

## DATE DUE



GREEK, ETRUSCAN AND ROMAN

BRONZES


333

PORTRAIT OF A ROMAN BOY
GREEK WORK OF THE FIRST CENTURY B. C.

## THE METROPOLITAN MUSEUM OF ART

# GREEK, ETRUSCAN AND ROMAN BRONZES 

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NEW YORK
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## PREFACE

THE first important acquisition of bronzes made by The Metropolitan Museum of Art was in the years 1872 and 1876, when the collection formed by General Louis P. di Cesnola in Cyprus was purchased from him with the rest of the Cypriote antiquities. This collection includes some first-rate statuettes, such as the fifth-century athlete (No. 87) and the archaic mirror-support (No. 28). But the bulk of the bronzes are implements and utensils, largely of the Bronze and Early Iron Ages, and are of great interest in exemplifying the types of weapons, tools, etc., in use at various epochs. As in the rest of the Cesnola Collection, excavation records were unfortunately not available; but many of the bronzes could be assigned to their various periods on the evidence obtained by later excavations in Cyprus.

The next extensive purchases were made in the year 1896, when two collections were acquired, one from S. J. Baxter, of Florence, the other from Professor A. L. Frothingham, Jr. These consisted chiefly of Roman and Etruscan statuettes and implements of archaeological rather than artistic interest.

In I897, the collection received an important impetus by the gift of Henry G. Marquand of over twenty bronzes of exceptional importance. Among them were the statues of the Camillus (No. 271) and Kybele (No. 258), the statuette of seated Zeus (No. 200), two Etruscan mirrors (Nos. 797, 798), and other pieces which still rank among the finest examples in our collection.

Minor purchases were made in 1898 , when some miscellaneous bronzes. stated to have been found at Kertsch in the Crimea, were acquired, and in 1900, when a number of bronzes from Syria were bought.

The famous chariot from Monteleone (No. 40), together with the objects found with it, was purchased in 1903; and in the same year was

## PREFACE

acquired the remarkable series of objects found in an Etruscan tomb of the fourth to third century B. C. (cf. pp. 180 ff .).

Since 1906 a number of hronzes, almost all of first-rate importance, have been acquired every year, so that now our collection ranks among the best of its kind in the world.

With these purchases are also included a few loans, the beautiful Eros from Boscoreale (No. 131) and the archaic statuette of a girl (No. 56), both the property of J. Pierpont Morgan; an archaic statuette of a horse, belonging to Junius S. Morgan (No. 14), and a small handle belonging to Lockwood de Forest (No. 95).

The most important recent gift is the wonderful bronze portrait-head (No. 325) of the Benjamin Altman Collection, which is exhibited in the Altman galleries.

The Cesnola bronzes are already known from various publications; a large part of them are figured in the Atlas of the Cesnola Collection, in L. P. di Cesnola's book on Cyprus, and in G. Perrot et C. Chipiez, Histoire de l'art dans l'antiquité, volume III; A. Furtwängler published a few of the more important pieces in his article on Neue Denkmäler antiker Kunst, III, in Sitzungsberichte der kgl. bayerischen Akademie der Wissenschaften, II, 1905, pp. $24 \mathrm{Iff}$. ; and recently J. L. Myres has briefly described the whole collection in his Handbook of the Cesnola Collection.

The Etruscan chariot has been published by A. Furtwängler in BrunnBruckmann, Denkmäler griechischer und römischer Skulptur, pls. 586, 587; and some of the fine bronzes which formed part of the collection in 1905 were also described and illustrated by Furtwängler in the article on Neue Denkmäler antiker Kunst, III, already mentioned. Since 1906 all new accessions have been systematically described in the Museum Bulletin.

Under every item in this catalogue are given the date of its acquisition, the provenance when known, and a reference to any publications of it; but it should be remembered that before 1906 there was no proper system of accessioning every piece that came into the Museum, and it has, therefore, been impossible to state with certainty when every object was acquired.

The material in this catalogue has been divided into two principal classes: I. Statues, Statuettes, and Reliefs; II. Implements and Utensils. The first class includes the works of which the chief interest to us is their sculptural quality, whether independent compositions or decorative parts of other objects, now lost; the second comprises the manifold implements made by the ancients in bronze.

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Such a division seemed the most useful from many points of view. Any one studying, for instance, archaic Greek art will turn to that section and find there the sculptural pieces belonging to that period, all grouped together, except when the utensil which a statuette or relief served to decorate is still preserved; in which case, of course, the whole object is placed in its respective class of utensils. Again, the reader who wants to study the various forms of jugs, or colanders, or mirrors in use among the ancients, will find the material of this kind grouped together, irrespective of the decorations which still adhere to them. However, though for practical purposes such a division seemed both obvious and desirable, it is naturally full of apparent inconsistencies. No. 75 I , for instance, being a complete mirror, is placed among mirrors as being a valuable example of the special type of mirrors with stands in the form of statuettes. Nos. 28, 77, 86, however, being merely supports of such mirrors, and therefore of no use in exemplifying mirror forms, but important as sculptural works of a certain period, have been classed with the statuettes. Again, handles, when still attached to their respective utensils, are described with such utensils; but when separate, are either listed with the sculptural works of their period if they bear decorations of special interest, or, if more or less plain, and interesting chiefly as types of handles, are catalogued under a separate group. There are many cases of this kind, all due to the strong instinct of the ancients for decorating their simplest possessions, and all more or less self-evident, so that their enumeration is unnecessary.

The three tomb groups in this collection have been treated both collectively and individually, so that their value as groups and as separate examples can be properly appreciated.

In the various sections the material has been arranged as far as possible chronologically. Each section is preceded by a brief introductory note, with references to the chief books or articles dealing with the subject. The numbering of the objects is not continuous, frequent gaps having been left to make room for future acquisitions.

In the Introduction the technical processes of bronze-working in antiquity and the origin of the ancient patina have been discussed at considerable length. It seemed advisable to give special attention to this important side of ancient bronzes, as the subject has not been comprehensively treated in the English language since the publication of H. B. Walters' Catalogue of the Bronzes in the British Museum, in 1899, and since that time a great deal of research work has been done and important results arrived at.

## PREFACE

The drawing on the cover is a free rendering of the inlaid design on the Roman table, No. 1211.

In the preparation of this catalogue I have been greatly assisted by the generous help of many of my colleagues both in Europe and America. My thanks are especially due to Mr. John Marshall, of England, Professor John L. Myres of Oxford University, Dr. R. Zahn of the Berlin Museum, Mr. A. H. Smith, and Mr. E. J. Forsdyke of the British Museum, M. E. Pottier of the Louvre, Mrs. C. H. Hawes, Dr. T. L. Shear, Miss E. R. Hall of the University Museum in Philadelphia, Dr. L. D. Caskey of the Boston Museum of Fine Arts, Professor P. V. C. Baur of Yale University, Professor J. R. Wheeler of Columbia University, Professor G. H. Chase of Harvard University, and many others who have not only afforded me every opportunity of studying the bronzes in their charge, but have often furnished me with helpful information and counsel. Above all, I am deeply indebted for the constant advice and valuable criticism given me by the Director, Dr. Edward Robinson, who has gone through the whole catalogue both in manuscript and in proof. I wish also to acknowledge my many obligations to the other members of the staff who have assisted me in various ways.

In the classification of the Cypriote bronzes I have followed throughout that adopted by Professor John L. Myres and published in his Handbook of the Cesnola Collection of Antiquities from Cyprus, 19 ri.

Gisela M. A. Richter.

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## I N T R O D U C T I O N

## CHARACTERISTICS OF GREEK BRONZES

AREPRESENTATIVE collection of ancient bronzes forms a point of departure for the study of ancient art in general; for in it we find the expression both of high art and of decorative art. The statues and statuettes teach us the development of the history of sculpture, while the utensils and implements show everywhere evidence of the strong decorative instinct of the ancients. Today we are satisfied when each implement is made in such a way as to serve best the purpose for which it was made; but with the Greeks, and later with their Roman successors, the utility of an object was not enough, the artistic sense had also to be satisfied, and thus the humblest object of daily life was often transformed into a work of art.

Moreover, bronze played a much more important rôle in antiquity than it plays with us, for it was used for a large variety of objects for which we employ different materials. Nowadays our kitchen pots and pans are commonly of aluminium and tin; our table service is of china and glass; the fittings of our furniture are of iron, steel, and brass; our swords and daggers are of steel, as are also most of our tools. But for all such articles bronze was one of the chief materials employed by the ancients. A collection of ancient bronzes has therefore quite a different significance from that which a collection of modern bronzes would have. It can give us a vivid picture of the life of the Greeks and Romans by making us see the sort of objects by which they were surrounded and the kind of implements with which they used to perform their daily work. Furthermore, historically bronze occupies a unique position. During a period of almost two thousand years, that is, during the so-called Bronze Age (see p. xv), man went through a certain stage of civilization, the chief characteristic of which was that his tools were no longer of stone and not yet of iron,

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but were made of bronze-a fact which is of supreme importance in the dating of prehistoric tombs.

It is a truism to state that Greek art has exercised an indelible influence on all subsequent European art. Consciously or unconsciously, architects, sculptors, and decorators have been feeling this influence ever since the great creative periods of Greek history. What rôle have Greek bronzes played in this phenomenon? Even a cursory glance at a collection of Renaissance bronzes will show how deeply the metal-worker of that period felt the influence of his Greek predecessor. In fact, at that time so great was the admiration meted out to ancient art that many of the Greek works then known were copied directly over and over again without any attempt at adaptation. And in modern times we continually find motives familiar through Greek bronzes utilized in the production of sculptural and decorative work. Moreover, many of the technical processes in use today are essentially the same as those employed by the Greeks and Romans.

With this similarity of composition between ancient bronzes on the one hand and Renaissance and modern bronzes on the other, the question arises, How can we always distinguish works of these several periods from one another? The difference is chiefly one of conception and of style. In Renaissance and modern sculpture there is an element of intimacy and of individuality which never appears in ancient work; for Greek work, even in its most realistic periods, remains impersonal. To the Greek artist, the modelling of the human body in rest and in motion, the imparting of vitality to his figures, the creation of harmonious flowing lines in his compositions, were the ideals to be attained in sculptural art. He was the greatest exponent of art for art's sake; he never tried to teach a moral lesson in his work, and the expression of religious and emotional feeling or the embodiment of ideas, which was the chief concern of the artist of the later periods, was outside his ken. The Greek artist was, in fact, not so much interested in studying the individual varieties of human nature, as in trying to produce the Greek ideal of man-athletic, graceful, well-balanced, and serene. That this is a type and not a faithful portrayal of nature may or may not be so. It is possible that the Greek men and women were as physically perfect as the Greek artist of the fine periods represented them. But even in that case, and though the modelling be truthful and realistic in its details, the conception of the whole was inspired, we feel, by abstract considerations of beauty. This does not mean that there is not an infinite variety in Greek sculptural

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art-but the variety was governed by certain accepted laws developed along definite channels. It was reserved for the modern artist to approach nature unhampered by rules and traditions and to interpret her according to his own free individuality.

Technically, there are also a few points to remember which distinguish ancient bronzes from Renaissance or modern products. The ancient patina is natural, and not artificial as is that of the later specimens. In the case of some modern forgeries the ancient patina has been imitated by paint. In that case it can easily be removed by alcohol; if, however, it has been produced chemically, it will, like the ancient patina, remain unaffected by alcohol. The copies of antique torsos prevalent among Renaissance bronzes as well as in our own times, were, of course, cast as fragments and consequently have smooth breaks; a Greek work was never conceived in a mutilated condition and the breaks are always genuine fractures with raw edges.

A modern forgery can often be detected easily by the fact that it is made of brass, which is considerably yellower in tone than bronze. It must be remembered, however, that brass was used in Roman times, and therefore for that period this is not a final test. The chief difference, however, between a genuine Greek bronze and a forgery is of course stylistic. The modern forger, even if consistent from the archaeological point of riew, hardly ever succeeds in keeping out of his creations a certain feeling of self-consciousness, which is totally foreign to the Greek spirit and immediately betrays its origin.

## THE BRONZE AGE

Though once a subject of eager controversy, it is now universally adnitted that in the ancient world there was a Bronze Age which succeeded a Stone Age and preceded an Iron Age. Such arguments as that the temperature to which it is required to raise copper to separate it from its ore is much higher than that of iron, and therefore iron would be more easily obtained by primitive man, or that the ornamentation on some primitive bronzes could have been produced only by iron tools, have had to yield to the overwhelming evidence of excavations. These have shown over and over again that above the strata containing stone tools come the strata in which implements are always of bronze (or copper) and never of iron; and that these strata in their turn are succeeded by others in which iron utensils make their appearance. It is true that iron, when exca-

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vated, is generally in a very corroded condition, while bronze, covered by a protective patina, is mostly found well preserved, but it would be altogether impossible to assume that all iron before a certain period had entirely disappeared and after that time was quite often preserved. It must, however, be remembered that the Bronze Age neither began nor ended at the same time in all localities. To confine ourselves here merely to the Greek world, the Bronze Age seems to have made its appearance first at the beginning of the third millennium B. C., that is, about $3000-$ 2800. The lower limit can roughly be placed toward the end of the second millennium, about $1200-1000$ B. C. During this long period, covering almost two thousand years, weapons and tools are of bronze or copper, and iron is unknown. When iron was at last introduced, it rapidly usurped the place of bronze for all purposes in which its greater hardness and cutting power made it preferable; but bronze retained its place in many fields, where these qualities were not essential.

Bronze being an alloy of copper and tin, it is natural that there should have been a transition stage when pure copper (or copper with only the slight admixture of other metals due to a mixed ore) was used. In Cyprus, Hungary, the Lake Dwellings, and many other places we find that in the earliest strata of the "Bronze Age" the implements are of copper, not of bronze (cf. p. 382). In Egypt, though copper was used in the Old Kingdom, bronze does not apparently occur until the Middle Kingdom (cf. J. H. Breasted, History of Egypt, and edition, p. 93; W. M. Flinders Petrie, The Arts and Crafts of Ancient Egypt, p. 100). But copper unalloyed was not hard enough to prove satisfactory for most purposes; and when once the great discovery was made that by mixing copper with tin, a substance was produced which had in every way superior qualifications, the place of bronze was assured. For bronze is not only considerably harder than copper, but it is more fusible and thus better suited for casting.
H. Blümner, Technologie und Terminologie der Gewerbe und Künste, IV, pp. 57 ff ., enumerates the places from which copper was obtained br the ancients. This information is derived both from the writings of classical authors and from the remains of ancient copper mines. The list is a long one, including localities in most parts of the Greek and Roman world. Especially famous were the mines of Cyprus, and from the name of that island the name of the metal is derived. Tin does not seem to have been so plentiful (cf. Bliimner, op. cit. IV, pp. 8i ff.), and many bronzeworkers must have been dependent on its acquisition by trade. We know that the Phoenicians in their time carried on an active commerce
in that article; and with our present knowledge of the extent of Cretan trade in the preceding period, it is no longer a matter of surprise that tin could be distributed throughout the ancient world.

## ALLOYING OF BRONZE

With regard to the alloying of bronze we have a considerable amount of ancient literature (cf. H. Blünner, Technologie und Terminologie, IV, pp. ISoff.). Pliny distinguishes three varieties of Greek bronze-Delian, Aeginetan, and Corinthian - and tells for what each was chiefly used. Of these, Corinthian bronze seems to have been the most admired, and an extraordinary story was current of how it was first produced by accident. We are told that at the sack of Corinth by Munmius in B. C. I $\ddagger 6$ a number of statues of bronze, silver, and gold were melted by the heat of the conflagration and combined into one molten stream of metal. This was of such beauty that the receipt was henceforth used for Corinthian bronzes. All such accounts cannot be taken seriously nowadays; they were probably based merely on the current popular beliefs of the time. The only trustworthy information that can be obtained on this subject is from analyses of the ancient bronzes themselves. A certain number of such analyses have been made and published (cf. Blümner, op. cit., pp. I 88 ff.; H. Schliemann, Tiryns, p. 171; Ilios, p. 251 ; H. B. Walters, Catalogue of Bronzes in the British Museum, p. XXVIII); but few definite results have as yet been established, and it has not been possible in any way to identify with specific alloys the various kinds of bronze mentioned by ancient authorities. It appears, however, that the proportion of tin was less in the earliest bronzes than it became later. Thus, some axes from Troy contain only $3 . S_{+}$to $5.70 \%$ of tin. Mycenaean bronzes already show a larger amount (about io to $13 \%$ ). In Greek bronze vessels the proportion of tin is generally to to $14 \%$, and in coins from 2 to $17 \%$. In mirrors the proportion of tin is generally higher than in other bronzes (from 19 to $32 \%$ ). After the earliest period we also find traces of other metals, such as lead, iron, nickel, silver, and gold, different mixtures being probably used for special purposes. In fact, it was probably in this way that the ancients varied the appearance of their bronzes; for, as we shall see later (pp. xxvii ff.), the various colored patinas that we see today on ancient bronzes were not intentional with the makers, but later additions due to atmospheric and chemical effects.

In Roman times a white metal, consisting of seventy-six parts of cop-

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per, seven parts of tin, sixteen of lead, and one of zinc and iron, was popular. At that period brass (opéixa入kos, orichalcum) appears also to have been produced for the first time by the addition of zinc (about $\mathrm{I}-\mathbf{2 8 \%}$ ), the slight traces of zinc sometimes found in earlier bronzes being apparently due to a mixed ore.

## TECHNICAL PROCESSES OF BRONZE-WORKING IN ANTIQUITY

Since bronze occupied so important a position in ancient times, it was natural that bronze-workers developed an extraordinary facility in manipulating this material. In fact, in spite of our increased technical resources, we could hardly produce nowadays work of the same delicacy and finish as is shown in some of the ancient examples.
Casting In order to fashion the bronze into the required forms the ancients used two methods, casting and hammering. The knowledge of solid casting goes back to very early times-earlier than the Greeks themselves realized, for they ascribed the invention of metal casting to the Samian artists Rhoikos and Theodoros, who lived in the seventh century B.C. (cf. Pausanias, VIII, 14, 8; IX, $4 \mathrm{r}, \mathrm{I} ; \mathrm{X}, 38,5$ ); but in Egypt this process was in use at least as early as the XI Dynasty, and we possess several statuettes of Mycenaean and geometric origin undoubtedly produced by casting.

The methods of ancient casting are ascertained chiefly from a study of the monuments themselves and an investigation of the processes in use today; for the scant literary evidence at our disposal gives us practically no details (cf. H. Blümner, Technologie und Terminologie, IV, p. 279 ; H. B. Walters, Catalogue of Bronzes in the British Museum, p. XXXII f.).

Both in solid and in hollow casting the Greeks apparently used the socalled cire-perdu process, which is still employed in a modified form at the present day as giving better results than the method of casting from sand moulds. Solid casting was comparatively simple. The object to be cast was first modelled in wax, and then surrounded with a mixture of clay and sand which formed a kind of mantle. When this was thoroughly dry, an opening was made at an appropriate place and the whole heated until all the wax melted away. The molten metal was then poured in, a few vent holes having previously been made in the mantle to allow for the escape of the air. After cooling, the mantle was broken up and the
bronze was ready for the finishing touches. But bronzes cast solid had the obvious disadvantage of using up a great deal of material and being of great weight, at least if the object was to be of considerable size. Hollow casting must therefore have been invented at an early date. It is uncertain how far back this process goes, but at least we know that throughout classical times it was in constant use, side by side with the solid casting, which was retained for smaller objects, being simpler and quicker. In our collection by far the majority of the statuettes are cast solid; the larger pieces, however, such as the running Eros (No. 131), the Aphrodite (No. 121), the Camillus (No. 271), the Kybele (No. 258), and the portrait-heads and statues (Nos. 325, 330, 333, 335, 350), are all hollow.

The process of hollow casting as used by the Greeks was apparently as follows: A core of clay or plaster was surrounded with a layer of wax, which was modelled in the shape of the required statue and made the same thickness that the bronze was to be. Before the application of the outer mantle, wax rods, to act as future gates and vents, were probably attached to the figure, in the same way that they are nowadays; for one of the difficulties of bronze casting is that the metal cools quickly and therefore has to be conveyed to the various cavities through several channels at the same time. Moreover, in order to keep the interior core from becoming displaced on the disappearance of the wax, metal rods were inserted, which pierced through the wax, joining the core to the mantle. When the outer mantle had been added, the whole was treated as in solid casting, that is, it was heated in a furnace until the wax all disappeared, whereupon the liquid bronze was poured in, which now occupied only the spaces left vacant by the molten wax instead of the whole interior. When the mantle was broken up there emerged the bronze, from which had to be removed the inside core, the rods which had been inserted to keep the core in place, and the gates and vents, which were now of bronze. Also, any defects of casting caused by air-bubbles and other accidents had to be repaired, generally by means of small patches, such as are still visible on many ancient bronze works (cf. e. g., Nos. 271, 335. 350, $44^{\circ}$ in our collection; and W. Deonna, Daremberg et Saglio, Dictionnaire, statuaria, p. 1490 ).

The chief difference between this process and the similar methods in use at present is that nowadays, ${ }^{1}$ instead of modelling the wax over the

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core (or entire in the case of solid casting), a mould of plaster or gelatine is first taken of the original model, and from this, which shows all the details of the model in reverse, the wax model is obtained. By multiplying the number of moulds any number of wax models can be made. These, indeed, are often retouched by the artist before they are cast in bronze, but the work is infinitely simpler than having to model the wax all over again for every new replica. E. Pernice has convincingly shown (cf. Oesterreichische Jahreshefte, VII, 1904, pp. 15t ff.) that until Hellenistic times (end of fourth century) Greek bronzes were always cast in the somewhat laborious manner described above; but that from that time onward the casting from moulds must have been learned, for not only do we sometimes find the several ornaments of a utensil so identical in all particulars that they can only have been made from the same mould; but actual moulds which must have been used for metal casting and some bronzes showing the seams of the moulds have been found (cf. Pernice, op. cit., p. 158). It is .further interesting to observe that even at the time when this simpler process was known, the older one was often practised (cf. Pernice, op. cit., p. 175). It follows, therefore, that in earlier Greek art every bronze piece, whether statue, statuette, or simple ornament, is an original work. And it is characteristic of the love of the Greeks for originality and their instinctive aversion to mechanical work that even later, when they could avail themselves of the simpler process, they often preferred to model each specimen afresh.

An examination of the examples in our collection bears out the truth of these statements. All pairs of handles, attachments, or ornaments, all feet from furniture, cauldrons, etc., if dating from pre-Hellenistic times, invariably show slight differences in design or measurements which make it impossible that they should have been cast from the same mould (cf. Nos. 47, 48, 50, 51, 52, 53, 54, 55, 91, 92, 108, 109, 533, 534, 538, 621, $624,1182-1187,1188,1189,1190$, ingi. Of these some still adhere to the utensil to which they belong; others are separate pieces). Similar objects of the Hellenistic or Roman period are often likewise not duplicates (cf. Nos. $247,248,406,407,408,409,723,724$ ); but occasionally are clearly cast from the same mould (cf. Nos. 249, 250).

It used to be supposed that open stone moulds were sometimes used for bronze casting, several such moulds having actually been found, some provided with casting channels. (Besides those referred to by E. Pernice, Oesterreichische Jahreshefte, VII, 1904, pp. 180 ff., cf. H. B. Hawes, Gournia, pl. III, 67.) E. Pernice (loc. cit.), however, has proved by
means of actual experiments, that a metal like bronze could not have been cast directly in such moulds: but that the moulds must have served either for lead casting, or for pouring in molten wax for the formation of models later transformed into bronze by means of the cire perdu process, or for hammering thin plates of gold.

It should be noted that on a red-figured kylix in the Berlin Museum is a representation of a bronze foundry (A. Furtwängler, Berliner Vasensammlung, No. 2294). We learn from this that large statues were cast in separate pieces, which were afterward welded together. This evidence is borne out by an examination of the ancient statues themselves, which shows that throughout Greek and Roman times statues were not cast all in one piece, the head, as well as other parts of the body, being generally made separately (cf. E. Pernice, Oesterreichische Jahreshefte, XI, igo8, pp. 212 ff.; W. Deonna, Daremberg et Saglio, Dictionnaire, statuaria, p. 1490; cf. also in this connection the statuette No. 127, in which both forearms were made separately). Moreover, during the later periods it seems also to have been customary to cast the head itself in more than one piece (cf. Pernice, loc. cit.).

The process of hammering bronze into thin plates of various shapes was known in Greek lands as far back as the second city of Troy, that is, the third millennium B. C., when we find it used with great skill for the fashioning of vessels (cf. H. Schmidt, Schliemann's Sammlung trojanischer Altertümer, Nos. 5817 ff .). The earliest bronze statues of the Greeks were apparently made by hammering, the several parts being joined by rivets. And even when this technique was abandoned for statues in favor of the casting process, it was retained for producing bronze vessels. The hammering could be done either free-hand or over a model. In the former process the metal was worked from the inside; in the latter, from the outside. Gradually the Greeks attained great proficiency in this technique and were able to hammer large objects out of one piece of metal. But the most remarkable work was achieved by them in their repoussé reliefs, which surpass everything of the kind that has since been produced. The process seems to have been as follows: The design of the relief was first traced out with a needle on the back side of a bronze plate. The plate was then heated and hammered out over lead or pitch. By reversing the plate and continuing to heat it parts of the relief could be hammered back, and this operation was repeated several times until the design was completed.

In ancient times repoussé reliefs were popularly used for the decora-

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tion of furniture and other objects. In this museum we have a magnificent example of such work in the Etruscan Chariot (No. 40), the body of which was made of wood, and the exterior entirely sheathed with bronze repoussé plates. Other splendid examples are the series of Greek mirrorcovers (Nos. 757 ff .), in some of which the relief is so high and the bronze so thin that it must have required extraordinary skill to attain this result without breaking the bronze. Compare also the reliefs Nos. 94, 108, io9, 111, 112, 135, and the bowls Nos. 535, 536.

Hammering was not employed merely for producing thin plates of metal, but also for shaping the bronzes into all manner of forms; for bronze, like iron, could be forged with the help of great heat. Accordingly we find that tools and utensils as well as bronze wire and chains were produced in this manner.

It has already been pointed out that bronze statues were not made all in one piece. Similarly bronze vessels and utensils-whether cast or hanmered-generally had their handles, feet, or other attachments made in separate pieces. For joining these various parts the ancients used two methods, riveting and soldering. The former was the earlier and was employed on the primitive Greek statues made of hammered bronze plates; but even later, when soldering became a common practice, attachments of utensils were often fastened by means of rivets. The ancients were acquainted both with soft soldering, by means of tin, and hard soldering, by means of a copper alloy (cf. H. Blümner, Technologie und Terminologie, IV, pp. 290 ff.; E. Pernice, Jahrbuch des deutschen archäologischen Instituts, XVI, 1901, pp. 62 ff.). Tin soldering was the method most generally employed, and since the tin becomes easily disintegrated, bronze pieces so joined have in many cases become detached. This circumstance, as well as the fact that the bodies of utensils were commonly made of very thin bronze, while the attachments were cast much thicker, accounts for the fact that so many single handles and other parts of vessels, etc., have been found, without the objects to which they were joined.
Engrating The various operations described above all relate to the actual fashioning of the bronze into the required shapes. There are a number of other technical processes which were practised by the ancients with a view to decorating the bronzes after their forms were finished. Of these the most important, and one in which they acquired consummate skill, is that of engraving.

In the earlier works this art was hampered by inadequate tools; for

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bronze has not sufficient hardness to serve well as a cutting instrument. But in the seventh century B. C. the invention was made of producing iron tools of steel-like hardness, and from this the art of engraving received a great impulse (cf. E. Pernice, Zeitschrift für Bildende Kunst, XXI, 1910, p. 223). It was used both for details on statues and utensils and for independent compositions. Thus on statues, statuettes, and reliefs the hair is often represented by delicately incised lines; so are the folds and ornaments on the garments, and any other accessories that could be appropriately treated in this manner. Moreover, on utensits and implements we frequently find decorative borders or ornaments rendered by engraving. Fine examples of such incised work are in our collection, above all, the Etruscan chariot (No. 40), on which the relief decorations are everywhere ornamented with engravings of wonderful delicacy and precision. For other noteworthy examples of. the ornaments on the garment of the Etruscan female statuette, No. 56, and the rendering of hair and other details on Nos. 61, 62, 63, 106, 107, 760, 765. These are only a few of the more important examples; it is impossible to enumerate all, for the tool of the engraver has left its mark on the majority of the better-worked bronzes.

Of even greater artistic value than such detail work are the independent incised compositions. These are found chiefly on the Etruscan cistae, and on Etruscan and Greek mirrors. On the Etruscan mirrors they regularly occupy the back of the mirror disk (cf. Nos. 797 ff .), while on the Greek specimens they are only occasionally found on the inside of mirror covers (cf. e. g. No. 760). For other incised scenes in our collection not on cistae or mirrors, cf. the bowls Nos. 535,536 , and the plaque No. 126.

The tools and methods employed for engraving by the ancients appear to have been of considerable variety (cf. H. Blümner, Technologie und Terminologie, IV , pp. 275 ff .). The most important tool was a chisel with a sharp point, with which could be incised either a continuous line, or a punctured line (consisting of consecutive dots). The other tools most frequently used were apparently a flat chisel and punches of different outlines, which were pressed into the bronze with the help of a hammer. It is not certain whether these tools were used chiefly free-hand or with the help of a tread-wheel. Some of the decorations, such as the concentric circles on the mirrors Nos. 780 ff ., could have been produced only with the turner's lathe (cf. E. Pernice, Oesterreichische Jahreshefte, VIII, 1905, pp. 5 Iff.).

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It has been a subject of discussion in what manner the engravings on the cistae and mirrors were produced, whether by incisions with a pointed tool, or hammered in with a chisel, or by etching (cf. G. Matthies, Die praenestinischen Spiegel, pp. 17 ff . and the references cited on p . 17 , Note 1). Here it can only be stated that the observations made by G. Matthies (loc. cit.), which led him to the conclusion that the lines were made by an engraver's sharp tool, are borne out by our examples. The engraved lines on our Etruscan examples are of triangular outline and on many (cf. especially Nos. 797, 798, 799, 800, 827) is visible the central shallow hole attributed by Matthies to the mark left by the peg which kept the mirror in position while the right hand held the chisel and the left turned the mirror.

Another means of decorating bronzes which was practised by the ancients with great success was that of inlaying. The object was to give the bronze a slightly polychrome appearance by picking out certain details or by adding decorative borders in various metals or other substances. ${ }^{I}$ This art was known to the Mycenaeans, as is shown by the beautiful inlaid patterns on the swords from Mycenae; and it was popular with both the Greeks and the Romans. The examples of decorative patterns in inlay work at present known to us date chiefly from the Hellenistic and Roman times (cf. e. g. Nos. 403 and 121 I in this collection); but as E. Pernice has pointed out (cf. Zeitschrift für Bildende Kunst, XXI, 1910, p. 223), it is possible that such decoration is hidden on some earlier Greek bronzes by the patina. In any case, examples of inlay work in the form of details picked out in another substance are abundant in classical bronzes of all periods. The substances to be inlaid consisted of other metals (gold, silver, and copper); niello (a blackish substance produced by a mixture of silver, lead, and copper with sulphur); glass paste; precious or semi-precious stones; ivory; and occasionally alabaster, amber, and pearls. The insertion of these substances required slightly different techniques. For the inlay of metals, or damaskeening, as this process is technically known, the pattern was first cut deeply into the bronze, whereupon the little plates or strips of metal were inserted in the grooves and hammered in. No use of riveting or soldering was made, but care was taken to undercut the incisions slightly, so that the plates would be kept in place by the protruding edges.

The niello technique was rather more complicated. After the silver,

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copper, lead, and sulphur had been melted together in the required proportions and the blackish substance called niello formed, this was ground up, mixed with borax, and applied not only to the incised grooves which were to be inlaid, but all over the surface of the bronze. The whole was then heated over a brazier, so that the niello should adhere to the metal. On cooling, it was carefully scraped from the surface of the bronze and retained only in the incised pattern, which now appeared a dull black color.

The parts of statues and statuettes selected by the ancients for such inlay work are of course those which in nature also stand out as of a different color from their background. Thus, in the human body we find the eyes, the eyebrows and lids, the hair and beard, the lips, the teeth, the nails, and the nipples of the breasts so accentuated; on the garments, the borders, the buttons, and such details could be brought out in this manner; and similarly jewelry and attributes lent themselves admirably to such treatment. For a detailed account of such inlays cf. F. Wieseler, Ueber die Einlegung und Verzierung von Werken aus Bronze, in Nachrichten der kgl. Gesellschaft der Wissenschaften zu Göttingen, 1886, I, pp. 29 ff ., and I $886, \mathrm{XV}$, pp. 48 ff . Here only a few references can be given to the examples of inlay work in our collection. In a number of our statuettes the eyes were inlaid. The materials commonly used for this purpose were silver (cf. Nos. 110, 131, 133, 134, 270, 271), glass paste (cf. No. 4), and bronze; but occasionally ivory (cf. No. 333), amber, alabaster, and precious or semi-precious stones (cf. No. 333) are also found. Frequently the iris and pupil were inlaid in a different material from the whites of the eyes, which in that case were commonly retained in bronze; in such cases the irises or pupils are almost always missing (cf. Nos.78, 86, 111 , 112, 128, 200, 201, 207, 270). In Nos. 40, 121, 330, 1182-1187 the entire eyes have fallen out. The Camillus, No. 271, has copper on the lips and on the bands of the garment. The sceptre-head from Cyprus, No. 1814, shows inlay of red enamel. On the statuette of Poseidon, No. I10, the nipples of the breast were inserted separately, but are now missing. On the panther, No. 403, the spots are of silver. On the central panel of the chariot, No. 40, the mouth of Medusa was evidently inlaid, but at present it shows as a mere cavity. The figure of Kybele (No. 258) has holes in her ears for the insertion of earrings, which were probably of gold. But the finest and most elaborate example of such work in our collection is the little statuette of a Mimus, No. 127, which has not only silver eyes and teeth, but niello on the hair and beard, as well as on the little buttons of the sleeves; it is indeed a little masterpiece of bronze decorative work.

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Of inlaid ornamental borders the Museum owns two splendid examples -the fine wreath of silver and niello on the base of the panther, No. 403, and the decorations on the bronze bindings of the table, No. i21t, also of silver and niello.

Besides engraving and inlaying there are a few other processes occasionally employed by the ancients with the purpose of adding to the general effect of their bronzes. By cutting away pieces of the bronze according to a definite pattern, open-work decorations were obtained (cf. Nos. 1062, 1089-1093 in this collection). Similarly the backgrounds were sometimes cut away from reliefs along both outer and inner contours. Such reliefs are generally termed à jour (cf. Nos. 505, 761, 1094). The cutting could be done either with scissors, if the bronze was very thin, or with a chisel and hammer over an anvil (cf. H. Blümner, Technologie und Terminologie, IV, p. 254 f.).

Bronzes were not infrequently gilt or silvered (cf. W. Deonna, Daremberg et Saglio, Dictionnaire, statuaria, p. 1492 f.; H. Blümner, Technologie und Terminologie, IV, pp. 308 ff ., 318 ff .). Of this practice we have both literary and monumental evidence. Pausanias occasionally refers to gilt statues (cf. e. g. X, 18, 7; X, 14, 7); and Pliny in his usual rambling way describes the technical process of gilding at some length (cf. XXXIII, 64). Actual examples of gilt and silvered bronzes are not rare (cf. H. Blümner, loc. cit.; W. Deonna, loc. cit.; H. B. Walters, Catalogue of Bronzes in the British Museum, p. XXXVI f.; F. Wieseler, Nachrichten von der kgl. Gesellschaft der Wissenschaften zu Göttingen, 1886, p. 482; also the wreath on the mirror disk No. 759 in our collection).

The gilding and silvering could be applied in two ways: in the form of actual gold or silver plates, which were hammered on the object so as to assume its shape; or in the form of gold and silver leaf. In order to fix the latter on the bronze, mercury was employed. It is uncertain whether the process was the same as that used today, when the mercury and gold (or silver) are melted together to form a pasty constituency with which the bronze is smeared; or whether the bronze was merely rubbed with mercury and then covered with the gold (or silver) leaf. In both cases the mercury was caused to disappear by the application of heat, whereupon the metal leaf was left secure.

Ancient writers sometimes refer to a process supposed to have been practised in ancient times by which the bronze was mixed with other metals, such as silver, or iron, and thereby made to assume a special color in certain places. Such are the well-known stories of statues of Iokaste

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and of Athamas in which pallor and a flushed color in the cheeks were said to have been produced in that manner (cf. Plutarch, Quaestiones Conviviales, V, i, 2, p. $67+$ A; Pliny, Historia Naturalis, XXXIV, 1+0). Nobody would now credit the possibility of alloying bronze in a way to produce such results; but the stories seem to point to the possibility that occasionally the sculptor had recourse to painting the surface of his bronzes.

On the subject of technical processes in ancient bronze working of.
E. Pernice Untersuchungen zur antiken Toreutik, in Oesterreichische Jahreshefte, VII, pp. $15+f f . ;$ VIII, pp. 51 ff .; XI, pp. 212 ff.; Bronzepatina und Bronzetechnik im Altertum, in Zeitschrift für Bildende Kunst, XXI, 1910, pp. 219-224.
W. Deonna Daremberg et Saglio, Dictionnaire, statuaria, pp. if 88 ff.
H. Blümner Technologie und Terminologie der Gewerbe und Künste bei Griechen und Römern, IV (1887) (a new edition is in preparation).
H. B. Walters Catalogue of Bronzes in the British Museum, pp. XXXIX ff. (1899).
H. Lüer Technik der Bronzeplastik, in Monographien des Kunstgewerbes, IV , pp. 19 ff .
L. Lewin
F. Wieseler

Über die Einlegung und Verzierung von Werken aus Bronze, in Nachrichten von der kgl. Gesellschaft der Wissenschaften zu Göttingen, 1886, pp. 29 ff.

## PATINA

It is a curious anomaly that nowadays we cover many of our bronzes with an artificial darkish tone, and thus obtain artificially a patina similar in appearance to that produced by nature on ancient specimens. For the Greeks and Romans themselves-to judge by what evidence we have -kept their bronzes in their original color, and thereby had the double advantage of a rich golden tone and a beautiful play of reflected lights on the surface. If the modern mind prefers to imagine that the ancient statues and statuettes always appeared in the subdued hues they have now acquired, this is due to the same feeling that makes it shrink from the suggestion of colored marble statues and architecture. We have

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grown accustomed to white marbles and dark bronzes, and lack imagination to picture them different and still beautiful; and we have a preconceived idea that the ancients were "classicists" and loved severe and quiet effects. If we could only remember that the Greeks were above all a joyous, imaginative people, living in a land with southern skies and rich color effects, we should not be afraid to associate splendor and brilliancy with them.

That the patina on ancient bronzes is natural and not artificial, i. e., that it was caused by various atmospheric effects and chemical combinations, is shown both by the evidence gleaned from ancient writings and inscriptions, and by the bronzes themselves.

First, with regard to the bronzes:
(1) There are a number of utensils and implements which could have served their original purpose only if the bronze were kept in its natural brilliant finish. Mirrors must have been bright to serve for reflection. Surgical instruments would not be covered with any colored substance, but left as clean and pure as possible. Weapons and tools both looked better and were more useful unencumbered by a surface coating. And the bronze bracelets, necklaces, and rings would certainly be kept bright and shiny to resemble as far as possible the gold and silver jewelry for which they served as substitutes. All these bronzes have now a patina which is identical with that found on the statuettes and other objects. It is, therefore, reasonable to suppose that the patina on those other objects was likewise a later addition.
(2) Some bronzes are decorated, as we have seen above (pp. xxiv ff.), with other materials, such as niello, silver, and copper. In some of these the effect of the decoration was entirely dependent on the fact that the bronze had its original bright appearance. Thus, the niello inlay on the table from Boscoreale in our collection (No. 1211) is now hardly distinguishable from the dark-green bronze; but originally the bright silver, the golden bronze, and the black niello must have formed a very effective combination. Again, to take another example from our own collection, in the statuette of a Mimus (No. 127), the beard and the little buttons on the sleeves which are inlaid with niello can now be seen only with difficulty, as the bronze and the niello are much the same color. The artist would certainly not have taken so much trouble for so little effect. His work is explicable only if we imagine the statuette in bright bronze, from which the dark niello stood out in contrast. Another example from our collection might be cited, the silver cup with bronze handle from Falerii (No. 579),

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in which the addition of the bronze would be much more appropriate if we suppose it to have been as bright and shiny as the silver it served to decorate.
(3) It is noticeable that bronzes from the same locality are generally covered with the same kind of patina. For instance, some Roman bronzes from Campania in the British Museum have a bright apple-green color (cf. H. B. Walters, Catalogue of Bronzes in the British Museum, p. XXXV); the Etruscan bronzes from the Lake of Falterona in the British Museum are covered with a brownish-green patina (cf. H. B. Walters, loc. cit.); bronzes from Falerii are apt to show a smooth turquoise-blue patina (cf. e. g. Nos. $488-490,570-573,578$, 580 in our collection); the Boscoreale bronzes have a rough green patina with dark-blue patches (cf. e. g. No. I318 in our collection); and the bronzes of Dodona are almost invariably distinguished by a patina of great beauty and finish (cf. L. Heuzey, in C. Carapanos, Dodone, p. 217; R. Kekulé von Stradonitz und H. Winnefeld, Bronzen aus Dodona, p. 32). It is only reasonable to suppose that this similarity is caused by the fact that the bronzes were exposed to the same conditions after burial; for they must have been made in various places and workshops, as we know definitely at least in the case of Dodona, where the bronzes consisted chiefly of offerings from pilgrims from all parts of Greece.

The most important allusions of ancient authors to the subject of the patina of bronzes are found in Plutarch and in Pliny. In Plutarch, De Pythiae oraculis, 395 B f., a number of visitors to the sanctuary of Apollo at Delphi are made to discuss the question whether the patina on the bronze group in front of which they are standing is natural or artificial. One of them is admiring the beautiful surface of the bronze, which resembles neither dirt nor rust, but looks as if it had been dipped in a bath of bril-
 oưoè $\ddot{\imath} \varphi, \beta \alpha \phi \grave{\eta}$ jè kvóvov $\sigma \tau i \lambda \beta$ ouros). "I wonder," he adds, "whether the ancient masters used a certain mixture or preparation on their bronzes?"
 In the discussion that follows, various suggestions are made to explain the presence of the patina by physical conditions; for instance, that it is due to the action of the atmosphere which enters the bronze and forces out the rust; or that the bronze itself when it gets old exhales the rust. The scientific value of such theories is, of course, of little account. But it is of great importance that Plutarch in the second century B. C. had no reason to believe in an artificial patina, but clearly decides in favor of a
patina acquired by natural causes. Also, it follows indirectly that in his own time bronzes were kept in their natural finish; otherwise, why should the Delphic visitors be surprised at the presence of a patina on Greek bronzes?

The passage in Pliny (Historia Naturalis, XXXIV, 1 5) with the most important bearing on this subject runs as follows: "The ancients painted their statues with mineral pitch, which makes it more surprising that they used to gild them. I do not know whether this is a Roman invention, but there are no ancient examples of it in Rome" (Bitumine antiqui tinguebant eas [i. e. the bronze figures], quo magis mirum est placuisse auro integere; hoc nescio an Romanum fuerit inventum, certe etiam Romae non habet vetustatem). Some authorities have quoted this passage as evidence in favor of the use of an artificial patina. But as E. Pernice has pointed out (Oesterreichische Jahreshefte, XIII, 1910, p. 104), it can be variously interpreted. Pliny may mean that it is surprising that the ancients covered their bronzes with bitumen because the effect was the opposite from that obtained by gilding, or because the bitumen covered the gilding, or because the bitumen gave the same appearance to the bronze as the gilding, and therefore made gilding unnecessary. Pernice decides in favor of the last meaning, basing his argument on experiments made by himself of using pitch diluted with turpentine as a wash on brightly polished bronze. The wash, he claims, increased rather than diminished the brightness of the bronze and at the same time protected the surface from atmospheric effects. This interpretation is further borne out by another remark of Pliny (Historia Naturalis, XXXIV, 99) in which liquid pitch is coupled with oil as a good preventive against the formation of rust on bronze (aera extersa robiginem celerius trahunt, quam neglecta, nisi oleo perunguantur. Servari ea optime in liquida pice tradunt).

There are two other passages (XXXV, 182 and XV, 34) in which Pliny speaks of besmearing bronze objects with bitumen or amurca (dregs of oil); but here the purpose is clearly to protect not statues or works of art, but articles of common use, just as we should paint our iron gratings or besmear our brass with vaseline or grease to keep them from getting rusty and tarnished. They have therefore no bearing on the immediate question.

Of greater importance than Pliny's doubtful comments is an inscription from Chios of the fourth century B. C. (quoted by E. Pernice, op. cit., p. 106), in which instructions are given for the restoration of a bronze statue of a tyrannicide. In it the clerks of the market are told to see to

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 $\dot{\epsilon} \pi \tau \mu \epsilon \epsilon \bar{\epsilon} \sigma \theta \alpha \iota$ тov̀s $\dot{\alpha} \gamma \sigma \rho \alpha \nu \dot{\partial} \mu o u s$ ), and again, the clerk is instructed to see that the statue be provided with a garland and kept bright ( $\dot{\epsilon} \tau \mu \epsilon \lambda \epsilon i \sigma \theta \alpha \iota$ $\tau \dot{\eta} s \epsilon i \kappa o ́ v o s ~ o ̈ \pi \omega s$ $\sigma \tau \epsilon \phi \alpha \nu \omega \dot{\eta} \sigma \epsilon \tau \alpha \iota$ тє ккi $\lambda \alpha \mu \pi \rho o ̀ s ~ \ddot{\epsilon} \sigma \tau \alpha \iota)$. From this it is clear that patina was considered as something detrimental to the bright appearance of the bronze.

Lastly should be mentioned some papyri giving the accounts of the temple of Jupiter Capitolinus in Arsinoë in the year 215 A. D. (quoted by Pernice, op. cit., p. 107 f.). Among the items are three which deal with the treatment of bronze statues and utensils. This treatment which is referred to as $\alpha \lambda \epsilon \psi \psi s$, or anointment, is entrusted to a man specially detailed for this work ( $\chi \alpha \lambda$ кoup $\gamma \dot{s}$ ). Here again special provisions seem to have been taken to guard against the formation of patina and to preserve the bright color of the bronzes.

An examination of the patina itself shows an almost endless variety of color and consistency. It appears in divers shades of green, brown, blue, black, and gray; it sometimes presents a crusty, rough exterior; at other times it is smooth and glossy. Moreover, besides this outward crust, which is generally as thin as writing-paper, but can be of considerable thickness, there is noticeable in many specimens a layer of reddish color. The various analyses which have been made seem to show that two circumstances influence the formation of a patina: the composition of the bronze itself, and the material in which it was buried. For bronze, being an alloy, naturally differs according to the proportion and the smelting of its constituent metals; and these various metals seem to react chemically under certain conditions, while no reaction will take place in others. Thus it has been observed that bronzes buried in peat mud are merely covered with a black earthy mass, which on removal shows the metallic lustre of the bronze; bronzes found in water usually have a coating of calcareous deposit; while the bronzes found buried in the earth or in graves always show the enveloping layer known as patina. The composition of this patina has been the subject of much study, and a number of analyses have been made. Dr. F. Rathgen in his valuable book on The Preservation of Antiquities (English edition, 1905) gives extracts from a number of works on this subject. It appears that the patina is produced by the gradual change of the copper, tin, zinc, and lead which make up the bronze, into carbonates, oxides, chlorides, the formation being dependent on the special conditions to which a specific bronze is exposed. The reddish layer already referred to has been attributed to the formation of

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cuprous oxide (cf. Rathgen, op. cit., p. 16). No exact statement as to what conditions produce that sort of patina can as yet be made, as the study on this subject is still in its initial stage. A perusal of the various theories quoted by Dr. Rathgen will show the present state of our knowledge.

