was not necessary or possible to make a display of silver and gold.

Most of the ancient statues of the Romans were of terracotta, a fact to which constant allusion is made by their writers. Juvenal speaks of "a fictile Jove, not spoiled by gold" ${ }^{[2603]}$ and Propertius speaks of the early days of the golden temples, when their gods were only of clay. ${ }^{[2604]}$ Similarly Pliny expresses his surprise that, since statuary in Italy goes back to such a remote period, statues of clay should even in his day still be preferred in the temples. ${ }^{[2605]}$ Vitruvius alludes to the favourite Tuscan fashion of ornamenting pediments with signa fictilia, ${ }^{[2606]}$ examples of which, he says, may be seen in the temple of Ceres in the Circus Maximus (see below), and the temple of Hercules at Pompeii. Cicero speaks of a statue of Summanus on the pediment of the Capitoline temple "which at that time was of terracotta, ${ }^{[2607]}$ and Livy ${ }^{[2608]}$ tells how in 211 b.c. a figure of Victory on the apex of the pediment of the temple of Concord was struck by lightning and fell, but was caught on the antefixal ornaments, also figures of Victory, and there stuck fast. Though not stated to be of terracotta, these figures would hardly be of any other material at that period. Other allusions may be found in Ovid and Seneca. ${ }^{[2609]}$

In the early days of the Republic art was clearly at a very low ebb-in fact, Roman art can hardly be said to have existed-and everything was either borrowed from the Etruscans or imported from Greece. Hence the statues of terracotta which adorned their temples are spoken of as signa Tuscanica. The most celebrated works in ancient Rome were made by artists of Veii or the Volscian Fregellae, such as the famous quadriga on the pediment of the temple of Jupiter Capitolinus, and the statue of the god himself, described elsewhere (p.314), which were made by Veientine artists in the time of Tarquinius Priscus. Numa, ever attentive to Roman arts and institutions, is said to have founded a corporation or guild of potters. ${ }^{[2610]}$ In 493 b.c. Gorgasos and Damophilos, natives of Himera in Sicily, ornamented with terracotta reliefs and figures the temple of Ceres at Rome (now Santa Maria in Cosmedin). ${ }^{[2611]}$ Their work, which is alluded to by Vitruvius in the passage referred to above, was probably Greek rather than Etruscan in style, as we have seen to be the case generally with the archaic terracotta relief-work of Italy (p. 317). In the reign of Augustus the temple was restored, and so great was the esteem in which the works of these old masters were held that they were taken out of the walls and framed in wood.
Coming down to later times, Possis, "who made fruit and bunches of grapes," and Arkesilaos are cited by Pliny, ${ }^{[2612]}$ on the authority of Varro, as modellers in clay. The latter made for Julius Caesar a statue of Venus, which, although unfinished, was highly prized. Pliny also mentions a terracotta figure of Felicitas made by order of Lucullus. ${ }^{[2613]}$ It seems probable that the extensive use of
terracotta was mainly due to the absence of white marble in Italy, none being discovered till imperial times. The siege of Corinth, which unfolded to the eyes of the Romans an entirely new school of art in the quantities of Greek masterpieces carried by Mummius to Rome, as also the conquest of Magna Graecia and other parts of Greece, caused the old fashion of sculpture in terracotta to fall into contempt and neglect. Henceforth the temples of the gods and houses of the nobility became enriched and beautified with the spoils of Greek art in all materials. Even at an earlier period (195 в.c.) Cato in vain protested against the invading flood of luxury, and especially against the new taste in sculpture. "Hateful, believe me," says he, "are the statues brought from Syracuse into this city. Already do I hear too many who praise and admire the ornaments of Corinth and Athens, and deride the terracotta antefixes of the Roman gods. For my part I prefer these propitious gods, and hope they will continue to be so, if we allow them to remain in their places." ${ }^{[2614]}$ Yet up to the close of the Republic, and even later, great works continued to be executed in terracotta, and were much esteemed. ${ }^{[2615]}$ The statue made for Lucullus is an instance, and existing statues in this material, which we shall shortly discuss, are probably of early Imperial date.
Few statues of any size in this material have escaped the ravages of time, but there are some specimens to be seen in our museums. In the Vatican is a figure of Mercury about life-size, ${ }^{[2616]}$ and in the British Museum a colossal torso, ${ }^{[2617]}$ to which the head and limbs had been mortised separately. A head of a youth from a large statue, found on the Esquiline, was exhibited in 1888 at the Burlington Fine Arts Club. ${ }^{[2618]}$ A series of female figures, including a seated Athena, ranging from two to four feet in height, was found in a well near the Porta Latina at Rome in 1767. ${ }^{[2619]}$ They were purchased by the sculptor Nollekens, who restored them and sold them to Mr. Towneley, from whom they were acquired for the British Museum. They are made of the same clay as the mural reliefs already described, and are supposed to have decorated a garden. Some of them have been identified, on somewhat slight authority, as the Muses Ourania, Calliope, and Thaleia; there are also two terminal busts of the bearded Indian Bacchus, which show some traces of conventional archaism in their style. Other large figures have been found at Nemi and Ardea in Latium, the latter being now in the Louvre. ${ }^{[2620]}$
At Pompeii in 1766 three pieces of colossal sculpture in terracotta were found in the temple of Aesculapius, representing a male and female deity and a bust of Minerva with her shield. The two former used to be identified as Aesculapius and Hygieia, but it is more probable that they are Jupiter and Juno, making, with the bust, the triad of Capitoline deities, ${ }^{[2621]}$ a subject found on lamps at Pompeii. The execution is careful, and they seem to date from the latter half of the first century b.c. They formed the cult-statues of the temple. Other statues appear to have been employed for adorning gardens, or for niches in private houses, among which are a portrait of a seated physician of great originality, ${ }^{[2622]}$ a nude boy, and two actors. ${ }^{[2623]}$ A figure of Eros appears to have been attached to a wall as an ornament ${ }^{[2624]}$; a fragment of a colossal Minerva found in a niche near the Porta Marina is an excellent example of sculpture of the first century b.c. Figures were also employed as architectural members, such as the Atlantes supporting the entablature in the tepidarium of the Thermae in the Forum, ${ }^{[2625]}$ dating from the Augustan period; the former seem to be copied from originals in tufa. Of later date is a Caryatid figure, probably of the Neronian epoch. ${ }^{[2626]}$ These sculptures are all of great importance for the history of art at the end of the first century B.c., and as showing the continued popularity of terracotta; the fashion, however, did not outlive the reign of Nero, and all those in Pompeii must be anterior to the earthquake of A.D. 63.
Sculptors sometimes made preliminary models in clay of the statues which they intended to execute in bronze and marble. This was not a common practice with the Greeks, and the first sculptor who made use of it, according to Pliny, ${ }^{[2627]}$ was Lysistratos, the brother of Lysippos. But at Rome in the time of Augustus it became much more frequent; Pasiteles is said by Pliny ${ }^{[2628]}$ never to have made a statue except in this manner. These models, known as proplasmata, were much sought after, as exhibiting the artist's style and powers of conception in the most free and unfettered manner, and those of Arkesilaos, another artist of the period, fetched a high price. ${ }^{[2629]}$

Terracotta statuettes, similar in proportions and subjects to those of Greece, are found in houses and tombs of the Roman period, and also as votive objects on sacred sites. They were known to the Romans as sigilla, and were employed as toys and presents, or placed in the lararia or domestic shrines; the same subjects are found applied to all these uses. Thus in the lararia were placed not only figures of deities, such as Venus, Mercury, or Bacchus, but masks, busts of children, and so on. ${ }^{[2630]}$ Sometimes they served to decorate the walls, as in the house of Julia Felix at Pompeii, where in the wall surrounding the garden were eighteen niches, containing alternately marble terms and terracotta figures, one of the latter representing a woman feeding a prisoner with her own milk. ${ }^{[2631]}$ In the Via Holconia forty-three terracotta figures from a workshop were found, showing that there was a local manufacture at Pompeii; the types were the same as in the houses. ${ }^{[2632]}$ It is noteworthy that the terracottas, of which some two hundred have been found, were nearly all from the lower parts of the city and the inferior houses, or in the domestic quarters of the large houses. This implies that the richer Romans preferred bronze statuettes for their shrines and household decoration. Comparatively few were found in tombs.

A few notices relating to terracotta figures are found in Roman authors. Martial speaks of a statuette of Hercules, which he calls sigillum ${ }^{[2633]}$; he also alludes to a caricature of a man which was so repulsive that Prometheus could only have made it when intoxicated at the Saturnalia, and to a grotesque mask of a Batavian. ${ }^{[2634]}$ In another epigram he refers to the imitation of a wellknown statue of a boy in terracotta. ${ }^{[2635]}$ Persius speaks of clay dolls (pupae) dedicated by a maiden to Venus, ${ }^{[2636]}$ and Achilles Tatius of clay figures of Marsyas made by coroplathi. ${ }^{[2637]}$ Elagabalus, by
way of a jest, used to place viands made of earthenware before his parasitical guests, and force them to enjoy a Barmecide feast. ${ }^{[2638]}$
There is also an interesting passage in the Satires of Macrobius relating to the festival of the Sigillaria, ${ }^{[2639]}$ at which large numbers of terracotta masks and figures were in demand. This festival took place on the twelfth to the tenth days before the Kalends of January, forming the fifth to seventh days of the Saturnalia, and corresponding to the 21 st to 23 rd of December. Ausonius says that the festival was so named from the sigilla or figurines, ${ }^{[2640]}$ and Macrobius more explicitly states that it was added to the Saturnalia to extend the religious festival and time of public relaxation. ${ }^{[2641]}$ Subsequently he diverges into an excursus on the origin of the feast, more curious than convincing. Epicadus is quoted by him as referring it to the story of Hercules on his return from slaying Geryon, when he threw into the river from the Pons Sublicius images of men which represented his lost travelling-companions, in order that they might be carried by the sea to their native shores. ${ }^{[2642]}$ His own view is that they represent expiatory offerings (piacula) to Saturn, each man offering an oscillum or mask on his own behalf in the chapel of that god. Hence, he says, sigilla were made by the potter and put on sale at the Saturnalia. ${ }^{[2643]}$ Elsewhere he states that clay oscilla were given to children as playthings at this season even before they had learned to walk. ${ }^{[2644]}$ The festival was indulged in by all classes of society, who vied in making presents of statuettes and figures to one another ${ }^{[2645]}$; and we are told that Hadrian exchanged gifts with others, and even sent them to those who did not expect to receive them. ${ }^{[2646]}$ Similarly, Caracalla, when a child, gave to his tutors and clients, as a mark of condescension, those which he had received from his parents. [2647]

From the use of this word sigilla (a diminutive of signum), for terracotta figures, the makers came to be known as sigillarii, or figuli sigillatores, ${ }^{[2648]}$ and a street in which they lived was known as the Via Sigillaria. ${ }^{[2649]}$ There was also a market for the sale of sigilla for the feast near the Pantheon. ${ }^{[2650]}$ Although the names of makers are constantly found on Roman lamps and pottery, as well as the tiles, they are very seldom found on statuettes, with the exception mentioned below of those found in Gaul. But the name of Q. Velius Primus, in a sort of mixture of Greek and Latin, is found in raised letters on a mask of a Satyr in the British Museum (D $177=$ Fig. 197), and other names are occasionally found on the moulds. The social condition of the Roman potter seems to have been much lower than that of the Greek, who was often a person of respectable position; but this may be partly due to the fact that his clientèle was drawn mainly from the poorer classes. He was generally a slave, sometimes a barbarian, and even the masters of the potteries were only freedmen. As we saw in the case of the tile-makers, the potters often worked on the estates of wealthy or influential people, from which their clay was obtained. More details of Roman potters will be found in the sections dealing with tiles and lamps.


FIG. 197. MASK OF SATYR, WITH NAME OF Q. VELIUS PRIMUS (BRIT. MUS.).

On the technical aspect of Roman terracotta figures little need be said. The processes were practically the same as those described in Chapter III. when dealing with the Greek terracottas. Large figures were made from models (proplasmata) and built up in several pieces on a wooden framework, known as crux or stipes. ${ }^{[2651]}$ A reference to this method may be traced in a fable of Phaedrus, ${ }^{[2652]}$ which describes Prometheus as having made human figures in clay in separate pieces, and, on returning from a supper with Bacchus, joined them together wrongly, so that the sexes became confused. The smaller figures were all made from moulds, by means of which they could be repeated with but slight alterations. Few statuettes seem to have been made after the second century of the Empire.

The range of subjects in Roman terracottas is much the same as in the Greek figures of the Hellenistic period. At Pompeii genre figures predominate, including such types as gladiators, athletes in the circus, slaves carrying bundles, and personages in Roman costume. ${ }^{[2653]}$ A favourite type at Pompeii is a mask of a youth in a Phrygian cap. ${ }^{[2654]}$ There is a decided preference shown for portraits and grotesques. Von Rohden, ${ }^{[2655]}$ in dealing with the question of the extent to which these figures represent Greek or purely Roman types, considers that although the influence of the former is still strong, yet they are marked by such wide differences that they must be ranked in the latter category. He dates them in the time of Vespasian, in which the decadence which had begun with the later Hellenistic age is in the Roman fabrics still more strongly accentuated. The style is negligent, the proportions faulty, and the art of colouring practically lost. They are only redeemed from insignificance by the taste for portraiture and the interest which attaches to the reproduction of motives borrowed from contemporary life.
The Pompeii figures may serve as typical Roman terracottas, but they are also found elsewhere in Italy, as well as in other parts of the Roman Empire; nearly all, however, are of inferior merit and execution. At Praeneste in 1878, on the site of the temple of Fortuna Primigenia, were found genre figures and votive objects, ${ }^{[2656]}$ and similar ex votos have come to light at Gabii. ${ }^{[2657]}$ At Nemi figures have been found which are obviously of Roman date, some of considerable size. ${ }^{[2658]}$ From time to time finds have been made in Rome, and there is a pretty little head in the British Museum found in the Tiber (D 383), which, however, may be of Greek workmanship. The industry also extended from Rome to the provinces, and even in Britain terracotta figures are sometimes found, as at Richborough ${ }^{[2659]}$; at Caistor, by Norwich, a terracotta head of Diana, of fairly good style, is recorded. ${ }^{[2660]}$ There are also in the Guildhall Museum some terracottas in the coarse red clay which characterises most of the British examples: a Venus on a swan; a female head with turreted crown, of archaistic style, from Finsbury; and a large figure of Proserpina holding a fruit, of very fair style, from Liverpool Street. ${ }^{[2661]}$ A figure of a boy on horseback is or was in the Museum of Practical

## 2. GAULISH TERRACOTTAS

In Gaul there appear to have been very extensive manufactures of terracottas, but not anterior to the conquest by Julius Caesar in 58 B.C. These statuettes were made for the Roman colonists, who introduced the types of their own religious conceptions, but the makers were local craftsmen. Potteries have been unearthed at Moulins on the banks of the Allier, and in Auvergne and other parts of France, and even in Germany, where one was discovered at Heiligenberg in Alsace, and others on the Rhine (see below, p. 384). The finds on the Allier, made in 1857, give a practically complete survey of the subjects; they are all now collected in the museums of Moulins and St. Germain, and were fully published at the time in a work by M. Tudot. ${ }^{[2663]}$ The figures found here are not from tombs, but were unearthed from the sites of the potteries and from ruins of buildings; they are all made in a peculiar white clay, whereas the figures of the Gironde district are grey or black, and those of the Rhine Valley reddish, like those of Britain. The technique resembles that of the Roman figures; there is no vent-hole, and they usually stand on a conical base; the modelling is very heavy, and the latest specimens are absolutely barbaric.
Until recently the subject of Gaulish terracottas had been greatly neglected; Tudot's plates were useful, but his text unsatisfactory and devoid of method, there being no proper description of the plates. M. Pottier has given a good summary of his work, and M. Héron de Villefosse has also dealt with some aspects of the subject. ${ }^{[2664]}$ But they had not been treated as a whole and in relation to the subject of ancient terracottas in general until 1891, when an important memoir by M. Blanchet appeared, in which a complete survey of the Gaulish terracottas was given. ${ }^{[2665]}$ This must of necessity form the basis of the present account.
In dealing with the technical character of the terracottas found in Gaul, M. Blanchet points out that the white clay of which many are made (e.g. those from the Allier valley) is not universal; some are made of red or grey clay, which has turned white in the baking, apparently by a process analogous to that used by the Chinese for porcelain, others are actually covered with a white engobe like the Greek terracottas. This appears to have been done with a view to subsequent colouring, which in nearly all cases has quite disappeared; but statuettes with remains of colouring, made of purely red clay, have recently been found in the neighbourhood of the Moselle and in Germany. ${ }^{[2666]} \mathrm{M}$. Blanchet quotes an example in the Museum at Angers, with the name of the maker, p • FABI • niciae, which is coated with a lead glaze like the enamelled wares described in Chapter III. He considers that the moulds from which they were made were often of bronze, and that bronze models were used as copies; but that they were also of terracotta is clear from the numerous examples given by Tudot. A terracotta mould for a figure of Venus Anadyomene, found at Clermont-Ferrand, is in the British Museum, and another from Moulins is for the back of the head of a similar figure, with hair elaborately coiled. ${ }^{[2667]}$ From the numerous moulds which have been found it may be seen that the figures were cast in two pieces, longitudinally, the arms being added afterwards, together with the circular plinth. The mould in the British Museum may be cited as an example of one for the back part of a figure; probably only the upper part was modelled.
Potters' names are exceedingly common, not only on the figures, but also on the moulds, ${ }^{[2668]}$ and form two distinct classes, those on the exterior of the moulds, and those on the figures or interior of the moulds (which are obviously the same thing). The distinction is that the former were merely for the identification of the moulds, while the latter indicated the creator of the type and made him known to the world, a feature which, as will be noted in Chapter XXIII. (p. 511), reappears in the pottery of Westerndorff in Germany. Tudot gives an example of a mould with the name atilano on the exterior and ioppillo on the inside. ${ }^{[2669]}$ Many of the names are identical with those of the makers of vases, ${ }^{[2670]}$ but the types and subjects are quite distinct from those on the Gaulish terra sigillata. Those on the exterior of the moulds are usually in a scrawling cursive type, whereas the other class are in capital letters ${ }^{[2671]}$; the cursive characters resemble those in use at Pompeii, but are not necessarily contemporary; they are, however, not later than the second century. The influence of this cursive character seems to have extended to the other class; for instance, in the inscription given in Fig. 198 below, not only are the G and S of cursive form, but E appears in the form II. Otherwise the letters are in the ordinary Roman alphabet (with the exception of A, which is sometimes $15 \AA$ Attic alpha the forms $E$ and II seem to have been used indifferently in Gaul at all periods. The "signature" sometimes combines the two names, as in the form

AVOT FORM<br>SACRILLOS CARATRI

which has been taken to mean Sacrillos fecit forma Caratri, "made by Sacrillos from Caratrius' mould." ${ }^{[2672]}$ Among the Roman names which occur are Attilianus, Lucanus, Pistillus, Priscus, Taurus, and Tiberius; among the Gaulish, Abudinus, Belinus, Camulenus, and Tritoguno.


From Blanchet.
FIG. 198. GAULISH FIGURE OF APHRODITE FROM NORMANDY

A large majority of the existing statuettes were, as we have seen, made in the valley of the Allier; these show more conspicuously than any others, the influence of transplanted Graeco-Roman art. Curiously enough none have been found at Lezoux, one of the chief pottery-centres of Gaul, although there is abundant evidence that the vases and statuettes were made in the same workshops (see above). ${ }^{[2673]} \mathrm{M}$. Blanchet considers that there was a large and important manufacture in Western France, which may have been inspired by the Allier workshops, but mainly exhibits native characteristics; he also notes the scarcity of these figures in Southern Gaul (Narbonensis), which may perhaps be explained by the preference there shown for bronze statuettes and vases with medallions (p. 530). ${ }^{[2674]}$ Other centres were Cesson, Meaux (where Atilanus and Sacrillos can be located), Bourbon-Lancy in Saône-et-Loire, and St. Rémy-en-Rollat (see p. 516), where vases also were made of the local white clay. M. Déchelette has been able to assign to the last-named pottery a date between A.D. 15 and 50. Another fabric was in the neighbourhood of Liège, and in Germany there were centres at Salzburg, and at Cologne, where the maker Vindex can be dated in the reign of Postumus (A.D. 260-270). ${ }^{[2675]}$ An important maker, Pistillus, had a pottery at Autun; his statuettes are found all over Gaul, ${ }^{[2676]}$ and the name appears on vases and coins, and also in an inscription. ${ }^{[2677]}$ Julius Allusa had a workshop at Bordeaux. In West and North-West France statuettes are found with the name of Rextugenos; they are all of peculiar and original character, with highly-ornamented backgrounds to the figures, and easily distinguished. The specimen given in Fig. 198, representing Venus Genetrix, was found at Caudebec-les-Elbeuf in Normandy (Seine-Inférieure); it bears the inscription RiIXTVGIINOSSVLLIASAVVOT, Rextugenos Sullias auvot (sc. fecit). ${ }^{[2678]}$

An interesting find of terracotta figures was made at Colchester in 1866, ${ }^{[2679]}$ consisting of thirteen figures presenting exact analogies to the Gallo-Roman terracottas of the second period both in type and style. One very poor specimen represents Hercules with club and lion-skin; another a bull, and a third a bust of a boy (perhaps a portrait of Nero or Britannicus); four are recumbent figures. The rest are more or less grotesque, including caricatured seated figures holding books or rolls, and a buffoon. With them were found vases in the form of animals of yellow-glazed ware. Figures of suckling goddesses (see below) have been found in Britain, and similar finds of Gallo-Roman types in white clay in London, among them a Venus holding a tress of her hair. ${ }^{[2680]}$ Votive offerings of parts of the body and figures of the goddess Fecunditas were found near the source of the Seine, in a temple of Dea Sequana, the local river-deity. ${ }^{[2681]}$ Other finds have been made in Touraine, Anjou, La Vendée, Brittany, and Normandy, brought by commerce from the Allier potteries; and in Germany at Heddernheim and on the Rhine. Part of a group of some size in purely Graeco-Roman style from the Department of Marne is now in the British Museum (Morel Collection).
Tudot originally classified the Gaulish terracottas chronologically in three periods according to style, and in this he has been followed by M. Pottier. But M. Blanchet ${ }^{[2682]}$ has pointed out that the
and that he was altogether wrong in conceiving the possibility of any being anterior to the Roman conquest. On the whole the chronological data are exceedingly vague, and can only be accepted in isolated instances, as in the case of the finds at St. Rémy-en-Rollat (A.D. 15-50) or Cologne (A.D. 260270), or where a resemblance in the coiffure of the feminine figures to those of Roman ladies can be traced. Some figures may probably be dated about A.D. 100 on the latter ground, the head-dress recalling those of Domitia and Julia the daughter of Titus. But it can only be laid down with certainty that the manufacture of statuettes was introduced into Gaul with the terra sigillata or ornamented red pottery at the beginning of the Imperial period. Where there is a question of decadent or barbaric style, as is undoubtedly often the case, it does not necessarily imply a late date, but only that the inferior work is due to the incapacity of some local artist, and figures of varying style must frequently be contemporaneous. ${ }^{[2683]}$
In dealing with the types of Gaulish terracottas, their origin and signification, M. Blanchet divides the subjects into three classes, of which the first is not only the largest but the most interesting: divinities, subjects from daily life, and animals. The deities are not those we should expect from Caesar's statement ${ }^{[2684]}$ that Mercury, Apollo, Mars, Jupiter, and Minerva represent the scale of popularity in Gaul, for they are mainly variants of one type, that of Venus. Many of these Venus figures reproduce types familiar in Greek and Graeco-Roman art, such as the Anadyomene, and the Cnidian or Pudica type; but in the majority she is frankly recognised as a Nature-goddess (Aphrodite Pandemos or Venus Genetrix), and hence we find numerous examples in which the old Oriental conception of the nude Aphrodite-Astarte with pronounced sexual characteristics, so common in the primitive terracottas of Chaldaea, Phoenicia, and Cyprus, ${ }^{[2685]}$ once more reappears, as in Fig. 198. Of almost equal frequency is the seated type of the Mother-Goddess or Koupoт suckling a child ${ }^{[2686]}$; this is not peculiar to Gaul, but is found in the terracottas of Southern Italy. ${ }^{[2687]}$ We may compare also the Fecunditas types on Roman coins. ${ }^{[2688]}$ Blanchet thinks that the goddess Rumina may be here intended, but prefers to adopt the general term of Mother-Goddess.


From Blanchet.
FIG. 199. GAULISH
TERRACOTTA:
THE GODDESS EPONA.

Among other mythological types the Ephesian Artemis, Pallas, Mercury, Epona (Fig. 199), and Abundantia occur; and among genre subjects the most interesting type is that of the Spinario, or boy extracting a thorn from his foot, familiar in Greek sculpture. Slaves, caricatures, and busts of ladies (see above) or children wearing the bulla, vases in the form of heads, and busts affixed to plates, also come under the latter category. Many of these are exceedingly rude and barbaric; children are transformed into coarse grotesques, and animals look (says M. Pottier) as if they had come out of a Noah's ark.
The artistic origin of the Gaulish types has been discussed by M . Blanchet, ${ }^{[2689]}$ who points out that although the modern tendency is to restrict the rôle played by Alexandrine art of the Hellenistic period in influencing that of Rome, ${ }^{[2690]}$ yet its effect on Gaul cannot be altogether ignored. That Egyptian cults found their way into Gaul is well known, ${ }^{[2691]}$ and in the terracottas such types as Isis and Horus appear, while comparisons may frequently be made with the late terracottas found in the Fayûm and at Naukratis. But there was also a stream of influence from Southern Italy, especially Campania, whence, as we have seen, the Mother-Goddess types were largely derived.
As regards the uses for which these terracottas were made, much that has been said on that head in Chapter III. will apply equally to Gaul. They have been found not only in tombs, but in wells and rivers, and on the sites of sanctuaries ${ }^{[2692]}$; but they do not seem to have had any special funerary significance. The majority were probably used for various domestic purposes in the houses, the figures of animals, for instance, as toys, and were then buried with their owners. Those found in wells or rivers may be regarded as votive offerings, as it is well known that the Gauls were fond of throwing votive figures into rivers or springs.

## 3. MISCELLANEOUS USES OF TERRACOTTA

It is impossible to enumerate all the purposes to which the Romans applied terracotta, but a few peculiar uses deserve special notice. The excavations at Pompeii have yielded several examples of its application to the decoration of a puteal, the circular structure which protected the mouth of a well; the core is of tufa or other hard material, and round this are laid curved slabs of terracotta decorated with reliefs. ${ }^{[2693]}$ They are all of comparatively early date; one has triglyphs and bulls' heads in relief, and is stuccoed over. Instances are also found at Pompeii of its use for table-legs, in the form of figures of kneeling Atlantes, ${ }^{[2694]}$ like those supporting the entablature in the Thermae (p. 374), but sculptured in the round. Small altars, or stands for holding lamps or for burning incense, supposed to have formed part of the furniture of the domestic shrines, have also been found in this material. ${ }^{[2695]}$ Varro tells us that the dolia or large jars made by potters were used as cages for dormice which were being fattened for the palates of Roman epicures ${ }^{[2696]}$; and Columella gives instructions for the use of clay tiles in making beehives. ${ }^{[2697]}$ Porphyry implies that it was customary to hive bees in kraters or amphorae of clay. ${ }^{[2698]}$ Tickets (tesserae) for admission to the circus or amphitheatre were also occasionally made of clay, and on them were stamped letters or numbers referring to the position of the seat, or representations of the animals exhibited. Two from Catania in the British Museum ${ }^{[2699]}$ have an elephant on the obverse and the letter A on the reverse, showing that they were for admission to a spectacle in which those beasts were shown. There are also possible instances of tesserae frumentariae, or tickets for the supply of cheap corn in time of necessity. ${ }^{[2700]}$ Moulds of terracotta for making counters, with masks or figures of Fortune and Isis,
have also been found; there is an example in the British Museum from Arezzo (E 46). ${ }^{[2701]}$
Herr Graeven, in a very interesting article, ${ }^{[2702]}$ has recently collected all the known examples (numbering some fifty) of money-boxes in terracotta used by the Romans. There is no mention of such objects in Latin literature, but it is probable that they were known as loculi, and were made in imitation of the metal $\Theta \eta \sigma \alpha v \rho o i ́$ used for keeping money in temples. Of this there is a clear instance in a specimen recently found at Priene in Asia Minor, ${ }^{[2703]}$ in the form of a small shrine with a slit in the top. Graeven states that there is evidence of their having been placed on a cornice which ran round the walls of the rooms in the houses. This box has an additional hole at the back for extracting the money, but the Roman specimens have only one opening. An example of a clay treasure-box from Western Europe is one in the form of a chest, $121 / 2$ inches high, with a bust of Apollo on the top, found at Vichy, and now in the Museum at Moulins. ${ }^{[2704]}$ It may have been placed in a sacellum or chapel for the offerings of those who visited the medicinal springs.
Of the Roman money-boxes proper four main types may be distinguished. The first, of which examples have been found at Pompeii, ${ }^{[2705]}$ is in the form of a small chest or coffer (arca), and may have been known by the name arcula. The second type is that of a money-box in the form of a vase. ${ }^{[2706]}$ The custom of hoarding money in jars (ollae, p. 470) was universal in Roman times, as we know from the Aulularia of Plautus, the plot of which turns on this practice, ${ }^{[2707]}$ and from the numerous finds of coins in jars in our own day. None of these have any ornamentation; they have been found in Germany, and there is a small specimen in the British Museum from Lincoln, ${ }^{[2708]}$ of spherical form with a knob at the top. Aubrey records the finding of a similar one in North Wiltshire. ${ }^{[2709]}$ These appear to be of very late date.
The next two types are of much greater interest, not only from their ornamentation, but from their form and the inscriptions which they bear. In the one the box takes a flat circular form, closely resembling the body of a lamp (the shape is that of Fig. 207), with a design similarly placed in a medallion. One actually has a figure of Victory with a shield, which reproduces the type of the New Year lamps described on page 413 (B.M. No. 309), and has a similar inscription. ${ }^{[2710]}$ It may be supposed that these boxes were carried round on New Year's Day to solicit contributions, just as is done (says Herr Graeven) by boys in Rome at the present time. Others have figures of Fortune and Hermes in a shrine, ${ }^{[2711]}$ the latter deity being of course specially associated with money-making. These two examples have their respective makers' names on the back, c ivn bit and Palladi, names which are also found on Roman lamps, ${ }^{[2712]}$ another detail which shows the close connection between these two classes of objects.


From Jahrbuch.
FIG. 200. TERRACOTTA MONEY-BOX.

The last type to be described is shaped like a bee-hive, or, as in Fig. 200, like a circular temple, forms which were found convenient for the then favourite design of a deity in a shrine. Among the examples quoted by Graeven ${ }^{[2713]}$ is one of the latter shape with Fortune (Fig. 200), now in the Bibliothèque Nationale. Of the bee-hive form three may be mentioned as presenting interesting features. One with Hermes in a shrine has the maker's name, PAS AVGV, which also occurs on lamps ${ }^{[2714]}$; another, found on the Aventine, and now at Gotha, ${ }^{[2715]}$ has on the front the figure of a victorious charioteer, on the reverse a slit for the coins, and the maker's name, AEL MAX. D'Agincourt suggested that this type of box was carried about by victors in the games to receive donations. Lastly, there is one recorded to have been found in the Baths of Titus in 1812, but now lost, which contained coins of Trajan, and was inscribed FISCI IVDAICI calumnia svblata. The evidence points to the dating of these two classes in the first century of the Empire, or slightly later.
Terracotta moulds for false or debased coins of the Imperial period have frequently been discovered in different parts of the Empire. ${ }^{[2716]}$ None, indeed, have come to light in Italy, but they occur in Egypt, Tunis, France, on the Rhine, in Switzerland, Lower Austria, and Britain. They were first noted by A. le Pois in 1579 at Fourvières, where moulds were found of coins of Septimius Severus and his successors. In 1697 and 1706 more of the same period, of local clay, were found at Lingwell Gate, near Wakefield, ${ }^{[2717]}$ in 1704 at Lyons, and in 1764 at Augst, near Basle. In 1829 and 1830 further finds were made at Wakefield, and again in 1869 at Duston, Northants. ${ }^{[2718]}$ Numbers have been noted from time to time in the museums of France and the Rhenish provinces, the most interesting find being that made in 182930 at Damery, near Épernay, in the Department of Marne. In 1859 a find of 130 moulds contained in a jug was made at Bernard; they appear to have been hastily placed there and left by forgers. At Bordeaux in 1884 finds were made in the ruins of a pottery, and others more recently at Autun and La Coulouche. In 1899 thirty-four moulds were found at Susa in Tunis. The British Museum has a collection of moulds of denarii from Egypt, mostly found at Crocodilopolis (Arsinoe) in the Fayûm; they are of a deep brick-red local clay, but a great number are burnt black.
Nearly all these moulds fall between the reigns of Septimius Severus and Diocletian, but some of those at Bernard go back as far as Trajan, and there are isolated instances of coins of Domitian at one end, of Constantius II. and Julia Mamaea at the other. Caracalla and Elagabalus are frequently represented, and those in the British Museum include Albinus, Crispus, Constantine, Galerius, Licinius, and Macrinus. The Damery find included thirty-nine moulds, comprising types of the coins of Caracalla, the elder Philip, and Postumus; 2,000 pieces of base silver coin, chiefly of Postumus; 3,900 bronzes of Constans I. and Constantius, all evidently made together; chisels and remains of other tools, and groups of moulds still containing the metal, and also lumps of metal which had overflowed from the moulds.

The way in which these moulds were used is as follows. The complete mould was composed of two shallow round boxes with hollow impressions respectively of the obverse and reverse, obtained by impressing the designs from genuine coins into the soft clay. The depth of the hollow was so calculated that when the two were placed together the space represented the required thickness. To cast the coins, a number of these moulds were placed one on the other, and luted with clay to prevent the liquid metal from escaping between the two pieces of each mould; down the side of the column formed by the pile of moulds a hollow cutting was made, at the base of which holes were pierced corresponding to the cavities where the metal was to enter. The metal was then poured into the hollow, and ran in through the holes as required. ${ }^{[2719]}$ Sometimes the columns were joined in groups of three $25 \&$ image for which a single column served; of this there is an example at Damery, where each rouleau contained a dozen moulds (thirteen discs). In the Cabinet des Médailles at Paris there is an example of one of these rouleaux of moulds, found at Lyons in 1704 (Fig. 201), ${ }^{[2720]}$ with the basin in which they were placed for the casting. At Susa the moulds were fitted slantwise into a bronze tube.
It is not absolutely certain whether these moulds were all used for fraudulent purposes by forgers; the find at Damery, for instance, was made on the site of Bibe, an important station on the road from Rheims to Beauvais, which would be too prominent a place for forgers to have selected. It is much more likely that in such a case they were used to make coins of inferior alloy, perhaps in some instances for the issues of usurpers who, being at a considerable distance from the capital, were unable to fill their military chests except with hastily cast coins. The distant parts of the Empire in which these moulds are found lend some colour to this theory. It will also be remembered that they mostly date from the time when a debased coinage was current throughout the Empire, beginning with the reign of Septimius Severus; this was put an end to by Diocletian in 297. We may therefore suppose that they represent, so to speak, officially recognised forgeries, emanating from a kind of local mint for producing coins hastily for provincial use. Hence the rapid spread of base money in the third century, which was not only forced upon the State, but was also readily taken advantage of by forgers.

2395Pliny, H.N. xxxi. 47; Columella, Re Rust. iii. 11, 9.
2396Etym. xv. 8, 16: cf. xix. 10, 16.
2397Pliny, H.N. xxxv. 170; Nonius, p. 445, 22.
2398Columella, Re Rust. ix. 1, 2; Vitr. i. 5, 8; Varro, Re Rust. i. 14, 4.
2399Vitr. ii. 8, 4; Varro, Re Rust. ii. 3, 6.
2400Columella, loc. cit.: paries crudo latere ac luto constructus. Cf. Caesar, Bell. Civ. ii. 9, of a floor, and ii. 15; also Vitr. ii. 1, 7; Pliny, H.N. xviii. 301.

2401Vitr. ii. 3, 3.
2402H.N. xxxv. 170 ff.
2403Vitr. vii. 1, 7 and 4, 2; Pallad. Agric. i. 19, 1 and 40, 2; Wilmanns, Exempla, 2793-94; Marini, Iscriz. ant. doliari, 942-944.

2404Cf. Wright, Celt, Roman, and Saxon ${ }^{4}$, p. 188.
2405Cf. Middleton, Remains of Ancient Rome, i. p. 59 (cut) = Archaeologia, li. pl. 1, fig. 5.
2406Marquardt, Privatalterthümer, p. 618.
2407Buckman and Newmarch, Roman Art in Cirencester, p. 64 ff .
2408Marquardt, Privatalterthümer, p. 618; Roach-Smith, Collect. Antiq. ii. p. 91.
2409Remains of Ancient Rome, i. p. 12: see also Archaeologia, xlix. p. 427, where it is pointed out that measurements of bricks form no guide to their date.

2410Loc. cit.
2411Jahreshefte (Beiblatt), i. p. 123.
2412ii. 3, 1.
2413This may be the origin of the foot-shaped stamp so common in Roman lamps and vases (see Blümner, Technologie, ii. p. 18).

2415Vitr. ii. 3. This passage with Pallad. Agric. vi. 12 and Isid. Etym. xix. 10, 16 are the loci classici on the subject.

2416Blümner, ii. p. 20, points out that there are very few instances of this, and perhaps Vitruvius' idea was not practical.

2417Middleton, Remains of Ancient Rome, i. pp. 12, 62.
2418See Roach-Smith, Illustr. Rom. London, p. 112.
2419xxxix. 61 ( ̇̇к п入ív $\theta \omega \nu$ ).
2420 Apud Non., p. 48 (s.v. suffundatum).
2421 De Div. ii. 47, 99.
2422Vitr. ii. 8, 18.
2423H.N. xxxv. 173.
2424Vitr. ii. 8, 17.
2425Ibid.
2426See Daremberg and Saglio, s.v. Aquaeductus; Middleton, Remains of Ancient Rome, ii. p. 323. 2427Suet. Aug. 28.

2428Borrmann, Die Keramik in der Baukunst (Durm's Handbuch d. Architektur), p. 51.
2429Roach-Smith, Collect. Antiq. iv. p. 11, pls. 5-6.
2430Nissen, Pompeian. Studien, p. 26; Mau-Kelsey, Pompeii, p. 36.
2431See Mau-Kelsey, Pompeii, p. 38.
2432Archaeologia, lii. p. 664.
2433Middleton, Remains of Ancient Rome, i. pp. 254, 301; id. in Archaeologia, xlix. p. 426.
2434See Dressel in C.I.L. xv. p. 9.
2435Mau-Kelsey, p. 38: but see Nissen, Pompeian. Studien, p. 59.
2436See Blümner, Technologie, iii. p. 146, where a good illustration is given.
2437Archaeologia, li. pl. 2, fig. 4; Middleton, op. cit. i. p. 55, fig. 6.
2438v. 10, 2.
2439See also on this subject Anderson and Spiers, Architecture of Greece and Rome, p. 137 ff .; Middleton, op. cit. i. p. 66, ii. p. 120, fig. 64.

2440See Middleton, op. cit. i. p. 62; Archaeologia, li. pl. 2, fig. 5.
2441Middleton, op. cit. i. pp. 12, 62.
2442Etym. xv. 8, 15; xix. 10, 15.
2443Henzen, Inscr. 6445, 7279-80.
2444Orelli, Inscr. 4190.
2445There are tiles in existence marked DOL . DELIC, i.e. (opus) doliare deliciare (Marquardt, Privatalterthümer, p. 619).

2446The arrangement is well illustrated on pl. 6 of Campana's Ant. opere in plastica (from Ostia).
2447Vitr. v. 9, 7; viii. 7, 1.
2448Brongniart, Traité, i. p. 374; Marquardt, Privatalterthümer, p. 620.
2449See Vitr. vii. 4, 2; Nissen, Pompeian. Studien, p. 65 ff.
2450Orelli, 1396: see Sitzungsber. d. Wiener Akad. Gesellsch. 1901, pt. 2, p. 13.
2451Caumont, Cours, ii. p. 182.
2452 Ibid. p. 184.
2453Brongniart and Riocreux, Mus. de Sèvres, i. p. 18.

2454Bull. Arch. Nap. 1853, pl. 14, p. 185.
2455Campana, Ant. opere in plastica, pl. 6.
2456For references to ornamental terracotta antefixes in Latin literature see below, p. 371; and cf. Livy, xxvi. 23, xxxiv. 4.

2457See for an account of these Von Rohden, Terracotten von Pompeii, p. 5; also Mau-Kelsey, Pompeii, p. 251.

2458Von Rohden, pl. 7, fig. 1, from the Casa dei Niobidi.
2459Ibid., pls. 5, 2, and 6, 1.
2460For examples of this type see B.M. Terracottas, D 66 (from Corneto), D 700 (from Cumae), and D 706 (from Capua).

2461Mau-Kelsey, Pompeii, p. 36.
2462Von Rohden, pls. 14-16; 18, fig. 1: cf. B.M. Cat. of Terracottas, D 699, from Pompeii.
2463Ibid. pls. 11-13.
2464Campana, Ant. opere in plastica, pl. 6.
2465Campana, pl. 6: cf. for the story Livy, xxix. 14, and Preller-Jordan, Röm. Mythol. ii. p. 55.
2466Archaeologia, xiv. pl. 13, p. 64: cf. Brongniart, Traité, i. p. 367.
2467Middleton, Remains of Ancient Rome, i. p. 181, ii. p. 121 ff.
2468vii. 4, 2.
2469See Middleton in Archaeologia, lii. p. 663, for a general discussion of the subject; also RoachSmith, Collect. Antiq. vi. p. 122.

2470Roach-Smith, Collect. Antiq. iii. pl. 26, p. 114; Illustr. Rom. London, p. 115.
2471Marquardt, Privatalterthümer, vii. p. 620.
2472Ep. 90, 25 (xiv. 2).
2473Ep. ii. 17, 23.
2474So also in the Roman villa at Woodchester (Wright, Celt, Roman, and Saxon ${ }^{4}$, p. 198).
2475Middleton, op. cit. ii. p. 113 ff.; id. in Archaeologia, li. pl. 3.
2476Roach-Smith, Collect. Antiq. ii. p. 21, pl. 8, figs. 1-2.
2477C.I.L. vii. 1250; Roach-Smith, Ill. Rom. Lond. p. 114, fig. 3.
2478C.I.L. vii. 1238.
2479Archaeologia, lii. pl. 20.
2480vii. 4, 2.
2481Roach-Smith, Collect. Antiq. vi. p. 125. Cf. Arch. Journ. viii. p. 30 ff. for another example from Hadstock, Essex.

2482Archaeologia, lii. p. 666.
2483Cf. Vitr. loc. cit.
2484Middleton, Remains of Ancient Rome, ii. p. 123.
2485See Daremberg and Saglio, s.v., and cf. Vitr. viii. 7, 1; Isid. Etym. xv. 8, 17; xix. 10, 29.
2486C.I.L. x. 4842.
2487viii. 7, 1.
2488H.N. xxxi. 57.
2489viii. 7, 10.
2490Mon. Antichi, i. pl. 6, p. 326.
2491See Lanciani in Atti dell' Accad. dei Lincei, Ser. 3, iv. (1879-80), p. 399 ff.

2492Avolio, Fatture di argille in Sicilia, p. 8.
2493See generally Blümner, Technologie, iii. p. 161 ff.; Middleton, Remains of Ancient Rome, i. p. 80.

2494Archaeologia, li. pl. 3.
2495Buckman and Newmarch, Roman Art in Cirencester, p. 64.
2496H.N. xxxv. 165; xxxvi. 188: cf. Geoponica, ii. 27, 5; Pallad. i. 9, 4; Cato, Agric. xviii. 7; Vitr. vii. 1, 4 ; Columella, i. 6,13 ; viii. $15,3,17,1$;ix. $1,2$.

2497Middleton, op. cit. ii. p. 121, fig. 65.
2498Cf. Buckman and Newmarch, Roman Art in Cirencester, p. 49 ff.
2499Vitr. vii. 1, 4; Pliny, H.N. xxxvi. 184; Stat. Silv. i. 3, 54.
2500Archaeologia, xxvi. pl. 44, p. 370.
2501Roach-Smith, Ill. Rom. Lond. p. 113.
2502C.I.L. vii. 1223-24.
2503Ibid. 1222 (in B.M.); others from Brecon and Abergavenny.
2504C.I.L. vii. 1225.
2505The inscribed tiles found in Rome have been collected and published by Dressel in vol. xv. (part 1, Nos. 1-2155) of the Corpus Inscr. Lat. Others are published in the other volumes under the heading "Instrumentum Domesticum." In the succeeding pages Dressel's account has been mainly followed.

2506See Hübner, Exempla Script. Epigr. Lat. p. lxviii.
2507C.I.L. xv. 19-29; 209, 1145; 709; 1212; 398.
2508Cat. of Terracottas, E 148-49.
2509Opus doliare is the invariable word for bricks or tiles in Roman inscriptions, figlinum being confined to pottery of the finer kind (cf. p. 330).

2510Cassiodorus, Variar. i. 25: cf. ii. 23.
2511C.I.L. xv. 1668-70.
2512Cf. C.I.L. xv. p. 204, Nos. 1616, 1627, etc.
2513Middleton, Remains of Ancient Rome, i. p. 13.
2514C.I.L. xiv. 4089, 7, from Ostia.
2515Ibid. 4090, No. 14.
2516C.I.L. xv. 478 ff.: cf. 683, and Ann. dell' Inst. 1840, p. 240.
2517Ibid. 677-82.
2518Ibid. 389.
2519B.M. Cat. of Terracottas, E 150.
2520E.g. Wilmanns, Exempla Inscr. Lat. 2793 a.
2521See Blanchet, Mélanges Gallo-romaines, ii. (1902), p. 110.
2522See Steiner, Cod. Inscr. Rom. Danubii et Rheni, i. p. 85, No. 190, ii. p. 187, No. 1231.
2523C.I.L. vii. 1255, 1257.
2524 Ibid. 1242.
2525Cf. C.I.L. xv. p. 274.
2526C.I.L. xv. 1097-1101, and see p. 275.
2527Marini, Iscriz. ant. doliari, 1418.
2528C.I.L. xv. 1539.

2529Ibid. 1540, 1542.
2530Ibid. 1668-70.
2531Steiner, op. cit. i. p. 252, No. 541 (from Mainz); also Bonner Jahrbücher, ii. p. 92.
2532Steiner, i. p. 75, No. 171; ii. p. 248, No. 1373.
2533C.I.L. iii. p. 962; Wiener Sitzungsberichte, xiv. (1855), p. 133.
2534C.I.L. ibid.
2535Steiner, ii. p. 254, No. 1391.
2536Now in Pesth Museum (C.I.L. ibid.).
2537C.I.L. vii. 1260.
2538Ibid. 1259; Victoria County Hist. of Hants, i. p. 282 (q.v. for other examples).
2539Cat. p. 73, No. 56; Ephem. Epigr. vii. (1892), p. 344.
2540C.I.L. ii. 4967, 31: cf. Victoria County Hist. of Hants, i. p. 275.
2541E.g. B.M. E 149: see p. 354.
2542See Dressel in C.I.L. xv. p. 10.
2543Steiner, Cod. Inscr. Rom. Danub. et Rheni, ii. p. 253, No. 1389.
2544C.I.L. xv. p. 5 ff. For epigraphical and grammatical peculiarities see ibid. p. 7. On p. 204 is given a list of emperors whose names are found on the tiles, from Trajan to Septimius Severus.

2545See for these abbreviations and expressions C.I.L. xv. p. 387.
2546B.M. E 152.
2547C.I.L. xiv. 4089, 1.
2548C.I.L. xv. 3, 4, xiv. 4089, 4.
2549Cat. p. 73, Nos. 60-3.
2550C.I.L. vii. 1235; Roach-Smith, Collect. Antiq. i. p. 143: see also Journ. Brit. Arch. Assoc. xxxix. p. 389.

2551Numerous examples of these legionary stamps will be found in Steiner's Codex Inscr. Rom. Danubii et Rheni (1851); they will presumably be republished in the forthcoming part of vol. xiii. of the Latin Corpus.

2552C.I.L. xiv. 4090, 2.
2553C.I.L. vii. 1225.
2554See generally C.I.L. iii. Suppl. 1, for Dacia, Pannonia, and the East; for Germany, Steiner, op. cit. passim, and Bonner Jahrbücher, index to vols. 1-60.

2555C.I.L. vii. 1228.
2556Ibid. 1231: see Roach-Smith, Ill. Rom. London, p. 116.
2557Wilmanns, Exempla, 2804.
2558C.I.L. iii. 3756.
2559Steiner, ii. p. 250, No. 1379.
2560Marini, Iscriz. ant. doliari, No. 1382; Wilmanns, Exempla, 2805 b.
2561C.I.L. vii. 1226; Roach-Smith, Ill. Rom. London, p. 112; Blanchet, Mélanges Gallo-romaines, ii. p. 110.

2562Vitr. iv. 6.
2563Campana, Ant. opere in plastica, p. 31.
2564S.v. Antefixa or Impluvium.
2565Ep. ad Att. i. 10.

2566B.M. D 543, 576, 594; Röm. Mitth. 1886, p. 173; Notizie degli Scavi, 1901, p. 188.
2567Cat. 501-660. It has been stated, but on what authority is unknown, that they were found in a well near the Porta Latina, together with a series of statues discussed below (p.373).

2568A collective publication of these reliefs is being prepared by the German Archaeological Institute.

2569See Helbig's Führer ${ }^{2}$, ii. pp. 272, 408 ff.
2570Cf. Pliny, H.N. xxxvi. 189: Agrippa in thermis figulinum opus encausto pinxit: see also Vol. I. p. 119.

2571See B.M. Cat. of Terracottas, p. xvii.
2572Von Rohden, Terracotten von Pompeii, pl. 20: see also pls. 21, 23.
2573D 626-27: cf. Jahreshefte, 1903, p. 25.
2574Ant. opere in plastica, pl. 14.
2575Hauser, Neuattische Reliefs, pp. 111, 128.
2576B.M. D 520, 527; Campana, pls. 47-8.
2577B.M. D 583-85; Campana, pls. 61, 62: cf. the Arretine krater, Fig. 219, p. 488.
2578B.M. D 561; Campana, pls. 27, 41.
2579B.M. D 501; Campana, pls. 1-2.
2580Campana, pl. 3.
2581B.M. D 505; Campana, pl. 18.
2582B.M. D 507; Campana, pl. 19.
2583B.M. D 508-9; Campana, pl. 10.
2584B.M. D 510-24; Campana, pls. 9-10, 15, 53, 88, 102-3.
2585Helbig 1459 = Overbeck, Kunstmythol. Atlas, pl. 16, 8.
2586Campana, pls. 7-8, 13, 16-7.
2587B.M. D 531: cf. Campana, pls. 29-30.
2588B.M. D 525; Campana, pl. 50: see J.H.S. xxiii. p. 295.
2589See for these B.M. D 526, 534-52.
2590Campana, pls. 26, 31, 35-7, 43-6.
2591B.M. D 553-60.
2592B.M. D 569-79: cf. J.H.S. vii. p. 284.
2593B.M. D 566-68; Campana, pls. 86 ff.
2594Campana, pl. 55; Helbig, 1179.
2595Campana, pls. 20-4; Helbig, 1180.
2596B.M. D 592-605; Campana, pls. 56-58, 63-65, 68; Helbig, 1188.
25970therwise interpreted, Helbig, Führer², ii. p. 418.
2598B.M. D 606-609; Campana, pls. 66-67, 71-73; Helbig, 1190, 1456.
2599B.M. D 611-617; Campana, pls. 74-81.
2600B.M. D 624-632; Campana, pls. 89-96; Helbig, 1466; and see Jahreshefte, 1903, p. 16 ff.
2601B.M. D 633-638; Campana, pls. 114, 115.
2602Plutarch, Vit. Num. viii. 8.
2603 Sat. xi. 116.
2604iv. (v.), 1, 5.

2605H.N. xxxiv. 34; and see xxxv. 158.
2606iii. 2 (3), 5.
2607De Div. i. 10, 16.
2608xxvi. 23.
26090vid, Fast. i. 202; Seneca, Cons. ad Helv. 10, 7: cf. Ep. 31 (iv. 2, 11).
2610Pliny, H.N. xxxv. 159; Plut. Vit. Num. 17.
2611Pliny, H.N. xxxv. 154.
2612Ibid. 155.
2613Ibid. 156.
2614Livy, xxxi. 4.
2615Cf. Pliny, H.N. xxxv. 155.
2616Helbig, Führer, ii. p. 272, No. 1177.
2617Cat. D 439.
2618Froehner's Cat. No. 249.
2619B.M. Cat. of Terracottas, D 431-437, and see ibid. p. xiii; also Smith, Nollekens and his Times, i. p. 10 .

2620Pottier, Statuettes de Terre Cuit, p. 233.
2621Von Rohden, Terracotten von Pompeii, pl. 29, p. 18, 21; Pottier, op. cit. p. 230.
2622Von Rohden, pl. 32.
2623Ibid. pls. 34-35.
2624Ibid. pl. 19, fig. 2.
2625Ibid. pl. 25: cf. pl. 26.
2626Ibid. pl. 24, 2.
2627H.N. xxxv. 153.
2628Ibid. 156.
2629Ibid. 155: see also on this subject Wickhoff, Roman Art, English edn., p. 42; Blümner, Technologie, iii. p. 190; Gardner, Handbook of Gk. Sculpture, p. 33.

2630Cf. Von Rohden, op. cit. p. 24.
2631 Ibid.: cf. also pls. 35-36, 41, 47. For the subject of the feeding of the prisoner cf. Classical Review, 1901, p. 93.

2632Ibid. pl. 42, pp. 25, 53.
2633xiv. 178.
2634Ibid. 176, 182.
2635Ibid. 171.
2636ii. 70: cf. Lactant, Div. Inst. ii. 4.
2637iii. 15.
2638Lampridius, Vit. 25.
2639i. 10, 23 and 11, 46: cf. Warde Fowler, Roman Festivals, p. 272.
2640De fer. rom. 31 (Teubner edn. p. 105); but see Marquardt, Staatsverwaltung, iii. p. 563.
2641Sat. i. 10, 23.
2642Cf. the ceremony of the Argei on the Ides of May (Preller-Jordan, Röm. Mythol. ii. p. 135).
2643Sat. i. 11, 46-49: cf. Preller-Jordan, loc. cit.

2644Sat. i. 11, 1.
2645Cf. Seneca, Ep. 12 (i. 12, 3), and other references given by Blümner, Technol. ii. p. 125.
2646Spartianus, Vit. Hadriani, 17.
2647Id. Vit. Carac. 1.
2648Orelli, Inscr. Lat. 4279, 4191.
2649Suet. Claud. 16, Nero 28; Gellius, ii. 3, 5, v. 4, 1.
2650Dio Cass. lix. 6; Gell. ii. 3, 5.
2651Tert. Apol. 12 and ad Nat. i. 12; the Greek word is кóv $\alpha \beta$ o̧: see Vol. I. p. 111.
2652iv. 15.
2653Von Rohden, pls. 36-45.
2654Ibid. p. 21, fig. 14.
2655Op. cit. p. 22: see also Pottier, Statuettes de Terre Cuite, p. 235.
2656Fernique, Praeneste, pp. 166, 211 ff.
2657Paris, Élatée, p. 156.
2658Röm. Mitth. 1886, p. 176: cf. Archaeologia, 1. pls. 8, 9.
2659Wright, Celt, Roman, and Saxon ${ }^{4}$, p. 281.
2660.Victoria County Hist. of Norfolk, p. 291.

2661Cat. p. 71, Nos. 39, 46; p. 70, No. 30.
2662Handbook of British Pottery, 1893, p. 77.
2663Figurines en Argile (1859): see for abstracts Roach-Smith in Collect. Antiq. vi. p. 48 ff., and Pottier, Statuettes de Terre Cuite, p. 236.

2664 Rev. Arch. xi. (1888), p. 145 ff .
2665Mémoires de la Soc. Nat. des Antiquaires de France, li. (1891), p. 65 ff., with a supplement in vol. lx. (1901), p. 189 ff.

2666Op. cit. lx. p. 197.
2667Cat. of Terracottas, E 48-49: cf. Tudot, pl. 9, and Roach-Smith, Ill. Rom. Lond. p. 109.
2668See the lists given by Tudot (p. 64) and Blanchet (p. 83).
2669Pl. 3: other examples in pls. 4-14.
2670See Chapter XXIII. and Pottier, Statuettes de Terre Cuite, p. 241.
2671See the tables given by Blanchet, p. 115.
2672Blanchet, p. 89. For avot see also p. 384.
2673For a complete list of Gaulish sites on which statuettes were made, see Blanchet, Mélanges Gallo-romaines, ii. (1902), p. 90 ff.

2674Op. cit. lx. p. 204.
2675Op. cit. lx. pp. 206, 234.
2676Rev. Arch. xv. (1890), p. 423 (from Dijon); for a list, see Blanchet, op. cit. li. p. 96.
2677Orelli, Inscr. Lat. 2776.
2678Blanchet, op. cit. plate, fig. 1; Rev. Arch. xi. (1888), p. 155, pl. 6.
2679Roach-Smith, Collect. Antiq. vi. p. 228 ff., pls. 46-47.
2680 Guildhall Mus. Cat. p. 71, No. 32. See also for Britain generally, Cumbd. and Westmd. Ant. Soc. Trans. xv. p. 505.

2681Roach-Smith, Collect. Antiq. vii. p. 63; Ill. Rom. Lond. p 109.
2682Op. cit. p. 106 ff.

2683See Blanchet, p. 120 ff .
2684Bell. Gall. vi. 17.
2685Cf. Heuzey, Figurines ant. du Louvre, pls. 2-4.
2686For a good example at Rouen see Blanchet, p. 167.
2687Cf. B.M. Cat. of Terracottas, D 229 ff.
2688See Roscher, s.v. Fecunditas.
2689Op. cit. lx. p. 198.
2690See p. 489.
2691Cf. Lafaye, Culte des divinités d'Alexandrie, p. 162 ff .
2692See Blanchet, op. cit. p. 143 ff.
2693See Von Rohden, Terracotten von Pompeii, pl. 27, p. 5.
2694Ibid. pl. 26.
2695Daremberg and Saglio, s.v. Lucerna, fig. 4607: see below, p. 396.
2696Re Rust. iii. 15.
2697ix. 6.
2698Antr. Nymph. 3, 14 ff. (Teubner).
2699Cat. of Terracottas, E 123-124.
2700See Journ. Brit. Arch. Assoc. xxxii. p. 65.
2701See also Daremberg and Saglio, s.v. Forma, fig. 3186.
2702Jahrbuch, 1901, p. 161 ff.: see also Daremberg and Saglio, s.v. Loculus.
2703Op. cit. p. 167. Cf. also for the form the $\Theta \eta \sigma \alpha v \rho o i ́ ~ a t ~ O l y m p i a . ~$
2704Op. cit. p. 166; Tudot, Figurines, pl. 48; Daremberg and Saglio, s.v. Loculus, fig. 4512.
2705Jahrbuch, 1901, p. 168.
2706Ibid. p. 170.
2707Cf. also Hor. Sat. ii. 6, 10.
2708Jahrbuch, loc. cit.
2709Miscellanies, p. 26.
2710Jahrbuch, 1901, p. 178 = C.I.L. xv. 6068.
2711Jahrbuch, 1901, p. 179; fig. 200.
2712See below, p. 428, and C.I.L., xv. 6502, 6608; also B.M. Nos. 329, 554.
2713Op. cit. p. 183 ff.
2714B.M. 488, 490; C.I.L. xv. 6610.
2715Jahrbuch, 1901, p. 185; C.I.L. xv. 6073: cf. for the signature on lamps, ibid. 6274, and B.M. 477.

2716See on this subject throughout Babelon, Traité des monnaies grecques et romaines, i. p. 955 (with full bibliography).

2717Numism. Journal, ii. pp. 58, 195.
2718Hill, Greek and Roman Coins, p. 157; Victoria County History, Northants, i. p. 198.
2719See Daremberg and Saglio, ii. s.v. Forma, for an account of the process.
2720Daremberg and Saglio, loc. cit., fig. 3187.

Introduction of lamps at Rome-Sites where found-Principal parts of lamps-Purposes for which used-Superstitious and other uses-Chronological account of forms-Technical processes-Subjects-Deities-Mythological and literary subjects-Genre subjects and animals-Inscriptions on lamps-Names of potters and their distribution-Centres of manufacture.

## BIBLIOGRAPHY

Bartoli, Le antichi lucerne sepolcrali; Antichità di Ercolano, vol. viii.; Kenner, Die antiken Thonlampen des k.-k. Münz- und Antiken-Cabinetes zu Wien, 1858; Wieseler in Göttinger Nachrichten, 1870 (Kestnersche Sammlung); La Blanchère and Gauckler, Cat. du Musée Alaoui, 1897; Daremberg and Saglio, Dict. des Antiqs, iii. art. lucerna (an admirable résumé by Toutain); Fink in Sitzungsber. d. Münchener Akad. d. Wissensch. 1900, p. 685 ff.; C.I.L., passim, s.v. Instrumentum Domesticum, but above all vol. xv. pt. 2, p. 782 ff. (Dressel).

Lamps (lucernae) were often made of terracotta, and these are in many ways of special interest. Originally they appear to have been called lychnus, from the Greek $\lambda$ v́ $\chi \nu 0 \varsigma$, and this word is used by Ennius, Lucilius, Lucretius, and Virgil. ${ }^{[2721]}$ Varro ${ }^{[2722]}$ says that the word lucerna, from lux, was invented when the want of a Latin word was felt, and that previously candelae or torches had been alone in use, there being no oil known in Italy suitable for this purpose. Even in Greece lamps were comparatively rare all through the best period (cf. Vol. I. p. 106). The oldest lamps found in Rome date from the third century B.C., and are thought to be of Campanian fabric; they were found on the Esquiline, and are of quite different character from the ordinary Roman types. ${ }^{[2723]}$ It would appear, therefore, that originally the Romans borrowed lamps from Southern Italy. By the time of the Empire their use had become general, and they are found everywhere. The increase in their manufacture was mainly due to growing taste in house decoration, and also to use in funeral ceremonies and for public purposes, such as illumination. Of the latter use in imperial times there is plenty of evidence (see below, p. 396).
The sites on which Roman lamps have been found are far too numerous to discuss in detail, as they embrace every part of the Roman Empire. In Rome and the neighbourhood they are especially plentiful, as is implied by the fact that a large portion of the fifteenth volume of the Latin Corpus Inscriptionum is devoted to those with potters' stamps alone. They are found in all parts of Italy, in Gaul, Germany, Britain, Spain, North Africa, Sicily, Greece, Egypt, Cyprus, and Asia Minor. The question of centres of manufacture is discussed elsewhere (p. 427) in connection with the potters' stamps; but it may be noted that those found on Greek soil are often of a distinct character from those of Western Europe, and the stamps on them form a distinct group, being usually in Greek letters (cf. Vol. I. p. 108). Of provincial sites, Knidos, Ephesos, Carthage, and some of the German towns have proved particularly rich in this respect. Large numbers have been found in London, mostly of the later types, some perhaps of local fabric, and those in the Romano-British collection of the British Museum are nearly all from that city or from Colchester. Not the least remarkable fact of their wide distribution is the occurrence in the most widely separated regions of the same potter's stamps and the same subjects, implying in the former case extensive export from one centre, in the latter systematic commercial intercourse between the potters of different districts.

The principal parts of a Roman lamp ${ }^{[2724]}$ are: (1) the reservoir or body, which contained the oil (infundibulum); (2) the flat circular top, known as the discus, sometimes with an ornamented rim (margo); (3) the nozzle, with a hole for the insertion of the wick (rostrum, ${ }^{[2725]}$ nasus, myxus ${ }^{[2726]}$; the wick was called ellychnium); (4) the handle (ansa, manubrium), which was not indispensable. In the discus was a filling-hole for pouring in the oil, sometimes protected by a cover or stopper, and sometimes a second smaller hole, the purpose of which has been disputed (see p. 406). The number of nozzles was not limited, though there is usually only one; a lamp with two is known as bilychnis ${ }^{[2727]}$; one with several, as polymyxus. Martial in one of his epigrams says: "Though I illuminate whole banquets with my flame, and have so many nozzles (myxos), I am known as a single lamp." ${ }^{[2728]}$ The wicks were made of a plant known as verbascum $\varphi \lambda$ ó $\mu \mathrm{o}$ ¢ or thryallis, ${ }^{[2729]}$ but tow, papyrus, and sulphur were also employed ${ }^{[2730]}$; the oil was a vegetable oil of some kind. Sometimes the lamps were provided with a sort of snuffers or tweezers for extracting and trimming the wick, ${ }^{[2731]}$ as described in a passage in the Moretum (10 ff.), which speaks of drawing out the wick of a dying lamp with a needle:

Admovet his pronam submissa fronte lucernam,
Et producit acu stuppas humore carentes
Excitat et crebris languentem flatibus ignem.
The purposes for which lamps were used by the Romans were various, but fall under three main heads: (1) for purposes of illumination in private houses, in public buildings, or on occasions of rejoicing; (2) as offerings in temples; (3) as funerary furniture.
In small houses they were placed either in niches in the walls or on brackets, or were suspended by chains, or even in some cases hung by the handle from a nail. An Etruscan terracotta lamp bears evidence of having been suspended in the last-named manner, ${ }^{[2732]}$ but there is no doubt that this was more usual with lamps of bronze, there being few in terracotta which would have admitted of such a use. Sometimes the lamps were made resting on a kind of support, as is the case with two in the British Museum, and others found in Africa. ${ }^{[2733]}$ On the support a figure of a deity was usually
modelled in relief. ${ }^{[2734]}$ Combinations of a lamp and altar are not uncommon, especially at Rome and Naples. ${ }^{[2735]}$ There are numerous examples from Pompeii and Herculaneum illustrating their use in private life, although lamps of clay are confined to the poorer houses or to domestic service. For their use in the bedchamber at night evidence is afforded by Martial and other writers. ${ }^{[2736]}$ A rough classification of the existing terracotta lamps might be made by dividing them into-(1) those with knobs for hanging, (2) those with handles for carrying, (3) those without handles for placing on tables or brackets.

Many passages in Latin writers afford evidence for the use of lamps in processions or for illuminations at times of public rejoicings, such as triumphs. They were thus used by Cleopatra, at the triumph of Julius Caesar, at the return of Nero, and so on. ${ }^{[2737]}$ Caligula had theatrical representations performed by lamp-light at night, and Domitian arranged hunts and gladiatoral combats ad lychnuchos. ${ }^{[2738]}$ Severus Alexander lighted up the baths with oil-lamps, ${ }^{[2739]}$ and Tertullian speaks of assisting in political triumphs by defrauding the day with the light of lamps. ${ }^{[2740]}$ Juvenal also speaks of their use in illuminations. ${ }^{[2741]}$ Many lamps, especially those with subjects relating to the circus or games, are inscribed with the word SAECvL(ares), and it is possible that they were used in connection with the Ludi Saeculares, at which illuminations took place. But lamps with this inscription are not exclusively ornamented with such subjects. ${ }^{[2742]}$
Lamps were used for burning in temples, and were also the subject of votive offerings to the gods, in Greece as well as in Italy. One found at Oenoanda in Lycia was offered "to the most high God" ${ }^{[2743]}$; and those which Sir Charles Newton found in such large numbers at Knidos (Vol. I. p. 108) were also votive offerings in the temenos of Demeter. Votive lamps are recorded from Selinus, ${ }^{[2744]}$ and at Carthage numbers were found round the altar of Saturnus Balcaranensis. ${ }^{[2745]}$ To their use in the worship of Isis, as referred to by Apuleius, we allude below.
Nearly all lamps have been found in tombs, the custom of placing them there being one of Asiatic, not of Greek, origin; it became quite general under the Roman dominion. Christian lamps are found in the catacombs, but not in cemeteries, showing that the practice came to be regarded as pagan. At Avisford in Sussex they were found placed in open bowls with handles, on brackets along the side of a tomb. ${ }^{[2746]}$ The Roman lamps found in tombs were placed there, like the Greek vases and the later glass, for the use of the dead, sometimes, though not necessarily, with the idea of their burning perpetually. ${ }^{[2747]}$ An inscription on a sepulchral cippus in the British Museum ${ }^{[2748]}$ directs the heirs of the deceased to place a lighted lamp in his tomb on the Kalends, Nones, and Ides of each month, and similarly L. Granius Pudens of the seventh cohort requests that his family should place oil in a lamp on his birthday. ${ }^{[2749]}$ Another inscription in an elegiac couplet says: "Whosoever places a lighted lamp in this tomb, may golden earth cover his ashes." ${ }^{[2750]}$ A fourth inscription directs the daily offering of a lamp at the public expense to the manes of a deceased person. ${ }^{[2751]}$ In the story of the matron of Ephesus, told by Petronius, a servant-maid is described as replenishing the lamp in a tomb as often as was required. ${ }^{[2752]}$ Two lamps in the Athens Museum have the subject
 placed there with some significance, and as, on the evidence of a Cilician inscription, Phobos was regarded as a guardian of tombs who frightened off robbers and other evilly-disposed persons, it may be that the terrible bear was placed on the lamp as a symbol of this protector of the dead. ${ }^{[2753]}$
Other superstitious uses of lamps, not connected with the tomb, were not uncommon. Omens were drawn from the way in which the flame burned, ${ }^{[2754]}$ and Chrysostom describes a method of naming children by giving names to lamps, which were then lighted, and the name of the child was taken from that last extinguished. ${ }^{[2755]}$

There are also a few other exceptional uses of lamps, as for instance when they were given as strenae, or New Year's presents. Such lamps usually have a figure of Victory holding a shield, on which are the words ANNVM NOVVM FAVSTVM FELICEM, "A happy and prosperous New Year!" ${ }^{[2756]}$ In the field are heads of Janus, or cakes, wreaths, and other objects also probably intended for presents. These all appear to date from the beginning of the first century after Christ. ${ }^{[2757]} \mathrm{A}$ lamp of the same class in the Guildhall Museum has on the shield FIILICTII, Felic(i)t(as). ${ }^{[2758]}$ It is interesting to note that the New Year lamps are found in tombs ${ }^{[2759]}$; they may, of course, have been preserved and buried as mementoes; but at the same time, it is not essential that the subject on a lamp should have any relation to its purpose, as we have seen in the case of those inscribed Saeculares. ${ }^{[2760]}$ The Helioserapis lamp (see p. 403) and those with Phobos as a bear may, indeed, be instances to the contrary, but on the whole it would seem that the same rule would apply as in the case of the terracottas (see Vol. I. p. 122).
The earliest Roman lamps are of rude shape, undecorated, with a long projecting nozzle and circular reservoir; they are not always provided with handles, but are often covered with black glaze, like the Greek examples. Lamps of this type are found on the Esquiline, in North Africa, as at Carthage, and in Sicily. ${ }^{[2761]}$ One of the Esquiline examples, dating from the second century, has the engraved inscription VEVCADIA (Fig. 202). ${ }^{[2762]}$ Like the Greek lamps, these are made on the wheel ( $\tau \rho о \chi$ и́ $\lambda \alpha$ тои), not, as later ones, in a mould. Names in graffito seem to imply a reference to the person


FIG. 202. LAMP FROM THE ESQUILINE. in whose tomb the lamp was found, and such formulae as AVE, NOLI ME TANGERE, NII ATTIGAS NON SVM TVA M - SVM, PONE FVR ("Drop it, thief!"), which occur on the Esquiline lamps, also clearly refer to funeral usage. ${ }^{[2763]}$
In the first century B.C. the lamps, still mostly of black ware, and devoid of subjects, are distinguished by the straight-ended, concave-sided nozzle 20 _nozzle with a shallow groove leading to the centre, small grooved ring-handle, and sometimes a lateral projection like a fin,


FIG. 203. "DELPHINIFORM" LAMP.