On the subject of patina cf.

1. Heuzey, in C. Carapanos, Dodone, p. 217 (1878).
H. Lechat, Bulletin de correspondance hellénique, XV, i89I, pp. 473 ff.; and in Revue archéologique, XXVIII, 1896, p. 33 I.
F. de Villenoisy, Revue archéologique, XXVIII, i896, pp. 67, i94.
R. Kekulé von Stradonitz und H. Winnefeld, Bronzen aus Dodona in den kgl. Museen zu Berlin, pp. 32 ff. (1909).
E. Pernice, Die Werkkunst, IV, 1909, 9, pp. 137 ff., 10, pp. 151 ff.; Oesterreichische Jahreshefte, XIII, 1910, pp. 102 ff.; Zeitschrift für Bildende Kunst, XXI, 1910, p. 219 f.
O. A. Rhousopoulos, Archiv für die Geschichte der Naturwissenschaft und der Technik, Leipzig, 4, p. 102.
F. Rathgen, The Preservation of Antiquities, pp. 15 ff. (English edition, 1905).

## THE BRONZE DISEASE

Here must be mentioned a peculiar change which sometimes takes place in ancient bronzes even after they have been dug up and are exposed merely to atmospheric conditions. This change, which is popularly known as the bronze disease, first shows itself by the formation of a powdery efflorescence of light-green color at one or more points on the surface. Gradually the affected spots grow more numerous, spread, and unite until the whole bronze is destroyed. The destruction is sometimes so rapid that an ancient coin may be converted into a shapeless, powdery mass in a few months; at other times the diseased spot grows more slowly and after several months the change may be hardly perceptible. L. Mond and G. Cuboni in an interesting article on this disease in the Atti della Reale Accademia dei Lincei, 1893, pp. 498 ff ., have attributed it to the action of bacteria. It has since, however, been shown that the real cause is probably the presence of chlorine in the patina and the action on the bronze of sodium chloride (cf. F. Rathgen, The Preservation of Antiquities, English edition, 1905, p. 46 ).

Various remedies have been suggested for this pernicious disease. F. Rathgen, op. cit., pp. 125 ff ., quotes the Finkener and the Krefting xxxii

## INTRODUCTION

methods, both of which are reduction processes. In these the compounds in the bronze are reduced again to metal, and the chlorine thus liberated forms chemical compounds, which may be subsequently washed out with water. These methods are applicable chiefly to bronzes in an advanced state of decay. They are not so appropriate for bronzes in which the disease is in its early stage and shows itself merely by one or more powdery efflorescences. Bronzes so affected have been successfully treated in this Museum for several years according to instructions given us by M. Alfred André of Paris. It is owing to the rare generosity of M. André that I am able to publish the receipt of this treatment, which he prefers to make known, "so that he may help in the conservation of the masterpieces of ancient art," rather than to keep it as a trade secret. The process is as follows:-The green powder is first removed with the greatest delicacy by means of the point of a needle and a little brush. Then the bronze is placed in a very dry place, or preferably in a drying oven of mild temperature, about $86^{\circ}$ Fahrenheit, so as to remove every trace of moisture. It is advisable to put the bronze in a box containing sifted sawdust, turning it orer from time to time. A few days must be given to this drying process. The Palestine bitumen, liquefied in spirits of turpentine, is applied to the diseased spots, allowed to penetrate, and then (after about half an hour) rubbed off the surface. The operation is performed by means of a small brush, preferably of sable, very fine and rather hard, so as to take only a little of the liquid at a time. The preparation is obtained by crushing the bitumen into small pieces, placing these in a small pot, and then pouring over them spirits of turpentine; the pieces will be entirely dissolved at the end of two or three days. The solution should then form a sort of black varnish and be of the consistency of thin syrup; if it is too thick, it will not penetrate and must be thinned with a little of the spirits. A second dose, this time a little thicker, can be applied at least twenty-four hours after the first; and, if necessary, even a third dose can be given after a few days. The great advantage of this method over those of Finkener and Krefting is that only the diseased spots on the bronze are touched, and the rest of the surface is not affected in any way. It can therefore be used without any fear of hurting the patina or the general appearance of the bronze.

The varying amount of moisture in our atmosphere favors the spread of the disease, and it is therefore advisable to place bronzes either in cases which are absolutely air-tight or which contain sticks of hydrate of potassium (caustic potash) or some other dehydrating agent. The latter are

## INTRODUCTION

placed inside the case in a small cup of hard metal, such as iron, dipped in melted paraffin near the upper edge. (The cup may be covered with a wooden casing provided with a few holes.) The moisture in the air gradually dissolves the sticks, which should then be renewed. They usually last from three to six months, sometimes longer.

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## I

STATUES, STATUETTES
AND RELIEFS

## STATUES, STATUETTES AND RELIEFS

FROMI<br>BEFORE SEVENTH CENTURY B.C. TO THIRD CENTURY A.D.

NOWADAIS, when Museums are filled with ancient marble figures and only isolated examples of statues in bronze have survived, it is difficult to realize that, at least until the fourth century B.C., bronze was the favorite material employed by Greek sculptors for large single figures, and that, though from the time of Praxiteles marble statues became more popular, bronze statues continued in favor. Pliny (Historia Naturalis, XXXIV, f), speaking of the large number of bronze statues in his day, says that private dwellings were so full of them that they might be mistaken for some public place. In the fifth century A.D. the number of bronze statues in Rome was estimated at three thousand seven hundred. (On this subject cf. R. Lanciani, Ancient Rome in the Light of Recent Discoveries, pp. $28_{4} \mathrm{ff}$.) The reasons for the disappearance of the majority of these bronze statues are obvious. They had the double disadvantage of being comparatively light and of being made of a material which had an intrinsic value. The result was that when the Romans systematically despoiled Greece to beautify their own cities, the bronze sculptures, being more easily portable, were naturally favored; and when later the barbarians swept down on Italy, these bronze statues, as well as those produced by the Romans themselves, were placed in the melting-pot and turned into valuable spoils.

The bronze statuettes, on the other hand, being of more modest proportions and thus of less value, largely escaped this fate, and it is on them that our knowledge of sculptural work in bronze is at present chiefly based. These statuettes appear to have served a number of purposes. A large quantity of them were doubtless ornamental figures and used for the same

## STATUES, STATUETTES, AND RELIEFS

decorative purposes that bronze figurines are nowadays. The number of small bronzes found in the famous villa at Herculaneum sufficiently testifies to the prevalence of this custom. Thus we may assume that the many bronze statuettes reproducing Greek originals were set up as ornaments in the rooms of educated Romans. Often the statuettes were not designed as a complete whole but formed parts of utensils, such as handles of mirrors or saucepans (cf. Nos. 28, 77, 86, 751 in this collection) or the terminating figures of candelabra or kottaboi (cf. Nos. 1299, 1830 in this collection).

Besides such obvious ornamental uses, the ancient statuettes served for some special purposes, such as dedicatory offerings, cult statues, amulets, etc. That they were used as votive offerings to deities is shown both by the fact that a large number have been discovered in shrines and temples (cf. A. Furtwängler, Olympia, IV, Die Bronzen, pp. 28 ff.; Bullettino dell' Instituto, 1838 , p. $66 ; 1845$, p. $96 ; 1857$, p. I 55), and by the dedicatory inscriptions on some of the bronzes (cf. e.g. Nos. 58, 59 in this collection).

As cult statues they were used, of course, chiefly in private worship. In Pompeii a number of statuettes were found in niches in private houses and street shrines and could be identified with household and other divinities (cf. under No. 265 in this collection). In Pompeii also it could be observed that some marble statues and bronze figures had special connection with definite portions of the dwelling-house, particularly with the fountains.

Some bronze statuettes of small dimensions are provided with a ring for suspension. These were probably used as amulets, a practice which has, we know, survived in the southern countries of Europe to the present time.

Finally must be mentioned the well-known custom of the ancients of placing dedicatory offerings in the tombs. So widespread and common was this usage that we can safely say that the majority of extant terracotta figurines, as well as of clay and glass vases, have been derived from this source. Similarly, bronze vessels and utensils have been found in graves in large quantities; but it should be noted that the presence of bronze statuettes in ancient burials, especially in Greek lands, is far less common.

Though in many cases bronze statuettes were evidently copies of famous originals, they were doubtless often original creations. Here again we may take recourse to modern parallels. An important work of large sculpture is often reproduced on a small scale in bronze; and frequently the change of scale does not detract from the original conception; but as a rule, nowadays as well as in ancient times, a bronze statuette is created for its
own sake, the effect of a full size and a diminutive figure being so different that their creation must necessarily be distinct.

Barring this unavoidable difference of conception, the history of bronze statuettes can be said to be identical with the history of Greek and Roman sculpture. The statuettes show the same succession of periods and styles, they underwent the same influences wrought by historical events, and they present many of the same problems as the larger sculptural works. We do not propose, therefore, to tell here the remarkable story of the development of Greek plastic art-of its early struggles to break away from primitive methods and conventions and its final achievement in expressing, for the first time in the history of art, the human form as it actually is. This must be studied at length in the many books dealing exclusively with this subject. It is enough here to say that the story can be followed in most of its phases in our collection of bronzes, which comprises works of the archaic, the transitional, the fine, the Hellenistic, and the Roman epochs. The material has been classified according to periods, as far as possible, while connections with special schools or styles have been noted under the individual examples.

A word of explanation is necessary with regard to the material classed under the Roman period. As is well known, Greek works were extensively copied in Roman times, especially in the early Imperial period. In fact, most of the marble statues which have come down to us date from that epoch; and the same applies to the bronze statuettes. In this catalogue all works which are not of genuine Greek workmanship-whether reproducing Greek types or of later origin-have been assigned to the period in which they were actually made. Such dates have had to be assigned almost exclusively on stylistic grounds, excavation data being seldom procurable. But though this treatment may be open to error, the difference between genuine Greek works and even the best of Roman copies is generally so marked that the distinction is in most cases easy to draw.

It is not always so simple to make a sharp division between Greek and Etruscan work, especially during the archaic period. At that time contact between the two countries was very close and doubtless many Greek artists actually resided in Etruria and worked for the Etruscan market. Consequently, the best Etruscan work of that period approximates at times so closely to the Greek that, especially when an object is of small dimensions and so offers little scope for stylistic peculiarities, the line of demarcation is not always possible to draw safely. In this catalogue, therefore, Etruscan statuettes of Hellenic style have been mostly classed under the same general heading as the Greek works, though their Etruscan origin is of
course noted in each case when determinable. On the other hand, a series of statuettes of rough workmanship, which have been found in Etruria and elsewhere in Italy in great quantities, and which bear little relation to contemporary Greek art, has been grouped together separately (cf. Nos. 145-197). Likewise, Etruscan mirrors form a distinct class, and are so treated in this catalogue (cf. Nos. 797 ff.).

As has been explained above (cf. p. vii), with the statues and statuettes have been classed a number of works, both in relief and in the round, which really formed parts of utensils, but of which the chief interest to us lies in their sculptural quality.

## PRE-CLASSICAL PERIOD

BEFORE SEVENTH CENTURY B.C.
I MALE STATUETTE standing with his weight on both legs, and both arms lowered and held away from the body. Beneath each foot is a tang for insertion in a base.

The execution is very primitive and recalls the early figurines found at Olympia (cf. A. Furtwängler, Olympia, IV, Die Bronzen, pls. XV ff.) and elsewhere in the lowest strata. Compare also the primitive figures from Italy, Nos. ${ }^{4} 45-150$, described in a separate section.

Height, $2 \frac{3}{\frac{3}{2}} \mathrm{in}$. ( 7 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 5025. Cast solid. Smooth, green patina. No missing parts. Acc. No. C.B. 333.


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2 STATUETTE OF A STAG, roughly but vigorously modelled in early style.

Probably ninth or eighth century B.C. Compare the primitive figures of animals found at Olympia (A. Furtwängler, Olympia, IV, Die Bronzen, pls. X ff.). Like them, this probably served as a votive offering.

Height, $5 \frac{1}{16}$ in. ( 12.9 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4766. Illustrated in the Cesnola Atlas, III, pl. LXV,


## PRE-CLASSICAL PERIOD-ARCHAIC PERIOD

5; L. P. di Cesnola, Ćprus, pl. NXA, where it is said to have been found at Curium. Cast solid. The surface is much corroded and there are several holes and cracks. Acc. No. C.B. 346.

3 STATUETTE OF A GOAT, modelled in the same rough and vigorous style as No. 2. Probably ninth or eighth century B.C.

Height, $4^{\frac{1}{8}}$ in. ( 10.5 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4767. Cast solid. The surface is much corroded and there are a number of cracks with a largish piece missing at the back. Acc. No. C.B. $3+8$.

4 STATUETTE OF A BIRD, perhaps an eagle, with spread wings, hooked beak, and eyes inlaid with glass paste (one missing). A curious


3 mane-like crest is indicated by a series of long locks modelled in relief, which fall from the top of the head. It is uncertain to which object it served as an ornament. The style shows Oriental influence; probably eighth century B.C.

Height, $4^{\frac{1}{8}}$ in. ( 10.3 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4765 . Illustrated in the Cesnola Atlas, III, pl. LXT, 4; L. P. di Cesnola, Cyprus, pl. NXX. Cast solid. Crusty, greenish patina with blue patches. The right wing was broken in several pieces and reat-


4 tached; and the left wing and right leg were also broken off and reattached. In each foot is a rivet-hole. The surface is somewhat corroded. Acc. No. C.B. 328 .

## ARCHAIC PERIOD

SEVENTH CENTURY TO BEGINNING OF FIFTH CENTURY B.C.

## I3 ORNAMENT OF A VESSEL OR PIECE OF FURNITURE.

 Two lions, worked in à jour relief, slightly convex, are heraldically grouped on each side of a lotos flower. One fore paw of each is raised; the other is placed on the lotos flower; the heads are turned backward. The raised fore paws are surmounted by a small plate pierced for the purpose of attachment. The ornament ends below in a narrow plinth, decorated on
## STATUES, STATUETTES, AND RELIEFS

its outer side with groups of incised lines and provided with a protruding inner edge which has two rivet-holes.

The style both of the lions and of the lotos flower is that of the early archaic period, probably the seventh century B.C. The workmanship is good; the lions are carefully modelled and their manes are covered with delicately incised lines.

An exactly similar ornament, derived probably from the same object, is in the Museum of Berlin (cf. Aus dem Berliner Museum, R. Kekulé


13 von Stradonitz dargebracht, 1909, pl. V), and is stated to have come from the Hinterland of Saloniki.

Height, $5^{\frac{3}{4}} \mathrm{in}$. ( 14.6 cm .). Width, 6 in . 15.2 cm .). Date of purchase uncertain (before 1906). Unpublished. Heary casting. Rough, green patina, largely covered with brown incrustations. The only missing part is a piece from the lower side of the plinth. Acc. No. G.R. 391.

I4 STATUETTE OF A WALKING HORSE. It is represented with a long and slender body, short legs, a long tail reaching to the base (to which it is attached), and large flat hoofs. The mane is indicated by a series of ridges across the neck covered with hatched lines. The forelock is divided into a top-knot rising between the ears and a heavy fringe which falls across the forehead. A curious line of demarcation running along the body from the fore leg to the hind leg on either side divides the upper from the lower part. It should be noriced that the position of the legs is incorrect. The right fore leg being advanced, the right, not the left hind leg should be put forward.

The figure, though stiff and angular, is modelled in a vigorous style. The type of the horse is of great interest. It is later than that of the long-legged horses, on the Dipylon and Melian vases (cf.


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A. Conze, Melische Thongefässe, pl. II) and on the wall-paintings in the tomb at Veii (cf. G. Dennis, The Cities and Cemeteries of Etruria, I, p. 34), which latter should be compared for the similar treatment of the hoofs. On the other hand, the horses on the François vase (dated not later than the middle of the sixth century B.C.) are of a rather more developed type and must be of a slightly later date than ours, even if we allow for the fact that proficiency in modelling in the round was attained more slowly than it was in drawing. The date of our horse must, therefore, be placed in the early part of the sixth century B.C. The line running along the body on either side reminds us of drawings on Orientalizing Corinthian and Ionic vases. The custom of tying a horse's forelock into a top-knot seems to have been in use from the early times (cf. an example on a Mycenaean vase figured in
 of St. Mark.

Length, $6 \frac{1}{5} \mathrm{in}$. $\left(15.5 \mathrm{~cm}\right.$.). Height, $6 \frac{9}{16} \mathrm{in}$. ( 16.6 cm .). Lent by Junius S. Morgan, 1907. Said to have been found in Southern Italy, probably near Locri. Unpublished. Cast solid. Patina green and crusty. The two fore legs have been broken off at their hoofs, and the tail and forelock have been broken off and reattached, but the only missing part is the tip of the left ear.

I5 HANDLE OF A LARGE VASE, probably a hydria. The upper attachment, by which it was joined to the rim, is decorated at each end with a sphinx wearing a headdress, with a curious loop attached to the wings. Between the sphinxes, in the centre, is a tonguepattern. The lower attachment, which was fitted to the shoulder of the vase, has two lateral projections, each fashioned in the form of a male (!) reslining figure, of which the one on the right holds a phiale in his right hand and a patera in his left, while


I5 the other holds a patera in his right hand and a drinking-horn in his left. Each wears a necklace and a fringed mantle which covers the body from below the waist, leaving the feet bare. Their hair is long and is arranged in a triangular mass behind, with a tress falling over each shoulder in front. Between the two figures is a female head wearing a polos, with a large inverted palmette below. On the handle proper are bead-and-reel mouldings, one rumning vertically through the centre, and one horizontally along the top, each with a ridge covered with hatched lines on either side. A ridge covered with hatched lines also runs vertically along each
edge of the handle. The type of this handle is rare; the workmanship is coarse and probably Etruscan, of the archaic period.

Height, $10 \frac{1}{2}$ in. $\left(26.5 \mathrm{~cm}\right.$.). Width, $9 \frac{7}{8} \mathrm{in}$. ( 25 cm .). Purchased in 1906. Mentioned in the Museum Bulletin, February, 1907, p. 20. Heavy casting. The patina has been removed by cleaning. Slightly chipped in places; otherwise intact. Acc. No. o6. 1093.
i6 STATUETTE OF A RUNNING YOUTH. He is kneeling on one knee in the attitude characteristic of early representations of running. The arms are bent sharply at the elbow with the hands folded and held against the body. The figure is nude and has long hair, which is represented as a solid mass, hanging down broad and flat, with a series of horizontal grooves. Encircling it is a fillet with long ends.

The type of the features is primitive, and the modelling, though vigorous, shows the faults of the early artist. Thus, the head and the upper part of the body are in full front; the legs, from the waist down, in profile. The eyes are unnaturally

${ }^{1} 6$ large and in one plane with the forehead and the cheeks. The workmanship cannot be later than the early part of the sixth century B.C.

Height, $2 \frac{7}{5}$ in. ( 7.2 cm .). Purchased in 1908. Published by E. R[obinson] in the Museum Bulletin, May, 1909, p. 78. Cast solid. The patina is light brown, covered with a crusty, green surface. Intact; the surface somewhat corroded in parts. Acc. No. 08.258.6.

## I7 STATUETTE OF A NUDE YOUTH OF THE "APOLLO"

 TYPE. He stands in the usual rigid attitude of these figures, with the left foot advanced. In his left hand he holds a round object and the right is clutched as though it held something, of which, however, there is no trace. The details of the hair, which is short, are indicated by long vertical lines, with short horizontal lines between them. The figure rests on a flat, oblong base. The head is of a distinctly archaic type, and the evidences of archaism are also apparent in the proportions, such as the unnaturally slender hips, as well as in the pose. Yet the modelling in general shows an earnest study of nature, rather than the conventional repro-
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duction of an established type, especially in the manner in which the muscles are rendered. Sixth century B.C.

Height, $4^{\frac{1}{8}}$ in. ( 10.4 cm .). Purchased in 1907 . Published by G. M. A. R[ichter] in the Museum Bulletin, May, 1908. pp. 89-90, fig. 4. Cast solid. Patina very dark green, smooth, and hard. Intact. Acc. No. 07.286.92.
i8 Male statuette of The soCALLED APOLLO TYPE. He stands with his weight on both legs, the left a trifle advanced and with both arms lowered and hands at sides. He is nude and has long hair which falls in a flat mass down his back. Archaic Etruscan, of fair execution. Illustrated, p. 12 .

Height, $3^{\frac{1}{4}} \mathrm{in}$. ( 8.2 cm .). Purchased in 1896 . Unpublished. Cast solid. The crusty, green patina has been almost entirely removed. Acc. No. G.R. 216 .

I9 MALE STATUETTE, similar to the preceding, except that the legs are close together and the execution very crude. Illustrated, p. iz.

Height, $4 \frac{1}{8}$ in. ( 10.4 cm .). Purchased in 1896 . Unpublished. Cast solid. The crusty, green patina has been mostly removed. Acc. No. G.R. 260.


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20 STATUETTE OF A NUDE YOUTH. He stands erect with the left foot advanced, holding out a duck in his right hand and with the left hand held downward. He has long hair rolled up over a fillet at the back and worn in a straight fringe across the forehead. Illustrated, p. 12.

The workmanship is indifferent, the body being modelled in a hard, mannered style. Archaic Etruscan.

Height, $4 \frac{1}{5}$ in. ( 10.4 cm .). Purchased in 1896 . Unpublished. Cast solid. Patina greenish with brown patches. Acc. No. G.R. 263.

25 STATUETTE OF A GIRL standing in a rigid attitude with the left foot slightly advanced. The right arm is bent sharply at the elbow and in the hand she holds up a lotos-bud; in the left hand she grasps a wreath at her side. She is nude but wears a diadem and a necklace. Her hair hangs down behind; in front it is arranged in a series of curls with a lock

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coming down on each side. The figure stands on a small, round base with flaring sides, undecorated, and a hole in the top of the head indicates that it once supported a mirror or other object.

The modelling of the body is flat and the rendering of the features primitive. Sixth century B.C.

Height, with base, $5^{\frac{3}{8}} \mathrm{in}$. ( 13.5 cm .). Height of the figure, $4^{\frac{7}{8}} \mathrm{in}$. ( 12.3 cm .). Purchased in 1906. Provenance unknown. Published by G. M. A. R[ichter] in the Museum Bulletin, February, 1907, p. 17, fig. I. Cast solid. Patina dark green, hard, and smooth. Preservation good. Acc. No. 06.IIO4.


I8


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26 STATUETTE OF A GIRL WALKING (OR DANCING?). Her left leg is advanced, and the knees slightly bent. Both arms are held away from the body and bent at the elbow; the hands are open. She wears a closely clinging chiton, the folds of which are roughly indicated by incised lines; it is ornamented on the chest by a series of circles. She also wears shoes and has short straight hair.

The rendering of the face is primitive and the lines on the chiton show little understanding of the natural fall of folds. Nevertheless, the figure, crude as it is, is full of animation and shows the sincere effort of the artist

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to express his idea. The workmanship is probably archaic Etruscan, of the sixth century B.C.

Height, $3 \frac{13}{16}$ in. $(9.7 \mathrm{~cm}$.). Purchased in 1913 . Described by G. MI. A. R lichter] in the Museum Bulletin, April, 1914, p. 90. Cast solid. Brown-green patina. No parts missing, but the surface is corroded in places. Under the right font is a tang for insertion in a base. Acc. No. 13.225.3.

27 STATUETTE OF A FEMALE FIGURE. She is standing with her right leg slightly advanced and both arms raised. She wears a chiton decorated with incised star-like ornaments. Her hair is long and hangs loose down her back.


Archaic Etruscan, of mediocre execution.
Height, $3^{\frac{3}{8}}$ in. ( 8.6 cm .). Purchased probably in 1896. Unpublished. Cast solid. Smooth, green patina. Both feet, the right forearm, and parts of the fingers of the left hand are missing. Acc. No. G.R. 20.

## 28 MIRROR-STAND, IN THE FORM OF A NUDE DANCING

 GIRL, standing, with the left foot slightly advanced, playing upon a pair of cymbals. She stands upon the back of a large frog which is squatting upon a folding seat of the "camp-stool" type. Upon her head she wears a
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close-fitting cap, decorated with incised cross-hatched lines, and from this rises the mirror-support-a pair of volutes on the front, with a palmette between them, and on the back a pair of volutes only. She also wears a short necklace or torque, with a heart-shaped pendant in front; and a chain or cord hangs over the right shoulder and under the left, with four amulets or jewels attached to it-a crescent and large signet ring (?) in front, and two small indeterminate objects behind. On the upper arms are the hind feet and tails of two lions or sphinxes which served as lateral supports for the mirror. Except for a long lock which falls in front of each ear, she has short hair, which is arranged in ringlets below the cap behind. Across the forehead is a row of lightly drilled holes, probably representing curls, though they may indicate a border or ornament on the edge of the cap.

This is a characteristic and admirable specimen of the minor Greek sculpture of the archaic period, dating about the middle of the sixth century B.C. Though easily recognizable as the work of a primitive artist, yet it shows the appreciation of the beauty of natural forms, and the painstaking
 struggle to express it, which give a peculiar fascination to the work of early Greek sculptors. The modelling of the slender body and limbs is superior to that of the head and feet, for while the former displays a fine feeling for the lines made by the large muscles, as well as for the relation of muscle to bone, the feet are carelessly, even clumsily modelled, and the head has all the shortconings of archaism-the ears placed too high in relation to the eyes, the eyes on nearly the same plane with the forehead instead of being sunk below it, the meaningless smile of the mouth, and the general lack of expression in the countenance. Furtwängler, who published this figure (see below), noted the curious twist in the body by which the upper part is turned toward the spectator's left. As he says, this must be acci-

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dental, partly because a movement would be foreign to archaic art, in which the whole figure would be facing in one direction, and partly because this turn would place the mirror above at an unnatural angle with the base.

Although this came from Cyprus, it could hardly have originated there, since it shows no affinities with Cypriote art as distinguished from the pure Greek art of the period. It is probably the product of a Peloponnesian school, both from its style and because mirrors of similar design have been found in the Peloponnesos. For a similar figure from Amyklae cf.
 complete with its mirror, from Hermione in Argolis cf. Führer of the Antiquarium, Munich, edition of 1901, No. 671, pl. VI. For a discussion of our statuette and similar figures cf. G. Körte, Archäologische Studien H. Brunn dargebracht, p. 28.

Though the female statuettes which served as mirror-supports are more often draped, nude figures, like our example, are not uncommon (cf. W. Mïller, Nacktheit und Entblöszung, pp. $1 \not{ }^{2}$ ff.; C. Praschnicker, Oesterreichische Jahreshefte, XV, 1912, p. 219; to this list T. Wiegand adds an example in Berlin, cf. $73^{\text {tes }}$ Winckelmannsprogramm, 1913, p. 19, Note 6).

Total height, $8 \frac{5}{5} \mathrm{in}$. ( 2 r .9 cm .); height of the figure alone, $7^{\frac{5}{5}} \mathrm{in}$. ( 18.6 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 5013. Published: Cesnola Atlas, III, pl. LXVI, 4, where it is said to have been found at Curium in Cyprus (the illustration is from a photograph printed from the wrong side of a negative, and therefore reverses all the details of the figure); G. Perrot and C. Chipiez, Histoire de l'art, III, Phénicie-Cypre, p. 86z, fig. 629 (as Phoenician of the Ptolemaic period); S. Reinach, Répertoire, II, 8oz, 6; A. Furtwängler, Neue Denkmäler antiker Kunst, III, pp. 265 ff., pl. V. Cast solid. The mirror disk, as well as the larger part of the lateral supports (see above), is missing. When discovered, at least a portion of the mirror itself was still extant. The surface of the figure has been overcleaned to the extent of removing the patina, which has been replaced by an artificial greenish tone; otherwise it is in excellent preservation except that the lower half of one leg of the seat is missing. Acc. No. C.B. 447.

33 PLAQUE with a female figure incised on it and roughly cut out in outline. She is turned to the left and wears a chiton. The right arm is extended, the left lowered. She has long hair, a tress of which falls down in front. Archaic period, probably Etruscan. Rough execution.

Height, $2 \frac{13}{16}$ in. ( 7.1 cm .). Purchased in 1896 . Said to have been found at Arezzo. Unpublished. Smooth, olive-green patina. The hack of the head, the right forearm, the right foot, and the front of the left foot are missing. Acc. No. G.R. ${ }^{7} 76$. Illustrated, p. 16 .

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34 PLAQUE, similar to the preceding, but with the figure turned to the right. The left hand is extended, the right clasps the drapery. Her chiton is decorated with small crosses. She has long hair with a tress falling down in front.

Height, $2 \frac{7}{16}$ in. ( 6.1 cm .). Purchased in 1896 . Said to have been found at Arezzo. Unpublished. Smooth, olive-green patina. A piece of the head and both feet are missing. Acc. No. G.R. 179 .


35 PLAQUE, similar to the preceding (Nos. 33 and 34 ), but with a male figure, turned to the left. Both arms are lowered, the right held a little away from the body. He is nude and has long hair.

Height, $2 \frac{5}{8}$ in. ( 6.7 cm .). Purchased in 1896. Said to have been found at Arezzo. Unpublished. Smooth, olive-green patina. The right leg from below the calf and the left leg from above the knee are missing; also a few small pieces. Acc. No. G.R. ${ }_{17} 8$.

36 PLAQUE, similar to the preceding, with a male figure turned to the left. His left arm is lowered, the right bent at the elbow. He is nude and wears a head-dress.

Height, $2_{8}^{5}$ in. ( 6.7 cm .). Purchased in 1896. Said to have been found at Arezzo. Unpublished. The light green patina has been partly removed. Several small pieces are missing. Acc. No. G.R. 177.

40 CHARIOT, of wood (restored) with bronze sheathing and iron tires. The body of the chariot has a curved high front and straight low sides; all three parts have rounded tops and are solid, not open. It is mounted on two wheels, each of which has nine spokes. The pole was originally somewhat longer; at its upper end has been mounted the yoke, which has two curvatures to fit the necks of the horses.

The bronze plates which form the sheathing of the chariot are of very thin bronze and are richly ornamented with reliefs in repoussé work with incised details. The chief decoration is on the outer surface of the body of the chariot and is divided into three panels with a frieze beneath, corresponding to the natural divisions made by the structure of the chariot. On the central panel are represented a man and a woman standing opposite each other and grasping with each hand a large shield and helmet between them. Above, on each side of the helmet, a bird (eagle or hawk) is darting down; while below the shield, and partly covered by it, lies a fawn on its back, apparently dead. The man is bearded and has long hair, arranged in a series of locks, which fall on his shoulder; he wears a short chiton and greaves. The woman wears a long-sleeved chiton and a mantle which is pulled over her head; also a necklace of lotos flowers. The garments are decorated throughout with elaborate borders and other ornaments incised with the greatest delicacy; a description of these is unnecessary, as they can be clearly seen on the accompanying drawing. The shield is of the so-called Boeotian form, decorated on the upper half with a mask of Medusa, on the lower with that of a lion; along the edge runs a border with spiral ornament, incised. The helmet is "Corinthian" in shape and is surmounted with a ram's head, which serves as the base of the crest; it has likewise an incised ornamental border round the edge. The eyes and mouth of the Medusa, the eyes of the lion, and those of the man and woman must originally have been inlaid, as they are now mere cavities. The materials inserted were probably ivory and some colored substance, perhaps a vitreous glaze, to distinguish the whites of the eyes from the irises and pupils, and Medusa's teeth from her tongue and lips.

On the left panel is represented a warrior victorious in battle. He is thrusting his spear through the body of his opponent who confronts him and whose spear-point is bent against his helmet. At their feet lies a fallen warrior. Above, a bird is flying to one side. The victorious warrior carries a shield of Boeotian form, similar to the one on the central panel, except that the masks of Medusa and the lion are reversed. His body is almost entirely hidden by the shield, but the sleeve of his chiton is

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just visible; he also wears a helmet and greaves. His opponent has a chiton, cuirass, helmet, greaves, and round shield. The cuirass, chiton, and the inside of his shield are elaborately decorated with incised ornaments (see drawing). All the helmets and greaves have ornamented edges.

On the left panel is represented a man standing in a chariot of the same shape as the one decorated with this relief, and driving a pair of winged horses, which are apparently rising into the air. He holds a whip and reins in his hands. Beneath the horses is a female figure in a recumbent attitude raising one hand as if trying to ward off the hoofs of the horses. As in the other panels the details are carefully incised. Both the (short) chiton of the driver and the (long) chiton of the woman are covered with little ornaments and have decorated borders (see drawing).

How are these reliefs to be interpreted? Have they any relation to one another? These are questions which have been variously answered by different authorities. Professor A. Furtwängler in his publication of this chariot (cf. Brunn-Bruckmann, Denkmäler griechischer und römischer Skulptur, pls. 586-587) has with his customary ingenuity found an explanation for every incident on the reliefs and interpreted them to form a harmonious whole. According to him, the three reliefs represent scenes from the life of the warrior in whose tomb the chariot was placed. In the central panel he is receiving his arms from his wife before setting out for battle; above are two birds of prey darting on a fawn, which, by way of anticipation, is already depicted as dead. The fact that the fawn is placed behind the shield shows that the birds are on the warrior's right, which Furtwängler interprets as signifying a good omen. On the left panel the warrior is represented victorious in battle, the favor of the gods being again signified by the bird flying on his right. That he is the same warrior as on the centre scene would appear (so Furtwängler claims) from the fact that he carries a similar shield. On the other side panel is the final scene of this trilogy; the warrior has concluded his life on earth, and in heroized form is being conducted to heaven by two winged steeds; the female figure is the personification of the Earth which he is leaving. P. Ducati, in an article on this chariot published in the Jahreshefte des oesterreichischen archäologischen Instituts, XII, 1909, pp. 74 ff., goes one step further. He accepts Furtwängler's interpretation as to the significance of each scene, but identifies the hero with a definite mythological personage, namely Achilles. He accordingly interprets the three scenes as Thetis giving Achilles his armor; the contest of Achilles and Memnon with Antilochos prostrate on the ground; and the deification of Achilles.


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Nobody will deny that these interpretations are suggestive, and they will no doubt carry conviction with many. But there is another explanation which, though perhaps not so interesting, is distinctly more probable. As will be shown later, this chariot is a product of Etruscan art. As is well


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known, Etruscan art during the sixth century was greatly influenced by contemporary Greek art, from which it borrowed freely for both types and subjects. Now, the representations on the chariot are all stock subjects of archaic Greek art, for which many parallels can be found on blackfigured Athenian vases and other monuments. A natural explanation,

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therefore, seems to be that the Etruscan artist chose three familiar scenes of warlike character as appropriate decorations for his chariot, and fitted them into the space at his disposal as best he could. The scenes are then simply explained and some of the accessories, which have had to be accounted


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for by rather far-fetched means, become purely decorative motives introduced to fill up the space, as we find them on Greek vases of the period. The subject represented in the central panel, a warrior receiving his armor from a woman, is familiar from Greek vase-paintings (see e.g. H. Heydemann, Griechische Vasenbilder, pl. VI, 4; A. Furtwängler und R. Reichhold,

Griechische Vasenmalerei, pl. 14. For another Etruscan representation of the subject of. L. A. Nilani, Museo archeologico di Firenze, II, pl. XX). The Etruscan artist made his shield and helmet unduly large, probably that they might fill as much of the field as possible; in spite of this there were still awkward spaces left empty, which, in the horror vacui characteristic of the period, he filled up with "Fullornamente" in the shape of two birds and a fawn.

For the scene on the left panel-two warriors fighting and one fallenit is sufficient to mention three close parallels, one on a bronze tripod of the Loeb collection (cf. G. H. Chase, American Journal of Archaeology, XII, 1908, p. 315, fig. 7b), one on the moulded pithos from Sparta (British School Annual, XII, $1905-6, \mathrm{pl}$. IX), and one on a black-figured vase in Würzburg (cf. E. Gerhard, Auserlesene Vasenbilder, pl. 205). On all these scenes the warrior on the right carries a Boeotian shield while the one on the left has a round shield, so that the argument that the warrior with the Boeotian shield on our chariot is identical with the one on the central panel because of the shape of the shield loses in force. The bird is probably again purely decorative: compare the birds on the contemporary bronze tripod of the Loeb collection (Chase, op. cit., pl. X) where flying birds are certainly used purely for space filling.

Furtwängler's theory that the man driving a chariot on the right panel is a heroized dead man rests chiefly on the fact that the horses are winged and must therefore be meant for supernatural beings. He compares the representations on Etruscan stelae from Felsina of figures evidently intended for the dead driving chariots with winged horses (cf. Notizie degli Scavi, I890, pl. I A; J. Martha, L’Art étrusque, pp. 368 ff .). But it is noteworthy that in these stelae the artist found it necessary to make his meaning clear by representing the figure as swathed or by introducing a winged genius as an escort for the journey into the other world, while the horses are often not winged; showing clearly that the mere fact of winged horses has no special significance in this connection. Indeed, there are many instances in Greek and Etruscan art where horses are represented as winged merely to indicate speed (cf. e.g. Museo Etrusco Gregoriano II, pl. XXXVI, 3a; and Pausanias' description of the chest of Kypselos (Frazer's Translation, V, xvii, 7), where he mentions that the horses of Pelops are winged). On this subject see also F. Studniczka, Athenische Mitteilungen, 1899, p. 370; and Monumenti antichiXV, p. 214, fig. 90, where are figured two chariots of the same type as the one we are describing, and where one pair of horses have wings, the other not. Nor is the identification of the recumbent female figure with a per-


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sonification of Earth convincing. A figure in exactly the same attitude occurs benearh two impetuous horsemen on a silver relief from Perugia in the British Museum (cf. E. Petersen, Bronzen von Perugia in Römische Mitteilungen, IX, 189t, p. 314, fig. 21). Here the horses are not winged and the identification of the recumbent figure with Earth seems impossible; but the representations are so similar that their interpretation must be the same. Petersen (loc. cit.) thinks the figure on the Perugia relief is a fallen Amazon. It seems more likely that we have here again a convenient device for filling up an awkward space.

Besides these principal reliefs, there are a number of minor decorations on the chariot:-Between the panels on each side is introduced a nude male figure of the "Apollo" type in high relief, surmounted by a round boss. On the lower border of the central panel are two couchant rams in the middle, and a couchant lion at each end. Beneath the three panels, forming the outside decoration of the floor of the chariot, runs a frieze with animals and other figures in low relief. Cn the left are a centaur carrying a branch of a tree from which a hare is suspended (cf. P. V. C. Baur, Centaurs in Ancient Art, p. 97); a winged human figure; and a youth holding a panther. The central portion is missing. On the right are a lion attaching a bull, and a lion attacking a stag. The ends of the axtes are decorated with lions' heads. The pole has at the lower end the fore part of a boar, while its upper end is fashioned in the form of an eagle 's head. The eyes of both the boar and the eagle appear to have been inlaid. Lastly, the yoke terminates at each end in the head of an animal (lion!). All these decorative motives are more or less familiar in archaic Greek art.

This is the only complete ancient bronze chariot at present known and constitutes one of the most important examples of ancient repoussé work. As regards its origin, first its shape and then the style of its decorations must be considered. The body of the chariot, as already described, has a curved high front and straight low sides, all three parts being solid and having rounded tops. Analogies for this shape of chariot will be found in the following monuments, which, it will be noted, all came from Etruria:

1. Gold rings from Etruria of the "Italo-Ionic" class, dated about 600 B.C. (see A. Furtwängler, Antike Gemmen, I, pl. VII, i-5, and III, pp. 84 ff.).
2. Black-figured "Italo-Ionic" vases of which the provenance is generally known to be Etruria; cf. A. Furtwängler, Antike Gemmen, III, pp. 85 ff., fig. 59; Archäologischer Anzeiger, 1904, p. 6I, fig. I; J. Sieveking und R. Hackl, Die kgl. Vasensammlung zu München, I, 838, p. 101; and
others enumerated by H. Nachod, Der Rennwagen bei den Italikern, p. 52 .
3. Archaic terracotta reliefs from Etruria; cf. G. Pellegrini in L. A. Milani, Studi e Materiali, I, p. 96, fig. 4 (from Toscanella and now in the Louvre); p. Ior, fig. 8 (from Velletri, now in the Naples Museum); p. 103, fig. 9 (part of preceding frieze); also A. Furtwängler, Antiquarium zu München, Beschreibung, 1908, p. 17, Nos. 914-915 (914 is an exact duplicate of the one illustrated in Milani, op. cit. I, p. 96, fig. 4); and Monumenti antichi, XV, p. 214 , fig. 90.
4. Bronze relief from the base of an archaic Etruscan figure from the Tomba d'Iside; cf. G. Micali, Monumenti inediti, 6.

On Ionian monuments from Asia Minor, for instance on the Klazomenai sarcophagi, a similar form of chariot is found, but with open instead of solid sides; while the examples on the Athenian black-figured vases are of quite a different type. As regards the shape, therefore, our chariot is most closely connected with monuments from Etruria executed under Ionic Greek influence.

The wheels with nine spokes, like those of our chariot, are unusual. For a chariot also with nine-spoked wheels see a miniature example from Bactria in the British Museum (cf. O. Nuoffer, Der Rennwagen im Altertum, pl. 8, $4^{8)}$. On Asiatic and Ionic chariots the number of spokes is generally six, eight, ten, and twelve, while the archaic Greek chariots of the mainland have only four spokes. The high number of spokes in our chariot therefore brings it in connection with the Ionian class.

The style of the decorations confirms this evidence of an Etruscan execution under Ionic Greek influence. The figures are all more or less conventional without that lifelike animation which characterizes all Greek work. Moreover, there are many inaccuracies of detail, and the adaptation of the figures to the spaces they decorate shows that lack of dexterity which we should expect from an Etruscan imitator. The beauty and richness of the incised decorations are only another argument for the Etruscan origin, for it was just in such decorative work that the Etruscans are known to have excelled. G. H. Chase, in his publication of the Loeb Tripods in the American Journal of Archaeology, XII, 1908, pp. 3 I2 ff., deals fully with the question of Greek or Etruscan workmanship of this chariot and decides in favor of the latter. Indeed, the most convincing argument for its being Etruscan is a comparison between it and these tripods, which are contemporary works of the same technique. Though just as archaic in character, the scenes on the tripods show a freshness, vitality, and facility of composition

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which leave no doubt of their Greek origin. In fact, it must have been such works as these tripods, either imported from Ionia or made by Ionian artists in Etruria, that served as models for contemporary Etruscan art. On the Etruscan origin of the chariot see also E. R[obinson], Metropolitan Museum Bulletin, igo6, May, p. 82 f. Furtwängler in Brunn-Bruckmann,


Denkmäler griechischer und römischer Skulptur, pls. 586-587, argues in favor of an Ionic Greek workmanship.

Closely allied in style to the decorations of our chariot are the fragments from another Etruscan chariot found at Perugia and now distributed among the Perugia, Munich, and British Museums (cf. E. Petersen, Athenische Mitteilungen, IX, I894, pp. 253 ff.; A. Furtwängler, Brunn-Bruckmann, Denkmäler, pls. 588, 589). Compare also some chariot fragments of the same style and technique from Capua (W. Froehner, Collection Dutuit, II, p. 199, No. 250, pls. 190-195).

The date of the chariot is fixed not only on stylistic grounds, but by two Attic black-figured vases found in the same tomb (see p. 177). They are kylikes of the Kleinmeister type dating from about the middle

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of the sixth century, and it is to this period that the chariot itself must belong.

The chariot was put together in this Museum from a heap of fragments. Its reconstruction is apparently correct. The pole, however, as has already been mentioned, was considerably longer, which would bring the yoke higher up from the ground and thus make it fit averagesized horses. For the obvious convenience of not having too large a


40
case, the pole was not reconstructed to its full length. Furtwängler in his publication doubts the correctness of the lions' heads at the ends of the axle; but similar heads occur on a miniature chariot of Etruscan origin (cf. Museo Etrusco Gregoriano, pl. LXXIV, ir), so that their place seems assured. The inside rim of the central panel appears to have been decorated with an ivory band; the ivory fragments which were found have been mounted separately and are exhibited in the case with the chariot. From our modern point of view the chariot seems very small for actual use; but in representations of ancient chariots the proportion of a man to the chariot is the same, and it must be remembered that in races, for which such chariots were much used, lightness was one of the principal requirements. In fact, there is no evidence that the Etruscans used chariots for actual warfare. When they are thus represented on Etruscan monuments the scenes are always borrowed from Greek legends. Their chief use was apparently for races and triumphal
processions. On this subject see E. Saglio in Daremberg et Saglio, Dictionnaire, under currus, p. $16 \boldsymbol{q}$.

Total height of chariot: 4 ft . $3^{\frac{1}{2}} \mathrm{in}$. ( t .309 m. . . Front: $2 \mathrm{ft} .9^{\frac{1}{4}} \mathrm{in}$. ( 84.5 cm .) high, I ft. $7^{\frac{3}{4}} \mathrm{in}$. ( 50.2 cm .) wide. Each side: $1 \mathrm{ft} .6 \frac{1}{2} \mathrm{in}$. ( 47 cm .) high, I ft. $2 \frac{3}{4} \mathrm{in}$. ( 37.5 cm .) wide. Each wheel: $2 \mathrm{ft} 1^{\frac{3}{1}} \mathrm{in}$. ( 65.5 cm .) in diameter. Length of pole as restored: 6 ft . $10 \frac{1}{\frac{1}{4}} \mathrm{in}$. ( 2.9 m .). It was found in 1902 in a tomb near Monteleone, on the ancient Via Cassia, at the foot of a little hill called "Il Capitano;" for the other objects found in this tomb see p. 177. It then passed through several hands and was finally exported to Paris. While there, it was purchased in 1903 by this Museum. When found, it was in a very fragmentary condition, having evidently fallen on

its right side after the wood corroded. It arrived at the Museum still in fragments and was here cleaned and put together by Charles Balliard. The wood foundation is entirely new, but no new pieces of bronze were inserted. From some remains of the ancient wood still preserved in the wheels it could be determined that it was walnut. Published by A. Furtwängler, Brunn-Bruckmann, Denkmäler griechischer und römischer Skulptur, pls. 586, 587; P. Ducati, Jahreshefte des oesterreichischen archäologischen Instituts, XII, 1909, p. 74; J. Offord, Revue archéologique, 1904, III, pp. 305-306; F. Barnabei, Nuova Antologia, vol. 194, Marzo-Aprile, 1904, pp. 643 ff.; E. Petersen, Römische Mitteilungen, 1904, p. 155 (without illustrations and referred to as perhaps a forgery); E. R[obinson], Museum Bulletin, May, 1906, p. 82 f. (not illustrated); H. Nachod, Der Rennwagen bei den Italikern, 1909, p. 44; Stuttgarter Antiquitätenzeitung, 1903, No. $5^{1}$, p. 404; G. H. Chase, American Journal of Archaeology, 1908, pp. 3 II ff.; Le Musée, 1904, May-June; Scientific American, November 28, 1903, p. 385; New York Tribune, Illustrated Supplement, October 18, 1903, p. 8 f.; Harold N. Fowler, The Chautauquan, September, 1905 , pp. 50 ff . The green patina has been partly removed, exposing the beautiful golden color of the bronze. Acc. No. G.R. 47 I.

45 HANDLE OF A VASE. The upper attachment, by which it was joined to the rim, is decorated in the centre with a female mask, and at each end with the fore part of a lion couchant (the one on the right is missing). The lower attachment where the handle was joined to the body of the vase, is in the form of two human heads in profile, back to back, with a tongue pattern above and two volutes and an inverted palmette below. Greek, sixth century B.C.