FIG. 204. LAMP WITH VOLUTENOZZLE; FIRST CENTURY B.C.
from which some varieties are known as "delphiniform" (Fig. 203). ${ }^{[2764]}$ These are often found in North Africa, but are also imported into Italy, and some have Greek stamps. The top is sometimes covered with globules, or with patterns of vine and ivy, and in the later examples figure-subjects are introduced. ${ }^{[2765]}$ The earlier ones have large single letters or monograms underneath for potters' marks; the later, the name of the potter or superintendent of the pottery.
We now come to the Roman lamps of the Imperial period, of which such large numbers exist in museums all over Europe and the basin of the Mediterranean. They have not as yet been very systematically studied and classified; but so far as the subject has been treated at all, those who have investigated the development of the forms are fairly unanimous in their general conclusions. ${ }^{[2766]}$ The last writer on the subject, Herr Fink, of Munich, has advanced a step further, and by comparison of forms with potters' signatures has arrived at some interesting results, which we need not hesitate to accept in the main. ${ }^{[2767]}$ He adopted as the basis of his classification the form of the nozzle in each case, for the obvious reason that it is more essential to the character of a lamp than the handle; if the latter is removed, the form is in no way affected, as it would be by the absence of the nozzle.
Following, then, on the lines of Fink and the other writers, we may establish-apart from abnormal forms and lamps modelled in the shape of figures-four main classes, which are sufficient to include practically all the lamps with which we have to deal. They may be summarised as follows:
(1) Lamps with rounded nozzle or nozzles, flanked on each side by a kind of double volute, as in Fig. 204 and B.M. 167-352. The usual number of nozzles is one, but two are not infrequently found. These belong to the first century b.c., and, being convenient forms for a decorated top, are ornamented with all kinds of subjects ${ }^{[2768]}$; the handle when present is often ornamented as in the cut.
(2) Lamps of the same type as the last, except that the nozzle ends in an obtuseangled termination, as Fig. 205 and B.M. 94-166. It is a form not adapted for more than one nozzle, and usually has no handle. ${ }^{[2769]}$
(3) A small but distinct class, almost devoid of figured decoration (Fig. 206 and B.M. 379-392), but usually with a potter's name underneath; the form is elegant, and probably copied from bronze. ${ }^{[2770]}$ The chief feature is the sunk centre, in which is usually placed a Bacchic or comic mask; round it runs a raised rim, through which a shallow groove passes to the somewhat elongated nozzle. This dates from the first century of the Empire or earlier, some being found with coins of Augustus, others at Pompeii; these lamps are of red clay, unglazed, and have no handle. On the sides are projecting knobs, either concealing the joins of the moulds (see p. 405), or for the attachment of chains. The names of the makers, Strobilus, Communis, Fortis, etc., are in good raised letters, impressed in the mould (see Fig. 210). They are found in all parts, but rarely south of Rome; most of them are from Gallia Cispadana, ${ }^{[2771]}$ and they may have been made at Mutina.


FIG. 207. LAMP WITH SMALL
PLAIN NOZZLE; SECOND CENTURY AFTER CHRIST.


FIG. 208. THIRDCENTURY TYPE OF LAMP.
(4) In this class (Fig. 207 and B.M. 393-567) the nozzle is small, and hardly projects beyond the rim of the lamp; it is semicircular or heartshaped in form, and sometimes has an incised line or circles at the base. Fig. 208 represents a late development with the heart-shaped nozzle, in which the design is always surrounded by a wreath or ornamental pattern. Many of these lamps, especially those found in Greece (see Vol. I. p. 108), have no handle; there is also a somewhat late variety, described on the same page, which is confined to Greece and marked by potters' signatures in Greek letters (B.M. 604-629). These lamps date from the time of Trajan onwards; the signatures are usually abbreviated, and are stamped hollow, or sometimes scratched in the wet clay; raised letters are rare. The subjects are very varied.
Some of the larger lamps in the first class, especially those with more than one nozzle, have a flat vertical projection attached to the top of the handle, triangular in form or crescent-shaped (as in Fig. 204), and this is often ornamented with figures in relief, either whole subjects or busts of deities, or such simple motives as a pair of dolphins, a leaf, or a palmette. The figure-subjects are often quasi-Egyptian, such as Harpocrates and Safekh on a British Museum example (No. 337 = Plate LXIII. fig. 3), or a lectisternium of Sarapis, Isis, Helios, and Selene. ${ }^{[2772]}$ In a few cases this projection is replaced by a bust or even a seated figure of Sarapis enthroned in a niche. But in most cases the handle, when present, is of a simple form, either a ring with shallow parallel grooves or a solid projecting piece through which a hole is pierced.


FIG. 205. LAMP WITH POINTED VOLUTENOZZLE; FIRST CENTURY B.C.


FIG. 206. LAMP WITH GROOVED NOZZLE (NORTH ITALY TYPE); FIRST CENTURY AFTER CHRIST.


Roman Lamps of Various Forms (First Cent. B.C.)
(British Museum).

Lamps of terracotta often assume, like those in bronze, ${ }^{[2773]}$ a more ornamental form, being modelled partly or wholly in the form of figures, heads, animals, and so on. In some cases the upper part or discus only is modelled, assuming the form of a mask-Satyric, theatrical, or grotesque. ${ }^{[2774]}$ Among the entire-figures which form lamps occur Artemis, ${ }^{[2775]}$ Eros, ${ }^{[2776]}$ Victory slaying a bull,[2777] and various animals; more common are heads of Zeus Ammon, ${ }^{[2778]}$ Pan, Seilenos, ${ }^{[2779]}$ negroes, ${ }^{[2780]}$ and animals such as oxen, birds, snails, frogs, or tortoises. ${ }^{[2781]}$ A favourite shape is a lamp in the form of a foot or a pair of feet, shod in sandals or boots, ${ }^{[2782]}$ and there are two lamps in the British Museum, one of enamelled ware, in the form of a gladiator's helmet ${ }^{[2783]}$; others form fruit, pinecones or crescents. ${ }^{[2784]}$ In the lamps which are modelled in the form of a head, the chin usually forms the nozzle, and the orifice for filling is on the forehead; in those in the shape of a foot the nozzle is formed by the great toe. Occasionally lamps are found in the form of a ship, recalling that which, according to Apuleius, was used in the worship of Isis: a golden boat or cup (cymbium, see Vol. I. p. 186), which shone with a clear light and sent forth a long flame. ${ }^{[2785]}$ An interesting commentary on this use of lamps is formed by a remarkable example in the British Museum (Plate LXIII. fig. 1), ${ }^{[2786]}$ which is not only in the shape of a boat, but is decorated with subjects referring to the pseudo-Egyptian cults characteristic of Rome in the late republican and early imperial period. This lamp, which is no less than twenty inches long and has numerous holes for wicks along the sides, was dredged up from the sea at Pozzuoli, where it may originally have been in the temple of Isis and Sarapis. On it is the inscription EYワ^OIA, signifying "a prosperous voyage," perhaps as a prayer on behalf of the donor, and underneath are the words $\triangle A B E$ ME TON HAIOCEPAГIN, "Receive me, Helioserapis," by which the name of the vessel may be intended.

Most lamps had only one wick, but the light which they afforded must have been feeble, and consequently the number was often increased. When the number is not large, or when the body is circular (as in Plate LXIII. fig. 4), they project beyond the rim of the lamp, as in Class I. already described, but the lamps which have a large number are usually boat-shaped or rectangular in form (see Plate LXIII.), and the nozzles do not then project, but are ranged along the sides, merely indicated by separate moulding underneath. ${ }^{[2787]}$ Occasionally a conglomeration of small lamps was made in a row or group, but even in these cases the illumination given must still have been feeble. The average size of a lamp is from three to four inches in diameter across the body, the length depending on the form of the handle and nozzle, but averaging about an inch over the diameter, and they are mostly about an inch in height. The top of the lamp is almost always circular in form, occasionally oval, and rarely rectangular, ${ }^{[2788]}$ and is usually slightly depressed, being thus shaped to enable any overflow of oil to run down through the filling-hole. Many Greek lamps, and Roman lamps from Greek sites, such as Cyprus, are convex above, with a small moulded disc on the raised centre, in which is the hole. These are either devoid of decoration, or only have an ornamental pattern or a frieze of figures on a small scale. Usually the subject is enclosed within a plain moulded rim, but in the later examples (Class IV.) especially it is more contracted in extent, and surrounded with a border of ornament, such as the egg-pattern or a wreath of some kind (see Fig. 208).

Christian lamps, which hardly come within the scope of this work, vary very little in form; they have ovoid instead of circular bodies, a plain rounded nozzle, and a small solid handle, and the design is always encircled by a band of ornamental pattern or symbolical devices. ${ }^{[2789]}$

The clay of which the lamps are made is usually of a red colour, due to the presence of red ochre (rubrica), but it varies both in quality and tone according to localities; those from Greek sites, such as Athens and Corfu, are often of a pale buff colour, those from Cyprus a light reddish brown, and so on. Martial refers to the red clay of Cumae, ${ }^{[2790]}$ a place where lamps are sometimes found, and those from Naples are usually of a dull brown or yellow colour. Lamps found in France and England are often imported from Italy, and therefore of the ordinary red clay, but those of local manufacture are of a white or yellowish tone.
The earliest undecorated examples are made on the wheel, as are those from the Esquiline and from Carthage, in which the decoration is only incised; but subjects in relief required a different technique. Occasionally they are modelled by hand, but we find that from the first century b.c. onwards they are almost invariably made in moulds, modelled from a pattern lamp, in a harder and finer clay than the pattern. ${ }^{[2791]}$ The mould was divided into two parts, adjusted by mortices and tenons, which, in the opinion of some writers, explains the lateral projections visible on certain varieties; the lower part formed the body of the lamp, the upper the decorated discus. The two parts seem to have been marked by corresponding letters to avoid errors, and there are two or three


FIG. 209. MOULD FOR LAMP FROM CATANIA (BRITISH MUSEUM). lower lamp-moulds in the British Museum from Ephesos and elsewhere, marked with an A on the under side for this purpose. ${ }^{[2792]}$ Other examples of moulds have been found in Greece, Italy, and Africa, ${ }^{[2793]}$ and there are also specimens both for the upper and lower half in the Guildhall Museum. ${ }^{[2794]}$ They were either of terracotta or plaster.
The clay was impressed into the mould with the fingers, the figured decoration being applied by means of models or stamps, as with the Arretine ware (see below, p. 439), and the ornamental patterns probably produced with a kind of wheel or running instrument, as in Roman pottery (p. 441). Signatures in relief were taken from the mould, those in hollow letters were impressed in the lamp itself from a stamp before baking. Important potteries must have possessed a large number of moulds; for instance, at Rome alone ninety-one different subjects are found on the lamps of one potter (L. Caecilius Saevus), eighty-four on those of C. Oppius Restitutus, fifty-one on those of Florentius, and there must of course have been many more now lost. It is clear that the same types were used by different potters; the models must, therefore, have been handed about from one to another, each potter merely adding his own name.
The two portions of the mould were joined while the clay was moist, and pared with a tool, and the orifice for filling was then pierced. Glaze, when used, was applied before the baking, for which only a moderate temperature seems to have been required; this process followed as soon as the clay was dry. In some lamps a small hole or slit may be observed, which some have thought to be for the pin with which the wick was extracted, ${ }^{[2795]}$ but it is more probable that it was for a piece of wood which held the top and bottom of the mould together until the clay was united; it was usually covered over before the baking, and may have taken the place of the knobs already spoken of which occur in other forms. The lamps were baked in batches, placed closely together or superimposed, ${ }^{[2796]}$ and it sometimes happens that a number are found united together which had coalesced firmly in the furnace, as in Sir Charles Newton's excavations at Knidos.

Subjects are first found on lamps in the second century b.c., though these are quite of a simple character. Lamps of this date from North Africa ${ }^{[2797]}$ have such designs as an altar and fruit, a vase, or a caduceus, a head of an ibis, or a nude incised figure of Tanit; others have merely a wreath round the centre, and these apparently belong to the first century b.c. ${ }^{[2798]}$ The number of figures is generally small, it being contrary to the principles of ancient art to crowd a work with minute figures and details. The majority of lamps have only one figure, and few beyond those of exceptional size have more than three. As a rule the treatment is careless and the figures very indistinct, but the lamps with Greek signatures (see Vol. 1. p. 108) form a notable exception.
It may be imagined that the lamp-maker sought to gratify the taste of his customers by ornamenting his ware with familiar subjects. Purchasers of terracotta lamps were, as has been noted, generally persons of inferior condition, and the subjects on the lamps are in many cases a popularising of well-known myths or even of works of art, such as the Venus types (p. 410) or the Maenads of the "new-Attic" reliefs (p. 411). The types of Victory and Fortune are reflections of statues of the period, and are repeated in many bronze statuettes. There are also, as we shall see, occasional references to literature. In Rome the stage exerted little influence, and subjects are rarely taken from the drama (masks are an exception); but the games of the circus and gladiatorial contests found a ready market, and form a large proportion of the designs. The subjects on the lamps, in fact, represent not so much the great masterpieces of art, as do coins or gems, but, like the Greek vases, the popular art of the day, and may be compared with the illustrations of the popular journals and magazines of our own time. On the whole, they are of great value to us as illustrating Roman life and religion, just as subsequently those on the Christian lamps are of inestimable importance for the light they throw on the early ages of our own religion.
As the number of published lamps and catalogues of collections is so very small, the subjects included in the following list are mostly confined to the collections in the British Museum, which are
quite sufficiently comprehensive for the purpose. ${ }^{[2799]}$ A few additional examples are given from the Guildhall, Vienna, and other collections, from the Antichità di Ercolano, Bartoli's Lucernae veterum sepulcrales, the Musée Alaoui, and other isolated sources. ${ }^{[2800]}$ References to Passeri's work, Lucernae fictiles Musei Passerii, have been avoided, as it has been shown by Dr. Dressel ${ }^{[2801]}$ that nearly all those published by him are false.
We proceed to note the principal subjects in detail, observing practically the same order that was adopted in describing the subjects on Greek vases. They may be roughly divided into eight classes:
(1) Olympian deities.
(2) Miscellaneous deities.
(3) Heroic legends, etc.
(4) Historical and literary subjects.
(5) Genre subjects.
(6) Animals.
(7) Inanimate objects.
(8) Floral and decorative devices.

The Olympian deities are not often represented, some not at all, except on a lamp in the Kestner collection at Göttingen, which has busts of all the twelve ${ }^{[2802]}$; they are not, however, clearly distinguished by attributes. Zeus is represented with Hera and Athena, the three Capitoline deities of Rome, whom the Etruscans knew as Tinia, Thalna, and Menerfa, the Romans as Jupiter, Juno, and Minerva. ${ }^{[2803]}$ He also appears alone, seated on his throne, ${ }^{[2804]}$ but more commonly his bust only is represented (Plate LXIV. fig. 4), accompanied by his eagle, which perches on a thunderbolt, sometimes conventionally rendered. ${ }^{[2805]}$ The eagle and the thunderbolt also appear alone, ${ }^{[2806]}$ or the former with Ganymede. ${ }^{[2807]}$ A bearded horned mask may be intended for Dionysos, but is more probably Zeus Ammon. ${ }^{[2808]}$ Sarapis is sometimes enthroned, with Cerberus at his side ${ }^{[2809]}$; sometimes only his bust occurs, surmounted by the usual kalathos ${ }^{[2810]}$; Cerberus is also found alone. ${ }^{[2811]}$ Hera, except in the instance mentioned, does not occur. A very interesting lamp from Salamis, Cyprus, now in the British Museum, represents the contest of Athena and Poseidon for the possession of Attica ${ }^{[2812]}$; it is doubtless a reminiscence of the Parthenon west pediment, though rough and indistinct in execution. Athena is also seen as a single figure, ${ }^{[2813]}$ seated, or standing in the usual Promachos attitude, or before an altar, or pursuing a panther ${ }^{[2814]}$; her head or bust are not uncommon. ${ }^{[2815]}$ Apollo is usually represented seated, playing on his lyre, or with the Gryphon at his side ${ }^{[2816]}$; Artemis appears as a huntress, accompanied by her hound, or drawing an arrow from her quiver. ${ }^{[2817]}$ A lyre or a crescent appearing alone may be the symbols of these two deities. ${ }^{[2818]}$ There are one or two possible instances of Hephaistos and Poseidon, ${ }^{[2819]}$ and Demeter may be indicated by a pair of torches ${ }^{[2820]}$; the latter also appears in her chariot, seeking for Persephone. ${ }^{[2821]}$ Ares or Mars is found either as a single figure, ${ }^{[2822]}$ in a chariot, ${ }^{[2823]}$ or playing with Eros, who steals his armour. ${ }^{[2824]}$ Hermes appears as a single figure, or accompanied by a sheep, goat, or cock ${ }^{[2825]}$; in one instance he presents a purse to Fortune, who is accompanied by Herakles. ${ }^{[2826]}$ A common subject is his bust, along with his attributes of the purse and caduceus ${ }^{[2827]}$; the latter attribute, accompanied by two hands joined, may also have reference to this deity. ${ }^{[2828]}$ Aphrodite occurs but rarely; she is either represented accompanied by lions, ${ }^{[2829]}$ or riding on a goat, ${ }^{[2830]}$ or at the bath or toilet, ${ }^{[2831]}$ or in the Cnidian type, ${ }^{[2832]}$ all these types being probably reproductions of known works of art. She is also accompanied by Eros, who assists in arming her; this type is known as Venus Victrix, and is seen in a group of Aphrodite and Eros in the Louvre. ${ }^{[2833]}$
More common than all the Olympian deities put together is Eros or Cupid, who appears in all sorts of attitudes and actions, besides those already mentioned. ${ }^{[2834]}$ He sits on a chair or reclines on a couch, ${ }^{[2835]}$ or is represented in motion, carrying a hare ${ }^{[2836]}$ or a bird, a dish of fruit or a branch of vine or palm, a cup, situla, or torch ${ }^{[2837]}$; or plays on the lyre, flutes, or Pan-pipes ${ }^{[2838]}$; or sacrifices a pig, or pours wine into a krater. ${ }^{[2839]} \mathrm{He}$ rides on a donkey, ${ }^{[2840]}$ a dolphin, or a crocodile, ${ }^{[2841]}$ or sails in a boat ${ }^{[2842]}$; plays with a chained lion,,${ }^{[2843]}$ or is himself tied to a tree. ${ }^{[2844]} \mathrm{He}$ is represented in the character of Ares, armed with spear and shield; or in that of Dionysos, with cup and thyrsos; or of Herakles, whose club he carries; also, probably in the character of Herakles, he shoots at a serpent. ${ }^{[2845]} \mathrm{He}$ is also associated with Psyche, ${ }^{[2846]}$ and two Erotes sometimes appear together, in one instance in the character of gladiators fighting, in another of boxers. ${ }^{[2847]}$ One of the most remarkable lamps in the Museum collection (No. 168) represents a number of diminutive Erotes playing with the club and cup of Herakles; it is unfortunately fragmentary, but another example in Dresden gives the complete design. ${ }^{[2848]}$ One plunges head-foremost into the cup; three others raise the club with difficulty from the ground, one supporting it with his back, and a fifth, hovering in the air, pulls at it with his hands. In front of the last-named are the words adivate sodales, "Help, comrades!"

Dionysos is another surprisingly rare figure on the lamps, though his followers, the Satyrs and Maenads, have their full share of representation. He occurs as a single figure of youthful appearance, ${ }^{[2849]}$ and also with his panther, to which he offers his kantharos to drink from ${ }^{[2850]}$; his mask or head may also be recognised. ${ }^{[2851]}$ Pan is occasionally found, ${ }^{[2852]}$ in one case in the form known as Aegipan (see p. 60) in company with Echo, ${ }^{[2853]}$ in another as a grotesque bust. ${ }^{[2854]}$ There is also an instance of Marsyas hung up for his punishment to the branch of a tree. ${ }^{[2855]}$ A pastoral deity playing flutes on the handle of a lamp in the B.M. (No. 366) may be either Pan or Marsyas. Satyrs are represented seizing Maenads, ${ }^{[2856]}$ dancing, drinking, and playing on the Pan-pipes, ${ }^{[2857]}$ or carrying cups and wine-skins, ${ }^{[2858]}$ or with a goat ${ }^{[2859]}$; both the bearded and beardless types are found, and their masks or busts are also common. ${ }^{[2860]}$ The shaggy-haired Papposeilenos is occasionally represented. ${ }^{[2861]}$ Maenads are depicted dancing, in frenzied attitudes, or sacrificing
kids; the type is often that of the "new-Attic" reliefs, derived originally from Scopas, of the Maenad Xıцкıрочóvos. ${ }^{[2862]}$ Their heads and masks also occur. ${ }^{[2863]}$

PLATE LXIV.


Roman Lamps with Mythological and Literary Subjects
(British Museum).

Among the minor deities we find that Helios and Selene (Sol and Luna) are often depicted together, ${ }^{[2864]}$ or Selene alone, ${ }^{[2865]}$ or else their busts together, ${ }^{[2866]}$ or separately ${ }^{[2867]}$; in one case there is a simple representation of the solar disc for Helios. ${ }^{[2868]}$ A curious subject in the British Museum collection is apparently a combination of the Christian "Good Shepherd" with Helios and the crescent for Selene. ${ }^{[2869]}$ Asklepios and Hygieia occur in rare instances, ${ }^{[2870]}$ and there is an example of Charon in his boat. ${ }^{[2871]}$ Of marine deities and monsters, Triton or Proteus, wearing the pileus or mariner's cap, ${ }^{[2872]}$ Scylla, ${ }^{[2873]}$ and a Nereid riding on a sea-monster (Plate LXIV. fig. 1) ${ }^{[2874]}$ are found. The popularity of exotic religions at Rome is testified to by the occurrence, on the one hand, of Kybele with her lions, ${ }^{[2875]}$ and Atys ${ }^{[2876]}$; on the other, of Egyptian deities such as Sarapis, already mentioned, and Harpocrates, who is found either alone, or with Isis, or with Isis and Anubis, ${ }^{[2877]}$ or with Safekh (Plate LXIII. fig. 3) ${ }^{[2878]}$; Isis and Horus, and busts of Hermanubis and Isis are also found. ${ }^{[2879]}$ On the handle of a lamp is a lectisternium with busts of Sarapis and Isis, and of Helios and Selene. ${ }^{[2880]}$ The busts of the two Kabeiri also occasionally appear. ${ }^{[2881]}$ Among personifications or quasi-personifications we find the three Charites or Graces ${ }^{[2882]}$ and a Muse with lyre ${ }^{[2883]}$; others are all typically Roman, such as a bust of Africa on a lamp from Carthage, ${ }^{[2884]}$ and such types as Abundantia ${ }^{[2885]}$ (or two cornucopiae as her symbol ${ }^{[2886]}$ ), Vertumnus, ${ }^{[2887]}$ Fortune with her steeringoar and cornucopia, ${ }^{[2888]}$ and Victory. ${ }^{[2889]}$ Many of these seem to be reflections of bronze statuettes of the Roman period. ${ }^{[2890]}$ The latter goddess is frequently found, bearing a wreath, a trophy, or a shield, ${ }^{[2891]}$ sometimes reclining or in a chariot ${ }^{[2892]}$; or again between two Lares ${ }^{[2893]}$; or two Victories are grouped together. ${ }^{[2894]}$ Of special interest are what are known as the New Year lamps, given as strenae on January 1st (see p. 398), ${ }^{[2895]}$ on which Victory is represented holding a shield, on which is inscribed an aspiration (see p. 420) for a happy New Year, the head of Janus, cakes, coins (stipes), and other emblems filling in the rest of the design (Plate LXIV. fig. 5). ${ }^{[2896]}$
Occasionally the inscription is varied, and appears as "For the safety of the state"[2897] or "Happiness" simply. ${ }^{[2898]}$ Two Lares confronted, holding cornucopia, etc., are also found without Victory. ${ }^{[2899]}$ Of representations of Phobos (Fear) we have spoken already (see p. 398). There are also representations of terminal deities, ${ }^{[2900]}$ as well as unidentified goddesses. ${ }^{[2901]}$
Coming now to the heroes and heroic legends, we find that they play on the whole an inconsiderable part in the list of subjects on lamps. Leda is represented with the swan, ${ }^{[2902]}$ and the Dioskuri sometimes appear as busts ${ }^{[2903]}$; also Kastor as a full figure, accompanied by his horse. ${ }^{[2904]}$ Of the labours of Herakles we have the Nemean lion, ${ }^{[2905]}$ the Erymanthian boar, ${ }^{[2906]}$ the hydra, ${ }^{[2907]}$ and the slaying of the serpent in the Garden of the Hesperides, ${ }^{[2908]}$ as well as the combat with a Centaur ${ }^{[2909]}$ and the freeing of Prometheus. ${ }^{[2910]} \mathrm{He}$ is also represented as a single figure, holding the apples of the Hesperides, ${ }^{[2911]}$ leading kids, ${ }^{[2912]}$ or with a jug or drinking-cup, ${ }^{[2913]}$ or his head alone (both bearded and beardless types). ${ }^{[2914]}$ Theseus slays the Amazon Andromache ${ }^{[2915]}$; Perseus is represented carrying the Gorgon's headd ${ }^{[2916] ;}$ Bellerophon is seen fallen from his horse Pegasos, or leading him to drink at Peirene ${ }^{[2917]}$; there are also possible representations of Kadmos and Meleager. ${ }^{[2918]}$ Europa is depicted on the bull ${ }^{[2919]}$; Endymion asleep ${ }^{[2920]}$; Aktaeon devoured by his hounds ${ }^{[2921]}$; Telephos suckled by the hind ${ }^{[2922] ;}$ and Eos pursuing Kephalos. ${ }^{[2923]}$ Icaros in his attempted flight is watched by Minos from the walls of Knossos (Plate LXIV. fig. 2). ${ }^{[2924]}$ From the Theban legend we have only Oedipus before the Sphinx, ${ }^{[2925]}$ a scene from the Phoenissae of Euripides (see p. 415), and Amphion and Zethos seizing the bull for the punishment of Dirke. ${ }^{[2926]}$ Nor are scenes from the Trojan cycle much more common; but Achilles and Thetis are represented, ${ }^{[2927]}$ and also Achilles dragging the body of Hector round the walls of Troy ${ }^{[2928]}$; there is a curious scene, somewhat grotesquely treated, of Odysseus and Neoptolemos stealing the bow of

Philoktetes, who fans his wounded foot ${ }^{[2929]}$; Ajax is seen grieving after his madness ${ }^{[2930]}$; and Aeneas carries off his aged father and his son from Troy. ${ }^{[2931]}$ Odysseus appears before Kirke, ${ }^{[2932]}$ passing the Sirens, ${ }^{[2933]}$ and offering a cup to Polyphemos, ${ }^{[2934]}$ but sometimes also without the Cyclops. Orestes appears at his trial before Athena in the presence of a Fury. ${ }^{[2935]}$ A Centaur is seen carrying off a woman, and in combat with a Lapith ${ }^{[2936]}$; also with a lion, ${ }^{[2937]}$ carrying an amphora, ${ }^{[2938]}$ or playing flutes. ${ }^{[2939]}$ An Amazon wounded, standing at an altar, and accompanied by a crane, are also among the list of subjects. ${ }^{[2940]}$ A single figure of Pegasos, ${ }^{[2941]}$ and the Gorgoneion or Medusa-head, ${ }^{[2942]}$ are not infrequently found. Combats of Pygmies and cranes, ${ }^{[2943]}$ and a Pygmy on a crocodile, ${ }^{\text {[2944] }}$ may also perhaps be included under this heading.
The next group of subjects includes those of a historical or literary character. In the British Museum there are two very interesting representations of Diogenes in his tub or pithos (see Vol. I. p. 152), presumably addressing Alexander, as in the well-known story, ${ }^{[2945]}$ but the latter is not represented (Plate LXIV. fig. 6).
Among portraits are busts of Aesop, ${ }^{[2946]}$ and various Roman personages, such as Hadrian, Antonia, Trajan, Marcus Aurelius, Septimius Severus, Commodus, Julia Domna, ${ }^{[2947]}$ Lucius Verus, ${ }^{[2948]}$ and others who cannot be identified. ${ }^{[2949]}$ A scene from the Phoenissae of Euripides occurs on one lamp, with the combat of the two brothers and the death of Jocasta; the name of the play is actually inscribed on the lamp. ${ }^{[2950]}$ With reference to Virgil's first Eclogue we find a representation of the shepherd Tityrus on a lamp found at Pozzuoli ${ }^{[2951]}$; the shepherd, whose name is given, is seated among his flocks. Several lamps illustrate the well-known fable of Aesop, of the Fox and Crow. ${ }^{[2952]}$ The fox, wearing a chlamys, stands on his hind-legs holding up a pair of flutes to the crow, which is perched on the top of a tree. Another subject, which doubtless has reference to some fable, is that of a stork holding in its beak a balance, in which a mouse is weighed against an elephant. ${ }^{[2953]}$ The humour of the subject lies in the fact that the mouse is seen to weigh the elephant down. These two are illustrated on Plate LXV. figs. 3, 6. There is also a lamp in the British Museum (Plate LXIII. fig. 2) with a curious subject which may either be a scene from a comedy like those on the South Italian vases, or else a parody of "a visit to Asklepios." ${ }^{[2954]}$
The subjects taken from ordinary life are eminently characteristic of the social life of Rome under the Empire. An almost inordinate proportion relate to the now popular gladiatorial shows, and many others deal with the events of the circus and arena. Of gladiatorial subjects there are three principal varieties, which occur again and again on lamps of all shapes and periods with little alteration. ${ }^{[2955]}$ One class represents a single gladiator in the characteristic armour, with visored helmet, greaves, and arm-guards, sword and shield ${ }^{[2956]}$; the next represents a combat of two (Plate LXV. fig. 5), in which the one is usually worsted and falls at the other's feet, his shield on the ground beside him. ${ }^{[2957]}$ An interesting example in the British Museum (No. 526) shows a mirmillo or secutor in combat with a retiarius, who fought with net and trident. The third series has representations of gladiatorial armour ranged in a circle: swords, shields, arm-guards, greaves, and helmets. ${ }^{[2958]}$


Roman Lamps with Miscellaneous Subjects
(British Museum).

From the circus and games we have such subjects as a naval contest in the amphitheatre ${ }^{[2959]}$; a bull-fight ${ }^{[2960]}$; a bestiarius contending with boars ${ }^{[2961]}$; a man leaping over a bull ${ }^{[2962] ;}$ and boxers. ${ }^{[2963]}$ A remarkable lamp in the British Museum (No. $164=$ Plate LXV. fig. 4) gives a representation of a chariot-race in the circus; we have the colonnade of latticed barriers (carceres) from which the chariots started, the spina down the middle of the course, adorned with shrines and obelisks, and rows of seats full of spectators; four chariots take part in the race. Next there are scenes such as an athlete crowning himself, a victorious charioteer in his quadriga, or a victory in the horse-race. ${ }^{[2964]}$ Of more miscellaneous character are such subjects as a chariot drawn by four men, a two-horse or
four-horse chariot by itself, or a man or boy on horseback. ${ }^{[2965]}$
Military subjects are at all times rare, but a not infrequent subject is a mounted warrior charging with a spear ${ }^{[2966]}$; a soldier is also depicted with a bird, ${ }^{[2967]}$ at an altar, taking an oath, and saluting an officer who rides past. ${ }^{[2968]}$ There are also representations of an imperator on his triumphal car, ${ }^{[2969]}$ of an eagle and standard, ${ }^{[2970]}$ and of a trophy perhaps commemorating a victory over barbarians. ${ }^{[2971]}$ A representation of a ship or galley is not uncommon, but sometimes it is not easy to distinguish these from the type of Odysseus and the Sirens. ${ }^{[2972]}$ Some lamps have landscapes in the style of Alexandrine reliefs and chased metalwork, as for instance a harbour surrounded by buildings, in which two fishermen pursue their vocation (Plate LXV. fig. 1), ${ }^{[2973]}$ or a hunter accompanied by a porter, with a town in the background. ${ }^{[2974]}$ Among pastoral scenes we have also, besides the Tityrus already mentioned, shepherds and goatherds with their dogs, tending sheep and goats which nibble the foliage of trees ${ }^{[2975]}$; fishermen, ${ }^{[2976]}$ and hunters, as already noted. Another interesting type is that of a juggler or mountebank accompanied by a dog and a cat, which climb ladders, jump through rings, and perform other tricks (Plate LXV. fig. 2). ${ }^{[2977]}$ Of a more miscellaneous character are such subjects as a butcher slaughtering animals hung from a tree ${ }^{[2978]}$; a fuller at work ${ }^{[2979]}$; a slave washing a dog, and another washing a statue ${ }^{[2980]}$; slaves carrying casks or fasces ${ }^{[2981]}$; a mule turning a mill. ${ }^{[2982]}$ Others, again, do not admit of any exact classification; such are a man and woman embracing; a woman scraping herself after the bath; a youth with a mortar; the sacrifice of a pig ${ }^{[2983]}$; a man riding on a camel or elephant, ${ }^{[2984]}$ or driving a camel ${ }^{[2985]}$; a dwarf in a boat or playing on a flute ${ }^{[2986]}$; comic actors, ${ }^{[2987]}$ and comic and tragic masks ${ }^{[2988]}$ innumerable; and two skeletons dancing. ${ }^{[2989]}$
Animals form a large proportion of the representations on lamps, ${ }^{[2990]}$ especially on the late class without handle from Knidos (Vol. I. p. 108), and include Gryphons, elephants, lions, panthers, boars, bears, wolves, deer, horses, oxen, sheep, goats, dogs, rabbits, eagles, storks, ostriches, ${ }^{[2991]}$ peacocks, ${ }^{[2992]}$ parrots, ${ }^{[2993]}$ cocks and hens, and other birds; dolphins, sea-horses, cuttle-fish and other kinds of fish, scorpions, ${ }^{[2994]}$ frogs, shell-fish, and so on. Those mentioned so far are single figures, merely decorative; in others there is more definite action. Such are a lion attacking a bull or crocodile, or seizing a hind or a donkey ${ }^{[2995]}$; two bears dancing ${ }^{[2996]}$; a monkey and vine ${ }^{[2997]}$; a dog on a couch, ${ }^{[2998]}$ fighting with a goose, or attacking a stag, ${ }^{[2999]}$ hind, or boar ${ }^{[3000]}$; two monkeys in a boat ${ }^{[3001]}$; a hare or rabbit nibbling at a plant ${ }^{[3002]}$; a bird on a twig, sometimes eating fruit ${ }^{[3003]}$; an eagle seizing a hare ${ }^{[3004]}$; an ibis and a serpent ${ }^{[3005]}$; a hen with chickens, cocks fighting, or a cock pursuing a hen ${ }^{[3006]}$; dolphins twisted round a trident or anchor; a crocodile and serpent; a lizard or sea-monster and eel; two serpents, sea-horses, or dolphins with an altar between ${ }^{[3007]}$; and a grasshopper eating grapes. ${ }^{[3008]}$
There are also a large number of lamps, the centre of which is only ornamented with some decorative motive, such as a carchesium (Vol. I. p. 188), situla, or krater, from which spring vinebranches, ivy, or other plants; an oinochoë, flask, or drinking-cup; palm-branches, wreaths of ivy, vine, oak, and myrtle, sprays of flowers; a cornucopia and caduceus, ${ }^{[3009]}$ or other emblems of deities, such as two hands joined with a caduceus behind them (see p. 410); scallop-shells; or purely conventional patterns, such as large four-leaved flowers, stars, and rosettes. The latter are mostly found on lamps from Greek sites, especially in Cyprus, and at Tarsus and Knidos. Many lamps have no decoration on the discus, but only comic masks round the edge, or a border of foliage.
The Christian lamps are as a rule easily to be distinguished from the pagan by their form, as well as by their subjects. These subjects are mainly taken from the Old Testament, from the life of our Lord, and from the sphere of symbolism; the Good Shepherd, the seven-branched candlestick, the cross or labarum, and the sacred monogram, are all favourites. ${ }^{[3010]}$

A considerable number of Roman lamps have inscriptions, either impressed in relief or hollow letters from a stamp, or engraved with a pointed instrument; the stamps were probably of bronze. Potters' signatures and trade-marks are always underneath the lamp, and those found on the top usually relate in some way to the subject. Sometimes, as in lamps from Pozzuoli and Naples, ${ }^{[3011]}$ the inscriptions are in relief on the surface, in small tablets. They may, however, be classified under four headings:-
(1) Inscriptions referring to the circumstances under which or for which the lamp was made, as, for instance, with reference to national events or public games, or for religious dedications.
(2) Inscriptions descriptive of the subjects.
(3) Acclamations or formulae addressed by the potter to the public.
(4) Signatures of potters or trade-marks; this class is by far the most numerous.

To the first class belong some of the formulae to which allusion has already been made (pp. 396, 398), such as those on the New Year lamps: annvm novvm favstvm felicem miti hic (or tibi, or to some person whose name is given); occasionally this is varied by formulae such as FILIICTII (for FELICITAs?), "Happiness (to you)!" ${ }^{[3012]}$ OB CIVES $\operatorname{SERV}($ atos $)$, "For the preservation of the state"[3013]; G $\cdot \mathrm{P} \cdot \mathrm{R} \cdot \mathrm{F}$, Genio populi Romani feliciter ${ }^{3014] ;}$ ex.s.C, "By the decree of the senate" ${ }^{[3015]}$; FIDES PVBLICA, "The public trust, ${ }^{[3016]}$ and the SAECVLI, SAECVLO, SAECVLARES group of inscriptions, ${ }^{[3017]}$ which may in a few cases refer to the Ludi Saeculares, but more probably are of similar import to the saEC(ulum) AV (reum) $\operatorname{DOM(ini),~"The~golden~age~of~our~lord,"~on~a~lamp~from~Antium.~}{ }^{[3018]}$ The last-named formula, it should be noted, is found both above and below the lamps. $\operatorname{LVCER}(n a) \operatorname{PV}(b) \operatorname{LICA}$ probably refers to the use of the lamp in some public illuminations (see p. 396). ${ }^{[3019]}$ A lamp in the Trier Museum ${ }^{[3020]}$ has the names of the consuls for the year 235 (Severus and Quintianus). Among names of deities for whose sanctuaries the lamps were intended are Venus (SACRVM VENERI, with a figure of
the goddess), ${ }^{[3021]}$ and the Ephesian Artemis (APTEMIC E中ECI』N). ${ }^{[3022]}$
Among the inscriptions relating to the subjects on the lamps are several which have already been mentioned, such as diogenes and titvrvs, and also GA(ny)medes over a figure of the same. ${ }^{[3023]}$ On a lamp representing the flight of Aeneas from Troy are the names aEn(eas), anc(hises), asc(anius), and the exclamation REX PIE, alluding to the former. ${ }^{[3024]}$ On another, which represents the fight of Eteokles and Polyneikes and the death of Jocasta, subjects taken from the Phoenissae of Euripides, occur not only the letters PVL for Polyneikes, but also PHo(e)niss(ae), leaving no doubt as to the source whence the scenes are taken. ${ }^{[3025]}$ Another in the form of Eros or a Genius with the club and lion-skin of Herakles, lying asleep, has on it the curious inscription AIA STLACIA TVRA DORMIT, STERNIT SIR $\ldots,{ }^{[3026]}$ the import of which is not quite clear. Similar inscriptions often occur in scenes from the circus or amphitheatre, giving the names of gladiators, as Afer, Helenus, Popillius, or Sabinus, ${ }^{[3027]}$ or of charioteers in the circus-races, as C. Annius Lacerta and the horse Corax, which won him a race for the white faction at the Secular Games ${ }^{[3028]}$; another lamp has the name of a horse or his driver, INCITATVS, and a third the exhortation VIG(i)LA PRASINE, ${ }^{[3029]}$ which may allude to a driver of the green faction. Over the figure of a warrior on a lamp from Carthage is Plvs Fecisses Si Plvs liceret, "You would have done more if you had had the chance." ${ }^{[3030]}$ In other cases there seems to be a revival of the old Greek fashion of apostrophising the figures as Kalos-e.g. aQvilo calos, axolmvs (c)ALOS. ${ }^{[3031]}$ There are also inscriptions put into the mouths of figures, as in the subject of Cupids with the club of Herakles, one of whom cries ADIV( $V$ )ATE SODALES, "Help, comrades!"[3032] or the funerary Genius weeping over an urn and saying, LVGEO, "I mourn." ${ }^{[3033]}$
To the third class belong such expressions as have, "Hail!"[3034]; VIVAS or valeas, "Long life!"; vtere, "Use this"[3035]; AVE ET VALE, "Greeting and farewell," on a lamp from Cologne ${ }^{[3036]}$; and on another from the same site, HAVE - MACENA • VILLIS • HAVE • LASCIBA • VALE, ${ }^{[3037]}$ which seems to have a somewhat coarse significance. Others allude to the future purchaser, as EME ME, "Buy me"[3038]; QVI FECERIT VIVAT et q(ui) emerit, "May the potter and purchaser flourish"; emite lvcernas ab asse colatas, "Buy lamps for an ass"[3039]; BONO QVI EME(rit), "May it be for his good who shall buy it." ${ }^{[3040]}$ The latter class are chiefly found in North Africa. Mention has already been made of the inscriptions on the Esquiline lamps, such as PONE FVR; these are not found on lamps of imperial times, and appear to be peculiar
 inscribed G • IVLIVS • ARTEMIDOR ... LVCERNAS • II • D D, "C. Julius Artemidorus makes a present of two lamps." ${ }^{[3042]}$ A very curious inscription is found written in ink on a lamp at Rome, to this effect: "Helenus delivers his name to the nether world; he carries down with him coins, a New Year's gift, and his lamp; let no one deliver him except us who have made them." ${ }^{[3043]}$

Potters' signatures are almost invariably to be found on the under side of the lamp, where they are arranged on the diameter at right angles to the axis of the lamp; sometimes they are placed in a panel or tablet, or within the outline of a foot. In rare instances they are found on the handle, or on the top. ${ }^{[3044]}$ Greek lamps which are not of Roman origin are never signed, nor are those of Christian origin; the oldest signatures are to be found on the Esquiline lamps, but they rarely appear before imperial times, when they become fairly general. Among these earlier instances are $\operatorname{PRAESE}\left(\right.$ ntis ${ }^{[3045]}$ and FL(a)BIA (Flavia), the latter found at Carthage. ${ }^{[3046]}$ More frequently, lamps of this kind have a single letter or monogram by way of stamp ${ }^{[3047]}$; a "delphiniform" lamp in the Musée Alaoui has a monogram of $A$ and $\Pi$. A single letter sometimes occurs above or below the inscription, which may be regarded as a sort of trade-mark indicating the potter (figulus), the full name being that of the officinator or master; on a lamp in the British Museum from Knidos (No. 132) the name ROMANE $(n)$ SIS is accompanied by the letter X; on another, fortis by the letter N . On the lamps signed by L• HOS • CRI, a Gaulish potter, are found the letters G, I, L, M, P, S, T, V, N, Z, and other signs. ${ }^{[3048]}$ These trade-marks are not confined to letters; Fortis uses a wreath and palm-branch, as in Fig. 210; L. Caecilius Saevus a palm-branch or a foot-shaped stamp; L. Fabricius Masculus the letters h and x , a wheel, or a star. ${ }^{[3049]}$ Other lamps have no name underneath, but some simple pattern, such as five circles in quincunx form, or the favourite device of the foot-shaped stamp (cf. p. 333). These varieties of marks were probably intended to distinguish different series in the products of a single pottery.


FIG. 210. UNDER SIDE OF LAMP WITH SIGNATURE OF FORTIS (BRIT. MUS.).

The signatures are usually abbreviated, the full form being ex officina (officinatoris), the name being consequently in the genitive. On a lamp from Rome is EX • OF • AIACIS, ex officina Aiacis. ${ }^{[3050]}$ Sometimes, but rarely under the Empire, the nominative is used: A.B. fecit, or more commonly A.B.f. Thus we have avgendi, atimeti, c . ivli nicephori, or asprenas, felix, trophimvs. But where a single name occurs it is rarely full enough to show the case. On a lamp at Dresden the potter Diomedes calls himself LVCERNARIVs. ${ }^{[3051]}$ From the second century down to the time of Augustus the name may be either in the nominative or genitive, either the praenomen and nomen, or the nomen or cognomen only; these signatures were all incised while the clay was moist. In the period represented by the third class (see p. 401) nearly all the signatures are cognomina simply, as atimeti, commynis, fortls, strobili, all in the genitive. In the fourth class, or lamps of the second century, the nominative is very rare; the names are usually abbreviated, and one (cognomen), two (nomen and cognomen), or three may be found. Potteries were, as we have seen, often owned by women, hence female names are not uncommon. Abbreviations of a particular name vary considerably; for instance, L. Caecilius Saevus appears as L • CAEC • SAE, L • CAE • SAE, L • CA • SAE (see below, p. 428); L. Fabricius Masculus as L • FABRIC • MASC, L • FABRIC • MAS, L • FABR • MASC, FABRIC • MAS, and so on. ${ }^{[3052]}$ Or the praenomen may vary, and for C • oppi • RES we find L • OpPI • RES; or, again, the cognomen, as in the case of C. Junius, where it may be Alexis, Bitus, or Draco, ${ }^{[3053]}$ or of L. Munatius, found with Adjectus, Restitutus, Successus, Threptus, and Philemo. ${ }^{[3054]}$ The variations in the names may denote potteries in connection, or successive holders of one business. In one instance the name of a workman PVLCHER occurs with that of Fabricius Masculus, in another that of PRIMvs with C. Oppius Restitutus. ${ }^{[3055]}$ Greek names, where they occur, seem to imply that the potters were freedmen, as in the case of Dionysius, Phoetaspus, and others.
The following list gives the names most frequently found, with the localities in which they occur ${ }^{[3056]}$ :-

Annius Serapiodorus (ANNI • SER): Rome, Ostia.
C. Atilius Vestalis (c • atili • vest): Rome, Italy, Gaul, Britain.

Atimetus: Italy, Gallia Narbonensis, Pannonia.
L. Caecilius Saevus (L•CAE•SAE): Rome, Southern Italy, Sicily, Sardinia, Gallia Narbonensis, Britain.

Clodius Heliodorus (clo • Hel): Italy, Africa, Spain, Gaul.
C. Clodius Successus (c • clo • svc): Rome, Gaul, Sardinia, Africa.

Communis: Rome, Pompeii, Gallia Cisalpina, Pannonia.
Crescens: Gaul, Pannonia.
L. Fabricius Masculus (L•FABR • MASC): Rome, Gallia Cisalpina, Africa.

Florentius (Florent): Rome, Italy, Sicily, Tunis, Gaul, Germany, Britain.
Fortis: Rome, Italy, Sicily, Dalmatia, Germany, Gaul, Britain.
Gabinia: Italy, Sardinia, Africa, Gaul.
L. Hospidius Crispus (L • HOS • CRI): Gaul.
C. Julius Nicephorus (C • IVLI - NICEP): Italy, Gaul.
C. Junius Alexis: Rome, Campania, Sicily, Sardinia, Africa.
C. Junius Bito: Italy, Sicily, Gaul.
C. Junius Draco: Rome, Italy, Sicily, Sardinia, Africa, Gallia Narbonensis.
L. Mar. Mi.: Rome, Campania, Sicily, Spain, Gallia Cisalpina.
L. Munatius (with various cognomina): Rome, Africa.
N. Naevius Luc. (N • NAEv • LVC): Italy, Sardinia, Spain, Gaul.
M. Novius Justus (M • Nov • IvST): Rome, Naples, Sicily, Sardinia, Africa, Gallia Narbonensis.
C. Oppius Restitutus (c • oppi •es): Rome, Italy, Sicily, Sardinia, Africa, Gallia Narbonensis, Cyprus.

Passenus Augurinus (pas •AVG): Italy, Gaul.
Phoetaspus: Italy, Gaul, Pannonia.
Strobilus: Rome, Italy, Africa, Pannonia, Dalmatia, Gaul, Britain.
Vibianus: Gaul, Pannonia.
C. Viciri Agathopus (c • viciri • AGAT): Italy, Sardinia, Gallia Cisalpina.

It will be noted that nearly all are found at Rome, but that the others fall into geographical groups; the same name is seldom found both in the north and south of the Empire. Thus Fortis is not found in Africa, Oppius Restitutus only rarely in Gaul. Certain names are entirely localised, as Annius Serapiodorus at Rome and Ostia, L. Hos. Cri. and Marcellus in Gaul, Q. Mem. Kar. and Pudens in Sardinia. The name of Vindex, a maker of terracotta figures at Cologne (see above, p. 383), is found on lamps at Trier and Nimeguen. ${ }^{[3057]}$
The distribution of the Fortis lamps in particular is remarkable. They have been found in several places in Gallia Cisalpina, such as Aquileia ${ }^{[3058]}$; at Lyons, Aix, Orange, and elsewhere in France ${ }^{[3059]}$; at Nimeguen in Holland ${ }^{[3060]}$; at Trier, Cologne, Mainz, and Louisendorf in Germany ${ }^{[3061]}$; in London ${ }^{[3062]}$; in Spain ${ }^{[3063]}$; and over the region of Dacia, Pannonia, and Dalmatia, ${ }^{[3064]}$ as well as in Rome and Italy. ${ }^{[3065]}$ The most natural conclusion to be drawn from these results is that the majority of the lamps seem to have been made in Italy, and it has been thought probable that there were three principal centres of fabric whence exportation went on in different directions-Rome and its environs, Campania for the lamps found in Southern Italy, Africa, and the Mediterranean, and Gallia Cisalpina for those found in Central Europe. ${ }^{[3066]}$ It has also been suggested that the last-named fabric centred in Mutina (Modena) and that this was the place where the lamps of Class III. (see p. 401) were chiefly made. ${ }^{[3067]}$ Outside Italy there may well have been manufactures in North Africa, where lamps are so plentiful, and in Gallia Narbonensis, to which region some signatures are peculiar. Evidence of a lamp-manufacturer in Africa seems to be afforded by the mention of praedia Pullaenorum in an inscription from Tunis, ${ }^{[3068]}$ the lamps of Pullaenus occurring in Sardinia and Africa. Local fabrics of very poor lamps were doubtless numerous.
A certain number of Roman lamps have Greek signatures, not differing in character but only in alphabet from the Latin inscriptions. The most curious instance is that of KEACEI ПOMПEEI for Celsi Pompeii, which is found on lamps in Southern Italy ${ }^{[3069]}$; Поипıגíov is also found at Naples,
 Vol. I. p. 108), occur on some found in Italy. ${ }^{[3070]}$ In Sicily we find the signatures of Apollophanes of Tyre (АПО^^OФAN TYPIO) at Himera and Proklos Agyrios (ПРОК^ AГYP) at Gela and Cataniaa ${ }^{[3071]}$; 'Pŋ́rえou for Regulus occurs at Tarentum. ${ }^{[3072]}$ Greek names are often found in Cyprus, ${ }^{[3073]}$ and conversely a large number of lamps found at Knidos by Sir Charles Newton bore the signature ROMANE ( $n$ ) ᄅI己, in Latin letters with the S reversed, apparently suggesting that the lamps were made by a Roman abroad. ${ }^{[3074]}$ Greek signatures are even found in Gaul and Germany. ${ }^{[3075]}$
Mention must also be made here of the recent researches of Herr Fink ${ }^{[3076]}$ with the object of ascertaining the chronological succession and general distribution of the signatures on lamps of the Imperial period. Starting with the four main classes of forms which have already been laid down as the basis ${ }^{[3077]}$ (the distinction resting mainly on the various forms of the nozzle), he has obtained, by comparison chiefly of the lamps in the British Museum, Berlin, and Munich collections, the following interesting results.
Certain stamps appear to be peculiar, or almost peculiar, to each class: thus, in Class I. only, we find P. Cessius Felix and L. Munatius Successus; in Class II. only, L. Fabricius Masculus; in Class III. only, Atimetus, Fortis, Phoetaspus, and other single cognomina; in Class IV., which contains by far the larger number of stamps, Clodius Helvidius, C. Junius Bitus, ${ }^{[3078]}$ L. Munatius Threptus, and C. Cornelius Ursus. The lamps of the Gaulish potter L. Hospidius Crispus are all of one peculiar form, a transition between Fink's I. and IV. ${ }^{[3079]}$ Cross-instances are very rare, but C. Junius Draco is found in Classes I. and IV., C. Oppius Restitutus in Classes II. and IV., Florentius and Celsus Pompeius in Classes III. and IV. It is also interesting to note that there are lamps in Class IV. with the Christian monogram and the figure of the Good Shepherd. In Class I., generally speaking, signatures are very rare; in Class III. they are almost invariable, but the total number of lamps is relatively small. Another curious result is that certain signatures, such as L. Caecilius Saevus, Bassus, Cerialis, Sextus Egnatius Aprilis, and Romanensis, are not confined to one type of lamp, but in these cases it is to be noted that each type has a variation of signature: thus, in Class I., L-CAEC•SAE; in II., L•CAE•SAE; in III., L•CA•SAE; while in IV., L•CAE•SAE occurs no less than 140 times.

His conclusions are that one workshop did not necessarily set itself to produce only one form, but that the differences in form are merely due to changes of fashion. In Class I. Greek technical instincts are still strong as regards form and choice of subjects, but in ornament the taste of Southern Italy prevails; the subjects are mainly mythological. In Class II. the typically Roman motives appear: gladiators, combats, and hunting-scenes; this form, according to Fink, is more developed than Class I. Evidence which has been obtained from Regensburg shows that Class III. belongs to the time from Augustus to Hadrian, and, as we have seen, it is chiefly confined to the north of the Apennines. Where provincial potteries can be traced, as at Westerndorf and at Westheim in Bavaria, the lamps are usually of this form, but it was doubtless imitated in Italy. Form IV. is essentially Italian, but is also found in Central Europe, and is evidently of late date.

2721See Macrobius, Sat. vi. 4, 18. Lucilius uses this word and lucerna in the same line.
2722L.L. v. 119.
2723Ann. dell' Inst. 1880, p. 265 ff.: see below, p. 399.
2724Cf. Dressel in C.I.L. xv. p. 784.
2725Pliny, H.N. xxviii. 163.
2726The corresponding Greek word was $\mu v ́ \xi \alpha$.
2727Petronius, Sat. 30 (Teubner edn. p. 21); Orelli, Inscr. 3678.
2728xiv. 41.
2729Pliny, H.N. xxv. 121.
2730Moretum, 11; Pliny, H.N. xix. 17, xxviii. 168, xxxv. 175.
2731La Blanchère and Gauckler, Mus. Alaoui, p. 193, Nos. 487-88; Ant. di Ercolano, viii. pl. 52.
2732Daremberg and Saglio, s.v. Lucerna, p. 1335, fig. 4605.
2733No. 393 and Cat. of Terracottas, C 421 (Plate IV. fig. 4); Mus. Alaoui, No. 484.
2734B.M. Nos. 2, 393.
2735C.I.L. xv. 6609-10; Daremberg and Saglio, fig. 4607; Ant. di Ercol. viii. pl. 12: see also p. 387.
2736Epigr. xiv. 39; Moretum. 10 ff.
2737Plutarch, Ant. 26; Suetonius, Vit. Caes. 37; Dio Cass. 63, 4.
2738Suet. Calig. 18; Domit. 4.
2739Lampridius, Vit. 24.
2740Apol. 35: cf. ad uxorem, ii. 6.
2741xii. 92.
2742Cf. C.I.L. xv. 6221; and B.M. Nos. 476, 506, 507, 534, 535.

2744Notizie degli Scavi, 1894, p. 205.
2745Mélanges de l'École franç. de Rome, xii. (1892), p. 116 ff.
2746Roach-Smith, Collect. Antiq. i. pl. 44, p. 123.
2747Cf. Roach-Smith, Ill. Rom. Lond. p. 111, and C.I.L. vi. pt. 4, No. 30102 (semper vigilet lucerna nardo).

2748Ellis, Townley Gallery, ii. p. 250.
2749Orelli, 4416.
2750C.I.L. x. 633 (from Salerno).
2751 Ibid. ii. 2102.
2752Sat. 111 (Teubner ed. p. 77).
2753See Athen. Mitth. 1902, p. 257 ff.; and cf. Amer. Journ. of Arch. 1903, p. 344.
2754Virg. Georg. i. 390; Apul. Metam. ii. 28.
2755Homil. in Ep. ad Cor. i. 12 (Pusey's Library of the Fathers, p. 164).
2756Cf. C.I.L. ii. 4969, 3; x. 8053, 5; xv. 6196-210: see also pp. 413, 420, and Plate LXIV. fig. 5.
2757 Ibid. xv. p. 785.
2758Cat. p. 47, No. 26.
2759Cf. C.I.L. ix. 6081, 1.
2760See also the lamps from the altar of Saturnus Balcaranensis (Daremberg and Saglio, iii. p. 1339).

2761B.M. 27-30, 67, 68; Ann. dell' Inst. 1880, pl. O; Mus. Alaoui, pl. 34, Nos. 6-12, pp. 147-48.
2762See Ann. dell' Inst. 1880, p. 275.
2763C.I.L. xv. 6631, 6900 ff.; Ann. dell' Inst. 1880, p. 315.
2764B.M. 25-26; C.I.L. xv. part 2, plate, No. 2; Daremberg and Saglio, s.v. Lucerna, p. 1323.
2765Cf. Mus. Alaoui, pl. 34, p. 149, Nos. 17-8: see also B.M. 69-82.
2766See Dressel in C.I.L. xv. p. 782 ff.; Toutain in Daremberg and Saglio, art. Lucerna; Fink, Formen u. Stempel röm. Thonlampen, in Sitzungsberichte d. Münchener Akad. 1900, p. 685 ff.

27670n the evidence yielded by the potters' signatures see also below, p. 428.
2768See the examples given on Plates LXIV.-LXV.
2769 I am inclined to agree with Dr. Dressel in placing this type earlier than Fink's Class I. It seems to be intermediate in form between the delphiniform and other types with blunt nozzles, and the type given in Fig. 204. Cf. C.I.L. xv. pl. 3.

2770Cf. C.I.L. xv. pl. 2, No. 5 = Fig. 206, and Dressel, ad loc., p. 783.
2771Cf. C.I.L. v. 8114.
2772See Daremberg and Saglio, s.v. p. 1011, fig. 4381.
2773Cf. for bronze examples, B.M. Cat. 2514 ff.
2774B.M. 3, 13.
2775Plate IV. fig. 4.
2776C.I.L. xi. 6699, 5.
2777In the Louvre.
2778C.I.L. xv. 6701.
2779Ibid. xv. 6513; Kenner, Ant. Thonlampen, No. 431.
2780B.M. 9-12: see also Guildhall Mus. Cat. p. 49, No. 50, for negro's head combined with camel's.
2781B.M. 18-21 (bulls’ heads); 22 (eagle); Mus. Borb. xiv. 38; C.I.L. xv. 6739, 6334, 6393; Ant. di Ercol. viii. 27; Kenner, 437, 437a; Mus. Alaoni, pl. 36, No. 485.

2782B.M. 14-17; C.I.L. xv. 6287; Kenner, 434-35.
2783Greek and Roman Department, from Cologne; British and Mediaeval Department, from Britain; others in Guildhall Museum, and C.I.L. xv. 6450.

2784C.I.L. xv. 6387, 6627; ibid. 6393 (artichoke); B.M. 24 (walnut); Ant. di Ercol. viii. 5.
2785Metam. xi. 245.
2786No. 1 = Cab. Durand, 1777: cf. Lafaye, Culte des Divinités d'Alexandrie, pp. 122, 303, No. 132; also Vol. I. pp. 209, 216.

2787See for examples in B.M., Nos. 58-66.
2788Cf. Anzeiger, 1889, p. 170, and B.M. Nos. 90, 91.
2789See Dalton, B. M. Cat. of Early Christian Antiqs. pl. 32, p. 148.
2790xiv. 114.
2791See on the subject Daremberg and Saglio, iii. p. 1334; Blümner, Technologie, ii. pp. 71, 108.
2792Cat. of Terracottas, E 81-83: see Fig. 209.
2793Mus. Alaoui, p. 253, Nos. 396-97 (Christian).
2794Cat. p. 51, Nos. 117-18 (from London Wall).
2795See also p. 395 above.
2796Cf. Avolio, Fatture di argille in Sicilia, p. 123.
2797Cf. Rev. Arch. xxxiii. (1898), p. 86; Mus. Alaoui, p. 148, No. 13.

2798Mus. Alaoui, p. 156, Nos. 74-81: cf. the Roman lamps of the same date (C.I.L. xv. p. 782).
2799The numbers given in the following notes are those of the forthcoming Catalogue of Roman lamps in the Department of Greek and Roman Antiquities.

2800See also C.I.L. xv. 6195-751 for mention of many interesting subjects.
2801 Röm. Mitth. 1892, p. 144 ff.
2802Göttingische Gelehrte Anzeigen, Nachrichten, 1870, p. 174: cf. Roach-Smith, Ill. Rom. London, p. 111.

2803B.M. 511; Ant. di Ercol. viii. 1.
2804Cyprus Mus. Cat. 1394; B.M. 604 = Plate IV. fig. 1.
2805B.M. 270, 315, 330, 331, 394, 472-475: cf. also Roach-Smith, Ill. Rom. Lond. pl. 30, 1; Ant. di Ercol. viii. 1; Bartoli, ii. 4; Kenner, Antike Thonlampen, Nos. 4-6.

2806Göttinger Nachrichten, p. 177, No. 18; Kenner, Nos. 227, 228, 425.
2807B.M. 605; Ann. dell' Inst. 1866, pl. g.
2808Kenner, No. 7: cf. Cyprus Mus. Cat. 1385-86.
2809Kenner, No. 8; B.M. 358 (handle).
2810B.M. 395; 360-363 on handle.
2811Kenner, No. 137.
2812No. $679=$ J.H.S. xiii. p. 93.
2813B.M. 307, 402, 466, 573: see also p. 415, note 2935.
2814Kenner, No. 10.
2815B.M. 607-609, 681, 707; Cyprus Mus. Cat. 1384.
2816B.M. 271, 398, 571; Cyprus Mus. Cat. 1356.
2817Kenner, Nos. 17-22; Bartoli, ii. 32-3; B.M. 332, 512, 680.
2818Kenner, No. 230; Guildhall Mus. Cat. p. 48, No. 43 (from Royal Exchange).
2819B.M. 572; Mus. Alaoui, No. 151.
2820Kenner, No. 229.
2821 Mus. Alaoui, No. 115.
2822B.M. 94; with Sphinx, ibid. 574.
2823Mus. Alaoui, No. 142.
2824B.M. 69.
2825B.M. 554, 614; Kenner, No. 28.
2826B.M. 174.
2827B.M. 175, 176, 333, 411-413; Kenner, No. 26; Bartoli, ii. 17.
2828B.M. 432, 433; Kenner, Nos. 231-2; Ant. di Ercol. viii. 32.
2829Kenner, No. 23.
2830Masner, Wiener Vasensamml. No. 684: cf. Anzeiger, 1890, p. 27.
2831B.M. 575; Kenner, Nos. 24-5; Guildhall Mus. Cat. p. 48, No. 46; Mus. Alaoui, No. 181.
2832Mus. Alaoui, No. 180.
2833B.M. 70: cf. Clarac, Musée de Sculpt. iii. 343, 1399; B.M. Terracottas, D 286.
2834See Kenner, Nos. 37-57.
2835B.M. 410, 477.
2836B.M. 172; Roach-Smith, Ill. Rom. Lond. pl. 30, 6 (Brit. and Mediaeval Dept.).

2837B.M. 516, 610, 611, 405, 515, 364, 553.
2838B.M. 407-409, 461, 479, 612, 654.
2839B.M. 478, 406.
2840Anzeiger, 1889, p. 168.
2841B.M. 308, 97.
2842B.M. 170, 171.
2843Göttinger Nachrichten, p. 179, No. 43.
2844Anzeiger, loc. cit.
2845B.M. 92, 613; 98; 95, 96, 156; 403, 404.
2846B.M. 272; Bartoli, i. 7.
2847B.M. 173, 89, 576; Bartoli, ii. 25.
2848Anzeiger, 1889, p. 168: cf. C.I.L. xv. 6230.
2849B.M. 517, 577; Bartoli, ii. 20.
2850B.M. 78.
2851B.M. 273, 499.
2852B.M. 616, 709.
2853Arch. Zeit. 1852, pl. 39 (in Berlin).
2854Anzeiger, 1889, p. 169.
2855Kenner, No. 36.
2856B.M. 481: cf. 316, 519.
2857B.M. 102, 180, 579; 183; Kenner, No. 34.
2858B.M. 101, 182; Kenner, No. 33.
2859B.M. 518.
2860B.M. 184, 274, 275, 326, 462, 500; Kenner, No. 35.
2861B.M. 181.
2862B.M. 58, 99, 578; 178, 179, 480, 618; Bull. Comm. Arch. 1887, p. 366, No. 8: cf. Hauser, Neuattische Reliefs, p. 154, Nos. 25-32.

2863B.M. 100, 582.
2864B.M. 476.
2865B.M. 514.
2866B.M. 513; Bartoli, ii. 13.
2867B.M. 83, 334, 399, 400, 157, 606; Masner, Wiener Vasens. 695; Bartoli, ii. 11.
2868B.M. 401.
2869No. 535: cf. also C.I.L. xv. 6221, 20.
2870B.M. 463, 482, 615; C.I.L. x. 8053, 157.
2871Guildhall Mus. Cat. p. 48, No. 40.
2872B.M. 396, 397; Göttinger Nachrichten, 1870, p. 184, Nos. 103-4.
2873B.M. 523; 191, 591 (bust); Kenner, No. 71; Mus. Alaoui, No. 164; Ant. di Ercol. viii. 30.
2874B.M. 167; Masner, 685; Fiedler, Castra Vetera, pl. 8, No. 3.
2875B.M. 465; Ant. di Ercol. viii. 11; Mus. Alaoui, No. 113; C.I.L. xii. 5682, 71 (K. adored by a
Gallus); Kenner, No. 3, and see No. 23.
2876Kenner, No. 77.

2877B.M. 370, 467, 508; 190, 297, 280; Kenner, No. 1; Ant. di Ercol. viii. 2: cf. B.M. Terracottas, D 285.

2878B.M. 337.
2879B.M. 369; Mus. Alaoui, No. 134.
2880Daremberg and Saglio, iii. p. 1011, fig. 4381.
2881B.M 281.
2882B.M. 468-470; Bartoli, ii. 42.
2883B.M. 104, 185(?).
2884Mus. Alaoui, No. 82.
2885Kenner, Nos. 66-7.
2886Ibid. Nos. 233-4.
2887Ibid. Nos. 72-3.
2888B.M. 276-278, 348, 484, 510, 586; Kenner, Nos. 58-9; Bartoli, ii. 46.
2889See generally, Ant. di Ercol. viii. 6; Bartoli, iii. 3 (with wreath).
2890E.g. B.M. Bronzes, 1510 ff.
2891B.M. 189 (see p. 420), 335, 367, 520; 336; 103, 187, 188, 483: cf. Roach-Smith, Collect. Antiq. ii. pl. 15

2892Rev. Arch. xxxiii. (1898), p. 229.
2893B.M. 583; Bartoli, iii. 2; Arch. Zeit. 1852, pl. 39.
2894B.M. 186.
2895See Marquardt, Privatalterthümer, p. 245; C.I.L. x. 8053, 5; ii. 4969, 3, and xv. 6196 ff; Ovid, Fasti, i. 189 ff . These lamps date from the time of Augustus and his successors.

2896B.M. 309, and cf. 368, 584, 585; Bartoli, iii. 5. For a similar subject on a money-box see above, p. 389.

2897B.M. 189; Ant. di Ercol. viii. pl. 6; Bartoli, iii. 4.
2898Guildhall Mus. Cat. p. 47, No. 26. See for these two p. 398 above, and p. 420 below.
2899B.M. 84, 105, 485; Kenner, No. 83; Bartoli, i. 13-14.
2900Rev. Arch. xxxiii. (1898), p. 229.
2901B.M. 710 (archaic xoanon).
2902Kenner, No. 76; Mus. Alaoui, Nos. 139-40.
2903B.M. 415.
2904B.M. 521.
2905B.M. 337 (Plate LXIII.), and 486.
2906Anzeiger, 1889, p. 167; Mus. Alaoui, No. 131.
2907B.M. 619.
2908B.M. 192, 587.
2909Cyprus Mus. Cat. 1358.
2910B.M. 416.
2911B.M. 620; 338, 339; Ant. di Ercol. viii. 4 (in the three latter only with club and lion's skin).
2912Cyprus Mus. Cat. 1393.
2913B.M. 506, 566, 588.
2914B.M. 106, 417.
2915B.M. 487.

2916B.M. 621
2917B.M. 193; Kenner, No. 81.
2918Kenner, No. 82; B.M. 107.
2919Mus. Alaoui, Nos. 126-27; Rev. Arch. xxxiii. (1898), p. 229.
2920Göttinger Nachrichten, 1870, p. 182, No. 72.
2921B.M. 158, 589; Bartoli, ii. 24; Ant. di Ercol. viii. 33; Guildhall Mus. Cat. p. 48, No. 39.
2922B.M. 108; Göttinger Nachrichten, p. 188, Nos. 235-36.
2923Mus. Alaoui, No. 100.
2924B.M. 194 = Arch. Zeit. 1852, pl. 39.
2925Mus. Alaoui, Nos. 153-56.
2926Ibid. No. 123.
2927Kenner, Nos. 79, 80.
2928B.M. 371.
2929B.M. $590=$ Roscher, Lexikon, iii. p. 2338.
2930Masner, Wiener Vasens. No. 674: cf. Bull. Arch. Nap. N.S. iv. pl. 10, fig. 4.
2931B.M. 555; Von Rohden, Terracotten von Pompeii, p. 49: cf. C.I.L. xv. 6236.
2932Arch. Zeit. 1865, pl. 194; B.M. 282: cf. 109, 195.
2933B.M. 319-321; Bartoli, iii. 11.
2934Mus. Alaoui, No. 192.
2935Masner, No. 676. Cf. a lamp with Athena voting for him, Daremberg and Saglio, Dict. iii. p. 1329, fig. 4601.

2936B.M. 199, 623.
2937C.I.L. x. 8053, 194.
2938Mus. Alaoui, No. 110; Guildhall Mus. Cat. p. 48, No. 41 = Roach-Smith, Collect. Antiq. ii. pl. 15 (from Colchester).

2939Mus. Alaoui, No. 111.
2940B.M. 196-198, 522, 622.
2941B.M. 130, 340, 418; Kenner, No. 136: cf. Masner, No. 686.
2942B.M. 524, 525; Cyprus Mus. Cat. 1351; Kenner, Nos. 68-70.
2943B.M. 682.
2944Rev. Arch. xxxiii. (1898), p. 230.
2945B.M. 110, 593: see Plutarch, Vit. Alexandri, 14.
2946Mon. dell' Inst. iii. pl. 14, fig. 3; see Bernoulli, Gr. Ikonogr. i. p. 56.
2947B.M. 128(?), 598; Kenner, Nos. 85-6, 88-90.
2948Arch. Zeit. 1861, Anzeiger, p. 157; Kenner, No. 87.
2949Guildhall Mus. Cat. p. 47, Nos. 14-15.
2950C.I.L. xi. 6699, 4.
2951 Bull. Arch. Nap. iv. (1856), pl. 10, fig. 3, p. 166; examples also in B.M. (No. $216=$ Plate LXIV. fig. 3) and C.I.L. xv. 6240. The companion lamp given in the Bull. Arch. Nap. pl. 10, fig. 4, does not represent Meliboeus, as there supposed, but Ajax.

2952B.M. 224; Roach-Smith, Ill. Rom. Lond. pl. 30, fig. 3; Jahn in Mitth. d. ant. Gesellsch. zu Zürich, xiv. pl. 4, fig. 9; Göttinger Nachrichten, 1870, p. 190, No. 282; and see Daremberg and Saglio, s.v. Lucerna, p. 1326.

2953B.M. 139: cf. Bull. dell' Inst. 1867, p. $35=$ Mitth. d. ant. Gesellsch. zu Zürich, xvii. p. 149; in the latter instance a man weighs an ant against an elephant.

2954Coll. H. Hoffmann (Paris, 1886), p. 39; and in B.M. (No. 59).
2955See for example Ant. di Ercol. viii. 7; Rev. Arch, xxxiii. (1898), p. 230; Daremberg and Saglio, Dict., ii., s.v. Gladiator, with the bibliography on p. 1600; also B.M., passim. Similar types occur on the Gaulish terra sigillata (p. 507 below, and Déchelette, Vases ornés, ii. p. 97 ff .).

2956B.M. 111-114, 341, etc.
2957B.M. 115-117, 201, etc.
2958B.M. 121, 159, 160, 207, 285, 317, 342.
2959Mus. Alaoui, No. 222.
2960Ant. di Ercol. viii. 9.
2961C.I.L. xii. 5682, 74.
2962B.M. 558.
2963B.M. 318; Rev. Arch. xxxiii. (1898), p. 231, fig. 27.
2964B.M. 557, and cf. 165; 208, 531; 311 and Cyprus Mus. Cat. 1364. See under the first-named head, Zeitschr. für Numism. xxiv. p. 357, for an athlete placing a prize vase on his head.

2965B.M. 507; 122, 211, 422; 209, 210; 125, 213, 214.
2966B.M. 75, 123, 124, 154, 212, 421.
2967C.I.L. x. 8053, 127.
2968Mus. Alaoui, No. 223 = Daremberg and Saglio, iii. p. 1327, fig. 4590.
2969Kenner, No. 98; Mus. Alaoui, No. 200.
2970Cyprus Mus. Cat. 1339.
2971B.M. 328: cf. Cyprus Mus. Cat. p. 80, No. 1365.
2972See B.M. 423, 424, 532, 533, 701; and cf. p. 415, note 2933.
2973Mus. Alaoui, Nos. 233-34; also B.M. 79. Cf. B.M. Cat. of Bronzes, No. 884.
2974 Mus. Alaoui, No. 227; B.M. 625 (hunter only).
2975B.M. 126, 425; Kenner, Nos. 117-122.
2976B.M. 79 = Plate LXV. fig. 1; Rev. Arch. xxxiii. (1898), p. 230.
2977B.M. 217; Rev. Arch. xxxiii. (1898), p. 233; Urlichs, Verzeichn. d. Antikens. d. Univ. Würzburg, p. 39, No. 37.

2978C.I.L. xv. 6718.
2979Roach-Smith, Collect. Antiq. ii. pl. 15.
2980Rev. Arch. xxxiii. (1898), pp. 230, 231.
2981B.M. 534, 218, 219: cf. Kenner, Nos. 123-24.
2982Roach-Smith, Ill. Rom. Lond. pl. 30, fig. 4: cf. the well-known graffito at Pompeii, and Collect. Antiq. iv. pl. 11.

2983B.M. 27; 222; 127; 74.
2984B.M. 215, 489; Rev. Arch. xxxiii. (1898), p. 230.
2985C.I.L. xv. 6221, 24.
2986Ibid. x. 8053, 126 and 192.
2987Anzeiger, 1889, p. 169.
2988Roach-Smith, Ill. Rom. London, pl. 30, 2.
2989Göttinger Nachrichten, 1870, p. 186, No. 182.

2990B.M., passim; Kenner, No. 139 ff.
2991 Mus. Alaoui, No. 278.
2992B.M. 441, 494, 501; Masner, Wiener Vasens. No. 694; Cyprus Mus. Cat. 1379.
2993Kenner, No. 181.
2994Ant. di Ercol. viii. 23.
2995B.M. 560, 226, 561.
2996B.M. 562.
2997Fiedler, Castra Vetera, pl. 7, No. 2.
2998B.M. 544.
2999B.M. 135, 291, 563; C.I.L. x. 8053, 127.
3000B.M. 230, 493; Guildhall Mus. Cat. p. 49, No. 57; Cyprus Mus. Cat. 1341.
3001 Rev. Arch. xxxiii. (1898), p. 232.
3002B.M. 234, 293, 439, 545; Kenner, Nos. 163-166.
3003B.M. 238-241, 296, 443, 444; Masner, No. 693.
3004Ant. di Ercol. viii. 5.
3005Rev. Arch. xxxiii. (1898), p. 232.
3006Ibid.; B.M. 242, 295, 626.
3007B.M. 76, 82; Masner, Nos. 654-59.
3008B.M. 77: cf. 145.
3009Roach-Smith, Ill. Rom. London, p. 110.
3010See generally Dalton, B.M. Cat. of Early Christian Antiqs. p. 139 ff.; Daremberg and Saglio, iii. p. 1328; Mus. Alaoui, Nos. 497 ff.; Ant. di Ercol. viii. 45-7; De Rossi, Roma Sotterr. ii. p. 498 ff.; Delattre, in Revue de l'Art Chrétien, 1889-93, etc. (Carthage).

3011C.I.L. x. 8053, 36, 143, 193; B.M. 201, 310, from Pozzuoli.
3012Guildhall Mus. Cat. p. 47, No. 26.
3013See B.M. 189 and C.I.L. xv. 6211-18; these all date from the time of Augustus: cf. his coins and those of his successors.

3014C.I.L. xv. 6195.
3015C.I.L. xv. 6219.
3016Ibid. 6222.
3017See ibid. 6221; B.M. 164, etc.
3018Ibid. x. 8053, 4.
3019Ibid. xv. 6223.
3020Ibid. xiii. 10001, 4.
3021Ibid. xiii. 10001, 2.
3022Inscr. Gr. xiv. 2405, 6. This and the preceding are bronze lamps.
3023C.I.L. xv. 6239 = Ann. dell' Inst. 1866, pl. G.
3024C.I.L. xv. 6236.
3025Ibid. xi. 6699, 4.
3026Ibid. 6699, 5.
3027Ibid. xv. 6241-49.
3028C.I.L. xv. 6250: cf. Pliny, H.N. viii. 160.

3029Ibid. 6257, 6261.
3030Daremberg and Saglio, Dict., s.v. Lucerna, p. 1330.
3031C.I.L. xv. 6254-55.
3032Ibid. x. 8053, 8; xv. 6230: see above, p. 411.
3033Ibid. xv. 6234.
3034Ibid. x. 8053, 6.
3035Ibid. xi. 6699, 8-10.
3036Ibid. xiii. 10001, 14.
3037Ibid. 10001, 20.
3038Ibid. xv. 6232.
3039Ibid. viii. 10478, 1; xiii. 10001, 19. The meaning of colatas is doubtful. Mr. F. H. Marshall suggests "well-made," lit. "sifted," referring to the quality of the clay.

3040Ibid. xv. 6752; xi. 6699, 7.
3041 Bull. dell' Inst. 1868, p. 59: see Vol. I. p. 107.
3042C.I.L. ii. 4969, 1.
3043Ibid. xv. 6265: see Arch. Zeit. 1861, p. 167.
3044Mélanges de l'École Franc. de Rome, xii. (1892), p. 118, Nos. 31-3, pl. 4, No. 5; C.I.L. xv. 6520; Mus. Alaoui, No. 369; and see above, p. 420, for examples on Campanian lamps.

3045Ann. dell' Inst. 1880, p. 291.
3046Daremberg and Saglio, Dict., s.v. Lucerna, p. 1330.
3047 E.g. А, в, с, н, I, R: C.I.L. x. 8053, 209-14; xii. 5682, 131; xv. 6266, 6334, 6342.
3048C.I.L. xii. 5682, 57.
3049See Fink in Münchener Sitzungsberichte, 1900, p. 690, for examples.
3050 C.I.L. xv. 6282.
3051Anzeiger, 1889, p. $170=$ C.I.L. xv. 6263.
3052C.I.L. xv. 6350, 6433.
3053Ibid. 6501-03.
3054Ibid. 6560-65.
3055Ibid. 6434, 6593.
3056See Daremberg and Saglio, s.v. Lucerna, p. 1331; also the lists given by Fink in Sitzungsb. d. Münch. Akad. 1900, pp. 689, 692 ff., and the various volumes of the Corpus under Instrumentum Domesticum, especially vol. xv.

3057Blanchet, Mélanges Gallo-romaines, ii. p. 112.
3058C.I.L. v. 8114, 54.
3059Ibid. xiii. 10001, 136; xii. 5682, 50; B.M. 383, 391.
3060C.I.L. xiii. 10001, 136.
3061 Ibid.: also Steiner, Cod. Inscr. Rom. Danub. et Rheni, i. p. 185, ii. p. 238.
3062C.I.L. vii. 1330, 15; Roach-Smith, Ill. Rom. London, p. 112; Guildhall Mus. Cat. p. 47, Nos. 27-8. 3063C.I.L. ii. p. 665, No. 24.

3064Ibid. iii. 3215, 7; ibid. Suppl. 1, 8076, 16.
3065C.I.L. ix. 6081, 33; x. 8053, 83; xi. 6699, 89; xv. 6450.
3066Daremberg and Saglio, s.v. p. 1332: cf. C.I.L. xv. p. 783.
3067From vol. v. of the Corpus it may be seen how common the signatures peculiar to this class are
in this region; e.g. 8114, 11, 28, 54, 126, 137.
3068Carton, Découvertes, p. 254: cf. C.I.L. viii. 10478, 33-4.
3069C.I.L. x. 8053, 46; Inscr. Graec. xiv. 2405, 18. Cf. Proc. Soc. Antiqs. xx. (1904), p. 96.
3070C.I.L. xv. 6869, 6886.
3071Boeckh, C.I.Gr. iii. p. 660, No. 5685; Inscr. Graec. xiv. 24053, 34; and B.M. 303.
3072Inscr. Gr. xiv. 2405, 35.
3073Cf. Cesnola, Salaminia, p. 284.
3074See C.I.L. iii. Suppl. 1, 7310, and Vol. I. p. 108. He also occurs in Africa (C.I.L. viii. 10478, 37) and elsewhere.

3075Inscr. Graec. xiv. 2574.
3076Münchener Sitzungsberichte, 1900, p. 685 ff. On p. 692 a table of signatures on the British Museum lamps is given.

3077See above, p. 400.
3078The names of this and other potters in Class IV. also occur on terracotta money-boxes (see above, p. 389).

3079See C.I.L. xv. pt. 2, pl. 3, No. 15.

# CHAPTER XXI <br> ROMAN POTTERY: TECHNICAL PROCESSES, SHAPES, AND USES 

Introductory-Geographical and historical limits-Clay and glaze-Technical processes-Stamps and moulds-Barbotine and other methods-Kilns found in Britain, Gaul, and Germany-Use of earthenware among the Romans-Echea-Dolia and Amphorae-Inscriptions on amphoraeCadus, Ampulla, and Lagena-Drinking-cups—Dishes-Sacrificial vases-Identification of names.

## 1. Introductory

Roman vases are far inferior in nearly all respects to Greek; the shapes are less artistic, and the decoration, though not without merits of its own, bears the same relation to that of Greek vases that all Roman art does to Greek art. Strictly speaking, a comparison of the two is not possible, as in the one case we are dealing with painted vases, in the other with ornamentation in relief. But from the point of view of style they may still be regarded as commensurable. Roman vases, in a word, require only the skill of the potter for their completion, and the processes employed are largely mechanical, whereas Greek vases called in the aid of a higher branch of industry, and one which gave scope for great artistic achievements-namely, that of painting.

It may perhaps be advisable to attempt some definition of the subject, and lay down as far as possible historical and geographical limits within which Roman pottery as a distinct phase of ancient art may be said to be comprised. The line which distinguishes it from Greek pottery is, however, one of artistic evolution rather than of chronology, one of political circumstances rather than of geographical demarcation. In other words, it will be found that during a certain period the ceramic art had reached the same stage of evolution throughout all the Mediterranean countries; in Greece and Asia Minor, in the Crimea and in North Africa, in Southern Italy and in Etruria, a point of development had been reached at which the same kind of pottery, of very similar artistic merit, was being made in all parts alike. In Greece and other regions which had up to the end of the fourth century, or even later, been famous for their painted pottery, this art had lost its popularity and was dying or dead; in other parts, as in Etruria, it had never obtained a very firm foothold, and the local traditions of relief-ware imitating metal were revived. Not the least remarkable feature of the art of the Hellenistic Age is the great impetus given to working in metal, as has already been indicated in a previous chapter (Vol. I. p. 498). The toreutic products of Alexandria and of the famous chasers of Asia Minor, whose names Pliny records, ${ }^{[3080]}$ became renowned throughout the Greek world, and the old passion for painted pottery was entirely ousted by the new passion for chased vases of metal.
But in spite of increased habits of luxury, it is obvious that the replacing of earthenware by metal could never have become universal. For ordinary household purposes pottery was still essential, and besides that, there were many to whom services of plate and gold or silver vessels for use or ornament were a luxury unattainable. Hence it was natural that there should follow a general tendency to imitate in the humbler material what was beyond reach in the more precious, and the practice arose, not only of adorning vessels of clay with reliefs in imitation of the chased vases, but even of covering them with some preparation to give them the appearance of metal. Instances of these tendencies have been given in Chapter XI., and no better example could be adduced than that of the silver phialae of Eze and their terracotta replicas in the British Museum (Vol. I. p. 502).

In the same chapter we saw that Southern Italy, in particular, was the home of the relief and moulded wares in the Hellenistic period. This was a time when there were close artistic relations between that region and Etruria, and we have already seen that this method of decoration had long been familiar in the latter district (see p. 292 ff .). Hence it is not surprising that we find springing up in the Etruscan region of Italy an important centre of pottery manufacture which proved itself to be the heir of more than one line of artistic traditions. The era of Roman pottery is generally assumed to begin with the establishment at Arretium, within the area of Roman domination, of a great manufactory in the hands of Roman masters and workmen. Evidence points to the second century B.C. as the time when Arretium sprang into importance as a pottery-centre; and thenceforward for many years its fabrics filled the markets and set the fashion to the rest of the Roman world.

The lower limit of the subject is, from lack of evidence, not much easier to define; but after the second century of the Empire, pottery, like other branches of working in clay, sank very much into the background, and the spread of Christianity after the time of Diocletian practically gave the death-blow to all Pagan art. M. Déchelette, in his account of the important potteries at Lezoux in Gaul, brings forward evidence to show that they practically came to an end about the time of Gallienus (A.D. 260-268) ${ }^{[3081]}$; but it is probable that the manufacture of degenerate sigillata wares went on for about a century longer in Germany at any rate, if not in Gaul. Much of the pottery found in Germany and Britain is of an exceedingly debased and barbaric character.

In discussing the geographical distribution of Roman pottery we are met first with the difficulty, which has already been hinted at, of defining where Greek ends and Roman begins. But we must have regard to the fact that in most if not all Greek lands pottery, painted or moulded, was in a moribund condition, whereas in Italy the latter branch was rejuvenescent. It seems, therefore, more satisfactory on the whole to exclude the Eastern Mediterranean entirely from the present survey, and to consider that with the concluding words of Chapter XI. the history of pottery in that part of the ancient world came to an end. That is to say, that all later fabrics found in Greece or Asia Minor, even though they are sometimes of Roman date, belong to the lingering traces of a purely Hellenic development, and have no bearing on our present investigation.

The latter must therefore be limited to the countries of Western Europe, embracing-besides ItalyFrance, Germany, Britain, and Spain. The pottery found in these regions during the period of the Roman Empire is homogeneous in character, though greatly varying in merit, and so far as it can be traced to the victorious occupiers of those countries rather than to purely native workmanship, represents what we may call Roman pottery, as opposed to Greek or Graeco-Roman on the one hand and Celtic or Gaulish on the other.

## 2. Technical Processes

Roman pottery, regarded from its purely technical aspect, is in some ways better known to us than Greek, chiefly owing to the extensive discoveries of kilns, furnaces, and potters' apparatus, such as moulds and tools, in various parts of Western Europe. On the other hand, its classification is a much more difficult matter, although it has for so long been the subject of study, for reasons which will subsequently appear. This is perhaps partly due to the overwhelming interest which the discoveries of recent years have evoked in the study of Greek vases; and partly, of course, to the artistic superiority and more varied interest of the latter; but the mass of material now collected in the Museums of Italy and Central Europe is gradually impelling Continental scholars to bring to bear on Roman pottery the scientific methods now universally pursued in other directions. Of their work we shall speak more in detail in another chapter; for the present we must confine ourselves to the technical aspect of the subject.
The Romans, who used metal vases to a far greater extent than the Greeks-at least under the late Republic and Empire-did not hold the art of pottery in very high estimation, and their vases, like their tiles and lamps, were produced by slaves and freedmen, whereas at Athens the potter usually held at least the position of a resident alien. These were content to produce useful, but not as a rule fine or beautiful, vases, for the most part only adapted to the necessities of life. There was, so far as we know, no manufacture of vases set apart for religious purposes, either for funerary use or as votive offerings, and for the adornment of the house metal had the preference. It is not, therefore, surprising that we should find them making use of a less fine and compact paste for the greater proportion of their vases. With the exception of the fine red wares with reliefs, which are now generally known to archaeologists as terra sigillata, ${ }^{[3082]}$ and which answered in public estimation to our porcelain, they made only common earthenware, and this was generally left unglazed.
All kinds of clays are used, varying with the different regions in which the pottery was made, and ranging in hue from black to grey, drab, yellow, brown, and red. In quality, too, the clay varies to a considerable extent, some being of a coarse, pebbly character. The red clay of the Allier district in France, where most of the Gaulish pottery was manufactured, is of a ferruginous nature; its natural colour is modified by baking, though it never becomes white. ${ }^{[3083]}$ The pottery of St. Rémy-en-Rollat in that neighbourhood is made of the same white clay as the terracotta figures (p. 382). ${ }^{[3084]}$ In Italy, as a rule, careful attention seems to have been paid to the preparing and mixing of the clay, and in the glazed red wares it is uniformly good. In fact, the remarkable similarity in technique and appearance of this ware throughout the Roman Empire has led to the view that there can only have been one centre from which it was exported. Against this, however, must be urged the undeniably provincial and almost barbarous character of the decoration on much of the pottery found in Central and Northern Europe; and therefore, without denying that exportation went on, as it undoubtedly did, we should prefer to suppose that this red glaze was produced in some special artificial manner, such as by using red ochre or iron oxide (see below), the knowledge of which became common property. As Semper said forty years ago ${ }^{[3085]}$ : "Not only did barbarians, Gauls, Britons, and Germans, learn to know and use Roman technique, but also Egypt, Asia, and the Greeks, already immortalised by their own pottery, dropped their local processes, and voluntarily adopted Roman forms and technique." Clay and glaze, form and technical method, are in all parts the same; it is only the decoration that varies and reflects the spirit and taste of the locality.
Formerly it was thought that the red glaze was obtained in the baking, after careful polishing of the surface, and that special means were adopted to this end. In the kilns of Castor (see below) Artis thought that he detected contrivances for this purpose; but it is now generally agreed that the glaze is artificial, not natural. In ordinary wares and in the lamps a red glaze is produced by a mere polishing of the surface, and this varies in tone and lustre with the proportion of oxide of iron in the paste, and the degree of heat employed in the baking. But in the terra sigillata the red glaze reaches a high and uniform state of perfection. This seems to have been produced by a kind of varnish, the elements of which are not absolutely certain; but it would appear that the substance added to produce the effect was of an essentially alkaloid nature. This has been deduced by Dragendorff ${ }^{3086]}$ from a series of analyses made from fragments of different wares, both without and with the glaze; in the latter case the alkaloid constituents show a marked increase in quantity, whereas the proportion of the iron oxide and other elements remain constant. These investigations were made by Dr. Lilienthal, of Dorpat, on five fragments: (1) from a vase of the Republican period found at Corneto; (2) from a bowl of fine terra sigillata of the first century after Christ; (3) from a deep cup of the same style; (4) from late provincial ware of the second or third century; (5) from a degenerate fabric with rough clay and inferior glaze, the results being as follows:-

1. Without glaze ${ }^{[3087]}$ :

|  | $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Silica | 55.08 | $52 \cdot 87$ | $52 \cdot 054$ | $54 \cdot 75$ | $66 \cdot 70$ |
| Clay earth | $23 \cdot 10$ | 23.95 | - | $18 \cdot 82$ | 21.01 |
| Iron oxide | 14.13 | 4.78 | 13.966 | 14.48 | 5.89 |


| Carbonate of lime | 5.22 | 13.80 | - | 5.30 | 3.20 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Magnesia | 0.75 | 2.35 | 1.850 | 3.38 | 1.26 |
| Potash | 0.79 | 0.89 | 1.852 | 1.55 | 1.02 |
| Carbonate of sodium | 0.28 | 0.45 | 0.523 | 0.53 | 0.57 |

2. With glaze ${ }^{[3088]}$ :

|  | $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Silica | 54.18 | - | 51.924 | 53.70 | - |
| Clay | 21.31 | - | - | 16.93 | - |
| Iron | 15.00 | - | $12 \cdot 168$ | 14.70 | - |
| Carbonate of lime | 6.01 | - | - | 5.82 | - |
| Magnesia | 1.94 | 3.12 | 2.201 | 5.72 | 2.05 |
| Potash | 0.95 | 1.06 | 2.210 | 1.82 | 1.27 |
| Carbonate of sodium | 0.37 | 0.49 | 0.921 | 0.62 | 0.69 |

It must be borne in mind that, although the final effect is due to the alkaloids, the red colour of the vases is produced by the iron oxide which was inherent in the composition of the clay, none being added with the varnish, as the quantities show. All the fragments also showed traces of manganese and sulphuric acid. Previously analyses had been given by Brongniart and Blümner, ${ }^{[3089]}$ with results approximately similar, but not so definite. Fabroni had thought that the iron oxide was combined with a vitreous paste, ${ }^{[3090]}$ and Keller, by practical experiments, essayed to show that borax was employed to provide the required appearance, ${ }^{[3091]}$ and further maintained that the furnace at Castor already alluded to was used for dissolving that substance. He was not far from the truth, but the results obtained by Dragendorff seem to militate against his conclusions.
In any case the glaze is very perfect, of so bright a red as to resemble coral, and serving, as Blümner says, to enhance the ground colour where a modern glaze would only conceal its imperfect tone. It is so fine and so carefully laid on that it does not interfere with any outlines or details, in this again evincing its superiority to modern glaze. It seems to have been applied not with the brush, but by dipping the vase into the liquid. ${ }^{[3092]}$ Black glaze, such as occurs on the earlier Italian fabrics (p. 481), was produced from an alkaline silicate. ${ }^{[3093]}$
The ordinary unglazed wares were classified by Brongniart under four heads ${ }^{[3094]}$ : (1) pale yellow; (2) red (dark red to red-brown; first century of Empire); (3) grey or ash-coloured (down to the end of the Western Empire); (4) black (mainly provincial). This distribution was in its general lines adopted by subsequent writers, such as Buckman ${ }^{[3095]}$ and Birch, but was felt to be inadequate, and some slight modifications were adopted. For practical purposes, however, it will be found to work fairly well as a convenient method of grouping the commoner wares. None of them as a rule have any decoration. They will be considered in fuller detail in a subsequent chapter.

In the manufacture of vases the Romans used the same processes as the Greeks. They were made on the wheel (rota figularis or orbis), ${ }^{[3096]}$ to which allusion is not infrequently made by the Latin poets, as in the well-known line of Horace ${ }^{[3097]}$ :-

## Amphora cepit <br> Institui; currente rota cur urceus exit?

And, again, in the phrase totus, teres, atque rotundus ${ }^{[3098]}$ he is doubtless referring to a vase just turned off the wheel. Tibullus speaks of "slippery clay fashioned on the wheel of Cumae"[3099]; and there are also allusions in Plautus and other writers. ${ }^{[3100]}$ The simile has also been drawn upon by English poets. ${ }^{[3101]}$ Specimens of potters' wheels have been found at Arezzo and at Nancy; these are made of terracotta, pierced in the centre for the axis of the pivot, and furnished at the circumference with small cylinders of lead, to give purchase for the hand and steadiness to the whirling wheel. ${ }^{[3102]}$ Another from Lezoux, now in the Museum at Roanne, is figured by M. Déchelette. ${ }^{[3103]}$ Most of the common wares were made by this process, except the dolia, or large casks, which were built up on a frame like the Greek pithos (Vol. I. p. 152).
But for the ornamented vases with reliefs an additional process was necessary in order to produce the raised ornament, and they were in nearly all cases produced from moulds, like the lamps or terracotta figures and reliefs. ${ }^{[3104]}$ The vases were still fashioned on the wheel, but this was done in the mould from which the reliefs were obtained. Occasionally the reliefs were modelled by hand or with the aid of tools, or even produced with a brush full of thick slip (en barbotine), but moulding was the general rule. This method entailed three distinct stages, of which the first alone required artistic capacity; the other two were purely mechanical, requiring only a certain technical dexterity. The first was that of making the stamps from which the designs were impressed; the second, the making of the moulds; the third, impressing the clay in the mould.
The stamps were made of clay, gypsum, wood, or metal, and had a handle at the back for holding while pressing them into the mould; they were used not only for figures and ornamental designs, but also for the potter's signature (see below). Only clay examples, however, have been preserved, but some of these are admirable specimens. Frequently the subjects on the Arretine vases were taken, like those on lamps and mural reliefs, from existing works of art, especially from the "new Attic" reliefs to which allusion has already been made (p. 368), and the stamps are directly copied from these sources. An instance of this is a stamp from Arezzo in the British Museum, with a beautiful figure of Spring (Plate LXVI. fig. 2), which finds its counterpart on a complete vase from

Capua (Fig. 219), and also on a mural relief (B.M. D 583). Another good example in the same collection represents a slave bending over a vessel on a fire, and shielding his face from the heat with one hand. From the same site are two others representing respectively a boar and a lion. A fourth stamp found at Arezzo, with a tragic mask, is given in Fig. 211. ${ }^{[3105]}$ The stamps must have been articles of commerce, and handed down from one potter to another, as the subjects are found repeated in different places; the majority were probably made at Arezzo and other important places in Italy.
Among examples from the provinces may be mentioned one in the British Museum (Romano-British collection), with the figure of a youth, inscribed offi(cina) liberti; it is of fine terracotta, and was found at Mainz. A stamp with the figure of Paris or Atys is in the museum of the Philosophical Society at York. ${ }^{[3106]}$ Other stamps in the form of a hare and a lion in the Sèvres Museum are inscribed with the name of Cerialis, a well-known German potter, whose name also occurs on a mould for a large bowl with a frieze of combatants in the British Museum, and in the former museum are six others, including one of a wolf, with the name of a Gaulish potter, Cobnertus. ${ }^{[3107]}$ Von Hefner mentions one found at Rheinzabern with a figure of a gladiator at each end, inscribed $p$. ATTI • CLINI • o(fficina), and others from Westerndorf with a lion and a horse. ${ }^{[3108]}$ Dies for stamping the potters' names have been found at Lezoux in Auvergne, and in Luxemburg, with the names of Auster (AVSTRI - OF) and Cobnertus, and Roach-Smith possessed one with the latter name ${ }^{[3109]}$; in the Sèvres Museum is also a stamp for making rows of pattern (see below), ${ }^{[3110]}$ and at Rheinzabern one for an egg-and-tongue moulding was found. ${ }^{[3111]}$ Specimens of these stamps are given in Fig. 211.


FIG. 211. STAMPS USED BY ROMAN POTTERS.

The moulds were made of a somewhat lighter clay than that of the vases, but it was essential that the material should be sufficiently porous to absorb the moisture of the pressed-in clay of the vase; sometimes holes for the water to escape through are visible. They were made on the wheel, and had a ridge on the exterior for convenience in handling; they were made whole, not in halves, but sometimes the vase was first made plain, and the figures were then attached from separate moulds, or rather made separately, as in the case of the "Megarian" bowls (Vol. I. p. 499). ${ }^{[3112]}$ Vases have been found in the Rhone valley ornamented with large appliqué medallions, and the separate moulds for these also exist; they seem to have been made at Vienne. ${ }^{[3113]}$ The figures and ornaments were impressed into the moulds from the stamps while the paste was still soft, leaving hollow impressions to receive the clay of the vases. Similarly, continuous patterns, such as rows of beads or dots, were traced in the mould with a roller or wheel-like instrument on which the pattern was cut in relief. ${ }^{[3114]}$ Any defects or careless arrangement in the completed vase would of course be due to a careless insertion of the stamps in the mould.
There are large numbers of moulds for Roman and provincial vases in existence, ${ }^{[3115]}$ and the British Museum has a fine though fragmentary series from Arezzo, intended for some of the finest specimens of the local ware; of these more will be said in the following chapter. Many of these moulds have been found on sites of potteries in Gaul, especially in the Auvergne and Bourbonnais districts, and are collected in the Moulins, Roanne, St. Germain, and other museums. Lezoux was an important centre in this respect, and here also were found moulds for patterns and ornaments. ${ }^{[3116]}$ In the British Museum (Romano-British collection) there is part of a mould for a shallow bowl, found at Rheinzabern, with stamped designs of a lion, boar, and hare pursuing one another; it is similar to the mould with Cerialis' name already described. These matrices are usually of fine bright red clay, unglazed; they are very porous, rapidly absorbing moisture, and easily allowing the potter to withdraw the vessel from the mould. The importance of the discovery of moulds can hardly be overrated for the evidence they afford as to the site of potteries and centres of fabrics ${ }^{[3117]}$; it is obvious that where they are found, and only in such places, the vases must have been made; and that the discovery of a potter's name on any mould establishes his workshop at the place where it was found. Various tools for working the moulds, or touching up details or damaged parts of bronze and ivory, have been found on the sites of ancient potteries, ${ }^{[3118]}$ as at Arezzo, but their use cannot be accurately determined.

The method of decoration known as en barbotine, which is a sort of cross between painting and
relief, was achieved by the laying on of a semi-liquid clay slip with a brush, a spatula, or a small tube. The pattern was probably first lightly indicated, and the viscous paste was then laid on in thick lines or masses, producing a sort of low relief. The process was, as a rule, only employed for simple ornamentation, such as leaves, sprays, and garlands; but on the provincial black wares it finds a freer scope. On vases found in Britain and the adjoining parts of the Continent (p. 544) figures of animals are rendered in this manner, and on another class peculiar to Germany (p. 537) inscriptions are painted in a thick white slip. The colour of the slip did not necessarily correspond to the clay of the vase, and was, in fact, usually white. These vases are, however, technically poor, and the reliefs heavy and irregular. The process has been aptly compared to the sugar ornamentation on cakes. ${ }^{[3119]}$

Painted decoration is almost unknown in Roman pottery, and is, in fact, confined to the pocolom series described in Chapter XI. It occurs in a rough and primitive form on some of the provincial fabrics, such as the Castor and Rhenish vases (see pp. 537, 544), but its place is really taken by the barbotine method.
Engraved or incised decoration is exceedingly rare, and practically confined to provincial wares, which sometimes have incisions or undulations made over the surface with the fingernail in the moist clay. ${ }^{[3120]}$ In the north of England, as at York, pottery is commonly found with wreaths and fanpatterns cut in intaglio in the clay while moist. Others have patterns of four leaves 20 ofour-leaf cut in the soft clay, or continuous ornaments round the vase made with the toothed roller-like instrument of which we have already spoken. Some of this ornamentation may be in imitation of contemporary glass vases. M. Déchelette has traced this fabric to Lezoux, ${ }^{[3121]}$ and the specimens found in Britain are doubtless imported. A Gaulish example from the Morel Collection in the British Museum is given on Plate LXIX. fig. 4.
The feet and rims of the vases were made separately, and attached after their removal from the wheel, as were also the handles when required; but the rarity of handles in Roman pottery is remarkable. It is perhaps due to the difficulty of packing them safely for export. The next process was the preparation of the glaze, for those vases to which it was applied, followed by the baking.
3. Roman Pottery-Furnaces

The remains of pottery-kilns and furnaces discovered in various parts of Europe have furnished a considerable amount of valuable information on the system employed in baking the vases. On this particular point, indeed, we know far more in regard to Roman pottery than to Greek, although, as we have seen in Chapter V., the painted vases themselves sometimes yield information on the appearance and arrangement of the furnaces. But remains of actual furnaces have been found in many places in Western Europe, notably in Germany, France, and Britain, in a more or less complete state, as also in Italy, at Pompeii, Modena, and Marzabotto. ${ }^{[3122]}$ A complete list of those known in 1863 has been given by Von Hefner, ${ }^{[3123]}$ supplemented by Blanchet's lists of furnaces found in France (1898 and 1902). ${ }^{[3124]}$ In Gaul the best examples are at Lezoux, near Clermont, at Châtelet in Haute-Marne, ${ }^{[3125]}$ and at Belle-Vue, near Agen, in the Department of Lot-et-Garonne. ${ }^{[3126]}$ The latter was circular in form, below the level of the soil. In Germany important remains have been found at Heiligenberg in Baden, Heddernheim near Frankfort, Rheinzabern near Karlsruhe, and Westerndorf. ${ }^{[3127]}$ All these in general arrangement differ little from those in use at the present day; the Heddernheim furnace (Fig. 212) was found in the most perfect preservation, but was subsequently destroyed, not, however, before satisfactory plans and drawings had been made. ${ }^{[3128]}$ In Britain by far the most important discoveries have been made at Castor, Chesterton, and Wansford in Northants, where the remains extend for some distance along the Nene valley. ${ }^{[3129]}$ They were first explored by Artis in 1821-27, who published a magnificent series of plates in illustration, entitled Durobrivae; these he supplemented by a full description in the Journal of the British Archaeological Association. ${ }^{[3130]}$ Castor and Chesterton (the latter in Hunts) are both on the site of Roman towns, and were the centres of a special local ware, described in a succeeding chapter. The potteries, being so numerous, are probably not all of the same age.


FIG. 212. ROMAN KILN FOUND AT HEDDERNHEIM, GERMANY.

In 1677 four Roman kilns were discovered in digging under St. Paul's Cathedral for the foundation of Sir C. Wren's building, at a depth of 26 feet. They were made of loam, which had been converted into brick by the action of the fires, and were full of coarse pots and dishes; they measured 5 feet each way. A drawing made at the time is preserved among the Sloane MSS. in the British Museum. ${ }^{[3131]}$ In the kilns was found pottery of the kind typical of London and the neighbourhood. In 1898 two kilns, one of large size, with pottery bearing the name CASTVS FECIT, were found near Radlett in Herts, ${ }^{[3132]}$ and another was excavated in 1895 by Mr. C. H. Read at Shoeburyness. ${ }^{[3133]}$ In Norfolk a kiln of somewhat curious form was found in the Roman settlement of Caistor by Norwich; the shape is that of a shallow concave depression with partitions, and it contained vases placed ready for baking. ${ }^{[3134]}$ Another found between Buxton and Brampton was recorded by Sir Thomas Browne, ${ }^{[3135]}$ and a third at Weybourne. ${ }^{[3136]}$ In the South of England kilns have been found in the New Forest, where there was a manufacture of local pottery ${ }^{[3137]}$; in Alice Holt Forest near Petersfield, Hants; at Shepton Mallet in Somerset; and a potter's workshop at Milton Abbas, Dorset.
${ }^{[3138]}$ The British Museum contains a model of a kiln unearthed at Worcester about forty years ago, on the site of the modern porcelain works. Finally, discoveries of kilns and pottery were made in 1819 at Colchester, and again in 1878, when five kilns, all of different forms, with local pottery, came to light. ${ }^{[3139]}$

To describe all these different types of furnaces in detail would of course be impossible, but much may be learnt from the very full, though now somewhat antiquated, descriptions of the Castor kilns given by Artis. ${ }^{[3140]}$ It will be found more satisfactory to describe the generally-prevailing arrangements, noting the more important variations where they occur. It may further be laid down that the system was practically the same for terracotta figures and tiles as for pottery, and that in many cases both were made in the same furnace. But this was not invariably the case, and at Rheinzabern, for instance, the kilns for tiles were quadrangular, those for pottery circular.
The kilns were constructed partly of burnt, partly of unburnt brick, the interior, floor, and outside of the roofs being covered with a strong layer of cement. They consisted of two main portions, the firechamber with its adjuncts, and the vaulted chamber above, in which the objects to be baked are placed. The fire-chamber was usually circular, with a projection in front, the praefurnium ${ }^{[3141]}$ which had either a vaulted roof, as at Castor and Heiligenberg, or a gabled roof formed of pairs of tiles, as at Rheinzabern. Through this the fuel was introduced, consisting chiefly, as charcoal remains show, of pine-wood. The fire-chamber was either divided up, as at Castor, by walls radiating from a central pillar which supported the roof, or by rows of pillars in a line with the entrance, as at Rheinzabern and Heiligenberg. Holes were bored in the roof to allow the heat to penetrate through, but the arrangement varies; at Heiligenberg each division of the furnace was vaulted, making grooves along which the holes were bored. The oven where the pots were placed has been destroyed in most cases, but we know that it consisted of a floor, a wall with entrances, and a vaulted dome. The pots were ranged partly on the floor, partly on terracotta stands over the holes, as at Rheinzabern and Heiligenberg ${ }^{[3142]}$; at Lezoux there are remains of holes in the walls for iron bars to support them. Special arrangements seem to have been made for baking the finer wares, in order to ensure the proper spread of heat, and to guard against their being blackened or otherwise injured. In the Romano-British Room of the British Museum is a lump of bowls of red ware from Lezoux, fused together in the baking and cast aside. ${ }^{[3143]}$

One of the kilns at Castor (Fig. 213) is described by Artis as a circular hole 3 to 4 feet deep and 4 feet in diameter, walled round to a height of 2 feet; the praefurnium was about a foot in length. In the centre of the circular hole was an oval pedestal (with one end pointing to the furnace-mouth), on which and on the side wall the floor was supported, being formed of perforated angular bricks meeting in the centre. The vaulted dome was composed of bricks moulded for the purpose, ${ }^{[3144]}$ and the sides of the kiln of curved bricks set edgeways in a thick slip of the same material. Brongniart ${ }^{[3145]}$ compares the Castor kiln with that at Heiligenberg, near Strasburg, and others in the Rhine valley in which "Samian" ware was made.
Another kiln found in 1844 Artis describes as having been "used for firing the common blue or slate-coloured pottery, and had been built on part of the site of one of the same kind, and within a yard and a half of one that had been constructed for firing pottery of a different description. The older exhausted kiln ... presented the appearance of very early work; the bricks had evidently been modelled with the hand, and not moulded, and the workmanship was altogether inferior to that of the others, which were also in a very mutilated state; but the character of the work, the bricks, the mouths of the furnaces, and the oval pedestals which supported the floors of the kilns, were still apparent."

Artis was also of opinion that "the blue and slate-coloured vessels found here in such abundance were coloured by suffocating the fire of the kiln, at a time when its contents had acquired a degree of heat sufficient to ensure uniformity of colour." Hence he


FIG. 213. KILN FOUND AT CASTOR, NORTHANTS. denominated kilns in which this ware was baked, "smother kilns." He further notes that the bricks of this kiln "were made of clay mixed with rye in the chaff, which being consumed by the fire [i.e. in the baking of the bricks] left cavities in the room of the grains, which might have been intended to modify expansion and contraction, as well as to assist the gradual distribution of the colouring vapour. The mouth of the furnace and top of the kiln were no doubt stopped; thus every part of the kiln was penetrated with the colouring exhalation." From experiments made on the local clays he proved to his own satisfaction that the colour could not have been produced by any metallic oxide, inherent or applied from without; and this view was supported by the appearance of the clay wrappers of the dome of the kiln. But in view of recent researches, such as those of Blümner, it is doubtful whether Artis' theories can now be upheld. As Mr. Haverfield has pointed out, ${ }^{[3146]}$ the dark colour may be due to the chemical action of the carbonaceous vapour of the smothered kiln rather than to any "colouring exhalation."

The process of packing the kiln in order to secure uniform heat in firing is thus described by the same writer: "The kilns were first carefully loose-packed with the articles to be fired, up to the height of the side walls. The circumference of the bulk was then gradually diminished, and finished in the shape of a dome. As this arrangement progressed, an attendant seems to have followed the packer, and thinly covered a layer of pots with coarse hay or grass. He then took some thin clay, the size of his hand, and laid it flat on the grass upon the vessels; he then placed more grass on the edge of the clay just laid on, and then more clay, and so on until he had completed the circle. By
this time the packer would have raised another tier of pots, the plasterer following as before, hanging the grass over the top edge of the last layer of plaster, until he had reached the top, in which a small aperture was left, and the clay nipt round the edge; another coating would be laid on as before described. Gravel or loam was then thrown up against the side wall where the clay wrappers were commenced, probably to secure the bricks and the clay coating. In consequence of the care taken to place grass between the edges of the wrappers, they could be unpacked in the same-sized pieces as when laid on in a plastic state, and thus the danger in breaking the coat to obtain the contents of the kiln could be obviated."
In the course of his excavations Artis discovered a singular furnace, ${ }^{[3147]}$ "of which I have never before or since met with an example. Over it had been placed two circular earthen fire vessels (or cauldrons); that next above the furnace was a third less than the other, which would hold about eight gallons. The fire passed partly under both of them, the smoke escaping by a smoothlyplastered flue, from seven to eight inches wide. The vessels were suspended by the rims fitting into a circular groove or rabbet, formed for the purpose." He was strongly of opinion that this furnace was used for producing glazed wares by means of iron oxide. Whether this is so or not, it is interesting to note that in the British Museum and Museum of Geology there are cakes of vitreous matter from Castor, probably used as a glaze, and consisting of silicates of soda and lime. ${ }^{[3148]}$
The kiln found at Caistor, in Norfolk, was apparently used for baking the grey Roman ware, and differed in form from those described, which were for the black, being only calculated for a slight degree of baking. It was a regular oval, measuring 6 feet 4 inches in breadth. The furnace holes were filled in below with burnt earth of a red colour, and in the upper part with peat; the exterior was formed of strong blue clay of 6 inches in thickness, and the interior lined with peat; the kiln was intersected by partitions of blue clay. Some of the vases were inverted and filled with a core of white sand. ${ }^{[3149]}$


FIG. 214. PLAN OF KILN AT HEILIGENBERG.

The furnaces at Heiligenberg and Rheinzabern present the following further peculiarities. ${ }^{[3150]}$ The former, which were evidently used for the baking of red wares, had a flue in the form of a long channel with arched vault, the mouth being over 8 feet from the space where the flames and heat were concentrated under the oven (Fig. 214). Numerous pipes of terracotta, of varying diameter, diverged from the upper part or floor of the oven, to distribute the heat; in the outer wall of the oven was a series of smaller ones, and twelve or fifteen of larger size opened under the floor of the oven to distribute the heat and flame round the pots (Fig. 215). The mouths of the pipes were sometimes stopped with baked clay stoppers to moderate the heat. The upper part or dome of the kiln is never found entire, having been generally destroyed here, as elsewhere, by the superincumbent earth. Walls of strong masonry separated and protected the space between the mouth of the flue and the walls of the oven, and the floor of the latter was made of terracotta tiles.


FIG. 215. SECTION OF KILN AT HEILIGENBERG.

At Rheinzabern, where excavations were made in 1858, fifteen furnaces were found, some round and others square, but all constructed on the same plan. The floor of the oven was over 3 feet below the top of the walls, and was covered with tiling, the walls being formed of rough slabs of clay,
about 28 by 16 inches in size. The floors of the ovens were in some cases supported by bricks covered with a coating of clay. Stands of baked clay in the shape of flattened cylinders supported the pots in the oven, and these rested on pads of a peculiar form, roughly modelled in clay. ${ }^{[3151]}$ In all, seventy-seven pottery-kilns and thirty-six tile-kilns were discovered on this site. ${ }^{[3152]}$

The following list, though by no means claiming to be exhaustive, gives the names of the chief potteries where actual furnaces have been discovered.

> 1. Italy

Arezzo
Marzabotto
Modena
Oria
Pompeii
Pozzuoli

See p. 479 ff .
Mon. Antichi, i. p. 282.
Bull. dell' Inst. 1875, p. 192.
Ibid. 1834, p. 56.
Mau-Kelsey, Pompeii, p. 386.
Bonner Jahrb. xcvi. p. 54.
2. France

Dept. Ain of

Allier

Aveyron
Dept. Bouches-du-Rhône of

| Charente | Auriol | Blanchet, p. 98. |
| :---: | :---: | :---: |
|  | Marseilles | p. 98. |
|  | Jarnac | " p. 101. |
|  | Chez Ferroux | " p. 102. |
| Eure-et-Loire | Chartres | p. 104. |
| Gard | Uzès | " p. 99. |
| Haute-Garonne | Vieille-Toulouse | " p. 101. |
| Haute-Marne | Châtelet | Brongniart, Traité, i. p. 439. |
| Haute-Saône | Luxueil | Blanchet, p. 107. |
| Ille-et-Vilaine | Redon | " p. 102. |
| Indre-et-Loire | Nouâtre | " p. 104. |
| Loire | Montverdun | " p. 96. |
| Loire-Inférieure | Herbignac | " p. 102. |
| Loire-et-Cher | Thoré | " p. 104. |
| Lot | Cahors | " p. 100. |
|  | Mélines | " p. 101. |
| Lot-et-Garonne | Agen | " p. 101; Rev. Arch. xviii. (1868), pl. 23. |
| Lozère | Banassac | Blanchet, p. 97; Déchelette, i. p. 117. |
| Nièvre | Chantenay | Blanchet, p. 96. |
|  | Gravier | p. 96. |
| Oise | Bois-Ibert | " p. 105. |
|  | Compiègne (Forest of) | " p. 104. |
|  | Mont-de-Hermes, Beauvais | " p. 105. |
|  | Sampigny | " p. 105. |
| Orne | Chandai | " p. 103. |
| Pas-de-Calais | Avesnes-le-Comte | " p. 106. |
| Puy-de-Dôme | Clermont-Ferrand | " p. 95. |
|  | Lezoux | " p. 93; Déchelette, i. p. 141 ff . |
|  | Thiers | Blanchet, p. 94. |
| Rhône | Lyons | " p. 100. |
| Sarthe | Grand-Lucé | " p. 103. |


| Seine | Paris | $"$ | p. 104. |
| :--- | :--- | :---: | :---: |
| Seine-Inférieure | Incheville | p. 103. |  |
| Somme | Amiens | Blanchet, p. 106. |  |
| Tarn | Montans | $"$ | p. 97. |
| Tarn-et-Garonne | Castelnau-de- | $"$ | p. 97. |
|  | Montratier |  |  |
|  | Muret | $"$ | p. 97. |
| Vendée | Trizay | $"$ | p. 102. |
| Yonne | Sens | $"$ | p. 106. |

[See also Blanchet, p. 90 ff. for sites of furnaces for terracotta figures.]
3. Germany

Alttrier, Luxemburg
Bergheim
Bonn
Cannstadt
Cologne
Commern
Dalheim, Luxemburg
Dieburg
Güglingen
Heddernheim
Heidelberg
Heiligenberg
Heldenbergen
Herbishofen
Nassenfels
Petzel, Luxemburg
Rheinzabern
Riegel
Rottenburg
Schönbuch, Würtemberg
Trier
Waiblingen
Westheim
Westerndorf

Von Hefner, p. 60.
Blanchet, Mélanges Gallo-rom. ii. p. 108.
Bonner Jahrb. lxxiv. p. 152; lxxxiv. p. 118.
Von Hefner, p. 61.
Bonner Jahrb. lxxix. p. 178.
Ibid. iv. p. 203.
Von Hefner, p. 61.
" p. 61.
Bonner Jahrb. i. p. 74.
Ann. dell' Inst. 1882, p. 183.
Bonner Jahrb. lxii. p. 7.
Brongniart, Traité, i. p. 427; Blanchet, Mélanges Gallo-rom. ii. p. 108.

Westd. Zeitschr. für Gesch. u. Kunst, xviii. (1899), pl. 4, p. 227.
Von Hefner, p. 61.
" p. 61.
" p. 61 .
" p. 61; Brongniart, i. p. 429.
Von Hefner, p. 61.
Bonner Jahrb. iv. p. 141.
Blanchet, p. 108.
" p. 108.
Von Hefner, p. 61.
" p. 62.
" p. 62.
4. England

Dorset, Milton Abbas
Essex, Ashdon
" Colchester
" Shoeburyness
Hampshire, Alice Holt Forest
" New Forest
Hertfordshire, Radlett
Huntingdon, Sibson and Water Newton
Kent, Upchurch
Lancashire, Warrington
Middlesex, London (St. Paul's)
Norfolk, Brampton
" Caistor-by-Norwich
" Caistor-by-Yarmouth
" Weybourne
Northants, Castor, Wansford, Bedford Purlieus
Oxfordshire, Headington
" Littlemore
Somerset, Shepton Mallet

Roach-Smith, Collect. Antiq. vi. p. 191.
Arch. Journ. x. p. 21.
Roach-Smith, Collect. Antiq. ii. p. 38, vii. pls. 13, p. 1 ff.; Journ. Brit. Arch. Assoc. xxxiii. p. 267.

Proc. Soc. Antiqs. 2nd Ser. xvi. p. 40.
Vict. County Hist. i. p. 306.
Ibid. p. 326.
Proc. Soc. Antiqs. 2nd Ser. xvii. p. 261.
Vict. County Hist. Northants, i. p. 175.
Roach-Smith, Collect. Antiq. vi. p. 178;
Archaeologia, li. p. 467.
Reliquary, 1900, p. 263.
Roach-Smith, Ill. Rom. Lond. p. 79.
Vict. County Hist. i. p. 314.
Ibid. p. 291; Archaeologia, xxxvi. p. 413.
Journ. Brit. Arch. Assoc., xxxvi. p. 206.
Vict. County Hist. i. p. 322.
Vict. County Hist. i. p. 166 ff., 206 ff.
Journ. Brit. Arch. Assoc. vi. p. 60.
Ibid. liv. p. 349.
Gentleman's Mag. 1864, ii. p. 770.

Suffolk, West Stow Heath
Worcester

Journ. Brit. Arch. Assoc. xxxvii. p. 152.
Vict. County Hist. i. p. 207 (a model in Brit. Mus.).
[On the subject generally reference may be made to Brongniart, Traité, i. p. 426; De Caumont, Cours d'ant. Monum. ii. (for Heiligenberg); Von Hefner, Römische Topferei, in Oberbayr. Archiv für vaterl. Gesch. xxii. (1863), p. 60 (where a complete list of furnaces up to date is given); Bonner Jahrbücher, lxii. 1878, p. 7 ff.; Wolff in Westdeutsche Zeitschrift für Gesch. u. Kunst, xviii. (1899), p. 211 ff.; Blümner, Technologie, ii. p. 23 ff.; Smith, Dict. of Antiqs. i. p. 845 (art. Fictile); and for Gaulish sites, Blanchet, Mélanges Gallo-romaines, ii. p. 93 ff .]

## 4. Pottery in Latin Literature; Shapes and Uses

Vessels of earthenware were extensively used by the Roman people in the earlier days of the Republic for all purposes of domestic life, ${ }^{[3153]}$ and later writers often contrast their use with that of the costly vases of precious metal then customary. "Gold," says Persius, "has driven away the vases of Numa and the brass vessels of Saturn, the urns of the Vestals and Etruscan earthenware"[3154]; and Juvenal speaks of those who laughed at "Numa's black dish and bowl, and fragile saucers from the Vatican hill." ${ }^{[3155]}$ Even under the Empire fictile vases continued to be used by the poorer classes, and the use of the finer red glazed wares must have been even more general. But Juvenal, satirising the luxury of Domitian's time, says that it is considered a reproach to dine off earthenware. ${ }^{[3156]}$ In Republican times it was the proud boast of a Curius to prefer his earthenware service to Samnite gold, ${ }^{[3157]}$ and in 167 b.c. the consul Q. Aclius Tubero was found by the Aetolian ambassador dining off earthenware ${ }^{[3158]}$; Seneca also tells how he, at his entertainment given in the temple of Jupiter, placed fictile vessels before his guests. ${ }^{[3159]}$ But when Masinissa entertained the Romans in 148 b.c. the first course was served on silver, the second in golden baskets, which Ptolemy Euergetes describes respectively as the Roman and Italian fashions. ${ }^{[3160]}$ Athenaeus says that up to Macedonian times dinners were served in fictile vessels, but that subsequently the Romans became more luxurious, and Cleopatra spent five minae a day on gold and silver wares. ${ }^{[3161]}$ Subsequently earthenware was replaced by glass as well as metal, especially for unguent-bottles and drinking-cups, of which large numbers are found in Roman tombs, where they virtually take the place of pottery. Vases of immense size were sometimes made under the Empire, and stories are told of the absurdities perpetrated by some of the Emperors in this respect. Juvenal, in describing the turbot prepared for Domitian, ${ }^{[3162]}$ says no dish could be found of sufficient size to cook it in, and Vitellius had a dish made which from its huge dimensions acquired the name of "the shield of Minerva. ${ }^{[3163]}$ Elsewhere it is scoffed at as a "swamp of dishes" (patinarum paludes). ${ }^{[3164]}$ Pliny speaks of terracotta vases which sold for even more than precious crystal or myrrhine ware, ${ }^{[3165]}$ and were therefore presumably of great size.
The principal use of earthenware was for the transport and storage of wine, oil, corn, figs, honey, and other commodities, answering to the casks of the present day. Martial speaks of a jar (testa) reddened with the blood of tunnies exported from Antipolis (Antibes). ${ }^{[3166]}$ Of the shapes used for this purpose and their names we shall speak presently in detail. Vases were also used in religious rites, but metal was probably more general; Plautus describes a miser who sacrificed to the Lares in earthenware (vasis Samiis) because he was afraid that they might steal silver vessels. ${ }^{[3167]}$ They were also used for various operations in agriculture, medicine, and household economy; but above all for the domestic purposes of the table. Some of the peculiar uses have already been referred to (p. 387), and another that may be mentioned is the use of jars as bell-glasses for rearing vinesprouts. ${ }^{[3168]}$
Although the custom of burying vases with the dead was not so general among the Romans as among the Greeks, they were yet frequently used in graves in the form of cinerary urns, in the shape of a covered jar (olla or obrendarium ${ }^{[3169]}$ ) of coarse ware and globular in form (p. 550). Vases containing ashes have often been found in England, as at Bartlow and Litlington in Cambridgeshire. ${ }^{[3170]}$ At the latter place a tomb contained a sort of colander perforated with holes which formed the letters indvlcivs. ${ }^{[3171]}$ Similar finds are recorded from Arnaise in France. Pliny states that many persons expressed their desire to be buried in coffins of terracotta. ${ }^{[3172]}$ Roman sarcophagi of terracotta have been found at Saguntum in Spain, but for these stone and lead were the ordinary materials. The cinerary urns were often formed from large dolia or amphorae, the neck being broken off so as to produce a globular vessel. Examples have been found in England at Chesterford, Essex, ${ }^{[3173]}$ at Southfleet in Kent, ${ }^{[3174]}$ and in the Bedford Purlieus near Kingscliffe, Northants (now at Woburn Abbey); another is in the Cathedral Library at Lincoln. ${ }^{[3175]}$ Roach-Smith also mentions specimens found in Lothbury, London, and in Kent, the latter being now in the Maidstone Museum. [3176]

Vitruvius, in his chapter on Echea, or vases distributed around the ancient theatres for acoustic purposes, mentions that they were often made of earthenware for economical reasons ${ }^{[3177]}$; but they were usually of bronze. Seneca, too, alludes to this practice when he speaks of the voice of a singer falling upon a jar (dolium). ${ }^{[3178]}$ It is certain that the Greeks and Romans often made use of earthenware jars in architecture, but it is probable that this was more often done with the object of diminishing weight than for acoustic reasons, or, as some have thought, for want of better material. The dolium, amphora, and olla seem to have been the forms most usually employed. There are various examples in walls and substructures of the Augustan period, and they are also found in vaults, where their purpose is undoubtedly to lighten the weight. ${ }^{[3179]}$ In the circus of Maxentius a number of large amphorae were found embedded in the vaulting and upper part of the walls, arranged neck downwards and with their axis inclined obliquely to the wall. ${ }^{[3180]}$ All are now broken, but they illustrate the ingenious method in which the upper parts of the arches supporting the rows
of seats were lightened. In the dome of the tomb of St. Helena, outside the Porta Labicana, rings of pots are embedded for the same purpose, whence the building is usually known as Torre Pignattara (from pignatte, pots). ${ }^{[3181]} \mathrm{An}$ oven found at Pompeii had a vaulted top formed of ollae fitted into one another, each about a foot in height, of ordinary red ware; the span of the arch was 5 feet 6 inches, and the object here was to ensure extreme dryness as well as lightness. ${ }^{[3182]} \mathrm{A}$ similar arrangement occurs in the Stabian Thermae at Pompeii, and also in the church of San Stefano alla Rotonda at Rome, and the dome of San Vitale at Ravenna, built by Justinian in the sixth century, is similarly constructed, with an elaborate system of tubes and jars. ${ }^{[3183]}$ The practice seems to have been continued during the Middle Ages, and an example occurs in England, at Fountains Abbey, where the purpose was acoustic. ${ }^{[3184]}$

We now proceed to describe in detail the principal shapes of Roman vases, so far as they can be identified from literary or epigraphical evidence or from other sources, on the same lines as in our previous chapter on the shapes of Greek pottery. Some of these shapes, it will be seen, they had in common with the Greeks, such as the amphora, the krater, and the phiale or patera, and in several instances (such as the cyathus and the scyphus) the Greek name is preserved.
Beginning with vases used for storage, whether for liquids, as for wine and oil, or for solids, as for corn or fruit, which were chiefly kept in cellars, we take first the dolium, a gigantic cask corresponding to the Greek níӨoç (Vol. I. p. 152), which from its general usage gave rise to the generic term opus doliare, for common work in clay. It was large enough to contain a man, as we know from the story of Diogenes illustrated on the Roman lamp already given (Plate LXIV. fig. 6); the vessel thereon depicted may serve to give an idea of its appearance. Columella ${ }^{[3185]}$ speaks of dolia sesquiculearia, i.e. holding one-and-a-half culei or thirty amphorae. They were buried in the earth of the cellars, and have been found thus in Italy at Anzi, in France at Apt, Vaucluse, and near Clermont, and at Tunis. ${ }^{[3186]}$ They were used for wine, oil, corn, and salted meat, and Juvenal tells us that dolia were used for new wine, being lined with wax, pitch, or gypsum. ${ }^{[3187]}$ In 1858 a large number were found at Sarno in Campania, some being stamped with the makers' names, as ONESIMVS FECIT, VITALIS F, L • TITI •T F F PAP, and M • LVCCEI $\cdot$ QVARTIONIS. ${ }^{[3188]}$ On one was incised L $\cdot$ XXXIV, or thirty-four lagenae (see p. 446). One of the prodigies which was supposed to predict the future fortune of the Emperor Antoninus Pius was the discovery above ground of some dolia which had been sunk in the earth in Etruria. ${ }^{[3189]}$ An old name for the dolium was calpar, ${ }^{[3190]}$ and another smaller variety was the seria, ${ }^{[3191]}$ containing only seven amphorae. A diminutive form of the latter, seriola, is described as a wine-vessel invented in Syria. ${ }^{[3192]}$
Dolia were made in separate pieces, the base and other parts being secured by leaden cramps, and they were also hooped with lead, as we learn from Cato. ${ }^{[3193]}$ Pliny speaks of repairing casks by fitting on handles, scraping the hoops, and stopping up cracks. ${ }^{[3194]}$ They are made both of white and red clay, baked in a slow furnace, great care being required to moderate the heat aright. Their makers were known as doliarii. Part of a large dolium bound with leaden hoops was found near Modena, at Palzano; also at Spilamberto, one with the name of T. Gavelius and the numerals xxx, xiir, another of the capacity of 36 amphorae. ${ }^{[3195]}$ On the mouth of one found in the Villa Peretta at Rome was the name of L. Calpurnius Eros, ${ }^{[3196]}$ on another the name of T. Cocceius Fortunatus. ${ }^{[3197]}$ Two good examples of dolia were at one time preserved in the gardens of the Villa Albani, about 4 feet in diameter and as many in height, and of a coarse gritty pale red clay. This kind of vase was often used for sepulchral purposes, bodies having being found actually buried in them (see above, p. 457).

Next in size and importance to the dolium is the amphora, resembling in form the Greek winejar ${ }^{[3198]}$; it usually has a long cylindrical body with pointed base, a long narrow neck, and two straight handles. Hölder ${ }^{[3199]}$ notes several varieties: the Canopic, the wide-bellied, the cylindrical, the globular, and the spheroidal, the former of which is a typical early form in the provinces. ${ }^{[3200]}$ It was often without neck or handle, and was seldom ornamented, not being used for artistic purposes like its Greek prototype, but only for strictly utilitarian ends, that is, for the storage and transport of wine. It is usually of coarse red earthenware, made on the wheel, with a clay stopper to close the mouth, and the name of the maker in a rectangular label on the handle, like the diota or wineamphora of the Greeks. It was in fact often known as a diota, as in a familiar line of Horace ${ }^{[3201]}$ :

Deprome quadrimum Sabina,
O Thaliarche, merum diota.

The amphora was pitched internally to preserve the wine ${ }^{[3202]}$; the pointed base was of course adapted for fixing it in the ground in the cellar, but when brought up it was placed in a tripod-stand of metal or wood (incitega). ${ }^{[3203]}$ In Cicero's time the regulation size was equivalent to a quadrantal or two urnae. ${ }^{[3204]}$ The use of this vase was very varied and extensive among the Romans; it was employed not only in cellars and granaries, but also at the table and for many other purposes of ordinary life, even where nowadays vessels of wood or iron would be preferred.
D'Agincourt ${ }^{[3205]}$ mentions the discovery at Rome, near the Porta del Popolo, of a row of amphorae in a cellar in 1789, and at Pompeii a hundred were found in the house of Arrius Diomedes, a hundred and fifty in that of the Faun; a hundred and twenty were found in a cellar near the baths of Titus, and many more at Milan in 1809, and at Turin. Numbers have been found in London, varying in capacity from four to twelve gallons, and others at Colchester and Mount Bures in Essex. ${ }^{[3206]}$ But they are so universal all over the Roman Empire that to enlarge the list would be tedious. Many, however, evoke a special interest by reason of their stamps and inscriptions, and a few typical examples may profitably be given. ${ }^{[3207]}$

The inscriptions vary in form and character; some amphorae give the name of the maker in the
genitive, officina being understood; others the consuls for the year in which they were filled; others, again, the name of the wine or other phrases descriptive of their contents; and others complimentary inscriptions to their owners. Among names of makers both single, double, and triple names are found, and among the former are many of a Gaulish or barbarian character, such as Bellucus, Dicetus, and Vacasatus, son of Brariatus; the last-named from Nimeguen, the first-named from London. ${ }^{[3208]}$ Among the triple names, showing that the potters were Roman citizens or freedmen, are M. Aemilius Rusticus from Caerleon, and C. Antonius Quintus, also found in Britain. ${ }^{[3209]}$ Sometimes the name is in the nominative with F for fecit, or with the genitive of for officina occurs. The stamps are in the form of oblong rectangular labels on the handle or neck, the letters in relief. One of the most curious stamps was on an amphora found in the Pontine marshes near Rome, a square one with a caduceus and other symbols arranged in twelve compartments; the inscription runs m • PETRON • VETERAN • LEO • SER • FECIT, "Leo, the slave of M. Petronius Veteranus, made it."[3210]
The names of Vespasian and Titus as consuls are found on an amphora from Pompeii: vespasiano iil ET FILIO CS, the year being A.D. $744^{[3211]}$; that of M. Aurelius (but not necessarily as consul) occurs on an amphora found at Newington in Kent ${ }^{[3212]}$; and on one in the British Museum from Leptis in Africa is L•CASSIO • C • MARIO - COS, the date being A.D. 107. ${ }^{[3213]}$ On the neck of a fourth amphora, found at Pompeii, was FVNDAN • CN • LENTVL • M • ASINIO • COSS, "wine of Fundi in the consulship of Cn. Lentulus and M. Asinius (Agrippa)," of the year A.D. 26. ${ }^{[3214]}$
The character or origin of the wine or other commodity stored in the amphorae is given by such inscriptions as BARCAE, KOR • OPT ("best Corcyrean"), ${ }^{[3215]}$ RVBR • VET • [=V] • P CII ("old red wine, 102 lbs. weight"), all from Pompeii, painted in red and black. ${ }^{[3216]}$ MES $\cdot \mathrm{AM} \cdot \mathrm{xviII}$, also on an amphora from Pompeii, appears to mean "eighteen amphorae [not measures] of Mesogitan wine" (from Mesogis in Lydia ${ }^{[3217]}$ ); or, again, we find at Pompeii SVRR . xxI, "twenty-one amphorae of wine of Surrentum"[3218]; TOSCOLA(n)ON (ex) OFFICINA $\operatorname{SCAV}(r i)$, "Tusculan wine from the manufactory of Scaurus." ${ }^{[3219]}$ On the other hand, LIQVAMEN OPTIMVM ("best pickle"), or such expressions as sCOMBRI ("mackerel"), GARVS ("brine"), etc., imply that the vessel has been used for conveying pickled fish. [3220]

Among expressions of a complimentary nature are: fabriles marcellae n • ad felicitatem, "the workmen of our Marcella to wish her joy"[3221]; ( $p r$ ) OMO ( $s$ ) FAMELIAI dONO $(m) \mathrm{v}$ (otum dedit), or dono v (rnam dat), "Promus gave (an urn) as a gift and vow to his family" (from Ardea in Latium). ${ }^{[3222]}$ The list may be concluded with the inscription on an amphora found in the garden of the Villa Farnese, among the ruins of the Aurea Domus of Nero, which held eight congii; on its neck was traced in illformed letters: L(iquaminis) fl(os) excel(lens) l • pVrelli gemelli m(...), "Finest brand of liquor, belonging to L. Purellus Gemellus." ${ }^{[3223]}$ An amphora was found at Pompeii with the name of Septimius or Stertinius Menodotus in Greek letters. ${ }^{[3224]}$ There are occasional references in the classics to the practice of placing such stamps on vases, as when Plautus makes the slave say, with reference to the drinking that went on in his master's house, "There you may see epistles written with letters in clay, sealed with pitch; the names are there in letters a foot and a half long." ${ }^{[3225]}$ Or, again, another slave, fearing to be caught with a jar in his possession, reflects, "This jar is lettered; it proclaims its ownership." ${ }^{[3226]}$ Juvenal speaks of wine whose country and brand had been obliterated by old age through long hanging in the smoke. ${ }^{[3227]}$
Another vase used much in the same way as the amphora, and particularly for keeping wine, was the cadus, the shape of which is not exactly known. It held about twelve congii, or seventy-two sextarii (pints), and is frequently mentioned by Horace and Martial. ${ }^{[3228]}$ The former in the Odes refers to his jar of Alban wine nine years old, and in another passage to one stored in Sulpicius' cellars ${ }^{[3229]}$; the latter speaks of cadi Vaticani, which may mean made of clay from the Vatican hill or containing Vatican wines ${ }^{[3230]}$; elsewhere he speaks of taking yellow honey from the ruddy jar (implying an earthenware vessel), and of the red jar which pours out home-made wine. ${ }^{[3231]} \mathrm{We}$ also learn from him that the cadus was hung in the chimney to give the wine a mellow flavour. ${ }^{[3232]}$ From other passages we learn that the cadus was used for oil, ${ }^{[3233]}$ fruit, ${ }^{[3234]}$ and money, ${ }^{[3235]}$ and also as a measure equivalent to one-and-a-half amphorae or three urnae. ${ }^{[3236]}$ The orca is described by Isidorus as a kind of amphora, of which the urceus (see below) was a diminutive. ${ }^{[3237]}$
The Romans were presumably, like the Greeks, in the habit of mixing their wine with water, but we only find the crater mentioned rarely, and that in a poetical manner. ${ }^{[3238]}$ Moreover it was probably made in metal as a rule, and the rare instances of the crater which occur in the Arretine ware are obvious imitations of metal prototypes; there is a fine example in the British Museum from Capua (see Fig. 219). Ovid, however, speaks of the rubens crater, ${ }^{[3239]}$ implying terracotta, as in the case of the rubens cadus of Martial mentioned above. The vinarium, ${ }^{[3240]}$ the acratophorum (for holding unmixed wine), ${ }^{[3241]}$ and the oenophorum were probably of the same character, but the latter was portable, as we know from Horace's jeer at the man who took his cooking-stove and wine-jar (oenophorum) with him everywhere. ${ }^{[3242]}$
The urna, the equivalent of the Greek hydria, was similarly used for carrying water, and also for casting lots, or as a voting-urn ${ }^{[3243]}$; in the latter sense Cicero actually uses the word hydria. ${ }^{[3244]}$ Its size was half that of the amphora. Both the urna and the hydria are found in connection with funerary usages, and appear to have held the ashes of the dead. ${ }^{[3245]}$ The situla, or bucket, with its diminutive sitella, was also used for water and for lots, ${ }^{[3246]}$ but was principally of metal. Isidorus says it is the Greek кó $\delta$ oç (Vol. I. p. 165). ${ }^{[3247]}$ The cupa and the cumera seem to have been of wood rather than earthenware ${ }^{[3248]}$; the former was a kind of tub, the latter was used for keeping grain, and also by brides for conveying their effects to their new home. ${ }^{[3249]}$ Another large vessel for holding liquids was the sinus, or sinum, used both for water and milk. ${ }^{[3250]}$ The nasiterna, so called from its long spout or nasus, had three handles, and was used as a watering-pot. ${ }^{[3251]}$ The fidelia appears to have been a kind of large pail or bucket; Cicero in one of his letters ${ }^{[3252]}$ cites the
proverb, de eadem fidelia duos parietes dealbare, which answers to our "killing two birds with one stone." It implies that it would be used for holding paint or whitewash.
Of smaller vases for holding liquids, such as jugs, bottles, and flasks, the principal were the urceus (with its diminutive urceolus), the ampulla, and the lagena or lagona. The hirnea is also mentioned as a jug which was filled from the jar or cadus. ${ }^{[3253]}$ The urceus seems to be a small jug, the equivalent of the Greek oivoұó $\eta$, having one handle; it was also used as a measure. ${ }^{[3254]}$ The ampulla was used both as a wine-flask and an oil-flask, corresponding thus to the Greek $\lambda \dot{\eta} \kappa \cup Ө$ oऽ, as is seen in its metaphorical use. ${ }^{[3255]}$ It was used for bringing the wine to table, like a decanter, ${ }^{[3256]}$ and is described by Apuleius ${ }^{[3257]}$ as lenticular in form, being therefore like a flat round-bodied flask with two handles.