Height, $5_{8}^{5}$ in. ( 14.8 cm .). Purchased in 1907. Described by G. M. A. R[ichter] in the Muscum Bulletin, May, 1908, p. 89, No. 5. Cast. Dark green patina. The only missing part is the right lion from the upper attachment noted above. Acc. No. 07.286.103.


45

46 RELIEF OF BOREAS. Boreas, the personification of the North wind, is represented as flying, the attitude being characteristic of early representations of forward motion. He is kneeling on one knee; his right hand is held against his side, the left is extended and bent sharply at the elbow with hand held open. He has two large wings on his back, which are spread so as to form a background. He wears a short chiton of peculiar shape consisting of a tight-fitting jacket with skirt and short sleeves, ornamented with zigzag lines round the neck, down the front, and round the edges of the sleeves and skirt. He also wears winged shoes and a cap. He is bearded and has long hair, which hangs down in a broad, flat mass behind and is arranged in a series of spiral curls over the forehead. The base, also in relief, ends in a volute on each side.

The modelling of the features is primitive, and the muscles of the arms and legs have been unduly accentuated. As is usual in works of this period, the upper part of the body is represented in full front, while the lower is in profile, the dividing line being formed sharply at the waist with no attempt at gradual transition. The com-


46 position, however, is spirited and in spite of its limitations conveys the
idea of lively movement successfully. Greek, sixth century B.C. It is uncertain what object this relief originally decorated.

Height, $4^{\frac{5}{8}}$ in. ( 11.7 cm .). Purchased in 1910. Said to have come from Greece. Published by G. M. A. R[ichter] in the Museum Bulletin, April, 1911, pp. 92, 94, fig.5. Cast. The back is perfectly smooth and flat. The green patina has been mostly removed. Intact, but the surface is somewhat rubbed in places. Acc. No. 10.230.2.

47, $4^{8}$ PAIR OF HANDLES FROM A VASE. Each ends below in a mask of Seilenos, above in a volute, bent back at a sharp angle and surmounted by a bird (duck?). Inside the angle on either side is a conventionalized palmette. The Seilenos masks are represented with horses' ears, and with thick beards and moustaches. These, as well as the hair over the forehead, the eyebrows, and the eyelashes are carefully rendered by incised lines. There are slight differences in the two handles; for instance, in the wings and feet of the birds and in the shape of the ears and eyes of the Seilenoi, from which it follows that they were not cast from the same mould (cf. p. xx).

The workmanship is Greek or Etruscan of the end of the sixth or beginning of the fifth century B.C. Compare a similar pair of handles in Dresden figured in Archäologischer Anzeiger, p. 225, fig. 19.


47

$4^{8}$

Height of each handle, $8 \frac{1}{16} \mathrm{in}$. ( 20.4 cm .). Gift of Henry G. Marquand, 1897. Said to have been found at Arezzo. Published by C. H. Caffin in Harper's Weekly, October 3oth, 1897. Cast. Patina light green and crusty. Preservation excellent; one handle is intact, and the only missing part in the other is a piece of the attachment. Each handle was joined to the vase by means of three rivets, one below in the beard of Seilenos, and two in the attachment in the upper part. Acc. Nos. G.R. 46 and 47 .

49 ORNAMENT FROM A ROUNDED OBJECT. It is in the form of a Triton, with human head, arms, and body, but with two fish-tails in place of legs, on which he is leaning both hands. He is bearded and has long hair, which spreads out behind in fanlike fashion. Incised lines are used for the scales of the fish-tails, the beard, and the hair, the latter being

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represented by small circles where it lies close to the skull, and a series of long grooves with a beaded edge where it spreads out behind.

The execution is rather coarse, the modelling being very superficial. The style is archaic, probably Etruscan. It is possible that this ornament, like No. 67, was attached to a helmet.

Height, $\mathrm{I} \frac{5}{8}$ in. ( 4.1 cm .). Width, $2 \frac{3}{8} \mathrm{in}$. $(6 \mathrm{~cm}$.). Gift of Henry G. Marquand, 1897. Said to have been found at Cordiano, in Etruria. Unpublished. Cast. Green patina. The end of the right fish-tail and part of the beaded edging round the hair


49 are missing. Acc. No. G.R. +3 .

50, 5 I PAIR OF HORIZONTAL HANDLES, probably from a hydria. The attachments are in the form of lanceolate leaves and are decorated with Seilenos masks and designs of scrolls and palmettes, in relief.

Effective, but rather cursory work of the archaic period.


Height of each, $5^{\frac{1}{2}} \mathrm{in}$. ( 13.9 cm .). Greatest width of $50,5^{\frac{3}{4}} \mathrm{in}$. ( 14.5 cm .), of $5^{1}, 5^{\frac{5}{8}} \mathrm{in}$. ( 14.2 cm .). Purchased in 1910. Said to be from near Rome. Mentioned in the Museum Bulletin, December 1910, p. 275. Cast. Patina blue-green and crusty. Preservation good. Acc. Nos. 10.210.32 and 10.210.34.

52, 53 PAIR OF HORIZONTAL HANDLES from a large round bowl. The base of each, by which it was riveted to the bowl, is decorated with a beautiful design of scrolls and palmettes, with a pair of eyes in the centre, similar to those which occur on Attic and Ionic kylikes of the period. The attachment of the handle proper to the lower part is

formed by fore parts of lions. On the upper side of each handle is a moulded decoration of two pairs of lines running lengthwise with short horizontal lines between them.

The execution is careful and spirited. The style is archaic Greek, of the sixth century B.C.

For the use of eyes as decorations in Greek art, see J. Boehlau, Die ionischen Augenschalen, in Athenische Mitteilungen, 1900, p. 76.

Length of each, $5 \frac{3}{1}$ in. ( 14.5 cm .). Purchased in 1907 . Described by G. M. A. R[ichter] in the Museum Bulletin, May, 1908, p. 89, Nos. 3, 4. Cast. Smooth, olive-green patina. Slightly chipped in various places; otherwise intact. Fragments of the original bowl still remain attached. Acc. Nos. 07.286.101, 07.286.102.

## 54, 55 PAIR OF ATTACHMENTS for the swinging handle of a pail


(situla). Each is composed of a design of scrolls and palmettes, with serpents intertwined. The effect of the whole is extremely decorative. Sixth century B.C.

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For examples of situlae showing similar attachments, see Museo Borbonico, vol. IV, pl. XII and vol. VI, pl. XXXI.

Height of $54,2 \mathrm{in}$. ( 5 cm .). Height of $55,1 \frac{7}{8} \mathrm{in} .(4.7 \mathrm{~cm}$.). Purchased in 1908. Probably from Cività Castellana. Referred to in the Museum Bulletin, May, 1909, p. 8I. Cast. Smooth, grayish-green patina, with light green patches. Both attachments are somewhat chipped in places, and in 54 the serpent head on the left is missing; otherwise the preservation is excellent. The rivets by which each attachment was joined to the pail are still preserved. Acc. Nos. $08.258 .8 \mathrm{a}, \mathrm{b}$.

56 STATUETTE OF A GIRL STANDING. She stands erect with the left foot slightly advanced. The right arm is bent forward at the elbow and probably held some object; the left is lowered and is grasping a fold of the drapery. She wears a long-sleeved chiton and a himation, arranged in broad vertical folds and passing from the right shoulder to below the left arm; also laced shoes with upturned pointed toes, rosetteshaped earrings, a necklace of beads, and a fillet decorated with three rosettes. Her hair is long and hangs down her back in a broad mass, the individual hairs being indicated by incised lines of great delicacy.

Ornamental borders are incised on both the himation and the chiton as follows: cross-hatchings on the lower edge of the chiton and along the left side of the himation; cross-hatchings with a row of dots on the upper and lower edges of the himation; a row of dots round the arm-holes and up both sleeves; zigzag lines and a row of dots on the upper edge of the chiton. Scattered over the surface of the chiton are small punctured designs of triple spirals $\mathscr{O}$. The lower corners of the himation end in tassels.

The period to which the statuette belongs can be fixed without difficulty as the latter part of the sixth century B.C., both from its general style and from the resemblance as regards attitude and dress to the "Akropolis maidens" and similar marble, bronze, and terracotta figures of that time. That it is Etruscan and not Greek is shown by the mistakes made in the rendering of the garment (see below), which betray the hand of the copyist. It is also noteworthy that the shoe with turned-up toe was the regular shape employed by the Etruscans during the archaic period (cf. representations on paintings of the period, e.g. J. Martha, L'Art étrusque, pl. IV, and figs. 285, 286; and numerous archaic Etruscan statuettes); while in Greek art it occurs only occasionally, e.g. on a Spartan relief (cf. Annali dell'Instituto, 1870, pl. Q); on the "Harpy Tomb" (A. H. Smith, Catalogue of Sculpture in the British Museum, I, No. 94).


This is one of the finest Etruscan statuettes in existence. It has all the grace and delicate charm which distinguish archaic Greek art without giving any suggestion of artificiality due to imitation. The features are carefully modelled and no longer in the primitive manner, but in the developed archaic style. The eyes are slightly narrowed and the eyeballs not so prominent as in the earliest figures. The representation of the mouth is also more adequately dealt with; for it is no longer a simple curve or line with turned-up ends, resulting in the archaic smile, but is carefully modelled, an effort being made to form a transition from the extremities of the lips to the cheeks. The chin and the cheek-bones are still strongly marked, as ahways in archaic art, but no longer with any exaggeration. The neck is thick-set and the formation of the throat is hardly indicated, but in the rest of the figure there is a distinct attempt to make the form of the body show through the drapery, the rendering of the chest being particularly good. Noteworthy also is the careful indication of the finger nails.

An analysis of the dress, however, betrays the copyist, for it clearly shows that the artist did not understand what he was representing. The most glaring mistake is the rendering of the himation. Instead of making it pass round the figure front and back, he has treated it merely as a sort of front panel, terminated on both sides and not appearing at all on the back. This treatment results in a mass of contradictions, such as the absence of a clear boundary line between the chiton and the himation on the right arm; the meaningless addition of a slit running half-way down the chiton on the right side; the indication of a series of punctured oblique lines along the right side of the himation, doubtless meant to represent the folds of a zigzag outline which are formed in other examples by the loose material hanging right and left of the sleeve, but which have no raison d'etre here since there is no such loose material. There are also some minor errors. The folds caused by the lifting of the garment with the left hand are not made to converge to the point from which the garment is pulled. The thickness of the chiton, though rightly represented where it comes in contact with the arms and legs, is not shown round the neck, the edge being marked merely by incised lines. No attempt is made to represent the characteristic little folds on the upper part of the chiton; the oblique wavy lines incised on the right side refer to the wrinkles caused by the insertion of the brooches to form the sleeve.

An examination of the treatment of the hair will show the same combination of skilful rendering of detail with a curious lack of understanding of the structure of the whole. The arrangement chosen is that found on some of

the Akropolis statues (cf. No. 671, H. Lechat, Au Musée de I' Acropole d' Athènes, p. 153 , fig. 9), except for the omission of the locks falling in front. The hair is parted in the middle and combed to either side, presenting a wavy outline over the brow, and allowed to fall loose on the back. In addition, a strand of hair is carried forward from the top of the head, forming a long loop over each temple, and then brought back behind the ears. In our statuette these loops are not rounded off properly; but are represented as cut off sharp at their lower ends, which gives them the singular appearance of separate tufts of hair. The general effect, however, is admirable; and especially at the back, where the hair hangs loose, it has a very lifelike appearance, the smooth, glossy surface being represented with quite extraordinary ability.

The decorative borders on the dress, the fillet with rosettes, the necklace, and the rosette-shaped earrings, all find analogies on Greek representations. The tassels at the ends of the himation are commonly found on representations of this garment on vase-paintings.

That the Etruscan artist succeeded sometimes in correctly representing the complicated form of himation which he here attempted is shown by several specimens (cf. e.g. E. Babelon et J.-A. Blanchet, Bronzes antiques de la Bibliothèque Nationale, No. 206; G. Dennis, Cities and Cemeteries of Etruria, II, p. 233), which, though of inferior execution, at least carry the garment round the whole figure and thus preserve its inherent character as a mantle. It is, therefore, the more surprising that a maker who did so careful a piece of work as our figure should be so little conversant with what he was representing. The possibility suggests itself that he was copying from a vasepainting or from a relief, and, being himself unfamiliar with the garment, naturally came to grief when he had to represent the back.

With regard to the interpretation of the figure, it is impossible in the absence of any definite attributes to identify it with any goddess or particular person; for, though the object grasped in the right hand is missing, there can be no doubt that it was some fruit, flower, or animal, such as make up the offerings held by the Akropolis statues. We must call this statuette, therefore, simply a maiden, perhaps placed as a votive offering in some sanctuary.

Height, $11 \frac{9}{16} \mathrm{in}$. ( 29.4 cm .). Lent by J. Pierpont Morgan, 1910. Published by G. M. A. Richter in the American Journal of Archaeology, XVI, 1912, pp. 343 ff., pls. III-IV. Cast solid. Smooth, olive-green patina. The only missing parts are the right hand from above the wrist and the left foot. The surface is corroded in places, especially on the face.

57 HANDLE OF A PATERA IN THE fORM OF A WINGED GODDESS. Her right hand is placed on her right shoulder, her left is held by her side. The upper part of her body is nude, but from below the waist she is draped in a himation. She wears a necklace, bracelets, and a high head-dress. Her hair is parted in the middle and hangs down behind. The feathers of the wings are indicated by engraved lines. On her head is the attachment of the patera in the form of a curved ivy-leaf. To the base of the figure a ring is attached to serve for suspension.

Coarse Etruscan work of early style.
Total height, $8 \frac{1}{5}$ in. ( 20.6 cm .). Height of figure, $5 \frac{13}{16} \mathrm{in}$. ( 14.7 cm .). Purchased in 1896. Unpublished. Cast solid. Patina green. Intact. Acc. No. G.R. 45.

58 STATUETTE OF AN ARCADIAN PEASANT (:) He stands erect with the left foot slightly advanced. Both arms are hanging down and are bent a little at the elbow. In his right hand he holds obliquely a stick, the top of which is broken off; in his left he held in the same position a similar object, which is now missing. He wears a pilos, or pointed hat, and a square, heavy mantle, which is fastened across his breast by a long pin, and is decorated on its side edges by a short fringe with pendants at the corners. The head is rather large in proportion; the hair is combed straight into the forehead and cut short; the nose is thin with scarcely any indication of the nostrils. The figure stands on a thin oblong plinth, the upper face of which bears the inscription, roughly incised: ©AVAEAIANE $\otimes V I R T O I \Gamma A W I$ $\Phi \alpha v \lambda \epsilon ́ \alpha s \dot{\alpha} \nu \epsilon \epsilon v \sigma \epsilon \tau \bar{\varphi} \Pi \alpha \boldsymbol{\nu}^{i}$ (Phauleas dedicated it to Pan). [For the use of
 The two holes in the plinth served for fastening. The under side of the plinth is left rough, except for a small, smooth, oval surface in the centre.

The workmanship is careful and may be attributed to a local artist working at the end of the sixth or the beginning of the fifth century B.C. In style this should be compared with the bronzes found at Lusoi, and described by A. Furtwängler, Sitzungsberichte der kgl. bayerischen Akademie, 1899, II, pp. 566 ff.

This is one of a number of archaic bronzes which were found near

Andritzena in Southern Arcadia. The others are published by P. Perdrizet in the Bulletin de correspondance hellénique, XXVII, 1003 , pls. VIIIS, p. 300. Pan was the chief god of the Arcadian peasants; it is therefore appropriate for Phauleas, who, to judge from the costume, was probably a peasant of the district, to dedicate his offering to this god.

Height, 4 in. ( 10.1 cm .). Purchased in 1908 . Found near Andritzena, close to Hagios Sostes. Formerly in the collection of E. P. Warren at Lewes, England. Published by E. R[obinson] in the Museum Bulletin, May, 1909, pp. 78, 8 r , fig. 4, and by F. Studniczka (who thinks the statuette may represent Hermes) in the Athenische Mitteilungen, 1905, pp. 65 ff ., pl. IV. Figured in S. Reinach, Répertoire, IV, p. 39, No. 5. Cast solid. The patina is black with green patches, smooth, and hard. Preservation good. The only missing parts are the right front corner of the plinth, the top of the stick in the right hand, and the attribute in the left hand. A piece at the back of the neck and mantle has been filed off. Acc. Nu. 08.258.7.

## 59 STATUETTE OF A MAN PLAYING THE

 LYRE. He stands erect holding in his left hand a lyre, of the shape derived from the early tortoise type, and
$5^{8}$ playing on it with a plectrum which he has in his right. long chiton, girt at the waist, the characteristic costume of lyre-players. At the bottom is engraved a border, and the garment itself is covered with a pattern composed of groups of small circles; the folds are indicated by a series of rigid parallel grooves crossing the front diagonally. The back of the sounding-board of the lyre is decorated with a rosette, incised. He is bearded and his hair is combed straight behind, with a series of short waves in front. He wears a fillet on which are traces of gilding. On the back is incised aninscription: $\triangle O W+O\{M A N E O E K E N$
 ters of archaic Attic shape.

The workmanship is crude and belongs to the end of the sixth century B.C.


59

## ARCHAIC PERIOD

Height, $3 \frac{1}{8}$ in. ( 7.9 cm .). Purchased in 1908. Said to have been found at Elis, near Achaia. Published by E. R[obinson] in the Museum Bulletin, May, 1909, pp. 78, 81, fig. 3. Figured in S. Reinach, Répertoire, IV, p. I 82, No. 4. Cast solid. The smooth, shiny, olive-green patina may be modern. Preservation excellent. Acc. No. 08.258.5.

60 STATUETTE OF APOLLO. He stands in a rigid attitude with the left foot advanced. Both arms are bent at the elbow, with the hands extended in front of him. In the left hand he grasps his bow, and in the right, outstretched, he held another object, only traces of which remain. He wears a chlamys, which is draped over the figure in shawl fashion, with two end hanging over the shoulders in front, and reaching nearly to the knees behind. He also wears high shoes, the lacings and other details of which are indicated by incised lines. He has long hair, which is caught up in a loop behind, with the ends hanging loose, and is held by a narrow fillet. In the top of the head is a small bronze nail, probably the base of an ornament. The figure stands upon a flat oblong base, divided into two steps, undecorated.

Advanced archaic style, probably end of the sixth century B.C.

It is noteworthy that the chlamys ends squarely at the bottom, not in a curved line as would be the case were it semicircular or cres-cent-shaped on one of its four sides, as described


60 by Plutarch and Pliny (cf. the references given by E. Saglio, in Daremberg et Saglio, Dictionnaire, under chlamys, p. 1 (15).

The style of head-dress represented in this statuette is common on archaic Attic and Ionic male figures and is identified by some writers with the ко $\dot{\omega} \beta u \lambda o s$ of Greek literature (cf. E. Pottier, Daremberg et Saglio, Dictionnaire, under crobylus, p. 1571).

Height, $4 \frac{1}{2}$ in. ( 11.4 cm .). Purchased in 1907. Said to have been found at Hagios Sostes, near Andritzena (Phigaleia) in Arkadia. Published by G. M. A. R[ichter] in the Museum Bulletin, May, 1908, pp. 89-90. No. I, Fig. 2. Cast solid. Green patina, hard and smooth. Preservation excellent, except that the
upper end of the bow, the object in the right hand, and that on top of the head are missing. Acc. No. 07.286.91.

6 I GROUP OF SEILENOS AND A NYMPH. He is represented kneeling on one knee placing his left arm round the nymph, who is sitting on his shoulder. His right arm is lowered and bent sharply at the elbow (the forearm is missing). He looks up at her in an appealing way, while she raises her hands (only the right is preserved) as if to ward off his advances. He is nude and has a beard, moustache, and long hair round which is tied a fillet. His legs end in horse's hoofs, and he has horse's ears and a tail (now missing). She wears a chiton and himation, of the style of the Akropolis Korai, and shoes; also a fillet decorated with three rosettes. She has long hair which falls down her back and is tied at the bottom.

The execution is excellent; both the nude, vigorous body of the Seilenos and the dainty, draped figure of the nymph are beautifully modelled, and all details, such as the incised lines for the hair and the little folds of the garments, are carefully rendered. Moreover, the group is full


61 of the naive touches which constitute so much of the charm of archaic Greek art. The style is that of the end of the sixth century B.C.

The type of Seilenos with hoofs was popular in Ionia and Etruria during the archaic period, but in Attica it occurs only occasionally (cf. the list of monuments given by H. Bulle, Die Silene in der archaischen Kunst der Griechen, pp. 1-15). Moreover, the Ionian type of Seilenos is of a more bestial character than the Attic and is often treated with broad humor (cf. E. Kuhnert, in Roscher's Lexikon, under Satyros, p. 449). The obvious sensuality of our Seilenos, therefore, as well as the presence of the hoofs, connect him more closely with the Ionian monuments, and the group is probably of Ionian workmanship, or perhaps Etruscan under Ionian influence.

A Seilenos and a nymph are often associated in archaic art; and the rape of a nymph by a Seilenos is a favorite subject on coins from Thasos and Lete (cf. P. Gardner, Types of Greek Coins, pl. III, 1, 28). See also the terracotta group from Olympia (G. Treu, Olympia, III, Die Bildwerke in Stein
und Thon, pls. VIII, 1-2, VII, $2-3$, pp. 37,38 , fig. 41 ) and the bronze groups figured in S. Reinach, Répertoire, II, p. 64, 3, 5. For representations of centaurs carrying nymphs cf. P. V. C. Baur, Centaurs in Ancient Art, Nos. 190, 191, 325, 326.

Height of group, $3 \frac{15}{15}$ in. ( 1 cm .). Height of Seilenos, $2 \frac{9}{16}$ in. ( 6.5 cm .). Height of nymph, 3 in . ( 7.6 cm .). Purchased in 1912 . Published by G. M. A. R[ichter] in the Museum Bulletin, December, 1913, pp. 267, 270, fig. 5. Cast solid. The green patina has been almost entirely removed; otherwise the condition is excellent, the only missing parts being the right forearm of the Seilenos and his tail, and the left hand of the nymph. The nymph is not actually attached to the Seilenos' left shoulder, but is joined to him in three places--to his left knee, his left hand, and his hair. Acc. No. 12.229.5.

62 STATUETTE OF HERAKLES. He is kneeling on one knee, in the attitude characteristic of early representations of rapid forward motion. His right arm is raised, the left held forward. He is nude, except for a lion's skin, which is wound round his waist. His hair is short and straight, with a row of spiral curls, worked in relief, over his forehead.

The execution of this figure is excellent. The body is vigorously modelled and the head and the lion's skin are worked with great delicacy. The style, though still archaic, is much more advanced than in the other running figure described above (No. 16). The upper part of the body is no longer in full front, but turned partly


62 sidervise, and the portrayal of the features is more successful, the eyes being sunk below the brow and cheeks, and no longer unnaturally large. The lips, too, are well modelled; but the transition between them and the cheeks is not yet properly shown, and the ears are placed too high; the rendering of the body, with the thick, heavy thighs, also shows the hand of the early artist. The probable date is the end of the sixth century B.C.

Both from the presence of the lion's skin and the position of the arms this statuette may be identified as Herakles. For Herakles in rapid forward motion with right arm raised and swinging the club, and with bow held out in his left is a favorite type for this hero in early Greek art (cf. A. Furtwängler, in Roscher's Lexikon, under Herakles, § 2r4i ff.). Though the attri-
butes are now missing, both hands having been broken away, it is doubtless with these two weapons that we should complete the figure.

The small attachment on the left knee shows that the statuette was originally joined to another object. This object must have been a tripod similar to those found at Chiusi, on which figures of similar style and with similar attachments occur (cf. especially Monumenti dell' Instituto, VI and VII, pl. LXIX; and J. Roulez, Annali dell' Instituto, 1862, pp. 189 ff.).

Height, $3 \frac{1}{16}$ in. ( 7.8 cm .). Purchased in 1912. Published by G. M. A. R [ichter] in the Museum Bulletin, December, 1913, pp. 268, 270, fig. 7. Cast solid. Smooth, grayish-green patina with blue patches. Both hands are missing and the surface is encrusted in a few places; otherwise the condition is cxcellent. Acc. No. 12.229.4.

63 STATUETTE OF A YOUTH carrying a pig on his shoulders. A youth of short, stocky build with highly developed muscles stands erect, with the right foot slightly advanced; both arms are raised to hold the pig, which he grasps by the left hind leg and the right fore leg. Round his waist he wears his garment rolled up like a rope with the ends tucked in and hanging over in, front. In his hair is a fillet. Small incised lines' are used to indicate the hair of the youth and the bristles of the pig. The figure stands on a small, round base with concave sides decorated with a beaded moulding above.

The modelling is excellent and the pose very lifelike, the only signs of archaism being in the treatment of the hair and face. The workmanship is probably Etruscan, of the early part of the fifth century B.C. For a statuette of somewhat similar style cf. Archäologischer Anzeiger, 1902, p. 1 II, fig. 3.

Height, with base, $4^{\frac{3}{8}}$ in. (II cm.); height, without base, $3 \frac{3}{5}$ in. ( 8.5 cm .). Purchased in 1906 from an English collection. Said to have been found at Sirolo, near Ancona. Published by G. M.


63 A. R[ichter] in the Museum Bulletin, February, 1907, pp. 17-18, fig. 2. Cast solid. Patina light green, smooth, and hard. Preservation excellent; only the lower part of the right hind leg of the pig is missing. The surface is slightly corroded in places. Acc. No. 06.1092.

## ARCHAIC PERIOD

64 STATUETTE OF A NUDE YOUTH. He stands erect with his weight chiefly on his right leg and the left a little advanced. His left arm is held downward with hand open; the right is somewhat extended and held a staff or orher rounded object, which is lost. He has short, closely curling hair.

Both the pose and the modelling of the figure show the freedom of the fully developed style; but the face is archaic and is roughly executed. The workmanship is Etruscan.

The base is ancient, but does not belong to the statuette, the patina being quite different from that on the figure.

Height, 4 in. ( 10.1 cm .). Purchased in 1896. Provenance unknown. Unpublished. Cast solid. The patina of the statuette is hard, smooth, and dark green; that of the base is crusty and blue-green. The object held in the right hand is missing. Acc. No. G.R. 25 .

65 statuette of a Nude Youth. He stands erect with the left foot advanced and
 both arms held away from the body in a downward position. Each hand is clutching some object. He has long, wavy hair.

Coarse Etruscan work of the later archaic period.

Height, $4^{\frac{1}{8}}$ in. ( 10.4 cm .). Purchased in 1896. Unpublished. Cast solid. Patina green and crusty. Parts of both objects appear to be missing. The surface is corroded. Acc. No. G.R. 279.

66 HANDLE OF A VASE IN THE FORM OF A YOUNG GIRL bent backward. She is leaning against and placing both hands on the upper attachment, which terminates at each end in an animal's head. This attachment is curved and was fitted upon the rim of the vase, which, to judge from the curvature, must have been a trefoil oinochoë. The figure is nude and has long hair, which is arranged in a series of curls across the forehead and hangs down behind in a broad, flat mass covering the cen-

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tral part of the attachment. Her feet rest on a plaque fashioned in the form of a Gorgoneion with protruding tongue.

The pose is very graceful and the workmanship spirited. It is Greek and belongs to the late archaic period, that is, to the first half of the fifth century B.C.

Height, 5 in. ( 12.6 cm .). Width of upper attachment, $3^{\frac{1}{4}}$ in. ( 8.2 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 5012. Illustrated in the Cesnola Atlas, III, pl. LXVI, 3, where it is said to have been found at Curium and in L. P. di Cesnola, Cyprus, pl. IV, where it is said to have been found at Dali. Cast solid. The powdery green patina has been mostly removed. The surface, especially in the lower part, is extensively corroded, and the details are blurred. The legs have been broken just above the ankles. Acc. No. C.B. $44^{8 .}$


66

67 SMALL ORNAMENT FROM A HELMET OR OTHER ROUNDED OBJECT. It is in the form of a bust of an archaic Satyr, bearded, winged, and with horse's ears. The bust includes the arms, which are sharply bent at the elbow, with the hands resting against the wings, palms outward. The hair falls in three long curls at either side of the head, and between these at the bottom the design terminates in an inverted palmette, springing from a pair of scrolls or volutes.

Both for the manner in which it is composed and for the exquisite character of the workmanship, this is an especially charming piece of conventionalized ornament. The skill displayed in the modelling leads to the suspicion that the archaism is at least partly an affectation, sought consciously for the effect of style which it


67 gives. The minute care with which the lines of the hair, beard, and wings are engraved is worthy of note. It is probably an Etruscan work of the beginning of the fifth century B.C.

For similar busts see W. Helbig, Annali dell' Instituto di corrispondenza archeologica, XLVI, 1874 , pp. $4^{6-48, ~ t a v . ~ d ' ~ a g g . ~ K, ~ f i g s . ~} 3$ and 5, and E.

Babelon et J.-A. Blanchet, Catalogue des Bronzes antiques de la Bibliothèque Nationale, No. 417. Helbig, op. cit., thinks that these ornaments were attached to helmets, since a helmet, found in the Marches and now in the Museo Etrusco in Florence, shows some ornaments of not dissimilar nature still in place.

Height, $1 \frac{1}{4}$ in. ( 3.2 cm .). Width, $\mathrm{I} \frac{9}{16} \mathrm{in}$ ( 4 cm .). Gift of Henry G. Marquand, 1897. Said to have been found in a fifth-century grave, in the Necropolis of Falerii (Cività Castellana). Unpublished. Cast. Patina smooth, shiny, olivegreen, with crusty light green patches. Preservation excellent; the only missing parts are the tip of the right ear, chips off the left ear, and the ends of the fingers of the left hand. Acc. No. G.R. 36 .

73 STATUETTE OF A COCK. He stands on a small rectangular plate, with feet close together. The details are indicated by incised lines.

Probably early (sixth century B.C.). It was perhaps used as an attachment to some object.

Height, $\mathrm{I}_{\frac{5}{8}}$ in. ( $4 . \mathrm{I} \mathrm{cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4858. Cast solid. The green patina has been largely removed. Acc. No. C.B. 289 .


73

## TRANSITIONAL PERIOD

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ABOUT 480 TO 450 B.C.
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77 MIRROR STAND, IN THE FORM OF A BEARDED MALE FIGURE, PROBABLY ZEUS. He stands upon the right leg, with the left foot slightly advanced. He wears a himation, which passes over the left shoulder and under the right, leaving the arm and part of the breast bare. In the right hand, which is clasped, he held some object, which may have been a thunderbolt, but could hardly have been a sceptre or staff because of the angle at which the hand is carried. The left hand, extended, with the palm upward, evidently also held something, and from analogies this may have been an eagle or a phiale, though there are no traces of it visible through the corrosion of the surface. The hair and beard are represented by finely incised lines, the hair being coiled behind around a narrow fillet which encircles the head. The eyelids are represented by sharply defined ridges and the irises are in relief. The

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mirror-attachment, which rises directly from the head, terminates at each end in a scroll and half palmette; in the centre is a lotos flower, lightly incised. From the back rises an extra support in the form of a palmette.

The combination of archaic elements, such as those evident in the treatment of the face, the extreme breadth of the shoulders as compared with the hips, and a certain degree of rigidity in the pose, with a relative amount of freedom in the arrangement of the drapery, show that this figure belongs in the transitional period, and its date is probably about $480-470$ B.C.

The fact that this figure was used as the stand for a mirror is of especial interest, for while a number of figures of the archaic Apollo type which served as mirror-stands have been found
 (cf. A. de Ridder, Daremberg et Saglio, Dictionnaire, speculum, p. 1425, references cited in Note 3), this is apparently a unique example of the employment for such a purpose of an image of Zeus or any other adult male type. It should be noted that T. Wiegand in his recent article on the Bronzefigur einer Spinnerin, in the 73 tes Winckelmannsprogramm, p. 19, Note 6, claims that no supports of mirrors in the shape of male figures have been found, and that those usually taken for such are handles of paterae or the like. But certainly No. $51+$ in the British Museum (H. B. Walters, Catalogue of Bronzes, pl. XVI), No. $8+$ in A. Furtwängler, Collection Somzée, pl. XXXII, and our specimen have attachments which could have served only for the insertion of a thin disk like a mirror.

Height, $5^{\frac{1}{2}}$ in. ( 14 cm .). Purchased in 1906. From Greece. Referred to in the Museum Bulletin, February, 1907, p. 17. Cast solid. The crusty, green patina has been removed in places. Well preserved; only the objects held in the hands, part of the thumb and of the left hand, and the base of the figure are missing. Acc. No. 06.1098.

78 STATUETTE OF A DISKOS-THROWER. He stands firmly on both legs, the right a little in advance, in an attitude preparatory for intense action, as is seen by the way the toes are represented as clutching the ground. The left hand is raised and holds the diskos level with his head. The right arm is missing from below the shoulder, but, from representations

of a diskos-thrower in the same position on a red-figured vase in the Ashmolean Museum, Oxford, No. 56I, and on one in Munich (cf. J. D. Beazley, Journal of Hellenic Studies, vol. NXXI, igir, pl. VIII, 2), we may infer that the arm was lowered and bent at the elbow with the hand held open.

This statuette is one of the most important pieces in our collection. Indeed, the splendid proportions of the figure, the beautiful, simple modelling, and the harmonious pose, make it a masterpiece of Greek art. Moreover, it derives peculiar importance from the fact that it belongs to a period of Greek sculpture of which very few examples have survived, namely, the beginning of the so-called transition period, between the archaic and the fully developed style; for a detailed examination of our statuette will show that mixture of an advanced technique with archaic traits which is characteristic of this period. Though the figure is beautifully modelled, some parts, such as the muscles of the arms and of the calves are unduly accentuated; also, the face is still distinctly archaic in character; the ears are of primitive form and placed too high; the hair is done in a solid mass like a close-fitting cap, the individual locks having probably been indicated by incised lines, as in No. 79, though no trace remains of these now; the eyelids are too heavy, and the mouth is not yet successfully represented, because, though the archaic smile has disappeared, the corners of the mouth are now turned down too far.

From these indications the date of our statuette must be about 4 So B.C. The school to which it belongs is somewhat difficult to deterrnine. During this period a revulsion had taken place in Athens from the influence exercised by Ionian art with its rich draperies and elaboration of details to a severer type, which, though it was probably partly due to natural development at home, certainly received a great impetus from the stern ideals of contemporary Dorian art. It is naturally difficult under these circumstances, especially with the scanty material at our command, to distinguish Attic work showing Dorian influence from genuine products of the Dorian school. However, though our statuette has the broad shoulders and strongly developed muscles associated with the Argive school of the second half of the fiftl century, a type which was probably inherited from the former generation of sculptors, its general proportions are distinctly more slender, an impression conveyed by the small head and long legs. This will be particularly noticeable when we compare the diskos-thrower with the fine but thick-set statuette from Ligourio, near Epidauros, which is now in Berlin (cf. A. Furtwängler, Eine argivische Bronze, in the 5otes Programm
zum Winckelmannsfeste). Moreover, the closest analogy to our statuette in general type is the Harmodios of the Tyrannicides, which has the same agility and animation and which we know to have been an Attic work. Probabilities, therefore, are in favor of an Attic origin for our figure.

It is also noteworthy that our statuette has two peculiarities-the marked eyelids with sunken eyeballs and the mouth with drooping cornerswhich are to be found in several Athenian works of the period, such as the Kore of Euthydikos and the head of a youth in the Akropolis Museum in Athens, and have been traced directly to Doric influence (see H. Lechat, La Sculpture attique avant Phidias, pp. 353-386).

The attitude of the statuette is not to be interpreted as that of a youth holding up a disk merely as an emblem of his occupation, but rather as that of an athlete in one of the regular positions gone through in the process of disk-throwing. E. Norman Gardiner in his account of the art of diskthrowing as practised by the ancients (Greek Athletic Sports and Festivals, pp. 313-337) has shown that though the swing of the diskos was always the same, namely, in a vertical not horizontal arc, and the actual throw was invariably made from a position like that of Myron's Diskobolos, the preliminary stances and movements varied. One of them is illustrated in our statuette. From this position the diskos would be raised above the head with both hands, then swung downward and backward preparatory for the final throw-off. For representations on vases of diskos-throwers in attitudes similar to that of our figure, see the two examples cited above.

Height of figure, $9 \frac{1}{\frac{1}{2}} \mathrm{in}$. 23.5 cm .). Purchased in 1907. From the Peloponnesos. Published by E. R[obinson] in the Museum Bulletin, February, 190s. pp. 31-36; figured in E. Norman Gardiner, Greek Athletic Sports and Festivals, pp. $328-329$, fig. 8 ; ; and S. Reinach, Répertoire, IV', p. 343, No. 4. Cast solid. Patina smooth and blackish green. The right foot and the greater part of the right arm are missing. When acquired, certain portions of the surface were coated with a crusty patina, which has been removed by Monsieur A. André. The diskos, which was somewhat batiered and bent, has also been repaired. The base is modern. Acc. No. 07.286.87.

79 STATUETTE OF AN ADORANS. He is nude and stands in a dignified pose with his weight on the left leg and the right slightly adranced. The right hand is raised to his lips in the customary attitude of saluting a divinity; the left hangs down by his side with the palm turned to the front.

This is another remarkable example of Greek work of the first half of the fifth century B.C. It is probably a little later than the Diskobolos

## sTATUES, STATUETTES, AND RELIEFS

just described, and may be approximately dated as 470 B.C. Like the preceding it combines an advanced technique with some remnants of archaism, such as a certain stiffness of pose, an exaggerated broadness of the shoulders, and a rather primitive rendering of the ears and hair. The latter is indicated, as in the Diskobolos, by a solid mass in relief, but on this delicate lines are incised to represent the separate strands. The wonderful dignity of the pose and the large style in which the figure is executed suggest that it may be a copy from a larger statue. It was probably intended as a votive offering.

For representations of the adoratio ( $п р о \sigma к i \nu \eta \sigma \iota s$ ) or salutation of a divinity see E. Saglio, in Daremberg et Saglio's Dictionnaire, under adoratio, pp. 80 if.

Height of figure, $11 \frac{3}{4}$ in. ( 29.8 cm .); height with base, $12 \frac{3}{8} \mathrm{in}$. ( 31.3 cm .). Purchased in 1908 from a private collector in England, in whose possession it had been for a number of years. It had previously been in Constantinople and before that in Smyrna, but the place of its discovery is not known. Published in the Catalogue of Ancient Greek Art, Burlington Fine Arts Club, 1903, p. 46, No. 36, pl. LIII; by E. R[obinson] in the Museum Bulletin, May, 1909, pp. 77-78, fig. 2. Figured in S. Reinach, Répertoire, IV, p. 370, No. 6. Cast solid. Green, crusty patina. The head and both arms are broken off and reattached; the fingers of both hands, the toes of the left foot, and parts of the toes of the right foot are missing. The surface is somewhat corroded in parts. The base is ancient. Acc. No. 08.258.10.

80 HANDLE OF A VASE terminating at the bottom in a Siren with spread wings, standing on an acorn with a reversed palmette below and a design of scrolls on each side. She wears a fillet with the hair wound round it.

The execution is very delicate and belongs to the second quarter of the fifth century B.C.

The type of Siren is that which was prevalent in Greece proper as distinguished from Asia Minor during this period, that is, it has no arms and wears no drapery. The peculiar ring-like protrusions on the upper part of the legs, which
 occur on most examples of this type and which have been explained as reminiscent of the "Federhosen" of the Egyptian Ba, are absent in


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our example (cf. G. Weicker, Der Seelenvogel, p. I3I, where the origin of this type is traced back to Chalkis).

For other examples of Sirens on bronze handles see G. Weicker, op. cit., pp. 130-134.

Height, $8 \frac{3}{5}$ in. ( 21.2 cm. ). Purchased in 1909. Said to have come from Thebes. Published by G. M. A. R[ichter] in the Museum Bulletin, April, 1910, pp. 97-98, fig. 5. Figured in S. Reinach, Répertoire, IV, p. 446, No. 2. Cast. Patina blue-green and slightly rough. The tip of the nose is worn and there is a break across the legs; otherwise intact. Acc. No.09.221.12.


8I STATUETTE OF AN ATHLETE. A youth standing with the left foot a little advanced, and the knees and back bent. Both arms are held rigidly before him, palm downward, and the head is looking straight forward. He has large eyes, with incised pupils, and closely curling hair.

The figure is beautifully modelled in the delicate, simple manner characteristic of the middle of the fifth century B.C. Fortunately the surface is well preserved, so that every detail can be appreciated. The attitude is one of concentrated action, recalling the works of Myron, under whose

## TRANSITIONAL PERIOD-FINE PERIOD

influence this bronze was probably created. What the action was is not certain. He used to be called a diver; but if he were diving, it would be more natural for him to hold his hands together and lean further forward, like the statuette from Perugia (see S. Reinach, Répertoire, II, p. 5ł3, 7). The position of the arms in our statuette, on the other hand, could only be that of a diver when he has taken his spring; so that if a diver is here represented, the only explanation is that the artist intentionally combined the moment just before and just after the spring, perhaps because he felt that the natural position with the arms drawn in would be ineffective. ${ }^{1}$ It is more probable, however, that the youth is represented as finishing a jump, or, possibly, about to jump, for the attitude is not unlike that of jumpers on vase-representations (cf. E. Norman Gardiner, Greek Athletic Sports and Festivals, p. 302, fig. 63 and p. 309, fig. 69; and an unpublished red-figured oinochoë in New Haven).

Height, $5^{\frac{7}{8}} \mathrm{in}$. ( 14.8 cm .). Purchased in 1908 from an English collection. Said to have been found near the modern city of Taranto, in South Italy. Published by E. R[obinson] in the Museum Bulletin, May, I909, pp. 77-79, fig. 6; also described in the Catalogue of Ancient Greek Art, Burlington Fine Arts Club, 1903, p. 46, No. 37. Illustrated in S. Reinach, Répertoire, IV, p. 345, No. 9. Cast solid. Smooth, green patina. The preservation is excellent, but the surface has been scraped in various places at the back of the legs. Acc. No. 08.258.11.

## FINE PERIOD

SECOND HALF OF FIFTH CENTURY B.C.
86 MIRROR STAND IN THE FORM OF A GIRL of sturdy proportions, standing with both arms raised and steadying with her hands the two ends of the mirror-attachment, which rests upon her head. She wears a Doric sleeveless chiton, and her hair is enveloped in a sakkos or kerchief, except around the face, from which it is rolled back in heavy coils. The weight of her body rests on the left leg; the right knee is slightly bent, introducing an element of variety both in the pose and in the fall of the folds, which elsewhere are straight and regular. The mirror-attachment is treated on the front as two pairs of volutes, with an incised lotos flower between them, and on the back as a moulding decorated with a Lesbian
${ }^{\text {I }}$ This explanation has been suggested by Mr. E. Norman Gardiner, who compares the representation of a woman diving on a vase in the Louvre (cf. Daremberg et Saglio, Dictionnaire, I, fig. 747); but here the woman leans a good deal further forward than our athlete.

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leaf-pattern in relief, from which rises an extra support in the form of an ivy-leaf, undecorated.

The execution is good. The style is that of the beginning of the fine period - about the middle of the fifth century B.C.-as is shown by the attitude of complete ease, the treatment of the drapery, which no longer hides the contours of the body beneath it, and the face, which is free from archaic traits. The large, staring eyes and open mouth are unusual in figures of this class. If the provenance is correct (it is stated to have come from Macedonia), this may be a type evolved in Northern Greece.

Height, $8 \frac{1}{8}$ in. ( 20.5 cm .). Purchased in 1906. Said to have been found in Macedonia. Published by G. M. A. R[ichter] in the Museum Bulletin, February, 1907, pp. 18-19, fig. 5. Cast solid. Patina green, hard, and slightly crusty. The base and the mirror disk are missing. The figure is in an excellent state of preservation, except that the front half of the left foot and the toes of the right foot are missing, as are also the pupils of the eyes, which were inserted. Acc.


86 No. 06.1144.

87 STATUETTE OF A YOUTH. He stands with his right foot slightly drawn back and his weight full on the left leg. His left hand, which is held at his side, seems to have grasped some object like a spear or staff in an oblique position. The right arm is somewhat extended with the fingers slightly clasped, the thumb resting against the middle finger.

In all its technical characteristics this bronze shows a close affinity to the style of Polykleitos. The pose, standing in an easy attitude with one arm slightly in advance, is quite common to other works attributed to Polykleitos; and the proportions of the body-such as the square build, the short thighs, and the flatness of the abdominal region-are equally characteristic of that sculptor. Moreover, the long, angular skull, on which the hair is laid flat, arranged more or less symmetrically in locks that curl only at the ends, the narrow brow, oval face, and heavy lips are all marked features of Polykleitan works.

The execution is excellent. The modelling is fresh and vigorous, and all details, such as nails, knuckles, and veins (on the right hand and forearm and the left leg) are rendered with great care.

Both for its style and conception this statuette may be brought in connection with the group of figures mentioned by A. Furtwängler, Masterpieces of Greek Sculpture, pp. 279 ff ., of which the finest is a bronze statuette in the


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Louvre (cf. op. cit., pl. NIII, fig. rig). The attitude is very similar, the chief difference being that in our statuette the weight of the body rests on the left leg, while in the other figures this scheme is reversed.

Height, $6 \frac{1}{\frac{1}{4}}$ in. ( I 5.8 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 5014. Illustrated in L. P. di Cesnola, Cyprus, p. 345; also in the Cesnola Atlas, III, pl. LXVI, 5, where it is said to have been found "in a ravine with many parts of stone statues and heads, near the temple of Apollo Hylates northwest of Curium." (The illustration in the Atlas is from a photograph printed from the wrong side of the negative and therefore reverses the pose of the figure.) Mentioned by A. Furtwängler, Neue Denkmäler antiker Kunst, III, p. 267. Cast solid. The surface has been overcleaned and the orig-
inal patina removed, the figure being now of an artificial greenish tone; otherwise the bronze is almost intact, only the right foot being missing. Acc. No. C.B. 446.

88 STATUETTE OF A YOUTH. He stands with his left foot slightly drawn back and his weight on his right leg. The left arm hangs down by his side and probably carried a staff (now missing). The right arm is bent at the elbow and extended, and perhaps held a patera.

Like the preceding, this bronze is of Polykleitan style and closely related to the series of figures brought together by Furtwängler (see No. 87), which it resembles even more closely from the fact that the position of the legs is similar. The execution, however, is not so good as in the preceding example, and the surface is so corroded that most details of the modelling are now lost.

The hole at the top of the head indicates that it served to support some object.

Height, $5 \frac{9}{16}$ in. ( 14.1 cm .). Purchased in 1912. Described by G. M. A. R[ichter] in the Museum Bulletin, December, 1913, p. 270. Cast solid. The green patina has been almost entirely removed. The right foot is missing; also the ends of the fingers of the right hand. On the left foot a part of a tang is still preserved.


88 The surface is much corroded. Acc. No. 12.235.I.

89 STATUETTE OF A YOUTH IN PRAYING ATTITUDE, probably votive. He stands erect, with his weight on the left leg and the right slightly drawn back. The two forearms have become bent, but their action can still be determined; the right was slightly raised, with the hand held open in the gesture of prayer; the left was extended, also with open palm. He is nude and has short hair arranged in heavy locks.

The execution is excellent. The style is that of the second half of the fifth century B.C. The influence of Polykleitos is apparent in the form of the shoulders and the arms; but the rendering of the chest and the abdomen, with deep instead of shallow pelvic curve, is pre-Polykleitan. The splendid way in which the body is modelled would point to Greek workmanship. Furtwängler, arguing from the type of the face, with the large, flat eyes and

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the somewhat clumsy treatment of the hair, believes the statuette to be Etruscan. But until we know more of Etruscan work during this period, it is difficult to decide definitely between a Greek and an Etruscan origin.