FIG. 216. AMPULLA (BRITISH MUSEUM).

An interesting example of an ampulla of this kind, of red ware with a coarse reddish-brown glaze was found some years ago near the Hôtel Dieu, Paris. ${ }^{[3258]}$ It bore two inscriptions round the body, one on either side, with letters in relief; on one side was ospita reple lagona cervesa, "Mine host, fill the flask with beer"; on the other, COPO CNODI TV ABES EST REPLETA, "Innkeeper, (?), be off, it is full." Similar vases have been found in Hainault and at Trier, and are said to be still made in Spain. Another of the same kind, but with only one handle, recently acquired by the British Museum from the Morel collection, has on it the word ampulla painted in white (Fig. 216). The lagena (Greek, גó́puvoç) was a jug or bottle with narrow neck, wide mouth, and handle, and was used as a sign by winesellers. ${ }^{[3259]}$ It was sealed up until required for use, ${ }^{[3260]}$ and being proverbially brittle, was protected, like a modern Italian wine-flask, by wicker-work. ${ }^{[3261]}$ It was also used as a travelling-flask, and carried by hunters and fishermen ${ }^{[3262]}$; the younger Pliny exhorts Tacitus, when he goes hunting, to take not only a "sandwich-box and brandy-flask" (panarium ac lagunculam), but also a notebook to jot down ideas. ${ }^{[2263]}$ The Roman barmaid carried a lagena at her side when serving in the tavern, ${ }^{[3264]}$ and it was used as a wine-jug at the table. ${ }^{[3265]}$ A jar found at Saintes in France has engraved on it MARTIALI SOL(i)DAM LAGONAM, "A whole flask to Martialis," ${ }^{[3266]}$ and gives a clue to the form associated with this word (see Fig. 217).
The words in use for a ladle are cyathus, corresponding to the Greek kú $\theta$ oç (Vol. I. p. 179), ${ }^{[3267]}$ in measure equivalent to onetwelfth of the sextarius or pint, and simpulum or simpuvium. The latter were chiefly associated with sacrifices, and will be dealt with later (p. 471); the cyathus was regularly used at the table for measuring out the wine into the drinking-cups. We learn from Martial that in drinking a toast it was customary to use the number of cyathi that corresponded to the letters in the name of the recipient, as in the epigram

> Laevia sex cyathis, septem Justina bibatur,
> Quinque Lycas, Lyde quattuor, Ida tribus. ${ }^{[3268]}$

Of drinking-cups the Romans had almost as large a variety as the Greeks, the majority of the ornamented vases preserved to this day being apparently for this purpose; the number of names recorded in literature is, however,


FIG. 217. LAGENA FROM FRANCE, INSCRIBED. much less, as many of those given in the long list on pp. 181-183 of Vol. I. are mere nick-names for ordinary forms. The generic name for a drinking-cup was poculum, ${ }^{[3269]}$ the Greek поти́pıov, just as vas was the generic name for a larger vessel; it occurs constantly in the poets, who, indeed, use it somewhat loosely, and has already been met with in the series of small bowls with Latin inscriptions described in Chapter XI. (p. 490). Many forms of drinking-cups used by the Romans were only made in metal, such as the cantharus, ${ }^{[3270]}$ carchesium, ${ }^{[3271]}$ and scyphus ${ }^{[3272]}$ (see Vol. I. pp. 184, 187). All these were forms borrowed from the Greeks, as were the calix (kylix), the cotula (chiefly used as a measure $=$ half-a-pint), and the scaphium ${ }^{[3273]}$ and cymbium, ${ }^{[3274]}$ which were boat-shaped vessels. The ciborium (a rare word, but used by Horace ${ }^{[3275]}$ ) was supposed to be made in the form of the leaves or pods of the colocasia, or Egyptian bean. ${ }^{[3276]}$ Its later ecclesiastical use is well known. Other names of which we hear are the batioca, ${ }^{[3277]}$ the gaulus, ${ }^{[3278]}$ the scutella (see below), ${ }^{[3279]}$ and the amystis, or cup drained at one draught (see Vol. I. p. 181). ${ }^{[3280]}$ Like the Greek kylix, the calix appears to have been of all these the one most commonly in use, and is constantly referred to by poets and prose writers. Those of terracotta could often be purchased at a very low price, and formed, it is evident, the ordinary drinking-cups of the Roman citizen; they were also frequently of glass. Juvenal speaks of "plebeian cups purchased for a few asses" ${ }^{[3281]}$; and Martial describes a man buying two calices for an as and taking them home with him. ${ }^{[3282]}$ We have no exact information as to its form, but it must have been something like the Greek kylix, only probably without handles; it was also used for solid food such as herbs. ${ }^{\text {[3283] }}$ Seneca speaks of calices Tiburtinae, which seem from the context to have been of earthenware. ${ }^{[3284]}$ Varieties of the calix are probably represented by the typical Gaulish forms illustrated in Chapter XXIII., Figs. 221-223.

Of dishes and other utensils employed for food at the table, the largest were the lanx and the
patina. The former is described by Horace and Juvenal as large enough to hold a whole boar, ${ }^{[3285]}$ and was probably of metal; the patina is described as a dish for holding fish, crabs, or lobsters, ${ }^{[3286]}$ but that it was not necessarily limited in size is shown by the stories already alluded to of Domitian and Vitellius (p. 456). The latter, when dragged to his death, was insulted by the epithet of patinarius, or dish-maker. ${ }^{[3287]}$ The patina was flat, and made of clay, and is also described as a wide and shallow vessel for cooking. ${ }^{[3288]}$ It is contrasted with the lagena in the well-known fable of the fox and the stork. ${ }^{[3289]}$ Smaller dishes for sweetmeats and other dainties were the catinum and catillum, and the patella. ${ }^{[3290]}$ The discus and paropsis ${ }^{[3291]}$ appear to have been, like the lanx, principally of metal; the former was like a shield (whence scutula and scutella); the latter is mentioned by Isidorus, who describes it as quadrangular, and by Martial, together with some obscurely-named dishes ${ }^{[3292]}$ :

Sic implet gabatas paropsidesque Et leves scutulas cavasque lances.

Martial speaks of the patella as a dish for a turbot, and also as a vessel of black ware which was used to hold vegetables ${ }^{[3293]}$; the catinus (a fictile dish) was large enough to hold a good-sized fish, such as a tunny, ${ }^{[3294]}$ and the catillus appears to have been a sort of porringer. Sauces were placed in small dishes or cups, known as acetabula (the Greek ó $̧ \dot{\jmath} \beta \alpha \varphi \rho \nu$ ), which were evidently of earthenware ${ }^{[3295]}$; the catellus held pepper, ${ }^{[3296]}$ and the concha or shell was used for a salt-cellar, also for unguents. ${ }^{[3297]}$ The latter was probably a real shell, not of earthenware. Another kind of dish which is only once mentioned, in Horace's account of Nasidienus' banquet, was the mazonomum, probably a kind of lanx, in metal, which held on that occasion a sort of ragoût of game. ${ }^{[3298]}$ His own table, however, he boasts, was adorned only by a cyathus and two cups, an echinus or rinsing-bowl, a guttus, and a patera or libation bowl. ${ }^{[3299]}$ The guttus seems to have corresponded to the Greek lekythos or askos, and is the general name for an oil-flask or cruet. ${ }^{[3300]}$ It was either a small, longnecked bottle or a squat flask with a narrow spout, which allowed the oil to pour slowly. RoachSmith published a relief dedicated by Egnatius, a physician, to the Deae Matres, on which small vases of the first-named form appear, indicating that he consecrated his medicine bottles to these divinities. ${ }^{[3301]}$
Of vessels for cooking, washing, and other common domestic purposes, the olla was that in most general use ${ }^{[3302]}$; the word is, in fact, a generic name for a jar or pot (Gk. $\chi$ v́t $\rho \alpha$ ), as in the play of Plautus, the Aulularia, the name of which embodies an archaic form of the word, aula, aulula. Here it was used for hiding a hoard of gold. It was also, as has been noted, used as a funerary urn, and some inscribed examples of marble ollae have been found in tombs. The pelvis was more particularly a washing basin, but Juvenal speaks of it as scented with Falernian wine. ${ }^{[3303]}$ It is usually identified with the mortarium, a large, shallow, open bowl with a spout, frequently found in Britain and Central Europe (see below, p. 550); it is of coarse light-red clay, and often has the potter's name stamped upon it. That it was used for pounding substances is shown by the fact that it often has small pebbles embedded in the surface of the interior. The scutra is mentioned by Cato and Plautus, ${ }^{[3304]}$ and appears to have been used only in Republican times; its Imperial successor was the cacabus. ${ }^{[3305]}$ The trua or trulla ${ }^{[3306]}$ was a saucepan with a flat handle; numerous examples in bronze, silver, and earthenware have been preserved, and some have elaborate designs in relief on the handle. ${ }^{[3307]}$
A number of obscure and archaic names of vases are recorded by the etymologists and other writers, especially in regard to those used for sacrificial purposes and libations. The capis or capedo was probably a kind of jug (from capere, to contain) ${ }^{[3308]}$; Cicero refers to the capedunculae which were a legacy from Numa. ${ }^{[3309]}$ The praefericulum ${ }^{[3310]}$ was not, as usually supposed in popular archaeology, a jug, but a shallow basin of bronze without handles, like a patera. The lepasta or lepesta (cf. Greek $\lambda \varepsilon \Pi \alpha ́ \sigma \tau \eta$ ) is recorded as used in Sabine temples, ${ }^{[3311]}$ and the futile was used in the cult of Vesta for holding water ${ }^{[3473]}$; the cuturnium ${ }^{[3313]}$ is also mentioned. The simpulum ${ }^{[3314]}$ and simpuvium ${ }^{[3315]}$ represent similar utensils, though the words are distinct; they were small-sized ladles used almost exclusively in religious rites, and sometimes regarded as old-fashioned. With reference to the size, fluctus in simpulo excitare ${ }^{[3316]}$ became a proverbial expression for "a storm in a teacup." They seem to have been usually of metal, but Pliny speaks of fictile simpula ${ }^{[3317]}$; the simpuvium is represented on coins and sacrificial reliefs. The lanx appears to have been used for offerings to Bacchus, ${ }^{[3318]}$ and the guttus, cymbium, and other forms also appear in a sacrificial connection ${ }^{[3319]}$; conversely the patera, which is for the most part exclusively a libation bowl, was sometimes used for secular purposes ${ }^{[3320]}$; there is evidence that its use as a drinking vessel is older than its use for libations. The last-named corresponds to the Greek $\varphi$ ló $\lambda \eta$ (Vol. I. p. 191), ${ }^{[3321]}$ and is constantly referred to or represented; its essential feature was the hollow knob or omphalos in the centre, and it was either made of metal or earthenware. The patella was also used for libations or for offering first-fruits to the household gods. ${ }^{[3322]}$
Other obscure words referring to vases of secular use are the pollubrum (Greek, поб and malluvium (Greek, र́́pvı $\psi$ ), ${ }^{[3324]}$ meaning respectively basins for washing the feet and hands; the aquiminarium for washing vessels ${ }^{[3325]}$; the galeola, a variety of the sinus ${ }^{[3326]}$; the pultarius, a vessel used for warm drinks, for must, for preserving grapes, for coals, for fumigating, and as a cupping-glass ${ }^{[3327]}$; and the obba, which Persius describes as sessilis, i.e. squat and flat-bottomed. ${ }^{[3328]}$ The culeus, congius, hemina, and sextarius appear to have been measures only, not vases in general use; the congius was one-eighth of an amphora, or six sextarii, about six English pints. ${ }^{[3329]}$
In the case of the majority of the names discussed in the foregoing pages, any attempt at identification with existing forms is hopeless; we have very few clues in the literature to the shapes of the vases described, and little evidence from themselves, as is often the case with Greek shapes;
nor is any Roman writer except Isidorus, whose date is too late to be trustworthy, so explicit as Athenaeus. At present little has been done in the way of collecting the different forms of existing vases, but a valuable treatise on the subject was recently issued by the late O. Hölder, a Würtemberg professor, who collected all the forms found in Germany and Italy, ${ }^{[3330]}$ and although he did not attempt to identify them by Latin names, he has done much service in grouping them together, classified as urns, jars, jugs, and so on, in a series of twenty-three plates of outline drawings.
There is, in fact, in Roman pottery no clear line of distinction to be drawn between the various forms of drinking-cups or of jugs or dishes, as is the case with Greek vases; different forms again are found in different fabrics, and those typical of ornamented wares are not found in plain pottery, and so on. Nor must it be forgotten that in Roman pottery the ornamented wares are the exception rather than the rule. Where the Greeks used painted vases, the Romans used metal; and apart from the plain pottery, the forms are almost limited to a few varieties of cups, bowls, and dishes. Comparisons with the Greek equivalents illustrated in Chapter IV. may give a probable idea of what the Roman meant when he spoke of an urceus or an olla, but for the rest the modern investigator can do little beyond attempting to point out what types of vases were peculiar to different periods or fabrics, and in most cases any attempt to give specific names can only be regarded as arbitrary.

3080H.N. xxxiii. 154 ff.: see below, p. 489.
3081.Vases ornés de la Gaule Romaine, i. p. 190 ff.

3082The term is applied to clay suited to receive stamps (sigilla) or impressions.
3083Déchelette, Vases ornés de la Gaule Romaine, ii. p. 335.
3084Ibid. i. p. 41 ff.
3085Der Stil, ii. p. 148.
3086Bonner Jahrbücher, xcvi. p. 20.
3087In the case of fragment No. 3 the clay and lime could not be differentiated.
3088In the case of fragments 2 and 5 no definite general result was obtained.
3089Brongniart, Traité, i. p. 421; Blümner, Technologie, ii. p. 91. See also Handbook to Collection of Pottery in the Museum of Practical Geology, 1893, p. 65, for an analysis made on a fragment of glazed red ware by Dr. Percy:

| Silica | 54.45 |
| :--- | ---: |
| Alumina | 22.08 |
| Peroxide of iron | 7.31 |
| Lime | 9.76 |
| Magnesia | 1.67 |
| Potash | 3.22 |
| Soda | 1.76 |
|  | $--\infty$ |
|  | 100.25 |
|  | $=====$ |

3090Storia degli ant. vast aretini, p. 65.
3091 Ueber die rothe Topferwaare, p. 16.
3092Brongniart, Traité, i. p. 423; Déchelette, ii. p. 339.
3093Blümner, Technol. ii. p. 91.
3094Op. cit. i. p. 381: cf. Blümner, ii. p. 64.
3095Roman Art in Cirencester, p. 77.
3096Plaut. Epid. iii. 2, 35; Pliny, H.N. vii. 198.
3097Art. Poet. 21.
3098Sat. ii. 7, 86.
3099ii. 3, 48.
3100Capt. ii. 3, 9; Persius, iii. 23; Avianus, Fab. 41, 9.

3102Smith, Dict. of Antiqs. ${ }^{[3312]}$ i. p. 844: see below, p. 480; also Vol. I. p. 207.
3103.Vases ornés, ii. p. 338

3104See Brongniart, Traité, i. p. 423 ff.; Blümner, Technol. ii. p. 106; Von Hefner, in Oberbayr. Archiv für vaterl. Gesch. xxii. (1863), pp. 23, 35; and Röm. Mitth. 1897, p. 286.

3105See Fabroni, Storia degli vasi aretini, pl. 5, fig. 4.
3106Handbook to Mus. (1891), p. 111.
3107Brongniart and Riocreux, Mus. de Sèvres, pp. 16, 128. For Cerialis see p. 536 and C.I.L. xiii. 10010, 544; for Cobnertus, ibid. 592, and Déchelette, i. p. 179.

3108Oberbayr. Archiv für vaterl. Gesch. xxii. (1863), pp. 23, 24.
3109Blümner, Technologie, ii. p. 104, fig. 21; Brit. Arch. Assoc. Journ. iv. p. 19. Déchelette states that about fifty in all are known (op. cit. i. p. 337).

3110Brongniart, Traité, i. p. 424, pl. 30; Mus. de Sèvres, p. 128, and pl. 9, fig. 8.
3111Oberbayr. Archiv, 1863, p. 24.
3112Examples of this technique often occur in Gaul and Britain: see Déchelette, ii. p. 169 ff ., and cf. Roach-Smith, Ill. Rom. Lond. p. 91, and a fine vase from Felixstowe in the British Museum. See also Plate LXIX. fig. 2, and p. 529.

3113See below, p. 530, and Déchelette, ii. p. 235 ff.
3114Blümner, Technol. ii. p. 112.
3115E.g. Blümner, Technol. ii. pp. 106, 107, figs. 22, 23.
3116Gaz. Arch. 1881-82, p. 17; Brongniart, Traité, pl. 30, figs. 2-4: see also Déchelette, i. p. 141 ff., and below, p. 525 ff.

3117Cf. Déchelette in Revue des Études Anciens, v. (1903), p. 42.
3118Blümner, ii. p. 110, fig. 25: cf. Von Hefner in Oberbayr. Archiv, 1863, p. 56; Fabroni, Storia degli antichi vasi aretini, pls. 3, 5, p. 63.

3119Blümner, ii. p. 111; Daremberg and Saglio, ii. art. Figlinum, p. 1130.
3120Cf. von Hefner in Oberbayr. Archiv für vaterl. Gesch. xxii. (1863), p. 55.
3121 Vases ornés, ii. p. 312.
3122Mau-Kelsey, Pompeii, p. 386; Bull. dell' Inst. 1875. p. 192; Mon. Antichi, i. pl. 8, 7, p. 282.
3123Oberbayr. Archiv für vaterl. Gesch. xxii. (1863), p. 56 ff.: see also Blümner, ii. p. 23 ff., and Daremberg and Saglio, ii. art. Figlinum.

3124Bullet. Arch. 1898, p. 18 ff., and Mélanges Gallo-romaines, ii. (1902), p. 93 ff.
3125Brongniart, i. p. 439.
3126Rev. Arch. xviii. (1868), pl. 23, p. 297.
3127See for a full account of the last-named Von Hefner in op. cit. p. 8 ff., p. 56, pl. 4.
3128See Ann. dell' Inst. 1882, pl. U, to which the letters in the cut refer. Other kilns found at Heddernheim are described in Westdeutsche Zeitschrift, xviii. (1899), p. 215 ff .

3129See Haverfield in Victoria County Hist. of Northants, i. pp. 167, 207 ff.
3130Journ. Brit. Arch. Assoc. i. p. 1 ff., ii. p. 164: see also Wright, Celt, Roman, and Saxon ${ }^{1}$, p. 264 ff.; Roach-Smith, Coll. Antiq. iv. p. 81, vi. p. 181 ff.

3131No. 958, fol. 105; reproduced by Roach-Smith, Collect. Antiq. vi. pl. 37, fig. 4, and Ill. Rom. Lond. p. 79; Proc. Soc. Antiqs. 2nd Ser. xvi. p. 42.

3132Proc. Soc. Antiqs. xvii. 1898, p. 262.
3133Ibid. xvi. (1895), p. 40.
3134.Vict. County Hist. of Norfolk, i. p. 291, fig. 7: see below, p. 449.

3135Op. cit. i. p. 314.
3136Ibid. p. 322.

3137Archaeologia, xxxv. p. 91; Vict. County Hist. of Hants, i. p. 326.
3138Roach-Smith, Collect. Antiq. vi. p. 191 ff.; Vict. County Hist. of Hants, i. p. 306.
3139Roach-Smith, op. cit. ii. p. 38; vii. p. 1 ff., pls. 1-3.
3140Wright, Celt, Roman, and Saxon1, p. 264 ff., and Haverfield in Vict. County Hist. of Northants, give the most satisfactory epitomes of Artis' descriptions.

3141Cato, Agricult. 38.
3142Cf. Von Hefner, op. cit. pl. 4, 28-31: see also Arch. Journ. vii. p. 176, and an example from Switzerland in the British Museum (Romano-British Collection).

3143See also Déchelette, ii. p. 341.
3144See Haverfield in Vict. County Hist. of Northants, i. p. 207.
3145Traité, i. p. 426.
3146.Vict. County Hist. of Northants, i. p. 209.

3147See Haverfield, op. cit. p. 210, fig. 31.
3148Haverfield, ibid.; Handbook of Pottery in Mus. of Pract. Geol. 1893, p. 71.
3149Archaeologia, xxii. pl. 36, p. 413; Vict. County Hist. i. p. 291.
3150See Brongniart, Traité, i. p. 428, pl. 1; Artis, Durobrivae, pl. 27, figs. 3 and 6; Daremberg and Saglio s.v. Fornax, figs. 3201-02.

3151Brongniart, i. p. 429.
3152.Von Hefner in Oberbayr. Archiv (1863), p. 58.

3153Cf. Tibull. i. 1, 38 :
"Nec e puris spernere fictilibus.
Fictilia antiquus primum sibi fecit agrestis Pocula de facili composuitque luto."

3154Sat. ii. 60.
3155Sat. vi. 342.
3156Sat. iii. 168.
3157Florus, i. 18, 22.
3158Pliny, H.N. xxxiii. 142.
3159Ep. 95, 72.
 of the word кє́pauоऽ for marble tiles (Vol. I. p. 100), implies the antiquity of the use of fictile ware. See the next note.

3161vi. 229 C, where the use of кє́р $\alpha$ оऽ or dinner-service is discussed.
3162iv. 72, 131: cf. Mart. xiii. 81.
3163Suet. Vit. Vitell. 13 (clypeum Minervae, $\alpha i \nprec i ́ \delta \alpha$ по $\lambda ı$ 七́ $\chi$ оv).
3164Pliny, H.N. xxxv. 164.
3165Ibid. 163.
3166iv. 88.
3167Capt. ii. 2, 41.
3168Virg. Georg. ii. 351.
3169Orelli, Inser. 4544; Gruter 607, 1; and see C.I.L. i. p 209.
3170See above, p. 351; and cf. Archaeologia, xxv. p. 1 ff.
3171 C.I.L. vii. 1335, 1. The vase is now at Clare College, Cambridge.
3172H.N. xxxv. 160 (fictilibus soliis).

3173Arch. Journ. x. (1853), p. 230.
3174Archaeologia, xiv. pl. 6, p. 37 (in B.M.).
3175Arch. Journ., loc. cit.
3176Ill. Rom. Lond. p. 88, and see p. 550.
3177y. 5, 8.
3178Quaest. Nat. vi. 19: cf. Arist. Probl. xi. 8, and Pliny, H.N. xi. 270, doliis inanibus.
3179Krause, Angeiologie, pp. 126, 463.
3180See Middleton, Remains of Ancient Rome, ii. p. 56.
3181Middleton, loc. cit.
3182Nissen, Pompeian. Studien, p. 64.
3183Nissen, ibid.
3184See Yorks. Arch. Journ. iii. p. 1 ff., xv. p. 303; Trans. Roy. Inst. of Brit. Architects, 1881-2, p. 65 ff.; Journ. Brit. Arch. Assoc. xxxv. p. 95, xxxviii. p. 218.

3185xii. 18.
3186Brongniart, Traité, i. p. 407 ff.
3187ix. 58.
3188Bull. Arch. Nap. N.S. vii. 1859, p. 84; C.I.L. x. 8047, 10, 18.
3189Capitolinus, Vit. Anton. Pii, 3.
3190Varro ap. Non. p. 26; Paul, ex Fest. p. 46 (Müller).
3191Columella, xii. 28, 1; Plaut. Capt. iv. 4, 9 ("preserve-jar").
3192Isid. Etym. xx. 6.
3193Agricult. 39.
3194H.N. xviii. 236.
3195Bull. dell' Inst. 1846, p. 34.
3196Marini, Inscr. Ant. Doliari, p. 406, No. 2.
3197Marini, No. 4.
3198See Fig. 22, Vol. I. p. 154.
3199Formen der röm. Thongef. p. 16, pls. 1-8.
3200Cf. Koenen, Gefässkunde, pls. 10-12.
3201Od. i. 9, 7.
3202Pliny, H.N. xiv. 135.
3203Cf. Jahn, Wandgem. d. Villa Pamph. pl. 5, p. 42.
3204See Hultsch, Metrologie, p. 113.
3205Recueil, p. 46.
3206Roach-Smith, Ill. Rom. Lond. p. 87; Collect. Antiq. ii. p. 26.
3207General reference may be made to the various volumes of the Latin Corpus, under the headings Instrumentum Domesticum, sub-heading Vascula, e.g. vii. 1331 for those found in Britain; for examples from Spain see Arch. Journ. lvi. p. 299.

3208C.I.L. vii. 1331, 22, xiii. 10005, 25; Steiner, Cod. Inscr. Rom. Danubii et Rheni, ii. pp. 271, 287; and see generally C.I.L. xiii. part 3, No. 10002.

3209C.I.L. vii. 1331, 6, 13.
3210C.I.L. x. 8056, 260.
3211 Ibid. iv. 2555.

3212Ibid. vii. 1332, 1.
3213Ibid. viii. 10477, 1.
3214Ibid. iv. 2552.
3215See Vol. I. p. 158.
3216C.I.L. x. 8055, 11; iv. 2584, 2616: cf. Vol. I. p. 158.
3217C.I.L. iv. 2603: cf. Pliny, H.N. xiv. 75.
3218C.I.L. iv. 2555.
3219Ibid. 2625.
3220Ibid. 2589-94, 2575 ff. On inscribed amphorae from Pompeii see also Mau-Kelsey, Pompeii, p. 505.

3221Doni, p. lxxxvi. Found on the Aventine, now in the Museo Kircheriano.
3222Ber. d. sächs. Gesellsch. 1857, p. 199.
3223C.I.L. xv. pt. 2, No. 4719.
3224Ibid. iv. 2584.
3225Poen. iv. 2, 14: literatas fictiles epistolas; the double play on the words cannot be expressed in English.

3226Rud. ii. 5, 21.
3227v. 33.
3228Cf. also Plaut. Amph. i. 1, 273; Virg. Aen. i. 195 (for the wine of Acestes).
3229Od. iv. 11, 2; 12, 17.
3230i. 19, 2: cf. Juv. vi. 344, and p. 477.
3231i. 56; iv. 66.
3232x. 36.
3233Mart. i. 44, 8; Pliny, H.N. xviii. 307.
3234H.N. xv. 82.
3235Mart. vi. 27, 6.
3236H.N. xiv. 96; Isid. Etym. xvi. 26, 13.
3237Hor. Sat. ii. 4, 66; Varro, R.R. i. 13, 6; Isid. Etym. xx. 6.
3238As often by Virgil and Ovid, usually in the form cratera: cf. Isid. Etym. xx. 5.
3239Fasti, v. 522.
3240Hor. Sat. ii. 8, 39; Cic. in Verr. iv. 27, 62.
3241Cic. de Fin. iii. 4, 15; Varro, R.R. i. 8, 5.
3242Hor. Sat. i. 6, 109: see also Juv. Sat. vi. 426; Persius, v. 140; Isid. Etym. xx. 6.
3243Cic. in Vatin. 14, 34; Lucan, v. 394: cf. Marquardt, Privataltert. vii. p. 629, note 3.
3244In Verr. ii. 51, 127: cf. Plutarch, Vit. T. Gracch. 11; also Isid. Etym. xx. 6: Vasis genus aquatilis. 3245See Orelli, 4546, and for urna, Suet. Calig. 15; Lucan, vii. 819; Ovid, passim.

3246Plaut. Cas. ii. 6, 11; Livy, xxv. 3. 16.
3247Etym. xx. 6.
3248Cf. Caes. Bell. Civ. ii. 11; Lucan, iv. 420.
3249Paul, ex Fest. ed. Müller, p. 63, 12.
3250Plaut. Curc. i. 1, 75; Rud. v. 2, 32; and see Virg. Ecl. vii. 33; Varro, L.L. v. 123.
3251Plaut. Stich. ii. 2, 28; Cato, Agricult. 11; Varro, Re Rust. i. 22: cf. Juv. v. 47 for nasus, applied to
a cup.
3252Ad Fam. vii. 29: cf. also Plaut. Aulul. iv. 2, 15; Pers. iii. 22.
3253Plaut. Amph. i. 1, 273; Cato, Agricult. 81; Varro, ap. Non. 546, 23.
3254Martial, xiv. 106; Juv. iii. 203 (urceoli sex); Varro, R.R. i. 22; Treb. Poll. Vit. Claud. 17; Plaut. Merc. v. 2, 86; id. Pers. i. 3, 43; Cic. Fin. iv. 12, 30.

3255Hor. A.P. 97: cf. the $\lambda \eta$ кv́ $\theta$ tov episode in the Frogs (Vol. I. p. 196); also the word ampullari.
3256Plin. Ep. iv. 30, 6; Mart. xiv. 110.
3257Florida, ii. 9, 2: cf. the terracotta vessels with reliefs in the British Museum, D 204-5; also Mus. Greg. i. pl. 10; Micali, Mon. Ined. pl. 52. Isidorus derives the word from ampla bulla, in reference to its rotund form (Etym. xx. 5).

3258Rev. Arch. xviii. (1868), pl. 22, p. 225.
3259Mart. vii. 61, 5.
3260Hor. Ep. ii. 2, 134.
3261Cf. the episode in Petronius, Sat. 22.
3262Pliny, H.N. xvi. 128.
3263Pliny, Ep. i. 6: cf. Juv. xii. 60.
3264Juv. viii. 161.
3265Hor. Sat. ii. 8, 41.
3266C.I.L. xiii. 10008, 4.
3267Hor. Od. iii. 8, 13; 19, 12.
3268i. 71: cf. viii. 51, 21; ix. 95; xi. 37; Hor. Od. iii. 19, 11 ff.
3269See Varro, L.L. v. 122; Isid. Etym. xx. 5, where the derivation from potare is given.
3270Virg. Ecl. vi. 17; Plaut. Asin. v. 2, 56; Hor. Od. i. 20, 2; and see Daremberg and Saglio, s.v.
3271See Macrob. v. 21.
3272Hor. Od. i. 27, 1; Epod. ix. 33; Isid. Etym. xx. 6, describes it as a wash-hand basin.
3273Plaut. Stich. v. 4, 11; Cic. in Verr. iv. 17, 37 and 24, 54.
3274Mart. viii. 6, 2; Isid. Etym. xx. 5.
32750d. ii. 7, 22.
3276Porphyrion ad Hor. loc. cit.
3277Plaut. Stich. v. 4, 12.
3278Id. Rud. v. 2, 32.
3279Cic. Tusc. iii. 19, 46.
3280Isid. Etym. xx. 5.
3281xi. 145.
3282ix. 60, 22.
3283Varro, L.L. v. 127; Ovid, Fast. v. 509.
3284Ep. 119, 3.
3285Hor. Sat. ii. 4, 41; Juv. v. 80.
3286Hor. Sat. i. 3, 80; ii. 2, 95; ii. 8, 43, 55.
3287Suet. Vitell. 17: cf. 13.
3288Isid. Etym. xx. 4: dispansis patentibusque oris.
3289Phaedr. i. 26.

3290Hor. Sat. i. 3, 90; ii. 4, 75; i. 6, 115; Ep. i. 5, 2.
3291Juv. iii. 142; Mart. xi. 28; Alciphr. Ep. iii. 20; Isid. Etym. xx. 4.
3292xi. 32, 18: cf. vii. 47, 3. Isidorus, Etym. xx. 4, says gabata = cavata.
3293xiii. 81; v. 79, 7: see Isid. Etym. xx. 8.
3294Hor. Sat. ii. 4, 77; Pers. v. 182; Isid. Etym. xx. 6. For other uses see Juv. xi. 108; Pliny, H.N. xxxiii. 69. Isidorus says catinum is a better form.

3295Isid. Etym. xx. 4.
3296Hor. Sat. ii. 4, 75.
3297Hor. Od. ii. 7, 23; Sat. i. 3, 14.
3298Hor. Sat. ii. 8, 86.
3299Sat. i. 6, 118.
3300Juv. iii. 263; xi. 158: cf. Vol. I. pp. 200, 211, 503.
3301 Collect. Antiq. v. p. 8.
3302Catull. 94, 2; Juv. xiv. 171. For examples of ollae, see Overbeck, Pompeii, p. 414, Daremberg and Saglio, s.v., and Pl. LXIX. fig. 2; see also pp. 389, 456, 550. Isidorus expressly states that it was used for boiling water (Etym. xx. 8).

3303vi. 430. Isidorus (Etym. xx. 6) derives it from pedes.
3304Cato, R.R. 157; Plant. Pers. i. 3, 8.
3305Isid. Etym. xx. 8.
3306Varro ap. Non. p. 19, 14.
3307Cf. B.M. Cat. of Bronzes, Nos. 2461-2465; also Déchelette, Vases de la Gaule Romaine, ii. p. 316.

3308Varro ap. Non. 547, 12; Pliny, H.N. xxxvii. 18; Livy, x. 7, 10; Cic. Rep. vi. 2, 11; id. Parad. i. 2, 11.

3309De Nat. Deor. iii. 17, 43.
3310The word is only given by Festus (p. 248, Müller).
3311Varro ap. Non. 547, 19.
3312Paul, ex Fest. p. 89, 4, with Müller's note.
3313Paul, ex Fest. p. 51, 1.
3314Varro, L.L. v. 124; Paul, ex Fest. p. 337, 10 (non dissimile cyatho).
3315.Varro ap. Non. 544, 23; Cic. Rep. vi. 2, 11; Juv. vi. 343.

3316Cic. Legg. iii. 16, 36.
$3317 H . N$. xxxv. 158. An example of a bronze simpulum may be seen in the Bronze Room of the British Museum (Case E).

3318Virg. Georg. ii. 394.
3319Id. Aen. iii. 66; Varro, L.L. v. 124.
3320Varro, L.L. v. 122; Virg. Aen. i. 729.
3321See Isid. Etym. xx. 5, who suggests a derivation from patere, "quod patentes sunt dispansisque labris."

3322Ov. Fast. ii. 634; Juv. v. 85: cf. Plaut. Cist. ii. 1, 46.
3323Paul, ex Fest. p. 247, Müll.; Varro, 544, 19 (ap. Non.).
3324Paul, ex Fest. p. 160.
3325Digest, xxxiv. 2, 19, § 12.
3326Varro ap. Non. 547, 14.

3327H.N. vii. 185; Petron. 42; Colum. xii. 43, 7; Pallad. Agric. vii. 7; Cels. 2, 11.
3328V. 148: see also Tert. Apol. 13; Varro ap. Non. 146, 8; 545, 2.
3329Cato, R.R. 57; Livy, xxv. 2, 8; Pliny, H.N. xiv. 85, 144. For a bronze congius representing the standard measure see Hultsch, Metrologie, p. 123; also Daremberg and Saglio, s.v. On Roman metrology generally see Krause, Angeiol. p. 454, and Hultsch, op. cit. p. 112 ff.

3330Die Formen der röm. Thongefässe, diesseits und jenseits der Alpen (Stuttgart, 1897). For the forms peculiar to the ornamented wares, reference should be made to Dragendorff's article in Bonner Jahrb. xcvi. pls. 1-3, and Déchelette, Vases de la Gaule Romaine, passim.

# CHAPTER XXII <br> ROMAN POTTERY, HISTORICALLY TREATED; ARRETINE WARE 

Roman pottery mentioned by ancient writers-"Samian" ware-Centres of fabric-The pottery of Arretium-Characteristics—Potters' stamps—Shapes of Arretine vases—Sources of inspiration for decoration-"Italian Megarian bowls"-Subjects-Distribution of Arretine wares.

In the present chapter we propose to discuss the origin and character of the finer Roman pottery, or red glazed ware with designs in relief, which is usually known to modern writers under the convenient designation of terra sigillata, a phrase which has already been explained (p. 434). Not only in clay and glaze but in decoration these wares are characteristically Roman; but the question as to the actual centre or centres of their manufacture still admits of some discussion.

Relying principally upon the testimony of Pliny, Martial, and other ancient writers, archaeologists have been accustomed to classify the red ware with reliefs, on a rough system of distinction according to artistic merit, as Arretine, Samian, and "false Samian." The latter term "Samian" has indeed acquired such popularity that it has passed into the language as a conventional term of almost every-day use; but to the scientific investigator it has long been apparent that in point of accuracy it almost stands on a level with that of "Etruscan vase." That of "false Samian" has usually been applied to a certain class of provincial wares, technically inferior to the "Samian." But though both terms may still retain currency in popular language for the sake of convenience, it must not be supposed that they are impressed with the hall-mark of scientific terminology.
Before however we attempt to distinguish the different fabrics on the basis of recent researches, it may be as well to investigate the statements of the classical writers and weigh the evidence which they afford on the various kinds of pottery in use in Italy under the Roman Empire.
The most valuable information is found in the pages of Pliny, supplemented by Isidorus of Seville, who, writing in the seventh century, probably gives merely second-hand information. The former ${ }^{[3331]}$ says: "The majority of mankind use earthenware vessels. Samian ware is commended even at the present day for dinner services; this reputation is also kept up by Arretium in Italy, and for drinking-cups by Surrentum, Hasta, Pollentia, Saguntum in Spain, and Pergamum in Asia. Tralles is also a centre for pottery, and Mutina in Italy ... and exportation from the celebrated potteries goes on all over the world." Isidorus, who largely quotes from Pliny, gives the tradition that Samos was the seat of the original invention of pottery, "whence too came Samian vases."[3332] He goes on to say that "Arretine vases are so called from Arretium, a town in Italy where they are made, for they are red." But in regard to "Samian ware" he admits that there is another explanation of the term, namely that it is a corruption of Samnia. Herein he is possibly not far from the truth, for we have already seen that the adjacent region of Campania was in the last few centuries of the Republic famous as a centre for relief-wares, and it is possible that the manufacture of such pottery was carried on in the district, as for instance at Puteoli, long afterwards. We also know that Allifae in Samnium was a seat of this industry, ${ }^{[3333]}$ and that a special class of pottery was made at Ocriculum and at Mevania in Umbria about 200 b.c. (see below, p. 490).
On the other hand there is no doubt that Samos had a reputation for its pottery for many centuries, as is implied by the tradition which Isidorus quotes and by the words of Pliny: "even at the present day it is commended." In a previous chapter it has been suggested that the so-called Megarian bowls, which undoubtedly are a prototype of the Roman wares, represent the Samian pottery of the Hellenistic period; but whether this is so or not, the most probable conclusion is that the term "Samian" connotes in the first instance a Greek, not a Roman, fabric; that this Greek ware was imported into Italy; and that it became so popular that the term really came into use for native products, just as now-a-days we are able to speak of "China" which has travelled no further than from Worcester, Sèvres, or Dresden. It may thus have become a generic name for table-ware. Plautus mentions Samian ware more than once (see above, p. 456), usually with reference to its brittleness, as in the Menaechmi, ${ }^{[3334]}$ where Menaechmus says, "Knock gently!" to which the parasite Peniculus replies: "I suppose you are afraid the doors are Samian." Again in the Bacchides, ${ }^{[3335]}$ with a jesting allusion to Samos as the home of one of the two heroines: "Take care, please, that no one handles her carelessly; you know how easily a Samian vase gets broken." In another passage he speaks of a Samiolum poterium. ${ }^{[3336]}$ And Tertullian, speaking of Numa's times, says that only Samian vases were as yet in use. ${ }^{[3337]}$

Pliny also mentions Pergamum and Tralles as centres of fabrics, and speaks of the firmitas or toughness of that of Kos, but of these we know nothing further. It has been pointed out by Dragendorff that there was some manufacture of terra sigillata in Asia Minor under the Empire, ${ }^{[3338]}$ probably an imitation of the Italian ware, as the examples known present the same characteristics as the provincial wares of Central Europe, and the forms are also those of the Arretine vases. The same writer has shown that there were also manufactures of terra sigillata in Greece itself, in Egypt, and in Southern Russia, which were of similar character.
To return to Italy and its local fabrics. It is not to be supposed that there was any one principal centre, for different towns excelled in their respective wares, and these were imported from one to the other, and especially into Rome. This city was of course originally supplied with earthenware by the Etruscans, whose mantle fell on the town of Arretium, but it cannot be doubted that the manufacture of pottery must have been carried on to some extent in Rome itself after the absorption of the Etruscan people. We read that even in Numa's time there was a Guild of Potters (see p. 372), but it never appears to have excelled in any of the finer wares, and is ignored by Pliny, though we have evidence from other sources. Thus Martial speaks of cadi Vaticani, ${ }^{[3339]}$ and Juvenal
of fragile dishes from the Vatican hill. ${ }^{[3340]}$ Cato says dolia are best bought in Rome, tiles at Venafrum. ${ }^{[3341]}$ And the evidence of a pottery in the third and second centuries B.c. on the Esquiline which is given by the find of lamps described in Chapter XX. is supported by Festus. ${ }^{[3342]}$
Pliny, as we have seen, mentions Arretium, Hasta and Pollentia, Mutina and Surrentum with commendation; he also couples the pottery of Hadria with that of Kos for firmitas. ${ }^{[3343]}$ He further implies that Arretium kept up the old pre-eminence of the Samian ware, and this is borne out, not only by what we gather from Martial and other writers, but still more by modern discoveries, of which we shall shortly speak in detail. Of the other potteries less is known, but remains have been found at Hasta and Pollentia (Asti and Pollenza in Piedmont) ${ }^{[3344]}$ and the figlinae of Velleia in the same region were also well known in antiquity. ${ }^{[3345]}$ At Mutina (Modena) remains of a pottery were found (see Vol. I. p. 71), together with vases of Arretine type, and the potter Fortis, whose name so often occurs on lamps (p. 426), appears to have had his workshop here. ${ }^{[3346]}$ His stamps are also found on tiles and on pottery of all kinds, even Arretine. Here, too, were found vases of black ware, of "Graeco-Campanian" style, sometimes with stamps impressed from gems, and unglazed red plates stamped with small palmettes like the Greek black-glazed wares (Vol. I. p. 212). Livy mentions that in 176 в.с. a great destruction took place here of "all kinds of vases, made more for use than for ornament." ${ }^{[3347]}$ In their general results the pottery-finds are instructive as showing the transition from black to red wares, which may also be observed in the vases of Popilius and the early Arretine fabrics (see below). ${ }^{[3348]}$
Campania in general seems to have maintained the traditions of the Calene and Etrusco-Campanian fabrics of the third century (Chapter XI.), and there is evidence of manufacture and export in the first century B.C. Horace's table was supplied with Campana supellex. ${ }^{[3349]}$ Surrentum ware is mentioned by Martial ${ }^{[3350]}$ as well as Pliny, and, as indicated in the preceding chapter (p. 462), supplied amphorae of local wine to Pompeii. ${ }^{[3351]}$ The pottery of Cumae, which place was at an earlier date an important centre for painted vases (Vol. I. p. 80), is mentioned by Martial ${ }^{[3352]}$ It would also seem to have supplied clay for the vases made at the neighbouring Puteoli, which had no local clay suitable for the purpose, and is not mentioned by ancient writers. The latter has however yielded large numbers of vases of a type closely resembling the Arretine, and a pottery was discovered in 1874, with moulds. ${ }^{[3353]}$ Some of the vases have Arretine stamps, ${ }^{[3354]}$ which imply importations during the first century b.c., but names of local potters are also known, chief of whom is Numerius Naevius Hilarus, who employed eleven slaves. Q. Pomponius Serenus and L. Valerius Titus are also found here and elsewhere in Southern Italy and at Nismes. ${ }^{[3355]}$ Some fragments of this Puteoli ware from various sources are in the British Museum. ${ }^{[3356]}$
Horace speaks of pottery from Allifae in Samnium, ${ }^{[3357]}$ and Pliny mentions the popularity of that made at Rhegium and Cumac ${ }^{[3358]}$; this exhausts the list of sites known to us from ancient writers. In the provinces the only place which had any fame was Saguntum, alluded to by Pliny and more than once by Martial, who speaks of cups (pocula and cymbia) fashioned from Saguntine clay ${ }^{[3359]}$; also of a synthesis septenaria or nest of seven cups, "polished by the potter's coarse tool, of clay turned on the Spanish wheel." ${ }^{[3360]}$ But modern researches on the site have not thrown any light on the character of the local fabric (p. 540) ${ }^{[3361]}$; it is only at Tarragona that terra sigillata has been found.
The pottery of Arretium is more than once referred to by Martial, who notes that it compared unfavourably with the splendour of crystal vessels, but at the same time begs his hearer not to regard it altogether with contempt, for Porsena was well served with his Tuscan earthenware ${ }^{[3362]}$ :

Arretina nimis ne spernas vasa monemus;
Lautus erat Tuscis Porsena fictilibus.
An epigram in the Latin Anthology (259) says:
Arretine calix, mensis decor ante paternis,
Ante manus medici quam bene sanus eras. ${ }^{[3363]}$
Other allusions are less direct. ${ }^{[3364]}$ Coming down to more modern times, we actually find mention of the pottery in a manuscript written by Sig. Ristori of Arezzo in 1282, and by C. Villani in his History of the World, written in the fourteenth century. Subsequently Alessi, who lived in the time of Leo X., described the discovery of red ware about a mile from the city, and Vasari tells us that in 1484 his grandfather found in the neighbourhood three vaults of an ancient furnace. Further allusions are found in the writings of Gori (1734) and Rossi (1796); and in 1841 Fabroni published a history of Arretine ware, ${ }^{[3365]}$ in which the above facts are recorded. He tells us that in 1779 potteries were unearthed at Cincelli or Centum Cellae, which contained, besides various implements, part of a potter's wheel, resembling those in vogue at the present day. It was composed of two circular slabs placed round one pivot at an interval from one another, their diameter not being the same. The wheel actually found was of terracotta, about 11 inches in diameter by 3 inches in thickness, with a groove round the edge. It was bound with a leaden tyre, held in place by six cylinders of the same metal, and appears to have been the upper of the two slabs, the "table" on which the clay was placed. ${ }^{[3366]}$
The Arretine ware must be regarded as the Roman pottery par excellence. The term was used anciently in an extended sense for all vases of a certain technique without regard to the place of manufacture, as a piece of evidence from Spain tends to show. Pottery has been found at Tarragona with the inscription, a titil figVl arre, A. Titii figul(i) Arre(tini), ${ }^{[3367]}$ which has generally been taken to mean a maker of Arretine ware living on the spot, just as now-a-days Wilton or Brussels carpets may be made at Kidderminster.
The general characteristics of the Arretine ware are: (1) the fine local red clay, carefully worked up
and baked very hard to a rich coral-colour, or like sealing-wax; (2) the fine red glaze, composed chiefly of silica, iron oxide, and an alkaline substance, which, as we have seen ( p .437 ), was perhaps borax; (3) the great variety of forms employed, which show in a marked degree the influence of metal-work; (4) the stamps with potter's names, which are almost invariably found. The duration of this pottery seems to have been from about 150 b.c. to the end of the first century of the Empire, at which time pottery in Italy had reached a very degenerate stage, and the height of its success and popularity was during the first century b.c. Analyses of the vases show that practically the same results as to their composition are obtained from different periods.
During the last century these vases have been found in large numbers at Arezzo, and there is now a considerable quantity of them collected in the public museum of that city, as well as in private collections and the museums of other countries. The official record of Italian excavations contains an account of finds made in 1883, 1884, 1890, 1894, and 1896 on various sites in the city and immediate neighbourhood, ${ }^{[3368]}$ and gives the locality of the different potteries, ${ }^{[3369]}$ as well as the names of their owners. The first potter's name recorded was that of Calidius Strigo by Alessi; it was found in 1492 in the presence of Giovanni de' Medici, afterwards Leo X. Others were given by Gori, and fuller lists (up to date) by Fabroni in 1841, Gamurrini in 1859, and Marini in 1884. ${ }^{[3370]}$ At the present day the most complete information on this head may be found in the recently published volume of the Corpus of Latin inscriptions dealing with Etruria, ${ }^{[3371]}$ in which the results of the most recent excavations are incorporated. A large number have also been found at Rome, the names being identical with those found at Arezzo, and the ware consequently imported. ${ }^{[3372]}$ It must be distinguished from the inferior relief wares either of local fabric (see p. 492) or imported from Gaul, Northern Italy, and elsewhere. Names of Arretine potters are also found in large numbers at Modena, Rimini, and other places in Northern Italy, in France, Spain, and elsewhere.
The stamps range in date from the second century B.C. down to the Christian era, but not beyond the first century of the Empire. The oldest of all, it is interesting to note, are found on black-glazed wares similar in character to those from the Esquiline. ${ }^{[3373]}$ The red-glazed ware probably came in about 100 в.c., and the two methods appear to have been for a time contemporaneous. The initials Q $\mathrm{A} \cdot \mathrm{F}$ and $\mathrm{C} \cdot \mathrm{V}$ which occur on early red Arretine wares ${ }^{[3374]}$ are also found on the Esquiline lamps. Next comes the red ware with quadrangular stamps repeated four or five times on the bottom, followed by single quadrangular stamps and those of varying form, especially some in the shape of a foot, which are not found in the best period at Arretium, and seem to belong only to the time of the Empire. This form of stamp is very common on lamps and plain pottery, and there are many examples of bronze stamps in this shape extant. ${ }^{[3375]}$ Those vases which have stamps on the exterior in the midst of the design represent the middle or Augustan period. The older stamps are more deeply impressed in the surface of the vase than the later. On the whole, the palaeographical evidence of the stamps is very slight, and we can only roughly date them between 100 b.c. and 100 A.D. ${ }^{[3376]}$ Dragendorff has, however, noted that the slaves' names are mostly Greek, a detail which helps to establish a terminus post quem, placing them later than 146 в.c.

The Calidius Strigo of whom we have already spoken was a potter of some importance, employing twenty slaves, of whom the names of Protus and Synistor occur most frequently. But he only seems to have made plain table wares without reliefs, examples of which are found in Rome and elsewhere. A potter named Domitius had a workshop on the same spot, but only employed a few slaves. A more important name is that of Publius Cornelius, first found by Ferdinando Rossi in the eighteenth century at Cincelli, together with remains of his workshop; many additional examples were found in 1883 and 1892. He employed no less than forty slaves, of whom the best known are Antioc(h)us, Faustus, Heraclides, Primus, and Rodo. One vase by the last-named has medallions with the head of Augustus and the inscription, AVGVSTVs, which gives the date of the fabric. ${ }^{[3377]}$ Previous to the discovery of this in 1893 Gamurrini had supposed that Cornelius was one of the colonists placed at Arezzo by Sulla. Many of his vases are found at Rome, and also in Spain and Southern Italy. The vases with corneli in a foot-shaped stamp are probably not his. He appears to have acquired the business of two other potters-C. Tellius and C. Cispius.
Among all the potters' stamps few are commoner than that of M. Perennius, and his wares certainly take the highest rank for their artistic merit. All his relief designs are copied from the best Greek models, as will be seen later. Few of his vases seem to have been exported to Rome, but they are found in Spain and Southern Gaul. The form of the name on the stamps varies greatly, ${ }^{[3378]}$ the commonest being m. Perenni; m. Peren., m. Pere., and m. Per. are also found, and even m. Pe. with the letters joined in a monogram. He employed seventeen slaves, of whom the best known is Tigranes. His name appears as tigran, tigra, or tigr, and always in conjunction with that of Perennius. These two are found on a vase with Achilles and Diomede fighting against Hector, ${ }^{[3379]}$ and on three Arretine moulds in the British Museum, the subjects of which are a dance of Maenads, masks of Maenads and Satyrs, and a banquet scene (Plate LXVI. figs. 4, 6). The name of Tigranes appears alone on a fine vase in the Louvre with the apotheosis of Herakles. ${ }^{[3380]}$ Another slave, Cerdo, made a vase with the nine Muses, their names being inscribed over them in Greek. ${ }^{[3381]}$ A third slave who produced vases of more than average merit was Bargates, whose name is found on a fine vase in the Boston Museum (Fig. 218), ${ }^{[3382]}$ the subject of which is the fall of Phaëthon, who lies shattered in pieces on the ground, with Tethys coming to his rescue. Zeus with his thunderbolt and Artemis with her bow have brought about his downfall. Helios is seen collecting his terrified steeds; and the rest of the design is occupied with the transformation of the Heliades into poplars.


From Philologus.
FIG. 218. ARRETINE BOWL WITH DEATH OF PHAËTHON (BOSTON MUSEUM).

The site of Perennius' principal workshop appears to have been in the city itself, close to the church of Sta. Maria in Gradi; but he may also have had a branch manufactory at Cincelli or Centum Cellae. Signor Pasqui ${ }^{[3383]}$ notes that his name occurs alone on the interior of plain bowls and dishes. Next to these come the copies of Greek models by Cerdo, Pilades, Pilemo, and Nicephorus, followed by Tigranes, and then by Bargates, who also worked for Tigranes when he became a freedman (the stamps being in the form $\begin{gathered}\text { BARGATE } \\ M \cdot \text { TIGR }\end{gathered}$; lastly occur the names of Crescens and Saturninus.
Three Annii had a pottery near the church of San Francesco, and employed over twenty slaves, with both Greek and Roman names; the most important of the three is C. Annius, who made vases with reliefs, as did Lucius, but Sextus only made plain wares. There are also vases stamped anni only; they probably belong to the first century b.c. Aulus Titius is found frequently at Arezzo and Rimini, at Lillebonne in France, and, as we have seen, in Spain; his wares also penetrated to Africa and all parts of Italy. He has no names of slaves coupled with his, and his signature appears in the various forms, A. Titi, A. Titi figul., A. Titi figul. Arret. He was succeeded by C. Titius Nepos, who had fifteen slaves, and there is also a L. Titius. C. and L. Tettius occur at Rome, but only the latter at Arezzo ${ }^{[3384]}$; the word SAMIA, which occurs on his stamps, is more likely to be a proper name than to have any reference to Samian ware. The name of Rasinius, which is associated with more names of slaves than any except P. Cornelius, is found more often at Rome than at Arezzo ${ }^{[3385]}$; it also occurs at Pompeii, ${ }^{[3386]}$ and at Neuss in Germany, which facts point to the time of Augustus and A.D. 79 as the limits of date. Of the numerous slaves, some were afterwards employed by C. Memmius. There appear to have been at least two representatives of the name, C. Rasinius in the Augustan period, and L. Rasinius Pisanus in the Flavian. The latter Déchelette has shown to be a degenerate Arretine, making imitations of Gaulish ware. ${ }^{[3387]}$ L. and C. Petronius are found at Arezzo, together with remains of their potteries, and C. Gavius, who belongs to the Republican period, at Cincelli. Numerous other potters who are probably Arretine may be found in Ihm's lists ${ }^{[3388]}$; on the other hand, there are stamps found at Rome and in Etruria which cannot have originated from Arretium. Such are Atenio circitor refi(ciendum) curavit, ${ }^{[3389]}$ and Faustus Salinator Seriae ${ }^{[3390]}$; those with OF(ficina), such as OF • FELICIS, which are found at Rome, but are probably Gaulish ${ }^{[3391]}$; those with
 name found at Vulci, Chiusi, and many other sites in Etruria, but not at Arezzo. ${ }^{[3394]}$
The name usually given in the signatures on the stamps is that of the maker only; sometimes a slave's name is added, either above or below the maker's, or on a separate stamp. The maker's name usually gives the nomen and praenomen, implying a freedman, and when given in full is seen to be in the genitive; the slave's name is usually in the nominative. Four typical varieties are given by the following stamps from the pottery of P. Cornelius, with the name of the slave Potus:

| POTVS | P.CORN | POTI | P.CORN |
| :--- | :--- | :---: | :---: |
| P.COR | POTVS | P.CORN | POTI |

A difficulty sometimes arises in regard to these two-line stamps when the slave's name occurs below that of the master, on account of the frequent abbreviations; for instance, it is not easy to say whether such stamps as $\underset{\text { DIOM }}{\text { A.VIBI }}$ or $\begin{gathered}\text { P.CORNELI } \\ \text { ANTHVS }\end{gathered}$ denote one name or two, for there are certain instances where the master has three names. ${ }^{[3395]}$ It is always possible that the name denotes a slave become a freedman, as A. Vibius Diomedes or P. Cornelius Anthus, and in Dr. Dressel's opinion ${ }^{[3396]}$ this is the most probable explanation; but the alternative has much in its favour. There are, moreover, stamps such as $\begin{gathered}\text { P.MESEINI } \\ \text { AMPLIO S(ervus) }\end{gathered}$ or P.CORNELI $\begin{gathered}\text { FIRMVS F(ecit) }\end{gathered}$ which, of course, leave no room for doubt. In later examples the praenomen is often omitted, and occasionally the praenomen and cognomen are found without the gentile name ${ }^{[3397]}$; there are also a few instances of female names. ${ }^{[3398]}$ An exceptional form of signature is given by cinna c-L-TITI(orum) s(ervus); occasionally also, as in the example from Spain already quoted, $\operatorname{FigVL}(u s) \operatorname{ARRE}(t i n u s)$, or simply arreti(nus), are found. Sometimes, again, two potters seem to have been in partnership, as Sura and Philologus, L. Gellius and L. Sempronius (L•GELLI L SEMP), ${ }^{[3399]}$ or two firms, as the Umbricii and Vibieni.

The simple quadrangular form of stamp is by far the commonest, and, next to this, an outline of a foot; less frequent forms, and of later date, are the circular, oval, or lunate, and other varieties of
marks, such as wreaths, stars, or branches. Dr. Dressel gives no less than eighty-seven types from Rome, ${ }^{[3400]}$ of which thirty-three are rectangular with ornamental edges. The forms of the letters are not always an indication of date, but such forms as 15 AAttic alpha $15 \wedge$ alpha for A, $15 \| E$ for E , and $15 \|^{\prime} \mathrm{F}$ for F betoken an early date. Ligatured letters abound. The names are often written from right to left, or left to right with separate letters reversed or inverted; or the words are broken up as MVs for Docimus, ${ }_{\text {ROM }}^{\text {ANV }}$ for Romanu(s), and so on. ${ }^{[3401]}$ The stamps were probably of wood, but some are taken from seal-rings.

The forms of Arretine vases are all, without exception, borrowed from metal originals, and in their contours display the same tendency. But, as compared with the Hellenistic forms they show great simplicity, and almost, as it were, a return to archaism. The vases are for the most part of small size, and indeed the dimensions of the furnaces at Arezzo seem to indicate that larger vases could not have been baked in them. They are principally cups, bowls, and dishes, the former of hemispherical or cylindrical form and devoid of handles-a characteristic which usually distinguishes Roman from Greek pottery. Some of the moulds for Arretine ware in the British Museum collection appear to have been used for a deep cup with flat base and spreading lip (Plate LXVI. fig. 5), of a type which finds no parallel in Greek shapes, but the hemispherical bowl on a low foot is the prevailing form. Other shapes are extremely rare, a notable exception being the beautiful krater in the British Museum with figures of the Seasons (Fig. 219), which, although found at Capua, is certainly Arretine in style and technique. The technical methods employed we have already described in the preceding chapter, ${ }^{[3402]}$ and there do not appear to have been any variations peculiar to this fabric. Fabroni (p. 37) states that cinerary urns, tiles, lamps, and reliefs were also made in the potteries at Arretium.


FIG. 219. ARRETINE KRATER WITH THE FOUR SEASONS (BRITISH MUSEUM).

The prototypes of the forms we have seen to be the Hellenistic vases of chased metal, for which Alexandria was the principal centre. But, apart from form, it is doubtful whether the Alexandrine toreutic work exercised much influence on the potters of Arretium. For the decoration and subjects they undoubtedly drew their inspiration chiefly from the New-Attic reliefs ${ }^{[3403]}$ and the art of Asia Minor, as has been pointed out by more than one recent writer, ${ }^{[3404]}$ who have urged that the influence of Alexandria on Roman art has been greatly over-estimated. ${ }^{[3405]}$ Dragendorff points out that all the famous chasers known to us were natives of Asia Minor, ${ }^{[3406]}$ and thinks that Rhodes was probably the centre of this art. It must also be borne in mind that the second century was the era of collecting works of art in Greece and Asia Minor and conveying them to Rome, so that the examples which were most prominently before the eyes of Italian artists under the later Republic were just these products of Greece and Asia Minor in the Hellenistic Age. Moreover, the Rhodian and Pergamene schools of art were still living when that of Alexandria was dying out under the later Ptolemies. The mixed style of art of the first century B.C. is essentially Roman, produced under the influence of the Greek works then collected in Rome, and does not extend beyond Italy.
But it is also conceivable that its predecessors in the line of ceramic development contributed to produce the ware of Arretium. It recalls in some respects the different Greek relief-wares discussed in Chapter XI., the Calene phialae of the third century, and the so-called Megarian or Homeric bowls, in which some have seen the real "Samian" ware of the Roman writers, dating from the same period. To these succeeded in Hellenic lands the fabrics of Athens, Southern Russia, and Asia Minor, to which allusion has already been made, and which often present similar characteristics to the Arretine fabrics. Nor must it be forgotten that the earliest Arretine pottery was covered with a black glaze, which may indeed represent a desire to reproduce the effect of metal, but is much more likely to be a direct heritage from the late Greek pottery, which in this respect carried on the tradition of the painted wares. At all events, two main characteristics of Hellenistic pottery have plainly left their mark on Roman fabrics: the disappearance of painting under the influence of relief decoration imitated from metal, and the cessation of the exclusive use of a black varnish.

The transition seems to be partially effected by a small group of vases which have been styled "Italian Megarian bowls" or "Vases of Popilius," after the potter C. Popilius, whose name occurs on many of them. ${ }^{[3407]}$ They form a distinct class, dating apparently from the third century b.c., on the testimony of the inscriptions; the form is that of a hemispherical bowl without handle or foot, with very thin walls, and covered with a slip of varying colour-yellow, brown, or black. These bowls, too, are a close imitation of metal-work, especially in the arrangement of the reliefs. The ornament usually consists of long leaves and scrolls radiating from a rosette on the foot and bordered above by bands of wave- or tongue-pattern, scrolls, or garlands; the ground is filled in with stars, shields, and other devices. In the finer examples a frieze of figures is added, with such motives as Erotes, masks, dolphins, and ox-skulls repeated. The bowl of Popilius published by Hartwig is the only one with a definite subject: a fight between Greeks and Barbarians, which is an undoubted reminiscence of the famous mosaic at Pompeii with Alexander at the Issus. Eleven bowls by Popilius are known, two by L. Appius (see Fig. 220), and one each by L. Atinius and L. Quintius. The first-named potter seems to have lived partly at Ocriculum, partly at Mevania in Umbria; both he and Appius also made "Calene" ware. These potters were freedmen, as the use of the two names indicates. Their work does not show the fine glaze of the Calene and Arretine fabrics, but is decorative in its effect; each ornamental motive is produced from a separate stamp, and the potter's marks are put on en barbotine (see p. 442).


FIG. 220. "ITALIAN MEGARIAN" BOWL BY L. APPIUS (BRITISH MUSEUM).

To sum up with Dragendorff, ${ }^{[3408]}$ it is clear that a careful study of Hellenistic pottery is necessary for a correct estimate of the Italian and Roman. As in the case of other arts, it proves that the Romans were merely receptive, at best only developing what they received. This development began with the importation of Greek relief-wares with black varnish, especially from Asia Minor, and their imitation at Cales. Then, as in Greece, so in Italy, the search for new forms, colouring, and decoration began and brought about a degeneration of technique. What the Calene vases are to those of Asia Minor, so are the vases of Popilius to the "Megarian" bowls. Finally, the finds in Southern Russia show that even the technique of the red-glazed ware is not an Arretine invention, but was already known to the Greeks, although first brought to perfection in Italy.

We must now return to the Arretine vases and turn our attention to their subjects and decoration, and their place in artistic development. Dragendorff ${ }^{3409]}$ divides them into two classes, including with them the vases of Puteoli, which bear Arretine stamps, and probably only represent a mere offshoot of the latter potteries, merely differing in the quality of the design and in the absence of many of the best types. These were mostly discovered in 1874, and it is possible that the krater from Capua (p. 488) may also be reckoned as originating from this source.
His first class includes the vases of M. Perennius, which form such a large proportion of the signed Arretine wares. They are characterised by friezes of figures repeated, or of groups of figures all of the same size, sometimes divided by pillars or terminal figures. Ground-ornaments are rare, and the ground under the figures is not indicated as elsewhere. The subjects include Dionysiac scenes, such as dancing Maenads, sacrifices, drinking-scenes, the vintage, or Dionysos in a chariot; Cupids, Muses, and Seasons; Victory sacrificing a bull; Nereids with the weapons of Achilles; Hieroduli or priestesses dancing, with wicker head-dresses; banqueting, erotic, and hunting-scenes. Examples of the latter classes are given on Plate LXVI. The types of the figures, as in the case of the dancing Maenads, are largely derived from the New-Attic reliefs (see above).

In the second class, to which belong the vases of P. Cornelius and those found at Puteoli, a large use of ornament is the most conspicuous feature. The figures are little more than decorative, or form motives of a sculpturesque character, and are not, as in the first class, isocephalous. Naturalistic motives, such as wreaths, are very frequent. Among the types we have figures like those in the Nile-scenes on the terracotta mural reliefs (p. 371) and Centaurs derived from Hellenic prototypes.

PLATE LXVI


Moulds and Stamp of Arretine Ware, with Casts from the Former
(British Museum).