For representations of figures in the attitude of prayer cf. E. Saglio in Daremberg et Saglio’s Dictionnaire, under adoratio, p. So f.

Height, measured from break just below right knee, 7 in. ( 17.7 cm .). Gift of Henry G. Marquand, i897. Published by A. Furtwängler, Sitzungsberichte


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der kgl. bayerischen Akademie der Wissenschaften, 1905, II, p. 264, fig. I, pl. IV; C. H. Caffin, Harper's Weekly, October 30, i897; and E. Knaufft, Art Interchange, November, 1897. Figured in S. Reinach, Répertoire, III, 24, 3. Cast solid. Blackish patina. The surface is slightly corroded in places. The lower parts of both legs are missing, the right from just below the knee, the left from just above the knee; also the thumb of the right hand and the four fingers of the left hand. Acc. No. G.R. 42.

90 HANDLE OF A VASE IN THE FORM OF A YOUNG GIRL bent backward, with arms raised above her head. She is nude but wears

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a cap and shoes. Her feet rest on a plaque of ivy-leaf shape, which formed the lower attachment.

The fine proportions of the body, the simple modelling, and the somewhat severe type of the face, place this handle in the fifth century B.C.

Height, $5^{\frac{3}{4}} \mathrm{in}$. ( 14.5 cm .). Purchased in 1909. Published by G. M. A. Rlichter] in the Museum Bulletin, April, 1910, pp. 97-98, fig. 7 . Figured in S. Reinach, Répertoire, IV, p. 242, No. 3. Cast solid. Green patina with brown patches; the surface is encrusted and corroded in places. Both hands are missing. Acc. No. 09.221.13.

## 91, 92 PAIR OF HANDLES FROM

 A VOLUTE KRATER. Each consists of a tall volute rising from a twisted handle, the ends of which are fashioned into swans' heads. The curve of the volute is continued on both faces by a design of scrolls and palmettes in à jour relief, while between the two faces is a palmette with a small inverted palmette in relief. The shape of the handles is very graceful and the whole effect extremely decorative.

A bronze krater from Locri with handles of the same type is in the British Museum (cf. H. B. Walters, Catalogue of Bronzes, No. 258) and another in the Naples Museum (cf. F. B. Tarbell, Naples Bronzes, No. iit, pl. LXXI). Compare also the example figured in Archäologischer Anzeiger, 1898, p. 52. The example in the British Museum has been classified among the archaic Greek bronzes, on account of the archaic character of its inscription ( $\mathbf{A} \boldsymbol{\text { ® }}$ ). However, the form $\oplus$ is often found in Locri in the first half of the fifth century


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B.C. (cf. E. S. Roberts, Greek Epigraphy, I, p. 236, No. 23I, p. 242), and occurs as late as the beginning of the Peloponnesian War, 43 r B.C. (cf. Roberts, op. cit., I, p. 239, No. 232, p. 242). There is, therefore, no reason why we should not assign our handles to the fifth century B.C., since their style and composition are characteristic of that period.

For a fifth-century example of this general type in terracotta see e.g. No. 07.286.84 in Gallery to A . Volute handles continued in regular use during the fourth century and are often found on Apulian amphorae, on which the device of terminating the ends of the handles in swans' heads became especially popular.

The dimensions of the two handles are identical: Height, $10 \frac{1}{1} \mathrm{in} .(26.1 \mathrm{~cm}$.$) ;$ width at top, $2 \frac{3}{4}$ in. ( 7 cm .) ; width at hattom, $6 \frac{15}{16} \mathrm{in}$. ( 17.7 cm .). Purchased in 1896. Unpublished. Cast partly over a core. Patina green and crusty. The surface is somewhat encrusted in parts: otherwise the preservation is excellent. Acc. Nos. G.R. iot and ioj.

93 HANDLE OF A JUG. The upper attachment by which it was joined to the rim of the vase is left plain. The lower attachment is decorated with a head of Herakles in relief. He is represented full front, with a long beard, and wearing the lion-skin cap. The hairs of the beard and lion's skin are indicated by delicately incised lines. Good, fifth-century Greek work.

Height, $5 \frac{7}{16}$ in. ( 13.7 cm .). Purchased in 1908. Said to have come from the Roman market. Mentioned in the Museum Bulletin, May, 1909, p. 8r. Cast. The patina has been almost wholly removed; otherwise the preservation is excellent. Acc. No. 08.258.4.

## 94 ROUND ORNAMENT WITH A RELIEF

 ON ITS UPPER SURFACE. The relief represents the contest of a youth and a griffin. The griffin is grappling the youth with both fore paws and digging its claws into his right arm and side; its left hind paw is planted firmly on the youth's right knee and with its beak it is biting his shoulder. The youth, who has fallen on one knee, is defending himself as best he can. In his right hand he holds a sword (now missing) which he is trying to thrust into the griffin's breast. His head and the upper part of his body are shown in full front. He is nude and has wavy hair. The griffin is of the type
## STATUES, STATUETTES, AND RELIEFS

first introduced at the beginning of the fifth century B.C., with spiked mane.

The workmanship of this relief is excellent. The figures are beautifully modelled, the strain of the combat being admirably represented in the tenseness of the muscles, which, however, show no trace of over-elaboration. Moreover, the composition is skilfully designed to fill the round space allotted to it. Greek, end of the fifth century B.C.

According to the legend the griffins dwelt near the extreme North, where they guarded gold treasures, which the Arimaspians, a race of one-eyed monsters, tried to secure from them (Herodotos, 3, II6; 4, 13). In Greek art contests of griffins and Arimaspians are often represented, the latter being depicted, however, not as one-eyed monsters, but merely as barbarians.


94 Rarely, as in this relief, the Arimaspian appears as a nude youth. For another instance see a representation on a red-figured vase (G. Micali, Monumenti inediti, pl. XL).

The ornament decorated with this relief is shaped like a knob with a flat top, the under part, which consists of three superimposed layers, being concave and ending in a large round hole, evidently for the insertion of a rod. Round the relief is a moulded edge. The use of the ornament is uncertain. It may have served as the top knob of the leg of a chair or couch.

Diameter, $3^{5} \mathrm{in}$. ( 9.2 cm .). Purchased in 1910 from an English collection. Formerly in the Barberini Collection. Found in Palestrina. Published in the Monumenti dell' Instituto, vol. IX, pl. XXXI, No. 3, and Annali, 1871, pp. 142 ff.; also by G. M. A. R[ichter] in the Museum Bulletin, April, 1911, pp. 92-94, fig. 4. The relief is repoussé and tooled; its preservation is good, only a few pieces round the edge, the right thumb of the youth, and the sword he held, being missing. The patina, crusty green with blue patches, which covers the rest of the ornament, has been mostly removed from the relief, but rust stains cover part of the youth's body, and the left fore leg of the griffin. The under part of the ornament is much broken and also has extensive rust stains. Acc. No. 10.230.1.
spool-shaped attachment terminating at each end in the fore part of a horse. Each horse has his head turned slightly to one side. The manes are indicated by incised lines. On the attachment is a series of ridges in relief.

The modelling is delicate and appears to be Greek, of the fifth cencury B.C. Unfortunately the surface is much obscured by encrustation. Com-


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pare three similar examples in the British Museum (Payne Knight Collection, 58 , not published); also some specimens of rather earlier date (K. Schumacher, Bronzen aus Karlsruhe, No. 453, pl. VIIl, ${ }_{37}$; W. Helbig, Annali dell' Instituto, 1880, p. 231).

Length, $3 \frac{1}{2}$ in. ( 8.9 cm .). Lent by Lockwood de Forest. From the Akropolis, Athens (!). Cast solid. Grayish green patina. The surface is considerably encrusted and corroded.

96 STATUETTE OF A DOE. She is standing still with her head slightly turned to the right. The left hind leg and the right fore leg are advanced.

The character of the animal is admirably expressed both in the attitude and in the expression of the face. Unfortunately the body has been scraped, so that the surface has lost its freshness. The head and parts of the legs which have been left untouched still show the smooth finish of the original. The type belongs to the fifth century.

For a similar figure compare the stat-


96 uette from Herculaneum in the Naples Museun (S. Reinach, Répertoire, II, p. 757, IV, p. 515). Does occur frequently on Attic vases of the fifth

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century (cf. S. Reinach, Répertoire des vases peints, I, 60, $158,2 \boldsymbol{q}^{6,253}$; II, $28,44,45,98$ ).

Height, $4^{\frac{1}{4}} \mathrm{in}$. ( 10.8 cm .). Purchased in 1907. Published by G. M. A. R[ichter] in the Museum Bulletin, May, 1908, pp. $89-90$, No. 6, fig. 3. Figured in S. Reinach, Répertoire, IV, p. 515, No. 4. Cast solid. The green patina has been mostly removed. Intact, except for the scraping mentioned above. The four feet were soldered separately to the base (which is missing) and still preserve remains of the lead soldering. Acc. No. 07.286.106.

97 STATUETTE OF A BULL. He is standing on all four legs looking straight before him. The hair is indicated in places with short, rather roughly incised lines. The modelling throughout shows keen observation of life, and the feeling of tranquil contentment and indolence is admirably conveyed in the pose and in the expression of the face. The workmanship is Greek, probably of a good period.

Length, 7 in. ( 17.7 cm .). Purchased in 1906. Found at Dodona. Mentioned in the Museum Bulletin, February, 1907, p. 18. Cast solid. Smooth, green patina. The greater part of the four legs, the right horn, and the end of the tail are missing, and the surface is somewhat battered in parts. Acc. No. 06.1091.


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## FOURTI CENTURY B.C.

IO5 STATUETTE OF A YOUTH. He is standing with his weight on his left leg and the right slightly drawn back. His left hand is placed on his hip; the right arm is lowered and slightly bent at the elbow. He is nude and has apparently long, straight hair done up in a tress round his head. The nipples of the breasts are inserted separately:

The surface is so corroded that it is difficult to judge of the modelling. It appears, however, to be Greek work of the fourth century B.C.

## FOURTH CENTURY B.C.

Height, 4 in. ( 10.2 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 5027. Illustrated in the Cesnola Atlas, III, pl. LXVI, 1. Cast solid. The green patina has been partly removed. The surface is much corroded. The right hand and wrist, a piece of the left forearm, and the front part of the right foot are missing. Acc. No. C.B. 338.


Io6 RELIEF, PROBABLY FROM A BRONZE HYDRIA. Eros is represented as a youth with large wings standing in an easy pose with his weight on his right leg. In his right hand he holds an oinochoë; in his left a phiale. He is nude, but wears shoes and has a chlamys hanging over his left arm. He has long hair which falls in curls on his shoulders. The feathers of the wings are indicated by incised lines. Forming the background at the top is what appears to be an inverted cluster of akanthos leaves.

The type of the face and the graceful, Praxitelean curve of the figure place this relief in the middle of the fourth century B.C.

The curved surface of the relief makes it probable that it decorated a hydria. Examples of bronze hydriae with such decorations still attached show that the exact place for it was just below the vertical handle at the back (see V. Staiss, Marbres et Bronzes du Musée National, p. 300, Nos. 7913 and 7914).

Height, $5 \frac{1}{2}$ in. ( 14 cm .). Purchased in 1907. From Bonikovo in Akarnania. Described by G. M. A. R[ichter] in the Museum Bulletin. May. 1908, p. go, No.

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9. The relief is repoussé and tooled. Patina light green and crusty. Several pieces of the right wing and the right foot have been broken off and reattached. The lower half of the left foot, pieces from both wings, and part of the ornament at the top are missing. Acc. No. 07.286.89.

IO7 RELIEF FROM THE COVER OF A MIRROR. Aphrodite is represented seated on a rock, with the upper part of her body turned toward her left. She supports her weight with her left arm, while her right hand is lifting a comer of the drapery on her shoulder. An Eros, who stands by her side, is in the act of shooting an arrow. Another Eros, of whom only part remains, is flying toward Aphrodite. Below is a swan (or goose!). Both Erotes are nude; but Aphrodite wears a short-sleeved chiton, girt at the waist, and a himation, which covers her back and is draped loosely on her lap. She has wavy hair, parted in the middle and done up in a knot behind.

The types of the faces, as weil as the


107 graceful composition and dainty postures of the figures, place this relief in the fourth century. The execution is excellent. Unfortunately the surface is much corroded, so that the beautiful modelling is obscured in places.

For the connection of Aphrodite and the swan (or goose) see A. Kalkmann, Jahrbuch des archäologischen Instituts 1886, p. $2 \not+6$ f.; L. Preller, Griechische Mythologie I, p. 304; A. Furtwängler, Brunn-Bruckmann's Denkmäler griechischer und römischer Skulptur, No. 577. There is no mention in literature of the swan as Aphrodite's bird; but it often occurs on monuments.

Height, $6_{\frac{1}{2}} \mathrm{in}$. ( 16.5 cm .). Width, $5^{\frac{1}{4}} \mathrm{in}$. ( 13.3 cm .). Purchased in 1907. Described by G. M. A. R[ichter] in the Museum Bulletin, May, 1908, p. 90, No. 8. The relief is repoussé and tooled. The crusty, green patina has been removed in places. The surface is considerably corroded and several pieces are broken off and reattached; others, such as the lower part of the flying Eros, a piece including both feet of Aphrodite, and other minor pieces, are missing. Acc. No. 07.286.88.
ro8, IO9 TWO CURVED PLAQUES, ornamented with designs in flat relief, consisting of three anthemia rising from akanthos leaves. The design is beautifully composed, the effect being rich and still perfectly
harmonious. The workmanship is Greek, of the fourth century B.C. The use of these plaques is uncertain; they probably served as attachments to a vase or other object. They are a pair, but they are not identical, differing in small details.

Height of each, $2 \frac{3}{4} \mathrm{in} .\left(6.9 \mathrm{~cm}\right.$.) ; width of each, $3 \frac{1}{8} \mathrm{in} .(7.9 \mathrm{~cm}$.). Purchased in 1909. From the Ferroni Sale (cf. Sale Catalogue, p. 44, No. 427). cf. also Sale Catalogue of the Prospero Sarti Collection, 1906, p. 28, No. 140, pl. XV. Described by G. M. A. R[ichter] in the Museum Bulletin, April, 1910, pp. 98, 99. The reliefs are repoussé. Patina green and slightly rough. The edge of one plaque is chipped in one place; otherwise intact. Acc. Nos. 09.221.18-A and B.


IIo STATUETTE OF POSEIDON(?). He stands with the right leg slightly drawn back and his weight on the left leg. His right arm is raised, the hand which is clasped having probably held the trident. The left hand is extended and evidently held another attribute, possibly a dolphin, as is the case in similar statuettes. He has thick, curly hair, beard, and moustache, and wears a small chlamys, doubled on the left shoulder and passing over the left forearm. The eyes are inlaid with silver, as were also the nipples of the breasts, which are now missing.

The workmanship of the figure is excellent. It belongs to the school of Lysippos, as is indicated by the proportions of the body, such as the slim torso and long legs, and by the modelling, which is slightly elaborated, but without the element of exaggeration introduced in the later periods.

The loss of the attributes makes it impossible to say definitely whether Poseidon or Zeus is represented, since the types are similar and the attitude of our figure is used for both; but the bushy hair and a certain expression of weariness in the face of our statuette make the identification as Poseidon more probable.

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For a similar statuette of Poseidon of the same period of. one from Paramythia in the British Museum (H. B. Walters, Catalogue of Bronzes, No. 274, pl. 6). The type goes back to an earlier original which is preserved in the famous bronze statuette in the Antiquarium, Munich (cf. W. Christ, Führer, No. 373, p. $56, \mathrm{pl} .5$ ), which belongs to the early fourth century B.C., and where the attitude of the figure is the same, only reversed. For other repetitions of this type cf. H. Bulle, in Roscher's Lexikon, under Poseidon, $\$ 2885$ f. To this list should be added one in the Museum of Tchinlikiosk at Constantinople, published by M. Collignon, in the Bulletin de correspondance hellénique IX, 1885 , pl. 14, p. 42 .

Height, $5 \frac{3}{8}$ in. ( 13.6 cm .). Purchased in 1906. Published by G. M. A. R[ichter] in the Museum Bulletin, February, 1907, pp. 18-20, fig. 4. Cast solid. Patina olive-green, smooth, and hard. The right leg below the knee, the forefinger of the right


IIO hand, the end of the thumb, and the forefinger of the left hand have been broken off; otherwise the preservation is excellent. Acc. No. 06.105s.

## III CONCAVE DISK ORNAMENTED WITH THE BUST OF

 A YOUNG SATYR. He is represented full front, with long hair, which flies about the head in thick, wavy locks. The mouth is slightly open and the face has an alert expression. The relief was worked separately and attached to the inside of the disk, covering most of its surface. The disk itself has a group of concentric circles in relief surrounding the head.The face is modelled with wonderful realism and every detail is carefully rendered. Note, for instance, the indication of the eyelashes by delicately incised lines on the lids.

With this and the succeeding disk were apparently found six other pieces, now in the British Museum, and published by F. H. Marshall, Journal of Hellenic Studies, XXIX, 1909, pp. 157 ff . Of these, three are disks similar to ours; they are ornamented with heads of a young Satyr, a Seilenos, and a bearded man with Phrygian cap, respectively. As Mr. Marshall points out, we know from the analogy of similar disks that they were used as horse-trappings ( $\phi \dot{\alpha} \lambda \alpha \rho \rho \alpha$ ). For at Alexandropol was found

## FOURTH CENTURI B.C.

a horse's bridle in which the four points where the side-straps of the bridle crossed one another and the strap along the front of the head were each ornamented with such a disk (Receuil d'antiquités de la Scythie, 1866, pp. IS ff., pl. XIV). In all there would therefore be five such disks, which is also the number found in our case. Compare also the similar ornaments found in a tomb at Kertsch with the skeletons of four horses (Compte rendu, 1865 , pp. 164 ff ., pl. V, $2-6$ ).

The South Russian ornaments are dated to the fourth century B.C. Our examples cannot be earlier than the end of that century.

Diameter, $3^{\frac{1}{4}} \mathrm{in}$. ( $\$ .2 \mathrm{~cm}$.). Purchased in 1906. From Elis (see above). Mentioned in the Museum Bulletin, February, 1907, p. 20. The relief is repoussé and tooled. The patina is blue-green and crusty, and there are brown stains, especially on the surface of the disk. The head is detached and the disk is somewhat broken. The irises of the eyes were inlaid and are missing. Acc. No. 06.1127.


II2 CONCAVE DISK, similar to the preceding, but ornamented with the head of an old Satyr. He is represented full front, with moustache, long beard, and wavy locks. He has a staring expression. There are traces of a concentric group of circles on the disk.

The workmanship is of the same high quality as in No. in i, the two being probably by the same artist.

Diameter, $3^{\frac{5}{8}} \mathrm{in}$. $(9.1 \mathrm{~cm}$.). Purchased in 1906. For provenance see No. 1 II . Mentioned and illustrated in the Museum Bulletin, February, 1907, p. 20, fig. 7.

The relief is repoussé and tooled. Patina light green and crusty. The head is detached. The disk is somewhat broken and has been repaired in places. The irises of the eyes were inlaid and are missing. Acc. No. o6.1128.

## THIRD TO FIRST CENTURY B.C.

I20 STATUETTE OF HERMARCHOS (?), mounted on an Ionic column. He is represented as an old, bearded man, standing in a thoughtful pose, with his weight on both feet and his head slightly bent and turned to the right. He wears sandals and a mantle, which is loosely draped round his body leaving the upper part bare. His right arm is lowered and held a little away from the body; the left is bent sharply at the elbow and holds the mantle.

This is probably the finest Greek portrait-statue on a small scale now in existence. The dignity of the pose and the lifelike rendering of the figure combine to make it a masterpiece of its kind. The subject is treated with a mixture of idealism and realism characteristic of the best Hellenistic works. The features are very individual, the skin where exposed is represented as shrunken by old age, and the prominence of the abdomen is faithfully rendered. But in spite of this marked realism with regard to details, the figure as a whole is full of force and dignity and the general conception is more suggestive of full-size sculpture than of a work of small dimensions. Moreover, the arrangement of the drapery in a few sweeping folds contributes to the effect of quiet simplicity.

The probable identification of the statuette as a portrait of Hermarchos is based on its close resemblance to a bust from Herculaneum in the Naples Museum, which is inscribed with that name (cf. Comparetti e de Petra, La Villa ercolanese, pl. XII, 8, and our collection of casts, No. 10+7). On p. 72 are shown two views of the heads of the Herculaneum bust and of our statuette in the same position and reduced to the same size. A comparison between the two brings out the striking similarity in the type of face and in the individual features. Each has the same general shape of face, the marked projection above the eyebrows, the long, thin nose with high bridge and pointed tip, and the same shape of the mouth and ears; and in both the hair and beard grow in the same manner. The only marked differences between the two are (I) the forehead of our statuette is higher than that of the Naples head, and (2) the skull of the Naples head is somewhat more rounded than that of ours. Moreover, in execution, our statuette is immeasurably

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superior, having all the spirit and animation of an original Greek work, while the Herculaneum bronze is a somewhat indifferent Roman copy.

Our knowledge of Hermarchos is only scanty, none of his writings having survived; but we know that he succeeded Epicurus as head of the Epicurean school of philosophy about 270 B.C., which date would agree with the gen-


BRONZE BUST OF HERMARCFOS FROM HERCULANEUA IN THE NAPLES MUSEUMI
eral style of our statuette. For other porrraits of Hermarchos, also identified on their resemblance to the Herculaneum bust, see J. J. Bernoulli, Griechische Ikonographie, II, p. i ұo. Our statuette should also be compared with the famous statues of Demosthenes, Poseidippos, and Menander (?) in the Vatican, and with the bronze statuette of a philosopher in the British Museum (cf. K. A. Esdaile, Journal of Hellenic Studies, XXXIV, 1914, pp. 47 ff., pls. II, III).

The statuette was originally mounted on an lonic bronze column, of which only the capital and the core of the shaft are preserved. Evidently

## THIRD TO FIRST (EENTURY B.C.

the shaft was made of thin bronze, which had to be strengthened inside. It has now been restored in black ebonized wood to its original height, as given by the length of the core. The abacus, or upper portion of the capital, has three mouldings, of which the upper two are decorated with the bead and the egg-and-dart patterns, and the lower, in the form of a


I 20


Lesbian cyma, with a leaf ornament. Between the volutes is introduced a flower, and suspended from the sides of the volutes are two pairs of loops (only one pair is preserved whole), probably intended to carry garlands and fillets such as were placed on votive statues on festive occasions.

The use of columns as bases for statues was more or less common in antiquity at various periods. For the sixth and fifth centuries B.C. it is attested by numerous representations on Greek vases and some remains of actual monuments. For the succeeding century the evidence is not certain. The column bases on fourth-century Panathenaic vases may or may not be taken as proof for their actual use; and the statue of Isokrates $\dot{\pi} \pi i$ kiovos (on a column) which Pausanias saw in the enclosure of the

Olympieion (cf. Pausanias, I, 18, 8) is no criterion, because, though the statue itself must have dated back to the latter part of the fourth century, the column may well have been a Roman addition. In Roman times the practice appears to have been common (cf. E. Petersen, Die Marcussäule, Archäologischer Anzeiger, 1896, p. 2). The Hermarchos statuette definitely shows that pedestals in the form of columns were also employed in Hellenistic times, though how frequent this custom was we do not know. (Compare in this connection a similar bronze capital in the Boston Museum of Fine Arts, unpublished, but mentioned in the Annual Report, 1913, p. 88, No. 13.173).

Height of statuette alone, $10 \frac{3}{8}$ in. ( 26.3 cm .); total height of column as restored, $12 \frac{1}{2} \mathrm{in}$. ( 3 I .7 cm .); length of bronze core of column, $9 \frac{3}{\frac{3}{4}} \mathrm{in}$. $(24.8 \mathrm{~cm}$.). Purchased in 1911. Published by E. R[obinson] in the Museum Bulletin, June, 1911, pp. 130 ff.; R. Delbrueck, Antike Porträts, 1912, pp. 38-9, pl. 26; G. Lippold, Griechische Porträtstatuen, 1912, p. 82 (who does not accept the identification, but is judging only from photographs). Cast hollow. Originally a crusty, green patina covered the surface of both the figure and the capital, obscuring some of the modelling. The surface has been skilfully cleaned by M. André of Paris. Both feet are broken off from the figure and reattached, the right at the ankle, and the left at the point where the leg, with the fold of drapery attached to it, joins the mantle. These fractures must have been of ancient date because their surface was covered with the same patina as the rest of the figure. The feet were also detached from the base; but that the base belonged to the figure is proved by the fact that the outline of each foot was clearly marked on the base. As mentioned above, only the capital of the column and the core of the shaft are preserved; of the two pairs of suspended loops one is whole, but of the other only the middle portion connecting the loops is left. Acc. No. Io.23I.r.

I2I STATUETTE OF APHRODITE. The attitude is a reproduction of the Knidian Aphrodite of Praxiteles. She stands leaning slightly forward with her weight on her right leg and the left somewhat drawn back. Her right hand is lowered and placed in front of her, with fingers extended; the left is held a little away from the body, the fingers being bent to grasp the drapery (now lost). Her head is turned to the left. She is nude and has long, wavy hair, tied with a fillet and falling down her back in a tress.

The fine execution of this statuette and its uncommonly large size make it a piece of peculiar importance. The graceful proportions of the body and the wonderful delicacy of the face can give us some idea of the powerful charm that was exercised by its famous original. Unfortunately the surface is considerably corroded, so that the beautiful modelling which can be


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seen on the better preserved parts, such as the left forearm, the under side of the right forearm, and parts of the back, does not come out to its full value on the rest of the statuette. There can be no doubt, however, that the execution is Greek, not Roman; probably a late Greek work of a school of Asia Minor.

As is well known, the identification of the Knidian Aphrodite is based on representations on Roman coins from Knidos, which show the goddess in a similar attitude (cf. J. J. Bernoulli, Aphrodite, pp. 15 and 208). The chief difference between the coin representations and the statues reproducing this type (cf. S. Reinach, Répertoire I, pls. 606 B, 616, 618; II, p. 352, 1; 356, 6-10; 804, 3; III, p. 109, 6; 110, 8, 10; IV, p. 216, 4-7; also A. Furtwängler, Masterpieces, p. 322, Note 3) is that in the former the head is turned sharply to the left, while in the statues the inclination is much slighter. It is interesting to note that in our statuette the head is more nearly in the position of that of the coin-types, though it is not, as there, in complete profile. In two other respects, however, this statuette is farther removed from the figures on the coins than most of the statues: (I) the hair is not gathered in a knot behind, but is plaited and hangs down the back; (2) the left arm is not bent sharply at the elbow but held considerably lower. Such variations from an important original that was copied again and again are very natural, and an examination of the extant Knidian reproductions will show how frequent they are. Artists grew tired of mechanically repeating one type and were glad to introduce modifications, which, however unimportant in themselves, allowed some vent to their own imagination.

Bronze statuettes in the attitude of the Knidian Aphrodite are not uncommon (see e.g. J. J. Bernoulli, Aphrodite, pp. 217 ff.); but these generally show modifications in the action of the left arm, which, instead of holding the drapery at the side, is represented as grasping some attribute. Though the drapery in our statuette is missing, there can be no doubt that it was originally held by the left hand, and that the figure corresponded also in this detail with the Praxitelean original. For other bronze statuettes of Knidian type with the drapery cf. A. de Ridder, Collection de Clercq, III, p 6, Nos. $\boldsymbol{f}^{-6}$.

Height, $20 \frac{3}{8} \mathrm{in} .(51.7 \mathrm{~cm}$.). Purchased in 1912. Provenance not certain; perhaps from Asia Minor. Said to have been formerly in a collection in Alexandria. Published by G. M. A. R[ichter] in the Museum Bulletin, December, 1913, pp. 268, 269, fig. 6. Cast hollow. The patina, where preserved, is smooth and dark green, but the surface is considerably corroded and the missing patina has

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been restored in places by green paint. The left leg from about the middle of the shin-bone is modern. On the right leg the knee and the adjoining parts are either restored or covered with modern stuff. The right arm has been reattached, the joint being hidden by restorations; the left arm has probably also been reattached and parts of the upper arm are restored. The bronze was broken in the back across the shoulder and some slight restorations have been made there. On the sole of the right foot is a long shallow depression, of roughly the same outline as the foot, perhaps made for the purpose of fastening. The heel has been pierced for the insertion of a modern dowel. Acc. No. 12.173.

122 HAN゙DLE OF A LID OF A CISTA, IN THE FORM OF TWO YOUTHS CARRYING THE DEAD BODY OF A THIRD. They stand erect, both in the same position, with the weight resting on the left leg and the right slightly advanced. Their arms are extended to carry the body of their companion, one holding him by the left foor and thigh, the other by the left shoulder and the head. All three are nude. The two standing youths rest on a long rectangular plaque, slightly curved, which formed the attachment to the lid of the cista; in the centre of the plaque is a small ring. One of the rivets with which the attachment was fastened to the cista is still in place. Illustrated, p. 79.

The motive of two youths carrying the body of a third is not an uncommon one and was used with many variations (cf. S. Reinach, Répertoire, II, p. 52I). Our example is of better execution than the average; the figures are well modelled throughout, and the stiff joints and lifeless face of the dead show a close observation of nature. The work is Etruscan, probably of the third century B.C., which is the period to which most Etruscan cistae belong (cf. p. 290), though the style is rather earlier, as is often the case in handles of cistae (compare No. I24).

Height, $5^{\frac{1}{2}} \mathrm{in}$. ( 14 cm .); width at base, $5^{\frac{7}{8}} \mathrm{in}$. ( 14.8 cm .). Purchased in 1909. Published by G. M. A. R[ichter] in the Museum Bulletin, April, igro, pp. 96-97, fig. 6. Figured in S. Reinach, Répertoire, IV, p. 323, fig. I. Cast solid. Patina green and slightly rough. Intact. Acc. No. 09.221.iI.

## I23 HANDLE OF A CISTA, IN THE FORM OF TWO YOUTHS

 CARRYING THE DEAD BODY OF A THIRD, similar to the preceding, but with positions reversed. They stand erect, one with the weight resting on the left leg, the other on the right leg, one looking to the left, the other to the right. Their arms are extended to carry the body of their companion, one holding him by the right arm and head, the other by theright foot and knee. All three are nude and have short, straight hair. The dead youth has a wound on his right side.

The curved rectangular plaque which formed the attachment to the lid of the cista is mostly missing; only the parts of it on which the two standing figures stood are preserved and have been cut to form two round plinths.

This example is of the same careful execution as the preceding, and is likewise an Etruscan work of the third century B.C.

For references to similar groups see No. 122 .
Height of right-hand youth, $5 \frac{3}{16}$ in. ( 13.2 cm .), of left-hand youth, $5 \frac{1}{16}$ in. ( 12.9 cm .).; greatest width of group, $5^{\frac{1}{4}} \mathrm{in}$. $(13.3 \mathrm{~cm}$.). Purchased in 1913 from the Taylor Collection. Published in the Catalogue of Ancient Greek Art, Burlington Fine Arts Club, pl. LVI, No. 61. Cast solid. The crusty, green patina has been mostly removed. No missing parts. Acc. No. 13.227.7.

I24 HANDLE OF THE LID OF AN ETRUSCAN CISTA, IN THE FORM OF TWO WRESTLERS. They stand side by side, their bodies inclined toward each other, with heads in contact and their arms locked behind their heads. The attitude of each is similar but reversed. The bodies are represented in full front, except the inside leg of each, which is in profile. They are nude and beardless, and have short, straight hair. They stand on a long rectangular plaque, slightly convex, which formed the attachment to the lid. The plaque is decorated round its edges with beading, and there are three rivet-holes, to one of which a ring is attached.

The execution is fairly good and probably belongs to the third century B.C., though the style is rather earlier, as is often the case in handles of cistae (see above, No. 122).

A group of two wrestlers in this or similar attitudes appears to have been a favorite device for cista-handles, and indeed the composition is clearly designed to furnish a convenient grasp for the hand. For similar examples cf. H. B. Walters, Catalogue of Bronzes in the British Museum, No. 639; Monumenti dell'Instituto, X, 1877, pl. XLV, I a; E. Babelon et J.-A. Blanchet, Bronzes antiques de la Bibliothèque Nationale, No.935. Compare also groups of warriors similarly grouped and used for cista-handles, one in the Louvre (S. Reinach, Répertoire, II, p. 539, 5), and one in Vienna (E. von Sacken, Die antiken Bronzen des kgl. Münz-und-Antiken-Cabinetes in Wien, XLV, 7).

Height, $4^{\frac{1}{2}} \mathrm{in} .\left(11.3 \mathrm{~cm}\right.$.); length of base, $5 \frac{7}{8}$ in. $(14.8 \mathrm{~cm}$.). Purchased in 1896. Unpublished. Cast solid. The crusty, green patina has been mostly removed. No parts missing. Acc. No. G.R. 27.


I 24

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I25 HANDLE OF A JUG OR FROM THE LID OF A CISTA, IN THE FORM OF A NUDE GIRL leaning back. She holds her right hand in front of her, and grasps one breast with her left. Her feet are kept close together. She has long hair which, instead of falling down her back, is represented as continuing the line of the handle.

Etruscan style, of cursory workmanship and uncertain date.

Length, 3 in. ( 7.6 cm .). Purchased in 1897. Unpublished. Cast solid. Crusty, light green patina. The surface is corroded in places. The handle was attached by means of two rivets, which are still in place. Acc. No. G.R. 156.


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I26 PLAQUE, of roughly triangular shape, decorated with incised designs. The decoration is divided into three tiers. In the uppermost, which is the broadest, is represented a woman standing with one hand on her hip, the other extended with open palm, as if to ward off something. Approaching her is a swan, and in the background a tree. To the right another woman is seated by an overturned jar from which water is flowing; in the background are leaves. Each woman is lightly draped with a himation and wears a necklace and bracelets. Both have long hair; the standing woman wears a fillet with triangular ornament in front, while the seated one has a band tied in a bow knot in front. In the second tier is a woman, seated to the right with one arm raised to her face, the other lowered and bent at the elbow. She is confronted by a standing woman, who, to judge by her general attitude and outstretched right hand, is appealing to or remonstrating with her. Each is wrapped in a himation, which in the case of the seated woman is pulled up over the head to form a veil. They wear necklaces, bracelets, and fillets with leaf-like or triangular ornaments. In the background are leaves. In the third tier are represented two men and a woman seated in a tub-like boat. The men are nude and have short hair. The woman is draped and wears a necklace and the same fillet with leaf-like ornaments as some of the other women. The rim of the boat is decorated with rows of dots.

Round the design is a narrow, plain edge. There are twelve rivet-holes, four along the top, three on each side, and two at the bottom. Several of the rivets are still partly preserved; three retain their heads; four others parts of the loops. They probably served for the attachment of a

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leather lining. It should be noted that these rivets were inserted after the design was drawn, which is in several cases obscured by them.

Both the purpose for which this object served and the interpretation of the designs are uncertain. In shape it resembles somewhat a horse's nose-piece (cf. e.g. K. Schumacher, Antike Bronzen aus Karlsruhe, Nos. 780 ff.). The design, though particularized by so many details, does not seem to refer to any known legend. The woman by the overturned jar may be a fountain nymph, and the presence of the swan recalls the story of Leda; but this does not help the interpretation of the whole. The style is Etruscan of about the third century B.C., and bears a strong resemblance to the compositions on Etruscan cistae of that period. With picturesque
 grouping and graceful postures are combined a lack of finish in details and many mistakes of drawing, such as the exaggerated size of some of the hands and feet. The manner in which the rivet-heads interfere with the design is also paralleled by the attachments of the rings on the cistae. The possibility suggests itself that, as is the case on so many cistae, the designs do not refer to any particular story, but simply represent a number of personages in various attitudes. However, the introduction of so many specific details in our composition makes this explanation unsatisfactory. For the introduction of landscape details cf. a certain group of Etruscan mirrors, of which No. 8 I 4 in this collection is an example.

Height, $10 \frac{5}{16} \mathrm{in}$. 26.2 cm .). Width at top, $7 \frac{7}{16}$ in. ( 18.9 cm .). Purchased in 1913. Published by G. M. A. R[ichter] in the Museum Bulletin, April, 1914, pp. 93, 94, fig. 5. The crusty, green patina has been mostly removed from the front. At the back the surface is much encrusted. The design has been picked out with white water-color paint. There are several cracks and holes. Acc. No. 13.225.7.

I27 STATUETTE OF A GROTESQUE FIGURE (MIMlUS). He stands with his weight on both feet, the right slightly advanced. Both forearms are missing, but enough remains to indicate their original attitude. The right arm is lowered, and was bent sharply at the elbow; the left arm

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was extended sidewise. He wears sandals and a sleeved tunic, which reaches to below his knees and has a fringed border at the bottom. The grotesque character of the figure is brought out by the hunch on his back and his chest, the large phallus, the enormous head, and the exaggerated features (large ears, long hooked nose, and crooked mouth with protruding teeth at the

corners). He has whiskers and short, straight hair, which leaves the temples bald. On the crown of the head is a round, shallow depression, of which the most probable explanation is that it was originally inlaid, perhaps with silver, to indicate a shiny bald spot; even now, with the inlay fallen out, it gives the appearance of a large tonsure. (For another statuette with the crown of the head inserted separately cf. Archäologische Zeitung, 1877, p. 78, pl. ıо.)

The execution is excellent; it is both careful and spirited; and the rendering of the face with its half-leering, half-pathetic expression makes of this deformed creature a work of high art. Moreover, technically, this figure is of great interest, illustrating as it does the extreme care with which some ancient bronzes were worked and decorated (cf. pp. xxiv ff.). Both forearms were evidently made in separate pieces and inserted. (For
a case of two ears worked separately cf. H. Dütschke, Antike Bildwerke in Oberitalien, IV, p. 137, No. 342.) The whites of the eyes are of silver; the irises and pupils have fallen out, but were probably either of bronze, glass paste, or precious stones. The two protruding teeth are of silver; the hair and whiskers are covered with a thin foil of niello, and the little buttons on the sleeves of the tunic are also of niello. While the insertion of silver eyes was a common practice in ancient times (cf. F. Wieseler, Ueber die Einlegung und Verzierung von Werken aus Bronze, in Nachrichten von der Gesellschaft der Wissenschaften zu Göttingen, r886, p. 49), and that of silver teeth is also known from other examples (cf. Wieseler, op. cit., p. 63 ), the application of a separate metal for the hair and beard as distinguished from the rest of the figure is, apparently, not known from other examples of classical art (cf. Wieseler, op. cit., p. 6I). Though the black niello can now hardly be distinguished from the dark patina, it must originally have been most effective when contrasted with the golden color of the bronze.

The period to which this statuette belongs must be late Greek; at least it is inconceivable that a work of so much spirit and animation and of such masterly technique originated in Roman times; and its style and conception do not permit an earlier dating.

All statuettes of this character used to be classed as "Alexandrian" grotesques. As a matter of fact, as A. J. B. Wace has pointed out (cf. British School Annual, X, 1903-1904, pp. 103 ff .), few of them have certainly been found in Egypt, while many come from Italy, and some come from Greece and Asia Minor. Mr. Wace thinks that they were used as charms against the evil eye (cf. op. cit., p. 109). For the probable identity of the "Grotesques" and the actors in the ancient farcical plays called mimes, cf. G. M. A. Richter, American Journal of Archaeology, second series XVII, 1913, pp. 149 ff.

Height, $3 \frac{15}{16} \mathrm{in}$. ( 10 cm .). Purchased in 1912. The statuette is not a recent find, but has been known for a long time. It formed part of the Ficoroni Collection and is described and illustrated in F. de Ficoroni, De larvis scenicis, pl. 9, No. 2 (1754). Also published in F. Wieseler, Denkmäler des Bühnenwesens, 1851, pl. XII, No. II (it is here described as with protruding tongue: Wieseler was evidently judging from the illustration of Ficoroni, De larvis scenicis, where it has that appearance); G. M. A. Richter, American Journal of Archaeology, second series XVII, 1913, pp. 149 ff ., pls. V and VI, and the Museum Bulletin, December, 1913, pp. 266, 268, fig. I. Illustrated in A. Dieterich, Pulcinella, p. 151; S. Reinach, Répertoire II, p. 815, 3. Cast solid. Patina brown, smooth, and highly lus-

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trous. Both forearms and the piece inlaid on top of the head are missing; otherwise intact. Acc. No. 12.229.6.

I28 STATUETTE OF AN ACTOR (?). A short, stockily built man is represented standing firmly on both feet, with the right leg advanced. His body and arms are enveloped in a mantle, which he wears folded double, so that it covers only the upper half of the figure. He has a long, curly beard and short hair, which is indicated only by the raised surface acrass the forehead. The earnest, upturned face, the dramatic manner in which both hands clutch the folds of the drapery, and the declamatory pose, all suggest an actor reciting, which is probably the subject, in spite of the absence of the usual mask.

The spirited execution, as well as the conception, indicate the Hellenistic period as the date of the figure.

A similar statuette is in the Dutuit Collection, Petit Palais, Paris (cf. W. Froehner, Catalogue of the Dutuit Collection, I, p. 24, pl. 33; also S. Reinach,


128 Répertoire, II, p. 559, 2, and Catalogue de la vente Fillon, pl. I). Compare also one from the Nolivos Collection, described in the Catalogue de la vente Milani (Frankfort, 1883), No. 463, and figured in S. Reinach, Répertoire, II, p. 815,5 . This appears to be identical with the statuette recently acquired by the Bibliothèque Nationale in Paris from the Piet-Labandrie Collection.

Height, $4_{4}^{\frac{3}{4}}$ in. ( 12 cm .). Purchased in 1907. Said to have come from Italy. Published by G. M. A. R[ichter] in the Museum Bulletin, May, 1908, pp. 90-91, No. 12, fig. 5 ; figured in S. Reinach, Répertoire, IV, p. 350, No. 6. Cast solid. Smooth, olive-green patina. The toes of the right foot and the large toe of the left foot have been injured; otherwise in perfect preservation. Acc. No. 07.286.96.

I29 STATUETTE OF A BEARDED DANCING SATYR. He is standing with his left leg advanced and his head a little on one side. The type is the same as that of the famous bronze in the National Museum of Naples (cf. Antichità di Ercolano, VI, pl.94), which, however, is a little larger. From the Naples example we can restore the missing parts in our figure. The right arm was extended, with the forearm brought forward and the hand closed; the forefinger of the right hand touched the beard. The lower parts of the legs in our statuette have become slightly bent; the right leg was originally set farther to the left and the Satyr was standing on tiptoe.

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In spite of the small dimensions the modelling is executed with great care and the spirit of mirth is admirably represented in the laughing face. The workmanship belongs to the Hellenistic period.

Height, $2 \frac{5}{8}$ in. ( 6.6 cm .). Purchased in 1909. From the Ferroni Sale (cf. Sale Catalogue, p. 53, No. 543). Published by G. M. A. R[ichter] in the Museum Bulletin, April, 1910, pp. 96-97, fig. 3. Figured in S. Reinach, Répertoire, IV, p. 33, No. 2. Cast solid. The blue-green patina has been largely removed. The right arm from above the elbow, the left forefinger, and the toes of the right foot are missing. Acc. No. 09.221.23.

## I30 STATUETTE OF HERAKLES STRUGGLING WITH THE NEMEAN LION. Herakles

 is striding to the right with his weight on his left leg. His left arm is around the neck of the lion, which he is throttling with all his might; with his right, which is hidden by the lion, he is probably thrusting his

129 sword into its breast. He is nude and has closely curling hair. The lion has his right hind leg planted against Herakles' leg, and his tail is wound round the other hind leg. His right fore paw is caught in his opponent's embrace, while the left hangs down in a helpless manner.

The execution is fresh and vigorous. The strain of the hero's action is well brought out by the tension given to each muscle, while the limp body of the dying lion forms an effective contrast. The elaboration of the modelling points to the Hellenistic period as the date of this group.

Height, $2 \frac{1}{16}$ in. ( 5.2 cm .). Purchased in 1909. From the Prospero Sarti Collection (cf. Sale Catalogue, 1906, p. 17, No. 4I, pl. VII). Said to have come from Rome. Published hy G. M. A. R[ichter] in the Muscum Bulletin, April, 1910, pp. 96-97, fig. 2. Figured in S. Reinach, Répertoire, IV, p.136, No. 2. Cast solid. The crusty, green patina has been partly removed. The right foot of Herakles is missing and the lion's tail is broken in one place. The surface is considerably encrusted in places. Acc. No. 09.221.22.


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I3 I STATUE OF AN EROS. He is springing forward, lightly poised on the toes of his right foot. The left arm is extended forward and holds the



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socket of a torch; the right is lowered and held obliquely from the body with fingers extended. He is nude and winged, the feathers of the wings being indicated on the front side by incised lines. His hair is curly and short, except for one tuft which is gathered about the centre of the head and braided. The figure is mounted on a round, moulded base.

This famous statue is one of the finest representations of Eros known. The artist has admirably succeeded in conveying the lightness and grace associated in our minds with the conception of Eros. Everything in the figure suggests rapid forward motion; but this is attained without sacrificing the perfect balance of all parts, so that the impression made is at the same time one of buoyancy and of restraint. The childlike character of the figure is brought out in the lithe, rounded limbs and the smiling, happy face. Unfortunately the surface is much corroded in places, but the beauty of the modelling can be seen in the better preserved parts-the front and left sides of the head and portions of the arms and of the right leg; and even on the back, where the corrosion is worst, the graceful outline of the figure can still be appreciated.

The conception of a running Eros was apparently popular in Roman times, for there are a large number of examples of that period in more or less the same attitude as this statue (cf. S. Reinach, Répertoire, I, p. 4+4, i and 5; II, p. 428, 2; p. 444, r;p. 445, 4; p. 446, 7 and 8; p. 447, 1, 3-8; III, p. 128, 5; p. 129, 1, 3, 6;IV, p. 260, 7; p. 26r, r, 2, 5; p. 262, 2, +; p. 263, I, 6). But, though the motive is similar, our statue is so superior to these figures both in spirit and in execution that there seems no doubt that it is of Greek not Roman workmanship. Indeed, the conception is characteristic of the later Hellenistic time, that is, of the second or first century B.C., and it is to this period that our statue probably belongs. The treatment of the hair in a series of separate curls laid closely on the scalp is reminiscent of the style of Lysippos. The custom of braiding one tuft of hair became very popular in Roman times; but it occurs as early as the fifth century B.C. (cf. Archäologische Studien Heinrich Brunn dargebracht, 1893, pp. 88 ff., pl. 3; also A. Furtwängler, Masterpieces, p. 316 ).

The fact that Eros is represented in rapid motion carrying a torch, suggests the possibility that he is conceived as running in a torch-race, as has been surmised in the case of similar figures from Tunis (cf. A. Merlin and L. Poinssot, Monuments Piot, XVII, 1909, pp. 52-54. ${ }^{\text {I }}$ For torch-racing in antiquity cf. Plato's Republic, p. 327; also the Classical Review, r899, p. 230). Like the Hermaphrodite from Tunis, it is also possible that our Eros

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originally served a practical purpose as a candelabrum. Since there is no connection in the case of our figure between the socket and the arm, it is not likely that it was used as a lamp, since the supply of oil would have been rather scant; but a real torch or candle could easily have been inserted in the socket.

Height with pedestal, $23 \frac{3}{16}$ in. ( 58.9 cm .). Height of figure, $20 \frac{1}{4}$ in. ( 51.4 cm .). Lent by J. Pierpont Morgan, 1910. Said to have been found in a villa at Boscoreale at the mouth of the river Sarno (not the villa in which the frescoes in this Museum were found), and formerly exhibited in the Victoria and Alberr Museum in London. Published in the Catalogue of Ancient Greek Art, Burlington Fine Arts Club, 1904, p. 23, No. 30, pls. I and XXIX; Cecil H. Smith, Catalogue of Bronzes in the Collection of J. Pierpont Morgan, No. 13, pp. III, 7, pls. VI, VII, and Burlington Magazine, July, 1903, p. 250; J. Foville, Le Musée, III, 1906, p. 205, fig. 34; G. M. A. R[ichter], Museum Bulletin, February, i910, p. 39; S. Reinach, Répertoire, IV, p. 259, 2. Cast hollow. The inside has been filled with cement to strengthen the bronze. The patina, where preserved intact, is smooth and bluish-green. There are no missing parts, but the surface is badly corroded in places, having been exposed to water. The eyes were inlaid with silver, which is still partly preserved.

I32 EROS ASLEEP. He is represented as a little boy stretched out on a rock. He lies on his right side, resting his head on his right arm and with the left arm hanging loosely across his body. His legs are outstretched and parted. He is nude, winged, and has long, curly hair. The rock on which he lies is on an inclined plane and is mostly covered by a large piece of drapery which is twisted togerher at the upper end to serve as a pillow. The feathers of the wings are indicated by engraved lines. Illustrated, p. 89.

The conception of a sleeping Eros was originated in the Hellenistic period and is characteristic of the more personal view of that deity prevalent during late Greek and Roman times. It was a favorite device for tombstones, for which a standing Eros leaning wearily on a torch was also popular; but its use was not limited to this purpose (cf. A. Furtwängler, in Roscher's Lexikon, under Eros, § 1369, and Bullettino dell' Instituto, 1 877 , pp. I21 ff.; for similar marble figures cf. also $S$. Reinach, Répertoire, I, pls. $\left.6_{43}, 6_{4}, 6_{4} \mathrm{~A}, 6_{4} \mathrm{~B}, 76_{1}, 76_{1} \mathrm{~B}\right)$.

The execution of our example is good. The complete relaxation of the child is wonderfully portrayed and the modelling, though not of the finest order, is both careful and spirited, belonging probably still to the Hellenistic period. It should be noted that--by what seems a curious inadvertencethe left arm and both legs of the statuette are not represented as supported by anything.

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Length, $8_{\frac{1}{4}} \mathrm{in}$. ( 21 cm .); height, $4 \frac{3}{16} \mathrm{in} .(10.7 \mathrm{~cm}$.). Purchased in 1913. Formerly in the Ficoroni Collection. Published by J. Zempel, Musei Kircheriani, in Romano Societatis Jesu Collegio, Aerea notis illustrata, ( 1763 ) vol. Il, p. 83, pl. X゙N; also by G. M. A. R[ichter] in the Museum Bulletin, April, 1914, pp. 90-91, fig. 2. Cast hollow. The crusty, green patina, which can still be seen on the rock and part of Eros' hair, has been removed from the rest of the surface. There is a break on the left arm, just below the shoulder, with a piece missing. The bronze is also somewhat corroded in places. There are three rivet-holes on the lower edge of the rock, of which one appears to be modern. Acc. No. 13.225.2.

## 133, 134 PAIR OF ORNAMENTS FROM A COUCH, EACH IN

 THE FORM OF A MULE'S HEAD. The neck is turned to the left and to the right, respectively, and appears in relief; the head is bent sidewise and is modelled in the round. The lower edge of the neck is cut out semicircularly. Encircling the head is an ivy wreath, and on the neck is a caparison ornamented with the skin of an animal. The eyes are inlaid with silver; the irises were inserted separately and are missing.Ornaments of this type have been found in considerable numbers. They were used to decorate the upper front corners of the curved rests placed on couches of late Greek and early Imperial type (cf. C. L. Ransom, Studies in Ancient Furniture, p. 32, pls. VIII-XVII; H. B. Walters, Catalogue of Bronzes in the British Museum, Nos. 2561 ff.; E. Pernice, Archäologischer Anzeiger, 1904, p. 30, fig. 36). They are referred to by Hyginus, Fabulae, 274, and by Juvenal, Satire XI, 97 as coronati capita aselli. See also Mayor's Juvenal ad. loc., where there is a discussion of the origin of these heads.

Our examples are beautifully worked, the character of the animal being well
 brought out and all details carefully modelled. They probably belong still to the Hellenistic period.

Height of each, $3 \frac{1}{2}$ in. ( 8.9 cm .). Purchased in 1913. From Asia Minor. Published by G. M. A. R[ichter] in the Museum Bulletin, April, 1914, p. 94, fig. 6. Cast partly over a core. The crusty, green patina has been largely
removed. The irises are missing (see above): otherwise in excellent preservation. Acc. Nos. 13.227 .9 and 10.

135 SMALL PLAQUE WITH THREE GOATS IN LOW RELIEF. In front is a goat lying on the ground and scratching its ear with one hind hoof; behind it another goat is clambering on some rocks to the left, apparently browsing on a tree; and behind this one a third goat is doing the same at the right.

The effect of the composition is somewhhat crowded and it is difficult at first sight to differentiate the three figures, as the height of the relief is the same in each case, though they are supposed to be in different planes. But the animals are well characterized, their postures being very lifelike and evidently studied from nature. The shaggy hair is successfully represented by small incised lines. The bronze sheet on which this relief is worked is very thin; it must have served to decorate some object, as can be seen by the small


135 rivet-hole near the edge. The date is uncertain; probably late Greek.

Height, $3^{\frac{1}{4}} \mathrm{in}$. $(8.2 \mathrm{~cm}$.). Width, 3 in. ( 7.2 cm .). Purchased in 1909. From Thebes. Described by G. M. A. R[ichter] in the Museum Bulletin, April, 1910 , p. 98. The relief is repoussé and tooled. The crusty, green patina has been partly removed. The relief is broken in several pieces which have been reattached. The surface is considerably encrusted in places. Acc. No. 09.221.24.

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The statuettes here classed together are all of more or less crude workmanship and have no artistic value. They are interesting, however, from an archaeological point of view, as they probably represent the common votive offerings of the poorer classes, who naturally had to have their presents cheap. Occasionally they are of abnormally elongated proportions, a circumstance which has been explained by the fact that they represent a compromise between the original vow, when a statuette of large size was promised, and the later carrying out of it, when the question of economy became a matter for consideration (cf. J. Martha, L'Art étrusque, p. 502 f.). Such statuettes have been found in great quantities in Italy, especially in

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Etruria. Our examples, though individually of unknown provenance, were purchased together as a collection made in Italy (Florence) and were therefore presumably found in that country.

The rough execution of most of these figures often makes it impossible to assign a definite date to them. Moreover, the same type sometimes appears to have been in use for a long time, beginning perhaps in the archaic period, but continuing down to Roman Imperial times; nor was such uniformity unnatural when we consider borh the conservatism of religious customs and the lack of artistic inspiration in those strata of Italian civilization which remained untouched by Greek influence.

I45 MALE STATUETTE, standing with his weight on both legs and both arms lowered. The execution is very primitive and recalls the early figurines found at Olympia (A. Furtwängler, Olympia, IV, Die Bronzen, pl. XV f.).

For similar statuettes found on the Viminal, Rome, cf. G. Pinza, Monumenti antichi, XV, p. 602, pl. XVI, I-IO, I2, $\mathrm{I}_{3}, \mathrm{I}_{5}$.

Height, $2^{\frac{1}{4}} \mathrm{in}$. $(5.7 \mathrm{~cm}$.). Purchased in 1896 . Unpublished. Cast solid. Crusty, green patina. Acc. No. G.R. 192.

I 46 MALE STATUETTE, similar to the preceding.

Height, $2 \frac{3}{16}$ in. ( 5.6 cm .). Purchased in 1896 . Unpublished. Cast solid. Crusty, green patina. Acc. No. G.R. 205 .


147 MALE (?) STATUETTE, similar to No. i45, except that the arms are held farther away from the body.

Height, $2 \frac{1}{8}$ in. ( 5.3 cm .). Purchased in 1896 . Unpublished. Cast solid. Crusty, green patina. The right foot and the left leg from above the knee are missing. Acc. No. G.R. 21 1.

I48 STATUETTE, similar to the preceding, but apparently female. Below each foot is a tang for insertion in a base.

Height, $1 \frac{7}{8} \mathrm{in} .(4.7 \mathrm{~cm}$.). Purchased in 1896 . Unpublished. Cast solid. The crusty, green patina has been mostly removed. Acc. No. G.R. zo8.

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149 STATUETTE, similar to No. 147 , but, like No. 148, apparently female. Below each foot is a tang for insertion in a base.

Height, $I_{\frac{7}{8}}$ in. ( 4.7 cm .). Purchased in 1896 . Unpublished. Cast solid. The crusty, green patina has been partly removed. Acc. No. G.R. 203.

150 MALE STATUETTE, of the same primitive type as the above (Nos. 145 ff .), but with right arm raised and the left extended forvard. Below each foot is a tang for insertion in a base.

Height, $2 \frac{5}{8}$ in. ( 6.6 cm .). Purchased in $\mathbf{1 8 9 6}$. Unpublished. Cast solid. Crusty, green patina. Acc. No. G.R. 215 .


150


152


15 I

I5 I STATUETTE OF A FEMALE FIGURE. She stands erect with feet close together, the right arm extended, the left holding a fold of her drapery. She wears a pointed cap and a long chiton decorated with dots. Below the feet is a tang for insertion in a base. Very crude execution, probably archaic Etruscan.

Statuettes of this type have been found in Italy in considerable numbers; some near the Black Stone on the Roman Forum (Notizie degli Scavi, I899, fig. 7, 5, p. 158 and passim; cf. also A. de Ridder, Les Bronzes antiques du Louvre, I, Nos. 224 ff., pl. 22, 235; and the other references there cited). The attitude is similar to that of the Akropolis maidens.

Height, $2 \frac{1}{2}$ in. $(6.3 \mathrm{~cm}$.). Purchased in 1896 . Unpublished. Cast solid. Smooth, green patina. Part of the tang is missing. Acc. No. G.R. 201.

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I52 STATUETTE OF A FEMALE FIGURE, similar to the preceding, except that the chiton is undecorated and the nipples of the breasts and the navel are indicated by incisions. She stands on a small circular base. Very crude execution.

Height, $2 \frac{15}{16} \mathrm{in}$. ( 7.5 cm .). Purchased in 1896 . Unpublished. Cast solid. The smooth, green patina has been partly removed. Acc. No. G.R. 227.

I53 STATUETTE OF HERAKLES. He stands with his weight on both legs and his left leg put forward. His right arm is raised and wields the club; the left is extended and probably held the bow (now missing). He is nude and beardless, with short hair, and he carries the lion's skin over his left arm. Very crude execution. Illustrated, p. 97.

Statuettes of Herakles in advancing attitude, wielding the club and holding the bow, have been found in great numbers (cf. S. Reinach, Répertoire, II, pls. 202 ff.; III, 67 ff.; IV, 18 ff.). The type goes back to archaic Greek art (cf. A. Furtwängler, Roscher’s Lexikon, Herakles, § 2141 ff. For a theory of its Phoenician origin [refuted by Furtwängler], cf. C. Friederichs, Geräthe und Bronzen im Alten Museum, pp. $4+3$ ff.); but in later times down to the Imperial period, it becomes especially frequent in Central Italy, where Herakles seems to have been regarded as a beneficent hero (cf. A. Furtwängler, Roscher’s Lexikon, Herakles, $\$ 2154$ f.). The workmanship in the majority of examples is so coarse that it is difficult to decide whether they are Etruscan or Roman, or to assign a date to them.

Height, $4 \frac{1}{8}$ in. ( 10.4 cm .). Purchased in 1896. Unpublished. Cast solid. Crusty, green patina. The left hand and the attribute it held are missing. Acc. No. G.R. 270.

154 STATUETTE OF HERAKLES, similar to the preceding. Crude execution.

Height, $4{ }^{\frac{7}{16}}$ in. ( 11.3 cm .). Purchased in 1896 . Unpublished. Cast solid. The green patina has been mostly removed. Of the attributes only the parts actually grasped in the hands are preserved. Acc. No. G.R. 285.

155 STATUETTE OF HERAKLES, similar to No. ${ }^{153}$. Crude execution.

Height, $4^{\frac{3}{\frac{3}{2}}}$ in. ( 12 cm .). Purchased in 1896 . Unpublished. Cast solid. The patina has been removed. Most of the club and the left forearm with the lion's skin and the attribute held in the hand are missing. Acc. No. G.R. 289.

I56 STATUETTE OF HERAKLES, similar to No. 153. Crude execution.

Height, $3 \frac{7}{16}$ in. $(8.8 \mathrm{~cm}$.). Purchased in 1896 . Unpublished. Cast solid. The crusty, green patina has been mostly removed. The right foot is missing and of the attributes only the parts actually grasped in the hands are preserved. Acc. No. G.R. 29 r.

157 STATUETTE OF HERAKLES, similar to No. 153. Crude execution.

Height, $2 \frac{15}{16} \mathrm{in} .(7.5 \mathrm{~cm}$.). Purchased in 1896 . Unpublished. Cast solid. Smooth, greenish patina, removed in places. Of the attributes only the parts actually grasped in the hands are preserved. Acc. No. G.R. 239.

I58 STATUETTE OF HERAKLES, similar to No. 153 , except that he wears a fillet and has a horn-like projection over the brow (probably an ornament of the fillet). Mediocre execution.

For similar horn-like ornaments on statuettes of this type cf. E. Babelon et J.-A. Blanchet, Bronzes antiques de la Bibliothèque Nationale, Nos. $521,525$.

Height, $3 \frac{7}{8}$ in. ( 9.8 cm .). Purchased in 1896 . Unpublished. Cast solid. Green patina with brownish patches. Only parts of the cluh and the bow are preserved. Acc. No. G.R. 259.

I 59 STATUETTE OF HERAKLES, similar to No. 153 , except that he holds a round object (apple?) in his left hand instead of a bow. The hair is indicated by a stippled surface. Mediocre execution.

Height, $4_{\frac{1}{4}} \mathrm{in}$. ( ro .8 cm .). Purchased in 1896. Unpublished. Cast solid. Smooth, olive-green patina. The club held in the right hand is missing. Acc. No. G.R. 283.

I60 STATUETTE OF HERAKLES, similar to No. 153 , except that the position of the legs is reversed and that he wears a fillet. He stands on a round base. Crude execution.

Height, $5 \frac{11}{16}$ in. ( $\mathbf{1} 4.4 \mathrm{~cm}$.). Purchased in $\mathbf{1 8 9 6}$. Unpublished. The statuette is cast solid, the base hollow. The crusty, green patina has been partly removed. Most of the lion's skin and the how in the left hand are missing. Acc. No. G.R. 281.


I6I


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I6I STATUETTE OF HERAKLES, similar to No. 153 , except that he wears the lion's skin over the head and the left arm, with the paws tied on his chest. The work is more careful than in the other examples. Illustrated, p. 97.

Height, $4 \frac{1}{16}$ in. ( 10.3 cm .). Purchased in $\mathbf{I} 896$. Unpublished. Cast solid. The dark green patina has been removed in places. Of the club only the part actually grasped in the hand is preserved. Acc. No. G.R. 5 ro.

I62 STATUETTE OF HERAKLES, similar to No. 153 , except that the weight is chiefly on the left leg and the right leg slightly drawn back, and the lion's skin is wound round the left shoulder and forearm. Crude execution. Illustrated, p. 97.

Height, $3^{\frac{1}{\mathrm{I}}} \mathrm{in}$. ( 8.3 cm .). Purchased in 1896 . Unpublished. Cast solid. Crusty, green patina, partly removed. Part of the right foot, the left foot and ankle, and most of the club and the bow are missing. The face is much worn. Acc. No. G.R. 219.

I63 STATUETTE OF A FIGHTING WARRIOR (Ares:). He is striding forward with the left leg advanced. His right arm is raised and is brandishing a spear; the left is lowered and probably held a shield (now lost). He wears a crested helmet with incised patterns and with cheek-pieces turned up, a cuirass with a row of flaps below, and greaves decorated with incised spirals along the edges. On the feet are tangs for insertion in a base.

Statuettes of this type of more or less crude execution and sometimes of very elongated proportions have been found in great numbers in Italy, especially in Etruria (cf. J. Martha, L'Art étrusque, p. 502; A. de Ridder, Les Bronzes antiques du Louvre, Nos. 278 ff., pl. 25, 279-28I; S. Reinach, Répertoire, II, p. 185, I; I86, 5 ff.; III, p. 24+, 5, 7; IV, pp. 102, 5; IO3, 5-6). It is doubtful whether they represent Ares or simply a warrior (cf. A. Furtwängler, Roscher's Lexikon, Ares, p. 49 I [g]).


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Total height (with tangs), $6 \frac{11}{16} \mathrm{in} .(17 \mathrm{~cm}$.$) . Purchased in 1896$. Unpublished. Cast solid. Blue-green patina with extensive brown patches. The shield, which we know from the other examples was carried in the left hand, is missing. On one side of the helmet is a large hole. Acc. No. G.R. 292.

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I64 STATUETTE OF A FIGHTING WARRIOR, similar to the preceding, except that the cuirass has shoulder-flaps and two rows of flounces below. There are no incised patterns on the ornament. The left foot is embedded in a circular leaden base. Crude workmanship.

Height, with hase, 8 in. ( 20.3 cm .). Purchased in 1896 . Unpublished. Cast solid. Green patina with extensive brown patches. The right arm, the left forearm, and the right foot and ankle are missing. Acc. No. G.R. 288.

165 STATUETTE OF A FIGHTING WARRIOR, similar to No. 163, except that the cuirass has shoulder-flaps, marked by incisions, and two rows of flounces below. The cuirass and the helmet are decorated with incised and punctured lines. Crude workmanship.

Height, $6 \frac{7}{16} \mathrm{in}$. ( 16.3 cm .). Purchased in 1896 . Unpublished. Cast solid. The green patina has been mostly removed. Both arms from below the shoulders and both legsfrom below the knees are missing; also parts of the crest. Acc. No. G.R. 286.
i66 sTATUETTE OF A FIGHTING WARRIOR, similar to No. 163, except that the cuirass has shoulder-flaps, marked by incisions, and two rows of flounces below. The cuirass is decorated with incised and punctured lines. The right hand is pierced for the insertion of the spear, which, however, is missing. Crude workmanship.

Height, $6 \frac{3}{8}$ in. ( 16.1 cm .). Purchased in 1896 . Unpublished. Cast solid. Rough, green patina. The left arm from below the shoulder, both legs from below the knees, and the crest are missing. Acc. No. G.R. 287.

## I67 STATUETTE OF A FIGHTING WAR-

 RIOR, of the same type as No. 163 , except that the right arm is lowered instead of raised and there is no indication of any armor except the helmet. In the right hand is a hole for the insertion of the spear (now missing). On the feet are tangs for insertion in a leaden base, part of which is still preserved. The execution is very crude, the features being marked by simple incisions.

Height (without hase), $3^{\frac{3}{4}} \mathrm{in}$. ( 9.6 cm .). Purchased in 1896 . Unpublished.

Cast solid. Greenish-black patina. The left forearm is missing. Acc. No. G.R. 266.

I68 STATUETTE OF A FIGHTING WARRIOR, similar to the preceding and of the same extremely crude workmanship. Incised lines are used to mark the features, the nipples of the breasts, and the navel. The right hand was pierced for the insertion of the spear.

Height, $2 \frac{1}{2}$ in. ( 6.3 cm .). Purchased in 1896. Unpublished. Cast solid. Blackish patina. Both legs from above the knees are missing; also part of the right hand. Acc. No. G.R. 236 .

I69 STATUETTE OF A FIGHTING WARRIOR, similar to No. 167 and of the same extremely crude workmanship. Incised lines are used to indicate the nipples of the breasts and the navel.

Height, $2 \frac{5}{8}$ in. ( 6.7 cm .). Purchased in 1896 . Unpublished. Cast solid. Dark green patina. The head, the greater part of both arms, and both feet are missing. Acc. No. G. R. $2 \not+6$.

I70 STATUETTE OF A MALE FIGURE (Priest?). He stands with his weight chiefly on his right leg and the left slightly bent. His right arm is extended and probably held a patera; the left is bent at the elbow and holds what appears to be a small box (pyxis). He wears a radiated headdress and a mantle which leaves the right arm and breast uncovered. Crude workmanship, probably late Etruscan.

Statuettes of this type have been found in great numbers. Their identity has been a matter of much discussion, the radiated head-dress having given rise to many theories. The chief identifications are Helios (cf. E. Gerhard, Gesammelte akademische Abhandlungen, 1866, I, pl. XXV, 5); an Italic divinity (cf. A. de Longpérier, Notice de bronzes du Louvre, Nos. 32 ff.); Asklepios (cf. F. Wieseler,


170 Archäologische Beiträge, II, pp. 23 ff .) ; Bacchus (cf. E. Babelon et J.-A. Blanchet, Bronzes antiques de la Bibliothèque Nationale, Nos. 37 I ff.); a man sacrificing (cf. C. Friederichs, Geräthe und Bronzen im Alten Museum, Nos. 2083 ff.); a priest (?) (cf. H. B. Walters, Catalogue of Bronzes
in the British Museum, Nos. 689 ff.); and a lar or genius (cf. E. von Sacken, Bronzen im k. k. Münz-und Antiken-Cabinetes zu Wien, pl. XXXVI, no. I and p. 85: S. Reinach, Répertoire, II, pp. 501 ff.; A. de Ridder, Les Bronzes antiques du Louvre, Nos. 307 ff .). Of these interpretations the most convincing is that of a priest (or man) performing a sacrifice. The patera, which is almost invariably found in the right hand in the better preserved examples, suggests the pouring of a libation, and the radiated head-dress is not unlike the wreaths worn by the Roman priests at sacrifices (cf. e.g. the reliefs of the Ara Pacis, E. Strong, Roman Sculpture, pls. VIII, IX. Compare also No. 270 in this collection). We know that bronze statues in the attitude of prayer or sacrifice were dedicated to the gods as thank-offerings (cf. Pausanias, $\mathrm{V}, 25,5$ and $\mathrm{N}, 18,5$ ); it is probable that these little figures were made to serve a similar purpose.

Though a large number of these statuettes are known to have come from Etruria, they have also been found on the Rhine and in other parts of the Roman empire. Their execution is mostly so crude that it is difficult to assign them to a definite period.

Height. $4 \frac{1}{2}$ in. (II. 5 cm .). Purchased in 1896 . Unpublished. Cast solid. Crusty, green patina. Both feet and the object probably held in the right hand are missing. Acc. No. G.R. 28 t.

I7I STATUETTE OF A MALE FIGURE (Priest?), similar to the preceding. Very crude workmanship.

Height, $3^{\frac{1}{4}} \mathrm{in}$. ( 8.2 cm .). Purchased in 1896 . Unpublished. Cast solid. The crusty, green patina has been mostly removed. The right arm from below the shoulder and the lower part of the left leg are missing. Acc. No. G.R. 226.

172 STATUETTE OF A MALE FIGURE (Priest?), similar to No. 170, except that the position is reversed, the weight being chiefly on the left leg with the right slightly drawn back, and that the mantle covers only the lower part of the body and the left shoulder. Crude workmanship. Illustrated, p. IOZ.

Height, $4 \frac{1}{2}$ in. ( II .4 cm .). Purchased in 1896 . Unpublished. Cast solid. Crusty, green patina. The right forearm is missing. Acc. No. G.R. 268.

I73 STATUETTE OF A MALE FIGURE, similar in attitude to No. 170, except that both hands are held open and contain no attributes,

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though it is possible that these have been lost. On the right foot is a tang for insertion in a base. Crude execution.

Height, $4^{\frac{3}{16}} \mathrm{in}$. ( 10.6 cm .). Purchased in 1896. Unpublished. Cast solid. Smooth, dark green patina. The left foot is missing. Acc. No. G.R. ${ }_{276}$.


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I 75

I74 STATUETTE OF A MALE FIGURE (Priest?), similar to the preceding, except that the mantle is pulled over the head like a hood. Both hands are held open, but may have contained attributes which have been lost. Crude execution.

Height, 3 in. ( 7.6 cm .). Purchased in 1896. Unpublished. Cast solid. The crusty, green patina has been mostly removed. The lower part of the right leg and the left foot are missing. Acc. No. G.R. 255.

175 STATUETTE OF A MALE (?) FIGURE, similar to No. 172, except that he wears shoes and a chiton, as well as a himation, and the left hand does not seem to have held a pyxis. On the left foot is a tang for insertion in a base. Crude execution.

Height, $3^{\frac{3}{8}} \mathrm{in}$. ( 8.6 cm .). Purchased in 1896 . Unpublished. Cast solid. Smooth, green patina. The right foot and part of the left hand are missing. The body is bent back. Acc. No. G.R. 237.

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I76 STATUETTE OF A MALE FIGURE, of the same type as No. 175. The feet are joined by a small ledge below which is a tang for insertion in a base. Crude execution.

Height, $3 \frac{7}{16}$ in. ( 8.7 cm .). Purchased in 1896 . Unpublished. Cast solid. Crusty, green patina. Acc. No. G.R. 252.

177 STATUETTE OF A FEMALE FIGURE. She stands with her weight on both legs, the right arm extended and holding a patera, the left lowered and muffled in her drapery. She wears a chiton, a himation, and a diadem. The back is flat and entirely unworked. A tang below both feet served for insertion in a base. Crude execution, probably late Etruscan.

Statuettes of this type have been found in great numbers in Etruria and other parts of the Roman empire. They appear to be the female counterparts to the statuettes of priests (?), described above (cf. Nos. ifo ff.). Like them they have been variously interpreted, the chief identifications suggested being Juno (E. Gerhard, Gesammelte akademische Abhandlungen, I, pp. 317,370 , pl. 36, fig. 3 ; E. Babelon et J.-A. Blanchet, Bronzes antiques de la


177 Bibliothèque Nationale, No. 4ı; A. de Ridder, Les Bronzes antiques du Musée du Louvre, Nos. 314 ff., pl. 28, 316 ) ; Hygieia (F. Wieseler, Archäologische Beiträge, II, pp. 35 ff.); and a priestess (?) (cf. C. Friederichs, Geräthe und Bronzen im Alten Museum, Nos. 2 roo ff; H. B. Walters, Catalogue of Bronzes in the British Museum, No. 693). In some cases (cf. Nos. I 8o182) the type approaches that of Juno as known through some statues (cf. J. Overbeck, Kunstmythologie, Atlas, pl. X, 35); but though the patera is a not uncommon attribute of this goddess (cf. W. H. Roscher, Roscher's Lexikon, under Hera, $\S 2132$ ), the pyxis which these statues hold in their hands is not elsewhere found, so that even in these cases the identification as a woman or priestess sacrificing seems to be more probable.

Height, $5^{\frac{1}{i}}$ in. ( 13.3 cm .). Purchased in I 896 . Unpublished. Cast solid. Crusty, green patina. Acc. No. G.R. 277.

I78 STATUETTE OF A FEMALE FIGURE, similar to the preceding. Crude execution.

Height, $3 \frac{11}{16} \mathrm{in}$. ( 9.4 cm .). Purchased in 1896 . Unpublished. Cast solid. Smooth, green patina. Acc. No. G.R. 243.

179 STATUETTE OF A FEMALE FIGURE, similar to No. 177 , except that the left hand protrudes from the drapery. No tang. Crude execution.

Height, 3 in. ( 7.6 cm .). Purchased in 1896. Unpublished. Cast solid. Smooth, dark green patina. Acc. No. G.R. 222.

I8o STATUETTE OF A FEMALE FIGURE. She stands looking to the right, with her weight chiefly on her left leg and the right slightly drawn back. The right arm is extended and holds a patera. The left is bent sharply at the elbow and holds a pyxis. She wears a long, girt chiton, and a himation which covers the lower part of the body and the left shoulder; also a diadem. Execution fair.

In general type this resembles the crude figures just described (Nos. 177 ff .). Like them it probably represents a priestess (see discussion under No. 177).

Height, $3 \frac{3}{8}$ in. $(8.6 \mathrm{~cm}$.). Purchased in I 896 . Unpublished. Cast solid. The green patina has been largely removed. The right arm seems to have been bent. Acc. No. G.R. 274.


I 80

I8 I STATUETTE OF A FEMALE FIGURE, similar to the preceding, except that the mantle is pulled over the head to serve as a hood. Underneath is a tang for insertion in a base. Fair execution.

Height, $4 \frac{3}{16}$ in. ( r 0.6 cm .). Purchased in I 896 . Unpublished. Cast solid. Crusty, green patina. The right arm from below the shoulder is missing. Acc. No. G.R. 262.

I82 STATUETTE OF A FEMALE FIGURE, similar to No. iso, except that the diadem is of radiated form. Below is a tang for insertion in a base.

Height, $2 \frac{11}{16}$ in. ( 6.8 cm .). Purchased in 1896. Unpublished. Cast solid. The crusty, green patina has been mostly removed. The patina is chipped. Acc. No. G.R. 225 .

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I83 MalE STATUETTE. He stands with his weight on both feet and both arms bent sharply at the elbow and extended forward. The left hand is held open, the right is clenched and probably held some object. He wears a himation which covers his left shoulder and the lower part of his body, and he has short, straight hair. Crude workmanship.

Statuettes of this general type have been found in great numbers in Italy (cf. e.g. A. de Ridder, Les Bronzes antiques du Nusée du Louvre, Nos. 291 ff., pl. 26, 293). In the absence of definite evidence it is best to explain them as votive figures placed in sanctuaries as offerings.

Height, $2 \frac{13}{16} \mathrm{in}$. ( 7.1 cm .). Purchased in 1896. Unpublished. Cast solid. Smooth, greenish black patina. The object which was probably held in the right hand is missing. Acc. No. G.R. 235.


I 8 + MALE STATUETTE, similar to the preceding, except that the arms are extended sidewise instead of forward. On each foot is a tang for insertion in a leaden base, part of which is still preserved. Crude execution.

Height, $2 \frac{7}{5}$ in. ( 7.3 cm .). Purchased in 1896 . Unpublished. Cast solid. Black patina. The object which was probably held in the right hand is missing. Acc. No. G.R. 228.

I85 MALE STATUETTE. He stands with his weight on both legs and his arms bent sharply at the elbow and extended forward with hands held open. His hair is short and straight. He wears a himation which is

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draped loosely over the lower part of his body with the ends slung round his left arm. The edges are decorated with punched circles. He stands on a rectangular plaque. The execution is fair.

Height, $3^{\frac{3}{16}}$ in. ( 8.1 cm .). Purchased in 1896. Unpublished. Cast solid. Smooth, dark green patina. Acc. No. G.R. 12.

I86 MALE STATUETTE. He stands in an easy attitude with his weight chiefly on his left leg. Both arms are bent sharply at the elbow and extended with hands held open. He wears a chiton and a himation which covers his left shoulder and the lower part of his body; also laced shoes. The edges of the chiton and the himation are decorated with hatched lines. His hair is long and is rolled up at the back under a fillet. On each foot is a tang for insertion in a base. The execution is fair. Itlustrated, p. 105.

Height, $4 \frac{1}{5}$ in. ( 10.5 cm .). Purchased in 1896 . Unpublished. Cast solid. Smooth, pale green patina. Acc. No. G.R. 269.

187 MALE STATUETTE, similar to the preceding, except that he wears no chiton and the mantle has dropped down from the left shoulder; there is also no indication of shoes, and the hair is short and straight. On the left foot is a tang for insertion in a base. Crude execution.

Height, $3 \frac{3}{16}$ in. ( 8.1 cm .). Purchased in 1896. Unpublished. Cast solid. The smooth, green patina has been removed in places. The right foot is missing. Acc. No. G.R. 251.

I 88 MALE STATUETTE, similar to the preceding, except that the right arm is held somewhat higher. On each foot is a tang for insertion


187 in a base. Crude execution.

Height, $3^{\frac{7}{6}} \mathrm{in}$. ( 8.7 cm .). Purchased in $\mathbf{1 8 9 6}$. Unpublished. Cast solid. The patina has been almost entirely removed. Both hands are missing. Acc. No. G.R. 240 .

I89 MALE STATUETTE. He stands with feet close together and both arms extended sidewise. In his right hand he holds a patera or a disk;
the left is apparently held open. He is nude and wears a conical cap. Below the feet is a tang for insertion in a base. Coarse execution.

Height, $3^{\frac{1}{2}}$ in. ( 8.9 cm .). Purchased in 1896. Unpublished. Cast solid. The surface is covered almost entirely with a brownish incrustation. Acc. No. G.R. 250.

190 MALE STATUETTE. He stands with his weight chiefly on his right leg. His right arm is bent sharply at the elbow; he holds a patera in the right hand, the left is placed on his hip. He wears a himation round the lower part of his body and laced shoes. On each foot is a tang for insertion in a base. The execution is fair.

Height, $3^{\frac{3}{5}} \mathrm{in}$. $(8.5 \mathrm{~cm}$.). Purchased in 1896. Unpublished. Cast solid. Crusty, green patina. Acc. No. G.R. 271.
igI Male Statuette. He stands with his feet close together, the right hand lowered and grasping a round object, the left placed on the hip and holding a long leaf (:). He is nude and has short, straight hair. Below the feet is a tang for insertion in a base. Coarse execution; the features are very roughly indicated.


Height, $2 \frac{11}{16}$ in. ( 6.8 cm .). Purchased in 1896. Cast solid. Smooth, green patina. The surface is somewhat corroded. Acc. No. G.R. 229.

192 NALE STATUETTE, similar to the preceding, except that he holds nothing in his left hand and the object in his right hand appears to be a patera. Below the feet is a tang for insertion in a base. Very coarse execution.

Height, $2 \frac{5}{16}$ in. ( 5.8 cm .). Purchased in $1 \$ 96$. Unpublished. Cast solid. Smooth, green patina. Surface somewhat corroded. Acc. No. G.R. 186.


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193 STATUETTE OF A YOUTH. He is striding forward with the left leg advanced. Both arms are extended sidewise with hands held open. He is quite nude, and the nipples of the breasts and the navel are represented by incisions. Very crude execution.


Height, $3^{\frac{1}{4}} \mathrm{in}$. ( 8.2 cm .). Purchased in 1896. Unpublished. Cast solid. Green patina, removed in places by scraping. No parts missing. Acc. No. G.R. 244.

I93A STATUETTE OF A YOUTH. He stands with his weight on both legs, the left advanced. Both arms are a little extended, the right held open, the left clenched. He is nude, and has short hair. The feet are joined by a small ledge below which is a tang for insertion in a base. Crude execution.

Height, $4_{1 \frac{5}{16}}$ in. ( 11 cm .). Gift of Garrett C. Pier, 1907. Unpublished. Cast solid. Smooth, green patina. Acc. No. 07.252.

I94 STATUETTE OF A MALE FIGURE. He stands with his weight chiefly on his right leg. The right arm is a little extended and holds a round object; the left is lowered and grasps a sickle (?). He is nude and has short hair. The nipples of the breasts and the navel are indicated by incisions. Very crude execution.

Height, $3 \frac{3}{5}$ in. ( 8.6 cm .). Purchased in 1896 . Unpublished. Cast solid. Smooth, green patina, partly removed. Acc. No. G.R. 275.

## ITALIOTE AND ETRUSCAN

I95 STATUETTE OF A YOUTH. He stands with his weight on his right leg and his left advanced. Both arms are lowered and brought to the front. He is nude and has long hair falling straight to the neck. Very crude execution.

Height, $3^{\frac{1}{2}}$ in. ( 8.9 cm .). Purchased in 1896. Unpublished. Cast solid. The green patina has been partly removed. The left foot and pieces of the right fingers are missing. The lower part of the right leg has been bent out of shape. The surface of the face is much worn. Acc. No. G.R. 249.

196 STATUETTE OF A FEMALE FIGURE. She stands with her weight chiefly on her right leg. The right arm is a little extended and holds a round object; the left is lowered and grasps a sickle (?). She wears a long chiton. For the attitude and attributes compare No. 194. Very crude execution.

Height, $3 \frac{7}{16}$ in. $(8.7 \mathrm{~cm}$.). Purchased in 1896. Unpublished. Cast solid. Smoorh, green patina with


196 brown patches. The left foot is missing. Acc. No. G.R. 217.

197 STATUETTE OF A FEMALE FIGURE. She stands with her weight chiefly on her right leg and the left slightly advanced. The right arm is extended and probably held some object; the left is lowered and apparently holds a fold of the drapery. She wears a long, sleeved chiton, the folds of which are indicated by incisions. Very crude execution.

Height, $3 \frac{9}{16}$ in. ( 9.1 cm .). Purchased in 1896 . Unpublished. Cast solid. The green patina has been partly removed. The right hand is missing. Acc. No. G. R. 247.


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# statues, statuettes, AND RELIEFS 

ROMAN PERIOD<br>END OF FIRST CENTURY B.C. TO THIRD CENTURY A.D.

[Material arranged according to subjects]

## ZEUS

200 STATUETTE OF ZEUS, seated. His left hand is raised and holds the sceptre; in his right is the thunderbolt. He wears a himation which covers the lower part of his body and is brought up behind with one end doubled and laid over the left shoulder. On his feet are sandals. He has thick hair and beard, similar in treatment to that of the Otricoli Zeus.

This is one of the best extant bronze statuettes of seated Zeus. It is of Roman execution, but must have been made by an artist thoroughly imbued with the Greek spirit. The type is one which was created in the fourth century B.C. as a modification of the Olympian Zeus of Pheidias, from which it differs in the forward inclination of the head, the manner of grasping the sceptre, the arrangement of the mantle, the type of the face, and the treatment of the hair and beard, all innovations which take away from
 the quiet dignity of the fifth-century composition, but are more in conformity with the taste of the later time. It is to this fourth-century conception that most of the numerous representations of seated Zeus in Roman times go back.

For bronze statuettes of the same type ct. two in the Bibliotheque Nationale (E. Babelon et J.-A. Blanchet, Catalogue des Bronzes antiques, Nos. 17 and i8), one in Naples (illustrated in Antichità di Ercolano, vol. VI, pl. 87), one in Vienna (E. von Sacken, Die antiken Bronzen des kgl. Münz-und Antiken-Cabinetes No. 540 a; illustrated in J. Overbeck, Kunstmythologie, I, p. I22, fig. II), one in the Sammlung Arndt in Munich (Führer der Sammlung Arndt, p. 24), one in the Antiquarium of the Berlin Museum (Aus dem Berliner Museum, R. Kekulé von Stradonitz dargebracht, igo9, pl. VII),
one in the de Clerq Collection in Paris (A. de Ridder, Collection de Clerq, III, pl. 36, No. 215), one in the Somzée Collection (A. Furtwängler, Catalogue, No. 87, pl. NXXIV), and one in the Museum of Fine Arts, Boston (cf. E. Robinson, Annual Report, 1898, p. 33, No. 36). Compare also a similar one in the British Museum (H. B. Walters, Catalogue of Bronzes, No. 909), where, however, the scheme is reversed. For a list of statues reproducing the same type see I. Overbeck, Griechische Kunstmythologie, I, Zeus, p. I Iff.

Height, $\boldsymbol{q}_{\frac{1}{5}}$ in. ( 10.4 cm .). Gift of Henry G. Marquand, 1897. Published by A. Furtwängler, Neue Denkmäler antiker Kunst, III, p. 267, No. 6, pl. VI. Figured in S. Reinach, Répertoire, IV, p. 8, No. 2. The figure is hollow in the centre, having been cast over a small core. The crusty, green patina has been partly removed. The seat is missing, as are also the lower part of the sceptre and the eyes, which were inlaid; otherwise the preservation is excellent. Acc. No. G.R. 37.

201 STATUETTE OF ZEUS. He stands quietly with his weight on his right leg and his head slightly inclined to the right. The right arm is lowered, the left bent sharply at the elbow. Over the left shoulder and upper arm he has a chlamys which hangs down in heavy folds both front and back. He is bearded and wears a fillet, which is decorated with three rosettes in front and has long ends hanging down the shoulders. Fair execution, of Roman date.

From similar statuettes (cf. J. Overbeck, Kunstmythologie, I, p. I +5 , and S. Reinach, Répertoire, I, I89; II, 9-II; III, $4 ;$ IV, 7) we know that the right hand held the thunderbolt and the left the sceptre. This type is known only from bronze statuettes, not from full-size statues (cf. Overbeck, loc. cit.). Though these statuettes all date from the Roman period, the quiet dignity of the conception points to a Greek


201 original.

Height, $4 \frac{1}{2}$ in. ( 11.4 cm .). Purchased in 1896 . Unpublished. Cast solid. The crusty, green patina has been partly removed. The right forearm, the left hand and wrist, part of the right leg, and the left foot and ankle are missing; also the pupils of the eyes, which were inlaid. The surface is much encrusted in places. Acc. No. G.R. 23.

STATUES, STATUETTES, AND RELIEFS

## HERA

Hera
205 STATUETTE OF HERA (?). She stands with her weight chiefly on her right leg and the left slightly drawn back. Her left arm is raised and evidently held the sceptre (now lost); the right is extended and probably held some other object. She wears a long chiton and a himation which is draped round her waist and over her left shoulder; also a diadem. Her hair is long and is tied together at the nape of the neck. Roman, mediocre execution.

As the sceptre and the diadem are associated equally with Hera and Demeter, it is not certain which of these two is here represented. The Demeter on the famous Eleusis relief by which Overbeck has identified a number of statues as certainly Demeter and not Hera (J. Overbeck, Kunstmythologie, II, p. $4^{6 \mathrm{I}} \mathrm{f}$.) is in the same attitude as our statuette, but the arrangement of the himation is


205 different and she wears no diadem. On the other hand, Hera is often represented holding the sceptre in the left hand and with the right arm extended, but in those cases she generally appears veiled (cf. J. Overbeck, Kunstmythologie, II, 119 f., pl. I). The slight variations found in our statuette are natural when we consider how often the types created by the Greeks were copied and adapted in Roman times.

Height, $2 \frac{7}{8}$ in. $(7.3 \mathrm{~cm}$.). Purchased in 1896 . Unpublished. Cast solid. Smooth, green patina. The right hand and the fingers of the left hand, with the sceptre they held, are missing. Acc. No. G.R. 232.

## POSEIDON

Poseldon
206 STATUETTE OF POSEIDON. He is striding forward, with his right hand raised and wielding the trident. His left arm is stretched forward, the hand being clasped to hold another attribute, which is missing, as is also the trident. He is nude except for a chlamys, which is draped loosely across his shoulders with both ends hanging from the arms. He has a long, curly beard and long hair, which is bound with a fillet and hangs down behind with the ends gathered into a small knot and two locks falling on the breast.

## ROMAN PERIOD

The chief interest of this statuette lies in the fact that it reproduces the Poseidon type of the striding Poseidon which occurs on the coins of Poseidonia from $550-400$ B.C. It is probable that the coins went back to a famous cult statue, which apparently considerably influenced contemporary and subsequent representations of Poseidon (cf. the vasepaintings and reliefs cited by J. Overbeck, Griechische Kunstmythologie, II, pp. 224 ff., and Atlas, pl . XII). Our figure is an archaistic work of the Roman period. The artist has borrowed from the archaic period the stiff but vigorous pose, the spare muscular form, the formal folds of the chlamys, and the treatment of the hair behind; but the type of the face, with the deep-set eyes and prominent brow, the free rendering of the beard, and the advanced modelling of the figure, are characteristic of late Greek art.


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Height, $5 \frac{1}{8}$ in. ( 13 cm .). Purchased in 1907. Said to have come from near Matera. Published by G. M. A. R[ichter] in the Museum Bulletin, May, igos, p. 91, No. 15, fig. 7. Figured in S. Reinach, Répertoire, IV, p. 19, No. 3. Cast solid. The brown-green patina has been removed in places. The end of the chlamys which hung from the right arm has been broken off and is missing, and the ends of the toes on both feet are chipped; otherwise in excellent preservation. Acc. No. 07.286.93.

## 207 STATUETTE OF POSEIDON (?).

 The attitude is the same as in No. iro, only reversed, that is, the weight of the body rests on the right leg and the left leg is slightly drawn back; the left arm is raised and the right extended. He has thick, bushy hair and is entirely nude. The attributes are missing. Therefore there is the same uncertainty as with No. iro whether this statuette represents Zeus or Poseidon; but the restlessness conveyed by the expression of the face and the treatment of the hair are in favor of the latter divinity.For an account of the origin and history of this type see No. iro. The figure is executed with


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## STATUES, STATUETTES, AND RELIEFS

Poseidon great care and finish, but the workmanship is somewhat hard and indicative of the Roman period.

Height, $4^{\frac{3}{4}} \mathrm{in}$. (12.1 cm.). Purchased in 1911. Said to have been found at Leicester Fosse, England. Published by G. M. A. R[ichter] in the Museum Bulletin, November, 1911, pp. 212, 213, fig. 5. Figured in S. Reinach, Répertoire, IV, p. 3, No. 7. Cast solid. The brilliant, greenish black patina is modern. The right arm from the elbow, and the large toe of the left foot are missing, as are also the pupils of the eyes and the nipples of the breasts, which were inlaid; otherwise the preservation is excellent. Acc. No. II.56.

## APOLLO

Apollo
210 STATUETTE OF APOLLO. He stands with his weight chiefly on his right leg and the left slightly drawn back. The right arm is extended and holds a patera; the left is lowered and grasps the plectron, or instrument for striking the lyre. He is nude, but wears a quiver on his back. His hair is long and is gathered together behind. Roman, of fair execution.

For similar statuettes see S. Reinach, Répertoire, II, 783,$7 ; 78$ f , I ; III, $27,5,6,8 ; 28$, I ; IV, 5 I, $5: 52,1$. Though these statuettes, like our example, are all of Roman workmanship, it is probable that they were copied from an earlier Greek original. It is interesting to compare in this connection the Sabouroff Apollo (cf. A. Furtwängler, Collection Sabouroff, pls. 8-II), the general attitude of which is the same.

Height, $2 \frac{1}{2} \mathrm{in}$. ( 6.3 cm .). Purchased in 1596. Unpublished. Cast solid. Smooth, green patina.
 The face and some of the other parts of the surface are much worn. Acc. No. G.R. 254.

## ROMAN PERIOD

## ARTEMIS

## 2 I MEDALLION WITH A BUST OF ARTEMIS IN RELIEF. Artemıs

 She wears a chiton and has a quiver strung on her right shoulder. Her hair is long with a tress falling in front on each side.Roman period; cursory execution.
Diameter, $\frac{13}{16}$ in. ( 2.1 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 486i. Green-brown patina. The surface is much rubbed.
 Acc. No. C.B. 291.

## ATHENA

2 I4 STATUETTE OF ATHENA. She stands with her weight on the Athena left leg and the right slightly drawn back. Her right hand is brought up to the shoulder and grasps a round object; the left arm is extended to hold the spear, now lost. She wears a chiton, and a himation, which is draped round the lower part of her body and over the left shoulder; also a crested helmet and the aegis with gorgoneion.

Roman, of indifferent execution.
The type of Athena standing quietly, holding the lance in the left hand and another attribute in the right, was originated as early as the early fifth century B.C. (cf. A. Furtwängler in Roscher's Lexikon, under Athena, ${ }^{6}$ 5). It became more and more popular, and in Roman times was frequently copied with slight variations.

Height, 3 in. ( 7.6 cm .). Purchased in 1896. Unpublished. Cast solid. The green patina has been


214 mostly removed. The spear in the left hand is missing and the surface is much rubbed. Acc. No. G.R. 238.

2 I 5 STATUETTE OF ATHENA. She stands with her weight on the right leg and her left slightly drawn back. Her right arm is raised and held
the spear; the left is lowered. She wears an Ionic chiton with diploidion, girt at the waist; an aegis, with gorgoneion; and a crested helmet with broad brim.

Roman work, of mediocre execution.
This type of Athena goes back to the fifth century B.C. (cf. A. Furtwängler, Roscher’s Lexikon, Athena, p. 695). In Roman times it attained great popularity and was reproduced continually with slight variations (cf. e.g. S. Reinach Répertoire, II, 275 ff.; III, 85 f.; IV, 168).