Throughout there is a remarkable variety, not only of subjects, but of ornaments and methods of composition, features in which the Greek vase-painters at all periods allowed themselves little freedom. The ornamentation, which usually borders the figures above and below, or still oftener occupies the whole surface available for decoration, includes such motives as conventional wreaths and festoons, scrolls of foliage, and egg-and-tongue pattern; a favourite device is the use of columns with spiral shafts, often surmounted by masks, between the figures. But it is often naturalistic as well as conventional, at least in detail, and only in the general effect is it purely ornamental rather than a reproduction of nature.
In the figures derived from the New-Attic reliefs and similar sources, such as metal reliefs on bases, candelabra, etc., the copyist usually shows a strong tendency to archaism; the attitudes of the figures are graceful, but somewhat affected. They seldom represent any particular action or story, but even human figures are merely decorative. Groups of dancing figures are especially favoured, such as Satyrs and Maenads, or the Hieroduli or dancing priestesses, who wear a curious headdress of wicker-work (calathus) ${ }^{[3410]}$; or we see Genii and Cupids crowning altars and lamp-stands, or playing on musical instruments. Throughout the parallelism with the Roman mural reliefs (p. 367 ff.) is most remarkable, whether in the archaising style, the decorative treatment of human figures, or in the choice of themes: the dancing Maenads and Satyrs, the Hieroduli, Victory sacrificing a bull, or the figures of Seasons. Of the last-named a fine instance is the beautiful krater from Capua, now in the British Museum (Fig. 219), the figures on which are most delicately modelled. A stamp in the same collection from Arezzo has a figure of Spring, which repeats the type of the Capua vase (Plate LXVI. fig. 2: see p. 439).
A somewhat later development, corresponding to the second class described above, seems to draw its inspiration rather from the Hellenistic reliefs of naturalistic style, such as Schreiber has published, dating from the third century b.c. ${ }^{[3411]}$ The figures are no longer stiff, but free and vigorous, and elaborate compositions are attempted, some being perhaps excerpts from large Hellenistic compositions. Realistic landscapes in the Hellenistic style, with rocks and trees, are largely favoured, and the repertory of subjects includes Dionysiac sacrifices and processions, combats of Centaurs and Lapiths, and hunting-scenes. A fragmentary mould in the British Museum is a good example of the latter, only that here the scene is definitely characterised as Alexander the Great at a lion-hunt (Plate LXVI. figs. 1, 3). The king is just slaying a lion, which stands over a man whom it has felled, and Krateros advances to his assistance with an axe. A wreath which adorns the beast's neck seems to indicate that it was an animal specially kept in the royal park for hunting. ${ }^{[3412]}$ The mould bears the name of M. Perennius.
Dragendorff, in a valuable and illuminating estimate of the Arretine wares, ${ }^{[3413]}$ points out that they are an example of the tendency, so constantly occurring in classic art, to imitate one substance in another. He is further of opinion that they largely reproduce contemporary originals which illustrate the eclectic art of the Augustan period, instituting a reaction against Hellenistic art and forming in their simple shapes a contrast to the baroque forms of later Hellenistic pottery. The art of the Augustan Age was followed, as Wickhoff has pointed out, ${ }^{[3414]}$ by a period of impressionism or illusionist style derived from painting, which is, however, completely absent from Arretine and all other pottery of the Roman period. It may, therefore, be fairly assumed that when the impressionist style came into vogue, the art of the Arretine potter had had its day. All subsequent wares with
reliefs are essentially provincial, and the origin of their style is uncertain, but it is at all events not derived from any of the contemporary phases of Roman art.
The vases of the types which we have been describing are not, as has been hinted already, found exclusively at Arezzo. In Italy they are found in all parts, ${ }^{[3415]}$ and the stamps of known Arretine potters occur in large numbers in Rome, as also at Cervetri, Chiusi, Vulci, and elsewhere in Etruria, ${ }^{[3416]}$ and at Mutina (Modena). ${ }^{[3417]}$ They are also found all over Campania, at Capua, Cumae, Pompeii, and Pozzuoli. North of the Alps they occur but rarely, and almost exclusively in Gallia Narbonensis, ${ }^{[3418]}$ but we have seen that they are found in Spain, and instances are also recorded from Sardinia, Africa, Greece, ${ }^{[3419]}$ Asia Minor, and Cyprus. ${ }^{[3420]}$ From these details two conclusions may be drawn, either that there were various centres scattered over the Empire for the manufacture of what was currently known as "Arretine ware," or that an extensive system of exportation went on from one centre, which would naturally be Arretium. Certainly there is no difference either technically or artistically between the Arezzo vases and some of those found in other places, such as Modena or Capua. Either view has something in its favour, and it is doubtful whether the question is yet ripe for solution.

The Arretine ware, as we have seen, steadily degenerated during the first century of the Empire, and at the close of that period had practically come to an end. The question then arises, What took its place in Italy? For it will be seen in the following pages that in discussing the remaining examples of terra sigillata which Roman potters have left us, we have to deal almost entirely with provincial wares, made in Gaul and Germany, and exported largely even into Central and Southern Italy. Not the least striking feature in the history of Roman pottery is the rapid rise of these provincial fabrics, and the reputation which they so speedily acquired even in the more central and more civilised parts of the empire. Yet the manufacture of pottery in Italy cannot have died out entirely by the end of the first century. The plain and unglazed wares for domestic or other ordinary uses, such as the dolia and wine amphorae, of course continued to be made in Italy as elsewhere, and the list of centres given by Pliny, which we have already discussed, clearly shows that in the Flavian epoch several places still preserved a reputation for the manufacture of pottery. On the other hand, we have no evidence that the pottery made in these centres had any other than utilitarian merit, or that it represents what we know as terra sigillata, and it is certainly remarkable that all the ornamental wares found in Italy are either of the Arretine type or else importations from Gaul, with very few exceptions. Lamps and tiles, as we have seen in previous chapters, continued to be made throughout the second and third centuries, but both were essentially utilitarian in their purposes, and the latter, at any rate, lay no claim to artistic distinction. The growing use of metal vases by all but the poorer classes, was also not without its effect on the disappearance of moulded wares in Italy, and a reference thereto may perhaps be traced in Martial's plea for the Arretine pottery (p. 479).
It therefore seems safest to assume that as in the fourth century b.c. the manufacture of painted vases ceased at Athens, but entered on a new era of development in Southern Italy with the migration of Athenian artists to the Hellenic centres of that region, so in the first century after Christ the manufacture of terra sigillata in Italy-as distinguished from plain pottery and other objects such as lamps-gradually died out, owing to the migration of artists and transference of artistic traditions to the rising centres of a new civilisation in the country bordering on the Rhone and the Rhine. It will be our object in the succeeding pages to collect the evidence for the existence and importance of the potteries in these regions, and to show, in short, that they for some time supplied to the whole Roman world all that its representatives were then capable of in the way of artistic and decorative work in pottery. In the following chapter will also be more conveniently discussed the vases of Ateius, Aco, and other potters which represent the transition from the Arretine to the Gaulish fabrics.

3331H.N. xxxv. 160 ff.
3332Etym. xx. 4, 3.
3333Hor. Sat. ii. 8, 39.
3334i. 2, 65.
3335ii. 2, 22.
3336Stich. v. 4, 12: cf. Mart. iii. 81, 3; Lucil. ap. Non. p. 398; Tibull. ii. 3, 47; Cic. pro Murcna, 36, 75; Cornif. Rhet. ad Herenn. iv. 51.

3337Apol. 25.
3338Bonner Jahrbücher, ci. (1897), p. 140: cf. ibid. xcvi. p. 25, and Blümner, Technol. ii. p. 103.
3339i. 19; see above, p. 463.
3340vi. 344.
3341Agric. 135.
3342Paul. ex Fest. ed. Müller, 344b; "in Esquilina regione figulo cum fornax plena vasorum
coqueretur."
$3343 x x x v .161$.
3344Cf. Mart. xiv. 157; "solet calices haec dare terra" (of Pollentia).
3345See C.I.L. xi. 1147; for recent finds, Bull. dell' Inst. 1837, p. 10 ff .
3346 Bull. dell' Inst. 1837, loc. cit.; 1875, p. 192.
3347xli. 18.
3348See generally Bonner Jahrb. xcvi. p. 53.
3349Sat. i. 6, 118: cf. ibid. ii. 3, 144.
3350xiv. 102: "Surrentinae leve toreuma rotae."
3351Cf. id. xiii. 110: "Surrentine cups are good enough for Surrentine wine."
3352xiv. 114: cf. Tibull. ii. 3, 48; Bull. dell' Inst. 1875, p. 66; Marquardt, Privatalterthümer, p. 640, note 2.

3353Bonner Jahrb. xcvi. p. 54; Bull. dell' Inst. 1875, p. 242.
3354C.I.L. x. 8056, 229.
3355Ibid. xii. 5686, 696.
3356See also C.I.L. x. 8056.
3357 Sat. ii. 8, 39.
3358H.N. xxxv. 164.
3359xiv. 108; viii. 6: cf. Juv. v. 29: "Saguntina Iagena."
3360iv. 46, 15.
3361See also C.I.L. ii. p. 512 and Suppl. p. 1008; Déchelette, i. pp. 16, 111; also Bull. dell' Inst. 1875, p. 250, and C.I.L. xv. 2632 for an amphora found on the Monte Testaccio at Rome with the stamp BCM(a)TERNI SAGYNTO.

3362xiv. 98.
3363."O Arretine cup, which decorated my father's table, how sound you were before the doctor's hand" (referring to its use for taking medicine).

3364Pers. i. 130: see also C.I.L. xi. p. 1081.
3365Storia degli ant. Vasi fitt. aretini, Arezzo, 1841.
3366See above, p. 438.
3367C.I.L. ii. 4970, 519.
3368Notizie degli Scavi, 1883, p. 265; Nov. 1884, p. 369, pls. 8, 9; 1890, p. 63 ff.; 1894, p. 117 ff.; 1896, p. 453 ff.

3369See the map in C.I.L. xi. pt. 2, p. 1082.
3370Iscriz. ant. doliari, p. 421 ff.
3371C.I.L., loc. cit., and No. 6700.
3372See C.I.L. xv. p. 702, Nos. 4925 ff.
3373Ann. dell' Inst. 1880, p. 265 ff.: cf. ibid. 1872, p. 284 ff. for the Arretine examples; also Notizie degli Scavi, 1890, pp. 64, 68.

3374C.I.L. xi. 6700, 12, 739.
3375Cf. B.M. Cat. of Bronzes, Nos. 3043, 3068, 3100, etc.
3376Some may be referred to Sulla's time: see Notizie, 1883, p. 269 ff.; 1890, p. 71 ff .
3377Notizie degli Scavi, 1894, p. 49.
3378Fifty varieties, with the different slaves' names, are given in C.I.L. xi. 6700, 435.

3379Bonner Jahrb. xcvi. p. 70, note 2.
3380Rayet and Collignon, p. 357.
3381 Inscr. Graec. xiv. 2406, 28-46; Notizie, 1884, pl. 8; Bonner Jahrb. xcvi. p. 70.
3382Philologus, lviii. (N.F. xii.), pl. 4, p. 482; Roscher, iii. p. 2195: see for this potter, Notizie, 1896, p. 457.

3383Notizie degli Scavi, 1896, p. 464.
3384Bonner Jahrb. cii. p. 119; also found in Spain (C.I.L. ii. 4970, 515).
3385C.I.L. xv. 5496.
3386Ibid. x. 8055, 36.
3387See Bonner Jahrb. cii. p. 119; Déchelette, Vases de la Gaule Romaine, i. p. 116. A potter of the same date and character is $\mathrm{SEX} \cdot \mathrm{M} \cdot \mathrm{F}$, found in Etruria.

3388C.I.L. xi. 6700; Bonner Jahrb. cii. p. 125.
3389C.I.L. xv. 5016.
3390 Ibid. 5572.
3391Cf. Déchelette, i. pp. 81, 272.
3392C.I.L. xv. 5211, 5398.
3393Op. cit. xi. 6700, 752.
3394See on this C.I.L. xi. 6700, 2; Bonner Jahrb. xcvi. p. 40; cii. p. 126.
3395E.g. C.I.L. xv. 5323 . No. 5374 ibid. has cognomen only.
3396C.I.L. xv. p. 702.
3397C.I.L. xv. 4996, 5094.
3398Ibid. 5515, 5555, 5603.
3399C.I.L. xi. 6700, 311.
3400C.I.L. xv. p. 703: see also Ann. dell' Inst. 1880, p. 318; Notizie degli Scavi, 1890, p. 69.
3401E.g. C.I.L. xv. 5179, 5524.
3402See also Röm. Mitth. 1897, p. 286.
3403See Hauser's work on the subject, Neuattische Reliefs, passim.
3404Rizzo in Röm. Mitth. 1897, p. 291 ff.; Dragendorff in Bonner Jahrbücher, ciii. (1898), p. 104.
3405E.g. by Schreiber, Alexandr. Toreutik, p. 401 ff.
3406Cf. Anzeiger, 1897, p. 127 ff.; Pliny, H.N. xxxiii. 154 ff.
3407Röm. Mitth. 1897, p. 40 (Siebourg); 1898, p. 399 (Hartwig); Bonner Jahrbücher, xcvi. p. 37; Mélanges d'Arch. 1889, pl. 7, p. 288.

3408 Op. cit. p. 38.
3409 Op. cit. p. 55.
3410Cf. Bonner Jahrb. xcvi. p. 58: also a mould in the B.M. (Plate LXVI. fig. 5), and Brit. Mus. Cat. of Terracottas, D 646.

3411 Hellen. Reliefbilder, pls. 1, 9, 10, 21, etc.
3412See on the subject, Bonner Jahrb. xcvi. p. 73.
3413Ibid. ciii. p. 103. On the same article the preceding paragraphs are also largely based.
3414Roman Art, Eng. Trans., p. 18 ff.
3415See C.I.L. xv. p. 702.
3416E.g. C.I.L. xi. 6700, $2,308,688,762$.
3417Ibid. 6700, 29, 306, 786.

3418A fine example has been found at Neuss on the Rhine (Bonner Jahrb. ciii. p. 88).
3419See Dumont, Inscrs. Céramiques, p. 390.
3420 Cyprus Mus. Cat. p. 94, No. 2116, princeps titi, from Salamis.

Distribution of Roman pottery in Europe-Transition from Arretine to provincial wares-Terra sigillata-Shapes and centres of fabric-Subjects-Potters' stamps-Vases with barbotine decoration-The fabrics of Gaul-St. Rémy-Graufesenque-"Marbled" vases-Vases with inscriptions (Banassac)-Lezoux-Vases with medallions (Southern Gaul)-Fabrics of Germany -Terra sigillata in Britain-Castor ware-Upchurch and New Forest wares-Plain pottery -Mortaria-Conclusion.

## 1. General Characteristics

The pottery with which we have now to deal is that which was known to an older generation as "Samian ware," ${ }^{[3421]}$ but may now be more appropriately termed Provincial terra sigillata. In regard to its general characteristics, it is distinguished by a fine close-grained red clay, harder than the Arretine, and presenting when broken an edge of light red. The surface is smooth and lustrous, of a brighter yet darker red colour (i.e. less like coral) than that of Arretine ware, but the tone of the red varies with the degree of heat used. The most important feature is the fine red glaze with which it is coated, similar in composition to-though not identical with-that of the Arretine (see the analysis given on p. 436); it is exceedingly thin and transparent, and laid equally over the whole surface, only slightly augmenting the colour of the clay, which resembles that of coral or sealing-wax. The glaze varies in lustre and quality as well as in colour, but as the analyses show, it is produced on the same principle at all periods and in all fabrics, Italian and provincial. The ornamentation is invariably of a coarser nature than that of Arretine ware, and though it draws its inspiration therefrom, is divided from it by a considerable interval of artistic degeneration; nor is the missing link always easy to trace. This ware is found all over Central Europe, from the Balkan to the Spanish Peninsula, in the forests of Germany, and on the distant shores of Britain, but in greatest abundance and effectiveness in the valleys of the Loire and Rhine, a fact which in itself directs us to look to these districts for the centres of its manufacture. Wherever found, it is in its main characteristics identical, and readily to be distinguished from the local wares with their simple, or entire absence of, ornamentation. The vases are usually of small dimensions, consisting of various types of bowls, cups, and dishes, of which two or three forms are preferred almost to the exclusion of the rest, and they usually bear the stamp of the potter impressed on the inside or outside. The angular and sharp profiles of the various shapes indicate that in nearly all cases they are derived from metal prototypes.
Although this ware is found all over the Roman world, yet by far the greater proportion of the material at hand comes from the Roman sites of Gaul, Germany, and Britain, and evidence points to two-and only two-districts as the principal centres of its manufacture: the valleys of the Loire and the Rhine and their immediate neighbourhood. Even in Italy the material is exceedingly scanty, and much of the pottery found in Rome or Campania can be proved by the potters' stamps to have been imported from Gaul. In Greece the finds of terra sigillata, though covering a wide area, are few and far between, and we are hardly in a position to state whether these are local fabrics or importations. Dragendorff notes ${ }^{[3422]}$ that in the museum at Bonn there are fragments from Athens, Eleusis, Rhamnus, Oropos, Epidauros, Eretria, Argos, Delos, and Troy, and others in private possession at the same place from Alexandria. In the museum at Dimitzana in Arcadia there is a vase with Latin stamps, and another without stamp is preserved at Chanak Kalessi on the Dardanelles. Furtwaengler records a few fragments from Olympia, ${ }^{[3423]}$ one with oct salve, and fragments have also been found at Pergamon. There are a few cups from Cyprus in the Museum at St. Germain-en-Laye, and others at Nicosia. ${ }^{[3424]}$ But it must not be forgotten that, as has already been noted (p. 476), there is evidence of manufacture of red relief wares in Greek lands under the Empire, and much of the above-mentioned material may not be able to lay any claim to a Western origin.
For the potteries of Central and Western Europe there is indeed no literary evidence, for, as we have seen (p. 479), Saguntum is the only provincial place of any reputation in antiquity, although modern excavations have not upheld its claim. All the evidence is necessarily derived from excavations, and from finds of moulds and potteries; but by the careful and scientific researches of Von Hefner, Dragendorff, Déchelette, and other investigators on Gaulish and German sites results have been obtained of incalculable value for establishing the provincial centres which during the first century of the Empire inherited the traditions of Arretium. In the succeeding enquiry, therefore, we shall devote our attention almost entirely to the terra sigillata, of which Gaul, Germany, and Britain have yielded such abundant quantities, and after a general consideration of its history and characteristics, shall discuss in detail the peculiarities of separate fabrics. ${ }^{[3425]}$

In his invaluable treatise on terra sigillata ${ }^{[3426]}$-the first comprehensive attempt at a general scientific discussion of the subject which has been contributed-Dragendorff collected a series of over fifty varieties of forms (almost exclusively cups, bowls, and dishes), which embrace all the examples of Arretine and provincial wares with relief-ornamentation. Of these he considers the first fourteen peculiar to the Arretine ware, but there are other vases found both in Italy and the provinces which in form and colour are not distinguishable from the Arretine, and seem to be undoubted examples of early importations. Such vases are found at Andernach, Neuss, and Xanten on the Lower Rhine, ${ }^{[3427]}$ bearing the stamps of Ateius, Bassus, Primus, and Xanthus, who are also frequently found in Southern Italy. ${ }^{[3428]}$ With regard to the first-named, however, there is evidence
to show that he may have worked in Southern Gaul, and the Italian origin of this pottery is not absolutely certain. ${ }^{[3429]}$ At all events, the finds in Germany to which a date in the first century can be given seem to show the adoption of a new form of dish differing from that characteristic of Arezzo ${ }^{[3430]}$; this new form is also common at Pompeii (probably as an importation), and is found on the Limes at Saalburg with the stamp bollvs fic. It is usually quite plain, and seems to have lasted down to the end of the third century. Another variety (No. 18) was found at Andernach with a coin of Antonia Augusta, and at Este in Italy with a stamp SERRAE, which belongs to the time of Augustus. From it a later form (No. 31) was developed.


FIG. 221. GAULISH BOWL (FORM NO. 29); FIRST CENTURY AFTER CHRIST.

As a general rule these early provincial forms were unornamented, but the two types of bowl or cup which Dragendorff numbers 29 and 30, and which are reproduced in Figs. 221, 222, become the normal form for the provincial relief-wares of the first century. These are not found in the Arretine ware, but occur all through that century, not only in Gaul, but also, for instance, in the castra on the frontier of Germany. ${ }^{[3431]}$ The only Arretine form which seems to have prevailed to any extent in the provinces is the krater (Dragendorff's No. $11=$ Fig. 219). ${ }^{[3432]}$ Other kinds of deep cups with expanding sides (Dragendorff's Nos. 22-27) are found occasionally in Italy and on various sites in Germany, and can be traced from their first appearance in the first century for about a hundred years. ${ }^{[3433]}$ Nos. 24 and 25 are found at Xanten (Castra Vetera) with coins of Julius Caesar and Nero, others in the cemetery of Bibracte near Autun, which is known not to be later than the time of Augustus. ${ }^{[3434]}$ The general conclusion seems to be that these wares


FIG. 222. GAULISH BOWL (FORM NO. 30); FIRST CENTURY AFTER CHRIST. represent a sort of transitional stage between those of Arretium and the indubitably provincial terra sigillata. Towards the end of the first century they are supplanted, notably at Lezoux and in Germany, by the hemispherical bowl (Dragendorff's No. $37=$ Fig. 223), which subsequently becomes the only form employed for the moulded wares.


FIG. 223. GAULISH BOWL (FORM NO. 37); A.D. 70-260.

In pursuing his investigation of the provincial fabrics of the first century, ${ }^{[3435]}$ Dragendorff begins by discussing various groups of vases found in Germany which seem to represent a period of transition between the Italian Roman (and the local native) pottery and the provincial terra sigillata proper, which is not usually found before the middle of the century. First we have a kind of light-red ware, formerly known as "false Samian," which lacks the strong lustrous sheen of the genuine terra sigillata; the tone Hettner considered to be the result of mere polishing, without any glaze or slip. ${ }^{[3436]}$ The forms are heavier and coarser, and are not confined, as in the genuine fabric, to deep cups or shallow bowls, but include a sort of beaker or tumbler-shaped cup, ${ }^{[3437]}$ and a slim jar with characteristic incised ornament. They are found in the oldest Roman tombs at Andernach, about A.D. $60 .{ }^{[3438]}$ Contemporary with this (from Augustus to Vespasian) was a kind of black ware with incised linear ornament, resembling that described under a subsequent heading (p.515); it bears the same
potters' stamps as the light-red ware, and is interesting for its close relation to the older La Tène pottery, showing its origin to be Celtic or Gaulish, not Roman. The centre of fabric for these wares, which are limited in their distribution to the Rhenish provinces, Normandy and Southern Gaul, seems to have been Trier, which place is as nearly as possible the centre of all the sites on which they have been found; it is further evident that both the red and the black were made in the same pottery. Dragendorff styles these fabrics "Belgic," on the ground that they are mostly found in the province of Gallia Belgica. It is conceivable that, as that province became organised in the first century, potters from Southern Gaul settled at Trier. A pottery of that epoch has been found there, with remains of black, grey, and light-red ware, and a piece found at Andernach with the stamp DVRO shows evidence of having been made at the former place. ${ }^{[3439]}$ The potters' stamps include both Roman and non-Roman names. These wares are very rarely found in Britain. ${ }^{[3440]}$
We now come to the terra sigillata fabrics proper, which extend from about A.D. 30 or even earlier to 250, and exhibit a great difference from the earlier fabrics. ${ }^{[3441]}$ There is no longer any question of Italian manufacture or of unsuccessful provincial imitations of Italian ware, but of a provincial fabric of excellent technique and real artistic individuality. The material for our purpose is supplied by the Gaulish cemeteries and pottery-sites of the Rhone and Allier valleys, the Cevennes, Normandy, and Belgium, by those of the Rhine valley and Southern Germany, and those of Britain. In Northern Gaul this pottery is found with coins ranging from Caligula to Commodus, and in the forts on the German Limes, such as those on the Taunus range and along the Main, the coins extend from Vespasian to Gallienus (a.D. 260), in whose time occupation ceased on the right bank of the Rhine.
In considering the probable centres of fabric we find a remarkable correspondence in the potters' stamps in the most widely-separated localities, indicating a limited number of centres which had a great reputation. Thus, for instance, in comparing lists of stamps found in London with those from Douai in France Roach-Smith noted that no less than three-fourths of the names occurred in both places. ${ }^{[3442]}$ The same investigator, now many years ago, was acute enough to deduce the conclusion from this and other similar evidence that in Britain there was no local manufacture of terra sigillata ${ }^{[3443]}$; and he has been justified by more recent researches, based on a much more extensive command of material. The two chief authorities on this subject at the present day, Dr. Dragendorff and M. Déchelette, are agreed in their main conclusions that the centre of this fabric must be sought in Gaul, and since the appearance of the latter's treatise on the Gaulish potteries, there seems little doubt that it was in the first century at Graufesenque near Rodez in the Cevennes (Condatomagus), in the succeeding period at Lezoux in Auvergne, where extensive remains of potteries have come to light. Dr. Dragendorff based his arguments on the following facts:
(1) The potters' names are largely Gaulish.
(2) Names are found in other parts which are known to be from a Gaulish centre such as Lezoux.
(3) Gallic epigraphical peculiarities, such as $\odot$ for $O$, $B$ for $D$, and $O V$ for $U$, are found in the inscriptions.
(4) Even names of an undoubted Latin type, such as Julios and Priscos, end in the Gallic termination -os.
(5) Cursive forms such as 15 Attic alpha reversed for A, $15 \|$ cursive E for $\mathrm{E}, 15$ |'cursive F for F , and $K$ for $L$, are frequently found, as also in Gaulish inscriptions of the second century.
That he was working on the right lines has been now shown by M. Déchelette, who has employed as the basis of his researches the more conclusive evidence of discoveries, especially of finds of moulds and remains of potteries. But of this more will be said subsequently.
On the other hand there were two large potteries in Germany, at Rheinzabern, near Speier, and at Westerndorf, in Southern Bavaria, where ornamented vases were undoubtedly made. They were apparently not largely exported, but many of the stamps also occur on the plain wares from these potteries, implying that the ornamental vases must also have been made by the local men. ${ }^{[3444]}$ The pottery of Westerndorf begins about the middle of the second century. Dragendorff notes that of all the Gaulish potters' stamps only forty-one have been found in Italy, and many of these only in Cisalpine Gaul, while others are very rare.
In regard to the forms, the chief fact to be noted is that new shapes and methods of decoration now appear with the growth of the provincial potteries, unknown in Italy, and the earlier bowls and dishes are not found (for instance) at Rheinzabern. ${ }^{[3445]}$ One form of dish (No. 32) is new, but another (No. 31) is clearly developed from the Italian type (No. 18). An essentially Gaulish form of deep bowl or cup is No. 33; another with handles (No. 34) is only found at Banassac. The mortaria with spout and pebbles inserted for grinding (see below, p. 551) now first make their appearance, especially in the Limes forts and in Britain. Many of the forms clearly indicate an imitation of metal. Déchelette notes that of the forms given by Dragendorff (Nos. 15-55) about twenty in all are found in Gaul, including the three used for moulded wares (see below, and p. 501). ${ }^{[3446]}$ To these he adds sixteen new forms, which he numbers 56 to 71 , and for the vases with barbotine or appliqué decoration six more (72-77) must be included in the list. ${ }^{[3447]}$
The next feature to be considered in these vases is the decoration, which is not confined, as in the Italian wares, to reliefs obtained from moulds, but is also produced by ornaments applied to the surface of the vase, either in the form of separate figures or medallions modelled by hand or made from moulds and then attached, or by the method known as en barbotine (see below, pp. 512, 529). Sometimes the decoration takes the form of impressed or incised patterns (p. 515), but these are more characteristic of the commoner wares. For the present we may limit the discussion to vases in
which the decoration is produced at the same time in the mould. ${ }^{[3448]}$
Vases of this type exhibit a remarkable monotony of form, being, as already noted, practically confined to two varieties of the bowl or deep cup, one with curved, the other with straight, sides (Forms 29 and $30=$ Figs. 221, 222), at least up to the middle of the first century. In the latter half of that century these are supplemented by a third variety (Form 37 = Fig. 223), and at the same time a gradual diminution in the sharpness of the outlines, as in the reliefs themselves, becomes apparent. No direct connection with the Arretine ware can be traced, either in the forms or in the decoration. The potters' stamps are found at first in the interior, as on the plain wares, but subsequently on the exterior, in the middle of the design.

At first there is a general absence of figure subjects, and the designs are purely ornamental, or else animals, such as birds or hares, are introduced as mere decorative elements. An important distinction from the Italian wares should be noted, viz. that in the latter the wreaths or scrolls which play such an important part in the decoration are composed of single detached leaves or flowers, whereas in the provincial wares the whole wreath is modelled in one continuous system, either formed of undulating motives, as at Graufesenque, or of a straight wreath or band of ornaments, as at Lezoux. ${ }^{[3449]}$ On the other hand the figure compositions are never continuous until the "free" style comes in at Lezoux with the second century, but are broken up by ornaments into metope-like groups. The typical arrangement is that of a wreath between rows of beads or raised dots, with a triple band of hatched lines or "machine-turned" ornament above, and rays or pearshaped ornaments below, pointing downwards. Sometimes the wreath is duplicated; or the frieze is broken up into metope-like groups of animals bordered by ornament, as in the first-century bowls found in France and Italy, which Déchelette attributes to the potteries of Condatomagus (Graufesenque in the Cevennes). ${ }^{[3450]}$ With the introduction of the hemispherical bowls (form 37) comes a new system, in which the upper edge is left plain, followed by a band of egg-and-tongue ornament; then comes the main frieze, and below this a simple wreath. This form and method first appear at Lezoux about A.D. 70, and at Rheinzabern with the beginning of the next century. The final stage is reached when the decoration consists of figures either arranged in medallions and arcades, or freely in friezes, a system which obtains exclusively at Westerndorf, and on the bulk of the terra sigillata found in Britain. Along with these changes in arrangement goes a steady artistic degeneration.
As regards the subjects, it may be generally observed that the conceptions are good, but the execution is poor. In many cases they are obviously imitations of well-known works, and it is curious that no Gaulish subjects occur. The types include representations of gods and heroes, warriors and gladiators, hunters and animals. In general they are of Hellenistic origin, and include all such subjects as are characteristic of the art of the period. ${ }^{[3451]}$ At first, however, purely decorative motives hold the field, in imitation of the Arretine ware, and it is not until after the disappearance of the latter that figure decoration is found. We have imitations of sculpture, as in the types of Venus bathing or the Diana à la biche, and of the Hellenistic reliefs with genre and idyllic subjects, as in the scenes with fowlers or fishermen. ${ }^{[3452]}$ The "new-Attic" reliefs furnish models for types, as in other branches of Roman art (see pp. 368, 489), and Eros, Herakles, and Dionysiac subjects are universally popular.
Among the mythological types Dragendorff has collected the following ${ }^{[3453]}$ : Zeus, Poseidon, Apollo, Hephaistos, Hermes, Aphrodite, Artemis, and Athena; Dionysos, Herakles, Victory, Fortune, and Cupids; Amazons, Giants, sea-monsters, Gryphons and Sphinxes, Pygmies and cranes; Bellerophon, Aktaeon, the rape of the Leukippidae, and Romulus and Remus suckled by the wolf. The gladiatorial subjects closely follow the types of Roman art, and the favourite theme, a combat of two in which one is worsted, resembles a common type on the lamps (p. 416). ${ }^{[3454]}$ Thus, though the style of art is essentially provincial, the subjects draw their inspiration exclusively from classical sources. ${ }^{[3455]}$

A series of examples from Britain may be noted as covering in their subjects the ground indicated; they are mostly from Roach-Smith's extensive collection, now in the British Museum. ${ }^{[3456]}$ They include a vase with figures in separate compartments: Diana, Minerva, Hercules, Bacchus, a man with a cup, and Satyrs and Nymphs; another with Hercules in the Garden of the Hesperides killing the serpent, Diana, warriors, and panels of ornament; a third with Bacchus and a tiger, Luna, and Genii with torches. Others have Apollo with Diana or pursuing Daphne; Diana and Actaeon; copies of statues of Venus (of the Cnidian or Medici type); the labours of Hercules, Bacchanalian orgies and processions, and such deities as Victory, Fortune, Cupids, and Anubis, as well as Satyrs and Fauns, Gryphons, Sphinxes, and Tritons. On the vase of Divixtus illustrated in Plate LXVIII. fig. 2, the subjects are Venus at her toilet, Diana with a stag, and a Silenus carrying a basket of fruit. The subjects from daily life include hunting scenes of various kinds; dogs pursuing stags, boars, or hares; combats of bestiarii with various animals; musicians, and gladiators. Ornamentation of a purely decorative character includes animals and trees, and representations of fruit, flowers, and foliage, either in scrolls or interspersed with other objects. Roach-Smith also gives a curious example from Hartlip in Kent ${ }^{[3457]}$ with two separate friezes of figures and the potter's stamp SABINI $\cdot{ }^{[3458]}$; on the upper band are Leda and the swan and a seated goddess with cornucopia; on the lower, Diana with a deer, under a canopy, and Victory crowning a warrior, the various groups being several times repeated. The style is very rude, and though the subjects are classical, the figures and designs are very barbaric, almost mediaeval in appearance. ${ }^{[3459]}$
The terra sigillata fabrics appear to have lasted on down to the end of the fourth century in the provinces, but are by that time not only rare, but exceedingly degenerate. Some found at Andernach can be attributed to the reign of Magnus Maximus (A.D. 388), and in others, apart from the style, the costume of the figures resembles that of the fourth century ${ }^{[3460]}$; the potters' stamps by this time have entirely ceased.

The names of potters which, as we have seen, so frequently occur on the provincial wares are nearly all Gaulish in form or origin, and this, it has been noted, is one of the strongest arguments for the Gaulish origin of the pottery. The stamps are usually quadrangular in form, but sometimes circular or oval, or in the form of a human foot; they are depressed in the surface of the vase, but the letters are in relief. There is considerable variation in the form of the letters, which are often cursive (see p. 504), often ligatured, and frequently single letters or whole words are impressed backwards. The names are either in the nominative, with or without F, FEC, FECIT, or in the genitive with OF, offic, etc., m, or manv; the Gaulish word AVOT for FECIT is also found. ${ }^{[3461]}$ It is rare to find a potter with more than one name, and probably few of the Gaulish potters were Roman citizens ${ }^{[3462]}$; on the other hand, there are few undoubted examples of slaves' names. Some groups of names seem to indicate partnerships, such as VRsvs FELIX, PRIMI PATER(ni), $\operatorname{SECVND}(i) \operatorname{RVFIN}(i)$; in other cases the name of the father is also given, as tornos VOCARI F(ilius), VACASATVS BRARIATI F, ${ }^{[3463]}$ but it is not impossible that the formula may mean, "Tornos the slave of Vocarius," or, "Vacasatus the slave of Brariatus made (fecit)." In Aquitania stamps occur with fam(uli) or nepotis added after the name. Some groups of names are peculiar to certain localities, Amabilis, Belsus, Domitianus, Placidus, etc., being found only in Germany; other potters give a hint of their origin, adding to their names ARVE or AR for Arvernus, the district of the Arverni, corresponding to the modern Auvergne. Vases are found at Lezoux with the stamp RVTENVS FECIT ${ }^{[3464]}$; here the name may be a deliberate intention of the Rutenian potter, to show that the vase was not made locally. The name Disetus, which is found on the Rhine, occurs in Gallia Belgica in the form Diseto, the variety being due either to differences in date or in the place of fabric. Among peculiarities in the stamps may be mentioned an instance, given among those from Britain, where the potter from ignorance or caprice has impressed the stamp of an oculist, intended for a quack ointment, on the bottom of a cup (found in London, and now in the British Museum). ${ }^{[3465]}$ It reads: Q • IVL • SENIS • CR | OCOD • AD • ASPR (crocodes, an ointment made from saffron). In 1902 some interesting graffiti were found on pottery at Graufesenque (cf. those given on p. 239), being apparently notes made by the potters, such as $\operatorname{VINAR}(i a)$, $\operatorname{ACET}(a b u l a)$, $\operatorname{tar(ichos),~and~so~on,~as~well~as~the~names~of~the~potters~and~the~quantity~of~}$ the contents in each case. ${ }^{[3466]}$ But it is not possible to ascertain the forms corresponding to the names given in graffito.
Some peculiarities of the potters' stamps may be noted among those from Westerndorf and Rheinzabern, in which certain combinations occur on the same vase. ${ }^{[3467]}$ Thus at Westerndorf we find:

```
COMITIALIS · FE - CSS · EROT
COMITIALIS P F }-{\begin{array}{l}{\textrm{CSS}\cdot\textrm{ER}}\\{\textrm{CSS}\cdot\textrm{M}}
SEDATVS F F - CSS PR
CSS}\cdotMAIANVS - CSS ER
```

at Rheinzabern:

| CERIAL $\cdot \mathrm{FE}$ | - | CONSTANT |
| :--- | :--- | :--- |
| COMITIALIS $\cdot \mathrm{FE}-$ | $\left\{\begin{array}{l}\text { IOVENTI } \\ \text { LATINNI } \\ \text { SECVNDAIANII }\end{array}{ }^{[3468]}\right.$ |  |

The names Comitialis and Cerialis are found on stamps interspersed among the designs, and therefore made with the vase in the mould, but those with CSS occur on the rim, and were therefore added subsequently. It will be noted from the above examples that the names like Comitialis-Primitivos is another instance-are common to more than one fabric, but those in the second series are peculiar to one; the latter, therefore, refer to the actual potter (figulus), the former to the designer of the decoration (sigillarius), whose moulds were employed in more than one place. It is an interesting parallel to the $\varepsilon \nprec \rho \alpha \psi \varepsilon \nu$ and $\dot{\varepsilon} п о i \eta \sigma \varepsilon \nu$ of the Greek vases. This conclusion receives additional confirmation from the discovery of certain types of decoration both at Rheinzabern and Westerndorf, showing that there was a system of exchange between the two potteries. ${ }^{[3469]}$ The name CSS is only found at Westerndorf, and it has been supposed that it denotes C. Septimius Secundianus, a name which occurs in the neighbourhood. The name of Comitialis is found on a vase from London in the British Museum, presumably imported from Germany. ${ }^{[3470]}$
Representations of potters are not unknown in Gaulish art; and there are also allusions to them in inscriptions. Some are depicted wearing the tunic only, and thereby proclaiming their servile condition; others wear the cloak also, as for instance one Casatus Caratius, fictiliarius, who is represented on a stele at Metz holding a fluted vase like those made in black ware. ${ }^{[3471]}$ On another, L. Aurelius Sabinus is represented, with an amphora, olla, and lagena in the background, and an inscription which runs, L. Aurelius Sabinus doliarius fecit sibi et suis. ${ }^{[3472]}$ Several inscriptions found in Germany speak of negotiatores artis cretariae, and may be assumed to refer to what we should call "commercial travellers" or "agents" for the sale of the finer wares. In an inscription found at Wiesbaden Secundus Agricola is mentioned in this capacity, and in another from Dornburg, Secundinus Silvanus, a native of Britain. ${ }^{[3474]}$ M. Messius Fortunatus, whose name actually occurs on pottery, is described in inscriptions as being also pavimentarius (road-maker) and paenalarius (cloak-maker). ${ }^{[3475]}$
Apart from the potters' stamps, some interesting inscriptions have been found on the vases from Rottenburg in Germany. There are examples with the names of the consuls for a.d. 237, Didius Caelius Balbinus and M. Clodius Pupienus Maximus (the first year of their reign). ${ }^{[3476]}$ Others have
the names of the legions stationed in the colonia of Sumlocene or Solicinium, which this site represents, with the dates A.D. 169 (LOCEN $\cdot \mathrm{A} \cdot \mathrm{V} \cdot \mathrm{C} \cdot \mathrm{MLVI}$ ), $248(\mathrm{C} \cdot \mathrm{STI} \cdot \mathrm{A} \cdot \mathrm{V} \cdot \mathrm{C} \cdot \mathrm{CDI}$ ), and 303, and the names of the twenty-first and twenty-second legions. ${ }^{[3477]}$ Incised inscriptions on Roman pottery are common throughout the provinces, as the pages of the Corpus indicate, but are more usually found on the plain wares than on the terra sigillata. Among the more interesting examples is a vase in the Louvre, of the first century after Christ, on the neck of which is incised genio tvrnacensivm, "To the Genius of Turnacum" (Tournay) ${ }^{[3478]}$; another found at Ickleton in Cambridgeshire ${ }^{[3479]}$ had (ex ho)C amici bibvnt, "Friends are they who drink from this"; a third from Leicester, verecvnda lvdia lvcivs GLADIATOR, supposed to refer to a love-token or present from a gladiator to his mistress. ${ }^{[3480]}$ A vase of black ware from Taplow, Bucks, in the British Museum has a Greek inscription.

We next come to the discussion of the vases decorated in the method known as en barbotine. ${ }^{[3481]}$ This is exceedingly rare in Italy, and it is probable that the vases there found are importations; the process seems to have been invented in Gaul or Germany, and the only parallel thereto in earlier ceramic art is in the method employed for the gilded vases of the fifth and fourth centuries (see Vol. I. p. 210). At its first appearance it occurs on vases of common grey or black unglazed ware, found at Andernach with coins of Claudius and Nero, ${ }^{[3482]}$ but by the end of the first century it is also employed on glazed wares, red or black, and even on the enamelled glazed vases of Gallic or German origin. The ornamentation is at first exceedingly simple, consisting of plain leaves, chains of rings, or raised knobs, as on the examples found in Italy; but it developed rapidly, and the patterns become very varied. Its chief merit is that it is essentially a free, not a mechanical method, and some of the specimens from the Rhine and Britain have really effective compositions of animals and interwoven scrolls. Even human figures find a place; but towards the end of its popularity the ornamentation encroaches upon and finally ousts the figure subjects, and degeneration is manifested in artificiality and crowding of detail. In the earlier examples there is a marked preference for a slip presenting a contrast of colour to the clay, and we find white used on red and black ware, brown on buff ware (early German vases in the form of human heads), and so on. ${ }^{[3483]}$

In Gaul, barbotine is limited to subsidiary decorative patterns, and is never used for figures as in Germany and Britain (see below and p. 544); it is very common in the North of France. At Lezoux it was employed in the earlier period of that pottery (A.D. 50-100) for simple leaf-patterns, in the later (A.D. 100-260) to complete the decoration of vases with appliqué reliefs (p. 529). ${ }^{[3484]}$

The black glazed wares decorated en barbotine are characteristic of the second century, and extend down to the fourth. ${ }^{[3485]}$ The clay is actually red, with thin walls, but is covered with a black or darkbrown varnish, often with a metallic lustre, which when too much baked turns to red, and thus presents the appearance of terra sigillata. The barbotine is either of the same colour as the clay, the varnish being subsequently added over it, or composed of white or yellow slip and applied after the varnish. The decoration usually takes the form of leaves or scrolls, or of simple raised knobs; but figures of dogs, hares, and deer are found, and occasionally men.
On the red or terra sigillata wares the barbotine process is not found earlier than the middle of the first century; there is none, for instance, at Andernach. It is practically unknown in Italy, and a few fragments from that country in the Louvre and Dresden Museums are probably importations. Moreover, it is confined to forms which only appear with the development of the provincial potteries. The earliest specimens are found with coins of the Flavian epoch at Trier and Xanten; it occurs also in Germany and Britain, and there are examples at Speier from Rheinzabern, but it does not seem to have been made at Westerndorf. The ornamentation is very limited in its scope, and from a strictly artistic point of view it was not really suited for any but simple patterns of leaves (especially those of the ivy or of lanceolate form) or for running animals. Figures of hunters, gladiators, or bestiarii are occasionally found. From the very nature of the process no fine details were possible, and all must be executed in long, thin, and soft lines. Sometimes, however, scrolls in barbotine were combined with figures of men and animals made from moulds, as on the Lezoux ware described below (p. 529). Potters' stamps are rare, but Dragendorff gives examples from Cologne, Bonn, and Speier. ${ }^{[3486]}$ It has been pointed out by the same authority that the influence of glass technique is strongly marked, not only in the method, which suggests the imitation of threads and lumps of spun glass, but also in the forms, which frequently occur in the provincial glass ware of the period, then rising into prominence. ${ }^{[3487]}$ Examples of British barbotine ware are given on Plate LXIX.
The other method of decoration to which we have alluded, that of indented ornamentation, is undoubtedly an imitation of glass technique, and the forms (flasks and small cups or bowls without feet or handles, of ovoid or spherical form) are equally characteristic of that material. ${ }^{[3488]}$ The decoration consists of linear patterns and sharply-cut ornaments in the shape of an olive or barleycorn, often combined with naturalistic foliage. This ware may be dated by coins between a.D. 100 and 250; there are no examples with potters' stamps, but it seems to have been made at Lezoux, Trier, and Westerndorf, and exported to Britain and elsewhere.
What may be described as a variety of this technique, but occurring in the red glazed wares, is a method of decoration in rows of linear incised patterns, usually in small rectangular panels of hatched lines. These belong to the time of the decadence of the ceramic industry, i.e. to the fourth century, and are found chiefly in North and East France and Germany, not in Central or Southern Gaul. There are examples from the Department of Marne in the British Museum (Morel Collection). The patterns are made with wooden stamps, not with the usual running wheel. Déchelette thinks the method originated in Germany with the vases of the La Tène period. ${ }^{[3489]}$
In order to elucidate further the development and characteristics of the provincial Roman pottery, it may be found serviceable to turn our attention to the various sites which are known to have been
centres of manufacture, or which have yielded pottery in large quantities, and at the same time to indicate the main points of difference between the fabrics of Gaul, Germany, and Britain.

## 2. The Fabrics of Gaul

The pottery of Gaul presenting the closest relationship, both artistically and chronologically, with that of Italy, it will be most convenient to accord it precedence. Hitherto a general survey of the Gaulish fabrics has hardly been possible, as the materials had not been collected and studied as a whole; and such a task was obviously beyond the capacity of any one who had not the advantage of a personal acquaintance with the mass of material now available in all parts of France. But since the indispensable and exhaustive work of M. Déchelette has appeared, it has rendered superfluous all the previous literature on this particular subject. This scholar has earned the gratitude of students by his careful study of the pottery excavated on certain sites in Southern France, by means of which much light has been thrown on the Gaulish fabrics of the first century, at the time when the sigillata industry was just taking root in Gaul, and had hardly freed itself from Italian influences. In one section of his work he deals with the finds made in 1895-1900 at Saint-Rémy on the Allier, about four miles from Vichy, ${ }^{[3490]}$ in another with those of 1901-02 at Graufesenque, near Rodez, in the Cevennes region, ${ }^{[3491]}$ and thirdly with the important fabrics of Lezoux. ${ }^{[3492]}$ With these and others of more or less importance we shall deal successively in the following pages.

At Saint-Rémy no traces of actual furnaces were found, but fragments of moulds, etc., showed clearly that it was an important centre, not only for pottery, but also for terracotta figures. As a rule little chronological evidence is to be obtained from finds in France owing to the confused and unstratified condition of the remains, or from absence of scientific records; but in the present case we are fortunate in possessing a series of homogeneous types belonging to the earliest period of sigillata ware in Gaul; an entire uniformity of clay, technique, form, and decoration shows that they must all belong to one circumscribed epoch, in spite of the absence of coins or other definite evidence. At the same time it has been possible not only to connect them with finds at Mont Beuvray (Bibracte), near Autun, which can be dated not later than 5 b.c., at Ornavasso, on Lago Maggiore (coins of Augustan epoch), and at Andernach (also Augustan, see pp. 502, 533), but also to obtain a clue to their originals and prototypes.
The forms of the vases fall under five clearly-defined heads: a poculum, or tumbler-shaped vessel, a scyphus with flat-topped handles, a straight-sided open bowl, flasks with or without handles, and of conical form or pear-shaped (see Fig. 224). All the vases are of white clay, with reliefs, but there are no potters' stamps, and the execution is often imperfect; the secret of the red ware seems as yet unknown, but there is evidence that it was gradually substituted for the white, and the typical bowl with sloping sides and continuous scrolls of foliage (Dragendorff's No. 29 = Fig. 221) introduced here as elsewhere. In the Saint-Rémy fabrics this bowl only has a single row of ornament, a tongue-pattern, scrolls, or arcading round the lower part. The general conclusion reached by $M$. Déchelette is that down to the end of the first century в.c. two kinds of pottery were introduced into Gaul: the Arretine ware, which occurs at Bibracte with the stamps of Annius, Memmius, and Tettius, and a class of small goblets and flasks of yellowish clay which in many respects resemble the Saint-Rémy type. The latter sometimes bear the name of ACO ACASTVS, ${ }^{[3493]}$ a potter who appears to have worked in the region of Savoy or Piedmont, and who was inspired by the Arretine technique and style of signature. His ware also occurs in Lombardy at Ornavasso, and at Klagenfurt in Pannonia, where a fragment was found (Fig. 225) with his name and an inscription which runs: "Life is short, hope is frail; come, (the lights) are kindled; let us drink, comrades, while it is light." ${ }^{[3494]} \mathrm{He}$ certainly belongs to the Augustan epoch, and may be regarded as the


From Déchelette. FIG. 224. VASE OF ST.-RÉMY FABRIC. immediate inspirer of the Saint-Rémy fabrics. Hence about the beginning of the first century of our era it may be inferred that the potters of Saint-Rémy and district began to "exploit" the Italian technique, but following the Gallo-Italic method of Aco rather than the Arretine. The typical decorative motive by which this pottery may be recognised is a kind of arcading, which from having floriated points gradually tends to assume a purely vegetable form. Some of the vases are only ornamented with rows of raised points, and this feature occurs on others with the potters' names L. Sarius Surus and Buccio Norbanus. Figure decoration is found only on the pear-shaped flasks, in the form of animals (Fig. 224) and bearded heads. To the same period belongs a series of vases manufactured at Vichy and Gannat in the same district. ${ }^{[3495]}$


From Déchelette.
FIG. 225. VASE OF ACO (FIRST CENTURY AFTER CHRIST), WITH INSCRIPTION.

The results obtained from Graufesenque, in the Department of Aveyron, have been even more remarkable. This place represents the ancient Condatomagus, in the country occupied by the Ruteni, and appears to have been a great centre of the terra sigillata industry. Although it is not mentioned by Pliny, yet there must have been in his time large exports southwards from this part of Gaul, even as far as Campania. M. Déchelette has shown that it supplied not only Gaul and Italy, but even Africa, Spain, and Britain, to a greater extent than any other centre-that, in fact, from A.D. 50 to 100 it was the seat of the most important pottery in the whole empire. ${ }^{[3496]}$
Remains of pottery were first discovered in 1882 by the Abbé Cérès, including a series of moulds, which made it certain that this was a centre of fabric. These discoveries were largely supplemented by further excavations in 1901-02. Among the moulds are those of certain potters which are only found here, and consequently afford satisfactory evidence that such potters can be localised in this region. The potters were not itinerant, nor were the moulds transferred from one pottery to another; but the important central pottery seems to have attracted a group of smaller ones to collect round it, just as we find Cincelli linked to Arezzo (p. 483), and the moulds could be exchanged from one to another within this limited area.
The local pottery of Gaul, which in the first century B.C. had reached a high level, ${ }^{[3497]}$ was interrupted about the time of Augustus by the invasion of Italian methods, by which it was very rapidly Romanised, and Gaul became a mere tributary of Roman industry. At first two kinds of technique were practised-one with a white or yellow clay, as at Saint-Rémy and Bibracte; the other in the ordinary red ware, which appears to have been employed exclusively at Condatomagus and Lezoux, at first following on the lines of the Arretine ware, but subsequently attempting new developments. Artistically it is inferior to the Arretine, but it is much more varied. Besides the terra sigillata proper, or moulded ware with reliefs, which is by far the most numerous, we find in Gaul several other varieties of technique: appliqué medallions, separately moulded and attached with barbotine, in imitation of the Greek metal $\dot{\varepsilon} \mu \beta \lambda \dot{\eta} \mu \alpha \tau \alpha$; barbotine decoration; a class of so-called "marbled" vases; and incised decoration of simple linear patterns made with a tool in the moist clay, but with bold and skilful execution. But practically the wares found at Graufesenque are limited to the moulded class, and the others, which will be described subsequently, only became general in the second century, when the Lezoux potteries came to the front and those of Graufesenque were exhausted.
In the terra sigillata wares three forms assume marked prominence, those illustrated in Figs. 221223; they are found in fairly equal proportions, but the earliest form, which we may call for convenience No. 29, has a slight preponderance. We shall see later that similarly the latest form (No. 37) prevails at Lezoux; this form was introduced about a.d. 70. The intermediate No. 30 is found at both, but more frequently at Graufesenque. The only other found in the moulded wares is a bowl on a high stem, which closely follows the type of the Arretine krater seen in Fig. 219; it is therefore either common to Arretium and Condatomagus, or represents a transition from one fabric to the other. ${ }^{[3498]}$ Déchelette quotes an instance with the stamp volvs, which recalls the Arretine potter Volusenus. ${ }^{[3499]}$
About three-fourths of the vases are ornamented, the decoration falling into two categories: (1) an earlier class with ornament only, occurring on the forms 29 and 30 (see Plate LXVII.); (2) a later with figures, such as animals or gladiators, the forms being Nos. 30 and 37. Of the ornamental motives on form 29, there are five principal types ${ }^{[3500]}$ : (a) simple winding scrolls; (b) scrolls combined with figures in medallions; (c) scrolls combined with panels of "arrow-head" pattern; (d) bands of semicircles enclosing volutes which terminate in rosettes; (e) figures in metopes. In this form the decoration is almost always in two friezes, a natural consequence of the shape of the vase; the metopes or geometrical compartments only come in with form 37. In the latter form seven successive types of decoration may be distinguished: ( $\alpha$ ) a transitional system with metopes, derived from the older form ${ }^{[3501]}$; $(\beta)$ metopes with wavy borders, a


Gaulish Pottery of First Century after Christ (Graufesenque Fabric)
(British Museum).
diagonal or cruciform pattern often occupying alternate panels (cf. Plate LXVII. fig. 2) ${ }^{[3502]}$; $\gamma$ ) large medallions, often combined with inverted semicircles (chiefly found at Lezoux: cf. Plate LXVIII. fig. 3 ); ( $\delta$ ) arcading (rare at Graufesenque); ( $\varepsilon$ ) arcading and semicircles combined; ( $\zeta$ ) large foliagepatterns or vine-leaves, often interspersed with animals; $(\eta)$ friezes of "free" figures (not found at Graufesenque: cf. PlateLXVIII. fig. 1).

In regard to the figure subjects, mythological types are rare, and generally there is not so much variety as at Lezoux. Déchelette reckons 177 different types in all, of which 112 are peculiar to the fabric, whereas no less than 793 are peculiar to Lezoux. ${ }^{[3503]}$ Hence, he points out, the origin of any Gaulish vase may be determined from the nature of the types alone. In artistic execution they are unequal, some being copies of popular themes, others of a naïve and unsophisticated character. Gaulish elements are conspicuously absent. Although the difference from the Arretine style is strongly marked, there is yet the same tendency to display the influence of toreutic prototypes, and even of the "new Attic" reliefs and the genre types of the Hellenistic period. ${ }^{[3504]}$ But others are original and non-classical in style, and there is no homogeneity. Each pottery doubtless had its favourite subjects-a point which may prove of use in determining the separate fabrics. In any case, figure-subjects only prevailed for a short period at Condatomagus, whereas at Lezoux and in Germany they extend over a considerable period. For Gaul did not become Romanised before the reign of Titus; hence the previous absence of mythological themes. The potter Libertus (see below, p. 527), who worked at Lezoux about A.D. 100, stands out as the foremost potter and modeller in Gaul, who, brought up on classical traditions, influenced the whole pottery of the country.
The question of the chronology of these Rutenian fabrics depends more upon the results of comparison with other sites than on the internal evidence of the finds. None of this pottery, for instance, is found at Bibracte, which was deserted about the beginning of our era; but at Andernach vases with Rutenian potters' stamps are found with coins ranging from Augustus to Nero. They are also abundant at Xanten, Neuss, and Vechten in Holland. Evidence may also be obtained from the German Limes, where form 29 disappears about A.D. 30. The exportation of Rutenian wares, therefore, began about the reign of Tiberius. Their wide distribution may be traced by a study of the inscriptions in the thirteenth and other volumes of the Latin Corpus. ${ }^{[3505]}$ In Britain they are found in London ${ }^{[3506]}$ and at Silchester. Out of thirty-four ornamented vases from the latter site in the Reading Museum, M. Déchelette attributes exactly half to Condatomagus, representing the first century, and the other half to Lezoux, representing the second. ${ }^{[3507]}$ In Italy this ware is found at Rome and Pompeii, and of the typical Rutenian subjects some twenty have been noted among the terra sigillata in Roman museums. The potters Bassus, Jucundus, Mommo, and others of Rutenian origin are found at Rome, whereas the only one from the Auvergne district there is Albucius ${ }^{[3508]}$; and the same names occur at Pompeii, especially that of Mommo, whose stamps are characteristic. ${ }^{[3509]}$ The latter group of vases, moreover, supply, as in other cases, important evidence for dating
the Rutenian vases; they show, not only that Mommo and the others were in full activity before a.D. 79 , but that mythological subjects-not found on the Pompeian examples-were only introduced towards the end of the pottery's activity.
Another well-known potter who appears to have worked at Condatomagus is Vitalis, whose signature in full or in the form OF - VITA is well known there. He is also found as far afield as Carthage and on the east coast of Spain. ${ }^{[3510]}$ This is additional testimony to the extent and quantity of exportations from this centre, and to its position as the most flourishing manufacture in the Roman empire at the time. This popularity it could never have acquired if the fabrics of Arretium, Mutina, and Puteoli had not now reached their decadence; nor, if those of Auvergne, such as Lezoux, or of the Rhenish provinces had been already in full activity, would the Rutenian wares have penetrated into Central Gaul and Germany. M. Déchelette notes as an interesting fact that in some collections of Roman pottery debased wares with Arretine stamps are to be seen, apparently not later than A.D. 80, and evidently imitations of Rutenian ware ${ }^{[3511]}$; these bear the names of L . Rasinius Pisanus and Sex. M. F., of whom mention was made in the last chapter (p. 485). There is no evidence that this pottery was in existence after A.D. 100, and its rapid disappearance is certainly due to the rise of Lezoux, where, as noted below, Rutenian potters' stamps are not uncommon in the first century.
Déchelette has collected forty-three names of Rutenian potters, which are distributed over two hundred and thirty-two vases or fragments known to him. ${ }^{[3512]}$ On form 29 the stamps are only found in the interior of the vases, and hence are not found on the moulds, but both were probably made by the same potters. Vases of the other two forms are often unsigned. Of individuals Mommo occurs sixty-three times, Germanus thirty-eight. The same writer points out that the evidence from Graufesenque would overthrow any theory of itinerant potters, if on no other grounds, from the fact that the moulds of a particular potter are only found on the one spot.
A group of vases which must be mentioned here, though a very small one and not strictly belonging to the terra sigillata, is that of the yellow ware with red marbling. ${ }^{[3513]}$ It consists of a small group of bowls and dishes with a dull yellow slip covered with veins of a red colour, producing a variegated effect. Eight of these were found at Trier, one with the stamp of Primus, and there are a few others in German museums. In Southern Gaul, as at Arles, they are more common, and others have been found at Lyons and Vichy. The British Museum possesses one from Bordighera and three from Arles, and they are also known in Sardinia and Southern Italy; there are two at Naples from Pompeii with the stamp of Primus. ${ }^{[3514]}$ The latter fact gives a terminus ante quem for their date, and it is probable that some place in Southern Gaul was the centre of the fabric. Dragendorff suggested Arles, where stamped examples have been found; but Déchelette points out that all the potters' names are Rutenian, and this is conclusive evidence in favour of Graufesenque; in any case we have here an instance of exportation from Gaul into Italy. It is not certain in what manner the marbling has been produced; it is probably an imitation of glass.

Yet another example of a fabric which was imported from Gaul into Italy is to be seen in the pottery of Banassac, a class of vases with inscriptions of a convivial character, with letters in relief encircling the body. ${ }^{[3515]}$ The form is that of the hemispherical bowl No. 37, the appearance of which at Pompeii shows that it was developed before A.D. 79. They are found in large numbers in the south of France, especially at Nismes, Orange, Vienne, Montans (Tarn), as well as Banassac; at the latter place fragments have been found on the site of a pottery, showing that they were made there. The most notable example (Fig. 226) was found at Pompeii, and is now in the Naples Museum ${ }^{[3516]}$; it is inscribed bibe amice de meo, "Drink, friend, from my (cup)," the letters being separated by leaves, and is of ordinary red terra sigillata ware. Here, again, it is possible to date the fabric in the first century, not later than the reign of Vespasian. On the local specimens are found such sentiments as Gabalibus felicit(er), Remis (felici)ter, Sequanis feliciter ${ }^{[3517]}$; veni ad me amica; bonus puer, bona puella; the two last-named recalling the seaside mugs of the nineteenth century. The convivial inscriptions we shall meet with again in a later fabric from the region of the Rhine (p. 538). Terra sigillata was also made here and at Montans in the Department of Tarn; the decoration is in the form of metopes, denoting the transitional period (about A.D. 70). No potters' names are found on the inscribed vases.


From Mus. Borb.

The pottery of Lezoux, in Auvergne, was first carefully studied by the late M. Plicque, ${ }^{[3518]}$ who excavated there on a large scale in 1879 and succeeding years, and obtained as a result of his researches no less than three thousand different potters' names, as well as the substructures of about a hundred and sixty furnaces, forty of which were in good preservation, comprising sixty-six distinct manufactories. About twenty-three more manufactories were traced along the principal roads and the banks of the Dore and Allier. He also found numerous remains of tools, potters' wheels, and other apparatus. In addition, he excavated some two hundred tombs containing quantities of pottery, which seemed to imply a general use of it in funeral ceremonies. The potteries here seem to have been already in full working order in the time of Vespasian, and lasted down to about A.D. 260. The earliest date to be obtained from the evidence of coins is about A.D. 70, but the earliest fabrics seem to go back to the time of Claudius; the date of destruction of the site is indicated by coins of Gallienus and Saloninus found among the burnt ruins.
A large proportion of the vases have potters' stamps, but there is no rule about the signatures. ${ }^{[3519]}$ In the vases of form 29 the names are in the interior, denoting the masters of the potteries; in the later forms they are on the exterior, having been placed on the inside of the mould before baking, usually among the ornament. The ordinary formula is $\mathrm{OF}, \mathrm{M}$, or F , with the name in the genitive. As to the distribution of Lezoux vases, there was, as noted below, little exportation before a.d. 100, but after that time they prevail over Britain and Germany. Déchelette gives ninety-two examples with potters' stamps in Britain, including twenty-one names. A few specimens have been found in North Italy; Paternus occurs at Turin, Albucius at Rome.


Gaulish Pottery found in Britain; Lezoux Fabric; A.D. 70-250 (Brit. Mus.).

Of the moulded or terra sigillata wares twelve different forms are found, of which as elsewhere three prevail to the exclusion of the others. ${ }^{[3520]}$ The krater type (Dragendorff's No. 11) is only found in the earliest period, about A.D. 40-50, and as already noted (p. 520) forms 29 and 30 are not so common as at Graufesenque, while form 37, which practically took the place of 29 , occurs in great quantities. Déchelette distinguishes three chronological epochs of development, covering respectively the periods A.D. 40-75, 75-100, and 110-260. ${ }^{[3521]}$ In the first period the decoration of form 29 develops in the same manner as at Graufesenque, but with this important variation, that the running scroll is replaced by a straight pattern of vine or oak leaves, or bands of rosettes or circles. The colour of the glaze is lighter than at Graufesenque, the reliefs more delicately modelled. The potters of this period, all of whom use form 29, are Atepomarus, Cobnertus, Danomarus, Iliomarus, and Petrecus. It will be noted that these are all Gaulish names, whereas those at Graufesenque are all Latin.
To the second period (A.D. 75-110) belong the bowls of form 37 with transitional or metope decoration, or in the "free" style, which is employed by Libertus, an important potter of Trajan's reign. Exportations now first begin, and examples are found on the Limes, but generally speaking they are few in number, and while the Rutenian potteries existed the output must have been limited. After the reign of Trajan, however, large numbers were exported to Britain and Germany.

The cruciform ornamentation (p. 521) is found on the forms 30 and 37, and a peculiar type of eggor astragalus-pattern (borrowed from Arretium) is used by Butrio and Libertus. Figure subjects, introduced by Libertus, now become general, especially animals and hunting-scenes (see for an example Plate LXVIII. fig. 1). The typical potters of the period are Butrio, Libertus, Carantinus, Divixtus (Plate LXVIII. fig. 2), Juliccus, Laxtucissa, and Putrius.
The third period (110-260) is represented almost exclusively by the form 37 with decoration in "free" style or large medallions and wreaths; a few examples of form 30 and the olla (Déchelette's No. 68: cf. p. 529) are found. The chief potters' names are Advocatus, Banuus, Catussa, Cinnamus (Plate LXVIII. fig. 3), Doeccus, Lastuca, Paternus, and Servus. Of these, Paternus belongs to the period of the Antonines, and he and Cinnamus, says M. Déchelette, represent the apogee of the prosperity of Lezoux, and of its export commerce. The period of degeneration is marked by the appearance of barbotine decoration and imitations of metal (see below). It is difficult to say exactly when the potteries came to an end, but there is no evidence that terra sigillata was manufactured after the third century, and Plicque is probably right in attributing their destruction to the German invaders in the reign of Gallienus.

The wares characteristic of the earlier period include dolia of coarse clay and other plain fabrics, as well as the various types of terra sigillata. Among the latter are examples of importations from the Graufesenque and Banassac potteries and other places in the Aveyron district, but the majority are of local manufacture. These include, besides the moulded red wares with figured decoration and potters' stamps, orange-red wares, yellow polished wares (often micaceous), and black ware with barbotine ornamentation, on which potters' stamps are not found. Lezoux was also a centre for the enamelled glazed wares which have been described in Chapter III. In the later period the red wares are ornamented with figures from moulds, or with barbotine, or have lion's-head spouts (see below). The marbled vases ( p .523 ) are also found, and in the third century the vases with appliqué reliefs, with incised or hollowed-out ornamentation, or bronzed in imitation of metal, are the prevailing types. ${ }^{[3522]}$

The salient points of difference between the earlier and later fabrics, says Plicque, are these. The clay of the earlier is only baked to a small degree of heat and is not vitreous, but is exceedingly porous. It is also frequently full of micaceous particles. Subsequently it becomes more vitreous but less porous; it is more compact and sonorous, free from mica, and more brilliant and lustrous. In the earlier, the forms are artistic and symmetrical, the ornament sober and elegant, remarkable for its taste and simplicity. The figures are enclosed in medallions, and the ornaments consist of rays or rounded leaves, rows of beads, and guilloche-patterns. In the later, the art degenerates, the ornamentation becoming heavy and overcrowded, and the figures are broken up and badly arranged; the forms of the vases, too, become heavier. The principal decorative pattern is the egg-and-tongue round the rim. In the potters' stamps of the two first periods the letters have frequent ligatures and abbreviations; the names are often in the nominative or with officina preceding the name. Later, the letters are coarser and ligatures are rare; the names are usually in the genitive, followed by м (manu) or of(ficina). The characteristic 15 u U for v found in the middle of the second century should be noted.

Among the subsidiary fabrics of Lezoux the most remarkable is that of the vases with appliqué reliefs. ${ }^{[3523]}$ They are formed entirely on the wheel, and the decoration is made separately from moulds (p. 440), and attached with barbotine, either in the form of a medallion or with an irregular outline, varying with the figure. Barbotine in many cases is also employed for foliage patterns filling in the background. The usual form is that of a spherical or ovoid vase (Plate LXIX. fig. 2), which may perhaps be termed an olla, ${ }^{[3524]}$ with short neck and no handles. It may be noted in passing that such shapes could not conveniently be moulded, hence the variation of form when we pass from terra sigillata to other methods of decoration. In the third century this combined process largely supplanted the moulded wares at Lezoux. The paste and glaze, however, are identical with the terra sigillata. No potters' signatures have been found on these vases, but they occur all over Gaul, including Belgium and Switzerland, and also in Britain. In the British Museum (Romano-British Room) there are two very fine specimens found at Felixstowe in Suffolk, one of which is that given on Plate LXIX. Roach-Smith mentions others from London, York, and Richborough, ${ }^{[3525]}$ and they are also known at Évreux in France. A good but imperfect example from Gaul is in the Morel Collection, now in the British Museum, and has figures of Herakles and Maenads. The modelling in some cases is admirable, especially in the Felixstowe vases, and in the London specimens published by RoachSmith, with masks and figures of Cupid. These vases represent the latest stage of the ceramic industry of Lezoux.
Another class of vases made at this centre which may be mentioned here includes a series of paterae, oinochoae, and trullae (p. 470) with ornamented handles, all obviously made in imitation of metal. ${ }^{[3526]}$ Of the paterae there is a good example in the British Museum from the Towneley Collection, ornamented with athletic contests and cock-fights round the edge. M. Déchelette (ii. p. 319) thinks some of the oinochoae made at Vichy may be imitations of the bronze jugs which are found at Pompeii, but many seem to be of a later date.
During the period A.D. 100-400, and especially in the third century, a class of red wares appears at Lezoux in the form of large bowls with spouts in the shape of lions' heads. ${ }^{[3527]}$ These were wrongly identified by Plicque with the acratophorus (p. 464), but they are clearly mortars (pelves, mortaria), in which food was ground or cooked, the spout serving the purpose of straining off liquid. The lions' heads are made from moulds and attached with barbotine. Some of these have potters' names. As a class they must be distinguished from the plain mortaria of grey or yellow ware described below (p. 551).

With the South of France it is necessary to connect a series of medallions with reliefs, intended for attachment to vases of terra sigillata ware. ${ }^{[3528]}$ In one or two cases the vases themselves have been preserved, but usually the medallions alone remain; there are also examples of the moulds in which they were made. ${ }^{[3529]}$ Nearly all of these have been found in the valley of the Rhone, at Orange or Vienne, ${ }^{[3530]}$ the rest in other parts of France, such as Lezoux, along the Rhine, or at Rome (two examples). They were probably made at Vienne; but there was also a fabric in Germany, examples of which occur at Cologne, Trier, and Xanten. The subjects of the reliefs are very varied, ranging from figures of deities to gladiators or even animals; they frequently bear inscriptions, and their date is the third century after Christ.


FIG. 227. MEDALLION FROM VASE OF SOUTHERN GAUL: SCENE FROM THE CYCNUS (BRITISH MUSEUM).

As long ago as 1873 Froehner published a series from Orange, ${ }^{[3531]}$ with such subjects as Apollo, Venus Victrix, Mars and Ilia, a figure of Lugdunum personified, the freeing of Prometheus and the death of Herakles, Dionysos and Ariadne, a bust of Hermes, a gladiator, a cock and hens, and a bust of the Emperor Geta, the last-named serving as an indication of date for the whole series. Several were inscribed, that with Venus Victrix having cera felicis, which probably refers to the wax in which the figures were first modelled, though some have thought that it represents the Greek $\kappa \varepsilon \rho \alpha(\mu \varepsilon ́ \omega \varsigma)$. Another trio from Orange ${ }^{[3532]}$ represent respectively:-(1) a chariot race in the circus, with the inscriptions FELICITER, LOGISMUS (a horse's name), and PRASIN(a) F(actio), "the green party"; (2) Fig. 227, a scene from a play, probably the Cycnus, in which Herakles is saying to Ares, the would-be avenger of his son, "(Invicta) virtus nusquam terreri potest," the god proclaiming "Adesse ultorem nati me credas mei"; in the background, on a raised stage or $\theta \varepsilon о \lambda о \gamma \varepsilon i ̃ \nu$, are deities; (3) an actor in female costume. There are also three in the Hermitage Museum at Petersburg, of which two represent Poseidon, the third Hermes. ${ }^{[3533]}$ Caylus also gives a representation of a vase with three such medallions, with busts of Pluto and Persephone, Mars and Ilia, and two gladiators. ${ }^{[3534]}$ Where gladiators with names appear it may be assumed that they are portraits of real people, and Déchelette argues from this that the vases were made specially in connection with gladiatorial (or theatrical) performances.


From Gaz. Arch.
FIG. 228. MEDALLION FROM VASE OF SOUTHERN GAUL: ATALANTA AND HIPPOMEDON.

An interesting group found at Vienne and Vichyl ${ }^{[3535]}$ have subjects taken from the Thirteenth Iliad, such as Deiphobos and the Locrian Ajax, or Hector fighting the Achaeans. Among the remaining examples known the most interesting are three from Orange, one of which represents a festival in honour of Isis, the other two, the victory of Hippomedon over Atalanta (Fig. 228), with an inscription of three lines:

Respicit ad malum pernicibus ignea plantis,
Quae pro dote parat mortem quicumque fugaci
Velox in cursu cessasset virgine visa. ${ }^{[3536]}$
Reference has already been made to a paper by M. Blanchet, in which he gives a list of the sites in Gaul on which pottery appears to have been made (see p. 443). But in the majority of these cases plain wares must have been the only output. Moulded wares, as Déchelette points out, required skill and resource to produce. ${ }^{[3537]}$ In any case, very few types are found on moulded wares which cannot be also associated with Graufesenque or Lezoux, and any made on other sites must have followed the same methods of decoration. ${ }^{[3538]}$ The places given in Blanchet's list cover practically the whole extent of France, though the principal centres of activity were always the Aveyron and Allier districts and the Rhone valley. In the neighbourhood of Lezoux, for instance, vases were made at Clermont-Ferrand, Lubié, St.-Bonnet, and Thiers. At Nouâtre, Indre-et-Loire, was an important pottery, not yet fully investigated; and others were at Rozier (Lozère), Auch (Gers), Montauban, Luxueil (Haute-Saône), St.-Nicholas near Nancy, and Aoste (Isère), where vases of characteristic originality were made. ${ }^{[3539]}$ But it is not likely that any future investigations will displace Graufesenque and Lezoux as the chief centres for Gaulish terra sigillata.

## 3. The Fabrics of Germany

In Germany the oldest and one of the most important sites for pottery is Andernach, ${ }^{[3540]}$ between Bonn and Coblenz, where however, it must be borne in mind, there was no local manufacture; its importance is mainly as a site yielding valuable chronological evidence. The finds extend from the beginning of the first century down to about A.D. 250, the earlier objects finding parallels in cemeteries at Trier and Regensburg which can be similarly dated. Generally speaking, it has been observed that Roman remains begin on the left bank of the Rhine a century earlier than those in the border forts on the Limes, which cover the period from A.D. 100 to 250.
Terra sigillata with reliefs is comparatively rare, though, as we have seen, it was at an early period exported from Gaul, and the pottery consists chiefly of ordinary wares, red, grey, and black, usually of good and careful execution, with thin walls. Much of this common pottery may be assumed to be of local manufacture. The characteristic types of the first century are simple jugs of plain ware without slip for funerary or domestic use; vases with white slip (also found at Regensburg); black ware bowls and dishes, sometimes with potters' stamps; black and grey cinerary urns. These forms include small urns and the usual cups and bowls with straight or sloping sides, replaced after a.D. 100 by spherical-bodied jars with narrow necks. The decoration comprises all the varieties we have included in the foregoing survey: barbotine, incised linear patterns, impressed patterns made with the thumb, and raised ornaments such as plain knobs or leaves worked with the hand. In the third century painted decoration is introduced, as in the black ware drinking-vessels with inscriptions described below (p. 537).

At Xanten (Castra Vetera), lower down the Rhine, large quantities of terra sigillata have been found, which can be dated by means of coin-finds from the beginning of the first century down to the third. During this period a steady degeneration in the pottery may be observed, although glass fabrics correspondingly improve; in the time of the Antonines the clay is coarse and often artificially coloured with red lead or other ingredients, producing what was formerly known as "false Samian" ware. ${ }^{[3541]}$
An exceptionally interesting centre, and in some respects the most important in Germany, is that at Westerndorf on the Inn, between Augsburg and Salzburg, where the coins range from about a.d. 160 to 330. It was first explored in 1807 and as long ago as 1862 the results were carefully investigated and summarised by Von Hefner in a still valuable treatise. ${ }^{[3542]}$ The pottery includes terra sigillata of the later types, and plain red, yellow, and grey wares, sometimes covered with a non-lustrous grey or reddish slip, or with black varnish, the latter have very thin walls and are baked very hard. The decoration of the terra sigillata comprises all the usual types, ${ }^{[3543]}$ the forms being also those prevalent elsewhere, with the addition of a covered jar or pyxis, but the figures are confined to the cylindrical or hemispherical bowls (Nos. 30 and 37). ${ }^{[3544]}$ The plain wares include cinerary urns, deep bowls or jars, with simple ornament, open bowls with impressed patterns, and mortaria.
Of some peculiarities of the potters' stamps we have already spoken (p. 510); they are found in the form of oblongs or human feet, and more rarely in circles, half-moons, or spirals, the letters being both in relief and incised. Trade marks were sometimes used, the potter Sentis, for instance, using a thorn-twig by way of a play on his name. Names are both in the nominative and genitive, with some abbreviated form in the one case of FECIT, in the other of manvs or officina. ${ }^{[3545]}$ Local names are clearly to be seen in those of Belatullus, Iassus, and Vologesus.

Another important centre of fabric in Germany is Rheinzabern (Tabernae Rhenanae) near Speier, which probably shared with Westerndorf a monopoly of the moulded wares. ${ }^{[3546]}$ The pottery found here is mostly in the Speier Museum; it is almost all of form 37, with its typical decoration, and the fabric does not seem to have been established before the second century. The chief potters' names are Belsus, Cerialis, Cobnertus, Comitialis, Julius, Juvenis, Mammillianus, Primitivus, and Reginus. The British Museum possesses moulds for large bowls with free friezes of animals, one with the stamp of Cerialis ${ }^{[3547]}$; there was little export to Gaul, but a considerable amount to Britain. M. Déchelette notes the similarity of the types to those of Lezoux, and suggests that Rheinzabern is an offshoot from the latter pottery. This site has also produced barbotine wares, ${ }^{[3548]}$ which bear a remarkable superficial resemblance to that of Castor (see below, p. 544), and have been wrongly identified therewith ${ }^{[3549]}$; but they are not found at Castor, and in point of fact differ widely in artistic merit, being far superior to the British fabric, as has been pointed out by Mr. Haverfield. ${ }^{[3550]}$ The ornamentation is a formal and conventional imitation of classical models, whereas the Castor ware is only classical in its elements, and is otherwise barbaric yet unconventional.
It is possible that Trier, and in fact all places mentioned in a preceding chapter (p. 453) as sites of kilns may be regarded as centres of manufacture, though in only a few cases was anything made beyond the ordinary plain wares. Of the latter a useful summary has been made by Koenen, ${ }^{\text {, } 3551]}$ chiefly from the technical point of view, which it may be worth while to recapitulate. He divides the pottery of the Rhine district (which may be taken as typical) into three main classes: the first transitional from the La Tène period ${ }^{[3552]}$ to Roman times; the second, native half-baked cinerary urns; the third, Roman pottery, ousting the other two. The first two classes cover the local handmade wares of grey, brown, or black clay, which are clearly of native make, and like the similar wares of Britain and Gaul hardly come under the heading of Roman pottery, though subsequently they felt its influence. The Roman pottery proper (which can be well studied in the museums of Bonn, Trier, and elsewhere on the Rhine) is divided by Koenen into three periods: Early, Middle, and Late Empire. Roman wares first appear with coins of Augustus, and at this period exercise much influence on the La Tène types, producing a sort of mixed style, usually of greyish or black clay with impressed or incised ornament, subsequently replaced by barbotine. The terra sigillata is either of the superior deep red variety with sharp outlines and details, which we have seen to emanate from Gaul, or else plain ware of a light red hue ("false Samian"), without ornament. ${ }^{[3553]}$ But as Hölder has pointed out, ${ }^{[3554]}$ the settlement of the chronology of German pottery (apart from the sigillata) is particularly difficult, because we are dealing with a purely utilitarian fabric, which consequently preserved its forms unaltered through a considerable period; moreover, there must have been many local fabrics and little exportation, which makes comparison difficult.
To the German fabrics belong a group of vases with painted inscriptions found on the Lower Rhine, and less frequently in North and East France. ${ }^{[3555]}$ They occur in the second century at the Saalburg, and last down to the fourth; large numbers have also been found at Trier, and other examples at Mesnil and Étaples (Gessoriacum) in France. ${ }^{[3556]}$ The usual form is that of a roundbellied cup or jar (Fig. 229), with a more or less high stem and plain moulded mouth. Their ornamentation is confined to berries, vine-tendrils, and scrolls, at first naturalistic, afterwards becoming conventionalised; but their chief interest lies in the inscriptions, which, like those of the Banassac type described above (p. 524), are of a convivial character. They are painted in bold well-formed capitals, in the same white pigment which is used for the ornamentation; the following examples will serve as specimens:


FIG. 229. GERMAN JAR WITH

DA BIBERE, DA MERVM, DA MI, DA VINVM. ${ }^{[3561]}$
DE ET DO, DOS (= Só́s). ${ }^{[3562]}$
EME. ${ }^{[3563]}$
FAVENTIBVS. ${ }^{[3564]}$
FELIX. ${ }^{[3565]}$
FE(r)O VINVM TIBI DVLCIS. ${ }^{[3566]}$
GAVDIO. ${ }^{[3567]}$
IMPLE. ${ }^{[3568]}$
LVDE. ${ }^{[3569]}$
MISCE, MISCE MI, MISCE VIVAS. ${ }^{[3570]}$
MITTE MERVM. ${ }^{[3571]}$
PETE. ${ }^{[3572]}$
REPLE, REPLE ME COPO MERI. ${ }^{[3573]}$
SESES $=$ ZESES $=$ そŋ́ $\sigma \alpha \iota$ ¢. ${ }^{[3574]}$
SITIO, SITIS. ${ }^{[3575]}$
VALE, VALIAMVS. ${ }^{[3576]}$
VINVM, VINVM TIBI DVLCIS. ${ }^{[3577]}$
VITA. ${ }^{[3578]}$
VIVE, VIVAS, VIVAMVS, VIVAS FELIX, VIVE BIBE MVLTIS. ${ }^{[3579]}$
To this list must be added a remarkable vase of the same class found at Mainz in $1888,{ }^{[3580]}$ with the inscription ACCIPE m(esi) TIE $n$ ) S ET TRADE SODALI, "Take me when you are thirsty and pass me on to your comrade." Above the inscription are seven busts of deities, Sol, Luna, Mars, Mercury, Jupiter, Venus, and Saturn, representing the seven days of the week; both the design and the inscription, however, are incised, not painted.

## 4. Roman Pottery in the Netherlands, Spain, and Britain

In Holland and Belgium finds of terra sigillata and potters' stamps are recorded from various sites, such as Arentsburg, Rossem, Rousse, near Oudenarde, Voorburg, between Utrecht and Leyden, and Wyk-by-Durstede, and also at Utrecht. ${ }^{[3581]}$ At Vechten near Utrecht, the ancient Fictio on the road from Lugdunum (Leiden) to Noviomagus (Nimeguen) finds were made in 1868 which confirm the activity of the Rutenian potters in the first century. ${ }^{[3582]}$ These discoveries included coins extending from the Republican period down to Trajan, and terra sigillata of the Graufesenque type, with many names of potters belonging to that region.
In Spain finds have been made on various sites, and there are numerous examples in the museum at Tarragona ${ }^{[3583]}$; at Murviedro, the site of the ancient Saguntum, which, as we have seen, is mentioned by Pliny and Martial as an important centre, various kinds of Roman ware have come to light, some with potters' stamps, but no evidence remains of potteries or of any local manufacture.

In Britain-at least in England—finds of Roman pottery have been so plentiful and so universal that it is difficult to select typical centres for discussion. It must also be borne in mind that, with the exception of the plain wares and a few other fabrics, such as the Castor ware, we have not to deal with local manufactures. A certain quantity of terra sigillata may have been imported from Germany (e.g. from Westerndorf), ${ }^{[3584]}$ but by far the greater proportion is from Gaul, as is shown by the potters' names.
We propose in the first place to review briefly the types of terra sigillata which occur in Britain. ${ }^{[3585]}$ The bowls of forms 29 and 30, which are found in Germany in the first century, do not occur on the Roman Wall, and we have already seen that they are not later than Hadrian's time; but they are common in the South of Britain, as at London and Colchester. Roach-Smith ${ }^{[3586]}$ and other earlier writers have published specimens of these older forms decorated with figures which have been found in London, Bath, York, Caerleon, ${ }^{[3587]}$ and elsewhere. The earliest dateable examples of form 37 have been found with coins of Nerva at Churchover in Warwickshire ${ }^{[3588]}$; this type is indeed common all over Britain, and is one of the few varieties of terra sigillata occurring in the North. It is found at South Shields, along the Roman Wall, and in Scotland at Birrens in Dumfriesshire. ${ }^{[3589]}$ Pottery of the second century is represented by a variety of the same form, with a moulded ridge breaking the outline in the middle ${ }^{[3590]}$; this would seem to be a type which also occurs in Germany during the second and third centuries. Mr. Haverfield states that this form is found at South Shields and in Yorkshire, and is imitated at Silchester. Of the principal subjects on these we have already given some description (p. 508). Finally, there is the wide shallow type, approximating to the mortar or pelvis, the upper part of which forms externally a flat, vertical band, projecting beyond and forming a tangent with the general curve of the bowl; this is usually ornamented with lions' heads in relief. This variety is not earlier than the second century, and is also found in the third; we have already seen that it was made at Lezoux. ${ }^{[3591]}$
It is important to note that all the places mentioned as yielding bowls of forms 29 and 30 were occupied at least as early as A.D. 85, perhaps as early as A.D. 50. But the style of these bowls may have lasted longer; at all events, the varieties are so numerous as to show a development for which some time is required. There is also a distinct development in the plain band round the upper edge
of the bowl, which, at first a mere beading, becomes broader and more vertical by degrees. It may, however, be assumed that, as none are found north of York, it disappeared from Britain, as from Gaul and Germany, before a.d. 100.
The ware formerly known as "false Samian" (Dragendorff's hellroth) ${ }^{[3592]}$ appears in several varieties. The light red or orange colour is produced by a kind of slip of pounded pottery laid over the surface. Vases of this type, glazed within and without with a thin reddish-brown and somewhat lustrous glaze, occur in London, and a good specimen was found many years ago at Oundle in Northants, but has since disappeared. ${ }^{[3593]}$ It was a fine vase, of light-red clay with red-brown glaze, resembling the Gaulish terra sigillata, and had some claim to artistic merit. The subject was Pan holding up a mask, and three draped figures, and it bore the stamp of the Gaulish potter Libertus (of • LIBERTI), who, as we have seen, worked at Lezoux. ${ }^{[3594]}$ This ware is often coarse, and ornamented externally with rude white scrolls painted in opaque colour, ${ }^{[3595]}$ and there is a variety found at Castor, of red glazed ware with a metalloid lustre, the clay itself varying from white to yellowish-brown or orange. ${ }^{[3596]}$ Both shapes and ornaments resemble those of the Castor black ware (see below), and it seems likely that this is actually a local fabric, the difference in colouring being due to the degree of heat employed in the firing.
The number of potters' names found on these wares in Britain is very large, those in the seventh volume of the Latin Corpus amounting to about 1,500. ${ }^{[3597]}$ This list, published in 1873, of course superseded all those previously drawn up by the Hon. R. C. Neville, by Roach-Smith, and by Thomas Wright. ${ }^{[3598]}$ Roach-Smith, however, performed a useful service in tabulating the list of names found in London along with those from Douai and other sites in France, ${ }^{[3599]}$ which went far to prove the Gaulish origin of the British terra sigillata. It is not, therefore, necessary to discuss the potters' names found in Britain in further detail. ${ }^{[3600]}$ Besides the potters' stamps, incised inscriptions sometimes occur on the pottery, giving the owner's name or other items of information (see above, p. 512).

To give a detailed account of all the sites in Britain on which Roman pottery has been found would be a task entailing more labour and occupying more space than the results would justify. Not only do the sites cover almost the whole of the country from the Roman Wall to the Isle of Wight, and from Exeter to Norfolk, but the disinterring of the material from miscellaneous and often unscientific records, or from scattered and uncatalogued collections, would be a truly gigantic achievement. It should, however, be achieved; but this will only be by co-operation, each county performing its share of the work, as has been done in a few cases. The Society of Antiquaries has issued archaeological surveys of certain counties, ${ }^{[3601]}$ which without entering into details tabulate the sites of Roman remains; and it is to be hoped that forthcoming volumes of the Victoria County History will do for other counties what those already published have done for Hampshire, Norfolk, Northants, etc. The most representative collections are those of the British Museum and the Guildhall in London, and of the provincial museums at Colchester, Reading, York, and elsewhere.

We now turn to the consideration of the local products of Romano-British potters. Exclusive of the plain unornamented wares which were made in many places, as the numerous remains of kilns show (cf. p. 454), there are only three distinct fabrics to be mentioned. In all of these the ware is black, with or without a glaze, but the style of ornamentation varies.
By far the most important centre, not only for the quantity of pottery it has yielded and the extent of its furnaces, but also for the artistic merit of its products, is that of Castor, in Northamptonshire. Of the numerous traces of furnaces and workshops discovered here, in the neighbouring villages of Wansford, Sibson, Chesterton, and in the Bedford Purlieus, we have already spoken in a previous chapter (p. 444 ff .); it now only remains to discuss the technical and artistic aspects of the pottery.
Artis has recorded that the pieces of pottery found in or near the kilns show great variety of form and style, including the red imitations of terra sigillata, pieces ornamented with "machine-turned" patterns, ${ }^{[3602]}$ and dark-coloured ware with reliefs or ornament in white paint. But the characteristic and commonest Castor ware has a white paste coloured by means of a slip with a dark slatecoloured surface; the usual form is that of a small jar on a stem with plain cylindrical mouth. Some are merely marked with indentations made by the potter's thumb, ${ }^{[3603]}$ or with rude patterns laid on the intervening ridges; but others have designs laid on en barbotine in a slip of the same colour as the vase, and others of rarer occurrence are decorated in white paint with conventional foliated patterns, ${ }^{[3604]}$ somewhat resembling the Rhenish wares described on p. 537. Haverfield reproduces a fragment of a vase on which are painted in white and yellow a man's head in peaked cap, and an arm holding an axe. ${ }^{[3605]}$ The barbotine variety is the most typical, and is by no means confined to this site. It is often found in Central and Eastern England, and even in the Netherlands. One of the finest specimens was found at Colchester in 1853, ${ }^{[3606]}$ containing calcined bones, and ornamented with figures over which inscriptions are incised. The subjects, arranged in friezes, include two stags, a hare, and a dog, interspersed with foliations; two men training a dancing-bear, one of whom holds a whip and is protected by armour; and a combat of two gladiators (murmillo and Thrax) of a type familiar to us from Roman lamps (see p. 416). Over the heads of the men with the bear is inscribed, SECVNDVS MARIO; over the gladiators, MEMN $(o) \mathrm{N}$ SAC • ViIII and valentinv - Legionis xxx, respectively. The meaning of the inscriptions is not quite clear, but the last one certainly seems to allude to games taking place at the post of the thirtieth legion-i.e. the Lower Rhine. For this and other reasons Mr. Haverfield is of opinion that the vase may have been made in that district and not at Castor, and it is not, of course, impossible that such ware was not confined to Britain. ${ }^{[3607]}$ This would, at any rate, explain its presence in the Netherlands. Mr. Arthur Evans has noted the presence of an unfinished piece of Castor ware in a kiln at Littlemore, near Oxford. ${ }^{[3608]}$


Types of Romano-British Pottery: Castor Ware, etc.
The Vase with Incised Patterns is from Gaul (British Museum).

Hunting-scenes are also very popular, especially a huntsman spearing a boar, or a hare or deer chased by stags, as on a fine vase found at Water Newton, Hunts, in 1827. ${ }^{[3609]}$ A specimen in the British Museum with a race of four-horse chariots is illustrated on Plate LXIX. Roach-Smith gives a remarkable specimen with a mythological subject, that of Herakles and Hesione ${ }^{[3610]}$; the subject is curiously treated, Hesione being chained down with heavy weights. Another interesting but fragmentary vase from Chesterford in Essex has figures of Jupiter, Mars, Mercury, and Venus, and it may be assumed that the complete subject was that of the seven deities represented by the days of the week. ${ }^{[3611]}$ Otherwise the potter is content with animals, such as dolphins or fishes, or mere foliations, ivy-wreaths, engrailed lines, and other ornamental patterns. ${ }^{[3612]}$
In regard to the technique of these wares, Artis notes that the indented patterns were made while the vase was "as pliable as it could be taken from the lathe"; for the barbotine the thumb or a rounded instrument was employed. Figures of animals were executed with a kind of skewer on which the slip was placed, a thicker variety being used for certain parts to heighten the relief, and a more delicate instrument for features and other details. No subsequent retouching was possible. The vases were glazed subsequently to the application of the barbotine; on the other hand, the decoration in white paint was made after glazing. The glaze was, as we have seen in Chapter XXI., p. 448, produced by a deposit of carbon, by the process known as "smothering"; it varies in quality, being either dark without any metallic lustre, or with a metalloid polish resembling that produced with black-lead.

The date of the Castor ware is difficult to ascertain, but it must begin fairly early in the Roman period, on account of its affinities with late Celtic pottery. Déchelette (ii. p. 310) would date the ware towards the end of the third century. As has already been pointed out (p.536), it is only the elements of the decoration that are classical; they are treated in a rude, debased manner, with the free unconventional handling characteristic of barbaric art. "They are not an imitation, but a recasting" according to the traditions of late Celtic or Gaulish art, ${ }^{[3613]}$ such as is displayed, for instance, in the ancient British and Gallic coinage. The fantastic animals, the treatment of the scrolls, and the dividing ornaments of beading, etc., between the subjects are essentially unclassical. Potters' stamps on this ware are exceedingly rare, an almost isolated instance being CAMARO • F on a vase found at Lincoln. ${ }^{[3614]}$
Two other local varieties of black ware peculiar to Britain are those known respectively as Upchurch and New Forest ware. Although no remains of kilns have been found in the former district, the pottery is obviously local, and its manufacture appears to have extended along the banks of the Medway from Rainham to Iwade, over what are now marshes, but was then firm ground. The remains consist of a thin finely-moulded bluish-black fabric, with graceful and varied forms, ornamented with groups of small knobs in bands, squares, circles, wavy, intersecting, or zigzag lines, or a characteristic pattern of concentric semi-circles resting on bands of parallel vertical lines (Plate LXIX. fig. 6). This ware has also been found on the Continent, and may either have been exported or else made in other places besides Upchurch; it is probably of quite late date. [3615]

The clay is soft and easily scratched, and is covered with a polish or lustre produced by friction; the composition is fine, and the walls thin and well turned. It varies in tone from greyish, like that of London clay, to a dull black. The vases are mostly small (cups, bottles, jugs, small jars, and occasional mortaria), and some have ribbed sides; the ornamentation is always either in the form of impressed lines or raised patterns made by applying pieces of clay before the vase was baked. No potters' stamps have come to light, nor is this ware found with coins or other Roman remains. Rough earthenware was also made in the Medway district, of a red, yellow, or stone colour.

The New Forest ware is found in the north-west part of the Forest, between Fordingbridge and Bramshaw. ${ }^{[3616]}$ It is sometimes spoken of as "Crockhill ware," from the local name of the site of the furnaces, of which traces were found in 1852. The pottery consists of two varieties, one of thin, hard, slate-coloured ware, with patterns of leaves or grass painted in white (Plate LXIX. fig. 5); these are small jars, averaging six inches in height, sometimes moulded by the potter's thumb into an undulating circumference. There are points of resemblance with the Castor ware. The other variety consists of a thicker ware, with a dull white-yellowish ground and coarse foliated patterns painted in red or brown, usually platters or dishes. It is a rude and inartistic fabric, of obviously native origin and resembling Celtic rather than any Roman or Italian pottery. It is found on other sites in Hampshire, such as Bitterne (Clausentum), and even as far north as Oxford. ${ }^{[3617]}$ The date is probably the third century of our era. With the kilns there were found heaps of potsherds which had been spoiled in the baking and rejected; they were vitrified so as to resemble stoneware, and when again submitted to the action of fire, cracked and split. The glaze with which the local blue clay had been covered was of a dark-red colour and alkaline nature, but had probably been affected by imperfect firing.

## 5. Plain Roman Wares

The plain unornamented and unglazed Roman pottery which answered to the modern earthenware has usually been considered by writers on the subject in a different category from the glazed and ornamented wares. Although from the very simplicity of its character it defies scientific classification, yet it must be remembered that this common ware was not likely to have been exported very far from the place of its origin, and therefore where any differences can be observed in the nature or appearance of the clay, in peculiarities of form or of technique, it is not impossible to establish the existence of a local fabric. But up to the present little has been done except in isolated instances. Certain local wares have been recognised in Britain, as will be noted below, besides the Castor, Upchurch, and New Forest wares, some of which almost come under this heading; and others, again, in Gaul. Similarly in Germany, attempts have been made by Koenen and other writers to classify the plain pottery whether according to form or on other principles (see above, p. 536).
Many years ago a rough but in some respects convenient classification was made by Brongniart ${ }^{[3618]}$ on the basis of the colour of the clay employed, which he distinguished under four heads: (1) pale yellow or white wares; (2) red wares, varying to reddish-brown; (3) grey or ash-coloured wares; (4) black wares. In the first division he included the large, often coarse, vases, such as the dolia and amphorae; under the second head Roman ware of the first century, and under the third that of subsequent date; while the fourth class comprised Gallo-Roman and other provincial wares. A somewhat similar system, in some respects even less chronological, was attempted by Buckman, ${ }^{[3619]}$ who distinguished brown ware as a separate fabric. The obvious defect of these systems is that they are neither chronological nor according to fabrics, and that their basis is in many respects a purely accidental one; but at the same time they have proved convenient for discussing plain ware which does not admit of much consideration apart from its forms and the general appearance of its composition. And at all events they enable us to discuss examples of certain shapes under one head, inasmuch as the amphorae and dolia are nearly all of the first class, the mortaria or pelves of the third, cups, dishes, and flasks of the second and fourth, and so on.
The yellow ware ${ }^{[3620]}$ is distinguished by its coarse clay, of a greyish-white or yellow colour, varying to dirty white, grey, or red. It is to this division that all the larger vases belong, such as those used for storing wine and other commodities or for funerary purposes, and the innumerable fragments of dolia and amphorae which compose the Monte Testaccio at Rome. ${ }^{[3621]}$ Some of these vases were made on the wheel, but others were modelled by hand and turned from within. Those used in burial were usually of a globular form, or even dolia with the necks and handles broken off, and contained cinerary urns and glass vessels. We also find lagenae, trullae (saucepans), and mortaria made in this ware. Another remarkable variety may be described as a kind of olla; its peculiarity is that it is modelled in the form of a human head, much in the same style as the primitive vases of Troy (Vol. I. p. 258). A vase of this type found at Bootham, near Lincoln, had painted on the foot d(e)o mircvrio, "To the god Mercury," in brown letters. ${ }^{[3622]}$ The clay is light yellow, with a slip of the same colour.
A finer variety of this clay, often of a rosy tint, or white and micaceous, was used for making the smaller vases, which are thin and light, and all turned on the wheel. ${ }^{[3623]}$ They are sometimes ornamented with bands, lines, hatching, or leaves, slightly indicated in dull ochre, laid on and fired with the vase. Some specimens are covered with a flat white slip, of a more uniform character than that employed on the Athenian vases. In others the clay is largely mixed with grains of quartz. In Britain little jars of a very white clay have sometimes been found, as well as small bottles and dishes, painted inside with patterns in a dull red or brown. They seem to have formed a kind of finer ware for ornamental purposes, as well as for the table.
The second class, that of the red wares, forms by far the largest division of Roman plain pottery, and comprises most of the kinds used for domestic purposes; it is found in all forms and sizes, all over Europe, often covered with a coating or slip, white, black, or red. This class may be considered to include all varieties of red and reddish-brown ware, but as a rule the clay varies in colour from pale rose to deep coral, and in quality from a coarse gritty composition to a fine compact and homogeneous paste. It is usually without a glaze, and sometimes the clay is largely micaceous. To enumerate all the shapes which illustrate this ware is unnecessary, but the Romano-British and Morel Collections in the British Museum-and in fact any representative collection of Roman pottery-exhibit all the principal varieties, from the cinerary urn to the so-called "tear-bottle" or unguent vase. The principal shapes are also illustrated in the treatises of Hölder and Koenen.

Among sepulchral vases of this ware were the ollae in which the ashes of slaves were placed in the columbaria at Rome, tall jars with moulded rims and flat saucer-shaped covers. ${ }^{[3624]}$ In Roman tombs in Gaul and Britain these ollae are usually placed inside large dolia or amphorae, to protect them from the weight of the superincumbent earth. ${ }^{[3625]}$ In Britain they have been found at Lincoln, on the sites of Roman settlements along the Dover Road, at Colchester, and in other places, and as many as twenty thousand are recorded as having been found at Bordeaux. ${ }^{[3626]}$ After the introduction of Christianity this practice seems to have been abandoned, but vases of smaller size continued to be placed round the bones of the dead.
The grey wares were usually made of fine clay, of which there were two varieties: a sandy loam like that of which bricks are made on the borders of the chalk formations in England, and a heavy stonecoloured paste, sonorous when struck, which has been compared to the clay of modern Staffordshire ware. The colour of the first-named is light and its texture brittle, and it was chiefly used for mortaria, or for cooking-vessels which were exposed to the heat of the fire. The mortaria resemble modern milk-pans, being flat, with overlapping edges and a grooved spout opening in front. They appear to have been used both for cooking, many bearing traces of the action of fire, and for grinding food or other commodities, the latter purpose probably explaining the presence, in the interior of many examples, of small pebbles, or a hard coating of pounded tile, to counteract the effects of trituration. They are usually of a hard coarse texture, but compact and heavy, and their colour varies from pale red to bright yellow or creamy white.
They are frequently stamped with the name of the potter, placed in a square or rectangular panel on the rim and often arranged in two lines. The names are either single, denoting the work of slaves, as Albinus, Brixsa, Catulus, Sollus, and Marinus, or double and occasionally even triple, for the work of freedmen, as Q. Valerius, Sex. Valerius, Q. Averus Veranius, and so on. ${ }^{[3627]}$ The example given in Fig. 230 is from Ribchester in Lancashire, and bears the stamp boried (us) F (ecit). A mortarium recently dug up in Bow Lane, London, now in the Guildhall Museum, has the name of Averus Veranius with o - GARR • fac in smaller


FIG. 230. ROMAN MORTARIUM FROM RIBCHESTER (BRITISH MUSEUM). type between the words, apparently referring to the place of manufacture. ${ }^{[3628]}$ One of the commonest names is that of Ripanus Tiberinus, who gives the name of the place where he worked: RIPANVS $\cdot \operatorname{TIBER} \cdot \mathrm{F} \cdot \mid$ LVGVDV FACT, Ripanus Tiber(inus) f(ecit); Lugudu(ni) fact(um). ${ }^{[3629]}$ The potters' names are usually accompanied by the letters of or F . The mortaria vary from seven to twenty-three inches in diameter, and are found in England, France, Germany, and Switzerland. Of the second or heavier variety a curious vase in the form of a human head was found at Castor ${ }^{[3630]}$; much of the New Forest ware also comes under the same heading, ${ }^{[3631]}$ including the small cups with pinched-in sides, some being covered with a slip of micaceous consistency.
Of black ware many varieties have been found in Gaul and Britain, besides the special local wares which have already been described. Some were employed as funerary urns, but the majority are of small size, and in quality they vary from the extremest coarseness to a fine polished clay, producing an effect almost equal to the Greek or Etruscan black wares. The finest specimens of plain black ware are to be seen in the vases with a highly polished surface, presenting a metallic appearance and an olive hue which almost approximates to that of bronze. Examples of this ware are found in Gaul at Lezoux, in Britain at Castor, and elsewhere. ${ }^{[3632]}$
In the first century after Christ a superior kind of black ware seems to have been made in Northern Gaul and Germany, described by Dragendorff as "Belgic black ware." ${ }^{[3633]}$ The clay is bluish-grey, with black polished surface produced like that of the bucchero ware by smoke, not like the black glaze of later Roman ware. A similar variety of grey ware exists, but without glaze or polish. The forms of the vases vary very much from the Roman, including a typical high, slim urn and other more squat forms, closely imitating metal; they bear some relation to those of the La Tène period, and are Celtic or Gaulish rather than German. ${ }^{[3634]}$ Such ornamentation as they bear is exclusively linear, and never in relief. There is, however, a Roman form of plate which often occurs, and, generally speaking, the fabric may be described as a continuation of pre-Roman pottery influenced by Italy. It is well represented at Xanten and Andernach, but is not found on the Limes, and is rare in Britain; it does not seem to have been made after the beginning of the Flavian epoch, when it was largely superseded by the ordinary Roman black glazed wares.
A special kind of black ware seems to have been made in the valley of the Rhone, consisting of pots of a coarse, gritty paste with micaceous particles, breaking with a coarse fracture of a dark red colour. They have been mostly found at Vienne, where they seem to have been made. The bottom of the vase is usually impressed with a circular stamp with the potter's name in late letters, as $\mathrm{L} \cdot$ cassi - O, F (ir)MINVS • F, SEVVO • F, SIMILIS • F (from Aix). ${ }^{[3635]}$ The well-known name of Fortis has also been found on black ware from Aix.

In Britain black ware is, as elsewhere, exceedingly common, and a typical group of the smaller varieties is afforded by a series of five found in a sarcophagus at Binsted in Hampshire, now in the British Museum, ${ }^{[3636]}$ consisting of two calices, a jar (olla), an acetabulum, and a kind of candlestick. The Upchurch ware largely belongs to this category, and much of the same kind has been found at Weymouth.
Brown ware of a very coarse style is often found with other Roman remains, consisting of amphorae and other vessels for domestic use. Examples of amphorae and jugs with female heads modelled on
the necks have been found at Richborough and elsewhere. ${ }^{[3637]}$
At Wroxeter the excavations yielded two new classes of pottery, one consisting of narrow-necked jugs and mortaria, ${ }^{[3638]}$ very beautifully made from a white local clay, which has been identified with that found at Broseley in the neighbourhood, nowadays supplying material for the manufacture of tobacco-pipes. The surface is decorated with red and yellow stripes. The other kind is a variety of red ware which has been styled "Romano-Salopian," made from clay obtained in the Severn valley, and differing from the common Roman ware. ${ }^{[3639]}$ It is, however, exceedingly doubtful whether these types should be classed under the heading Roman.
In conclusion, it may be noted that although all provincial museums contain more or less complete collections of the ordinary plain fabrics, they are for the most part of strictly local origin, and not in themselves sufficient for general study. But since the acquisition of the Morel Collection by the British Museum the student has ample facilities for investigating there not only the fabrics of Britain, but also those of Gaul, of which an exhaustive series is now incorporated in our national collection.

With this review of the ceramic industries of the Roman Empire, we conclude our survey of the pottery of the classical world. We have followed its rise from the rough, almost shapeless products of the Neolithic and earliest Bronze Age, when the potter's wheel was as yet unknown (on classical soil), and decoration was not attempted, or was confined to the rudest kinds of incised patterns. We have traced the development of painted decoration from monochrome to polychrome, from simple patterns to elaborate pictorial compositions, and so to its gradual decay and disappearance under the luxurious and artificial tendencies of the Hellenistic Age, when men were ever seeking for new artistic departures, and a new system of technique arose which finally substituted various forms of decoration in relief for painting. And lastly, we have seen how this new system established itself firmly in the domain of Roman art, until with the gradual decay of artistic taste and under the encroachments of barbarism, it sank into neglect and oblivion. We observe, too, with a melancholy interest, that while other arts, such as architecture, painting, and metal-work, have left some sort of heritage to the later European civilisations, and like the runners in the Greek torch-race
vitai lampada tradunt,
this is not so in the case of pottery. This art had, it would seem, completely worn itself out, and had, in fact, returned to the level of its earliest beginnings. The decorative element disappears, and pottery becomes, as in its earliest days, a mere utilitarian industry, the secrets of its former technical achievements irrevocably lost, its ornamentation reduced to the simplest and roughest kinds of decoration, and its status among the products of human industry once more limited to the mere supplying of one of the humblest of men's needs.
But this was inevitable, and we must perforce be content; for have we not seen, in the course of its rise and fall, a reflection of the whole history of Greek art, from the humble beginnings in which Pausanias descried the touch of something divine which presaged its future greatness? It is unnecessary to recapitulate the manner in which the successive stages of Greek art are mirrored in the pottery, from the first efforts of the Athenian potter down to the eclecticism of the Arretine ware. Let it suffice to say that the object of this work has been twofold: firstly, to show the manysided interests of the historical study of ancient pottery; secondly, to point out its value to the student of ancient art and mythology: and that it is the modest hope of the writer that this object has been in some measure fulfilled.

3421See a correspondence in the Gentleman's Magazine, 1844-45, reprinted in the Gentleman's Magazine Library, Romano-British Remains, ii. p. 547 ff.

3422Bonner Jahrbücher, xcvi. p. 82.
3423Ergebnisse von Olympia, iv. p. 206: cf. ibid. v. p. 783.
3424Cyprus Mus. Cat. p. 93, and index, s.v. Samian.
3425M. Déchelette's epoch-making work on Roman pottery in Gaul only appeared after this chapter was in type. To make proper use of it would have necessitated practically re-writing the chapter; but I have remodelled it where absolutely essential, and given frequent references to his work in foot-notes, which it is hoped may suffice in some measure. Moreover for some of the fabrics I have had the advantage of his articles previously published in the Revue Archéol. xxxviii. (1901) and the Revue des Etudes Anciens, v. (1903), which he has since incorporated in his book.

3426Terra Sigillata, in Bonner Jahrbücher, xcvi. (1895), p. 18 ff.
3427See Bonner Jahrb. lxxxvi. p. 152 ff.; Koenen, Gefässkunde, p. 88.
3428C.I.L. x. 8055, 4-9; 8056, 5, 46-52, 280 ff.; ibid. v. 8115, 97.
3429See Déchelette, i. p. 16; Bonner Jahrb. ci. p. 22.
3430Cf. Dragendorff's Nos. 15-17 (plates 1-2) with Nos. 1-3 (plate 1).

3431For examples from Andernach, see Bonner Jahrb. lxxxvi. pl. 6, 16, pl. 7, 18.
3432See Déchelette, i. p. 66, and below, p. 520.
3433Bonner Jahrb. xcvi. p. 86.
3434It was deserted about 5 b.c. See Déchelette, i. p. 93.
3435Bonner Jahrb. xcvi. p. 87 ff.
3436Festschr. für Joh. Overbeck, p. 168; cf. Bonner Jahrb. lxxxvi. p. 155.
3437Bonner Jahrb. lxxxvi. pl. 5, 21, pl. 6, 4, 9-10: cf. Dragendorff's Nos. 19-20.
3438 Op. cit. xcvi. p. 87.
3439For other typical stamps see Dragendorff in Bonner Jahrb. xcvi. p. 95; ibid. lxxxvi. p. 164 ff., lxxxix. p. 51 ff .

3440C.I.L. vii. 1336, 790 is an isolated example of the black ware found in London.
3441 Bonner Jahrb. xcvi. p. 103 ff.; Déchelette, i. p. 64 ff.
3442IIl. Rom. Lond. p. 98.
3443 Collect. Antiq. vi. p. 70; Ill. Rom. Lond. loc. cit.
3444See Bonner Jahrb. xcvi. p. 105.
3445See ibid. p. 110, pls. 2-3, figs. 31-55, for later provincial forms.
3446 See his vol. i. p. 29, with plates 2-5.
3447 Ibid. ii. pls. 1, 2.
3448See Bonner Jahrb. xcvi. p. 126 ff.
3449Cf. the vases given in Plate LXVII. figs. 1, 2, and Déchelette, i. pp. 70, 180, pl. 6.
3450See below, p. 520
3451See generally Déchelette, i. p. 219.
3452 Ibid. ii. p. 91 ff.
3453An exhaustive list of types, figures, and ornaments of all kinds, as found in the Graufesenque and Lezoux fabrics, is given by Déchelette in his second volume, p. 5 ff .

3454See Roach-Smith, Ill. Rom. Lond. p. 95.
3455 See also the useful list given by Von Hefner in Oberbayr. Archiv, xxii. (1863), p. 28 ff., giving the chief types on German wares from Westerndorf and elsewhere.

3456See Cat. of London Antiqs. Nos. 158 ff. pl. 8; Ill. Rom. Lond. p. 89 ff.; Collect. Antiq. passim; also Plate LXVIII.

3457Collect. Antiq. ii. p. 13.
3458Cf. C.I.L. xiii. 10010, 1682.
3459Hence Roach-Smith was inclined to date the vase as late as the fifth century; but recent researches show that this is impossible. Even in the first century vases of this debased style are found. There were two potters of the name of Sabinus in the first century in Gaul (Déchelette, i. p. 297).

3460Bonner Jahrb. xcvi. p. 139: cf. Roach-Smith, Collect. Antiq. ii. p. 15.
3461See C.I.L. xiii. part 3, p. 121.
3462 Ibid. p. 120. An example from Britain is L. Cosconius Virilis (C.I.L. vii. 1336, 346: cf. RoachSmith, Collect. Antiq. i. p. 155).

3463C.I.L. xiii. 10006, 95, on a mortarium.
3464C.I.L. xiii. 10010, 1670.
3465C.I.L. vii. 1314: cf. Rev. Arch. xxiv. (1894), p. 57.
3466Déchelette, i. p. 86, pl. 13; Rev. Arch. iii. (1904), p. 75 ff. The names of vessels include the interesting word pannae, whence our "pan."

3467See Oberbayr. Archiv für vaterl. Gesch. xxii. (1863), p. 38, pl. 4, fig. 1; C.I.L. iii. 6010, 68; Déchelette, i. p. 210.

3468Bonner Jahrb. xcvi. p. 136.
3469Oberbayr. Archiv, xxii. (1863), p. 43.
3470C.I.L. vii. 1337, 22.
3471Orelli, 4189; Blanchet in Bullet. Archéol. 1898, p. 29, and id., Mélanges Gallo-romaines, ii. (1902), p. 109.

3472See Marquardt, Privatleben der Römer, p. 648, note 7.
3473Henzen, 7258; Blanchet, loc. cit.: cf. C.I.L. iii. 5833.
3474Steiner, Cod. Inscr. Danub. et Rheni, ii. p. 305; Orelli, 2029.
3475Orelli, 4302; Henzen, 7259; Blanchet, loc. cit.
3476Steiner, op. cit. i. p. 58, No. 130. Other names of consuls from 199 to 228 are given in Bonner Jahrb. xv. p. 61 (these are in graffito).

3477Steiner, ii. p. 349 ff., Nos. 1649-51, 1653, 1661; Bonner Jahrb. xv. p. 53 ff.
3478Gaz. Arch. 1877, p. 180; Roach-Smith, Collect. Antiq. iii. pl. 31, p. 193.
3479Journ. Brit. Arch. Assoc, iv. p. 364.
3480C.I.L. vii. 1335, 4.
3481 For the technique of this process see above, p. 442, and Brongniart, Traité, i. p. 425.
3482There is an example of this ware from Cologne in the British Museum (Greek and Roman Department), and others at Turin and Trier. Déchelette (ii. p. 309) states that it is found in the first century B.c.

3483See Bonner Jahrb. xcvi. p. 111 ff.; Hölder, Formen der röm. Thongef. p. 8.
3484Déchelette, ii. p. 309.
3485Koenen, Gefässkunde, p. 101.
3486Bonner Jahrb. xcvi. p. 120.
3487Op. cit. p. 121: cf. Mus. Borb. v. 13.
3488See for examples Déchelette, ii. pl. 5; Bonner Jahrb. lxxxiv. pl. 2, figs. 2-5, p. 109; Roach-Smith, Ill. Rom. Lond. p. 93; Oberbayr. Archiv., 1863, pl. 4, fig. 11; and Plate LXIX. fig. 4.

3489Vol. ii. p. 325.
3490i. p. 41 ff.
3491i. p. 64 ff.
3492i. p. 138 ff.
3493C.I.L. xiii. 10009, 3; Déchelette, i. p. 31 ff.
3494C.I.L. iii. Suppl. 12013, 3; Déchelette, i. p. 34.
3495Déchelette, i. p. 60.
3496See also Jullian in Revue des Études Anciens, i. (1899), p. 152.
3497Painted vases with Geometrical decoration were widely exported, even to Bohemia: see Rev. Arch. xxvi. (1895), pls. 5, 6, p. 196 ff.; Gaz. Arch. 1881-2, pls. 3-4, p. 17.

3498See Déchelette, i. p. 66; it is the form numbered 11 by Dragendorff.
3499Op. cit. i. p. 68: cf. C.I.L. xi. 6700, 821.
3500See Déchelette, i. pls. 6, 7, p. 69.
3501 Op. cit. i. pl. 8, p. 74.
3502See also op. cit. pl. 9, p. 73.
3503See his vol. i. p. 75 for further details.

3504A figure of Artemis is derived from the type given by Hauser, Neuattische Reliefs, pl. 1, fig. 9: for a genre type, cf. the fishermen figured by Déchelette, Rev. des Études Anciens, v. p. 55 (= Vases de la Gaule, ii. p. 91, type No. 556).

3505The list of names given by Déchelette, i. p. 81, will render it possible to trace Rutenian potters on these sites in C.I.L. xiii. part 3, fasc. 1: see also vols. vii. (Britain), x. (Campania), xv. (Rome), etc., and Déchelette, i. p. 105 ff .

3506Examples in British and Guildhall Museums.
3507 Op. cit. i. p. 112.
3508Cf. C.I.L. xv. 5059, 5273, 5355; 4945.
3509C.I.L. x. 8055, 27: cf. Déchelette, i. p. 96 ff.
3510C.I.L. ii. 4970, 559 from Tarraco, and the vase published in Rev. Arch. xxxiii. (1898), p. 100, fig. 11, from Carthage.

3511Vol. i. p. 113.
3512 Op. cit. i. p. 79.
3513Bonner Jahrb. xcvi. p. 97 ("Marmorirung"): see also Déchelette, i. p. 67.
3514C.I.L. x. 8056, 283.
3515See Bonner Jahrb. xcvi. p. 101; Gaz. Arch. 1877, pl. 28, p. 172 ff.; Déchelette, i. p. 120 ff.
3516Mus. Borb. vii. pl. 29; C.I.L. x. 8056, 4; Déchelette, i. p. 121.
3517Déchelette (i. p. 125) notes in these names a direct proof of exportation; they were carried about by the negotiatores or agents (p.511) to the different regions named.

3518Étude de la Céramique Arverno-romaine (1887). M. Déchelette has embodied most of Plicque’s researches in his own account of the potteries (i. p. 138 ff .).

3519See Déchelette, i. pp. 155, 194 ff . for lists of names, with types used by each and places where found.

3520See Déchelette, i. pls. 4, 5, Nos. 63-71, and p. 149.
3521 Op. cit. p. 178 ff.
3522See Plicque's summary in his Étude de la Céramique Arverno-rom. p. 10 ff .
3523See generally Déchelette, ii. p. 167 ff.; also Rev. Arch. ii. (1903), pl. 17, p. 387.
3524Cf. the Greek stamnos (Vol. I. p. 164).
3525Ill. Rom. Lond. pp. 86, 97, pl. 29; Cat. of London Antiqs. pl. 7, fig. 2; Richborough, p. 74.
3526Déchelette, ii. p. 316.
3527Déchelette, ii. p. 321.
$35280 n$ the technical aspect of these, see above, p. 441; for all other information reference should be made to Déchelette, ii. p. 235 ff .

3529Froehner, Coll. Gréau, No. 1353.
3530Déchelette states that seventy-nine have been found at Vienne, thirty-three at Lyons, and twenty-nine at Orange.

3531 Musées de France, pls. 14-16, p. 52 ff.
3532Gaz. Arch. 1877, pl. 12, p. 66. The second of these has passed into the British Museum (in the Morel Collection). See Fig. 227, and Déchelette, ii. p. 290.

3533Stephani, Vasens. 1353; id., Compte-Rendu, 1873, p. 67.
3534Recueil, vi. 107: see Déchelette, ii. pp. 236, 250, 253, 294.
3535Gaz. Arch. 1889, p. 50, pl. 15.
3536See also Gaz. Arch. 1880, pl. 30, p. 178 for examples from Nismes; Froehner, Coll. Gréau, 1351, 1352; Rev. Arch. xix. (1892), pl. 11, p. 313; Daremberg and Saglio, iii. art. Forma, figs. 3184, 3185; C.I.L. xii. 5687. All previous literature is now superseded by Déchelette's work (vol. ii. p. 235 ff .).

3537 Op. cit. i. p. 27.
3538Ibid. p. 204.
3539Ibid. The form employed is his No. 69
3540See Hettner in Festschrift für J. Overbeck, p. 165 ff.; Koenen in Bonner Jahrb. lxxxvi. p. 152 ff.
3541See Fiedler, Castra Vetera, p. 40; Bonner Jahrb. v. p. 422, pls. 13-4; and for stamps, Steiner, Cod. Inscr. Danub. et Rheni, ii. p. 225, No. 1317.

3542Oberbayr. Archiv für vaterländische Geschichte, xxii. (1863), p. 1 ff.
3543A useful summary is given by Von Hefner, p. 28.
3544Cf. ibid. pl. 4, figs. 1-7.
3545Ibid. p. 42.
3546See Roach-Smith, Ill. Rom. Lond. p. 99; Déchelette, i. p. 210.
3547In the Greek and Roman Department, found at Mainz.
3548Déchelette, ii. p. 319.
3549Archaeologia, lvii. p. 104.
3550.Victoria County Hist. of Northants, p. 211.

3551Gefässkunde in den Rheinlanden, p. 65 ff. For various finds of pottery in Germany see also Bonner Jahrb. lxxiv. p. 147; lxxxiv. p. 108 ff.; lxxxix. p. 1 ff.

3552See Rev. Arch. xxxix. (1901), p. 51 ff.
3553See also generally Von Hefner, op. cit.; Bonner Jahrb. xcvi. p. 87 ff., and index to vols. 1-60; Wolff in Westdeutsche Zeitschr. für Gesch. u. Kunst, xviii. (1899), p. 213.
$3554 F o r m e n ~ d e r ~ r o ̈ m . ~ T h o n g e f a ̈ s s e, ~ p . ~ 11 . ~$
3555Bonner Jahrb. xiii. p. 106 ff., xxxv. p. 46, lxxxvii. p. 61 ff., xcvi. p. 101; Déchelette, ii. p. 311, p. 312, note 3.

3556Roach-Smith, Collect. Antiq. i. pl. 4, p. 3.
3557Bonner Jahrb. xiii. p. 112; lxxxvii. p. 62; Steiner, Cod. Inscr. Danub. et Rhen. ii. p. 195, No. 1252 (from Neuss): cf. Virg. Ecl. iii. 47.

3558Steiner, op. cit. p. 100; Gerhard, Berlins ant. Bildw. No. 1687; Roach-Smith, Collect. Antiq. i. pl. 4, p. 3; Bonner Jahrb. lxxxvii. p. 63.

3559Bonner Jahrb. xiii. p. 113.
3560Ibid. xiii. pp. 109, 113, lxxxvii. p. 64; Steiner, op. cit. p. 155; and in B.M. (BiBE).
3561 Bonner Jahrb. xiii. pp. 107, 108, xxxv. p. 47, lxxxvii. p. 65; B.M. (Fig. 229).
3562Op. cit. xxxv. p. 49.
3563Op. cit. xxxv. p. 48, lxxxvii. p. 66.
3564Op. cit. xiii. p. 113.
3565Op. cit. xiii. p. 111, lxxxvii. p. 66; B.M.
3566 Op. cit. xxxv. p. 49.
3567 Op. cit. xiii. p. 111, lxxxvii. p. 67.
3568Op. cit. lxxxvii. p. 67; Collect. Antiq. i. p. 3.
3569Levezow, Berliner Verzeichniss, p. 366, No. 1470; Bonner Jahrb. lxxxvii. p. 68
3570Bonner Jahrb. xiii. p. 107, lxxxvii. p. 69.
3571 Ibid.
3572Op. cit. xxxv. p. 49, lxxxvii. p. 70.
3573Op. cit. xiii. p. 106, xxxv. p. 48, lxxxvii. p. 78: cf. B.M. (reple Copo dA).

3574 Op. cit. xxxv. p. 48, lxxxvii. p. 77.
3575 Op. cit. xiii. p. 106, xxxv. p. 47, lxxxvii. p. 71; Levezow, op. cit. No. 1469.
3576Op. cit. xiii. p. 110; Levezow, No. 1471.
3577 Op. cit. xiii. p. 107, xxxv. p. 49, lxxxvii. p. 72.
3578 Op. cit. lxxxvii. p. 72; B.M.
3579Op. cit. xiii. p. 110, xxxv. p. 48, lxxxvii. p. 73; B.M. (vivas).
3580Zeitschr. des Vereins zur Erforsch. d. rhein. Gesch. u. Altert. iv. (1900), p. 266.
3581For stamps found here and at Voorburg, see Steiner, Cod. Inscr. Danub. et Rhen. ii. p. 276, No. 1449, p. 293, No. 1484.

3582Bonner Jahrb. xlvi. p. 115; Déchelette, i. p. 103. They are now in the Leiden Museum.
3583See C.I.L. ii. 4970, and p. 512; Brongniart, Traité, i. p. 453; Déchelette, i. p. 16; and above, pp. 479, 499.

3584See above, p. 536.
3585See Haverfield in Cumberland and Westm. Arch. Soc. Trans. xv. p. 191.
3586Ill. Rom. Lond. pls. 24-8, p. 89 ff.; Richborough, pl. 3.
3587Wellbeloved, Eburacum, pl. 16; Scarth, Aquae Solis, pl. 43; Lee, Isca Silurum, pls. II, 12.
3588.Vict. County Hist. of Warwickshire, i. p. 230.

3589Arch. Aeliana, x. p. 268; Proc. Soc. Ant. Scot. xxx. (1896), p. 179 ff.; Haverfield, loc. cit. 3590Haverfield's fig. 8 (loc. cit.).

3591Haverfield, op. cit., pl. 7, fig. 7, p. 193; and see p. 528 above.
3592Cf. Roach-Smith, Collect. Antiq. ii. p. 35, and see above, p. 502.
3593Roach-Smith, Collect. Antiq. iv. pl. 17, p. 63; Victoria County Hist. of Northants, p. 219.
3594See Déchelette, i. p. 282, ii. p. 71, No. 425.
3595Artis, Durobrivae, pl. 30, figs. 1, 4.
3596Handbook to British Pottery in Mus. of Pract. Geol. 1893, p. 72.
3597vii. 1334-36. Supplementary lists are given in Arch. Journal, xxxv. p. 289.
3598See C.I.L. vii. p. 238 for bibliography.
3599Ill. Rom. Lond. pp. 102, 107.
3600General reference may also be made to the archaeological journals of the London and provincial societies, and to the volume of the Gentleman's Magazine Library on Romano-British Remains; also for Norfolk, Northants, Hampshire, and other counties, to the respective volumes of the Victoria County History.

3601Cumberland and Westmoreland, Hereford, Hertford, Kent, and Lancashire.
3602See Haverfield, in Vict. County Hist. of Northants, p. 208, fig. 29.
3603Cf. Haverfield, figs. 32, 33.
3604Ibid. fig. 33.
3605Ibid. p. 209.
3606Roach-Smith, Collect. Antiq. iv. pl. 21, p. 82; Vict. County Hist. of Northants, p. 211; C.I.L. vii. 1335, 3.

3607But see above, p. 536, and Déchelette, ii. p. 311.
3608Arch. Journ. liv. p. 349.
3609Artis, Durobrivae, pl. 28; Vict. County Hist. of Northants, p. 211, fig. 34: cf. ibid. p. 190 = fig. 18, p. 192 (from Bedford Purlieus).

3611 Ibid. iv. p. 91: cf. the vase mentioned on p. 539.
3612Brit. Arch. Assoc. Journ. i. p. 5 ff.
3613Haverfield, in Vict. County Hist. of Northants, p. 212.
3614Arch. Journ., xiii. p. 173: cf. C.I.L. vii. 1336, 220.
3615See on this ware Roach-Smith, Collect. Antiq. vi. p. 178, pl. 36, and Ill. Rom. Lond. p. 82; Wright, Uriconium, p. 247 ff., and Celt, Roman, and Saxon ${ }^{4}$, p. 260.

3616Haverfield, in Vict. County Hist. of Hants, i. p. 326.
3617Archaeologia, xxxv. p. 91; Arch. Journ. liv. p. 348; x. p. 8; xxx. p. 319; Proc. Soc. Antiq. 1st Ser. ii. p. 285, iv. p. 167.

3618 Traité, i. p. 381.
3619Roman Art in Cirencester, p. 77.
3620See Blümner, Technol. ii. p. 65.
3621C.I.L. xv. p. 560; Ann. dell' Inst. 1878, p. 119 ff.
3622 Proc. Soc. Ant. 2nd Ser. iii. (1867), p. 440 (now in B.M.): cf. Artis, Durobrivae, pl. 49.
3623Brongniart, i. p. 435.
3624See Daremberg and Saglio, s.v. Olla.
3625Cf. Wright, Celt, Roman, and Saxon ${ }^{4}$, p. 359 ff.; Archaeologia, xii. pl. 14, p. 108; Brit. Arch. Assoc. Journ. i. p. 239; and see above, p. 457.

3626Brongniart, i. p. 437.
3627See generally C.I.L. vii. 1334.
3628Journ. Brit. Arch. Assoc. xlvi. (1890), p. 156; other examples at Colchester and Exeter and Guildhall (Cat. p. 104, No. 641, q • ERIV • Germanvs): see also C.I.L. vii. 1334, 63.

3629Roach-Smith, Ill. Rom. Lond. p. 89; C.I.L. vii. 1334, 43.
3630Artis, Durobrivae, pl. 49, fig. 1.
3631See Vict. Hist. of Hants, i. p. 326.
3632Cf. Plicque, Céramique Arverno-romaine, pp. 16, 30.
3633Bonner Jahrb. xcvi. p. 88.
3634Ibid. p. 89; Hettner in Festschr. für Joh. Overbeck, p. 170.
3635C.I.L. xii. 5685, 195, 362, 831, 845; B. M. Cat. of Terracottas, E 145-47 (wrongly included in that volume among tile-stamps).

3636Arch. Journ. ix. p. 12.
3637Roach-Smith, Richborough, p. 74; Wright, Celt, Roman, and Saxon ${ }^{4}$, p. 281; others in B.M.
3638Wright, Uriconium, p. 251. Examples may be seen in the Shrewsbury Museum.
3639Wright, ibid. p. 252, and Celt, Roman, and Saxon ${ }^{4}$, p. 278.

Abaskantos, lamp-maker, i. 108
Abecedaria, ii. 311, and see Alphabet
Abella, vases from, i. 81;
fabric of, i. 484
Acanthus-patterns, ii. 223
Acetabulum, ii. 469
Achaeans in Cyprus, i. 245, and see 275
Acheloös, ii. 83, 101
Achilles on vases, ii. 120 ff.;
fight over body of, i. 323
Acids used for cleaning vases, i. 40, 41
Aco Acastus, potter, ii. 517
Acratophorum, ii. 464
Acrobats, ii. 165, 182
Actors on vases, i. 473, ii. 160 ff., 197
Adjuvate, sodales, inscription on lamp, ii. 411, 422
Admetos and Alkestis, ii. 102, 140, 310, 312
Adonis, ii. 42
Adrastos, ii. 119
Aecetiae pocolom, i. 490
Aegean pottery, i. 262 ff., 275
—— Islands, vase-finds in the, i. 54 ff .
Aegina, personified, ii. 19, 82;
vases from, i. 54, 308, 492
Aegisthos, death of, ii. 138
Aeneas on vases, ii. 129, 135;
on lamps, ii. 414, 421
Aeolis, finds in, i. 62;
pottery of, i. 339, 347, 356
Aeolus, ii. 14
Aeson, vase-painter, i. 444
Aesop on vase, ii. 151;
on lamp, ii. 415;
fables of, on lamps, ii. 416
"Affected" amphorae, i. 387
Africa, types of tombs in, i. 36;
vases from, i. 67;
Ionic pottery of, i. 340 ff .;
relations with Ionia, i. 355;
lamps from, ii. 399, 406, 427;
bust of, on lamp, ii. 412
$\alpha \not \approx \gamma \alpha \lambda \mu \alpha$, i. 98
Agamedes and Trophonios, ii. 140

Agamemnon on vases, ii. 126, 137
Agia Paraskevi (Cyprus), i. 35, 66, 246
Agon, ii. 89, 194
Agra, mysteries of, ii. 27, 104
Agriculture on vases, ii. 171
Agrigentum, see Girgenti
Agrios, myth of, ii. 141
Agrippa, painter on terracotta, i. 119, ii. 366
Aigeus, ii. 108
Aithra, ii. 24
Ajax, son of Oïleus, ii. 134, 135
—— son of Telamon, ii. 124, 128, 129;
death of, ii. 133, 310
Akamas and Demophon, ii. 135
а้ккто̧, i. 186
а̇кроточо́ ооя, і. 173
Akratos, i. 88, ii. 64
$\alpha \dot{\alpha} \kappa \omega \tau \eta \jmath_{\rho} \propto$, i. 97 ff.
Aktaeon on vases, ii. 35, 310;
on lamps, ii. 414;
on Gaulish pottery, ii. 508
Aktor and Astyoche, ii. 143
$\dot{\alpha} \lambda \alpha \beta \alpha \sigma \tau о \theta \eta ́ к \eta$, i. 133
Alabastron, i. 196, 308, 312, 492
Alba Longa, i. 79;
hut-urns from, ii. 288
Alcaeus quoted, i. 133; on vases, ii. 151

Alexander the Great on Arretine vase, ii. 494
Alexandria, vases from, i. 67, 146;
porcelain ware of, i. 129;
wine-amphorae from, i. 154 ff .
Alexandrine subjects on vases, i. 502;
in Gaulish terracottas, ii. 386;
on Roman lamps, ii. 418;
on Arretine vases, ii. 489
Alkestis, see Admetos
Alkmena, i. 480, ii. 19
Alkyoneus, ii. 100
Allegory on vases, i. 21
Allier, valley of, as centre for Gaulish terracottas, ii. 380 ff .; for pottery, ii. 533;
clay of, ii. 434
Allifae, pottery of, ii. 475, 478
$\dot{\alpha} \lambda \omega \Pi \varepsilon \kappa \tilde{\eta}$, ii. 179, 200
Alphabet, introduction into Greece and early varieties, ii. 245 ff.; crheme of earlv varisties ii 348 .

Attic, i. 12, ii. 246, 268;
early Etruscan, ii. 296, 311
Altemura, vases from, i. 85
Alyzia, inscribed tile from, i. 102
Amasis, king of Egypt, i. 345
—— potter, i. 381 ff., 387
—— vase-painter, i. 439
Amathus, pottery from, i. 36, 66, 147, 250, 253
Amazons on vases, ii. 99, 111, 132, 144, 195;
on lamps, ii. 415
America, museums of, i. 26, 30
Amorgos, pottery from, i. 56, 262
Amphiaraos, i. 76, 318, ii. 118
Amphion, ii. 117
Amphitrite, ii. 23, 189
Amphitruo of Rhinthon, see i. 473
Amphorae, forms of Greek, i. 153 ff.;
Apulian, i. 162, 469;
Attic, i. 295, 368, 372, 411;
Chalcidian, i. 322;
Melian, i. 57, 301;
Nicosthenic, i. 385;
Panathenaic, i. 46, 69, 84, 132, 145, 388 ff .;
"Tyrrhenian," i. 160, 324;
"affected," i. 387;
"false-necked," i. 246, 271;
ornamentation of, i. 375, ii. 234;
prices paid for, i. 44 ff .;
ancient examples at Erythrae, i. 205;
used as wine-jars, i. 154 ff.;
Roman, ii. 460 ff.
$\alpha \not \alpha \varphi \omega t ı \varsigma, ~ i . ~ 186$
Ampulla, ii. 465
Amyklae, pottery from, i. 52
Amykos, ii. 115
Amymone, ii. 24
Anakles, potter, i. 384
Anakreon on vases, ii. 152
Analyses of pottery, i. 203, ii. 301, 435
Ananke, ii. 69, 90
$\alpha \dot{\alpha} \nu \alpha \mathfrak{v}{ }^{\prime} \delta \varepsilon \varsigma$, ii. 178
Andernach, Roman pottery from, ii. 500, 502, 509, 522, 533
Andokides, potter, i. 386, 401, ii. 258
Andromache and Astyanax, ii. 131
Andromeda, ii. 113

Animals on early vases, see Chapters VI.-VIII. passim; as subjects on vases, ii. 184 ff .;
on lamps, ii. 418;


Annia Arescusana, potter, ii. 367
Annum novum faustum felicem, inscription on lamps, ii. 398, 420
Ansae lunulatae, ii. 287
Antaios, i. 431, ii. 100
Antefixal ornaments, Greek, i. 97 ff.; Etruscan, ii. 317;
Roman, ii. 343 ff., and see 365,371
Ante-Homerica, subjects from, ii. 4, 119 ff .
Antepagmentum, ii. 315, 365
Anthedon, vases from, i. 53
Antonius Epaphras, M., potter, ii. 367
Anzi, vases found at, i. 83, 481
Apate, ii. 90
Apes on vases, i. 355, ii. 185
Aphidna, early pottery from, i. 49, 278
Aphrodite, in terracottas, i. 123 ff .; dedications to, at Naukratis, i. 345; representations of, on vases, ii. 42 ff., 191; on cup in B. M., i. 434, 457; with Persephone, ii. 28, 42; at Judgment of Paris, ii. 122; on mural reliefs, ii. 368; in Gaulish terracottas, ii. 385; on lamps, ii. 410; and see Venus

Apollo, dedications to, i. 139, 345; representations of, on vases, ii. 29 ff., 189; in Gigantomachia, ii. 13, 15;
with Herakles, ii. 33, 97, 103;
on mural reliefs, ii. 368;
on lamps, ii. 409;
and see Helios
Apollodoros, vase-painter, i. 439
Apollonia, vases from, i. 60
Appius, L., potter, ii. 490
Appliqué reliefs, i. 119, 497;
at Lezoux, ii. 529;
and see $\dot{\varepsilon} \mu \beta \lambda \eta ́ \mu \alpha \tau \alpha$
Apuleius quoted, ii. 403
Apulia, vases from, i. 83 ff.; local pottery of, ii. 323 ff ; painted pottery of, i. 468 ff ., 485, 486; shapes, i. 144, 171, 178, 179, 469; ornamentation, i. 468, ii. 235;
arrangement of subjects on, ii. 209; inscriptions on, ii. 271 ff.; sepulchral subjects on, i. 144,476 , ii. 157; scenes from Under-world on, ii. 67 ff.

Aqueducts, use of brick in, ii. 336
Archemoros, ii. 118
АคХєข๙v́tŋร, ii. 92
Archers, ii. 177, 178, 199

Architecture，terracotta used in，i． 91 ff．； in Etruria，ii． 314 ff．； at Rome and Pompeii，ii． 330 ff．； use of bricks and tiles in，i． 91 ff．，ii． 336 ff ．，343； use of vases in，ii．457；
treatment of，in vase－paintings，ii． 205 ff．；
imitations of，in arrangement of designs，i．378，ii．207；
in patterns，ii． 211
Archons，names of，on vases，i．69， 390
$\dot{\alpha} \rho \delta \alpha ́ ⿱ ㇒ ⿻ 二 乚 力 刂 ı o v, ~ i . ~ 167 ~$
Ares on vases，ii．41，190；
in Gigantomachia，ii．13，15；
on lamps，ii． 409
Arezzo，pottery found at，i．29，72，ii．479，481；
potters＇tools and stamps from，i．207，ii．438，439，493；
and see Arretium
Argolis，pottery from，i．51；
as centre of fabric，i．274，298，307，336；
inscriptions in alphabet of，i．308，335，357，ii． 249
Argonauts on vases，i．442，ii．115，and see ii． 104
Argos，vases from，i． 52
—— guardian of Io，ii． 20
Ariadne on vases，ii．57，110， 298
Aridikes and Telephanes，painters，i．312，320， 395
Arimaspi，ii． 148
Aristonoös，vase of，i．168，297，ii． 249
Aristophanes quoted or referred to，i．132，143，ii． 266
—— vase painter，i． 444
Arkesilaos of Kyrene，i． 341 ff．，ii．149；
cup with subject of，i．44， 341 ff．，ii．149， 250
—— sculptor and modeller，ii． 372
Arles，pottery from，ii． 524
Armed foot－race，ii． 164
Armento，vases from，i． 83
Arming of warriors，ii． 175
Armour，how represented，ii． 198
Arrangement of subjects on vases，ii． 206 ff．
Arretine vases，ii． 479 ff．；
connection of，with Gaulish ware，ii．500， 517 ff．
Arretium as centre of fabric，ii．432，475，477； and see Arezzo

Artemis，on lamps，i．107，ii．409； on vases，ii． 30 ff．，35，190； in Gigantomachia，ii．13，15； as Aidos，ii．90；
Asiatic，i．56，289，301，ii．35；
Diktynna，i．497，ii． 35
Artis on kilns at Castor，ii．435， 447 ff．
Artistic aspects of study of vases，i．13，and see i． 20
Artists＇signatures，ii．244， 257 ff．，272；
list of, ii. 273 ft.;
Athenian, i. 379 ff., 420 ff., ii. 257 ff.