Height, $4 \frac{5}{16}$ in. ( 11.1 cm. ). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 5028. Cast hollow. The green patina has been largely removed. The ends of the fingers of the right hand with the spear they held, and the lower part of the left hand are missing. Acc. No. C.B. 335.


2 I6 BUST OF ATHENA. Her hair is waved over her temples and knotted at the back. She wears a "Corinthian" helmet, a chiton, and a mantle over her left shoulder. Her head is inclined a little to the right. The hole at the top of the helmet was probably for the insertion of a crest. The bust appears to have been used as an ornament to some object.

The workmanship is good and belongs to the Roman period; but the type goes back to the end of the fifth or the beginning of the fourth century B.C.

Height, $3 \frac{1}{16} \mathrm{in}$. $(7.7 \mathrm{~cm}$.). Found in Rome. Gift of Henry G. Marquand, i897. Unpublished. Cast solid. Green patina. Preservation good; the mantle has been


216 considerably rubbed, so that the folds appear indistinct. Acc. No. G.R. 40.

## 217 LEFT ARM OF A LARGE STATUETTE OF ATHENA.

 The upper arm is covered with the aegis, on which is a gorgoneion. The fingers are loosely clasped to hold some attribute, now missing.Probably Roman period, but the surface is so blurred that it is difficult to assign a date.

Length, $6 \frac{7}{16} \mathrm{in} .(16.4 \mathrm{~cm}$.). Purchased in 1913. Mentioned in the Museum Bulletin, April, 1914, p. 94. Cast hollow. The green patina has been mostly removed. The surface is considerably corroded and part of the first finger is missing. Acc. No. 13.225.8.


217

## APHRODITE

## 220 STATUETTE OF APHRODITE.

 The attitude is, like No. I2I, a reproduction of the Knidian Aphrodite of Praxiteles. She is nude and is standing with her weight on her right leg, bent slightly forward. Her right hand is held in front of her, the left arm is lowered, but being broken off from beneath the shoulderits action cannot be determined. Shewears a diadem and has wavy hair gathered in a knot behind.This charming figure is not only interesting for the type it represents, but of value for its own sake, for the execution is good, and though executed in Roman times it retains much of the Greek spirit.

For a discussion of bronze statuettes in the attitude of the Knidian Aphrodite see No. i2I.

Height of fragment, $4^{\frac{3}{4}}$ in. (I2.I cm.). Purchased in 191I. Published by G. M. A. R[ichter] in the Museum Bulletin, November, 1911, pp. 212, 213, fig. 4. Cast solid. Crusty, green patina. The surface is somewhat corroded. Both legs from above the knees and the left arm from beneath the shoulder are missing. The head was broken off and has been reattached, the missing parts of the neck being restored. The ears are pierced for the insertion of earrings. Acc. No. irifio.io.


220 standing looking to the right, with her weight chiefly on the left leg

Aphrodite and the right drawn back. Her left hand is raised and holds one of her tresses; the right is lowered and probably held an attribute. She is nude and has long hair which falls down her back with one tress on either side.

Roman, of cursory execution.
Statuettes of Aphrodite holding her hair, as if to arrange it or to wring out the water after the bath, occur with great frequency (cf. J. J. Bernoulli, Aphrodite, pp. 288 ff.; S. Reinach, Répertoire, II, 339 ff.; III, io3, ff.; IV, 200 ff.). The most usual attitude for figures of this type is for both hands to be raised to the hair; but the slight variation of pose shown in this statuette is not uncommon (cf. S. Reinach, loc. cit.). The great popularity of the type presupposes a famous original, which, to judge from the general style and conception, probably belonged to the second half of the fourth century B.C. L. Stephani, Compte-rendu, $1870-$ $7 \mathrm{I}, \mathrm{pp} .78 \mathrm{ff}$., attempted to connect this Aphrodite Anadyomene type with the famous painting by Apelles which represented the new-born goddess

$22 I$ rising from the sea and drying her hair; but the arguments of O. Benndorf (Athenische Mitteilungen, I, 1876, pp. 50 ff.) for the possibility that the Apelles Aphrodite was conceived with the lower part of her body still immersed in the water appear more convincing.

Height, 4 in. ( 10.2 cm .). Purchased in $\mathbf{1 8 9 6}$. Unpublished. Cast solid. The green patina has been almost entirely removed. The right hand is missing and the surface of the face is much worn. Acc. No. G.R. 264.

222 STATUETTE OF APHRODITE. She is nude and stands with her weight on her right leg and the left a little drawn back. The right arm is lowered; in the left she holds up an apple. Her head is inclined to the right. She wears a diadem and has wavy hair done up in a knot behind, with a tress falling on each shoulder. The figure stands on a round base.

The workmanship is fair, but Roman; the type belongs to the Hellenistic period.

For statuettes of a similar character see J. J. Bernoulli, Aphrodite, p. 359, and S. Reinach, Répertoire, II, p. 360.

## ROMAN PERIOD

Height of figure, $6_{9}^{3}$ in. ( 16.2 cm .). Height, with base, $8 \frac{1}{5}$ in. ( 20.6 cm .). Gift of Henry G. Marquand, i897. Unpublished. The base is hollow, but the statuette is cast solid. Patina hlack-green and rough. Intact except for the loss of the ends of the fingers of the right hand. Acc. No. G. R. 3 I.


222

EROS
228 STATUETTE OF A WINGED EROS. He is running forward
Eros resting his weight lightly on the toes of his right foot and with his left thrown back. His left hand is held up and grasps the socket of a torch; his right is lowered and holds a large vine-branch. He is nude and has curly hair, of which one tuft is gathered into a knot over the forehead and braided. (For this arrangement cf. under No. ij1.) On the inside of the wing the feathers are modelled and incised.

## statues, statuettes, AND RELIEFS

Eros This statuette is of the same general type as the famous bronze Eros from Boscoreale (No. 131). It is not, however, of the same splendid workmanship, but merely a good decorative piece of the Roman period. For similar statuettes see the list given under No. I31.

The vine-branch in Eros's right hand is of the type which occurs in Pompeiian lamp-stands for the support of a disk on which the lamp was placed (cf. F. B. Tarbell, Naples Bronzes, figs. 67, 68, 71, 73). It is possible that it served a similar purpose here.

Height of figure, $6 \frac{3}{2}$ in. (17.1 cm.); total height, $9 \frac{1}{2}$ in. ( 24.1 cm .). Gift of Henry G. Marquand, I897. Said to have been found at Trebizond. Unpublished. Cast solid. The patina (artificial?) is smooth, light green, and highly lustrous. The top of the vine-branch is unfinished, showing that some object must have fitted into it (see above). The figure is in an excellent state of preservation; only the tip of the third finger of the left hand is broken off, and the toes of the left foot have become injured. Acc. No. G. R. 32 .

229 STATUETTE OF A WINGED EROS. He stands with his weight on his left leg and the right drawn back. His left arm is bent at the elbow and holds the bow. With his right he is extracting an arrow from the quiver hanging on his shoulder. By his side stands a torch placed upside down. He is nude and has long curly hair, falling loose except for a braid along the middle. The statuette rests on a base consisting of a plinth with flaring foot, decorated with incised patterns. Along the under side of the base is a slit for insertion in some object.

The conception is graceful and probably goes


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## ROMAN PERIOD

back to the fourth century B.C.; but the execution is mediocre and be- Eros longs to the Roman period. For a statue representing Eros in the same attitude cf. S. Reinach, Répertoire, I, p. 355 , No. I 465 .

Height, $3 \frac{13}{16}$ in. $(9.7 \mathrm{~cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 5029; illustrated in the Cesnola Atlas, III, pl. LXVI, 2, and by L. P. di Cesnola, Cyprus, pl. IV, where it is said to have come from Dali. Cast solid. The green patina has been partly removed. The surface is somewhat corroded. Acc. No. C.B. 336 .

230 HANDLE OF A JUG. The lower attachment is decorated with a relief of Eros, on either side of which is a volute. Eros is standing in a graceful pose, with a mantle thrown over his left arm. In his left hand he holds a wreath; in his right a reversed cup. At his feet lies a panther which seems to be catching the drops poured from the cup. The handle belongs to the Roman period.

Height, 6 in. ( 15.2 cm .). Purchased in 1909. It formed part of the Ferroni Sale (see Sale Catalogue, p. 36, No. 313). Described by G. M. A. R[ichter] in the Museum Bulletin, April, 1910, p. 98. Cast solid. Smooth, green patina. The surface is partly encrusted and much worn in places; the features of Eros, for instance, have completely disappeared. The volute on the right side of the lower attachment and a piece from the top of the handle are missing. Acc. No. 09.221.26.


## HERMES

235 HERM OF HERMES PROPYLAIOS (?). His features are Hermes regular and he looks straight before him. He has a full beard and long hair, arranged in front in three rows of conventionalized spiral curls and rolled up behind. He wears a fillet, round which a strand of hair is twisted in two places in front; it should be noticed that the hair is not rolled round the fillet behind according to the usual custom, the artist having evidently not thoroughly understood what he was representing. The pupils were inserted and are miss-

## statues, statuettes, AND RELIEFS

Hernes ing. The hole at the top of the head indicates that this herm was used as a support.

Herms of this type are of common occurrence (see e.g. Beschreibung der antiken Skulpturen in Berlin, Nos. roi-108), and are also frequently represented on vases. At first they were ascribed indiscriminately to Dionysos (cf. E. Q. Visconti, Museo Pio-Clementino 6, pp. 65 ff.), then to Hermes (cf. G. Zoega, De origine et usu obeliscorum, p. 217). It is clear, however, that the type was used for both Hermes and Dionysos, since the herms are sometimes characterized by definite attributes, like the ivy-wreath or the caduceus, as either one or the other god. But the question comes up which of the two is represented


235 where there are no definite attributes, and this is the case in the majority of examples. E. Gerhard (Über Hermenbilder auf griechischen Vasen, in Akademische Abhandlungen, II, pp. 126 ff.) held that it was chiefly Hermes that came into consideration. This view has lately been supported by the discovery at Pergamos of a marble herm, identified by the inscription as a copy of the Hermes Propylaios by Alkamenes (cf. A. Conze, Sitzungsberichte der Berliner Akademie, 1904, pp. 69 ff .), which is of the same general type as the many existing herms, and probably reproduced the original from which the numerous replicas were derived. These vary more or less in details. Thus in our example the hair is treated somewhat differently from the way it appears on the Pergamos herm, where it falls in a straight mass on the back, with a lock hanging over each shoulder in front.

The date of the original by Alkamenes must probably be assigned to 450 B.C. The archaic rendering of the hair was apparently preserved chiefly for its architectonic effect. For this dating cf. G. Löschcke, Jahrbuch des archäologischen Instituts, 1904, p. 24 f. Furtwängler dates it somewhat earlier, i.e. 470 B.C. (cf. Sitzungsberichte der kgl. bayerischen Akademie der Wissenschaften, 1904, Heft III, p. 379). The sculptor is of course an elder Alkamenes, not the pupil of Pheidias.

The execution of our herm is fair and belongs to the Roman period.
Height, 3 in. ( 7.6 cm .). Gift of Henry G. Marquand, 1897. Published by A. Furtwängler, Neue Denkmäler antiker Kunst, III, p. 268, fig. 2. Cast hollow. Patina olive green with black patches. There is a hole at the top of the head. Acc. No. G.R. 44.

236 STATUETTE OF HERMES. He is walking slowly, with his Hermes weight resting on the left leg, and the right fout drawn back. The right hand is extended and holds a purse; in the left, which is lowered, was the caduceus, or herald's staff. He wears a chlamys, fastened with a stud on the left shoulder and wound loosely around the arm. His head, which is slightly turned to the right, is winged, and he has short, wavy hair.

This type of Hermes, in which he is characterized by the money pouch as the god of commerce, appears to be of Roman, not Greek origin (cf. Chr. Sherer, in Roscher's Lexikon, under Hermes, $\$_{2+26}$ ). It became the favorite aspect under which Hermes was conceived during the Roman period.

For bronze statuettes representing Hermes with the purse and caduceus, and with a chlamys over the left shoulder, of. S. Reinach, Répertoire, II, pp. $15 \nmid-16 \nmid$. They are of very frequent occurrence. Wings are sometimes added to the feet, and a winged petasos takes the place of the wings in the hair. The style of the figures also varies; sometimes they reproduce a Polykleitan type (cf. A. Furtwängler, Masterpieces, p. 232 f.), but oftener they are of later style, as is the case in our statuette. The execution of our figure is fairly good.

Height, $7^{\frac{1}{8}} \mathrm{in}$. ( 18 cm .). Purchased in 1908 . From the Rome Sale. Described by E. R[obinson] in the Museum Bulletin, May, 1909, p. 78. Cast solid. The green patina has been removed by cleaning. Intact, except for the loss of the caduceus in the left hand. Acc. No. 08.258.3.

## 237 STATUETTE OF HERMES. Of the

 same general type as the preceding, but in a slightly different attitude. He stands with his weight resting on the right leg and the left foot

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237 a little drawn back. The right hand is extended and held an attribute, probably a purse; the left hand, which presumably held the caduceus, is

## STATUES, STATUETTES, AND RELIEFS

Hermes missing. He wears a chlamys over his left shoulder and arm, fastened with a stud, and on his feet are sandals. He has short, curly hair, from which rise two small wings, and his head is slightly turned to the left.

The execution of this figure is excellent and the careful, though somewhat hard modelling can be fully appreciated, as the surface is splendidly preserved. For a discussion of this type of Hermes see under No. 236. Like that figure it dates from the Roman period.

Height, $6 \frac{1}{\frac{1}{2}}$ in. ( 15.8 cm .). Purchased in 1906 . Found at Versailleux (Département d'Ain). Published by G. M. A. R[ichter] in the Museum Bulletin. February, 1907, pp. 19, 20, fig. 6; and in the Bulletin de la Société Nationale des Antiquaires de France, 1905, p. 284, with plate. Cast solid. The patina is smooth and dark green. The left hand and wrist, the attributes in both hands, the front of the left foot, and the eyes and the nipples of the breast (which were inlaid) are missing; otherwise the preservation is excellent. Acc. No. 06.1057.


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238 STATUETTE OF HERMES. Of the same type as No. 237, except that he is represented as a boy instead of a youth, and wears a winged petasos. The execution is mediocre.

Height to top of wing, $2 \frac{1}{2} \mathrm{in}$. ( 6.3 cm .). Purchased in $\mathbf{1 8 9 6}$. Unpublished.

Cast solid. Black-green patina. Both feet are missing, also the attribute in the left hand, and the right wing on the petasos. One finger of the left hand is bent out of position. Acc. No. G.R. 234.

239 STATUETTE OF HERMES. Similar to the preceding. The execution is very crude.

Height, $2 \frac{1}{1} \mathrm{in} .(5.8 \mathrm{~cm}$.). Date of acquisition uncertain (before 1906). Unpublished. Cast solid. Patina green and slightly rough. The right leg, the lower part of the left leg, the right arm from below the shoulder, the attribute in the left hand, and the right wing of the petasos are missing. Acc. No. G.R. 13.

## DIONYSOS, SEILENOI, AND SATYRS

245, 246 PAIR OF ATTACHMENTS for the swinging handle of a pail. Each is decorated with the bust of Dionysos in relief. He has long flowing locks and wears a diadem in which are introduced clusters of grapes and vine leaves. Rather coarse Roman work.

For a pail from Boscoreale with similar attachments still in position cf. E. Pernice, Bronzen aus Boscoreale, Archäologischer Anzeiger, 1900, p. I88, fig. I4.


245


246

Total height of each, $3 \frac{1}{2}$ in. ( 8.9 cm .). Purchased in 1900 . Said to have been found in the Hauran, Syria. Unpublished. Cast. Rough, green patina. Chipped in places; otherwise intact. Acc. Nos. G.R. 328 and 329 .

247, 248 PAIR OF ATTACHMENTS for the swinging handles of a pail. Each is in the form of a Seilenos mask with long beard twisted into a series of pointed ends. On the forehead of one are two sprays of ivy leaves in relief; on the other are incisions to indicate the hair. There are also other minor differences between the two which show that they were not cast from the same mould. Careful Roman work.

Seilenos masks were commonly used for attachments of situla handles.

Dionysos Seilenoi AND Satyrs

## STATUES, STATUETTES, AND RELIEFS

Dionysos Seilenol And Satyrs

For similar examples see Museo Etrusco Gregoriano, pl. LVIII, 4; E. Babelon et J.-A. Blanchet, Bronzes antiques de la Bibliothèque Nationale, No. 401.

Height of each, 3 in. ( 7.6 cm .). Purchased in 1907. Described by G. M. A. R[ichter] in the Museum Bulletin, May, 1908, p. 91, Nos. 16, 17. Cast. The patina of 247 is smooth and olive green, but from No. 248 it has been mostly removed. A few of the pointed ends of the beard are hroken off. Acc. Nos. 07.286.98 and 07.286.99.


247


248

249, 25 PAIR OF HORIZUNTAL HANDLES, probably from a hydria. The attachments, which are in the form of lanceolate leaves,

are joined together at one point and are decorated with Seilenos masks and garlands, in relief. Each mask is crowned with a wreath.

Somewhat cursory Roman work.
Height of each, $6 \frac{3}{4} \mathrm{in}$. ( 17.1 cm .). Greatest width of each, $5 \frac{3}{4} \mathrm{in} .(14.5 \mathrm{~cm}$.). Purchased in 1910. Perhaps from near Rome. Mentioned in the Museum Bulletin, December, 1910, p. 275. Cast. Patina dull green. Preservation good; one handle is partly covered with incrustations. Acc. Nos. 10.210.31 and 10.210.33.

25 I STATUETTE OF A SATYR. He is striding forward, his weight resting on the left leg, which is advanced. The right hand is swung over to the left side and grasps the fragment of a staff or thyrsos; under his left

## ROMAN PERIOD

arm he holds a pointed amphora by the handle. His head is raised and turned sharply to the right. He is nude but wears high shoes with flaps at the top and a bracelet on each wrist. His hair is long and shaggy. The type of Satyr is that prevalent during the Hellenistic period-of strong build, somewhat coarse features, and with goat's horns.

The splendid motion of the figure, the dramatic pose, and the fine, strong modelling of the body point to a Pergamene original for this statuette. The execution, however, is rather hard and must be Roman.

Height, 7 in. ( 17.7 cm .). Purchased in 1907. Published by G. M. A. R[ichter] in the Museum Bulletin, May, 1908, p. 91, No. 13, fig. 6, and by Nicolas de Romé in Le Musée, V, 1908, pp. 279 ff. Figured in S. Reinach, Répertoire, IV, p. 71, No. 3. Cast solid. The dark green patina has been partly removed. Intact, except for the lower part of the thyrsos(?), which has been broken off and is missing. On the top of the head there are traces of an iron attachment. Acc. No. 07.286.90.

## HERAKLES

252 STATUETTE OF HERAKLES. He stands in a leisurely attitude with his weight chiefly on the right leg and the left a little advanced. The left arm is lowered and bent sharply at the elbow with the hand open as if holding an attribute, now lost. The right arm is missing, but the position of the shoulder shows that it was lowered. He is nude and carries the lion's skin over his left arm.

The type of Herakles standing in a restful pose with his right arm usually resting on the club and the left holding another attribute is common in late Greek and Roman art (cf. A. Furtwängler, Roscher's Lexikon, Herakles, §2179), though the motive occurs as early as the fifth century B.C. (cf. A. Furtwängler, Roscher's Lexikon, Herakles, $\S 2156 \mathrm{ff}$.). The execution of this statuette is Roman, but the easy, Praxitelean pose points to a fourthcentury original.


252

Dionysos Sellenoi


Height, $6 \frac{1}{8} \mathrm{in}$. ( 15.5 cm .). Purchased in 1896 . Unpublished. Cast solid. The crusty, green patina has been largely removed. The head, the right arm from below the shoulder, most of the right leg, and the left foot are missing; also the attributes. The left forearm has been broken off and reattached. Acc. No. G.R. 278.

253 STATUETTE OF HERAKLES. He stands in a leisurely attitude with his weight on his right leg, the left a little drawn back. The right arm is extended, with the hand held open; the left holds the club against the shoulder. He is nude and has the lion's skin hanging from his left forearm. He wears a beard and moustache, and in his curly hair is a wreath, the ends of which hang over his shoulders. The nipples of the breasts are indicated with incisions. The statuette is mounted on its ancient base, which is round and has a square plinth resting on four feet.

This type, like the preceding, was popular in the Hellenistic and Roman periods (cf. A. Furtwängler, Roscher's Lexikon, Herakles, § 2 179). The extended right hand generally holds the apples of the Hesperides, or another attribute, such as a drinking-cup (kantharos) or wreath (cf. the representations on late Greek coins from Further Asia, P. Gardner, Types of Greek Coins, pl. XIV, 16, 22)


253
The execution of our statuette is fair and belongs to the Roman period.

Height, $4^{\frac{1}{4}} \mathrm{in}$. (io. 8 cm. ). Purchased in $\mathbf{1} 897$. Unpublished. The statuette is cast solid, the base hollow. The crusty, greenish patina has been removed in places. The figure has become separated from the base and has been reattached. The attribute which may have been held in the right hand is missing (see above). Acc. No. G.R. 24 .

## MISCELLANEOUS DIVINITIES

MiscellaNEOUS
Divinities

258 REPRESENTATION OF AN IMAGE OF KYBELE on its processional car drawn by two lions. The figure is seated on a throne, her feet resting on a foot-stool; in her right hand she holds a drum (tympanumı), in her left a bowl (patera). She wears a mural crown, a chiton, and a himation, which is drawn up over the crown to form a veil; in her ears are holes for the attachment of earrings, now missing. The chariot has four wheels, each with seven spokes, shaped like clubs. The attachment of the pole is in the form of a Doric capital. The upper surface of the chariot


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## STATUES, STATUETTES, AND RELIEFS

MiscellaNeous
Divinities
and the side pieces of the throne are decorated with floral designs, cast separately and soldered on. The background may once have been filled with some colored substance. A number of similar fragments were found with the chariot, but their use is uncertain.

The conception of the group is dignified and the execution fair, dating probably from the second century A.D.

The worship of the great nature goddess Kybele in Rome dates from the year $20+$ B.C., when, in obedience to a Sibylline edict, her image was fetched from her Phrygian home and placed in a temple on the Palatine. From that time on, her cult became very popular, and various ceremonies were observed in connection with it. The two chief features in the legend of Kybele were the loss of her lover Attis and his subsequent restoration, Kybele symbolizing the Earth, and Attis Vegetation. Both in Phrygia and later in Rome a yearly festival was held in which wild manifestations first of sorrow and then of rejoicing commemorated these two events. One of the ceremonies observed in Rome on this occasion was the carrying of the statue of Kybele on her chariot from her temple on the Palatine to the banks of the river Alno, where both were bathed, and then brought back to the temple. It is this ceremony that the group in this Museum probably commemorates; for the proportion of the figure of Kybele to the lions clearly indicates that not the goddess herself but her image is here represented.

Total height, $22 \frac{1}{8} \mathrm{in} .(56.2 \mathrm{~cm}$.). Total length, 3 ft .5 in . ( 1.04 m .). Height of figure, 12 in . ( 30.5 cm .). Gift of Henry G. Marquand, 1897 . Found on the site of the shop called "Old England" in Rome, on the corner of the Via Nazionale and the Via Eufemia. Published by A. Furtwängler, Neue Denkmäler antiker Kunst, III (1905), pp. 263-64, pl. III; S. Reinach, Répertoire, III (1904), p. 83, No. 3; C. H. Caffin, in Harper's Weekly, October 18, 1897, and Ernest Knaufft, Art Interchange, November, I897. Cast hollow. Crusty, green patina. The group was broken in many pieces. It was cleaned and put together in Rome by Martinetti. There are some slight restorations. Acc. No. G.R. 486.

259 ANTIOCHEIA, OR THE PERSONIFICATION OF THE CITY OF ANTIOCH, represented as a woman seated on a rock. She is sitting with crossed legs, the right arm held forward, the left stretched out behind and supported on the edge of the rock. She wears a mural crown, and a chiton and himation, of which the latter is pulled up behind to cover part of her hair; on her feet are sandals. In her right hand she holds a longish object, which, from the analogy of similar figures, may be identified as a bunch of wheat.

Figures of this type have been brought into connection with a bronze statue known to have been made by Eutychides, a pupil of Lysippos, for the city of Antioch founded in 300 B.C. (cf. Pausanias VI, 2, 6; R. Förster, Jahrbuch des archäologischen Instituts, I897, p. 145), and reproduced on Syrian coins of Tigranes ( 83 B.C.) and later. The best-known replica is the marble group in the Vatican, where Antiocheia is represented with her foot on the river Orontes (cf. IV. Helbig, Führer, I, No. 362 [1913 edition], and the references there cited). In our example the figure of Orontes is not present; but as he is also absent on some of the coin-representations, the identification of the statuette with Antiocheia does not depend on this detail.

For other bronze statuettes of this type, cf. A. de Ridder, Collection de Clercq, III, pl. 5r, 326; E. Babelon et J.-A. Blanchet, Bronzes de la Bibliothèque Nationale, No. 607; L. A. Milani, Museo archeologico di Firenze, pl. CXXXVIII; cf. also a silver statuette in the British Museum published by P. Gardner, Journal of Hellenic Studies, 1888, pl. V. These monuments vary in slight details from each other; but in essentials they are the same. The conception is distinguished by a combination of dignity and grace.

The execution of our statuette is careful, but somewhat schematic, and belongs to the Roman period.

Height, 4 in. ( 10.2 cm .). Purchased in 1913. Published in the Museum Bulletin. Cast hollow. The patina has been mostly removed. The right forearm was broken and has been reattached. Acc. No. 13.227.8.

260 STATUETTE OF FORTUNA. She stands with her weight resting chiefly on her right leg. Her right hand is lowered and holds a steer-ing-oar; in her left she grasps the cornucopia, or horn of plenty, which is laden with fruit, apparently grapes. She wears a long, girt chiton and a himation, which is draped round the lower part of her body and over the left shoulder; also a modius (measure) on her head. Her hair is


259

Miscellaneous
Divinities

Miscella- arranged in a knot behind, with a tress falling over each shoulder.

Divinities Roman period, of cursory execution.
Statuettes of Fortuna, the goddess of Chance, were evidently popular during the Roman Imperial times, judging from the large number that have been found (cf. R. Peter in Roscher's Lexikon, under Fortuna, § r 503 ff.; and S. Remach, Répertoire, II, 261-263; III, 77-8I; IV, $154-155$ ). The commonest attitude is that of our statuette, with steering-oar and cornucopia; but she is also found with other attributes, such as a globe, ears of corn, a wheel, the prow of a boat, and a patera. The identification of this type with Fortuna is rendered certain by inscribed representations on Roman coins (cf. Peter, op. cit.).

Height, $3 \frac{1}{5}$ in. ( 7.9 cm .). Purchased in 1896 . Unpublished. Cast salid. Brown-green patina. The right hand and the upper part of the steering-oar are missing; the features are almost completely rubbed away and the rest of the statuette is much chipped in places. The cornucopia is joined to the head by a horizontal support. Acc. No. G.R. 253.

26I STATUETTE OF FORTUNA, similar to the preceding, except that the head is inclined a little to the right. The execution is slightly better.

Height, $4 \frac{1}{2}$ in. ( 11.4 cm .). Purchased in 1896. Unpublished. Cast solid. Blackish patina with green patches. The fingers of the right hand, the steeringoar, and the upper part of the cornucopia are missing. Acc. No. G.R. 265.

265 STATUETTE OF LAR. He is represented as a youth, advancing on tiptoe in a dancing attitude, with the right foot put forward. The right hand is raised and holds up a drinkinghorn, or rhyton, ending in the head of a stag; the left is extended and holds a patera. He wears a short tunic girt at the waist, and a mantle which is draped loosely across the right shoulder and left forearm with both ends hanging from the arms. He has high shoes (endromides) with flaps, and
 long curly hair, arranged in thick clusters round his face. The figure stands on a round base.

The execution is fair and belongs to the Imperial period.

Bronze statuettes of Lares have been found in great numbers, especially in the aedicula of Roman private houses, their identification with this Roman divinity being made certain by inscriptions and occasional references by contemporary writers. We can distinguish two types, one advancing in a dancing attitude with drinking-horn and patera, like the figure described above, the other standing in a quiet attitude and holding a cornucopia and patera. The dancing type has been identified as the one created probably during the time of the Second Punic War for the Lares compıtales, i.e. divinities worshipped at the Compita, or cross-roads, their somewhat gay appearance being consistent with the joyous festival of the Compitalia. The standing type, on the other hand, is probably to be identified with that created for the Lar familiaris, or household dirinity. Augustus, in reorganizing the worship of the Lares compitales, did away with the difference between the Lar familiaris and the Lar compitalis, and henceforth the dancing type was used for both. As a matter of fact, all extant representations of Lares belong to the Imperial times. The presence of the standing type during that period is explained as a survival of the type used for the Republican Lar familiaris. For a history of the Lares and their representations see G. Wissowa, in Roscher's Lexikon, under Lares and the bibliography there given.

Height of figure, $4^{\frac{3}{5}}$ in. ( 11 cm .); total height with base, 6 in . ( 15.2 cm .). Purchased probably in 1896 . Unpublished. Cast solid. Dark green patina with light green patches. Intact. Acc. No. G.R. If.

266 STATUETTE OF LAR. Of the same type as the preceding, but without the mantle. The lower part of the tunic is blown out on either side. The execution is crude and belongs to the Imperial period. Illustrated, p. I $3+$.

Height, $2 \frac{3}{4}$ in. ( 6.9 cm .). Prohably purchased in 1896 . Unpublished. Cast solid. Black patina with green patches. The right hand, the right leg from under the knee, the end of the left foot, and parts of the patera are missing. Acc. No. G.R. 221.

## statues, statuettes, and reliefs

MiscellaNEOUS Divinities

267 STATUETTE OF LAR. Of the same type as the two preceding, but the scheme is reversed: the left arm is raised, the right extended, and the left leg is advanced. He wears a tunic, of which the lower part is blown out on either side, but no mantle.

The execution is Roman, of the Imperial period, and very crude.
Height, $2 \frac{7}{8}$ in. $(7.2 \mathrm{~cm}$.). Probably purchased in 1896 . Unpublished. Cast solid. Green patina. The right arm from under the elbow and the left arm from above the elbow are missing. Acc. No. G.R. 220.


## PRIESTS

270 STATUETTE OF A ROMAN PRIEST. He stands with his weight on his right leg and his left slightly drawn back. His right arm is missing; the left is bent at the elbow and holds a small box (acerra). He wears a tunic and a toga, which is drawn up over his head behind and thrown across his left shoulder in front, leaving the right arm uncovered. He also wears high shoes and a laurel wreath in his hair. The execution is fair.

Statuettes of men sacrificing, with an incense box in one hand and a piece of incense or a patera in the other, have been found in considerable numbers on Roman sites (cf. S. Reinach, Répertoire II, p. 503, 4-8; 504, I-5; III, p. 144, 9; IV, p. 308, 6; 310, 2; compare also the statuettes Nos. ı70 ff.). They can be identified as Roman priests from their resemblance both to figures of priests on Roman reliefs, such as those of the Ara Pacis (cf. E. Strong, Roman Sculpture, pls. VIII, IX), and to bronze figures represented in the act of sacrificing before an altar (cf. e.g. a statuette in the Sofia Museum, published by S. Reinach, Revue archéologique, 1897, pp. 234, 235, No. 39).

Height, $9 \frac{3}{4} \mathrm{in}$. $(24.8 \mathrm{~cm}$.). Purchased in 1913. From Macedonia. Described Priests by G. M. A. R[ichter] in the Museum Bulletin, April, 1914, p. 93. Cast hollow. The crusty, green patina has been largely removed. The right arm from below the shoulder is missing. The surface is somewhat corroded and scraped in places. The eyes are inlaid in silver; the pupils were inserted separately and are missing. Acc. No. 13.227.6.

## 27 I STATUE OF A "CAMILLUS". A

 boy is represented standing in an easy pose, with his weight on his right leg and the left a little drawn back. His right arm is lowered and holds a staff; the left, which is slightly extended, is bent sharply at the elbow with the fingers held open, probably to grasp an incense-box. He wears a tunic, girt at the waist, and sandals. The tunic is inlaid with narrow bands of copper running along the shoulders and down each side, front and back. These were probably intended to represent purple stripes on a white background. He has short, curly hair and a merry expression on his face. The head is turned slightly
to the left. The statue is mounted on an octagonal base, tastefully decorated with mouldings of tongue and plait patterns.

The execution is good. The boyish character of the figure is well rendered; the tunic falls in simple and effective, though somewhat heavy folds, and all details, such as the curly hair, the straps of the sandals, and the mouldings on the base, are carefully worked.

The identification of the statue as a "Camillus", that is, a boy who assisted at religious ceremonies (cf. Servius, ad Aen. XI, 558) is based on its similarity to the famous bronze statue in the Capitoline Museum (cf. W. Helbig, Führer [1913 edition], I, No.957), and to other similar statues and representations on reliefs. For a list of these cf. L. C. Spaulding, The "Camillus" Type in Sculpture, pp. 23 ff .

That this statue is Roman is evident both from the execution and from the type of garment represented. It is difficult, however, to assign it to a definite period. It can hardly belong to the Augustan age, for it lacks the severe classicism that distinguishes works of that time. A. Furtwängler (Neue Denkmäler antiker Kunst, III, p. 263) dates it "not later than the first century B.C." on account of its similarity to the young satyrs of late

## STATUES, STATUETTES, AND RELIEFS

Priests Greek art; but there are no other statues of the late Republican period with which this statue can be brought into connection. L. C. Spaulding (op. cit., p. 51) would place it in the Flavian age. With the scanty data at our command, however, it is safer not to limit the time more strictly than the earlier Imperial period.

Height, with base, $3 \mathrm{ft} .10 \frac{1}{8} \mathrm{in}$. ( 1.17 m .). Height of figure, $3 \mathrm{ft} .4^{\frac{5}{8}}$ in. ( 1.03 m. ). Gift of Henry G. Marquand, 1897. Provenance unknown. Published by A. Furtwängler, Neue Denkmäler antiker Kunst, III, p. 262 f., pl. II; L. C. Spaulding, The "Camillus" Type in Sculpture, p. 46, with plate; as a statue of Geta in Harper's Weekly, October 30, 1897, by C. H. Caffin, and in the Art Interchange, November, I897, by E. Knaufft. Illustrated in S. Reinach, Répertoire III, p. 144, No. 3. Cast hollow. The crusty, green patina has been removed in several places. The statue was originally in pieces, with the head detached, and was put together and strengthened inside by Martinetti. The lower end of the staff in the right hand is broken off and the object held in the left hand is missing. The eyes were inlaid with silver, which is still partly preserved. The lips are inlaid with copper, as are also the bands on the garment (see above). Small pieces of bronze inserted as ancient repairs have become detached; others can still be seen in place. Acc. No. G.R. 489.

## GROTESQUES

275 GROTESQUE STATUETTE OF A DWARF. This appears to be a caricature of a hawker. He is holding in front of him a large dish of small fruits (?), from which he has taken one and is putting it into his mouth. He wears a kind of apron, which is tied at the back of his neck and covers the front part of his body down to his waist; a small bag hangs by his side. He is bald and wears a wreath. His legs are crooked and he has a large phallus.

The workmanship is fair and belongs to the Roman period. For similar figures see the list given by A. J. B. Wace, British School Annual, X, 1903-1904, p. 105 f. For the interpretation of such grotesque figures see No. 127.

Height, $3 \frac{1}{5}$ in. ( 7.9 cm .). Gift of Henry G. Marquand,

275
 1897. Published by A. Furtwängler, Neue Denkmäler antiker Kunst, III, p. 268, pl. IX. Cast solid. The light green patina has been partly removed. The third and fourth fingers of the right hand have been broken off; otherwise in good condition. At the top of the head are remains of a round attachment. Acc. No. G.R. 3 \&


## STATUES, STATUETTES, AND RELIEFS

Grotesques
276 GROTESQUE BUST. He has a long nose, high cheek-bones, and receding forehead. On his nose and on each cheek is a wart. He is bald, except for a tuft of hair at the top of his head and one at the back.

The workmanship is fair and belongs to the Roman period. For the interpretation of such grotesques see No. 127.

Height, $2 \frac{3}{8}$ in. ( 6 cm .). Gift of Henry G. Marquand, 1897. Unpublished. Cast hollow. Green patina. Preservation good. On the neck and the bust are iron stains. At the top of the head is a large round hole. Acc. No. G. R. 35 .


276

## MALE FIGURES (NOT DIVINITIES)

Male
Figures
(not
DIVINITIES)

280 FRAGMENTARY RELIEF OF A YOUTH OF POLYKLEITAN TYPE. He stands with the weight of the body resting mainly on the right leg and his head slightly inclined to the right. Both arms are missing, each having been worked in a separate piece and attached; the actual motive of the figure is therefore uncertain.

The treatment of both the body and the head shows the characteristics associated with the sculptor Polykleitos. The body is of the massive, heavy build, with strongly developed muscles intersecting each other in definite planes, which we find both in the Doryphoros and the Diadumenos; the pose, the square skull, and the general character of the face are all faithfully copied from that artist. The relief is of Roman workmanship and probably served as an ornament of a vase or other object.

Height of fragment, $3^{\frac{7}{8}}$ in. ( 9.8 cm .).


280

Width, $\mathbf{I}^{\frac{7}{8}} \mathrm{in}$. ( 4.7 cm .). Purchased in igoo. From the Ferroni Sale (see Sale Catalogue, p. 44, No. 426). Described by G. M. A. R[ichter] in the Museum Bulletin, April, 1910, p. 98. The relief is repoussé. Crusty, green patina. Both legs from above the knees and, as has been mentioned above,
both arms are missing. The background is in a fragmentary state. Acc. No. 09.221.25.

28I HEAD OF A YOUTH, broken from a statuette. He has short wayy hair. Fifth-century type, of Roman execution.

Height. $\mathrm{I}_{16} \frac{1}{\mathrm{i}}$. ( 2.7 cm .). Purchased probably in 1896 . Unpublished. Cast solid. Green patina. The surface is considerably battered and encrusted. Ace. No. G.R. 195.


282 STATUETTE OF A YOUTH. He stands with his weight on his right leg, and his left hand placed on his hip. He is nude, but carries a piece of drapery over his left forearm. His hair is short and wavy and he wears a fillet. Fourth-century style, of rough Roman execution.

Height, $2 \frac{1}{16}$ in. ( 5.2 cm .). Purchased probably in 1896 . Unpublished. Cast solid. Smooth, green patina. The right arm from below the shoulder and both legs from above the knees are missing. Acc. No. G.R. 196.

283 HEAD OF A BEARDED MAN, broken from a statuette. He has wavy hair and a curly moustache. The eyes are deep set. Late Greek type, probably of Roman execution.

Height, $\mathrm{I} \frac{1}{16}$ in. ( 2.7 cm .). Purchased probably in 1896. Unpublished. Cast solid. Dark green patina. The surface is considerably encrusted. Acc. No. G.R. 185.

## STATUES, STATUETTES, AND RELIEFS

Male Figures (not divinities)

284 STATUETTE OF A YOUTH. He stands looking a little to the right with his weight on his right leg and the left slightly advanced. The right arm is extended forward and holds a round object between the thumb and the forefinger; the left is extended sidewise and bent sharply at the el-


284


285


300
bow; the hand clutched an object of which only the part actually grasped in the hand is preserved. He is nude, but has a chlamys hanging over his left arm. His hair is short and straight. Fair execution, of Roman date.

Height, $4^{\frac{3}{4}}$ in. (12.1 cm.). Purchased in 1896. Unpublished. Cast solid. Crusty, green patina. The tip of the left thumb, the attribute held in the hand, and some of the toes of the left foot are missing. The surface is partly corroded. Acc. No. G.R. 26 I.

285 STATUETTE OF A YOUTH. He stands with his weight on his right leg and the left slightly drawn back. The right arm is lowered, with the forearm extended forward; the left is lowered as far as preserved. He is nude, but wears a chlamys over the left shoulder. Mediocre Roman work.

Height, $5 \frac{7}{16}$ in. ( 13.8 cm .). Purchased in 1896. Unpublished. Cast solid. The green patina has been mostly scraped off. The right hand, the left arm from above the elbow, and the left foot are missing. The surface has been much damaged by scraping, especially on the head. Acc. No. G.R. 282.

## ROMAN PERIOD

300 STATUETTE OF AN ORATOR ( $\ddagger$ ). He stands with his weight on the left leg and the right slightly drawn back. His right arm is extended with hand held open; the left is lowered and bent at the elbow. He wears a tunic and a mantle, which is draped round the lower part of his body and over the left shoulder and is decorated with punctured dots. He also has shoes. His hair is short and straight.

The execution is fair and belongs to the Roman period. For statuettes of this type cf. S. Reinach, Répertoire, II, p. 6I9. They have been identified as orators from the gesture of the right hand.

Height, $3 \frac{3}{5}$ in. ( 8.6 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 5030. Cast solid. The light green patina has been partly removed. The left forearm was inserted in a separate piece and is missing. Acc. No. C.B. 337.

305 RELIEF OF TWO MEN FIGHTING. A warrior, clothed in a crested helmet, chiton, and cuirass, is placing his foot on his vanquished enemy. He has seized his opponent by the hair and is threatening to kill him with his sword (now missing). The warrior is characterized as a Roman soldier by the shape of his helmet, which is of cap-like form with cheek-pieces, and the scallop-shaped appendages beneath the cuirass. On his left side hangs the sheath of his sword. His opponent wears only a tunic and shoes, and the long hair and beard mark him as a barbarian.

The group must have served as an attachment to some object; it is worked in high relief, some parts being in full round. The composition is spirited, and the contrast between the self-confident


305 figure of the victor and the drooping form of his victim is well brought out. The execution is fair.

For an almost identical relief in the Louvre cf. Adolphe J. Reinach, Monuments Piot, XVIII, 19ro, p. 106, pl. IX, I (who assigns it to the Hellenistic period), and S. Reinach, Répertoire, IV, 1910, p. 320, No. 3. Compare also similar groups on Roman monuments commemorating the victories

Male of the Roman army, such as the Trajan Column, the Column of Marcus Aurelius, and the Arch of Septimius Severus.

Greatest height, $4 \frac{3}{16} \mathrm{in}$. ( 10.7 cm .). Greatest width, $2 \frac{13}{16} \mathrm{in} .(7.2 \mathrm{~cm}$.). Purchased in 1911. Said to have come from Rome. Published by G. M. A. R[ichter] in the Museum Bulletin, November, 1911, pp. 212-214, fig. 6. Cast. Patina green and crusty. The left arm of the barbarian from above the elbow and the sword in the warrior's right hand are missing, and both faces are somewhat battered. Acc. No. 11.140.8.

3 I5 RIGHT FOOT FROM A COLOSSAL MALE STATUE. Only the front part of the foot is preserved. The modelling is forceful, though somewhat heavy, with the toes thickening considerably toward the tips. Roman period.

Length of fragment, $7^{\frac{3}{4}} \mathrm{in}$. ( 19.7 cm .). Width, $5 \frac{3}{8}$ in. ( 13.7 cm .). Purchased in 1912. Described by G. M. A. R[ichter] in the Museum Bulletin, December, 1913, p. 270. Cast hollow. Crusty, green patina. Acc. No. 12.235.2.


315

## PORTRAITS

325 PORTRAIT BUST OF A MAN of youthful appearance and distinctive personality. His features are strongly individual. He has a high, slightly receding forehead, rounded skull, short, curling hair, represented as lying close to the skull, and no beard or moustache. His nose is rounded at the tip, the chin is strong and prominent, and the ears protrude somewhat from the head. Another noteworthy characteristic is the prominence of the larynx. The whites of the eyes are of ivory; the irises and pupils were also inlaid but are now missing.

The period to which this head belongs is readily recognized, both by its style and by the shape of the bust. The latter is small and includes only the collar-bone and the parts immediately surrounding it, which is the form prevalent during the late Republic and early Imperial times, that is, during the end of the first century B.C. and the beginning of the first century A.D. The style coincides with this dating. A comparison of our bust with the strongly realistic heads of the Republican era, on the one hand, and with the idealizing types of the time of Augustus on the other, will show that it stands midway between these two epochs. The influence of Greek
models has already acted on the artist in the direction of restraining the tendency toward extreme realism; but the influence has not been strong enough to change this tendency entirely, and so his work is still markedly individual.


This is one of the finest bronze portrait busts known. The face is beautifully modelled, especially on the forehead, and round the mouth. Moreover, the artist has successfully seized the personality of the man, and without too detailed treatment, has conveyed a sensitive and yet forceful character. The man represented has not yet been identified. The type does not appear to occur on coins and there is no other portrait known of this man bearing an inscription.

Height, 15 in. ( 38.1 cm. ). Bequest of Benjamin Altman, 1913. Said to have been found in Trastevere, Rome. Published by G. M. A. Richter in Art in America, April, 1913, pp. 120 ff., figs. 27-29. Cast hollow. The patina, which appears to have been green with black patches, has been largely removed. Otherwise the preservation is excellent; there are merely a few unimportant injuries, for instance, on the right ear. The surface is slightly corroded in places. Acc. No. I 4.40 .696.

330 PORTRAIT HEAD OF AGRIPPA (!) probably from a statue. He is represented as a man of commanding personality, with strong features and a serious cast of countenance. He has a square face, with broad forehead, straight nose, and small mouth. His hair is short and slightly wavy and he has no beard or moustache.

This is a splendid example of Roman portraiture. The energetic, forceful character of the man is well brought out and the modelling is careful and detailed, though rather hard.

For the identification of this head we are in possession of important external evidence. The head was found in $190+$ during excavations made at Susa, near Turin, not far from the famous Arch of Augustus. It was unearthed in the débris which covered a Roman street, and in the immediate vicinity of a Roman house. In the same place were found a number of fragments such as a greave, parts of a foot, two fingers, part of a shoulder, and a heel, of the same bronze and of the same relative size as the head, as well as seven pieces of marble containing a dedicatory inscription to MI. Agrippa. The presumption, therefore, is that our head was broken from a large bronze statue representing Agrippa.

The full text of the inscription is:

$$
\begin{aligned}
& \text { M . AGRIPPAE . L.F. } \\
& \text { (cos. III . tri) B . (p)OTEST } \\
& \text { DO . . ET COTTI } \\
& \text { COTTI . F }
\end{aligned}
$$

Though fragmentary, enough remains to show that the statue was dedicated by a member of the family of Cottius, then reigning at Susa.

Agrippa ( $63-12$ B.C.), the illustrious friend and general of Augustus, was a man of great influence and popularity, and a number of statues erected in his honor are known to us from literature and from extant dedicatory bases. What we know of his character-his loyalty to Augustus,

$325$


$330$

## statues, statuettes, AND RELIEFS

Portraits the combination of firmness and generosity in his dealings with men, and his hatred of luxury-corresponds remarkably well with the physiognomy of our head. Moreover, a comparison between our head and the portraits of Agrippa which occur on Roman coins (cf. J. J. Bernoulli, Römische Ikonographie, pp. 254 ff., Münztafel V, ioı-I06), as well as with the busts identified with Agrippa by the help of these coins (cf. Bernoulli, op. cit. pp. 255 ff .), brings out important similarities. The square shape of the head, the massive forehead, the straight nose, and the strongly developed jaws and neck are identical on the coins, the busts, and our head. Similar also is the arrangement of the hair. In one important characteristic, however, our head differs from both the coin types and the busts. These all show a very heavy overhanging brow under which the eyes are set at a sharp angle, giving the face a sullen expression. In our head the brows show no unusual thickness and the expression is consequently proportionately milder. This marked difference makes the attribution of our head to Agrippa uncertain. It is, of course, possible that the sculptor of the statue wished to represent Agrippa in a more benevolent aspect and purposely did not give prominence to this characteristic. There is, at all events, no other well-known personage with whom it seems possible to identify the head. It bears, indeed, a certain resemblance to members of the Claudian family, such as the Elder Drusus and Germanicus, in the shape of the skull and the arrangement of the hair, especially in the manner in which it grows low down on the neck. But Drusus and Germanicus were twenty-nine and thirty-four years old respectively when they died, and our head represents a considerably older man.

Height, $12 \frac{3}{16}$ in. ( 31 cm .). Purchased at the Sambon Sale, Paris, in 1914. For the circumstances of its discovery see alove; they are stated at length by G. Couvert in Atti della società di archeologia e belle arti per la provincia di Torino, VII, fasc. 6 (1908), p. 406. Besides the bronze pieces enumerated above as having been found with the head, he mentions also various ornamental pieces such as a small Triton, fragments of cornices, a lily, an oak leaf, a fibula, the nozzle of a lamp, and a small slab with the letters A N. All these objects, as well as the marble fragments with the inscription, are described as having been unearthed "on the paving stones of the Roman street, scattered in a disorderly manner not very far from one another, and on the same foot-way on which the head was found." Published also by G. Couvert in the Illustrazione italiana, XXXI, September 4, 1904, p. 198; E. Ferrero, Bollettino di filologia classica, XI (1904), pp. 7 I and 89; L. Cantarelli, Bullettino della commissione archeologica comunale di Roma, XXXII, 1904, p. 365; G. M. A. R[ichter] in the Museum Bulletin, February, 1915; Catalogue of the Sambon Sale, May 25,

1914, No. 71. The head is cast hollow. The patina is crusty green. The surface is covered with incrustations in places. There is a hole at the back of the head and a large crack in the neck; otherwise in excellent preservation. The eyes were inlaid and are missing. When found, traces of gilding are said to have been noticed at the back of the head; these are now not visible. Acc. No. I4.130.2.


333 PORTRAIT STATUE OF A BOY. He stands in a graceful, easy pose, his head slightly turned to the left and his weight resting on the left leg. He wears a himation, or Greek mantle, which covers his left upper arm, is drawn across the back in a downward slanting line, and is then brought round to cover the lower part of the figure in front, the upper portion being thrown over the left forearm.

## STATUES, STATUETTES AND RELIEFS

Portraits This is probably the most valuable piece in our collection. The great rarity of bronze statues that have survived either from Greek or Roman times (cf. p. 3), and the high quality and beautiful preservation of this specimen, combine to make it a piece of first-rate importance. It is certainly one of the best portrait statues of its period in existence. The sculptor's fine artistic sense is shown both in the conception of the whole and in many delicate touches. The pose, with the little tilt of the head and the slight curve of the figure, is wonderfully graceful; and the boyish face has a sensitiveness and charm rarely equalled in ancient sculpture. Very effective also is the contrast presented by the nude torso and the varied folds of the drapery covering the lower half of the figure. The execution is excellent. The nude portions of the body, especially the back and the shoulders, are beautifully modelled, with fine appreciation of the delicate forms of a young boy. Moreover, the drapery is rendered with unusual skill; it is rich and varied, and still essentially simple in its lines, and the feeling for the figure beneath it is successfully conveyed.

It is noteworthy that on the himation in front are indicated a number of stripes, both horizontal and crossing each other. Each stripe consists of two parallel lines about half an inch apart. Identical stripes occur on the draperies of sculptures of the fourth century and later periods (cf. e.g. A. Conze, Die attischen Grabreliefs, pl. LXXVIII, No. 320; A. Milchhoefer, Zum 42 ten Winckelmannsprogramm, p. 3; H. Hepding, Athenische Mitteilungen, XXXV, 1910, p. 495; P. Arndt und W. Amelung, Einzelverkauf, No. 736), notably on those of the Pergamene Altar (cf. H. Winnefeld, Altertiumer von Pergamon, III, 2, Die Friese des grossen Altars, passim). They have generally been interpreted as creases formed by the folding of the garments; but this interpretation is not satisfactory, as such creases would hardly be represented by double lines, and would not occur in the irregular way in which we find them on some of the statues. It is a more plausible theory that the artist meant to represent a garment with a striped pattern.

The two lower corners of the himation, which appear on the left side, are each decorated with a bow-knot ending in a tassel, and a border runs round the bottom, both front and back.

It is difficult to interpret the action of the two hands. The right is held half open; the left, with the palm of the hand upward and the fingers extended (the greater part of the fingers is missing). There is a roughness on the thumb of the right hand and a corresponding roughness on the


## STATUES, STATUETTES AND RELIEFS

Portraits base of the thumb of the left hand, which may be remains of attachments; but what the object or objects held were it is now impossible to say.

The period to which the statue belongs is determined by the type of the boy's head, which has the characteristic traits of the Julio-Claudian family. He has the broad forehead, the flat skull, the protruding ears, and the general type of features continually found in members of that family. But though the general likeness is very strong, it is impossible, in the absence of further evidence, to identify it with any one member of that house. There are points of resemblance with several portraits of that time, but a positive identification is rendered more difficult by the fact that our statue represents a boy about twelve years old, while the identified busts and the coins of the period are all of full-grown men. We must therefore be content in calling this statue an imperial prince of the JulioClaudian house.

Though of Roman date, the statue is thoroughly Greek in feeling, and must have been executed by a Greek strongly imbued with the idealizing tendencies of earlier Greek sculpture. Its date cannot be later than the end of the Christian era, before the somewhat dry elegance of the 'Augustan' style became fully established. The close connection of the statue with Greek rather than Roman sculpture is shown not only by the whole conception and the style, but by the fact that the boy wears the Greek himation instead of the Roman toga, which was the garment generally worn by Roman boys of good family of that period.

Grearest height of statue as preserved, $4 \mathrm{ft} .1 \frac{1}{2} \mathrm{in}$. ( 1.232 m .) ; approximate height allowing for feet, $4 \mathrm{ft} .4^{1 / 8} \mathrm{in} .(1.324 \mathrm{~m}$.); height of head from crown to bottom of chin, 734 in . ( 19.7 cm .). Purchased in 1914 . Published by G. M. A. R[ichter] in the Museum Bulletin, January, 1915, pp. 3 ff . Cast hollow. Smooth, blue-green patina. The surface is partly covered with incrustations. The preservation is excellent, the only missing parts being both feet, the fingers of the left hand, and the object or objects held. The eye-balls were inserted separately. Only one is now preserved and has not been placed in the socket; the white is of ivory, the iris of a blue-gray stone, the pupil missing; fragments of the lashes of one eye, of bronze, are also preserved, but have likewise not been added. The right arm was broken off and reattached; there is a break across the middle of the body above the drapery, which has been repaired. On the left side joining the two ends of the himation is a small support, such as is generally found on marble statues. A small rectangular piece inserted in the drapery on the left side as a repair for defective casting has fallen out. Acc. No. I4.Izo.i.

335 PORTRAIT BUST OF A MAN, wearing a tunic and a Portrats toga. It represents a bearded man of about middle age with a large, crooked nose, small eyes, prominent cheek-bones, and protruding ears. The forehead is deeply furrowed. It is the face of a man neither highly intellectual nor of a very distinguished bearing. There is a certain sensitiveness about the mobile mouth, but it is a sensitiveness indicative of a nervous


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temperament rather than of fine sensibilities. However, though the personality is not interesting, the artist has so well succeeded in convey ing the character of his sitter that, as a portrait study, the head has become a work of art.

From the shape of the bust, which includes the shoulder and part of the upper arm, we may place it in the Trajanic or early Hadrianic period (cf. P. Bienkowski, Revue archéologique, 1895, pp. 294-295, fig. 12). The identity of the man is not known. The rarity of such busts and the exception-

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Portraits ally good execution and preservation of this example combine to make it a piece of exceptional interest.

Height, $8 \frac{3}{1} \mathrm{in}$. ( 22.2 cm .). Purchased in 1913 . Published by G. M. A. R[ichter] in the Museum Bulletin, April, 1914, p. 93, fig. 3. Cast hollow. Smooth, green patina. The preservation is unusually good. There are two small holes in the bust, and one at the top of the head. There are also several places which have been repaired in antiquity owing to defective casting. Acc. No. 13.225.I.

340 FRAGMENT FROM A PORTRAIT HEAD showing part of the right side of the face of a bearded man, about half life-size. The fragment includes the whole lower part of the face up to a line drawn from the ear to the eye; the eyebrow and forehead are missing. He has a short beard and moustache worked in relief. The iris and pupil of the eye are indicated by incision.

The modelling is careful and probably belongs to the second century A.D.


340

Height of fragment, $3 \frac{1}{8} \mathrm{in}$. ( 8 cm .). Purchased in 1913 . Mentioned in the Museum Bulletin, April, 1914, p. 94. Cast hollow. The patina has been almost entirely removed. There is a large crack through the cheek and a small hole in the ear. Acc. No. 13.225.9.

## 350 PORTRAIT STATUE OF THE EMPEROR CAIUS VIBIUS

 TREBONIANUS GALLUS. He stands with his weight on his right leg and the left slightly drawn back. His left arm is lowered and bent at the elbow; the right is extended sidewise with the forefinger raised. The attitude and whole bearing suggest that he is conceived as delivering a speech. His hair, beard, and moustache are short cropped. He has a high, furrowed forehead, eyes set close together, a long nose, full lips, and a strong chin. The skull is rounded. The face suggests a man of somewhat unattractive personality and of a coarse, wilful nature. He is represented nude, in accordance with the custom of "heroizing" Roman emperors. A mantle is lightly draped over the left shoulder and forearm; on his feet are high sandals.This figure is remarkable both for its large size, ancient bronze statues being of great rarity (see p. 3), and for the fact that it can be identified with considerable certainty with Caius Vibius Trebonianus Gallus, who was Roman Emperor from 251 to 254 A.D. At least, a comparison between this statue and the coin types of this emperor (cf. H. Cohen, Description historique des monnaies frappées sous l'Empire romain, V, pp. 235 ff .)


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shows a marked resemblance. Both have the furrowed brow, the long nose and full mouth, and the same general type of face. Moreover, the style of the statue accords well with the date of this emperor.

The statue is carefully worked, but the modelling, especially on the body, is hard and schematic. Moreover, the effect of the whole figure is heavy and the conception lacking in inspiration. On the other hand, the face is a fine portrait study and successfully conveys the personality of the man.

The record of Trebonianus Gallus as Roman emperor is not an enviable one. He was responsible for the disgraceful treaty made with the Goths which guaranteed them a fixed annual tribute if they forbore to invade Italy in the future. The peace thus gained was naturally short-lived; for fresh hordes of barbarians soon imitated the successful feats of their brethren. These were, however, defeated by the general, Aemilianus, who was forthwith proclaimed Emperor by his army. When Gallus marched forth to meet his rival, he was murdered by his own soldiers.

Height, 7 ft . 11 in . ( 2.406 metres). Purchased in 1905 . The history told of this statue is as follows: It was found by Count Nicolas Nikivitch Demidor near the Church of San Giovanni in Laterano, Rome, in the early years of the nineteenth century. In 1828 it passed into the hands of his son; then in 1848 to Count A. de Montferrand, who took it to St. Petersburg, where it stayed for some time, until it was sold to Rollin and Feuardent in Paris. It had been badly restored and had fallen to pieces; but was taken apart again and reconstructed properly by M. André of Paris. The circumstances told of its discovery are somewhat suspicious, and it is doubtful whether the story is based on any facts. But it is certain that the statue was in the possession of Count A. de Montferrand, in 1852, as it is so described by B. von Köhne in a communication read before the Archäologische Gesellschaft, May 4, 1852 (cf. Archäologische Zeitung, 1852, Anzeiger, p. 187). It was reproduced in the Mémoires de la Société impérial d'archéologie issued in 1852 , and again in an extract from that publication entitled Description des objets les plus remarquable de la Collection de M. A. de Montferrand (St. Petersburg, 1852). It was then described as Julius Caesar. J. J. Bernoulli refers to it in his Römische Ikonographie I, p. I65, as an "angebliche Statue des Caesar", and Mr. Frank Jesup Scott alludes to it in his "Portraitures of Julius Caesar" as a statue "credited to the private collection of A. de Montferrand". It is figured in S. Reinach's Répertoire, II, p. 571, fig. 3 (with the corona, a modern addition since removed); it is also published by C. M. Fitzgerald in the Museum Bulletin, November, 1905, p. 124, and ly F. J. Mather, Jr., in the Burlington Magazine, November, 1905, p. $14^{8}$. Cast hollow. The patina, where preserved, is dark green; it has been restored in several places. The statue has been put together from a number of fragments, but only a piece a few inches square on the back of the torso is said to have been missing. There are several small repairs made in ancient times due to defective casting. Acc. No. G.R. 487.

$350$



## STATUES, STATUETTES, AND RELIEFS

## FEMALE FIGURES (NOT DIVINITIES)

Female
Figures
(not
DIVINITIES)

360 STATUETTE OF A DRAPED WOMAN. She stands with her weight on the right leg and with her head inclined to the right. She is completely enveloped in drapery, wearing a chiton and over it a himation, which covers her head. She also wears shoes. Her right hand is placed on the breast; the left is lowered and holds the drapery.

In the pose and arrangement of the drapery this statuette is similar to the famous statue of a matron from Herculaneum in the Albertinum, Dresden. For other statues of the same general type cf. S. Reinach, Répertoire, II, p. 665 f. The workmanship is fair and belongs to the Roman period.

Height, $6 \frac{5}{8}$ in. ( 16.8 cm. ). Gift of Henry G. Marquand, 1897. Unpublished. Cast hollow. Dark green patina. Preservation good. Acc. No. G.R. 19.

370 FEMALE (?) HEAD, broken from a statuette. She wears a diadem and has short straight hair, parted in the middle, and slightly waved round the forehead. Fifthcentury type, of Roman execution.

Height, 1 in. ( 2.5 cm .). Purchased probably in 1896. Unpublished. Cast solid. Dark


360 greenish patina. The surface is considerably encrusted. Acc. No. G.R. 187.

## CHILDREN

Children
375 STATUETTE OF A LITTLE GIRL HOLDING A PUPPY. She is seated with both legs slightly drawn up and stretched sidewise. In her right arm she clasps a puppy; her left is extended as if reaching out for something and her face is lifted eagerly in the same direction as the outstretched hand. She wears a short-sleeved tunic, girt above the waist, of which the right sleeve has slipped down, leaving the shoulder bare. Her hair is long and wavy, and tied together at the nape of the neck.

This is a charming study of child life. Both the little girl and the Children dog are rendered with remarkable truth to nature, and there is a delightful spontaneity in the postures of both figures. The execution is good, but the hardness with which some of the drapery is rendered shows that it was probably executed in the Roman period.

Children playing with animals are frequently represented in late Greek and Roman times, when the forms of children were for the first time properly studied and genre scenes formed a favorite topic of artists (cf. S. Reinach, Répertoire, II, pp. $46 z \mathrm{ff}$.; III, pp.


375 $13+\mathrm{ff}$.; IV, pp. 290, 291). For a child in a somewhat similar pose to ours, but with a bird instead of a dog, cf. R. Herzog, Oesterreichische Jahreshefte, VI, I903, pp. 227 ff.

Height, $2 \frac{3}{5}$ in. ( 6 cm .). Purchased in 1913. Published by G. M. A. R[ichter] in the Museum Bulletin, April, 1914, pp. 90 and 9r, fig. 1. Cast hollow. Crusty, greenish patina. The fingers of the left hand are missing; the irises of the eyes were inlaid and have fallen out. Acc. No. 13.225.4.

376 STATUETTE OF AN INFANT, seated and grasping a large bunch of grapes in both arms. His body is turned to his left, but he looks to his right. He is nude. The eyes are inlaid with silver and the hair is indicated by fine relief lines.

The rounded forms of the child and the chubby face are well rendered. Roman period.

Seated infants are a favorite subject of late Greek and Roman times (cf. S. Reinach, Répertoire, II, pp. 451-453; III, pp. 132, 265; IV, pp. 279 ff.). Sometimes the child is characterized as Eros by the addition of wings or various attributes; however, to refer the grapes in the hands of our statuette to Dionysos seems unnecessary.


376

Height, $2 \frac{1}{4}$ in. ( 5.6 cm .). Purchased in 1907. Described by G. M. A. R[ichter] in the Museum Bulletin, May, 1908, p. 91, No. 14. Cast solid. Brown-green patina. Most of the toes are missing; otherwise the preservation is good. Below are remains of a round attachment with traces of iron. Acc. No. 07.286.94.

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Children 385 SMALL BUST OF A GIRL. She is enveloped below the shoulders with drapery. Her hair is long and fastened in a knot behind. The bust ends below in a tang, and there is an iron tang at the top of the head; so that it probably served as an ornament to some object. Roman period.

Height, $\mathbf{I}_{8}^{\frac{1}{8}}$ in. $(2.8 \mathrm{~cm}$.). Purchased probably in $\mathbf{1} 896$. Unpublished. Cast solid. Greenish black patina. Acc. No. G.R. 206.

## ANIMALS

Animals
402 STATUETTE OF A SPHINX. She is lying down with head erect, fore paws extended, and


385 wings spread. She wears a diadem and has long hair which is brought back and arranged in a loose coil behind. The feathers of the wings are indicated by incised lines.

Fifth-century type, but of Roman execution.

For a similar figure cf. E. Babelon et J.-A. Blanchet, Bronzes antiques de la Bibliothèque Nationale, No. 769.

Height, $\frac{5}{8}$ in. ( 4.1 cm .). Length, $2 \frac{3}{5}$ in. $(6 \mathrm{~cm}$.). Purchased in 1900 . Unpublished. Cast solid. The green, crusty patina has been removed in many places. The left wing has been broken off and reattached. The fore paws and the greater part of the hind legs are missing. The surface is encrusted in places. Acc. No. G.R. 39.


402

403 STATUETTE OF A FEMALE PANTHER. She is represented lying on one side, the left fore leg and hind leg raised in the air, the head lifted and turned to the left. The mouth is wide open, the eyes contracted, and the ears laid back. It is not clear whether she is turning around in a playful attitude, or whether she is wounded. Her face seems to suggest that she is in pain, but there is no trace of a wound. The whole body, the head, the paws, and the tail, are covered with spots which were inlaid with silver. These spots are of different forms, some being round, some oblong, and some crescent-shaped.

The panther is mounted on a base of semicircular shape which has a

moulding ornamented with a leaf pattern round the bottom. The top and sides of the base are decorated with beautiful inlay work in silver and niello. On the top around the curved part are two delicate sprays of leaves and berries, with a small rosette in the centre; on the rounded side of the base is a series of triangles, each of which is surmounted by a lotos bud. The combination of the bright silver with dark niello inlay against the rich golden color of the original bronze must have been very effective.

This panther is a remarkable example of ancient animal sculpture and may well rival the works of the great modern student of animal life, A. L. Barye. The wonderful way in which the cat-like nature of the beast is displayed in the grinning face, the uplifted paws, and the long, lithe body with its many curves and hollows, shows that this figure was studied from life without the conventionalism of Greek art in the treatment of animals. The conception is characteristic of the Hellenistic period; but the actual workmanship is probably Roman, of early Imperial date, since the figure is said to have been found in Rome, in a deposit of Roman bronzes discovered there in i880. It probably comes from the same place as the bronzes published in the Bullettino Comunale, 188r, p. 30 (chiefly Roman heads), a statuette of Dionysos in the Dutuit Collection (cf. Catalogue, vol. II, No. ${ }^{1}+1$ ), and a panther in Baron Edmond de Rothschild's collection (cf. S. Reinach, Monuments Piot, IV, p. 105, pl. X, where it is said to have been discovered in I888; but if it comes from the same find this must be a misprint for 1880 ).

It should be noted that the base on which our panther is at present placed cannot have been made for it; for the right fore paw does not rest on it as it should, but is slightly lifted from the ground; and since there is no indication that the leg has been bent, it would seem that a base of uneven surface, perhaps to represent a rocky ground, was originally made for the figure. The present base, being approximately the required size, may have been used later for it; at any rate, the assertion that it was found with the figure is undoubtedly true, since both show the same oxidation, and moreover the base has marks indicating that the panther rested on it; these marks run not lengthwise, but across the width, so that we may suppose that in burying the panther became displaced.

Whether our panther is complete in itself or belonged to a larger composition is an open question. Mr. Reinach has tried, not convincingly, to combine the Rothschild panther with the Dutuit Dionysos in one group. But our panther is considerably smaller and therefore could not in any case have formed part of that group. The presence of the base is no evidence


## STATUES, STATUETTES, AND RELIEFS

Anmals in the matter, since, as has been pointed out, the two were not made for each other. On the whole, it is more probable that the panther was an independent composition, since there are plenty of analogies of animals made as single figures (see S. Reinach, Répertoire, II, pp. 710-778), while groups are comparatively rare.

Length of panther, $9 \frac{3}{5} \mathrm{in}$. ( 23.7 cm .); length of base, 10 in . ( 25.4 cm .); greatest width of base, $6 \frac{7}{8}$ in. ( 17.4 cm .). Purchased in 1907 from an English collection. Said to have been found in Rome when digging for the foundation of the English Church in the Via Babuino in r880. Published by G. M. A. R[ichter] in the Museum Bulletin, March, 1908, p. 58 f., figs. I, 2. The panther is cast solid, the base hollow. Patina blackish green with reddish and green patches. The end of the tail is missing and part of the inlay has disappeared; otherwise the figure is complete. When found it was much corroded, but it has been cleaned by M. André in Paris. Acc. No. 07.261.

406, 407 PAIR OF WATER-SPOUTS, EACH ENDING IN THE MASK OF A LION modelled in high relief. The tongue of the lion forms the spout itself. Round the tube at the back are extensive remains of the lead with which it was soldered in place.

The modelling of the lion mask is forceful, but hard and schematic. It is probably of Roman execution.


406


407

Diameter of No. $406,5 \frac{1}{8}$ in. ( 13 cm. ); length, including tube to end of spout, $6 \frac{3}{8} \mathrm{in} .\left(16.2 \mathrm{~cm}\right.$.). Diameter of No. $407,5 \frac{1}{8} \mathrm{in}$. ( 13 cm .); length, including tube to end of spout, $6 \frac{1}{2}$ in. ( 16.5 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, Nos. 5015, 5016. Illustrated in the Cesnola Atlas, III, pl. LXII, 1, where they are said to have come from Curium. The relief is cast. The green patina is artificial, having been added by Mr. Baillard
in this Museum. No. 407 is intact; No. 406 has the end of its spout broken Animals off and reattached. Acc. Nos. C.B. 444, 445 .

408, 409 PAIR OF WATER-SPOUTS, EACH ENDING IN THE MASK OF A LION modelled in high relief. The tongue of the lion forms the spout itself. The muzzle is covered with punctured dots, which occur also, in groups of three, on the smooth surface of the brow. Round the tube at the back are extensive remains of the lead with which it was soldered in place.

The execution is Hellenistic or Roman. For a lion of similar type, in stone, also from Cyprus, see No. 1387 in the Cesnola Collection.


Diameter of No. $408,3 \frac{5}{8} \mathrm{in}$. ( 9.2 cm .); length, including tube to end of spout, $7 \frac{1}{4} \mathrm{in}$. ( 18.4 cm .). Diameter of No. $409,3 \frac{5}{8} \mathrm{in} .(9.2 \mathrm{~cm}$.): length, including tube to end of spout, $7 \frac{1}{4} \mathrm{in}$. ( 18.4 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, Nos. 5017, 5018. Illustrated in the Cesnola Atlas under III, pl. LXII, i, where they are said to have come from Curium. The relief is cast. The green patina is artificial, having been added by Mr. Baillard in this Museum. No. 408 is intact; No. 409 has a piece of the spout missing. Acc. Nos. C.B. 442, 443 .

4I2-425 MINIATURE FARMYARD GROUP, consisting of a pair of bulls, a pair of cows, a pair of goats, a ram, ewe, pig, and sow, together with a plough, a cart, and two yokes. All the animals, though rather roughly modelled, are carefully characterized.

The plough is of the primitive composite type, consisting of the pole, the ploughtail, and the sharebeam. In this example the ploughtail, which was held by the farmer, is missing, but a hole shows the place where it was attached. Though the rest of the plough was cast in one piece of bronze, the

## statues, statuettes, AND RELIEFS

Animals joints of the wooden original are all indicated; thus the pole is represented as fastened to the sharebeam by two large pers, and the share to the sharebeam by means of straps. This type of plough was in use both in Greek and Roman times; for other representations of it see Daremberg et Saglio,

$412-425$

Dictionnaire, under ararium, p. 354; cf. also A. S. F. Gow, Journal of Hellenic Studies, XXXIV, 1914, pp. 249 ff.

The cart is of the general shape used in Roman times. It consists of a platform made of transverse beams, an upright piece front and back, and a long pole, the whole mounted on a pair of solid wheels. Similar carts used for the transportation of food and army baggage occur on the Column of Trajan. Compare also the Etruscan example in the British Museum (cf. H. B. Walters, Catalogue of Bronzes in the British Museum, No. 602).

The yokes are of the double type, with two curvatures to fit the neck and shoulders of the oxen on which they were probably placed (cf. A. Baudrillart, Daremberg et Saglio, Dictionnaire, under jugum, pp. 663 ff.). In one yoke the holes are indicated through which were passed the leather straps fastening the yokes to the oxen. On the centre of each yoke at the top is a notch into which the pole is fitted.

This interesting group of objects was found in a tomb and probably constitutes either a votive offering or a child 's toy. It belongs to the Roman period. For a votive plough with two oxen and driver in the Museo Kircheriano, Rome, see J. Martha, L’Art étrusque, p. 510 , fig. $3+5$, and G. Micali, Antichi monumenti, pl. CXIV; these are about twice the size of our example.

The lengths of the animals range from $2 \frac{5}{8}$ in. to $5 \frac{1}{2}$ in. ( 6.6 cm . to 14 cm .). Length of plough, $8 \frac{5}{8}$ in. ( 21.8 cm .). Total length of cart, including pole, $9 \frac{1}{8}$
 chased in 1909. From Cività Castellana. Published by G. M. A. R[ichter] in the Museum Bulletin, April, 1910, pp. 95-98, fig. 1. Illustrated in S. Reinach, Répertoire, IV (1910), p. 486, No. 8. The objects are all cast solid. The patina has mostly been removed; where it remains it is light green and crusty: The preservation is good in most cases; but one cow is considerably battered and has the greater part of the legs missing. Acc. Nos. 09.221.20-A-S.

426 STATUETTE OF A BULL (Apis?). He is represented walking, with right fore foot raised, the head turned slightly to the right. He has a large dewlap and his tail is raised, with the end resting on the back. Between the horns is a small stump. The execution is good, the proud nature and powerful forms of the bull being admirably portrayed. Roman Imperial period.

Statuettes of bulls of similar character belonging to the Roman period have been found in considerable numbers. A. Furtwängler (Bonner Jahrbücher, Heft 107, I901, pp. 37 ff.) called at-
 tention to the fact that the majority of such examples had a round hole between the horns, which must have served for the insertion of some attribute. From examples where this attribute was actually preserved he found that it consisted of either a crescent or a bird, apparently an owl. From this fact he was able to identify these bulls with Apis, the sacred animal of Memphis. In Egyptian statuettes the bull carries a round disk surmounted by the uraeus, but the Roman statuettes must be considered as adaptations from this original type. In our example the attribute itself has been broken off. only the stump on which it rested being preserved.

Length, $2 \frac{1}{4} \mathrm{in} .(5.7 \mathrm{~cm}$.). Height, $2 \mathrm{in} .(5.1 \mathrm{~cm}$.). Date and manner of acquisition unknown. Published by A. Furtwängler, Bonner Jahrbücher, Heft ift, 115 , p. 199 f., fig. 4. Illustrated in S. Reinach, Répertoire, IV, 1910, p. +85 , No. I. Cast solid. The light green, crusty patina has been mostly removed. There is a break in the tail and the surface is encrusted on one side. Acc. No. G.R. $4^{1}$.

427 STATUETTE OF A BULL. He stands with his full weight on all four legs, with head turned slightly to the right and tail curled on the back. The dewlap is unusually large. The sleek hide of the animal is successfully represented by the small incisions which cover the whole body, while the

## STATUES, STATUETTES, AND RELIEFS

Animals longer hair of the forehead and above the hoofs is made to stand out by being modelled. The head is lifelike, but the modelling of the figure as a whole is hard and conventional, and compares unfavorably with the statuette described above (No. 97), where every detail is carefully studied. It belongs to the Roman period.

Length, $4 \frac{5}{16}$ in. (II cm.); height, without horns, $2 \frac{15}{16}$ in. ( 7.5 cm .). Purchased in Ig1I. Said to have been found at Trebizond. Described by G. M. A. R[ichter] in the Museum Bulletin, November, 191I, p. 2Iq. Cast solid. Smooth, dark green patina. Preservation ex-


427 cellent. The tail is worked in a separate piece and inserted. Beneath each hoof is a tang which served for insertion in the pedestal. Acc. No. ir.i40.9.

428 BULL, STANDING. Probably Roman period. Very rough execution.

Length, $2 \frac{1}{4}$ in. ( 5.7 cm .). Date of purchase uncertain (before 1906). Cast solid. The green patina has been largely removed. The fore legs are missing. The surface is considerably rubbed. Acc. No. G.R. i58.

## 432 HANDLE OF A PIECE OF FURNITURE OR OTHER UP.

 RIGHT OBJECT. Beneath the handle proper, which consists of a curved, fluted stem with flaring sides, is the fore part of a young bullock, modelled in full round. Of the Roman period; fair execution.Height, $5^{\frac{3}{4}}$ in. ( 14.5 cm .). Purchased in 1907. Described in the Museum Bulletin, May, 1908, p. 91 , No. I8. Cast hollow and very thick. The bronze has been coated with lead both inside and out. A piece from the lower left side is missing and there is a small hole in the front. On each side are two rivet-holes (one is broken away), which served for attachment. Acc. No. 07.286.104.

435 STATUETTE OF A RAM. It is represented lying down, with head raised and fore feet bent inward. Details are indicated by incised lines. Roman period; of rough execution.


432

Length, $5 \frac{1}{2} \mathrm{in} .(3.8 \mathrm{~cm}$.). Date of purchase uncertain (hefore rgo6). Un- Anmals published. Cast hollow. The green patina has been partly removed. The surface is somewhat corroded. Acc. No. G.R. ${ }^{5} 4$.

436 FOOT OF A YESSEL IN THE FORM OF A RAMI'S HEAD AND LEG COMBINED. Careful Roman work.

Length, $2 \frac{3}{4}$ in. ( 6.9 cm .). Purchased in 1910. Mentioned in the Museum Bulletin, December, 1910, p. 275 . Cast solid. Smooth, dark green patina. Intact. Acc. No. 10.250.29.

437 HEAD OF A GOAT (\%). The neck is prolonged into a short moulded shaft, of round


436 section. In the shaft are remains of an iron pin for attachment to some object. Roman period; of fair execution. Illustrated, p. ${ }^{172}$.

Length, 2 in . ( 5.1 cm. ). Date of purchase uncertain (before 1906). Unpublished. Cast solid. Smooth, green patina. The surface is corroded in places. Acc. No. G.R. i59.

40 HORSE'S HOOF AND FETLOCK, broken from a life-size statue. Roman period.

Length, If in. ( 27.8 cm .) . Purchased in 1908 . Found in Rome; probably in the bed of the river Tiber. Mentioned in the Museum Bulletin. May, Igog,

$4+0$ p. 8i. Cast hollow. The crusty, green patina has been mostly removed. A number of small rectangular pieces have been inserted as repairs for defective casting, some of which have fallen out. Acc. No. 08.258.9.

44I TAIL OF A HORSE, broken from a large relief. Fine piece of modelling of Roman date.

Length, 16 in. ( +0.6 cm .). Purchased in 1gog. From the Martinetti Collection, Rome. Described by G. M. A. R[ichter] in the Museum Bulletin, April, 19r0, p. 99. Cast hollow, but very thick and heavy. Rough, green patina; the surface is considerably encrusted. Acc. No. 09.221.19.


## STATUES, STATUETTES, AND RELIEFS

$44^{2}$ STATUETTE OF A DOG, lying down, with head raised. The details are rendered with incised lines. Roman period; of very rough execution.

Length, $1 \frac{7}{16} \mathrm{in}$. ( 3.7 cm .). Date of purchase uncertain (before 1906). Unpublished. Cast solid. The crusty, green patina has been partly removed. Pieces from the legs are missing. Acc. No. G.R. 161.

$4+3$ HEAD OF A DOG. Behind is a pin for attachment to some object.

Roman period, of fair execution.
Length, with pin, $1^{\frac{3}{4}} \mathrm{in} .(4.5 \mathrm{~cm}$.). Date of purchase uncertain (before 1906). Unpublished. Cast solid. The green patina has been partly removed. The surface is considerably corroded. Acc. No. G.R. 153.

## $44+$ HANDLE OF A PATERA, TERMINATING IN THE HEAD

 OF A DUG OR WOLF. The head is well modelled, the animal's nature being admirahly expressed by the sensitive nostrils, the open panting mouth, and the long narrow eyes. The shaft of the handle is fluted and is surmounted at each end with a fluted band. At its juncture with the patera is an attachment wirh flaring sides and two lateral pieces decorated with volutes in relief. The workmanship is Roman.Patera handles of this type are not uncommon. For almost identical examples see Catalogue of Ancient Greek Art, Burlington Fine Arts Club, 1904, D 98, pl. LXT, and Cecil H. Smith. Catalogue of Bronzes in the Collection of J. Pierpont Mlorgan, No. $7 \not+$; see also E. Babelon et J.-A. Blanchet,


44

Bronzes antiques de la Bibliothèque Nationale, No. I429, where the patera is still preserved.

Length, $6 \frac{5}{3} \mathrm{in}$. ( 20.4 cm .). Purchased in 1900. Unpublished. Cast solid. Crusty, green patina. The edges of the attachment are slightly chipped; otherwise nothing is missing. Acc. No. G.R. 29.
$44^{8}$ STATUETTE OF A SWAN. Only the head and neek preserved.
Roman period, of fair execution.
Length, $\frac{5}{16}$ in. $(3.3 \mathrm{~cm}$.). Date of purchase uncertain (hefore 1906). Unpublished. Cast solid. Crusty, green patina. The surface is considerably corroded. Acc. No. G.R. 152.

449 STATUETTE OF A SWAN ( (:). It is represented standing, with closed wings and head raised.

Roman period, of rough execution.
Height, $I^{\frac{1}{4}} \mathrm{in}$. ( 2.9 cm .). Date of purchase uncertain (before 1906). Unpublished. Cast solid. The green patina has been mostly removed. The feet and the head are missing, and the surface is much corroded. Acc. No. G.R. I 55.

450 STATUETTE OF A GOOSE. The wings are spread, and the head is raised and turned slightly to the left. The feathers are indicated by incised lines.

Roman period, of cursory execution. Beneath the body is a pin which served for attachment to some object.

Length, $1 \frac{3}{1} \mathrm{in} .(4.5 \mathrm{~cm}$.). Date of purchase uncertain (before 1906). Unpuhlished. Cast solid. The crusty, green patina has been mostly removed. Acc. No. G.R. 157.

## STATUES, STATUETTES, AND RELIEFS

+55 SNAKE. Only a small part, including the head, is preserved. The lower part is flat. The scales and the details of the head are indicated with incised lines.

Roman period, of fair execution. Illustrated, p. 172.
Length, $I_{\frac{3}{4}}$ in. ( 4.5 cm .). Date of purchase uncertain (before 1906). Unpublished. Cast solid. Greenish patina. Acc. No. G.R. 160.

## II

IMPLEMIENTS AND UTENSILS

## I M PLEMENTSAND UTENSILS

## TOMB GROUPS

The following are three tomb groups, exhibited as such to give an idea of what sorts of objects are found together in tombs. The contents of each, which consist of various implements and utensils, are here illustrated and enumerated, so that their collective value can be fully appreciated. The bronze and iron specimens are described in the classes to which they severally belong, their numbers being given in the following lists:
I. A number of miscellaneous objects, of clay, bronze, and iron, found near Monteleone in the same tomb with the Etruscan chariot described above (No. fo):
Of clay $\quad\left\{\begin{array}{l}\text { Two Athenian black-figured kylikes of the "Kleinmeister "type }\end{array}\right.$ A bucchero vessel

A cista " a cordoni" (cf. No. 6jo)
Four cauldrons (cf. Nos. 621-624)
A jug (cf. No. $^{8}$ )
Twenty-one bowls (cf. Nos. 5+2-562)
Of bronze $\{$ A pail (cf. No. 63i)
A lid of a vessel (cf. No. 632)
Five spits (cf. Nos. 677-68I)
A pin (cf. No. 910)
Three handles (cf. Nos. 705-707)
Of iron $\left\{\begin{array}{l}\text { A grate (cf. No. 666) } \\ \text { A pair of fire-dogs (cf. Nos. 667, 668) }\end{array}\right.$
Four spear-heads (cf. Nos. I $+42-1+45$ )
The finding in this tomb of two kylikes of the "Kleinmeister" type belonging to the middle of the sixth century B.C. is of importance as it



## IMPLEMENTS AND UTENSILS

Tomb supplies definite evidence for dating the entire contents of the tomb within Groups fairly narrow limits.

For the circumstances of the discovery of this tomb and the acquisition of its contents by the Museum see under No. \&o. Many of the pieces have already been published by A. Furtwängler in Brunn-Bruckmann’s Denkmäler griechischer und römischer Skulptur, text to pls. 586, 587. He there describes an iron tripod as having been found in the tomb (p. 3, fig. 4). This used to be exhibited with the other objects; but as it is almost entirely modern, it has since been withdrawn from exhibition.
II. Ten vases said to have been found together in a tomb at Cività Castellana, the site of the ancient Falerii (illustrated, p. 179):

Three jugs with beaked, trefoil mouth and high-shouldered body (cf. Nos. 488-490)

Four cylindrical jars, of which two retain their high handles (cf. Nos. 570-573)

A patera with long handle (cf. No. 580)
A vessel of which only the round mouth is preserved (cf. No. 578)
A silver cup of flaring outline with high bronze handle (cf. No. 579)
From the shape of the vases and the style of their decorations it is possible to assign the date of this group to the end of the sixth or the beginning of the fifth century B.C. They are splendid examples of the fine work which could be produced by Greek bronze workers; for in elegance of form and in precision and delicacy of workmanship such products as these have not been surpassed at any period. Moreover, they are at present covered with a brilliant blue patina with a fine smooth surface, which further enhances their beauty.

For a short account of this tomb group cf. G. M. A. R[ichter], Museum Bulletin, December, i913, p. 266.
III. A number of objects of bronze, iron, silver, gold, and clay, found together in a tomb at Bolsena :

A mirror with an engraved design representing the release of Prometheus (cf. No. 817)
A patera, with handle in the form of a winged Lasa (cf. No. 598)
Of bronze A bowl, undecorated (cf. No. 599)
A jug (cf. No. 507)
A cista (cf. No. 845)
A bowl from a thymiaterion (cf. No. 1350)

tomb group ili

## IMPLEMENTS AND UTENSILS

Tomb
Groups
Of iron

Of silver
A small pyxis with cover
A pointed amphora with scroll handles A strigil
Two black-glaze vases of fourth to third-century type Six vases of white clay, undecorated Twelve small balls of reddish clay, probably used for playing a game
Of gold A ring (cf. No. G. S. 226 in Gallery C. 32 [Gold Room])
From the fact that a large number of these objects are toilet articles we may assume that the tomb was that of a woman. Many are inscribed Suthina (AHIOVM), in Etruscan letters, a word not infrequenty found on Etruscan bronzes and apparently signifying sepulcralis, or tomb article (cf. W. Deecke, Etruskische Forschungen und Studien, II, p. 95; C. Pauli, Etruskische Studien, III, pp. 37 ff., 137 f., translates it as "Eigentum". cf. also Torp, Etruskische Beiträge, II, I903, p. 28, and Skutsch in Pauly-Wissowa, Realencyklopädie, VI, 790). Two black-glaze vases definitely date the tomb to the fourth to third centuries B.C., which evidence is confirmed by some of the other objects decorated in the Etruscan style of that period.

Some of the pieces have already been published by A. Furtwängler, in Sitzungsberichte der kgl. bayerischen Akademie der Wissenschaften, 1905. Heft II, pp. 270 ff. He incorrectly read the inscription as Muoina, which he identified with an Etruscan name of a woman.

## VASES AND KITCHEN UTENSILS

## JUGS AND BOTTLES

Three candelabra (cf. Nos. $\mathrm{I}_{3} \mathbf{O}_{4}{ }^{-1} \mathbf{3 0 6}$ )
Four andirons (cf. Nos. 669-672)
A pair of fire-tongs (cf. No. 673)
Two fire-rakes (cf. Nos. 67+, 675)
A knife-blade (cf. No. 1679)
A spit (?) (cf. No. 676)

Of clay

A great variety of one-handled jugs were employed in ancient times. Their use was the obvious one of pouring liquids, as is suggested by the form itself and as we find them employed in vase-representations. The names used by ancient writers to signify jugs are: oivoxón, $\pi \rho o \chi^{\chi} o v s$,

## Vases and kitchen utensils

 references given by O. Jahn, Münchner Vasensammlung, pp. XCVII

Jugs and Bottles and ACV ; also G. Karo, in Daremberg et Saglio's Dictionnaire, under oinochoë, p. I59, and under prochous, p. 66i; E. Saglio, in Daremberg et Saglio's Dictionnaire, under chous, p. II27; and E. Pottier, in Daremberg et Saglio’s Dictionnaire, under olpe, p. 172, and under epichysis, p. 659). These words are used without definite descriptions of the shapes to which they apply, so that it is impossible to decide whether each name was reserved for a special shape of jug, or whether they were used indiscriminately for all, as we should use jug, pitcher, ewer, jar.

Bottles of various forms have survived. They appear to have been used chiefly to contain oil or ointments, but could of course have been employed for any other liquid (cf. E. Saglio, in Daremberg et Saglio's Dictionnaire, under ampulla).

The following jugs and bottles (unless otherwise stated) are hammered, with handles and other attachments cast.

475 ONE-HANDLED JUG with cylindrical mouth and neck, ovoid body, and short cylindrical foot. On the outer side of the rim is a plain band in relief, fastened with a series of rivets. This band is in one piece with the handle, which is plain, except for a groove running down the middle.

Perhaps Late Mycenaean period. For clay jugs of somewhat similar shape found in Cyprus and belonging to the Mycenaean period cf. e.g. British Museum Excavations in Cyprus, p. 34, fig. 62, No. 1258; p. 36, fig. 64, No. IO34.

Height of jug, $7 \frac{11}{16}$ in. ( 19.6 cm .); height with handle, $8 \frac{i}{16}$ in. ( 21.5 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4702. Illustrated in the Cesnola Atlas, III,

$+75$ pl. XLVI, 1, and L. P. di Cesnola, Cyprus, pl. XXX, where it is said to have come from Curium. Crusty, green patina. There is a hole on one side of the body. Acc. No. C.B. $3=0$.

476 ONE-HANDLED JUG with round mouth, neck merging into the body, and no foot. The handle ends below in the head of a serpent,

IUGS and and above in two arms which are riveted to the vase. The shape is Bottles rather heavy and the execution rough.

Perhaps Early Iron Age.
Height, $9^{\frac{13}{16}}$ in. ( 24.9 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4764 . Illustrated in the Cesnola Atlas, III, pl. L, ini, and L. P. di Cesnola, Cyprus, pl. XXX, where it is said to have come from Curium. Rough, brown-green patina. The vase is cracked and indented in various places. Acc. No. C.B. 322.

477 NECK OF A LARGE VASE. It consists of a short, cylindrical neck and flat rim, and has two ring handles which are fastened by a loop to a rectangular attachment. A piece of the body of the vase, which was made separately of much thinner bronze and attached to the neck by means of rivets, is still preserved.

This example, like Nos. 533, 534, 625,


476


477 626, testifies to the popularity of bronze vessels of large size in Cyprus.

The period is uncertain; probably Early Iron Ase.

Height, $3 \frac{1}{8}$ in. ( 7.9 cm .). Diameter, $16 \frac{15}{16} \mathrm{in}$. ( 43.1 cm. ). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4913. One of the ring handles is figured in the Cesnola Atlas, III, pl. LVII, 2. The patina has been mostly removed. Acc. No. C.B. 40 I.

480 ONE-HANDLED JUG with globular body, strongly pinched lip, and conical neck separated from the body by a sharp ridge. The handle, which is in one piece with the mouth of the vase, has a groove running down the middle, and ends below in an attachment with a design of rolutes.

## VASES AND KITCHEN UTENSILS

The shape recalls that of the Red Bucchero vases in the Cesnola Collection (cf. J. L. Myres, Cesnola Handbook, Nos. 474, 475 ). This example

Jegs and Buttles probably dates from the seventh to sixth century B.C.

Height, 9 in. ( 22.9 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4919. Illustrated in the Cesnola Atlas, III, NLVI, 2. The crusty, greenish patina has been removed in places. The rase is considerably hroken, with large pieces missing. Acc. No. C.B. 794.

48 O ONE-HANDLED GL.OBULAR JUG with tubular spout, cylindrical mouth, and flaring foot. The lip is moulded. The handle, which has a deep groove running down the middle, ends above in a snake's head, the open mouth of which fits into the rim; the lower attachment is in the form of a lion's mask, surmounted by an ornamental collar. The details on the snake's head and the lion-mask are incised.

The ornaments are finely executed in the archaic Greek style.

Height. $8 \frac{7}{5}$ in. $(22.5 \mathrm{~cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4921. Illustrated in the Cesnola Atlas, III, pl. XLYI, 3. Considerably broken and repaired, with a number of pieces missing. The crusty, green patina has been partly removed. Acc. No. C.B. 793.


482 VASE OF INDETERMINATE USE, perhaps a libation vase. The body is egg-shaped and has a flaring foot and rounded mouth. From one side projects a long spout ending in a lion's head and decorated on its four sides with guilloche ornament, incised. To the left of the spout is a loop-shaped handle with open-work decoration on its outer side. The attachment to the vase is formed by a bird with spread wings in Oriental style. A small chain is attached to the bottom of the handle.


Probably sixth century B.C. The decorations are carefully executed.

Jugs and Bottles

Height of vase, 9 in . ( 22.9 cm .). Length of spout, $8 \frac{9}{16} \mathrm{in} .(21.5 \mathrm{~cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4920. Illustrated in the Cesnola Atlas, III, pl. XLIII. Crusty, green patina. The vase was considerably broken and has been put together with only a piece near the mouth missing. Acc. No. C.B. 321 .

483 JUG with beaked, trefoil mouth and marked separation between the neck and the shoulder. The handle is of angular outline and ends below in an attachment decorated with a palmette and scrolls in relief, above in two arms terminating in heads of dogs.

The form is somewhat clumsy. This jug was found in the same tomb with the Etruscan chariot and is thereby dated as belonging to about the middle of the sixth century B.C. For this type of handle cf. A. Furtwängler, Olympia, IV, Die Bronzen, p. i44, No. 899, pl. LIV.

Height, $9^{\frac{3}{4}}$ in. ( 24.8 cm .). Published by A. Furtwängler, Brunn-Bruckmann, Denkmäler griechischer und römischer Skulptur, text to pls. 586,587 , p. 5 , No. 9, fig. 9. The crusty, green patina has been removed in places. Intact. Acc. No. G.R. 413.

484 JUG with beaked, trefoil mouth and

$+83$ marked separation between the neck and the shoulder. The handle has a thumb-rest above and a leaf-shaped attachment below; its arms terminate in animals' heads.

The shape is similar to the preceding and probably belongs to the same period.