ג̇ $\rho$ v́t $\alpha ı \nu \alpha$, i. 179
Aryballos, i. 127, 197, 300;
Corinthian, i. 312;
later type, i. 412, 492
Ashmolean Museum, see Oxford
Asia personified, ii. 81
Asia Minor, vase-collections in, i. 30;
tombs of, i. 34;
vase-finds in, i. 61, 330, 356;
lamps from, i. 108;
porcelain ware from, i. 129
Asiatic art, influence of, on Arretine ware, ii. 489; and see Ionic

Asine, pottery from, i. 52
Asklepios, ii. 76;
on lamp (?), ii. 416
Askos, i. 119, 129, 199;
local Apulian, ii. 325, 326
Assariik, pottery from, i. 64, 280, 340
Assos, pottery from, i. 62
Assteas, vase-painter, i. 81, 83, 472, 474, 478 ff., ii. 104, 271
Assyrian bricks and cylinders, i. 6, 7;
enamels, i. 8;
textile fabrics, i. 312, 333, 334;
influence on Greek pottery, i. 295, 333;
and see Oriental
Asti, see Hasta
Áatuvó $\mu$ or on tiles, i. 101
Astyanax, ii. 131, 134
Atalante, ii. 141, 142; on Gaulish vase, ii. 532
_— in Lokris, vases found at, i. 53
Ate, ii. 90
Ateius, Cn., potter, ii. 500
Athamas (?), see Salmoneus
Athena, on vases, i. 323, ii. 37 ff.;
types of, ii. 190;
statues of, ii. 40, 134, and see Palladion;
Parthenos on vases, i. 449, 451;
Promachos, i. 389;
with Poseidon on vase, i. 464, 497, ii. 24;
on lamp, ii. 409;
birth of, i. 370, 396, ii. 15, 294;
birth-type used for other scenes, i. 388;
with Herakles, ii. 38, 105;
in Trojan scenes, ii. 39, 133;
at Judgment of Paris, ii. 122
Athenaeus on shapes of vases, i. 148 ff .;
on drinking-cups, i. 180 ff .
AӨŋvaĩos on tile from Marathon, i. 99

Atnenan artists or potters, ı. उ/Y II., $4 \angle 1$ II., ıl. LכЈ II.;
migration of, to other parts, i. 464, 465;
festivals, ii. 156;
horsemen or knights, ii. 166, 177, 179;
sepulchral reliefs, i. 477, ii. 158;
tribal heroes, ii. 140;
vases made for Cyprus, i. 255;
exported to other parts, i. 11, 405, 458, 464;
influenced by Ionian, i. 294, 295, 388;
contrasted with Ionian, i. 332, 356;
chronology of, i. 401 ff., 463, ii. 270;
and see generally Dipylon, Proto-Attic, Black-figured, Red-figured;
white lekythi, i. 48, 54, 86, 132, 142, 196, 454 ff., ii. 157
Athens, history of, in connection with vases, i. 11, 369, 418, 463;
finds of vases at, i. 12, 33, 46 ff .;
of lamps, i. 108;
museum of, i. 26, 30, 48;
Acropolis, finds on, i. 33, 48, 138, 402;
tombs at, i. 33, 47, 142, 147;
modern forgers at, i. 43;
potters' quarter at, i. 89, 231;
public measure at, i. 135;
early artistic position of, i. 235, 292, 369;
art of painting at, i. 396 ff., 409, 441 ff., 454;
pottery of, see Chapters VI., VII., IX.-XI. passim;
its native origin, i. 20, 278;
inscriptions on vases, ii. 255 ff., and see Attic;
termination of vase-painting at, i. 463 ff .
Athletes on vases, i. 417, 476, ii. 162 ff.;
attire of, ii. 197
Atilius, K., potter, i. 502
Atlantes of terracotta at Pompeii, ii. 374
Atlas, ii. 75
Atreus and Thyestes, ii. 141
Attegia tegulicia, ii. 342
Attic alphabet, i. 12, ii. 246, 268;
dialect, ii. 237, 255;
inscriptions, i. 291, 296, 325, 370, 379, ii. 255 ff.;
palaeography of, ii. 268 ff .;
comedy reflected on vases, i. 473, 483, 484;
legends on vases, ii. 138 ff.
Attica, finds of pottery in, i. 49, 278 ff.;
and see Athens
Auge, i. 474, ii. 104
Aulis, scenes at, ii. 124
Aurae, ii. 81, 193
Auster, stamp of, ii. 440
Australis on Roman tile, ii. 359

Austria, vase-collections of, i. 28
Auvergne, potteries in, ii. 504;
and see Lezoux
Avot for fecit, ii. 382, 509

Babylonia, bricks of, i. 6, 8, 91, 94;
cylinders and tablets, i. 7;
enamels, i. 8
Bacchic scenes, see Dionysiac
Bacchylides and vase-paintings, ii. 6
Baking. of terracottas. i. 116 :
of vases, i. 214 ff ;
ovens for, i. 105;
and see Kilns
Ball-games, ii. 167
Banassac, fabric of, ii. 524
Banquet-scenes, ii. 180 ff.; use of kylix in, i. 188

Barbarians on vases, i. 420, ii. 178 ff .
Barbotine decoration, i. 130, 210, ii. 438, 442, 505, 512; in Germany, ii. 513, 536;
at Lezoux, ii. 528, 529;
at Castor, ii. 544
Bargates, potter, ii. 483
Bari, vases from, i. 84, 86;
local pottery of, ii. 326
"Base-ring" ware (Cypriote), i. 242
Basile and Echelos, ii. 27, 140
Bathing-scenes, ii. 165, 173
Baths, use of tiles in, i. 103, ii. 342, 346;
use of bricks in, ii. 331, 335, 339;
vessels used for, i. 176
—— of Caracalla, arrangements of, ii. 347
Bears on lamps, ii. 398
"Belgic" black ware, ii. 552
Bellerophon on vases, ii. 114; on lamps, ii. 414

Benghazi, vases from, i. 68; porcelain ware from, i. 129; and see Cyrenaica

Berlin Museum, i. 25, 28
Bibe, amice, de meo on Gaulish vase, ii. 524
及и̃коऽ, і. 164
"Bilingual" vases, i. 387
Biremes on Geometrica vases, i. 291, ii. 178
Blacas krater, i. 409, 443, ii. 78, 79
Black punctured ware (Cypriote), i. 242
—— slip ware (Cypriote), i. 241
—— varnish, i. 210, 219 ff., 371, 405
—— wares (Etruscan), ii. 291; mentioned in Latin literature, ii. 304; plain Roman, ii. 552; and see Etruria, Naukratis, etc.

Black-bodied amphorae, i. 151; other vases, i. 221

Black-figured vases, i. 219, 368;
from Cyprus, i. 255;
from Ionia, i. 330, 356 ff ;
technique of, i. 219, 370;
shapes, i. 372 ff.;
ornamentation, i. 375 ff., ii. 234;
subjects, i. 376 ff.;
artists of, i. 379 ft., ii. 274; arrangement of subjects on, ii. 207;
к $\alpha$ 入ós-names on, ii. 277;
transition to R.F., i. 386, 393, 400;
treatment of eye on, compared with R.F., i. 408;
subjects compared with R.F., i. 416 ff.;
varieties of amphora in, i. 159
Blanchet on Gaulish terracottas, ii. 380 ff.;
on kilns in France, ii. 443, 451;
on Gaulish pottery-centres, ii. 533
Boar-hunts on vases, i. 315, ii. 166;
and see Calydonian
Boat-shaped vases, i. 186;
lamps, ii. 403
Böhlau on Geometrical pottery, i. 286 ff.;
on Proto-Attic, i. 292;
on Phaleron ware, i. 298;
on Ionic pottery, i. 336 ff .
Boeotia, pottery from, i. 52;
tiles from, i. 102;
terracottas from, i. 118, 123, 290;
Mycenaean pottery from, i. 274;
Geometrical, i. 52, 159, 286;
bronze fibulae of, i. 290;
Proto-Corinthian vases, i. 307;
later local fabrics, i. 300, 391, 451;
vases with reliefs, i. 497;
alphabet of, ii. 252;
artists' signatures, ii. 252, 273
Boiae, foundation of (?), ii. 143
Bologna, vases from, i. 72;
Villanuova civilisation at, ii. 285
Bolsena, vases from, i. 73, 501
Bomarzo, vases from, i. 74
$\beta$ оиßи́入ıos, i. 198
Borax, use of, for red glaze, ii. 437
Boreades, ii. 81, 115, 116
Boreas, ii. 80, 115, 194
Boriedus, potter, ii. 551
Boston Museum, i. 26, 30;
vase in, ii. 483
Bowls, Megarian or Homeric, i. 50, 53, 134, 185, 499; for libations, i. 140, 192, ii. 471;
"Italian Megarian," ii. 490;
forms of Gaulish, ii. 501, 520 ff.;
and see Calix, Patera, Phiale
Boxers, ii. 163
Braziers, i. 105
Bricks, use of, in Babylonia, i. 6, 91;
in Greece, i. 89 ff .;
in Etruria, ii. 314;
at Rome, ii. 331, 336, 340, 352;
at Pompeii, ii. 337;
sun-dried, i. 91 ff., ii. 331, 335;
baked, i. 95, ii. 334 ff.;
sizes of Roman, ii. 332;
methods of construction in, ii. 337 ff.;
stamps and inscriptions on, ii. 352 ff.;
and see Tiles

Bridal scenes, see Marriage
Britain, vase-collections in, i. 27;
use of brick in, ii. 332, 337, and see 335;
tiles from, ii. 346, 348, 358, 359, 363;
terracotta statuettes from, ii. 379, 384;
kilns found in, ii. 444, 445, 454;
wine-amphorae, ii. 461;
Roman pottery found in, ii. 540 ff ;
imported wares, ii. 504, 540;
subjects, 508;
types and chronological sequence, ii. 540;
barbotine wares in, ii. 513, 544;
Rutenian, ii. 522;
Lezoux ware, ii. 529;
"false Samian" ware, ii. 541;
potters' names from, ii. 542;
local fabrics, ii. 543 ff.;
plain wares, ii. 549 ff.;
and see Castor, New Forest, Upchurch
British Museum, i. 17, 24, 27;
prices paid by, for vases, i. 43 ff .
—— School at Athens, excavations of, i. 57, 262, 265
Вроиíкৎ, i. 186
Brongniart on Greek vases, i. 203;
on bucchero, ii. 301;
on plain Roman wares, ii. 437, 548
Bronze, workers in, ii. 171;
imitations of, in bucchero ware, ii. 303;
in Roman pottery, ii. 528, 552
—— Age in Cyprus, i. 35, 66, 206, 237 ff.;
in Italy, ii. 283 ff.;
porcelain ware of, i. 127
Brunn on Melian reliefs, i. 120
Brushes used for painting vases, i. 227
Brygos, potter, i. 421, 437, ii. 256
Bucchero ware in Cyprus, i. 242;
in Etruria, ii. 289, 295, 301 ff.
Bucket, see кर́סoç, Situla
Bularchos, painter, i. 361, 363
Burgon vases, i. 45, 47, 57, 145, 285, 295
Burial scenes, and use of vases in, see Funeral
Burlesques, ii. 159;
and see Caricatures, Comedy
Busiris, ii. 102
Busts of terracotta (funereal), i. 123
Butades, i. 98, 110
Butrio, potter, ii. 527
Cacus, ii. 100
Cadus, ii. 463;
and see кóסos
Caecilius Saevus, L., lamp-maker, ii. 406, 423, 425, 428
Caere, see Cervetri
Caeretan hydriae, i. 166, 353 ff., ii. 308;
-11ind fnhminn : כட\& ff
dmed iduricis, ı. Јכ0 11.
Caesar, C. Julius, his finds of vases at Corinth, i. 134
Caistor-by-Norwich, kiln at, ii. 445, 449
Calene phialae, i. 502, and see ii. 490
Calidius Strigo, potter, ii. 482
Calix, ii. 468;
and see Bowl, Kylix
Calvi (Cales), vases from, i. 81, 119, 146, 191, 502
Calydonian boar-hunt, ii. 114, 294
Calyx-patterns, ii. 221
Cambridge, Fitzwilliam Museum, i. 27
Cambridgeshire, Roman tombs in, ii. 351, 456
Campania, vases found in, i. 80, 146;
amphorae of, i. 162, 469, 484;
fabrics of, i. 467 ff., 482 ff.;
local, i. 227, 484;
Roman pottery in, ii. 475, 478
Candelabrum-amphorae, i. 162
Canino, i. 44, 76;
and see Vulci
Canoleius, L., potter, i. 502
Canopic jars (Etruscan), ii. 304
Canosa, vases from, i. 84, 118, 146, 487
Capedo, capis, ii. 471
Capitoline Jupiter, temple of, ii. 314, 371, and see i. 116; statue of, ii. 314, 372

Capua, vases from, i. 81, ii. 488, 493;
tiles from, i. 98, 103;
vases with gilding from, i. 210, 231, 498;
forgeries made at, i. 42
Caria, pottery from, i. 64, 330, 340
Caricatures on vases, i. 392
Carthage, lamps from, ii. 397, 399, 405, 422;
Gaulish vase at, ii. 523
Casks, see Dolium, Pithos
Castor, kilns of, ii. 435, 437, 444, 446 ff.; ware of, ii. 543, and see 442, 536

Catagrapha, i. 397, 455
Catalogues of vases, i. 26 ff .; and see Bibliography in Vol. I.

Catinus and catillus, ii. 469
Cato on terracotta sculpture at Rome, ii. 373
Caudebec, terracotta figure from, ii. 384
Cave-dwellings, pottery from, i. 4
Ceglie, vases from, i. 84
Centaurs, ii. 102, 111, 145, 195
Centorbi, vases from, i. 87

Cerigo, see Kythera
Cervetri (Caere), vases from, i. 75, ii. 292 ff., 297, 307, 308;
architectural terracottas from, i. 98, ii. 315, 317;
vases with reliefs from, i. 496, ii. 292;
painted slabs from, ii. 299, 319;
Regulini-Galassi tomb at, ii. 300;
abecedaria from, ii. 311;
sarcophagi from, ii. 317, 321
Cesnola, i. 65
Chachrylion, potter, i. 420, 424, 427, 430
chaĩre kaì píei eũ, i. 373, ii. 265
Chalcidian vases, i. 321 ff.;
alphabet and inscriptions, ii. 253
Chalcosthenes or Caicosthenes, i. 92
Chalkis as pottery centre, i. 55, 307, 321 ff., 495
Chamber-tombs (Etruscan), ii. 294 ff.
Chares, vase-painter, i. 315
Charinos, potter, i. 411, 492
Chariot-scenes on vases, ii. 164, 166, 176; on lamps, ii. 417, 422

Charioteer, dress of, ii. 198
Charon, i. 459, ii. 69, 193
Charun, ii. 69, 193, 310
Cheiron, ii. 95, 120, 145
Chelis, potter, i. 420, 424, 427
Chequer-patterns, ii. 215
Chest of Kypselos, see Kypselos
Chevron-patterns, ii. 214
Chigi vase, i. 309
Children, vases used by, i. 137;
subjects relating to, ii. 167, 174
Chimaera, ii. 114, 148
Chiton, treatment of, on vases, i. 372, ii. 200
Chiusi, vases from, i. 73;
as centre for Etruscan pottery, ii. 302, 304
Christian lamps, ii. 404, 420
Chronology of Cypriote pottery, i. 245 ff .; of Cretan, i. 265;
of R.F. vases, i. 401 ff., 463, ii. 271;
of Gaulish terracottas, ii. 385; of Roman lamps, ii. 399 ff .; of Gaulish pottery, ii. 501 ff., 516 ff .

Chrysaor, ii. 112
Chryse, ii. 105, 115, 124
Chrysos, ii. 85, 88
Chthonian deities, in terracottas, i. 123 ff .; on vases, ii. 67 ff .

Хर́т $\rho \alpha$, i. 174

Ciborium, i. 186, ii. 468
Cicero quoted, ii. 365, 371
Cincelli, potteries at, ii. 480, 483
Cinerary urns, i. 144 ff.; Etruscan, ii. 285, 288; Roman, ii. 456, and see 550; and see Ossuaria

Cinnamus, potter, ii. 527
Circle-patterns, ii. 216
Circus, scenes from, on mural reliefs, ii. 370; on lamps, ii. 417, 422

Cistae, Etruscan, compared with vases, ii. 307
Cities personified, ii. 81, 82, 194
Civil use of pottery, see Measures
Civita Castellana, see Falerii
—— Lavinia, terracottas from, i. 98, 101, ii. 316, 317
—— Vecchia, vases from, i. 74
Classical literature, see Literature
Clay, earliest working in, i. 5 ff.; uses of, i. 89 ff.;
varieties of, i. 113, 204;
used for bricks and tiles, i. 90 ff., ii. 333 ff.;
for sarcophagi, i. 104;
for models, i. 111, ii. 375;
for porcelain objects, i. 127;
in sculpture, i. 109 ff., ii. 314, 317, 371 ff.;
nature of, for terracotta figures, i. 113, ii. 380;
for mural reliefs, ii. 366;
for lamps, ii. 404;
for Roman pottery, ii. 434 ff., 548;
preparation of, for vases, i. 202 ff ;
representations of digging for, ii. 170
Clazomenae, vases from, i. 62, 64, 330, 354, 356;
as centre of Ionic fabric, i. 350, 354;
sarcophagi of, i. 62, 362 ff.;
compared with vases, i. 350 ff .
Cobnertus, potter, ii. 440
Coins, terracotta moulds for, i. 106, ii. 390 ff.;
compared with R.F. vases, i. 426;
evidence of, for Greek alphabets, ii. 246
Colchester, terracottas from, ii. 384;
kilns at, ii. 445;
vase from, ii. 544
Collections of vases, early, i. 16 ff .; list of existing, i. 27 ff .

Colours used for terracottas, i. 116;
for vases, i. 230;
in Etruscan art, ii. 299, 321 ff.;
for mural reliefs, ii. 366
Combats, ii. 175 ff.;
and see Gladiators

Comitialis, potter, ii. 511
"Complementary" method of representation, ii. 10
Concentric circles, Cypriote, i. 251, ii. 216
Conclamatio, ii. 157
Concrete, use of, in Roman buildings, ii. 335 ff.
Condatomagus, see Graufesenque
Congius, ii. 472
Consuls, names of, on tiles, ii. 360; on vases, ii. 462, 512
"Continuous" method of representation, ii. 10
Convivial inscriptions, ii. 265, 524, 538
Cooking-vessels, i. 174, ii. 470
Corfu, vases from, i. 54; tiles from, i. 101
Corinth, its early commercial and artistic importance, i. 11, 303; finds of pottery at, i. 50, 139, 304, 305, 307; amphora-handles from, i. 158;
clay of, i. 304, 305;
industries of, represented on vases, i. 207, 216, 305, 317, ii. 170
Corinthian krater, i. 168;
kylix, i. 190;
painters, i. 312, 320, 395;
pinakes, i. 51, 139, 207, 216, 224, 305, 316, ii. 23, 170, 249, 251;
vases generally, i. 304 ff.;
sites where found, i. 304;
classification, i. 305 ff.;
shapes, i. 311 ff., 317;
ornamentation, i. 311 ff., 320, ii. 233;
subjects, i. 314, 318;
inscriptions, i. 315, 326, ii. 249 ff.;
potters' names, i. 315, ii. 250, 273;
imitations of, i. 321;
types from, on "Tyrrhenian" amphorae, i. 326;
points of contact with Ionia, i. 329 ff .;
found in Etruria, i. 77, 318, ii. 294 ff., 307
Corintho-Attic vases, see Tyrrhenian
Cornelius, P., potter, ii. 482
Corneto, vases from, i. 74, ii. 284
Cornices of terracotta, i. 97, ii. 344
Cosmogonic deities, ii. 73 ff.
Costume on Greek vases, ii. 200 ff .
Countries personified, ii. 81, 82, 194
"Courting"-scenes, i. 475, ii. 183
Crater, see Krater
Crescent patterns, ii. 218
Cretan bull, ii. 96
Crete, finds in, i. 59, 152, 263 ff.; ossuaria in, i. 145, 272; ethnography of, i. 264; early pottery of, i. 265 ff.; as Mycenaean centre, i. 269, 274; influence on later pottery, i. 276; the island personified, ii. 82

Crimea, vases from, i. 60, 330, 340, 447, 448, 464;

Croesus, see Kroisos
Crudus, used of bricks, i. 90, 92; of vases, i. 214
"Cult of Tomb" on lekythi, i. 143, 459, 460, ii. 158; on Apulian vases, i. 144, 476, ii. 158

Cumae, vases from, i. 80, 210;
fabrics of, i. 483, ii. 478
Cupid, see Eros
Cups, see Drinking-cup, Kylix, etc.
Curetes and infant Zeus, ii. 368
Curium, tombs at, i. 36, 255, and see 66, 67; vases from, i. 128, 243 ff., 488

Cyathus, ii. 467; and see Kyathos

Cyclades, finds in, i. 56; early pottery of, i. 9, 56, 260 ff., 303

Cyclic poets and vase-subjects, ii. 4, 119 ff .
Cycnus, scene from drama of, ii. 531
Cylinders, Assyrian, i. 7
Cyprus, vase-collections in, i. 30;
tombs in, i. 34 ff .;
finds of pottery, i. 65, 237, 240, 250, 273, 280;
terracottas, i. 112, 123 ff ;
general character of pottery, i. 236;
shapes of vases,. i. 238, 252;
Bronze-Age pottery, i. 66, 206, 237 ff.;
Mycenaean pottery, i. 239, 244;
Graeco-Phoenician, i. 247 ff.;
Hellenic, i. 255;
Roman, ii. 495, 499;
ethnology of inhabitants, i. 240, 248;
chronology of pottery, i. 250
Cyrenaica, tombs in, i. 36;
vases from, i. 69, 465;
terracottas, i. 125, 126;
and see Kyrene
Cyrene, see Kyrene
Daidalos, see Ikaros
Daily life, scenes from, on vases, i. 417, 449, 475, ii. 154 ff.; on lamps, ii. 416 ff.; of women and children, ii. 172 ff .

Dali, pottery of, i. 250, 273
Danaë, ii. 19, 112
Danaids, ii. 68
Danaos (?), ii. 140
Dancing scenes on Greek vases, ii. 168, 182; on Arretine vases, see Hieroduli

Daphnae, pottery from, i. 68, 349 ff.;
Fikellura style at, i. 338, 352;
scale-pattern used at, i. 311, 337, 352, ii. 218
Dardanus, see Troad
Dareios in council, ii. 151

Dawn, see Eos
Death-deities, ii. 72; and see Thanatos

Déchelette on Gaulish pottery, ii. 432, 504 ff ., 516 ff .
Decoration of vases, artistic value of, i. 14; see Ornamentation, Subjects

Decorative patterns, see Ornamental
Dedicatory inscriptions on Greek vases, i. 139, ii. 242; on lamps, ii. 421

Deepdene, collection of vases at, i. 17, 27, 323
Deianeira, ii. 102, 104
Deinos (vase-shape), i. 173
Deities, terracotta statuettes of, i. 122; Gaulish, ii. 384 ff.; representations of, on vases, see Chaps. XII., XIII.; on lamps, ii. 408 ff .; Etruscan, ii. 310

Delos as centre of vase-fabric (?), i. 57, 302; braziers made at, i. 105

Delphi, pottery from, i. 53
Delphic scenes on vases, ii. 29 ff., 103, 138
Delphiniform lamps, ii. 399
Demeter, ii. 26 ff., 189; bust of, in terracotta, i. 123

Demons, on braziers, i. 105; and see Death-deities
$\Delta \eta \mu o ́ \sigma \iota \alpha$ on tiles, i. 102; on a washing-basin, ii. 260
$\Delta \eta \mu$ óбıov on a measure, i. 135
Demosthenes, allusions to vases in, i. 133, 142
Dennis, explorations of, in the Cyrenaica, i. 36; in Etruria, i. 38;
in Sicily, i. 87
Departure-scenes on vases, ii. 176
ठદ́пळৎ, i. 148, 181
Depositio-scenes, i. 459, ii. 157
Descriptive names, ii. 91, 260
Devices on shields, ii. 198
Diadumenos, terracotta figure of, i. 126
Diana on Gaulish pottery, ii. 507, 508; and see Artemis

Diitrephes (?), ii. 151
Dike, ii. 69, 89
Dimini, pottery from, i. 54
סí $\mu \cup \xi$ oç (of lamps), i. 107
Diocletian, tile-stamps in reign of, ii. 353, 362

Diogenes on lamp, ii. 415, 421;
tub of, i. 151
Diomedes, horses of, ii. 98
—— in Trojan scenes, ii. 127, 128, 133
Diomos (tribal hero) ?, ii. 140
Dionysiac personifications, ii. 64 ff., 91;
scenes on vases, ii. 32, 54, 57 ff.;
on R.F. vases, i. 416;
on mural reliefs, ii. 369;
on lamps, ii. 411;
on Arretine vases, ii. 492, 493
Dionysos on vases, ii. 55 ff., 191;
in ship, i. 381;
in Gigantomachia, ii. 14, 56;
birth of, ii. 19, 55;
in Attica, ii. 139;
sacrifices to, i. 140, ii. 60
Dioskuri on vases, ii. 93, 115, 194;
on lamps, ii. 413
Diota, i. 154, 163, ii. 460
Dipylon, cemetery of, i. 9, 48, 280;
vases from, i. 48, 247, 253, 255, 280 ff.; ornamentation, i. 282, ii. 232;
subjects, i. 285, ii. 157, 178;
chronology, i. 291;
influence on later vases, i. 293, 298;
early inscribed vase from, ii. 243
Discovery of vases, circumstances of, i. 33 ff .
Discs of terracotta of unknown use, i. 105, 106
Discus (סíбкоৎ), name of vase, i. 194, ii. 469; part of lamp, ii. 395

Dishes, Greek, i. 194;
Roman, ii. 468
Diskos, throwing of, ii. 163
Divixtus, potter, ii. 527
Dodwell pyxis, i. 50, 315, ii. 250
Dörpfeld, discoveries of, at Troy, i. 61, 153, 257, 259
$\Delta$ oкı $\mu \alpha \sigma$ í $\alpha$ of Athenian knights, ii. 177
Doliarius, ii. 457, 511
Dolium, ii. 438, 457 ff.; and see Pithos

Dolls of terracotta, i. 113, 114, 120
Dolon, story of, i. 363, ii. 128
Domestic use of vases, i. 136, 138, and see 252; Roman, ii. 431, 455 ff., 549 ff.

Domitia gens, tiles of, ii. 357, 358
Dorian invasion, i. 245, 277
Doric architecture, use of tiles in, i. 94; dialect used at Athens, ii. 256

Douai, potters' stamps from, ii. 503
Dragendorff on Roman pottery in Greece, ii. 476, 498; on Arretine ware, ii. 482,

Drain-pipes, see Pipes
Drama, subjects from, on late vases, i. 471 ff ., ii. 7, 159 ff .
Drapery, treatment of, on B.F. vases, i. 372;
on R.F., i. 408;
and see ii. 201
Drawing on Greek vases, technique of, i. 222 ff.;
on B.F. vases, i. 371;
on R.F., i. 406 ff .;
on white-ground vases, i. 457;
on South Italian, i. 470;
and see i. 396
Dress on vases, see Costume, Drapery
Dressel on tile-stamps, ii. 352 ff.;
on Arretine stamps, ii. 486, 487
Drinking-cups, i. 148 ff., 180 ff.; Roman, ii. 467, and see 475

Dümmler on Cypriote pottery, i. 240;
on Rhodian, i. 336;
on Daphnae pottery, i. 350;
on Caeretan vases, i. 354;
on "Pontic," i. 359;
on Etruscan imitations of Caeretan, ii. 308
Duris, vase-painter, i. 21, 421, 434 ff., 440, ii. 263, 268
Earth-Mother, see Gaia, Koupoт $о$ о́ оз
Echea, ii. 457
Echelos, see Basile
Echo, ii. 81;
and see Pan
Egg-pattern, ii. 220
غ́үкотט́ $\lambda \eta$, ii. 167
Egnazia, see Gnatia
है $\gamma \rho \propto \psi \varepsilon$, form of signature, i. 379, 422, ii. 257 ff., 273 ff .
Egypt, pre-dynastic pottery of, i. 4;
brick used in, i. 6, 94;
use of wheel in, i. 7;
enamels of, i. 8;
pottery found in, i. 67;
lamps in, i. 107;
porcelain ware, i. 126 ff.;
influence of, on Cypriote pottery, i. 239, 247 ff.;
Cypriote pottery in, i. 239, 242, 243;
evidence from, for Cretan and Mycenaean pottery, i. 266, 267, 271;
influence of, in Etruria, ii. 299, 303, 304
Egyptian situla at Daphnae, i. 350;
subjects on Caeretan vases, i. 355;
in Roman mural reliefs, ii. 370;
in Gaulish terracottas, ii. 386;
on lamps, ii. 402, 403, 412
Egyptians on vases, ii. 180
$\varepsilon ̌ ̌ \delta \omega \lambda \alpha$, i. 460 , ii. 72, 193
Eileithyia, ii. 15, 76
Eirene, ii. 85

غ́кє $\alpha$ 人́ $\mu \varepsilon v \sigma \varepsilon$ ，form of signature，i．379，ii． 258
Ekphantos，painter，i．312，320， 395
Elateia，tiles from，i． 102
Elektra，ii． 137
Eleusinian mysteries，supposed references to，i．21； scenes relating to，ii．27； and see Demeter，Persephone

Eleusis，finds of vases at，i．49； personified，ii． 82

غ̇̀ $\lambda$ ú $\chi$ vıov，i． 107
$\dot{\varepsilon} \mu \beta \alpha ́ \varphi \varphi$ ıо⿱, i． 124
$\varepsilon \dot{\varepsilon} \mu \lambda \eta \eta_{\mu} \alpha \tau \alpha$, i．130； and see Appliqué reliefs

Emperors＇names on tiles，ii． 354 ff．； on pottery，ii． 462

Enamelling，i．8， 126 ff．
Endt on Ionic vases，i．350， 354 ff．
England，see Britain
Enkelados，ii． 13
Enkomi，vases from，i．66，127， 242 ff．
Eos，ii．79；
with Kephalos，i．98，ii．80； with Memnon，ii． 132

Epexegetic system of interpretation，i． 20
Ephebi on R．F．vases，i． 417

$\dot{\varepsilon} \varphi \varepsilon \delta \rho ı \sigma \mu o ́ s$, ii． 167
Ephialtes，ii． 13
Epic poetry and vases，ii． 3 ff ．
Epichysis，i．179， 469
Epidromos ка入ós，i． 425
Epigenes，potter，i． 445
Epiktetos，vase－painter，i．379，398，420，422，425； cups from school of，i．417， 425 ff．

Epilykos，vase－painter，i． 424
غ́пі́ขทтроь，i． 199
غ́поíךбє，form of signature，i．379，422，ii． 257 ff．， 273 ff ．
Epona，ii． 386
Eretria，vases from，i．55， 458
غ̇คعús，i． 194
Ergasterion，i． 233
Erginos，potter，i． 444
—— and heralds，ii． 102
Ergotimos，potter，i．370，379，380，ii． 257

Erinnyes, see Furies
Eriphyle, ii. 118
Eris, ii. 90, 194
Eros in terracottas, i. 126;
on vases, i. $377,418,475,486$, ii. 45 ff., and see ii. 89 ;
types of, i. 486 , ii. $45,48,191$;
with Aphrodite, ii. 42 ff.;
on mural reliefs, ii. 369;
on lamps, ii. 410
Erymanthian boar, ii. 97
Erythrae, amphorae in temple at, i. 205
Esquiline, lamps from, ii. 393, 399, and see 481; pottery from, ii. 477

Ethical ideas on vases, ii. 89
Ethiopians, ii. 180
$\dot{\eta} \theta \mu$ оя, i. 175
Ethnography of Crete, i. 264; of Mycenaeans, i. 275

Ethnological value of study of vases, i. 10
غ̇тขท́puoıs, i. 180
Etruria, discoveries in, i. 19, 72 ff.; tombs of, i. 37, 78, 104, 145, ii. 284 ff.; architecture of, in terracotta, i. 101, ii. 313 ff ; terracotta sarcophagi, i. 104, ii. 299, 317, 320 ff.; sculpture in terracotta, i. 109, ii. 313, 317; relations with Greece in Geometrical period, i. 292, ii. 289 ff.; vase-painting in, i. 358, ii. 307 ff.; relief wares of, i. 496, 501, ii. 292 ff.; paintings on terracotta, ii. 299, 319; earliest civilisation of, ii. 282 ff.; earliest pottery, ii. 285; wheel-made, ii. 290; Villanuova period in, ii. 290 ff.; early Greek influence in, ii. 291, 293, 296 ff., 303; early Oriental influence, ii. 292, 296 ff.;
character of art of, ii. 309, 322;
Roman pottery in, ii. 486, and see Arretine ware
Etruscan alphabet, ii. 311;
artists at Rome, ii. 372;
inscriptions on vases, ii. 310;
pottery, see Bucchero, Cervetri, Polledrara
"Etruscan" theory of origin of Greek vases, i. 18, 79
Etruscans, origin of, ii. 281
Euboea personified, ii. 82;
vases found in, i. 55;
and see Chalkis, Eretria
Eucheiros, painter, i. 395
Eucheiros, potter, i. 374, 379, 384
Euergides, potter, i. 424
Eumaros, painter, i. 317, 371, 396
Euphorbos-plate or pinax, i. 334, 335, ii. 129, 249
Euphronios, potter and painter, i. 398, 402, 403, 421 ff., 428, 430 ff., 440
Euripides, subjects from, on vases, i. 472, 500, ii. 162;
nn lamn ii $4154 \geqslant 1$

Europa, ii. 19
Eurystheus, i. 151, ii. 97
Euthymides, vase-painter, i. 421, 427, ii. 258
Euxitheos, potter, i. 421, 429
Evans, Dr. A. J., discoveries of, i. 59, 152, 265 ff.
$\dot{\varepsilon} \xi \alpha ́ \alpha \lambda \varepsilon ı \pi \tau \rho о \nu, ~ i . ~ 198$
Exarchos (Abae), vase from, i. 217
Excavations, vases found in, i. 138; and see Chapter II. passim

Exclamatory inscriptions on vases, ii. 261 ff .; on lamps, ii. 422

Exekias, potter and painter, i. 161, 374, 375, 379, 380 ff., ii. 218, 257
Explanatory inscriptions on vases, ii. 259 ff.
Expression of figures, i. 398, 408, ii. 202 ff.
Eye, treatment of, on vases, ii. 203;
on Ionic, i. 356;
on Attic, i. 408
Eyes on vases, i. 257, 357, 410, 426, 427
Fables on Roman lamps, ii. 416
Fabricius Masculus, L., lamp-maker, ii. 424, 425
Fabroni on Roman pottery, ii. 437, 479
Falerii (Civita Castellana), vases found or made at, i. 75, 485, ii. 301, 309; early settlements at, ii. 289

False amphora (Mycenaean), i. 271
"False Samian" ware, ii. 474, 502, 541
Farces, scenes from, on vases, i. 473, ii. 159 ff.
Fasano, vases found at, i. 85; and see Gnatia

Fates on vases, ii. 84
Favissae (rubbish-heaps of temples), i. 345; and see i. 138

Fayûm, pottery from, i. 67; terracotta coin-moulds from, i. 106, ii. 391

Feather-brush or pen, use of, in vase-painting, i. 227 ff .
Fecunditas, ii. 384, 386
Felicitas on lamps, ii. 398, 413
Felixstowe, vases from, ii. 440, 529
Fibulae, Boeotian, compared with vases, i. 289
Fictiliarius, ii. 511
Fidelia, ii. 465
Figlinae of tile-makers, ii. 356
Figure-subjects, introduced on Greek vases, i. 281 ff., 314 ff .; in Etruria, ii. 291 ff.; on Arretine ware, ii. 492;
on Gaulish pottery, ii. 506, 507, 514, 521, 527; at Castor, 544
"Fikellura" or Samian ware, i. 336 ff.;
at Daphnae, i. 338, 352
"Fine" style of R.F. vases, i. 421, 440 ff .
Fink on Roman lamps, ii. 400, 428
Fish-plates, i. 194, 487, ii. 186
Flange-tiles, ii. 341, 342
Floral patterns on Corinthian vases, i. 312;
and see Lotos, Palmette, Rosette
Flue-tiles, ii. 346 ff.
Flute-players on vases, ii. 169
Foreshortening, i. 398
Forgeries of vases, i. 40 ff .
Forms of vases, see Shapes
Fortis, potter, ii. 423 ff., 477
Fortune on money-boxes, ii. 390; on lamps, ii. 413

Fossa-tombs in Etruria, ii. 289 ff.
Fox and Crow, fable of, ii. 416
France, vase-collections of, i. 27;
pottery-finds in, Chapter XXIII. passim; terracottas from, ii. 379 ff.; coin-moulds from, ii. 390 ff.; clay of, ii. 434; kilns in, ii. 443, 451 ff.; potters' stamps in, ii. 503; and see Gaul

François vase, i. 73, 149, 370, ii. 10, 11; inscriptions on, ii. 257, 270
"Free" style at Lezoux, ii. 506, 521, 527
Friezes of animals on Corinthian vases, i. 313 ff., ii. 207; on Ionian, i. 331;
general treatment of, ii. 207 ff .
Funeral lekythi, i. 142, 458 ff., ii. 157; masks, i. 123;
imitated in Etruria, ii. 305;
scenes on Apulian vases, i. 476, ii. 158;
on Dipylon, i. 285, ii. 157;
in general, ii. 156 ff.;
uses of vases, i. 141 ff .;
of lamps, ii. 397;
of Roman pottery, ii. 456, 550
Furies, ii. 69, 138, 192
Furnaces, see Kilns
Furtwaengler on forgeries, i. 43;
on Mycenaean vases, i. 270;
on Boeotian, i. 286;
on the Aristonoös vase, i. 298
Gaia, Koupot $\rho$ ó $\varphi$ о̧, ii. 30, 73;
type of, in terracotta figures, i. 122 ff.;
rising from earth, ii. 73, and see 193;
see also Pandora
Gamedes, potter, i. 300
Games on vases, ii. 167; of children, i. 137, 418, 449, ii. 167

## Ganymede, ii. 18

Gaul, enamelled ware from, i. 129; terracottas from, ii. 379 ff.;
as centre of lamp-fabric, ii. 427;
moulds and stamps from, ii. 439 ff .;
kilns in, ii. 443, 451 ff.;
as centre for provincial pottery, ii. 498, 503, 515 ff.;
subjects on pottery of, ii. 507;
use of barbotine in, ii. 513, 529;
doubtful pottery-centres in, ii. 533;
pottery from, in Britain, ii. 522, 540, 542;
plain wares of, ii. 548 ff .;
duration of potteries in, ii. 432, 503, 526;
and see France
Gaulish inscriptions on pottery, ii. 504;
potters represented in art, ii. 511;
potters' names and stamps, ii. 461, 504, 509, 522, 527
үعĩбov, i. 96
Gela, tombs at, i. 37;
vases from, i. 86, 196;
treasury of, at Olympia, i. 100
Gems compared with R.F. vases, i. 426
Genre subjects in terracotta, i. 124;
miscellaneous on vases, ii. 184;
transformed into mythological, i. 318, cf. ii. 5
Geographical distribution of Greek vases, i. 32;
of Roman, ii. 432, 495, 498;
personifications, ii. 81 ff .
Geometrical pottery in Greece, i. 277 ff.;
description of, i. 281 ff .;
in Thera, i. 56;
in Cyprus, i. 239, 247, 253 ff.;
in Boeotia, i. 286 ff.;
influence of, at Athens, i. 294, 298;
in Boeotia, i. 300;
in Melos, i. 302;
at Corinth, i. 306, 308;
at Daphnae, i. 351;
in Etruria, ii. 289 ff.;
in Southern Italy, ii. 325, 327, 328;
ornamentation of, ii. 202 ff., 232;
and see Dipylon
Geras, ii. 84
Gerhard on chronology of vases, i. 23;
on varieties of amphorae, i. 160
Germany, vase-collections in, i. 28; inscribed tiles from, ii. 357, 364; terracottas from, ii. 383; duration of Roman pottery in, ii. 432; moulds and stamps from, ii. 439 ff .;
kilns in, ii. 444, 453;
early Roman pottery in, ii. 501 ff.;
description of fabrics and pottery-centres, ii. 504, 533 ff.;
classification, ii. 536;
potters' names, ii. 509 ff., 535;
barbotine decoration, ii. 513, 514, 536;
inscribed pottery, ii. 537;
plain black wares, ii. 552
Geryon, i. 322, 432, ii. 98, 195
Giants, types of, ii. 195
Giganlomachia, ii. 12 ff.

Girgenti (Agrigentum), vases from, i. 86, 87;
moulds from. i. 115
Gladiators on lamps, ii. 416, 421;
on Roman pottery, ii. 507, 532, 544
Glass, enamels, i. 8, cf. 127 ff.;
imitations of, in pottery, i. 64, 130, ii. 443, 514, 524
Glaukon к $\alpha$ 入ós, i. 403, 432, ii. 153, 267
Glaukos and Polyeidos, ii. 141
Glaukytes, potter, i. 232, 374, 379, 384
Glaze on terracottas, i. 8, 118, 128 ff.;
on Greek vases, i. 203 ff.;
on Roman pottery, ii. 435 ff.;
analyses of, ii. 436;
on provincial wares, ii. 497;
on Castor ware, ii. 545
Gnatia or Gnathia (Egnazia, Fasano), vases of, i. 85, 226, 487, 488
Gordion, pottery from, i. 64
Gorgasos and Damophilos, ii. 372
Gorgoneion in interior of kylikes, i. 374, 400, 427
Gorgons, ii. 112, 146, 196
Graces (Charites), ii. 84
Graeco-Phoenician tombs in Cyprus, i. 35; pottery, i. 66, 247 ff., 251 ff.; sites where found, i. 250

Graeven on Roman money-boxes, ii. 388 ff.
Graffiti on vases at Graufesenque, ii. 510; and see Inscriptions

Graufesenque potteries, ii. 504, 515 ff.;
ornamentation, ii. 506, 520; graffiti on, ii. 510; forms and decoration, ii. 519; potters, ii. 522

Greece, introduction of potter's wheel in, i. 7, 206;
earliest pottery of, i. 9, 10, 277 ff.;
collections of vases in, i. 30;
tombs in, i. 33;
finds of pottery in, i. 46 ff .;
terra sigillata in, ii. 476, 498
Greek colonies, i. 60, 80;
islands, finds in, i. 54 ff.; early pottery of, i. 9, 262 ff.;
religion, i. 13, 138 ff., ii. 154 ff.;
and see Pottery, Vases
Greeks and Persians, combats of, ii. 151, 179
Grey Roman wares, ii. 550
Ground-ornaments on Corinthian vases, i. 312, 320, ii. 231, 233; on Ionic, i. 334, ii. 233

Gryphons, ii. 148, 196;
heads of, on Etruscan pottery, ii. 300
Gsell, excavations of, at Vulci, i. 77, ii. 280, 291
Guildhall Museum, ii. 359, 379
Guilloche pattern, ii. 219

Gutter-tiles, i. 97, ii. 341; at Pompeii, ii. 343 ff .

Guttus, i. 200, 211, 503, ii. 469
Gypsum, figures of, i. 111
Hades, ii. 28, 67, 190; and see Underworld

Hadria, vases from, i. 71; and see ii. 477

Hair, treatment of, on vases, i. 407, ii. 201
Halikarnassos, finds at, i. 105, 106
Hamilton, Sir W., i. 17, 43
Hampshire, pottery from, see New Forest
Hancarville (D'), i. 17, 22
Handles of vases, i. 208, ii. 443; of wine-amphorae, stamped, i. 155 ff .

Hare-hunts, ii. 165
Harmodios and Aristogeiton, ii. 150
Harpies, ii. 72, 146, 196
Hartlip, use of tiles in villa at, ii. 348; vase from, ii. 508

Hartwig on the feather-pen, i. 227; on R.F. cup-painting, i. 398, 424 ff.; on кк入ós-names, i. 404

Hasta (Asti) as pottery-centre, i. 71, ii. 477
Hathor, i. 254
Haverfield on Castor kilns, ii. 448; on Roman pottery, ii. 536, 541, 544, 546

Hebe, ii. 77, 84, 193
Hector, ii. 126 ff.
Heddernheim, kilns at, ii. 444
Hegesiboulos, potter, i. 445
Hegias, vase-painter, i. 421, 444
Heiligenberg, kilns at, ii. 444, 446, 449
Hekate, ii. 71, 190
Helen, ii. 119, 123, 135
Helios on vases, ii. 78, 103, 193, 483;
on lamps, ii. 412;
as Rhodian amphora-stamp, i. 156
Helioserapis lamp, ii. 403; and see i. 209, 216

Hellas personified, ii. 81
Hellenic pottery, of Cyprus, i. 237, 250, 253, 255;
influence of Mycenaean on, i. 276
Hellenistic art, influence of, on Arretine ware, ii. 489, 494; on Gaulish pottery, ii. 507; on Gaulish terracottas, ii. 386;
porcelain vases, i. 128;
pottery of Cyprus, i. 256;
terracottas, i. 125
Hemera, ii. 78, 79
ท̇นıкоти́ $\lambda \iota 0 \nu$, i. 135, 183, ii. 241
ท̇цíтоиоऽ, i. 174
Hephaistos on vases, ii. 36, 190; in Gigantomachia, ii. 14, 15; at birth of Athena, ii. 15; return of, to Olympos, ii. 17; smithy of, ii. 37, 130, 171

Hera on vases, ii. 16, 21, 188; and see Juno Lanuvina

Heraion at Argos, i. 52, 278, 298, 307; at Olympia, i. 92 ff., 97, 100

Herakles on vases, generally, ii. 94 ff .; how represented, ii. 194; on Corinthian vases, i. 314, 318;
on Chalcidian, i. 322; on Assteas vase, i. 479; with Apollo, ii. 33; with Athena, ii. 38, 105; on mural reliefs, ii. 370; on lamps, ii. 413; on Gaulish pottery, ii. 508, 531, 545; skyphos of, i. 185; Erotes with club of, ii. 411

Heraldic groups on vases, i. 318, ii. 207
Heralds, ii. 177, 198
Hermaios, potter, i. 420, 424
Hermes in terracottas, i. 114, 126;
on vases, ii. 50 ff., 190;
Kıג入ท́vıos, i. 325, 326, ii. 260;
on lamps, ii. 409
Hermione, vases from, i. 52
Hermogenes, potter, i. 374, 379, 383
Hermonax, vase-painter, i. 421, 446
Herodotos on origin of Etruscans, ii. 281
Heroic subjects on mural reliefs, ii. 370; on lamps, ii. 414

Heroön, i. 476, ii. 158, 159
ท้م $\omega \varsigma$, worship of, i. 477
Hesiod and vase-paintings, ii. 6
Hesperides, ii. 92; garden of, ii. 75, 99

Hestia on vases, ii. 53, 190
Hiérarchie des genres, law of, i. 245, 284, 315, 332
Hieroduli, ii. 492, 493
Hieron, potter, i. 421, 436, ii. 238, 259
Hilinos, potter, i. 421, 429
Himera, vases from, i. 87
Himeros, ii. 49

Hippalektryon, ii. 149
Hipparchos к $\alpha \lambda$ ós, i. 403
Hippolyta, ii. 99, 111
Hippolytos, ii. 112
Hischylos, potter, i. 379, 420, 422, 424
Hissarlik, see Troy
Historical methods of study, i. 22, 235;
limits of subject, i. 31, ii. 430 ff.;
subjects and personages on vases, i. 403, ii. 149 ff., 266, 267;
on lamps, ii. 415
History illustrated by vases, i. 11;
in connection with R.F. vases, i. 402 ff., 463
Hölder on Roman pottery, ii. 460, 472, 537
Hogarth on Cretan pottery, i. 267
ò $\lambda \kappa \varepsilon$ ı̃ov, i. 175
Holland, collections in, i. 28;
pottery from, ii. 522, 539;
inscribed tiles from, ii. 358, 361, 365
ӧ $\lambda \mu$ оৎ, i. 176
Homer, references to vases in, i. 89, 132, 145, 148, 168, 172, 174, 180, 192; to potter's wheel in, i. 207;
on Cretan ethnography, i. 264;
subjects from, on vases, i. 335, 499, ii. 3 ff., 126 ff.
Homeric bowls, i. 134, 185, 499, ii. 2
Hopkinson on Melian vases, i. 302
о́п入ıтоброци́ $\alpha$, ii. 164
Hoppin on Euthymides, i. 428
Horace quoted, ii. 460, 463, 464, 469
Horae, ii. 84;
and see Seasons
Horror vacui, i. 283, 313
Horse-race, ii. 164
—— taming, ii. 166
Horsemen, ii. 166
Human figures, introduction of, on Greek vases, i. 281 ff ., 314 ff .
Hungary, inscribed tiles from, ii. 359
Hunters on vases, ii. 165, 197;
on Gaulish pottery, ii. 507, 527;
on Castor ware, ii. 544
Hut-urns in Italy, ii. 288
Hyades, ii. 81, 193
Hybla Heraea, vases from, i. 88
Hydra, ii. 98
Hydria, i. 165 ff., 372 ff., 411
Hydrophoria, ii. 173
Hygiainon, painter, i. 396

Hygieia, ii. 76, 84
Hypnos, ii. 71, 84, 193, and see 158
Hypocausts, i. 103, ii. 332, 342, 346 ff.
Hypsis, vase-painter, i. 421, 429.
Iacchos, ii. 27
Ialysos, vases from, i. 58, 152, 270
Iapygians, i. 172, ii. 323, 325; pottery of, ii. 323 ff .

Iapys, eponymous hero, ii. 327
Ikarios (?), ii. 139, and see 369
Ikaros on lamp, ii. 414; with Daidalos on vase, ii. 141

Iliad and vases, ii. 4; scenes from, ii. 126 ff .
'İíov Пع́рбıৎ, ii. 5, 133 ff.
Illuminations, use of lamps in, ii. 396
Imbrex, i. 96, ii. 341 ff.
Imbrications, i. 311, 331, ii. 219
Imitations of vases (modern), i. 40 ff .
Impasto Italico, ii. 285, 290, 295, 300
Incense-burner, i. 140
Incised lines, i. 311, 313, 314, 331;
inscriptions, ii. 237 ff., 271 ff., 359, and see Graffiti, Inscriptions;
decoration on provincial wares, ii. 505, 515
Indented patterns on provincial wares, ii. 514, 544
Individualities personified, ii. 91
Infundibulum of lamp, ii. 394
Inghirami, i. 18, 42
Inhumation, i. 145, ii. 284
Inscriptions on tiles, i. 101, ii. 348, 351 ff., 357, 358;
chronology of, ii. 360 ff .;
on lamps, i. 107, 108, ii. 420 ff.;
on vases, i. 149, ii. 236 ff.;
incised, ii. 237 ff.;
painted, ii. 243 ff.;
palaeography of, ii. 246 ff., 268 ff .;
Corinthian, i. 315 ff., ii. 250 ff.;
"Corintho-Attic," i. 325;
Ionic, i. 336, 357, ii. 252;
Cyrenaic, i. 344, ii. 250;
Naucratite, i. 345;
Attic, i. 378, 402, 418, 422, ii. 255 ff.;
Boeotian, ii. 252;
Chalcidian, ii. 253;
South Italian, ii. 271 ff.;
к $\alpha \lambda$ ós-names, i. 403, ii. 265 ff.;
artists' signatures, ii. 257 ff.;
explanatory on Attic vases, ii. 259 ff.;
exclamatory, ii. 261 ff.;
convivial, ii. 265, 524, 538;
under feet of vases (names and prices), ii. 239 ff .;
on Etruscan vases, ii. 310 ff.;
on terracotta moulds, ii. 382;
on Arretine vases, ii. 480 ff.;
on Gaulish pottery, ii. 504, 512, 517, 531;
and see Graffiti, Signatures, Stamps
Interpretation of subjects on vases, i. 21, ii. 8
Ionia, art of, i. 329, 332, 361;
pottery of, i. 62, 224, 328 ff .;
various fabrics of, i. 330;
influence of Mycenaean civilisation on, i. 277, 329 ff.;
of Oriental art, i. 331 ff .;
influence of, on Attic vases, i. 294, 295, 300, 370, 374, 382, 385, 388;
on Etruria, ii. 296, 299, 308, 317, 320;
use of incised lines in, i. 314;
B.F. fabrics in, i. 353 ff.;
arrangement of subjects on vases, ii. 206;
ornamentation, ii. 212 ff., 233;
early painting of, i. 361 ff .
Ionian islands, pottery from, i. 54;
and see Corfu
Ionic alphabet, ii. 246, 253, 271;
inscriptions, i. 357, ii. 252;
pottery in Egypt, i. 68, 345 ff.;
type of kylix, i. 357, 374
Iphigeneia, ii. 35, 124, 138
Iris, ii. 76, 128, 193
Ischia, vases from, i. 88
Isidorus on Roman pottery, ii. 464, 469, 475
Isis on lamps, ii. 412;
lamps used in worship of, ii. 403
Isola Farnese, see Veii
"Isolating" method of representation on vases, ii. 10.
"Italian Megarian " bowls, ii. 490
Italy, vases found in, i. 22, 69 ff.;
collections in, i. 29;
tombs, i. 37, ii. 284 ff.;
porcelain and enamelled wares from, i. 128, 129;
Corinthian vases in, i. 305 ff., 318, ii. 294 ff.;
imitations of Ionic pottery in, i. 358, ii. 308;
modelled vases in, i. 494;
relief-wares in, i. 496, 498, 501 ff., and see Etruscan, Roman;
early civilisation of, ii. 280 ff., and see Etruria;
terracotta architecture in, i. 98, 101, ii. 315 ff.;
sculpture, ii. 313, 371 ff.;
centres of lamp-manufacture in, ii. 427;
pottery-kilns, ii. 443, 451;
centres for Roman pottery, ii. 475 ff.;
end of terra sigillata in, ii. 495;
transition to provincial fabrics in, ii. 500, 515 ff.;
Gaulish pottery found in, ii. 498, 522, 524, 526
-- Southern, tombs in, i. 37;
vases found in, i. 79 ff.;
R.F. vase-painting in, i. 465 ff.;
fabrics of, i. 479 ff.;
end of vase-painting in, i. 487 ff .;
plastic and moulded vases in, i. 494, 498, 502;
local pottery of, ii. 323 ff .
Italynski, i. 21
Ivy-leaf patterns, ii. 221
Ixion, ii. 69
Jahn on vases, i. 20, 23, 150
Jars used in architecture, ii. 457

Jason, ii. 115
Jatta collection, i. 26, 29
Javelin-throwing, ii. 163
Jewellery on vases, ii. 202
Joubin on Clazomenae sarcophagi, i. 364
Judgment of Paris, ii. 121 ff .
Juggler on lamps, ii. 418
Jugs, see Oinochoë, Olpe
Jumping on vases, ii. 163
Juno Lanuvina, ii. 22, 103
Jupiter, Capitoline, i. 116, ii. 314, 371, 372; and see Zeus

Juvenal quoted on Roman pottery, ii. 455 ff .
Kabeiri, ii. 74;
vases from temple of, i. 52, 391, ii. 159
Kadmos, ii. 117
ко́ס́oc, i. 165;
and see Cadus
Kaineus, ii. 145
Kalais, see Boreades
Kalliades, potter, i. 411, 434, 493
к $\alpha \lambda$ 人́s-names, i. 379, 402 ff., ii. 265 ff.; list of, ii. 277

ко́ $\lambda п ц ц, ~ i . ~ 166$
ккגипти́р, i. 96
Kalymnos, vases from, i. 58
Kamaraes, vases from, i. 59; fabric so called, i. 264 ff .

Kamarina, vases from, i. 87
Kameiros, tombs at, i. 34.; vases from i. 59, 127; terracottas from, see Rhodes

ко́v $\alpha$ ßoç i. 111, 209
Kanake, ii. 141
ка́ $\nu \nu \alpha \beta$ о̧, i. 152
Kantharos, i. 187, 410
к $\rho \rho \chi$ ท́бıь, і. 188
Karlsruhe, vase-collection at, i. 28
Karo on "affected" vases, i. 387
Karpathos, tombs in, i. 34; pottery from, i. 58

Karystos, vase from, i. 55
Kassandra, ii. 134
Kastor, see Dioskuri
Keel-hauling, ii. 178

Kekrops, ii. 139
кє $\lambda \varepsilon ́ \beta \eta$, i. 169
кદ́入ŋтєऽ, ii. 164
Keos, fabric of, i. 56, 357, ii. 253
Kephalos, ii. 80, 140
кท̀ $\operatorname{\theta \alpha \nu \alpha ́tolo,~ii.~72,~} 100$
Kerameikos, i. 46, 89, 92, 231, 280
кє $\rho \alpha ́ \mu \iota \delta \varepsilon \varsigma ~ \lambda \varepsilon о \nu т о к \varepsilon \varphi \alpha \lambda о \iota, ~ і . ~ 97 ~$
кєро́ $\mu$ ıор, i. 136
кє́ $\alpha \mu о \varsigma, ~ i . ~ 89, ~ 100, ~ i i . ~ 455 ~$
Kerberos, ii. 70, 99
Kerkyon, ii. 109
кє́рขоৎ or кє́рхขоৎ, i. 195, 201
Kertch, vases from, i. 32, 60, 447, 451, 464, 497;
tiles from, i. 101;
wine-amphorae from, i. 158
Keryneian stag, ii. 97
къ $\beta \omega ́ \rho ı о \nu$, see Ciborium
Kilns for Roman pottery, existing remains of, ii. 443 ff .; detailed list of, ii. 451 ff .; representations of, see i. 215 ff .

Kimon, painter, i. 320, 397, 398, 408, 430, 455
—— statesman, i. 418
Kings, how represented on vases, ii. 97
Kirke, ii. 136
кıбби́ßıор, i. 180
Kitharoidos, see Apollo
Kittos, potter, i. 379, 391
Klagenfurt, vase from, ii. 517
Kleanthes, painter, i. 320, 395, 396
Klein on R. F. cup-painting, i. 424 ff.; on signatures of artists, ii. 257; on к $\alpha \lambda$ ós-names, ii. 266

Kleisophos, vase-painter, i. 384
Kleonae, vases from, i. 52
к $\lambda i ́ \beta \alpha \nu о \varsigma, ~ i . ~ 105$
Klitias, vase-painter, i. 370, 379, ii. 257
Klytaemnestra, ii. 137, 138
Knidos, pottery from, i. 64, 330;
lamps from, i. 108, ii. 397, 418, 423, 427; amphora-handles from, i. 157

Knossos, excavations at, i. 60, 152, 265 ff.
Knuckle-bone players, i. 125
Kodros, ii. 140

Koenen on German pottery, ii. 536
Kolchos, potter, i. 379
Kolias, Cape, i. 46, 49, 205, 370
к $\tilde{\mu} \mu \circ \varsigma$, ii. 182
Kopenhagen, vases at, i. 28, 286
кó $\rho \alpha$ ı, i. 112 ff .
коро́ $\lambda \lambda_{\imath \imath \alpha, ~ i . ~} 139$
короп $\lambda \alpha ́ \theta$ oı or короп $\lambda \alpha \sigma \tau \alpha$ í, i. 112
Kos, pottery from, i. 58, 129;
and see ii. 476
к $\omega \theta \omega \nu$, i. 140, 187
Kottabos, i. 188, ii. 167, 181
коти́ $\lambda$ ıбкоৎ, i. 184, 195
Kotyle, i. 135, 183, 212, 217
Kоиротро́ $о$ о types in terracottas, i. 123, ii. 386; on vases, ii. 30, 73;
and see Gaia
Kramer's classification of vases, i. 22
Krater, i. 167 ff., 411, 468, 482;
local South Italian, ii. 326;
Arretine, ii. 488, 501, 520;
and see ii. 464
Krause on shapes of vases, i. 150
Kreon, ii. 119
Kreousa and Ion, ii. 140
Krete, see Crete
Kretschmer on vase-inscriptions, ii. 237 ff.
Kroisos, brick used by, i. 91, 94;
represented on vase, ii. 6, 150
Kroker on Geometrical vases, i. 281
Krommyon, ii. 82, 109
Kronos, ii. 73
кр $\omega \sigma \sigma$ ós, i. 167
ки́цßıov, i. 186
куцıขобо́кор, i. 194
ки́пع $\lambda \lambda$ оv, i. 180
Kyathos, i. 179
Kybele, ii. 74
Kyklopes, i. 105, ii. 37, 171; and see Polyphemos

Kyknos, ii. 101
Kylix, i. 188 ff.; early types, i. 272, 287, 313, 341; Athenian, i. 373, 400, 409, 422 ff., 457; compared with calix, ii. 468

Kymation, i. 97;
as pattern on vases，ii． 218
Kyme，vases from，i．62， 356
Kypselos，chest of，i．315，319，320，378，ii． 236
Kyrene，goddess，i．124，343，ii．31，81，82； and see Cyrenaica

Kythera，vases from，i．54， 315
Laconia，vases from，i． 52
Laertes and Antikleia（？），ii． 137
Lagena，ii． 466
入人́́үvขos，i． 165
Lamia，ii． 149
$\lambda \alpha \mu п \alpha \delta \eta \delta \rho о \mu i ́ \alpha$ ，ii． 164
Lamps，Greek，i． 106 ff．； Roman，ii． 393 ff．； uses， 395 ff．； forms， 399 ff．； subjects， 406 ff ．； inscriptions， 420 ff ．

Landscape on vases，i．409，470，ii．204，205； in scenes on lamps，ii． 418

Lanx，ii． 468
Laokoön，ii． 134
Lararia，ii． 375
Lares on lamps，ii． 413
Larisa in Asia Minor，pottery from，i．62， 339
Larnaka，vases from，i． 66
$\lambda \alpha ́ \rho \nu \alpha \xi$, see Ossuaria
Lasimos，vase－painter，i．478，ii． 272
＂Late fine＂style，i．421， 448 ff ．
Laterariae，i．91，ii． 331
Lateres，ii．331， 335
Latin inscriptions on vases，i．485，490；
literature，references to，see Literature
Latium，vases from，i． 79
Laurel－wreaths，ii． 223
Lead used for glaze，i．130； vases repaired with，i． 147

Leaf－patterns on vases，ii． 221 ff ．
Leagros к $\alpha$ 入ós，i．403，425，430，ii．152， 267
Leather，imitations of，i．242， 243
Lebes，i．146，174；

and see Burgon
Lecce，vases from，i． 86
Leda，ii．19，120， 508
Legions，stamps of，on tiles，ii．351， 363

Lekane, i. 146, 164, 176, 469
$\lambda \varepsilon к \alpha \nu о \mu \alpha \nu \tau \varepsilon i ́ \alpha$, i. 177
Lekythos, i. 195;
B.F., i. 376;
R.F., i. 412;
white-ground, i. 48, 132, 143, 224, 456 ff., ii. 157
Lemnos personified, ii. 82
Lenormant on Iapygian pottery, ii. 327
Lentini, vases from, i. 86
$\lambda \varepsilon п \alpha \sigma т \eta ́, ~ i . ~ 165, ~ 469 ; ~$
and see ii. 471
Lesbos, vases from, i. 57;
fabrics of, i. 339, 347
Leto, ii. 30, 31
$\lambda \varepsilon v ́ к \omega \mu \alpha$, i. 397, 454, ii. 320
Lezoux, potteries of, ii. 504, 525 ff.;
kilns at, ii. 525;
potter's wheel from, ii. 438;
stamps from, ii. 440;
moulds from, ii. 441;
forms of vases at, ii. 501, 526;
ornamentation, ii. 506, 527;
enamelled ware from, i. 130;
incised vases, ii. 443, 515;
barbotine decoration, ii. 513;
other fabrics, ii. 528 ff .;
termination of potteries, ii. 432, 526
Libation-bowls, i. 140, 192, ii. 471;
see Patera, Phiale
Libation-scenes, i. 140, ii. 18, 31, 86 ff., 155
Libertus, potter, ii. 439, 521, 527, 542
Lincoln, vases from, ii. 546, 549
Liniare, i. 396
Lion's head spouts, vases with, ii. 530, 541
Lipari Islands, vases from, i. 88
Liquids, vases used for, i. 150 ff .
Literature, classical, and vases, i. 13, 132, ii. 1 ff.;
Roman pottery in, ii. 455, 475 ff.;
names of vases in, i. 148 ff ., ii. 458 ff .;
lamps in, i. 107, ii. 395 ff.;
terracottas in, i. 110, ii. 371 ff .;
subjects from, on lamps, ii. 415
Litlington, vases in tombs at, ii. 351, 456
Locri, vases from, i. 86;
terracotta reliefs from, i. 120;
white lekythi from, i. 458
Loculi, ii. 388
Loeschcke on "Corintho-Attic" vases, i. 324
Lokris, vases from, i. 53
London, tiles found in, ii. 348, 359, 363;
kilns found in, ii. 444;
pottery from, ii. 503, 529, 540;
and see British Museum

Lotos-ornament in Cyprus, i. 249, ii. 224;
in Boeotia, i. 288;
general history of, ii. 223 ff.
גoutи́pıov, i. 176
入оитрочо́роя, i. 142
Louvre Museum, i. 25, 27
Love-scenes on vases, ii. 183
Lucania, vases from, i. 83, 144, 172;
style of, i. 481;
local pottery of, ii. 324, 328
入v́ұขos, i. 107
Luckenbach on connection of vases and literature, ii. 5 ff .
Luni, terracotta sculpture from, ii. 318
Luynes, Duc de, i. 18, 22
Lycia, pottery from, i. 64
Lydian origin of Etruscans, ii. 281
Lykaon, ii. 130
Lykourgos, ii. 56, 141
Lyre-players, ii. 169
Lyric poetry and vases, ii. 6
Lyssa, ii. 91, 194
Mackenzie on Cretan pottery, i. 265 ff .
Macmillan lekythos, i. 309
Macrobius on the Sigillaria, ii. 376
Maeander-pattern, ii. 212 ff.; on R.F. vases, i. 415

Maenads on vases, ii. 55 ff., 192;
names of, ii. 65;
on lamps, ii. 411;
on Arretine vases, ii. 492, 493
Mainz, inscribed vase from, ii. 539
Makron, vase-painter, i. 436
Malta, pottery from, i. 88
Mandrokles, painter, i. 361
Mania, ii. 91
Marathon, vases from, i. 49; tile from, i. 99;
bull of, ii. 109
"Marbled" vases, ii. 523
Marine subjects (Mycenaean), i. 272, ii. 185; and see Sea-Deities

Marion, see Poli
Marne, Department of, incised pottery from, ii. 515
Marriage-scenes on vases, ii. 16, 36, 172
Marseilles, pottery found at, i. 69
Marsyas, ii. 32

Martha on Etruscan art, ii. 322
Martial quoted, ii. 376, 395, 463, 469, 478, 479
Marzabotto, terracotta pipes from, ii. 350
Masks of terracotta, i. 104, 105, 123, ii. 377; imitation of, in Canopic jars, ii. 305; use of, for gutter-tiles, ii. 344
$\mu \alpha \sigma$ тós, i. 186
Matt colour, i. 246
Maurion, potter, i. 445
Mayer on local Apulian pottery, ii. 323 ff.
Mazonomum, ii. 469
Measures, vases used as, i. 135, ii. 460, 463, 472
Medallions on Gaulish vases, ii. 441, 530 ff.
Medeia, ii. 116
Medusa, see Gorgon
Megakles к $\alpha \lambda$ ós, i. 428
—— potter, i. 445
—— statesman, i. 12, 103
Megalopolis, pottery from, i. 52
Megara, vases from, i. 53; statue of Zeus at, i. 92, 111;
temple at, i. 94
Megarian bowls, i. 53, 134, 185, 499, ii. 2; as prototypes of Roman pottery, ii. 475, 489; treasury at Olympia, i. 100

Meidias, potter, i. 446
Melampus and Proitos, ii. 141
Meleager, ii. 114
Melian reliefs, i. 120;
amphorae, i. 301;
their ornamentation, ii. 232
Melos, vases from, i. 57, 262; and see Melian

Memnon, ii. 132
—— кк入ós, i. 425
Menaidas, potter, i. 52, 301
Mending of vases, i. 39, 147
Menekrates, tomb of, i. 54
Menelaos, ii. 129, 135
Menidi, pottery from, i. 49, 273
Merope, ii. 141
Messapians on vases, ii. 151; pottery of, ii. 323 ff .

Metal vases, i. 131 ff., 201, ii. 2; use of, in Etruria, ii. 307;
at Rome, ii. 433;
imitations of. in Greece. i. 385. 495 ff.:
in Etruria, ii. 303, 307;
in Italy and Gaul, ii. 489, 528, 529, 552
Metaphysical ideas personified, ii. 90
Metapontum, vases from, i. 85;
tile from, i. 97
Metope style of decoration, i. 282, 378, ii. 208
Metopes of terracotta painted, i. 92
Mevania as pottery-centre, ii. 475, 490
Midas, ii. 144
Mikon, painter, i. 442
Milani on Canopic jars, ii. 304
Miletos as pottery-centre, i. 329, 336, 338
Military subjects on vases, ii. 175 ff.; on lamps, ii. 417; uses of bricks and tiles, ii. 332, 336, 363 ff.