Height, $9^{\frac{5}{8}}$ in. $(24.5 \mathrm{~cm}$.). Gift of F. W. Rhinelander, 1899 . Unpublished. The patina, which has been removed in some places, is crusty and green with brown patches. Preservation good. Acc. No. G.R. 164.

488 JUG with beaked, trefoil mouth and high-shouldered body. The handle, which is fluted and ornamented with beading, terminates

$4^{8} 4$ below in a leaf-shaped attachment; its arms are decorated with a spiral

## VASES AND KITCHEN UTENSILS

pattern in relief, and end in couchant lions. On the trefoil lip is a tongue pattern in relief, with two rows of beading above, and a lion introduced at each corner. Round the foot is another row of beading.

Both in elegance of form and precision and delicacy of execution this is a splendid example of Greek work in bronze. Very effective is the manner in which the decoration is confined to the handle and the mouth and not

$4^{88}$
made to interfere with the lines of the form. It should be noted that the angular projections at the two corners of the trefoil mouth, which are here decorated with lions, not only add to the artistic effect but had a practical use in preventing the liquid from spilling while it was poured out.

Vases of this shape have been found not infrequently in sixth to fifthcentury tombs in Italy (cf. A. Zannoni, Scavi della Certosa, pl. XXXXIII, 7 [found together with red-figured vases], pl. CXXXX, is [found together with black-figured amphorae]; Museo Etrusco Gregoriano, I, pl. LV, fig. I, at bottom to the right; O. Montelius, La Civilisation primitive en Italie, pl. if3, if; Bullettino archeologico napolitano, new series, V, i857, pl. III, in the middle; E. Brizio, Monumenti archeologichi della provincia di Bologna, pl. III, fig. 6; Soranzo, Scavi e scoperte nei poderi Nazari di Este, pl. V, fig. I 3; G. Mantovani, Notizie degli Scavi, 1890, p. 98, No. 169; S.

## INIPLENIENTS AND UTENSILS

Jugs and Gsell, Fouilles de Vulci, p. 5 I8). For their history cf. O. Tischler, AnthroBottles pologisches Correspondenzblatt, 1881, p. 126 f .

Height, $11 \frac{15}{16} \mathrm{in} .(30.3 \mathrm{~cm}$.$) . Purchased in 1912. Said to have been found at$ Cività Castellana with Nos. 459, 490, 570-573, 578-580 (cf. p. 179f.). Published ly G. M. A. R [ichter] in the Museum Bulletin, December, 1913, pp. 266267 , fig. 2. In this and the following beaked jugs the mouth and neck appear to have been cast and soldered to the hammered body. Smooth, turquoise-blue patina covered with incrustations in a ferw places. The vase is cracked in several places, otherwise the preservation is excellent. Acc. No. 12.160.3.

489 JUG of similar shape to the preceding. The handle is fluted and terminates below in the head and arms of a bearded Satyr; the arms of the handle end in couchant lions.

Height, $11 \frac{13}{16}$ in. ( 30 cm .). Purchased in 1912. Said to have been found at Civitù Castellana with Nos. f $^{88}$, 490, $570-573,578-580$ (cf. p. 179 f.).


Mentioned in the Museum Bulletin, December, 1913, p. 266. Smooth, tur-quoise-blue patina. The vase is cracked in several places, otherwise in excellent preservation. Acc. No. 12.160.2.

## VaSES AND KITCHEN UTENSILS

490 JUG of similar shape to Nos. 488,489 . The handle is fluted and terminates below in the head of a bearded Satyr, rising from a design of

Jugs and Bottles scrolls and palmettes; the arms of the handle are decorated with beading and end in does' heads.

Height, $12 \frac{5}{5} \mathrm{in}$. ( 32.1 cm. ). Purchased in 1912. Said to have been found at Cività Castellana with Nos. 488 , $489,570-573,578-580$ (cf. p. 179 f.). Mentoned in the Museum Bulletin, December, 1913, p. 266. The smooth, bluish patina shows only in the front; at the hack the vase was largely encrusted and has been cleaned. The vase is cracked in several places. Acc. No. re.r6o.r.


491
49 I JUG of similar shape to Nos. $\dagger 88-490$. The handle is fluted and terminates below in an inverted palmette, flanked by two serpents; the arms of the handle end in bud-shaped ornaments.

Height, $9_{4}^{\frac{1}{4}}$ in. $(23.5 \mathrm{~cm}$.). Purchased in 1913 . Mentioned in the Museum Bulletin, April, 1914, p. 95. The crusty, blue-green patina has been partly removed exposing the golden color of the bronze. The surface is somewhat corroded in places and there are a few small holes and cracks. Acc. No. 13.227.3.

492 JUG with trefoil mouth, rounded body, and high handle. The handle, which has a deep groove running down the middle, ends below in an attachment in the form of the skin of a lion's head; the upper attach-

## IMPLEMENTS AND UTENSILS

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ment is ornamented with a palmette and is attached to the lip by means of two rivets. The lip has a tongue pattern with beading above; the whole surface of the body is covered with decorations consisting of a plait pattern between two tongue patterns.

The decorations are all executed with the same precision and delicacy as in the vases of tomb-group II (see p. 179 f.; compare also No. 574). As this jug is covered with the same turquoise-blue patina, it is possible that it was found with them. In any case it must belong to the same period.

Height with handle, $5 \frac{9}{16} \mathrm{in}$. ( 14.1 cm .). Purchased in 1913 . Mentioned in the Museum Bulletin, April, 1914. p. 95. Smooth, turquoise-blue patina. The surface is


492 encrusted in places. There are several cracks which have been patched up. Acc. No. 13.227.5.

493 JUG with beaked, trefoil mouth and body of angular outline. The lower attachment of the handle, by which it was joined to the body of the vase, is in the form of a running youth worked in relief. He is in the half-kneeling attitude characteristic of early representations of running. A large mantle is hanging loosely over both shoulders, leaving the front part of his body nude.

Archaic Greek or Etruscan, of fair execution. Clay vases of this shape appear at the end of the sixth and the beginning of the fifth century (cf. K. Masner, Vasen des oesterreichischen Museums, No. 330, fig. 27; A. Furtwängler, Berliner Vasensammlung No. 2189; G. M. A. Richter, American Journal of Archaeology, vol. NI, 1907, p. 424, fig. 6; E. Pottier, Vases du Louvre, F. ir8, p. 106). This is also the period in which the bronze speci-


493 mens occur; cf. the tomb finds in the Certosa of Bologna where they were frequently found with black-figured and red-figured vases (cf. A. Zannoni, Scavi della Certosa di Bologna, pls. XIX, 5, L, 19). That this shape, however, continued in use until later is shown by its occurrence in an Etruscan

## VASES AND KITCHEN U'TENSILS

tomb of the IV-III century B.C. (cf. L. A. Milani, Museo archeologico di Firenze, igiz, vol. II, pl. CXXI).

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Bottles

Height, $8 \frac{11}{16}$ in. ( 22.1 cm. ). Purchased in 1911. Mentioned in the Nuseum Bulletin, May, 1912, p. 98. Crusty, blue-green patina. The handle was soldered both to the lip and to the lower part of the vase; the attachment below has become displaced. The face of the youth is much battered. Acc. No. 11.212.1.

494 JUG similar to the preceding. The handle is fluted and ends above in an attachment in the form of a ram's head.

Archaic Greek or Etruscan, of fine execution. For a discussion of this shape see the preceding number.

Height, $9^{\frac{1}{4}}$ in. ( 23.5 cm .). Purchased in 1913. Said to be from Cività Castellana. Mentioned in the Museum Bulletin, April, 1914, p. 95. The patina is smooth and turquoise-blue with crusty green patches. The surface is encrusted in places. There are several small holes in the body of the vase and a large slash on one side of the mouth and neck. Acc. No. 13.232.2.


495 JUG, of elongated shape, with circular mouth and high handle, which terminates below in a rounded plaque, left undecorated.

This shape occurs both in bronze and in terracotta during the late sixth and fifth centuries B.C. (cf. K. Schumacher, Antike Bronzen in Karlsruhe, pl. $\mathrm{X}_{1}, \mathrm{I}_{4}$, and A. Furtwängler, Berliner Vasensammlung, II, pl. V, 139).

Height, with handle, $6 \frac{9}{16}$ in. ( 16.6 cm .). Purchased in 1896. Unpublished.

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Jugs anin A beautiful turquoise-blue patina covers the surface; on one side, however, this Bottles is considerably encrusted. The handle is riveted to the neck and the body of the vase. Acc. No. G.R. 28.

505 JUG , of squat shape with cylindrical mouth and high handle, which terminates below in a beautiful design in à jour relief of an inverted anthemion rising from akanthos leaves. On the lip is a tongue pattern in relief, with beading above.

The design under the handle is similar to that which occurs on the akroteria of grave stelae of the early fourth century B.C.; it is that period, therefore, that this vase should be assigned. The general shape, however, only somewhat more squat, occurs as early as the fifth century B.C. (cf. K. Schumacher, Antike Bronzen in Karlsruhe, pl. X, 9; A. Furtwängler, Berliner Vasensammlung, II, pl. VI, 206).


505
Height of vase, $7 \frac{7}{8}$ in. ( 20 cm .). Height with handle, $9^{\frac{7}{8}} \mathrm{in} .(25 \mathrm{~cm}$.). Purchased in 1909. Said to have been found in the necropotis of Teano. Published by G. M. A. R[ichter] in the Museum Bulletin, February, 1910, p. $9^{8,}$ fig. 4. Patina green and slightly rough, with brilliant blue patches. The handle has been broken and reattached. Small portions of the d̀ jour relief are missing. Acc. No. 09.221.10.

506 HANDLELESS BOTTLE with ovoid body and narrow, cylindrical neck. There is a moulded band on the shoulder, and concentric circles on the bottom.

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The form is similar to that of the glazed-ware bottles in the Cesnola Collection, which probably date from the fourth century B.C. (cf. J. L. Myres, Cesnola Handbook, Nos. 1581, 1582).

Height, $3 \frac{1}{16}$ in. ( 7.8 cm. ). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4933. Illustrated in the Cesnola Atlas, III, pl. LI, I. Brown-green patina. Nuch corroded and indented, and considerably broken. Acc. No. C.B. 330 .


507 JUG with beaked mouth and high handle ending above in a large loop, below in a floral ornament. The word Suthina is inscribed on the neck in Etruscan letters (cf. p. I82).

The shape is characteristic of the late Etruscan period (fourth to third century B.C); for similar examples cf. L. A. Milani, Museo archeologico di Firenze, pl. XXIII.

Height, including handle, it in. ( 35.6 cm .); of jug alone, $11 \frac{3}{4} \mathrm{in}$. ( 29.9 cm .). Purchased in 1903. Found at Bolsena in an Etruscan tomb of the fourth to third century B.C. (cf. pp. 180 ff .). Published by A. Furtwängler, Sitzungsberichte der kgl. bayerischen Akademie der Wissenschaften, 1905, Heft II, p. 271 (c), fig. 6. The crusty, green patina has been partly removed. Somewhat broken on one side, otherwise in good preservation. Acc. No. G.R. 445.

5 IO VASE IN THE FORM OF A FEMALE HEAD. She wears a diadem and has wavy hair, parted in the middle


507 and done up in a knot behind. The vase is suspended from a handle by means of two chains which are fastened to the head by bird-shaped attachments. At the top of the head is a round opening.

Fair execution; Etruscan, probably third century B.C.
A large number of vases in the shape of human heads have been discovered, both in bronze and in terracotta. Their original purpose is not quite certain. They are usually called incense vases (balsamaria); but

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though this theory is probable, there is no real evidence for such a use. For a list of known examples cf. E. Pottier et $S$. Reinach. Nécropole de Myrina p. 509, Note 2; also H. B. Walters, Catalogue of Bronzes in the British Museum, Nos. 756-770, and L. A. Milani, Museo archeologico di Firenze, II, pl. XXIII (dated examples of the third century B.C.). For a bronze vase in the shape of the bust of a negress cf. E. von Stern, Oesterreichische Jahreshefte, VII, p. 197, and a few similar examples there cited.

Sometimes these vases were clearly made without a bottom (cf. e.g. C. Friederichs, Kleinere Kunst und Industrie, No. I563), in which cases they could not have served for actual use but only as grave offerings.

Height of head, $3^{\frac{3}{s}}$ in. ( 8.6 cm .). Purchased in 191I. Described by G. M. A. R[ichter] in the Museum Bulletin, November, igir, pp. 214-15. Cast hollow. Crusty, blue-green patina. The bottom is missing, but there are clear traces that it existed. Small pieces of the chains are restored. Acc. No. 11.91 .3.


510

5 I I JUG of elongated shape, with circular mouth and high handle. The handle terminates below in a paw, beneath which is a relief of scrolls and floral ornament, roughly executed. On the lip is a tongue pattern, in relief, with beading above.

Probably Roman period.
Height without handle, 5 in. ( 12.7 cm .). Purchased in 1goo. Said to have been found in the Hauran, Syria. Unpublished. Green, crusty patinawith blue and brown patches. Preservation good. The handle has been attached to the neck with two rivets. Acc. No. G.R. 33.

5 I2 JUG with broad, circular mouth, wide neck, and handle which terminates below in a Seilenos mask crowned with vine leaves. The arms of the handle are


511 in the form of scrolls. Horizontal bands are incised below the neck, and underneath the foot are concentric circles, also incised

## vases and kitchen utensils

The style of the Seilenos mask assigns this vase to the Roman period. Jugs and
Height, $6 \frac{3}{1} \mathrm{in}$. ( 17.1 cm. ). Purchased in 1909. Nentioned in the Museum Bottles Bulletin, April, 1910, p. 98. Greenish patina, smooth on the handle, slightly rough on the vase. The vase has been largely restored. The handle was broken off and reattached. Acc. No. 09.221.14.


512


513

513 JUG of squat shape, with broad, circular mouth and handle terminating below in a Seilenos mask. Attached to the handle by an iron hinge is a lid in the form of a plain round disk; near its outer edge, in front, is a dolphin, modelled in full round, to serve as a handle. There is also a foot, which is united to the body of the vase by three rectangular attachments.

The style of the ornaments places this jug in the Roman period.
Total height, $9^{\frac{3}{1}}$ in. $(24.8 \mathrm{~cm}$.). Gift of Henry G. Marquand, 1897 . Unpublished. Crusty, green patina with blue patches. The handle was broken off and reattached. The iron hinge by which the lid was fixed to the handle is broken. Acc. No. G.R. 173.

514 BOTTLE, high-shouldered, with short, narrow neck and circular mouth, probably used for oil or perfume. Illustrated, p. 196.

Roman period. For a similar specimen in the Naples Museum, of. F. B. Tarbell, Naples Bronzes, No. 237.

Height, $3^{\frac{11}{16}} \mathrm{in}$. $(9.4 \mathrm{~cm}$.). Purchased in 1900 . Said to have been found in the Hauran, Syria. Unpublished. Crusty, brown-green patina. Slightly indented in places. Acc. No. G.R. 2.

## IMPLEMENTS AND UTENSILS

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5 I5 BOTTLE of the same shape as the preceding. On the bottom are moulded concentric circles.

Height, $3 \frac{11}{16}$ in. ( 9.4 cm .). Purchased in 1900 . Said to have been found in the


514


515

Hauran, Syria. Unpublished. Crusty, brown-green patina. Considerably indented in places; there is a small hole on one side. Acc. No. G.R. 6.

5 I6 BOTTLE of globular shape, with short, narrow neck and circular mouth. On the bottom are moulded concentric circles. Like the preceding (Nos. 514, 515) it was probably used as an ointment bottle.

Roman period.
Height, 3 in. ( 7.6 cm .). Purchased in 1900 . Said to have been found in the Hauran, Syria. Unpublished. Crusty, brown-green patina. Slightly indented in places. Acc. No. G.R. i.

517 OINTMENT BOTTLE (?) of globular shape, with long, narrow neck and circular mouth. A chain is fastened to the bottle by means of two barrel-shaped attachments on each side of


516 the neck. The neck is moulded and the body is decorated with a series of concentric circles, moulded and arranged in two tiers.

Date uncertain, probably Roman period.
Height, $4 \frac{9}{16}$ in. ( 11.6 cm .). Purchased in 1900. Said to have been found
in the Hauran, Syria. Unpublished. Cast. Light green patina, covered with Jugs and brown incrustations in places. Slightly chipped, and there are two small holes. Bottues Acc. No. G.R. 16.


5I7

## WATER-JARS

Both the name and the use of this type of vase can be identified with certainty. On the François vase a jar of this shape is depicted with the word iopio (hydria) inscribed over it; and on the representations of women drawing water from a fountain, which frequently occur on black-figured vases, this form is generally depicted. It was carried by the women on the head or on the shoulder, a practice still customary in Italy at the present time. The two horizontal handles were used for lifting the vase when full, the vertical handle for carrying it when empty, and for pouring. Besides the word iopic the word к夭́ $\lambda \pi t s$ often occurs in literature for water-jar (see references given by O. Jahn, Münchner Vasensammlung, p. XCII), so that the two were probably interchangeable, just as water-jar and waterpitcher are to-day. The use of the hydria was not restricted solely to that of a water-pitcher. Pollux, Onomastikon $\mathrm{X}, 74$, speaks of the hydria as also a wine-vase, and this evidence is corroborated by vase-representations.

525 WATER-JAR. Undecorated. On the handle is a leaf-shaped thumb-rest.

The shape is similar to that found in use for earthenware water-jars during the fifth century B.C., and it is to that period that this vase must

## IMPLEMENTS AND UTENSILS

$W_{\text {ater-Jars }}$ therefore be assigned. The simple dignity of the shape and the finished workmanship nuake it a superb example of Greek work in bronze.

Height, ${ }_{5} 5 \mathrm{in}$. ( 38 cm .). Purchased in 1906 . Said to have been found at Galaxidi. Mentioned in the Museum Bulletin, 1907, p. 20. The body is hammered, the handles cast. The crusty, blue-green patina has been largely removed. The vase is cracked in several places and small portions of the arms of the handle are missing. Otherwise the preservation is excellent. The handles were broken off and reattached. Acc. No. o6.ro78.


## CUPS, BOWLS, AND PLATES

Curs, Bowls and Plates

A large variety of drinking-cups were in use among the ancients; Athenaeus in the eleventh book of his Deipnosophists gives a long list of names of such cups, but his descriptions are not sufficient to identify them with any known shapes; moreover, a great many appear to be fanciful names that had come into favor at the time.

The favorite cup form in bronze appears to have been the $\kappa \dot{u} \lambda c \xi, \xi_{\text {, a }}$ a vase with foot and two handles. The name кinck is assured by an inscription under the foot of a clay cup of this shape: Kin¢ぃoч $\hat{\omega} \nu \tau o s \dot{\eta} \kappa \dot{\lambda} \lambda \iota \xi$ (Corpus Inscriptionum Graecarum, 545). The shape also agrees with the descriptions given by Athenaeus, XI, p. 470 E, $479 \mathrm{E}, 480 \mathrm{E}$. The form varies according to the different periods.

The Greek name for a shallow, round bowl, generally with a round boss in the centre, appears to have been $\varphi \iota \alpha \lambda \eta$, which is described as resembling a shield (Aristoteles, Rhetoric, III, 4, II; Poctics, 21, 12), and as without

## VASES AND KITCHEN UTENSILS

handles (cf. the references cited by O. Jahn, Münchner Vasensammlung, Cups, Bowls p. XCVIII). The Latin name for a bowl was patera (cf. E. Pottier, Darem- and Plates berg et Saglio, Dictionnaire, patera, p. 341 ).

The following cups, bowls, and plates (unless otherwise stated) are hammered, with handles and other attachments cast.

530 HEMISPHERICAL BOWL, undecorated. Sub-Minoan period.
Height, 2 in. ( 5.1 cm .). Diameter, $5 \frac{9}{16} \mathrm{in}$. ( 14.1 cm .). From Gournia, Crete. Gift of the American Exploration Society, 1907. Crusty, green patina. The surface is considerably corroded. Cracked in places, with a large piece missing. Acc. No. 07.232.13.

53 I SHALLOW PHIALE OR PLATE, with omphalos, or round boss, in the centre. The inside is decorated with a frieze in repoussé


530 relief of monsters occupying almost the entire width of the plate. The monsters, which are represented as walking to the right, consist of four winged lions, three sphinxes, and one griffin. They are of the types which occur on Etruscan monuments of the seventh century B.C.; compare, for instance, the figures on the high bronze stand in the Museo Etrusco Gregoriano, I, pl. XVII, i, 2. The execution is very coarse.

Diamerer, II in. ( 27.9 cm .). Purchased in 1903. Illustrated in A. Sambon, Catalogue des Antiquités grecques et romaines (Sale Catalogue), 1903, No. 340. Patina bluegreen and crusty. There are several breaks which have been filled up. Acc. No. G.R. 121.


531

532 KYLIX OF EARLY SHAPE, with ring base. It is ornamented on the outside with a frieze of animals, below which is a border of lotosbuds. The animals are mostly of monstrous shapes, borrowed from Eastern art: a winged goat, a lion, a panther, a winged panther, a winged lion with the head of a bearded man, and a griffin; a few floral ornaments are introduced in the background. Underneath the foot is a Maltese cross, ornamented with cross-hatched lines. The designs are drawn with a tool,

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Cups, Bowls which, instead of producing a simple, straight line, made a very fine zigzag; and Plates underneath can be seen the preliminary sketch of delicately incised lines. On the handles, which are attached by rivets, are moulded bands running vertically on the sides and horizontally along the ends.


The designs are similar to those which occur on Orientalizing Corinthian vases. The kylix must, therefore, be dated as early as the seventh century B.C.

Height, $2 \frac{3}{5}$ in. $(6 \mathrm{~cm}$.$) . Diameter, 6 \frac{7}{5}$ in. $(17.4 \mathrm{~cm}$.). Purchased in 1909. Said to have been found in Palestrina. Described by G. M. A. R[ichter] in the Museum Bulletin, April, 1910, p. 98. The green patina has been mostly removed by cleaning. There are several cracks; otherwise in good condition. Acc. No. 09.221.21.

533 DEEP BOWL, with two large horizontal handles curving upward and surmounted in the centre by a lotos flower. The attachments are in the form of round plaques.

Handles of this type have been found at Olympia, and in tombs in Italy (cf. A. Furtwängler, Olympia, IV, Die Bronzen, No. 9ir, and the references there cited); also at Delphi (P. Perdrizet, Fouilles de Delphes, p. 73, figs. 240, 241 ).

For miniature bowls in clay of this

5.33 form cf. J. L. Myres, Cesnola Handbook, Nos. 495, 496. The design is very effective and presupposes Oriental influence (cf. the motive on Assy-

## VASES AND KITCHEN UTENSILS

rian columns, G. Perrot et C. Chipiez, Histoire de l’art, II, p. 202, fig. 68). Probably seventh century B.C.

Height of bowl, $5 \frac{7}{5}$ in. ( 15 cm .); height with handles, $10 \frac{5}{8} \mathrm{in}$. ( 27 cm .). Diameter, $13 \frac{5}{8}$ in. ( 34.6 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 491+. Illustrated in the Cesnola Atlas, III, pl. XLIV', i. Crusty, greenish patina. Cracked and repaired in several places. Each handle is fastened to the bowl by means of five rivets. Acc. No. C.B. $44^{\circ}$.

534 PART OF A BOWL, similar to the preceding. Only the two massive lotos handles, part of the rim, and small pieces of the bowl are preserved.


Diameter of bowl, $16 \frac{15}{16} \mathrm{in} .\left(43 \mathrm{~cm}\right.$.). Height of handles, $12 \frac{9}{16} \mathrm{in}$. ( 32.9 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4915. Illustrated in the Cesnola Atlas, III, pl. LIII; L. P. di Cesnola, Cyprus, pl. XXX, where it is said to have come from Curium; G. Perrot et C. Chipiez, Histoire de l'art, III, p. 797, fig. 557. Rough green patina with blue patches. The bronze is corroded in parts. Acc. No. C.B. 441.

535 BOWL with engraved and embossed decorations. In the centre, which is considerably depressed, is a rosette surrounded by a cable border. On the sides of the bowl is a remarkable scene of Cypriote religious ritual. Sitting at the right of a tripod table, on which is placed a basket of fruit or other offerings, is a goddess seated on a high-backed chair. In her right hand she holds a lotos flower, in her left one of the offerings from the bowl. Behind the goddess stand three musicians, playing on the double pipe, the lyre, and the tambourine, respectively. On the left of the table stands

## IMPLEMENTS AND UTENSILS

Cups, Bowls a priestess holding in each hand an uncertain object, perhaps a fan and a and Plates wine-ladle. Behind her, on a four-legged table, are a large amphora and an oinochoë, for drink-offering. Then follows a dance of six women, each holding the wrist of the one behind her, as is the rule in Greek choral dancing, ancient and modern. The sixth stands back to back with the tambourine player already described, and so closes the scene. In the intervals between the women, lotos-capped columns-perhaps stelae like Nos. I $4 \mathbf{1}^{5-1+20}$ in the Collection of Cypriote Sculpture-occupy the background. All the women wear the Minoan jacket and kilt and have their lair piled high on the head, with a single long plait hanging down in front of the shoulder. The scene is enclosed above and below by a cable border.

The workmanship, which is Cypriote of about the seventh century B.C., is coarse and heavy; but the representation is full of instructive details and should be compared with that on the painted vase, No. 75I, in the Collection of Cypriote Pottery.

Diameter, $5^{\frac{1}{4}}$ in. ( 13.3 cm .). Height, $\mathrm{I} \frac{7}{16}$ in. ( 3.6 cm .). From Cyprus. Cesnola Collection. Published by J. L. Myres. Cesnola Handbook No. 4561. (The description given above is taken from that of Professor Myres.) Cesnola Atlas, III, pl. XXX゙III, 2; L. P. di Cesnola, Cyprus, p.77; G. Perrot et C. Chipiez, Histoire de l'art, MII, p. 673, fig. 482; G. Colonna-Ceccaldi, Monuments de Cypre, pl. VII. The green patina has been almost entirely removed. The reliefs are somewhat blurred, but


535 there are no missing parts. Acc. No. C.B. 795.

536 SHALLOW BOWL, with flat rim on which are represented rivet heads in relief. In the centre of the bowl is a medallion with a fine design, modelled in repoussé relief and incised, consisting of a rosette surrounded by papyrus foliage, among which are grazing deer. The rest of the bowl is undecorated except for two incised bands. There is a single swinging handle of which the attachment terminates at each end in the head of an animal.

The style shows Oriental influence and belongs to the seventh and sixth centuries B.C. Compare the incised gold, silver, and bronze bowls from Cyprus in the Gold Room (Gallery C 32), illustrated in the Cesnola Atlas, III, pl. XXXIII and described by J. L. Myres, Cesnola Handbook, Nos. 455 Iff .

Height of bowl, 2 in. ( 5.1 cm .). Diameter of bow $1,12 \frac{1}{2}$ in. ( 30.8 cm .). From Cy prus. Cesnola Collection. cf. J. L. Myyres, Cesnola Handbook, No. 4560 . Illustrated in the Cesnola Atlas, III, pl. XLYII, 3; L. P. di Cesnola, Cyprus, p. 337 , where it is said to have come from Curium. The rough, green patina has been largely removed. There is a largish hole in the bowl and the rim is chipped and bent in places. Acc. No. C.B. 376 .


537 SHALLOW BONL. The outer side of the rim is surrounded by a flat band on which are ornaments in the shape of double spools placed at regular intervals.

Probably seventh or sixth century B.C. For similar spool ornaments on vases cf. A. Furtwängler, Olympia, IV, Die Bronzen, Nos. $\delta_{+1}$ ff., and P. Perdrizet, Fouilles de Delphes, p. 78 , figs. 268 ff . and the large bowl from the Polledrara Tomb, in the British Museum. Compare also the similar bronze bowls from Nineveh in the British Museum.

Height of bowl, $2 \frac{1}{15}$ in. $(5.2 \mathrm{~cm}$.). Diameter
 of bowl, io in. ( 25.5 cm .). From Cyprus. Cesnola Collection. of. J. L. Myres, Cesnola Handbook, No. 4916. Ithustrated in the Cesnola Atlas, III, pl. XLVII, 2; L. P. di Cesnola, Cyprus, pl. XXX, where it is said to have come from Curium. Crusty, greenish patina with brownish patches. The bowl is considerably cracked and one largish piece is missing. Portions of the band round the rim are also missing, as well as three of the spool ornaments, there having been ten in all. Acc. No. C.B. 375.

538 SHALLOW BOWL. It has two horizontal swinging handles with attachments in the form of double spools. The outer side of the rim

## IMPLEMENTS AND UTENSILS

Cups, Bowls is surrounded by a grooved band on which are placed a series of spool-like and Plates ornaments, with heads protruding above the rim.

Probably seventh or sixth century B.C. For bowls with similar handles cf. K. Schumacher, Antike Bronzen in Karlsruhe, pl. VIII, and the references cited under No. 537.


Height of bowl, $\frac{17}{8} \mathrm{in} .(4 \mathrm{~cm}$.). Diameter of bowl, if in. ( 28 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4917. Illustrated in the Cesnola Atlas, III, pl. XLVII, 4; L. P. di Cesnola, Cyprus, pl. XXX, where it is said to have come from Curium. The patina, which is green, has heen partly removed, showing the original surface of the bronze. Parts of the exterior band are missing and the rim is chipped in places. Acc. No. C.B. 377.

541 SMALL CYLINDRICAL CUP, engraved on its outer surface with a group, twice represented, of two animals (horses!) heraldically placed on each side of a floral ornament; the same ornament is also used to separate the two groups from each other. The surfaces of the animals and parts of the ornaments are dotted.

Archaic Greek or Etruscan, of cursory execution.

Height, $\mathrm{I}_{\frac{7}{8}}$ in. ( 4.8 cm .). Diameter, 2 in. (5.I cm.). Purchased in igr1. Mentioned in the Museum Bulletin, May, 1912, p. 98. Smooth, greenish black patina, covered with incrustation in

$5+1$ places. The upper part is broken off. Acc. No. II.2I2.3.

## VASES AND KITCHEN UTENSILS

542 LARGE SHALLOW BOWL with broad, flat rim. The rim is decorated with three bands of plait pattern, stamped. On the rim are two rivet-holes (modern:).

This and the following bowls (Nos. $5+3-562$ ) were found in the same tomb with the Etruscan chariot (No. 4o), and are thereby dated to about the middle of the sixth century B.C.

Height, $2 \frac{1}{2}$ in. $\left(6.4 \mathrm{~cm}\right.$.). Diameter, $19 \frac{5}{16}$ in. ( 49.1 cm .). Unpublished. The crusty, dark green patina has been partly removed. Cracked in places with some pieces missing. Acc. No. G.R. 402.


543-562 Twenty examples like the preceding, of approximately the same dimensions. Some are considerably broken; only the five best-preserved specimens are at present on exhibition. Acc. Nus. G.R. 396, 397, $400-405,407-410,4^{2} 4^{-}+32$.

563 BOWL with large round boss in the centre, and narrow, flat rim.

This bowl was found in the same tomb as the Etruscan chariot, No. 40 , and is thereby dated to about the middle of the sixth century B.C.

Height, $2 \frac{3}{4}$ in. $(7 \mathrm{~cm}$.). Diameter from outside of rim, $14 \frac{1}{2}$ in. ( 36.9 cm .). Unpublished. The crusty, green patina has been partly removed. Much broken and repaired with a number of pieces missing.


563 Acc. No. G.R. 406.

564 "TORCH-HOLDER" (:) in the form of a cup and saucer joined. The cup, which is attached to the saucer by three rivets, is conical in shape, with flaring rim.

Sixth century B.C. For the possibility of these cup-and-saucer vases being torchholders, and for other examples, in clay, of the same type, cf. J. L. Myres, Journal of Hellenic studies, XTII, p. i59, and J. L. Myres-M. Ohnefalsch-Richter, Catalogue of


564

Cups, Bowls and Plates

Cups, Bowls the Cyprus Museum, p. 66, Nos. 963-96t, and the references there and Plates cited.
 Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4922. Illustrated in the Cesnola Atlas, III, pl. LV, 3. Crusty, green patina with dark blue and brown patches. The saucer has several pieces missing and the rim of the cup is chipped. Acc. No. C.B. 323.

565 CUP, from a vessel like the preceding. The plate is missing.
Height, $4 \frac{5}{16}$ in. ( 11 cm .). Diameter of mouth, $3 \frac{15}{16} \mathrm{in}$. ( 10 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4923. Illustrated in the Cesnola Atlas, III, pl. LV, \&. Crusty, blue-green patina. The rim is broken away on one side and a piece at the bottom is missing. Acc. No. C.B. 343 .

566 CUP, perhaps from a vessel like 564,565 . The plate is missing.
Height, 3 in. ( 7.7 cm .). Diameter of mouth, $2 \frac{15}{16} \mathrm{in}$. 7.5 cm .) From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 49z4. Illustrated in the Cesnola Atlas, III, pl. LV, 5. The patina has been mostly removed. The surface is somewhat corroded and the cup is cracked in places. Acc. No. C.B. 352.

570 CYIINDRICAL JAR with short neck and rim, slightly concave sides, and a high handle. The handle, which is fluted and decorated with beading, terminates below in a leaf-shaped attachment partly covered with small, punctured circles; on the rim is a tongue pattem with beading above, and on the lower part of the cup is an ornamented band, consisting of shaded triangles and rows of beading, incised.

The exact use of these vases is uncertain. They are sometimes described as cups, but the shape with the rolling, ornamented lip is not well adapted for drinking. C. Friederichs (Kleinere Kunst und Industrie, p. $3 \not 4^{6}$, Nos. 1567 ff .) suggested that they were used as measures. They may well have been used for ladling out flour, grain, or some such substance, the high handle being in that case very appropriate.

Jars of this shape have been frequently found in sixth to fifth-century tombs in Etruria; cf. O. Montelius, La Civilisation primitive en Italie, pls. 98, r; 103, 13; Museo Etrusco Gregoriano, pl. LVI, 6; S. Gsell, Fouilles de Vulci, p. 7I; G. Gozzadini, Di ulteriore scoperte nell’ antica necropoli a Mlarzabotto nel Bolognese, pl. if, ; W. Froehner, Collection Hoffmann (from Corchiano). cf. also K. Schumacher, Antike Bronzen in Karlsruhe, pl. $\mathrm{X}^{\text {, }}$

## VASES AND KITCHEN UTENSILS

16, 17, Nos. 563. 564; E. Robinson, Boston Museum of Fine Arts, Annual Cups, Bowls Report, is99, p. fi, No. 10.

Height of cup, $2 \frac{5}{5} \mathrm{in}$. $\left(6.7 \mathrm{~cm}\right.$.) ; height with handle, $3 \frac{13}{16} \mathrm{in}$. $(9.7 \mathrm{~cm}$.). Diameter of mouth, $2 \frac{5}{16}$ in. ( 5.9 cm .). Purchased in 1912 . Said to have been found at Cività Castellanawith Nos. 488-490, 571-573, 578-580 (cf. p. 179 f.). Mentioned in the Museum Bulletin, December, 1913, p. 266. In this and the four following jars the lip appears to have been cast and soldered to the hammered body. A smooth, turquoise-hlue patina covers the outer surface: inside it is blue-green and crusty. Excellent preservation. Acc. No. 12.160.4.


57 I JAR of similar shape to the preceding. The handle is undecorated except for a few incised lines on its lower attachment. On the rim beading, roughly executed.

Height of cup, $2_{16}^{9}$ in. $\left(6.5 \mathrm{~cm}\right.$.); height with handle, $3 \frac{9}{10} \mathrm{in}$. ( 9 cm. ). Diameter of mouth, $2 \frac{3}{16}$ in. $(5.6 \mathrm{~cm}$.$) . Purchased in 1912. Said to have been found at$ Cività Castellana with Nos. $4^{88} \mathbf{4 9 0}, 570,572,573,578-580$ (cf. p. 179 f.). Mentioned in the Nuseum Bulletin, December, 1913, p. 266. The turquoise-blue patina has largely disappeared on the exterior: and en the inside the patina is light blue with dark blue and green patches. The handle is slightly corroded and the cup is cracked in several places. Acc. No. 12.160.5.

572 JAR of similar shape to 570,571 . The handle is missing, but the place where it was attached is clearly visible by the indentation on the rim and the outline left by its lower attachment. The decoration on the cup is similar to No. 570.

Height, $3 \frac{7}{16} \mathrm{in} .\left(8.7 \mathrm{~cm}\right.$.). Diameter of mouth, $2 \frac{5}{5} \mathrm{in}$.


572 ( 6.7 cm .). Purchased in 1912. Said to have been found at Cività Castellana

## IMPLEMENTS AND UTENSILS

Cups, Bowls in the same tomb with Nos. 488-490, 570, 571, 573, 578-580. Mentioned in and Plates the Museum Bulletin, December, 1913, p. 266. Smooth, turquoise patina with dark blue patches. The handle is missing (see above). The vase is cracked in a few places and small missing portions have been restored. Acc. No. 12.160. 6.

573 JAR of similar shape to $570-572$. The handle is missing, but as in No. 572 the place where it was originally attached is clearly visible. On the lip is a tongue pattern with beading above; the ornamental band at the bottom consists of cross-hatchings and rows of beading.

Height, $3 \frac{3}{16} \mathrm{in}$. $\left(8.1 \mathrm{~cm}\right.$.). Diameter of mouth, $2 \frac{3}{8} \mathrm{in}$. ( 6 cm .). Purchased in 1912. Said to have been found at Cività Castellana with Nos. 488-490, 570-572, $57^{8-580}$ (cf. p. 179f.). Mentioned in the Museum Bulletin, December, 1913, p. 266. Turquoise-blue patina with dark blue patches. A piece from the lower part of the vase is missing and small missing portions have been restored. Acc. No. 12.160.7.


574


573


575

574 JAR of similar shape to $570-573$. The rim is decorated with a tongue pattern and two rows of beading; on the cup are two broad, ornamental bands each consisting of a plait pattern between rows of beading; around the bottom is another row of beading. The handle, which is plain and ends below in a leaf-shaped attachment, is ancient, but does not appear to belong to the cup; the attachment of the original handle was considerably larger, as can be seen by its outlines, which are still preserved.

The decorations are all executed with the same delicacy as in the preceding examples, and as the cup is covered with the same turquoise-blue patina, it is possible that it belonged to the same tomb find. In any case it must belong to the same period.

## VASES AND KITCHEN UTENSILS

Height with handle, + in. ( 10.5 cm .). Purchased in 1913. Mentioned in the Museum Bulletin, April, 1914, p. 95. Smooth, turquoise-blue patina. The surface is encrusted in places. There are several cracks which have been patched up. The handle is ancient, but does not belong to the vase (see above). Acc. No. 13.227.4.

575 JAR, with high handle, of similar shape to Nos. 570-574, but with slightly more concave sides. The lower attachment of the handle is leaf-shaped; otherwise there is no decoration.

The execution is rough. For a similar jar from Nemi with an inscription in archaic Latin characters, cf. Collection H. Hoffmann, Antiquités (Sale Catalogue), i899, p. II8, No. 507.

Height, with handle, $4 \frac{9}{16}$ in. ( 11.6 cm .); height of cup, $3 \frac{3}{16}$ in. ( 8.1 cm .). Diameter, $2 \frac{11}{16} \mathrm{in} .(6.8 \mathrm{~cm}$.). Purchased in 1896 . Said to have been found near Grosseto. Unpublished. Crusty, blue-green patina. On one side is a brown patch where the bronze probably came in contact with iron. Acc. No. G.R. 3 .

578 ROUND MOUTH OF A VASE. The decoration, which is executed with great precision and delicacy, consists, on the inside, of a plait pattern and a tongue pattern; on the outside, of a tongue pattern only; and on the rim, of a tongue pattern surmounted by beading. The body of the vase was of very thin bronze and has almost entirely disappeared; but enough remains of the
 neck and the curve of the shoulder to indicate that the vase was a shortnecked jar probably similar e.g. to K. Schumacher, Antike Bronzen in Karlsruhe, pl. IX, 16, 17, 19.

Diameter, $5 \frac{5}{16}$ in. ( 13.5 cm .). Purchased in 1912. Said to have been found at Cività Castellana with Nos. $488-490,570-573,579,580$ (cf. p. i 79 f.). Mentioned in the Museum Bulletin, December, 1913, p. 266. The mouth was evidently cast and soldered to the hammered body. Smooth, turquoise-blue patina. A clod of earth is still adhering to the neck. Acc. No. 12.160.8.

579 SILVER CUP of flaring outline, with high bronze handle. The handle is decorated with beading and terminates below in a paw resting on an elongated disk, which is partly covered with small punctured circles.

## IMPLEMENTS AND UTENSILS

Curs, Bowls The cup itself has two broad ornamental bands, consisting of plait pattern, ani Plates shaded triangles, and rows of beading.

For a cup of similar shape see K. Schumacher, Antike Bronzen in Karlsruhe, pl. X , r 8.

Height of cup, $5^{\frac{3}{4}} \mathrm{in}$. ( 14.6 cm .); height with handle, $7 \frac{15}{16} \mathrm{in} .(20.2 \mathrm{~cm}$.). Diameter, $5^{\frac{1}{4}}$ in. $(13.4 \mathrm{~cm}$.). Purchased in 1912 . Said to have been found at


579

Cività Castellana with Nos. $488-490,570-573,578,580$ (cf. p. 179 f.). Mentioned in the Museum Bulletin, December, 1913, p. 266. The patina of the handle is smooth and turquoise blue. The surface of the silver has assumed a dark gray tone. The handle is well preserved, but the cup is considerably broken and restored. Acc. No. 12.160.10.

580 PATERA WITH HANDLE. It has a flat bottom and a rim of slightly flaring outline. The patera itself is plain, but the handle is etaborately ornamented with decorations in relief and openwork, as follows: The attachment, which is slightly curved and was attached to the

$580$

## IMPLEMENTS AND UTENSILS

Cups, Bowls bottom of the patera, bears a spiral pattern, surmounted by a recumbent and Plates doe, in flat relief. Beneath this is a plaque with a scene of two boxers and a trainer, modelled in the round. One boxer has already been knocked down by his opponent, who is in the act of delivering another blow with his left hand. To the right stands the trainer with both arms uplifted, evidently to indicate the termination of the fight. Both boxers are nude; one has straight hair falling to the neck, with a row of curls on the forehead. The other appears to be bald. The surface is somewhat rubbed, but a series of incised lines is clearly visible on both wrists of the victorious boxers; so that we may presume that the contestants wore boxing-gloves. The trainer has a mantle with a fringed border at the bottom and has straight hair falling to his neck.

This scene is executed with great spirit and the difficulties of representing such a complicated subject within so small a compass have been surmounted with much ingenuity-note, for instance, the way the standing boxer's left arm and the trainer's left arm are modelled side by side, one showing only in front, the other only from behind.

Beneath this plaque is a beautiful design of scrolls and palmettes, worked in low relief on both sides of the handle and terminating below in a giant in full round, the upper part of which is in the form of a bearded man with long hair, while below he ends in fish-legs, with bearded serpents' heads. On this type of giant with serpent's legs and its occurrence in the sixth century B.C., cf. E. Kuhnert in Roscher's Lexikon, Giganten, $s$ s 1670 ff . The artist has successfully combined actual utility with art by leaving a pleasing blank space below the boxers' scene to act as a thumbrest and by making the scaly legs of the monster intertwine to form a ring by which the patera could be hung up.

The workmanship is excellent. This may indeed be regarded as a masterpiece of Greek decorative art, both for the delicacy with which all details are executed and for the marvellous variety and harmony of the composition.

For paterae of this shape and period, but without handle, cf. A. Zannoni, Scavi della Certosa, pls. XIX, 20; XX, 7 ; ffor a somervhat similar handle, cf. K. Schumacher, Antike Bronzen in Karlsruhe, pl. XII, 7.

Length, with handle, $17^{\frac{1}{4}} \mathrm{in}$. ( 48.8 cm .). Diameter of patera, $10 \frac{7}{16} \mathrm{in}$. $(26.5 \mathrm{~cm}$.). Height of patera, $1 \frac{11}{16} \mathrm{in} .(4.3 \mathrm{~cm}$.). Purchased in 1912. Said to have been found at Cività Castellana with Nos. 488-490, $570-573,578,579$ (cf. p. 179 f.). Published by G. M. A. R[ichter] in the Museum Bulletin, December, 1913, pp. 266, 267, figs. 3-4. Smooth, turquoise-blue patina. The patera is considerably


HANDLE OF PATERA 580

## IMPLEMENTS AND UTENSILS

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cracked and some missing pieces have been restored. The handle, however, which was soldered to the bottom of the patera, is in excellent preservation. Acc. No. 12.160.9.

58 I SHALLOW BOWL, with narrow flat rim. Undecorated. Perhaps early fifth century B.C. (cf. J. L. Myres, Cesnola Handbook, No. 4926).

Height, $I_{4}^{1} \mathrm{in}$. ( $3 . \mathrm{I} \mathrm{cm}$.). Diameter, $5^{\frac{11}{16}} \mathrm{in}$. $(14.5 \mathrm{~cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4926. The green patina has been partly removed. There is a small hole near the rim. Acc. No. C.B. 360 .


582 HEMISPHERICAL BOWL, undecorated.
Probably early fifth century B.C. (cf. J. L. Myres, Cesnola Handbook, No. 4928 ).

Height, $2 \frac{1}{4} \mathrm{in}$. ( 5.7 cm .). Diameter, $4 \frac{15}{15} \mathrm{in}$. ( 12.5 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 492S. Dark green patina with light green patches. Small pieces missing. Acc. No. C.B. 355 .

583 HEMISPHERICAL BOWL, similar to preceding.
Height, $2 \frac{3}{8}$ in. ( 6 cm .). Diameter, $4_{5}^{\frac{7}{5}} \mathrm{in}$. ( 12.4 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4927. Crusty, green patina with purplish patches. Cracked on one side with a small piece missing. Acc. No. C.B. 357 .

584 SHALLOW BOWL, with central boss incised.
Fifth-century type (cf. J. L. Myres, Cesnola Handbook, No. 4932).
Height, $1 \frac{7}{8}$ in. $\left(4.8 \mathrm{~cm}\right.$.). Diameter, $8 \frac{1}{4} \mathrm{in}$. ( 21 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4932. Rough, green

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patina with dark blue and brown patches. Small pieces missing. Acc. No. Cups, Bowls C.B. 356.

585 HEAIISPHERICAL BOWL, with central boss and flaring rim. Probably late fifth century B.C. (cf. J. L. Myres, Cesnola Handbook, No. +930).

Height of bowl, $1 \frac{15}{16}$ in. ( 4.9 cm .). Diameter, $4 \frac{7}{16} \mathrm{in} .(11.3 \mathrm{~cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4930. Rough, dark green patina. No parts missing. Acc. No. C.B. 354 .


586 BOWL, with central boss. Probably late fifth century B.C. (cf. J. L. Myres, Cesnola Handbook, No. +929).

Height of bowl, $1_{5}^{\frac{3}{5}} \mathrm{in}$. ( 3.5 cm .). Diameter, $5^{\frac{3}{16}} \mathrm{in}$. ( 13.2 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4929. Illustrated in the Cesnola Atlas, III, pl. LVI, 3. Crusty, green patina with blue patches. The bowl has been broken and repaired, but only a small piece is missing. The rim is slightly chipped. Acc. No. C.B. 353.

587 BOWL, with central depression and rim curving inward.

Probably late fifth century B.C. (cf. J. L. Myres, Cesnola Handbook, No. 493i).

Height of bowl, $\mathrm{I}_{16}^{\frac{7}{16}} \mathrm{in}$. $\left(3.7 \mathrm{~cm}\right.$.). Diameter, $6 \frac{1}{5} \mathrm{in}$. ( 15.5 cm .). From Cyprus. Cesnola Collection. of. J. L. Myres, Cesnola