Millin, i. 17
Millingen, i. 22, ii. 9
Milonidas, vase-painter, i. 315, 317
Miltiades к $\alpha \lambda$ ós, i. 403, ii. 267
मí̀то̧, i. 231;
and see Minium, Rubrica
Mining, representations of, ii. 170
Minium, i. 118, 231;
and see ii. 314
Minoan pottery, see Crete
Minor Artists, i. 374, 379, 383
Minos, ii. 144;
thalassocracy of, i. 264
Minotaur, ii. 109, 148
Mirrors, Etruscan, compared with vases, ii. 307
"Mixed" technique, Ionic, i. 331, 334, 346;
B.F. and R.F., i. 379, 386, 401

Modelling, of vases, i. 208 ff., 492 ff.; in clay, i. 6, 110, 114, ii. 372, 375, 378

Modena, see Mutina
Moirae, ii. 84
Mommo, potter, ii. 522
Money-boxes, ii. 388 ff.
Monochrome painting, i. 395
Montans, pottery of, ii. 525
Moretum quoted, ii. 395
Morra, game of, ii. 167
Mortarium, ii. 470, 550; and see 530, 541

Mother-Goddess, ii. 386; and see Koupotрó $\varphi$ о̧

IMoulas, l. IUb, $1 \perp 1$, ll. $388 ;$
for coins, i. 106, ii. 390 ff.;
for terracottas, i. 114, ii. 381;
for bricks, ii. 333;
for lamps, ii. 405;
Arretine, ii. 488, 494;
use of, in Roman pottery, ii. 438, 440
Moulins, manufacture of terracottas at, ii. 379 ff .
Mourners, i. 285, 460, 476, ii. 157, 158
Munich, collection at, i. 26, 28
Mural reliefs (Roman), ii. 365 ff.; compared with Arretine ware, ii. 439, 493

Murray on Clazomenae sarcophagus, i. 363;
on R.F. painters, i. 423 ff.;
on white-ground vases, i. 458, 461
Muses, ii. 83
Museums, i. 23 ff.;
list of, i. 27 ff .
Musicians, ii. 168, 182, 197
Mutina (Modena), vases found at, i. 71, ii. 495;
as centre for lamps, ii. 401, 427;
for vases, ii. 477
$\mu \nu$ そóc (myxus), i. 107, ii. 395
Mycenae, tombs at, i. 33; pottery from, i. 51

Mycenaean pottery, i. 269 ff.; shapes, i. 168, 181, 190, 271; subjects and ornamentation, i. 272, 276, ii. 185, 206, 232; in Rhodes, i. 58;
in Crete, i. 59, 265 ff.; in Cyprus, i. 237, 239, 244 ff.; imitations of, i. 246, 280; influence of, on later pottery:

Geometrical, i. 277 ff.;
Proto-Attic, i. 294;
Phaleron ware, i., 299;
Melian, i. 302;
Ionian, i. 329 ff., 338, 352;
in Southern Italy, ii. 324, 325
Mylasa, pottery from, i. 64, 340
Myres on Cypriote pottery, i. 240 ff .
Myrina, pottery from, i. 62, 339;
terracottas, i. 125, 126
Myrtle-wreaths, ii. 223
Mysteries, see Eleusinian
Mythological subjects, introduced at Athens, i. 296;
at Corinth, i. 314, 317 ff.;
on R.F. vases, i. 416;
on South Italian, i. 474;
types in terracottas, i. 123 ff .;
on B.F. vases, i. 376 ff.;
on R.F., i. 419
Mythology on vases, i. 12, 13, ii. 3
Naples, Museum of, i. $24,26,29,80,483$, and see i. 45 ; vases found at, i. 80;
imitations made at, i. 41,42
Narce, early settlement at, ii. 289

Nasiterna, ii. 465
Natural products personified, ii. 82
Naukratis, finds at, i. 68, 138, 338; local pottery of, i. 224, 345 ff .; other pottery at, i. 338, 341; connection with Etruria, ii. 298, 299

Nauplia, pottery from, i. 51
Nausikaa, ii. 136
Nautilus on vases, i. 272, ii. 185
Naval subjects, i. 285, 291, ii. 178
Nearchos, potter, i. 379, 383
Negroes on vases, ii. 179
Nemea personified, ii. 82
Nemean lion, ii. 95
Nemesis, ii. 91
Neolithic Age, i. 4, 5; pottery of, in Crete, i. 265, 267; remains in Etruria, ii. 283

Neoptolemos, ii. 133, 138
Neptune on Roman roof-tiles, ii. 345; and see Poseidon

Nereids, ii. 26, 130, 133
Nereus, ii. 25, 101, 189
Nestor, ii. 124;
cup of, i. 148, 172, ii. 2
Nether World, see Under-world
Netherlands, Roman pottery from, ii. 539
Network patterns, ii. 215
ขะиробпабта́, i. 121
"New Attic" reliefs, ii. 368, 407, 411, 439, 492, 493, 507
New Forest ware, ii. 547
—— Year lamps, ii. 398, 412, 420
—— York Museum, i. 26, 65
Newton, Sir Charles, i. 57, 58, 108
Nike (Victory) in terracottas, i. 125;
on vases, i. 418, ii. 85 ff., 193;
with Herakles, ii. 106;
on Roman antefix, ii. 343;
on mural reliefs, ii. 368, 369;
on lamps, ii. 413
Nikias, potter, i. 446, ii. 259
Nikosthenes, potter, i. 170, 384, 393
Nile on vases, ii. 83;
scenes on, in mural reliefs, ii. 371
Niobids, ii. 33
Nisyros, vases from, i. 58; as weapon of Poseidon, ii. 13

Nola, vases from, i. 82;
varnish of, i. 42, 46
"Nolan" amphorae, i. 82, 162, 219, 405; imitations of, i. 484

Norfolk, kilns found in, ii. 445, 449
Normandy, terracottas from, ii. 384
Northamptonshire, kilns found in, ii. 444, 543; and see Castor

Nootoí, ii. 5, 135
Nozzles of lamps, ii. 395; as basis of classification, ii. 399 ff .

Numa, pottery in use under, ii. 304, 455, 476, 477
Nursing-Mother type, see Kоирот $о$ о́ оऽ
Nymphs, ii. 19, 31, 55, 82, 92, 143, 149
Nyx, ii. 79, 193
Obba, ii. 472
Obrendarium, ii. 456
Occupations represented on vases, ii. 169 ff .
Ocriculum as pottery-centre, ii. 475, 490
Oculist's stamp on a vase, ii. 510
Odysseus on vases, ii. 128, 133, 136, 137; on lamps, ii. 414

Odyssey, subjects from, ii. 4, 135 ff.
Oedipus, ii. 117, 118
Oenophorum, ii. 464
Officina, meaning of, on tile-stamps, ii. 356, 362; use of, in Roman potters' stamps, ii. 461, 486, 509, 528, 535

Oikopheles, potter, i. 297, 379, ii. 258
Oil, amphorae used for, i. 153 ff.;
other vases used for, i. 195 ff.;
making and selling of, on vases, ii. 171, 262
oívท́puoıs, i. 180
Oinochoë, i. 177, 334, 412, 469
Oinomaos, ii. 113
Oinopion, ii. 58, 91
Oistros, ii. 91, 194
Okeanos, ii. 25
Olbia, vases from, i. 61; tiles from, i. 101; wine-amphorae from, i. 157, 158

Olla, ii. 389, 456, 457, 470, 529, 550
Olpe or olpis, i. 178;
Corinthian, i. 311;
used by Amasis, i. 382
Oltos, painter, i. 421, 429
Olympia, pottery found at, i. 52; terracotta architecture of, i. 92 ff.;
personmea, ı. ठı;
scenes at, on vases, ii. 113
Olympian deities on vases, Chap. XII. passim; on lamps, ii. 414

Olympos, scenes in, ii. 15 ff., 107
—— Mount, personified as Satyr, ii. 64, 83
Onesimos, vase-painter, i. 421, 422, 434
ǒvos, i. 199
Opaque painting on black ground, i. 226, 393, 485, 488 ff .
Oppius Restitutus, C., lamp maker, ii. 406, 425, 426
Opus doliare, ii. 330, 354, 361, 458
—— mixtum, ii. 337, 339
—— reticulatum, ii. 338
Orange, Gaulish medallions from, ii. 530 ff.
Orbetello, pottery from, i. 73
Orbiculus on tile-stamps, ii. 353, 360
Orchomenos, pottery from, i. 53
Orcio appulo, ii. 325
Orestes and his story, ii. 137
Oria, vases from, i. 86
Oriental influence in Cyprus, i. 239, 247 ff.;
in Attica, i. 295, 298;
at Corinth, i. 311, 318;
in Ionia, i. 331, 333, 334;
in Etruria, ii. 292, 296, 299, 303, 304;
motives on vases, ii. 206
Orientals on vases, ii. 178, 195, 199, 200
Ormidhia, vase from, i. 253
Ornamental patterns, origin of, ii. 210;
rectilinear, ii. 211 ff.;
curvilinear, ii. 216 ff.;
vegetable and floral, ii. 220 ff.;
treatment of, in different fabrics, ii. 232 ff .;
Mycenaean, i. 276;
Geometrical, i. 282;
Boeotian, i. 288;
Melian, i. 302;
Corinthian, i. 312 ff.;
Rhodian, i. 334;
Naucratite, i. 348;
Caeretan, i. 354;
black-figured, i. 375;
red-figured, i. 412;
South Italian, i. 468;
on Clazomenae sarcophagi, i. 365
Ornamentation of Roman pottery, how produced, ii. 438;
of Gaulish wares, ii. 520, 521, 526;
of barbotine wares, ii. 514, 544;
incised or indented, ii. 514, 546
Orpheus, ii. 68, 143, 195
Orsi, discoveries of, in Crete, i. 264 ff., 272
Orthography of Attic vases, ii. 268 ff .
ỏ $\rho$ Oootóס́ov, ii. 169, 197

Orvieto，vases from，i．74；
krater from，in Louvre，i．409，442，ii．203；
terracotta sculpture at，ii． 319
Oscan inscriptions，i．103，483，ii． 273
Oscilla，ii． 377
Osco－Samnites，i．483，ii．180，200， 324
Ossuaria，i．145，272，ii．285； and see Cinerary urn

Ostia，roof－tile from，ii． 345
Ostracism，i．12， 103

Oundle，vase from，ii． 541
Outline－drawing，i．224，320，331，334，395， 455
Owl－vases from Troy，i． 258
Owners＇names on vases，ii． 241
Oxford，Ashmolean Museum，i． 27
óそ̧́́，i．194，ii． 239
óそúß $\alpha$ мор，i．136，171，194，ii． 239
Paestum，vases from，i．82；
fabric of，i．479；
inscriptions on vases of，ii． 272
Паүкро́тıо⿱，ii． 163
Painted vases，special uses of，i． 142 ff ．； manufacture of，i． 202 ff．； classification，i． 219 ff．； earliest examples in Greece，i．239，243，260，265； in Etruria，ii．293， 306 ff．； Roman，ii．442； termination of，in Greece and Italy，i． 487 ff．，ii．310，431； and see Vase－paintings，Vases

Painters of vases represented，i．223，227， 228
Painting，Greek，i．14，320， 394 ff．， 440 ff．，450；
Ionic，i．361；
influence of，on vases，i．14，320， 394 ff．， 440 ff．，450，455，471，ii．203；
on terracotta，i．92，397，454；
Etruscan，on terracotta，ii．299， 319
Palaeography of vase－inscriptions，ii．245； of Attic inscriptions，ii． 268 ff ．

Palaestra，scenes in，ii． 162 ff．
Palaimon，i．314，ii．26， 189
Palazzolo（Acrae），vases from，i． 87
Palladion，rape of，ii． 133
Palmette－pattern，ii． 224 ff．；
on Boeotian Geometrical vases，i．288；
on B．F．，i．375；
on R．F．，i． 413 ff ．
Pamphaios，potter，i．379，420， 422 ff．，427，ii． 259
Pan，ii．58， 192
Panathenaic amphorae，i．46，69，132，145，160，389； inscriptions on，ii．264， 270

11 $10 \alpha \forall \eta \nu \alpha 1 K \alpha$, ı. 18Ь, 41U
and see Kotyle
Pandareos, ii. 141
Pandion, sons of, ii. 139
Pandora, ii. 75;
"box" of, i. 152
Panels on vases, i. 160, 169, 221, 356, 369, 373, 375, ii. 208
Panofka, theories of, i. 21, 149
Pantheon at Rome, date of brickwork, ii. 338, 360
Panticapaeum, see Kertch
Papposeilenos, ii. 65, 192
Paris, son of Priam, ii. 121 ff., 127, 195;
Judgment of, ii. 122
Paris, see Louvre
парочíц, i. 194, ii. 469
Paros, stamped amphora-handles from, i. 157; primitive pottery from, i. 262

Parrhasios, i. 450
Parthenon sculptures, and vase-paintings, i. 15, 450, 460, 464, 497; and lamps, ii. 409

Pasiades, potter, i. 379
Pasiteles, use of clay models by, i. 111, ii. 375
Passeri, theories of, i. 21;
collection of lamps, ii. 408
Pastoral scenes on lamps, ii. 418; and see Tityrus

Patella, ii. 469
Patera, ii. 471;
imitating metal, ii. 529;
and see Phiale
Paternus, potter, ii. 527
Patina, ii. 456, 468
Patroklos, ii. 123, 126, 130;
games for, ii. 131;
tomb of, ii. 131
Patroni on Italian vases, i. 467, 479, 483, ii. 323 ff.
Patterns, see Ornamental
Pausanias on use of brick and terracotta in Greece, i. 92, 98, 100; on the chest of Kypselos, ii. 236

Pavements, tiles used in, ii. 350
Pediment-style of composition, ii. 207
Pegasos, ii. 79, 114, 148
Peirithoös, ii. 111
Peisistratos, i. 304, 369
Peithinos, vase-painter, i. 421, 438
Peitho, ii. 42, 49

Pelias, funeral games for, i. 319, ii. 116
"Pelike," i. 163, 411
пह́ $\lambda \lambda \alpha$, i. 186, 391; and cf. ii. 239

Pelops, ii. 113, 195
пп $\lambda$ ós, i. 89
Pelvis, ii. 469
Penelope, ii. 135
Pentathlon, ii. 163
Penteskouphia, pinakes from, i. 51, 139, 316
Penthesileia, ii. 132
Pentheus, ii. 56, 142
Perennius, M., potter, ii. 483, 492, 494
Persephone, ii. 26 ff., 67, 189
Perseus, ii. 112, 195
Persia, vases from, i. 64
Persians on vases, i. 420, ii. 151, 179
Personal names on vases, ii. 92, 260
Personifications on vases, ii. 77 ff .
Perspective, conventional, i. 286, 312; on R.F. vases, i. 398;
on South Italian, i. 470
Perugia, vases from, i. 73
Peucetians on vases, i. 487; pottery of, ii. 323 ff .

Phaestos, pottery from, i. 60, 264
Phaëthon on Arretine vase, ii. 483
Phaidra, ii. 112
Phaleron ware, i. 49, 298
Phanagoria, vases from, i. 61, 340
Phaon, ii. 142
Pheidias, see Parthenon
Pheidippos, vase-painter, i. 424
Phiale, i. 140, 191, 490, 502;
and see Patera
Philoktetes, ii. 124
Philomela, ii. 139
Phineus, i. 136, ii. 81, 115, 143; cup with subject of, i. 357, ii. 203

Phintias, vase-painter, i. 421, 428, ii. 259
$\varphi \lambda$ v́ ккєৎ, i. 85, 473, ii. 160
Phobos on vases, ii. 90, 199; on lamps, ii. 398
as centre of fabric，i．354， 360
Phoenicians，in Cyprus，i． 247 ff．； influence of，on Etruria，ii．296， 303

Phoenissae of Euripides，scenes from，i．500，ii．414，415， 421
Phoinix，ii．126， 128
Phokis，pottery from，i． 53
Pholos，ii．102， 146
Phosphoros，ii． 79
甲оگós，meaning of，i． 215
Phrynos，potter，i．379， 384
Phthonos，ii． 49
Phylakopi，pottery of，i．57， 262
Physical conceptions personified，ii． 77 ff．， 84
Physiognomy，treatment of，on vases，ii． 202 ff．
Pictorial style on vases，i．409， 440 ff．，450， 470
Pile Cinq－Mars，ii． 337
Pinakes，Corinthian，i．51，207，216， 217 316，ii．170，249； Rhodian，i． 335

Pinax，i．194；
votive，i．139，454，and see Pinakes；
with subject of Euphorbos，i．335，ii． 249
Pindar quoted，i．132；
comparison of，with vase－subjects，ii． 6
Pipes of terracotta，i．109，ii． 347 ff．
Pisa，vases from，i． 72
Pisticci，vases from，i． 83
Pistillus，potter，ii． 383
Pistoxenos，potter，i． 423
Pitane，vases from，i．62， 339
Pitcher，see Hydria，Kalpis
ПıӨoípıa，ii． 156
Pithos，i．57，147， 151 ff．，209，216；
with reliefs，i．496，ii．292；
Etruscan，ii．292， 300
Pit－tombs of Etruria，ii． 284 ff ．
п入人íбıov，i． 96
Plastic art，i．6，110； nature of clay，i．5； principle in pottery，i．238，256，257，267，310， 491 ff．； and see Modelling of vases

Plautus quoted，ii．456，463， 476
Plicque on Lezoux pottery，ii． 525 ff ．
п入ívӨоц，i．94， 95
Pliny，traditions recorded by，i．91，92，98，110；
on early Greek painting，i．320， 394 ff．； on terracotta in Italy，ii．313，314，371，372； on Roman pottery，ii． 475

Ploutos, ii. 85
Poculum, i. 180, ii. 467
побкขıпти́р, i. 176
Poinae, ii. 69, 90
Poli (Marion), vases from, i. 67, 250, 255
Polledrara ware, ii. 297 ff.;
at Naukratis, i. 347
Pollentia, pottery of, i. 71, ii. 477
Pollux on names of vases, i. 149 ff .
Polychrome painting, i. 224, 256, 449, 456;
at Naukratis, i. 348;
in Southern Italy, i. 484;
in Etruria, ii. 299
Polydeukes, see Dioskuri
Polygnotos, painter, i. 15, 409, 421, 441 ff., 459, ii. 202, 209; vases in style of, i. 443
—— vase-painter, i. 421, 445
Polykleitos, i. 112
Polymestor, ii. 135
Polyphemos, ii. 136
Polyxena, i. 326, ii. 125, 135
Pomarico, vases from, i. 83
Pomegranate-patterns, ii. 222
Pompeii, wine-amphorae from, i. 158, ii. 462;
paintings of, relation to vases, i. 471, 485;
bricks used at, ii. 337;
tiles used at, ii. 342 ff.;
mural reliefs from, ii. 367;
terracotta statues from, ii. 374;
statuettes, ii. 375, 378;
miscellaneous terracotta objects, ii. 387;
echea, ii. 458;
Gaulish pottery at, ii. 522, 524
"Pontic" vases, i. 359
Popilius, C., potter, ii. 490
Porcelain vases, i. 126 ff.
Portraits on lamps, ii. 415
Portus on tile-stamps, ii. 363
Poseidon on vases, ii. 22 ff., 188;
in Gigantomachia, ii. 13 ff.;
on Corinthian pinakes, i. 317, ii. 23;
on lamps, ii. 409
Post-Homerica, scenes from, ii. 119 ff.
потท́คıор, i. 180
Pothos, ii. 49
Potteries, Greek, i. 89, 233;
scenes in, on vases, i. 208, 213, 216 ff., ii. 170;
of tile-makers, ii. 356;
at Arezzo, ii. 480 ff.;
in Gaul, ii. 504, 533;
importance of fixing sites of, ii. 441;
and see Kerameikos

Potters represented on vases, i. 208, 209, 213, 216 t土., 422, ii. 260; in sculpture, ii. 511;
list of Greek, ii. 273 ff.;
names or stamps of, on terracottas, ii. 379 ff.;
on lamps, ii. 406, 423 ff.;
on Arretine ware, ii. 480 ff.;
Gaulish, ii. 504, 509 ff., 522, 526;
in Germany, ii. 510, 535;
in Britain, ii. 542;
on mortars, ii. 551;
wheel used by, i. 7, 206
Pottery, invention of, i. 3 ff ;
Palaeolithic and Neolithic, i. 4;
characteristics of Greek, i. 9;
primitive Greek, i. 64, 206, 237 ff., 256 ff.;
Greek terms for, i. 89;
use of, in daily life, i. 135 ff.;
shapes, i. 148 ff ., ii. 458 ff ;
imitations of metal in, i. 201, 488, 492, 495 ff.,
and see Metal;
manufacture, 202 ff.;
unpainted domestic, i. 252, ii. 548 ff.
Pottier on Greek vases, i. 9, 298, 305, 308, 330, 367;
on Etruscan, ii. 281, 301
Pozzo-tombs in Etruria, ii. 284 ff.
Pozzuoli, see Puteoli
Praedia on tile-stamps, ii. 355
Praefericulum, ii. 471
Praefurnium, ii. 466
Preimos, lamp-maker, i. 108
Pre-Mycenaean pottery in Greece, i. 256 ff .
Priam, ii. 127, 131, 134
Priapos, potter, i. 147
Prices of vases, i. 43 ff.;
scratched under the foot, ii. 238 ff .
Primitive pottery in Cyprus, i. 236 ff.;
in Greece, 256 ff.;
in Etruria, ii. 284 ff.
Prize-vases, see Panathenaic
про́кроь, i. 167
Processions, ii. 155;
and see Judgment of Paris
поо́хооৎ, i. 178
Prokles, potter, i. 493
Prokne, ii. 139
Prokrustes, ii. 109
Prometheus, ii. 75;
as potter, ii. 378
пропла́б $\mu \alpha \tau \alpha$, i. 111, ii. 375, 378
Proteus, ii. 26, 136
прó $\theta \varepsilon \sigma \iota \varsigma, ~ i . ~ 142, ~ 459, ~ i i . ~ 157 ~$
Prothesis-amphorae, i. 142, 159, ii. 157
Proto-Attic vases, i. 159, 292 ff.

Proto-Corinthian vases, i. 305 ff., ii. 254
Provincial Roman wares, ii. 497 ff.;
as illustrating Roman art, ii. 508, 521
Psiax, vase-painter, i. 421, 429
廿икти́р, i. 150, 172, 411
Psychostasia, ii. 130, 132
Ptolemies, representations of, i. 129
Ptolemy Euergetes quoted, ii. 455
Ptoös, finds at Mount, i. 287
Pultarius, ii. 472
Punctured patterns, i. 242
пú $\alpha$ оvos, i. 105
пирорраүท́я, i. 215
Purple, use of, for details, i. 221, 231, 312, 371
"Pursuing" type on R.F. vases, i. 419
Puteals, terracotta used for, ii. 387
Puteoli as vase-centre, ii. 478, 492
Pygmies and cranes, ii. 149
Pyrrhos, potter, i. 308, ii. 254
Python, potter, i. 423, 434
—— vase-painter, i. 147, 478 ff., ii. 272
Pyxis, i. 198, 201, 412, 449;
and see Dodwell
Raimondi, restorer of vases, i. 42
Rasinius Pisanus, L., potter, ii. 485, 523
Rattles, vases used as, i. 137
Reclining figures in terracotta, i. 124; on Etruscan sarcophagi, ii. 317, 321

Red glaze, Roman, ii. 435 ff., 497; on Greek sites, ii. 476, 498;
and see Glaze
Red wares, Cypriote, i. 241, 251;
Roman, plain, ii. 549
Red-bodied amphorae, i. 161, 221, 369
Red-figured vases, technique of, i. 221; found in Cyprus, i. 255;
chronology of, i. 401;
drawing, i. 406;
shapes, i. 409 ff.;
ornamentation, i. 412 ff., ii. 234;
subjects, i. 416 ff.;
arrangement of subjects on, ii. 208;
relation to B.F., i. 368, 386, 393, 400;
Etruscan imitations of, ii. 309
Regulini-Galassi tomb at Cervetri, ii. 300
Reliefs, architectural, i. 98, ii. 315 ff., 343, 345;
terracotta, i. 119;
Roman mural, ii. 365 ff.;
Greek vases with, i. 496 ff .;
etruscan vases witn, lı. $\angle y\llcorner$, and see buccnero;
method of producing, in Roman pottery, ii. 438 ff., 505;
appliqué, at Lezoux, ii. 529;
and see Terra sigillata
Religion of Greeks, i. 13, 138 ff., ii. 155;
of Mycenaeans, i. 273
Religious uses of vases, i. 138; subjects on vases, ii. 154 ff .

Restoration of vases, i. 40, 147
Revels on vases, ii. 182
Rextugenos, potter, ii. 384
Rheinzabern, stamps from, ii. 440;
mould from, ii. 441;
kilns at, ii. 446, 450;
potteries of, ii. 504, 535;
potters' names at, ii. 510
Rheneia, vases from, i. 57, 302
Rhesos, ii. 128
Rhineland, terracottas from, ii. 380, 383; pottery of, ii. 498, 500 ff ., 534 ff .

Rhodes, tombs of, i. 34, 121;
vases found in, i. 58;
terracottas from, i. 112, 121;
пíӨol from, i. 152;
wine-amphorae and stamps from, i. 155;
typical oinochoë of, i. 177;
Mycenaean vases from, i. 274, 276;
Corinthian, i. 311;
B.F. kylikes, i. 357;
vases with reliefs, i. 497
Rhodian pottery, i. 333 ff.;
ornamentation, i. 334, ii. 225, 231, 233;
"mixed" technique of, i. 338;
found at Troy, i. 339;
compared with Naukratis, i. 345 ff.;
influence on Proto-Attic, i. 294, 295
Rhoikos, i. 110
Rhone valley as pottery-centre, ii. 440, 498, 503, 530, 533
Rhyton, i. 127, 192, 201, 211, 410, 493, 494
Riegl on ornamentation of vases, ii. 223 ff .; on Mycenaean, i. 276

Ripanus Tiberinus, potter, ii. 551
River-gods, ii. 83, 194; and see Acheloös, Nile

Rivets for mending vases, i. 147
Roach-Smith on Roman pottery, ii. 503, 508, 529, 540, 542
Robert on Polygnotos, i. 442, 445; on Megarian bowls, i. 499

Roman art, illustrated in pottery, ii. 489, 494, 507, 508, 521, 544 ff .; porcelain ware, i. 129;
subjects on mural reliefs, ii. 370;
on lamps, ii. 407, 412, 416;
villas in Britain, use of tiles in, ii. 346, 348;
Wall, pottery from, ii. 540
—— pottery, uses of, ii. 387, 455 ff.;
compared with Greek, ii. 430, 472;
limits of subject, ii. 430 ff .;
extent of use of, ii. $431,433,455,473,496$;
development of, from earlier, ii. 431, 432, 489 ff .;
termination of, ii. 432, 495;
technical processes, ii. 433 ff.;
plain wares, ii. 437, 496, 547 ff.;
kilns for, ii. 443 ff.;
shapes and names, ii. 458 ff.;
centres of manufacture, ii. 474 ff .;
transition to provincial wares, ii. 496, 500 ff.;
in Germany, ii. 504, 510, 536, 552;
in Britain, ii. 540 ff.;
and see Arretine, Gaul, Provincial wares
Romanensis, lamp-maker, i. 108, ii. 423, 427
Romano-British pottery, ii. 543 ff.;
from Wroxeter, ii. 553
Rome, collections at, i. 29;
pottery found at, i. 79, ii. 456, 461;
use of terracotta at, for sculpture, ii. 314, 372;
use of bricks and tiles at, ii. 331 ff.;
stamped tiles from, ii. 352 ff.;
evidence for dating buildings at, ii. 360;
mural reliefs from, ii. 365;
statuettes of terracotta in use at, ii. 376 ff .;
use of lamps at, ii. 393, 396;
as centre of lamp-fabric, ii. 427;
echea found at, ii. 457;
as centre for pottery, ii. 477;
Arretine stamps at, ii. 481 ff.;
provincial wares at, ii. 498, 522
Roofs and roof-tiles of terracotta, i. 96 ff., ii. 315, 344, 345
Rosettes on vases, i. 312, 334, ii. 230
Rottenburg, inscribed vases from, ii. 512
Rubrica, i. 205, ii. 404
Russia, collections in, i. 28;
vases from, i. 60;
tiles from, i. 101;
stamped wine amphorae from, i. 158;
and see Kertch, Olbia
Rutenian pottery and potters, see Graufesenque
Rutenus, potter (?), ii. 510
Ruvo, vases found at, i. 83;
furnace at, i. 215;
as centre for Apulian vases, i. 486
Sabinus, potter, ii. 508
Sacrifices, vases used in, i. 140;
representations of, ii. 155
Saeculares on lamps, ii. 396, 398, 421
Saguntum as pottery-centre, ii. 479, 499, 540
St.-Rémy-en-Rollat, potteries of, ii. 382, 385, 516;
clay of, ii. 434
Sakonides, vase-painter, i. 379, 384
Sala Consilina, local pottery from, ii. 324, 328
Salamis (Attica), personified, ii. 82; vases from, i. 54

Salmoneus, ii. 143
"Samian" ware, i. 57, 71, ii. 474 ff., 497
Samnium as pottery-centre, ii. 475
Samos, pottery of, i. 57, 336 ff., and see ii. 475
Sandwith on Cypriote pottery, i. 65, 240
oovís, i. 112, 122
Santa Agata dei Goti (Saticula), vases from, i. 81, 484
Sappho, ii. 144, 151
Sarapis on lamps, ii. 402, 409, 412
Sarcophagi of terracotta, i. 104, ii. 457; from Clazomenae, i. 62, 104, 362 ff.; Etruscan, ii. 317, 320 ff.

Sardinia, vases from, i. 88; and see Tharros

Sardis, pottery from, i. 64
Sarpedon, ii. 129
Sarteano, vases from, i. 73
Saticula, fabric of, i. 81, 484
Saturnalia, statuettes in connection with, ii. 376
Saturnus Balcaranensis, lamps from altar of, ii. 397
Satyric drama, subjects from, ii. 7, 161; mask of terracotta, i. 104, ii. 377

Satyrs, ii. 54 ff., 192;
names of, ii. 65;
Ionic, i. 353, 355;
on R.F. vases, i. 416, 417;
on mural reliefs, ii. 369;
on lamps, ii. 411
Saurias of Samos, painter, i. 361
Scale-patterns, ii. 218;
Corinthian, i. 311;
Ionic, i. 338, 352
Schliemann's excavations, i. 256
School-scenes on vases, i. 435, ii. 168, 263
Sculpture, in clay, i. 6, 110;
Etruscan, ii. 313 ff.;
at Rome, ii. 371;
use of clay models in, ii. 375;
in relation to vase-paintings, i. 15, 450
Scutra, ii. 470
Scyphi Homerici, i. 134, 185, 499, ii. 2
Scythians, on vases, ii. 179; dialect of (?), ii. 256

Sea-deities, ii. 25, 189; on Corinthian vases, i. 314, ii. 26, 189

Seasons on mural reliefs, ii. 368, 370; on Arretine vases, ii. 488, 493;
and see Spring, Horae
Seianti Thanunia, sarcophagus of, ii. 322

Seileni, ii. 54 ff., 65, 161; and see Satyrs

Selene, ii. 78, 79, 193;
on lamps, ii. 412
Selinus, tombs of, i. 37;
vases from, i. 87
Selva la Rocca, vases from, i. 76
Semele, ii. 18, 56
Semitic nations, use of brick among, i. 6, 91; and see Assyrian, Oriental

Septimius Secundanus, C., potter, ii. 511
Sepulchral stelae compared with vases, i. 461, 477, ii. 158; and see Funeral, Tomb
"Severe" style of R.F. vases, i. 420, 422 ff .
Sexes, distinction of, on early vases, i. 317, 331; and see ii. 200

Shapes of vases, i. 13, 148 ff.;
at Troy, i. 258;
at Thera, i. 261;
Mycenaean, i. 271;
Geometrical, i. 281, 287;
Proto-Attic, i. 293;
Proto-Corinthian, i. 308;
Corinthian, i. 313, 317;
Rhodian. i. 334;
Attic B.F., i. 372 ff.;
R.F., i. 409 ff.;

White-ground vases, i. 456;
South Italian, i. 468, 481, 483, 485;
Etruscan, ii. 285 ff., 302;
local Italian, ii. 325 ff.;
Roman, ii. 458 ff.;
Arretine, ii. 488;
provincial, ii. 500 ff., 505, 520, 526
Shields, devices on, ii. 198
Ships, ii. 178;
on Dipylon vases, i. 285, 291;
on lamps, ii. 417
"Short-hand" system of indicating landscape, etc., ii. 204 ff .
Sicily, history of, in relation to vases, i. 11;
tombs in, i. 37;
vases from, i. 86, 307, 311;
terracotta architecture of, i. 100
Sigeion, vases from, i. 61
Sigilla, ii. 375 ff.
Sigillaria, ii. 376
Sigillarius, ii. 511
Signatures, forms of, i. 379, 422 ff., ii. 257 ff.; of Gaulish potters, ii. 381, 509;
of German potters, ii. 510;
of lamp-makers, ii. 423 ff., 427
Sikanos, potter, i. 420, 424
Sikelos, vase-painter, i. 391
Sikyon, vases from, i. 51;
alphabet of, i. 321, 381, ii. 252;
painters of school of, i. 395

Silchester, pottery from, ii. 522
Silhouette paintings on vases, i. 220, 285, 396, 455; on Clazomenae sarcophagi, i. 362

Silphium at Kyrene, i. 342
Silver, vases coated with, i. 74, 189, 501
Simonides quoted, i. 132
Simpulum, simpuvium, ii. 471
Singing on vases, ii. 169, 182;
inscriptions denoting, ii. 261
Sinis, ii. 109
Sinus, ii. 465
Sipylos, pottery from, i. 64
Sirens, ii. 147, 196
Sisyphos, ii. 68;
and cf. ii. 264
Situla, i. 165, ii. 464;
from Daphnae, i. 350
бко́́甲ๆ, i. 175
Skiron, ii. 109
бки́чоऽ, i. 184
Skylla, ii. 26, 148, 189
$\sigma \mu \eta \mu \alpha т о Ө$ ŋ́кп, і. 198
Smikros, vase-painter, i. 421,440 , ii. 259
Smith (Cecil) on Proto-Attic vases, i. 294; on R.F. vases, i. 407; on Polledrara ware, ii. 300

Smithy of Hephaistos, ii. 37, 171
Social advantages, etc., personified, ii. 85, 91
$\sigma \omega \lambda \tilde{\eta} \nu \varepsilon \varsigma$, i. 96
Solygea, vase from, i. 51
Sophilos, vase-painter, i. 379, 380
Sorrento, vases from, i. 82
Sosias, potter, i. 421, 439
Sotades, potter, i. 191, 410, 421, 445, 457
Southern Italy, see Apulia, Campania, Lucania, Italy
Spain, Roman pottery in, ii. 479, 480, 540
Sparta personified, ii. 82
Spata, pottery from, i. 49
Sphinx, i. 249, ii. 147, 196;
Theban, ii. 117
Spiral patterns, i. 292, 302, 375, ii. 217
Sporades, pottery from, i. 57
Sport on vases, ii. 165
Spring, stamp with figure of, ii. 439, 493; and cos Caacnne

Stackelberg, i. 18, 42, 48
Stage, subjects from, see Drama
Stag-hunts, ii. 165
бта́́ $\mu \nu$ о̧, i. 163, 411;
from Daphnae, i. 352
Stamped patterns on Greek vases, i. 212
Stamps on bricks and tiles, ii. 352 ff.;
in the provinces, ii. 357;
military, ii. 363 ff.;
on dolia, ii. 459;
on wine-amphorae, i. 155 ff., ii. 461 ff.;
for figures in Roman pottery, ii. 438;
and see Inscriptions, Signatures
Stars, ii. 79
Stationes on tile-stamps, ii. 362
Statues of terracotta, i. 109, ii. 371 ff.
Statuettes of terracotta, Greek, i. 110 ff .;
Roman, ii. 375 ff.;
Gaulish, ii. 379 ff.
$\sigma \tau \varepsilon \gamma \alpha \sigma \tau \tilde{\rho} \rho \varepsilon \varsigma$, i. 96
Stelae with inscriptions on vases, ii. 272; and see Sepulchral
"Still-life" subjects, ii. 185
Stone Age, pottery of, i. 4, 9; and see Neolithic

Strabo quoted, i. 50, 134
Strenae, ii. 398
"Strong" period of R.F. vases, i. 417, 421
Studniczka on Cyrenaic vases, i. 341
Study of Greek vases, its uses, i. 10 ff.; its history, i. 16 ff .

Stymphalian birds, ii. 98
Subjects on vases, i. 12 ff .; interpretation of, i. 21, ii. 8; relation to literature, ii. 1 ff .; arrangement of, ii. 206 ff.; Mycenaean, i. 272;
Dipylon, i. 286;
Proto-Attic, i. 296;
Melian, i. 301;
Proto-Corinthian, i. 309;
Corinthian, i. 314 ff.;
Black-figured, i. 376 ff.;
Red-figured, i. 416 ff.;
White-ground, i. 457;
South Italian, i. 474 ff .;
Campanian, i. 483;
Etruscan, ii. 292, 302, 309;
Arretine, ii. 492 ff.;
provincial, ii. 507, 521, 544;
on lamps, ii. 408 ff .;
on mural reliefs, ii. 368 ff .
Sub-Mycenaean pottery, i. 246
Suetonius quoted, i. 134, ii. 336

Sun-dried bricks, i. 89 ff., ii. 331, 333
Susa (Persia), vase from, i. 64
Swallow-scene, ii. 185, 262
Swimming-scenes, ii. 173
Syra, pottery from, i. 262
Syracuse, vases from, i. 86, 307
Taleides, potter, i. 379, 380
Talos, ii. 116
Tamassos, vase from, i. 249
Tanagra, vases from, i. 53, 451;
terracottas from, i. 112, 116, 124.
Tantalos, ii. 68
Taras, ii. 144, 160
Tarentum, vases from, i. 85; moulds from, i. 115;
$\varphi \lambda$ úккєऽ at, i. 473;
as centre of pottery (?), i. 486, 488, ii. 324
Tarragona, Roman pottery from, ii. 479, 480, 540
Tarsus, lamps from, i. 108;
enamelled wares from, i. 129
Tataie lekythos, i. 80, ii. 242
Taygeta, ii. 19, 82
Technical processes, for terracottas, i. 113 ff .;
for Greek vases, i. 202 ff.;
for lamps, ii. 405;
for Roman pottery, ii. 433 ff.;
for Romano-British, ii. 545;
miscellaneous details, B.F., i. 370;
R.F., i. 405, 449;

White-ground, i. 455;
South Italian, i. 470
Tegulae, i. 96, ii. 340;
bessales, ii. 332, 348;
bipedales, ii. 332, 337, 339, 346, 351;
colliciares, deliciares, ii. 341;
mammatae, ii. 341, 346;
sesquipedales, ii. 332;
and see Tiles
Telemachos, ii. 136
Telephos, ii. 125
Tell-el-Amarna, pottery from, i. 67
Tempera painting, i. 117, 119, ii. 321, 367
Temples, use of terracotta for, in Greece, i. 92 ff.; in Italy, i. 98, 101, ii. 314;
lamps used in, ii. 397
Tenea, vases from, i. 51
Teos, pottery of, i. 64
Tereus, ii. 139
Terra sigillata, term explained, ii. 434; and see i. 503, ii. 474, 496; in Greece, ii. 476, 498;
provincial, ii. 497 ff.;
centres of fabric of, ii. 503;
Rutenian, ii. 520;
at Banassac, ii. 525;
at Lezoux, ii. 526;
in Germany, ii. 534;
in Britain, ii. 540;
combined with barbotine, ii. 529;
termination of, in Italy, ii. 495;
in the provinces, ii. 508, 526
Terracotta, use of, for bricks, i. 7, ii. 334 ff.;
for tiles, i. 96 ff., ii. 341 ff.;
in architecture, Greek, i. 92 ff.;
Etruscan, ii. 314 ff.;
at Rome and Pompeii, ii. 343 ff .;
for pipes, i. 103, ii. 349;
in tombs, i. 104, ii. 351;
for sarcophagi, i. 104, 362 ff., ii. 317, 320 ff., 457;
for coin-moulds, i. 106, ii. 390 ff.;
for impressions for seals, i. 106;
for models for statues, i. 111, ii. 375;
miscellaneous uses, i. 90, 105, ii. 387 ff.;
Greek terms for, i. 89;
invention of modelling and moulding, i. 110;
vases of, i. 118, 146, 201;
reliefs, i. 119, ii. 365 ff.;
antefixal ornaments, i. 97 ff., ii. 315, 317, 343;
architectural sculpture in Etruria, ii. 317, 318;
statues, i. 109, ii. 371 ff.;
statuettes, i. 112 ff., ii. 375 ff.;
Boeotian, i. 290;
Etruscan, ii. 313 ff.;
Gaulish, ii. 379 ff.;
Roman, ii. 373 ff.;
types, i. 121 ff .;
methods of manufacture, i. 113 ff., ii. 378;
use of colour for, i. 116. ii. 321, 322;
painted panels, i. 92, ii. 299, 319;
use of, as substitute for metal, i. 495 ff., ii. 431, 455
Terramare civilisation, ii. 283
Terranuova, see Gela
Testa, ii. 331, cf. 350
Teucheira, vases from, i. 69
Textiles, influence of, i. 312, 333, ii. 211
Thaleia, ii. 19
Thamyris, ii. 144
Thanatos, ii. 71, 84, 193
Tharros, vases from, i. 88;
porcelain ware from, i. 128
Thasos, amphora-stamps from, i. 157;
alphabet of, i. 443, ii. 271
Theatrical treatment of subjects, i. 470; subjects on vases, see Drama

Thebes, vases from, i. 52, 286, 390;
personified, ii. 82, and see 83;
legends of, ii. 116 ff.
Themis, ii. 74
Theocritus quoted, ii. 2
Theodoric, tiles of, ii. 355
Theokosmos, i. 92, 111
Theozotos. potter. i. 52. 301

Thera, finds in, i. 56;
níӨol from, i. 153;
early pottery of, i. 260 ff .
connection with Crete, i. 264;
Mycenaean vases from, i. 270
Thericleian kylikes, i. 189
$\theta \varepsilon \rho \mu \alpha \nu \tau \eta ́ \rho, ~ i . ~ 175$
Thermon metopes, i. 92
Өгриопо́тıs, i. 169, 175
Thersites, ii. 126, 132; and see i. 215
Theseus, on R.F. vases, i. 417, 432, 442;
with Minotaur, ii. 109, 298;
labours of, ii. 108 ff.;
in Hades, ii. 68, 111;
in Crete, ii. 110;
at Athens, ii. 111
Thessaly, pottery from, i. 54
Thetis, ii. 120, 130
Thiersch on Tyrrhenian amphorae, i. 324 ff .
Thoas, ii. 143
Thracians, ii. 143, 179, 200;
and see ii. 166
Thypheithides, potter, i. 147
Tickets of terracotta, ii. 388
Tigranes, potter, ii. 483
Tiles, Greek, i. 96 ff.;
inscribed, i. 101, 102;
used for tombs, i. 104
—— Roman, used as bricks, ii. 331;
for other purposes, ii. 341;
in Roman walls in Britain, ii. 332;
later use of, ii. 335;
varieties of, ii. 332, 341;
flanged, ii. 341, 342;
for roofs, ii. 342 ff .;
ornamental, ii. 343;
used for warming, ii. 346 ff.;
for pavements, ii. 350;
for tombs, ii. 351;
potteries for, ii. 356;
inscriptions on, ii. 351 ff., 357 ff., 363 ff.;
military, ii. 351, 363;
from Central Europe, ii. 357 ff.;
from Britain, ii. 342, 346, 348, 350, 359, 363;
chronological evidence of, ii. 360 ff .
Timagoras, potter, i. 379, 383
Timonidas, vase-painter, i. 315, 317, ii. 251
Tiryns, finds at, i. 51
Tischbein, i. 17
Titius, A., Arretine potter, ii. 480, 485
Tityrus on lamps, ii. 416
Tleson, potter, i. 379, 383
Toilet-scenes on vases, i. 475, ii. 172, 173; and see Aphrodite. Helen

Tombs, Greek, i. 33 ff.;
Cypriote, i. 35, 237, 250, 255, 256;
in Cyrenaica, i. 36;
in Sicily, i. 37;
in Italy, i. 37 ff.;
in Dipylon at Athens, i. 280;
in Etruria, ii. 284 ff.;
a pozzo, ii. 284;
a fossa, ii. 289;
a camera, ii. 294
of large size, ii. 300;
arrangement of vases in, i. 38;
vases used in, i. 143 ff., ii. 456, 550;
tiles used for, ii. 351;
lamps used in, ii. 397;
forms of, as depicted on vases, ii. 157, 158
Tongue-pattern, i. 375, ii. 219
Tools used in painting vases, i. 227 ff.;
by Roman potters, ii. 437 ff .
Torch-race, ii. 164
Toreutic work, influence of, on Arretine ware, ii. 489
Towneley, terracottas collected by, ii. 366, 373
Toys, of terracotta, i. 120;
vases used as, i. 137;
representations of, on vases, ii. 167
Trades on vases, ii. 169 ff
Tradition, literary and artistic, compared, i. 13, ii. 3 ff.
Tragedy and vase-paintings, i. 471, ii. 7, 162
т $\rho \propto \gamma \varepsilon ́ \lambda \alpha \varphi о$, i. 193
Traits reservés, i. 362
Treasury of Gela at Olympia, terracotta used in, i. 100
Trench-tombs in Etruria, ii. 289
Trier as pottery-centre, ii. 502, 534, 536
трıи́рпц, i. 186
Triptolemos, ii. 27, 189
Triton, ii. 25, 101, 189
Triumphs, lamps used in, ii. 396
Troad, pottery from, i. 61, 153, 330, 339; and see Troy

т тохŋ́ $\lambda \alpha$ тоऽ, of lamps, i. 107
Troilos, i. 433, ii. 125
Trojan subjects on vases, i. 322, 335, ii. 4, 119 ff.;
on mural reliefs, ii. 370;
on lamps, ii. 414
Troy, finds at, i. 61, 256, 339;
early pottery of, i. 257 ff., and see 491;
compared with Cypriote, i. 238, 240, 243;
Sack of, on vases, ii. 133
Trua, trulla, ii. 470
т $\rho$ и́ß入ıov, i. 194

Tuguria, ii. 288
Tychios, potter, i. 379, 383
Tydeus, ii. 118
Types on B.F. vases, i. 377, 388;
on R.F., i. 418 ff.;
distinctions of, ii. 187 ff.
Typhon, ii. 12, 149
Tyrrhenian amphorae, i. 160, 324 ff.
Tyrrhenians, ii. 281
Tyszkiewicz on forgeries, i. 42; on vase from Vulci, i. 77

Umbrian civilisation, ii. 282
Under-world on vases, i. 476, ii. 66 ff., 159; types of persons in, ii. 192; and see Hades

Upchurch ware, ii. 546
Urceus, ii. 465
Urna, ii. 464
Ussing on vase-shapes, i. 150 ff .
Vallisneria spiralis, i. 272, ii. 224
Varnish, black, i. 219 ff., 369, 371, 405 ff.
Vase-painters, i. 219 ff., 379 ff., 405 ff., 421 ff.
Vase-paintings, early interpretations of, i. 21; technical aspects of, i. 219 ff.; later study of, i. 235; earliest Greek, i. 239, 260, 265 ff.; decadence of, i. 462 ff ., 487 ff .; relations of, to the drama, ii. 159 ff .; to literature in general, ii. 1 ff.;
to Greek mythology, i. 13;
to painting, i. 14, 320, 395 ff., 440 ff ., 471;
to sculpture, i. 15, 450
Vases, Greek painted, value of study of, i. 10 ff .; exportations of, to Italy, i. 11, 467;
early publications of, i. 16 ff .;
collections of, i. 17, 23 ff .;
alleged Etruscan origin of, i. 18 ff ., 79;
classification, i. 22, 219 ff.;
discovery of, and arrangement in tombs, i. 33 ff .;
restorations and imitations, i. 39 ff.;
prices paid for, i. 43 ff.;
found in Italy, i. 71 ff .;
mention of, in literature, i. 132 ff .;
uses of, i. 135 ff.;
repair of, in antiquity, i. 147;
shapes of, i. 148 ff ;
manufacture, i. 202 ff.;
primitive, i. 256 ff .;
influence of, in Etruria, ii. 289 ff., 296 ff., 307 ff., 320;
compared with Roman, ii. 430, 472
Vaults, use of jars for, ii. 457
Vechten, pottery found at, ii. 522, 539
Vegetable ornament on vases, i. 312, ii. 221 ff.
Veii (Isola Farnese), Campana tomb at, i. 38, ii. 320; vases from, i. 75;
sculptors in terracotta from, ii. 372
Velius Primus, Q., potter, ii. 377
Velleia as pottery-centre, ii. 477
Venice, forgeries made at, i. 41
Venus, Gaulish, ii. 385;
on provincial wares, ii. 507, 508;
and see Aphrodite
Vetulonia, early remains at, ii. 284;
Tomba del Duce at, ii. 300
Victors in contests, ii. 164, 169, 417
Victory, see Nike
Vienna, collections at, i. 28
Vienne as pottery-centre, ii. 441, 530
Villanuova civilisation in Etruria, i. 292, ii. 284 ff.
Vindex, potter, ii. 383, 426
Vitalis, potter, ii. 522
Vitellius, story of, ii. 456
Viterbo, vases from, i. 74
Vitruvius quoted, on bricks and tiles, ii. 331, 333, 335, 339; on terracotta sculpture, ii. 371, 372;
on echea, ii. 457
Vivenzio vase, i. 45, 146, 438, ii. 134
Volca of Veii, ii. 314
Volterra, vases from, i. 72
Volutes on nozzles of lamps, ii. 400
Votive lamps, ii. 397;
offerings, ii. 156;
tablets, i. 51, 139, 316, 454, ii. 156, and see Pinax;
vases, i. 138, ii. 242
Vourva vases, i. 50, 295, 299, 324
Vulci, excavations at, i. 19, 76 ff.; tombs at, i. 37, 78, ii. 287, 291, 294;
and see Polledrara
Warrior, tomb of, ii. 158; on painted pinax, i. 397, 454

Warrior-vase (Mycenaean ?), i. 297
Warriors, on vases, i. 285, 475, 483, ii. 175 ff., 198;
Italian, i. 475, 483, ii. 180;
Oriental, ii. 178, 179;
race of, armed, ii. 164;
on lamps, ii. 417
Wave-pattern, ii. 218
Weddings, see Marriage
Wedgwood, i. 20, 41
Westerndorf, pottery of, ii. 504, 507, 535;
potters' stamps at, ii. 520
Wheel, for cutting patterns, ii. 441;
potter's, i. 7, 206, ii. 437;
earliest vases made on, in Greece, i. 260, 266;
in Etruria. ii. 290

White paint used for details, i. 294, 331, 355, 371, 407, 470
White slip, use of, for painting, i. 397; and see $\lambda \varepsilon$ v́к $\omega \mu \alpha$

White wares, Cypriote, i. 243, 244, 246, 251; Romano-British, ii. 553

White-ground vases, i. 224, 454 ff.
Wicks of lamps, i. 107, ii. 395, 403
Wide on Mycenaean pottery, i. 276; on Geometrical, i. 278 ff .

Wilisch on Corinthian vases, i. 304 ff .
Winckelmann, i. 16, 19, 79
Winds, ii. 80, 194
Wine-amphorae, i. 154 ff., ii. 460 ff.
Winged figures, i. 460, ii. 72, 90, 193, 194
Witte (J. de), i. 23
Women, games of, ii. 167; as dancers, ii. 169; as jugglers, ii. 174, 182; life of, on vases, ii. 172 ff.; dress of, ii. 200 ff.

Wrestlers, ii. 163
Writing materials, use of clay for, i. 7
Wroxeter, Romano-British pottery from, ii. 553
Xanten (Castra Vetera), pottery from, ii. 500, 501, 522, 534
Xanthippos on ostrakon, i. 12, 103
Xenokles, potter, i. 374, 379, 383
Xenophantos, potter, i. 61, 421, 447, 464
Xenotimos, potter, i. 421, 444
そó $\alpha \nu 0 \nu$ in terracotta, i. 110, 122; of Hera, ii. 21; of Apollo, ii. 34; of Artemis, ii. 35;
of Athena, ii. 40; of Dionysos, ii. 60

Yellow wares, plain Roman, ii. 548
York, stamp from, ii. 439; pottery from, ii. 443, 540

Zagreus, ii. 74
Zakro, pottery from, i. 60, 268
弓عıра́, ii. 179, 200
Zephyros, ii. 80
Zetes, see Boreades
Zethos, ii. 117
Zeus on vases, ii. 17 ff., 188; in Gigantomachia, ii. 13, 14; at birth of Athena, ii. 15; 'Еркєі̃оऽ, ii. 18; weighing souls of heroes, ii. 130, 132; on mural reliefs ii. 369.
on lamps, ii. 408
Zeuxis, i. 441, 471
Zigzag patterns, see Chevrons

## Transcriber's Note:

Errors which can be attributed to printer's mistakes have been corrected, as noted below. Lapses in punctuation are corrected with no further mention.
The author has included as Fig. 173 a table of alphabets used on Greek vases.
Inscriptions using archaic Greek characters which do not exist in the unicode character set are provided as inline images, and as such are not searchable. For instance, the character for pi ( $П$ ) resembles the modern gamma ( $Г$ ). The character upsilon (Y) frequently appears as a modern Roman V. On occasion, sigma appears in the form of a modern $C$ (the lunate sigma C).
Footnotes, which were numbered sequentially on each page, have been resequenced to be unique across the text. Cross-references to those numbers in the text have been changed to reflect this. The notes themselves have been moved to the end of each chapter.
Internal links have been provided for ease of reference.
Many references refer to the first volume of this work, and when viewed in a browser, the links will guide you to the locations in Volume I on the Project Gutenberg site.
Each plate was followed by a blank page on its verso, which have been removed here. The position of each plate, as well as that of all other figures, has been adjusted slightly to avoid falling in mid-paragraph. The pages devoted to plates were not counted in pagination.

The following anomalies regarding footnotes were observed:
On p. 31, note 108, the reference to Overbeck's Kunstmythologie Atlas failed to italicize "Atlas".

On p. 72, the reference to footnote (882) is missing from the text. The reference has been added at the end of the paragraph ending with "he floats through the air fully armed, with large wings." The description of item B 240, referred to in the note, from a contemporary edition of A Catalogue of the Greek and Etruscan Vases in the British Museum agrees with this characterization.

On p. 458, the footnote number for 3184 was missing and has been replaced.
The following table contains those textual issues which are readily attributed to printer's errors:

| p. | n. | Pylades at [o/O]mphalos | Corrected. |
| :--- | :--- | :--- | :--- |
| 138 | 1421 |  |  |
| p. |  | [r]idge-tiles | Missing 'r'. Possibly 'edge' |

345
*** END OF THE PROJECT GUTENBERG EBOOK HISTORY OF ANCIENT POTTERY: GREEK, ETRUSCAN, AND ROMAN. VOLUME 2 (OF 2) ***

Updated editions will replace the previous one-the old editions will be renamed.
Creating the works from print editions not protected by U.S. copyright law means that no one owns a United States copyright in these works, so the Foundation (and you!) can copy and distribute it in the United States without permission and without paying copyright royalties. Special rules, set forth in the General Terms of Use part of this license, apply to copying and distributing Project Gutenberg ${ }^{\mathrm{TM}}$ electronic works to protect the PROJECT GUTENBERG ${ }^{\mathrm{TM}}$ concept and trademark. Project Gutenberg is a registered trademark, and may not be used if you charge for an eBook, except by following the terms of the trademark license, including paying royalties for use of the Project Gutenberg trademark. If you do not charge anything for copies of this eBook, complying with the trademark license is very easy. You may use this eBook for nearly any purpose such as creation of derivative works, reports, performances and research. Project Gutenberg eBooks may be modified and printed and given away-you may do practically ANYTHING in the United States with eBooks not protected by U.S. copyright law. Redistribution is subject to the trademark license, especially commercial redistribution.

## START: FULL LICENSE

THE FULL PROJECT GUTENBERG LICENSE
PLEASE READ THIS BEFORE YOU DISTRIBUTE OR USE THIS WORK
To protect the Project Gutenberg ${ }^{\mathrm{TM}}$ mission of promoting the free distribution of electronic works, by using or distributing this work (or any other work associated in any way with the phrase "Project Gutenberg"), you agree to comply with all the terms of the Full Project Gutenberg ${ }^{\mathrm{TM}}$ License available with this file or online at www.gutenberg.org/license.

## Section 1. General Terms of Use and Redistributing Project Gutenberg ${ }^{\mathrm{TM}}$ electronic works

1.A. By reading or using any part of this Project Gutenberg ${ }^{\text {TM }}$ electronic work, you indicate that you have read, understand, agree to and accept all the terms of this license and intellectual property (trademark/copyright) agreement. If you do not agree to abide by all the terms of this agreement, you must cease using and return or destroy all copies of Project Gutenberg ${ }^{\text {TM }}$ electronic works in your possession. If you paid a fee for obtaining a copy of or access to a Project Gutenberg ${ }^{\text {TM }}$ electronic work and you do not agree to be bound by the terms of this agreement, you may obtain a refund from the person or entity to whom you paid the fee as set forth in paragraph 1.E.8.
1.B. "Project Gutenberg" is a registered trademark. It may only be used on or associated in any way with an electronic work by people who agree to be bound by the terms of this agreement. There are a few things that you can do with most Project Gutenberg ${ }^{\text {TM }}$ electronic works even without complying with the full terms of this agreement. See paragraph 1.C below. There are a lot of things you can do with Project Gutenberg ${ }^{\mathrm{TM}}$ electronic works if you follow the terms of this agreement and help preserve free future access to Project Gutenberg ${ }^{\text {TM }}$ electronic works. See paragraph 1.E below.
1.C. The Project Gutenberg Literary Archive Foundation ("the Foundation" or PGLAF), owns a compilation copyright in the collection of Project Gutenberg ${ }^{\mathrm{TM}}$ electronic works. Nearly all the individual works in the collection are in the public domain in the United States. If an individual work is unprotected by copyright law in the United States and you are located in the United States, we do not claim a right to prevent you from copying, distributing, performing, displaying or creating derivative works based on the work as long as all references to Project Gutenberg are removed. Of course, we hope that you will support the Project Gutenberg ${ }^{\mathrm{TM}}$ mission of promoting free access to electronic works by freely sharing Project Gutenberg ${ }^{\mathrm{TM}}$ works in compliance with the terms of this agreement for keeping the Project Gutenberg ${ }^{\mathrm{TM}}$ name associated with the work. You can easily comply with the terms of this agreement by keeping this work in the same format with its attached full Project Gutenberg ${ }^{\text {TM }}$ License when you share it without charge with others.
1.D. The copyright laws of the place where you are located also govern what you can do with this work. Copyright laws in most countries are in a constant state of change. If you are outside the United States, check the laws of your country in addition to the terms of this agreement before downloading, copying, displaying, performing, distributing or creating derivative works based on this work or any other Project Gutenberg ${ }^{\mathrm{TM}}$ work. The Foundation makes no representations concerning the copyright status of any work in any country other than the United States.

## 1.E. Unless you have removed all references to Project Gutenberg:

1.E.1. The following sentence, with active links to, or other immediate access to, the full Project Gutenberg ${ }^{\text {TM }}$ License must appear prominently whenever any copy of a Project Gutenberg ${ }^{\text {TM }}$ work (any work on which the phrase "Project Gutenberg" appears, or with which the phrase
"Project Gutenberg" is associated) is accessed, displayed, performed, viewed, copied or distributed:

This eBook is for the use of anyone anywhere in the United States and most other parts of the world at no cost and with almost no restrictions whatsoever. You may copy it, give it away or re-use it under the terms of the Project Gutenberg License included with this eBook or online at www.gutenberg.org. If you are not located in the United States, you will have to check the laws of the country where you are located before using this eBook.
1.E.2. If an individual Project Gutenberg ${ }^{\mathrm{TM}}$ electronic work is derived from texts not protected by U.S. copyright law (does not contain a notice indicating that it is posted with permission of the copyright holder), the work can be copied and distributed to anyone in the United States without paying any fees or charges. If you are redistributing or providing access to a work with the phrase "Project Gutenberg" associated with or appearing on the work, you must comply either with the requirements of paragraphs 1.E. 1 through 1.E. 7 or obtain permission for the use of the work and the Project Gutenberg ${ }^{\mathrm{TM}}$ trademark as set forth in paragraphs 1.E.8 or 1.E.9.
1.E.3. If an individual Project Gutenberg ${ }^{\mathrm{TM}}$ electronic work is posted with the permission of the copyright holder, your use and distribution must comply with both paragraphs 1.E. 1 through 1.E. 7 and any additional terms imposed by the copyright holder. Additional terms will be linked to the Project Gutenberg ${ }^{\text {TM }}$ License for all works posted with the permission of the copyright holder found at the beginning of this work.
1.E.4. Do not unlink or detach or remove the full Project Gutenberg ${ }^{\text {TM }}$ License terms from this work, or any files containing a part of this work or any other work associated with Project Gutenberg ${ }^{\mathrm{TM}}$.
1.E.5. Do not copy, display, perform, distribute or redistribute this electronic work, or any part of this electronic work, without prominently displaying the sentence set forth in paragraph
1.E. 1 with active links or immediate access to the full terms of the Project Gutenberg ${ }^{\mathrm{TM}}$ License.
1.E.6. You may convert to and distribute this work in any binary, compressed, marked up, nonproprietary or proprietary form, including any word processing or hypertext form. However, if you provide access to or distribute copies of a Project Gutenberg ${ }^{\mathrm{TM}}$ work in a format other than "Plain Vanilla ASCII" or other format used in the official version posted on the official Project Gutenberg ${ }^{\text {TM }}$ website (www.gutenberg.org), you must, at no additional cost, fee or expense to the user, provide a copy, a means of exporting a copy, or a means of obtaining a copy upon request, of the work in its original "Plain Vanilla ASCII" or other form. Any alternate format must include the full Project Gutenberg ${ }^{\mathrm{TM}}$ License as specified in paragraph 1.E.1.
1.E.7. Do not charge a fee for access to, viewing, displaying, performing, copying or distributing any Project Gutenberg ${ }^{\mathrm{TM}}$ works unless you comply with paragraph 1.E. 8 or 1.E.9.
1.E.8. You may charge a reasonable fee for copies of or providing access to or distributing Project Gutenberg ${ }^{\text {TM }}$ electronic works provided that:

- You pay a royalty fee of $20 \%$ of the gross profits you derive from the use of Project Gutenberg ${ }^{\mathrm{TM}}$ works calculated using the method you already use to calculate your applicable taxes. The fee is owed to the owner of the Project Gutenberg ${ }^{\text {TM }}$ trademark, but he has agreed to donate royalties under this paragraph to the Project Gutenberg Literary Archive Foundation. Royalty payments must be paid within 60 days following each date on which you prepare (or are legally required to prepare) your periodic tax returns. Royalty payments should be clearly marked as such and sent to the Project Gutenberg Literary Archive Foundation at the address specified in Section 4, "Information about donations to the Project Gutenberg Literary Archive Foundation."
- You provide a full refund of any money paid by a user who notifies you in writing (or by e-mail) within 30 days of receipt that $\mathrm{s} / \mathrm{he}$ does not agree to the terms of the full Project Gutenberg ${ }^{\mathrm{TM}}$. License. You must require such a user to return or destroy all copies of the works possessed in a physical medium and discontinue all use of and all access to other copies of Project Gutenberg ${ }^{\text {TM }}$ works.
- You provide, in accordance with paragraph 1.F.3, a full refund of any money paid for a work or a replacement copy, if a defect in the electronic work is discovered and reported to you within 90 days of receipt of the work.
- You comply with all other terms of this agreement for free distribution of Project Gutenberg ${ }^{\mathrm{TM}}$ works.
1.E.9. If you wish to charge a fee or distribute a Project Gutenberg ${ }^{\mathrm{TM}}$ electronic work or group of works on different terms than are set forth in this agreement, you must obtain permission in writing from the Project Gutenberg Literary Archive Foundation, the manager of the Project Gutenberg ${ }^{\mathrm{TM}}$ trademark. Contact the Foundation as set forth in Section 3 below.
1.F.
1.F.1. Project Gutenberg volunteers and employees expend considerable effort to identify, do copyright research on, transcribe and proofread works not protected by U.S. copyright law in creating the Project Gutenberg ${ }^{\mathrm{TM}}$ collection. Despite these efforts, Project Gutenberg ${ }^{\mathrm{TM}}$ electronic works, and the medium on which they may be stored, may contain "Defects," such as, but not limited to, incomplete, inaccurate or corrupt data, transcription errors, a copyright or other intellectual property infringement, a defective or damaged disk or other medium, a computer virus, or computer codes that damage or cannot be read by your equipment.
1.F.2. LIMITED WARRANTY, DISCLAIMER OF DAMAGES - Except for the "Right of Replacement or Refund" described in paragraph 1.F.3, the Project Gutenberg Literary Archive Foundation, the owner of the Project Gutenberg ${ }^{\mathrm{TM}}$ trademark, and any other party distributing a Project Gutenberg ${ }^{\mathrm{TM}}$ electronic work under this agreement, disclaim all liability to you for damages, costs and expenses, including legal fees. YOU AGREE THAT YOU HAVE NO
REMEDIES FOR NEGLIGENCE, STRICT LIABILITY, BREACH OF WARRANTY OR BREACH OF CONTRACT EXCEPT THOSE PROVIDED IN PARAGRAPH 1.F.3. YOU AGREE THAT THE FOUNDATION, THE TRADEMARK OWNER, AND ANY DISTRIBUTOR UNDER THIS AGREEMENT WILL NOT BE LIABLE TO YOU FOR ACTUAL, DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE OR INCIDENTAL DAMAGES EVEN IF YOU GIVE NOTICE OF THE POSSIBILITY OF SUCH DAMAGE.
1.F.3. LIMITED RIGHT OF REPLACEMENT OR REFUND - If you discover a defect in this electronic work within 90 days of receiving it, you can receive a refund of the money (if any) you paid for it by sending a written explanation to the person you received the work from. If you received the work on a physical medium, you must return the medium with your written explanation. The person or entity that provided you with the defective work may elect to provide a replacement copy in lieu of a refund. If you received the work electronically, the person or entity providing it to you may choose to give you a second opportunity to receive the work electronically in lieu of a refund. If the second copy is also defective, you may demand a refund in writing without further opportunities to fix the problem.
1.F.4. Except for the limited right of replacement or refund set forth in paragraph 1.F.3, this work is provided to you 'AS-IS', WITH NO OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PURPOSE.
1.F.5. Some states do not allow disclaimers of certain implied warranties or the exclusion or limitation of certain types of damages. If any disclaimer or limitation set forth in this agreement violates the law of the state applicable to this agreement, the agreement shall be interpreted to make the maximum disclaimer or limitation permitted by the applicable state law. The invalidity or unenforceability of any provision of this agreement shall not void the remaining provisions.
1.F.6. INDEMNITY - You agree to indemnify and hold the Foundation, the trademark owner, any agent or employee of the Foundation, anyone providing copies of Project Gutenberg ${ }^{\text {TM }}$ electronic works in accordance with this agreement, and any volunteers associated with the production, promotion and distribution of Project Gutenberg ${ }^{\mathrm{TM}}$ electronic works, harmless from all liability, costs and expenses, including legal fees, that arise directly or indirectly from any of the following which you do or cause to occur: (a) distribution of this or any Project Gutenberg ${ }^{\mathrm{TM}}$ work, (b) alteration, modification, or additions or deletions to any Project Gutenberg ${ }^{\mathrm{TM}}$ work, and (c) any Defect you cause.


## Section 2. Information about the Mission of Project Gutenberg ${ }^{\mathrm{TM}}$

Project Gutenberg ${ }^{\text {TM }}$ is synonymous with the free distribution of electronic works in formats readable by the widest variety of computers including obsolete, old, middle-aged and new computers. It exists because of the efforts of hundreds of volunteers and donations from people in all walks of life.

Volunteers and financial support to provide volunteers with the assistance they need are critical to reaching Project Gutenberg ${ }^{\mathrm{TM}}$ 's goals and ensuring that the Project Gutenberg ${ }^{\mathrm{TM}}$ collection will remain freely available for generations to come. In 2001, the Project Gutenberg Literary Archive Foundation was created to provide a secure and permanent future for Project Gutenberg ${ }^{\mathrm{TM}}$ and future generations. To learn more about the Project Gutenberg Literary Archive Foundation and how your efforts and donations can help, see Sections 3 and 4 and the Foundation information page at www.gutenberg.org.

## Section 3. Information about the Project Gutenberg Literary Archive Foundation

The Project Gutenberg Literary Archive Foundation is a non-profit 501(c)(3) educational corporation organized under the laws of the state of Mississippi and granted tax exempt status by the Internal Revenue Service. The Foundation's EIN or federal tax identification number is 64-6221541. Contributions to the Project Gutenberg Literary Archive Foundation are tax deductible to the full extent permitted by U.S. federal laws and your state's laws.

The Foundation's business office is located at 809 North 1500 West, Salt Lake City, UT 84116, (801) 596-1887. Email contact links and up to date contact information can be found at the Foundation's website and official page at www.gutenberg.org/contact

## Section 4. Information about Donations to the Project Gutenberg Literary Archive Foundation

Project Gutenberg ${ }^{\mathrm{TM}}$ depends upon and cannot survive without widespread public support and donations to carry out its mission of increasing the number of public domain and licensed works that can be freely distributed in machine-readable form accessible by the widest array of equipment including outdated equipment. Many small donations ( $\$ 1$ to $\$ 5,000$ ) are particularly important to maintaining tax exempt status with the IRS.

The Foundation is committed to complying with the laws regulating charities and charitable donations in all 50 states of the United States. Compliance requirements are not uniform and it takes a considerable effort, much paperwork and many fees to meet and keep up with these requirements. We do not solicit donations in locations where we have not received written confirmation of compliance. To SEND DONATIONS or determine the status of compliance for any particular state visit www.gutenberg.org/donate.

While we cannot and do not solicit contributions from states where we have not met the solicitation requirements, we know of no prohibition against accepting unsolicited donations from donors in such states who approach us with offers to donate.

International donations are gratefully accepted, but we cannot make any statements concerning tax treatment of donations received from outside the United States. U.S. laws alone swamp our small staff.

Please check the Project Gutenberg web pages for current donation methods and addresses. Donations are accepted in a number of other ways including checks, online payments and credit card donations. To donate, please visit: www.gutenberg.org/donate

## Section 5. General Information About Project Gutenberg ${ }^{\mathrm{TM}}$ electronic works

Professor Michael S. Hart was the originator of the Project Gutenberg ${ }^{\text {TM }}$ concept of a library of electronic works that could be freely shared with anyone. For forty years, he produced and distributed Project Gutenberg ${ }^{\mathrm{TM}}$ eBooks with only a loose network of volunteer support.

Project Gutenberg ${ }^{\text {TM }}$ eBooks are often created from several printed editions, all of which are confirmed as not protected by copyright in the U.S. unless a copyright notice is included. Thus, we do not necessarily keep eBooks in compliance with any particular paper edition.

Most people start at our website which has the main PG search facility: www.gutenberg.org.
This website includes information about Project Gutenberg ${ }^{\mathrm{TM}}$, including how to make donations to the Project Gutenberg Literary Archive Foundation, how to help produce our new eBooks, and how to subscribe to our email newsletter to hear about new eBooks.

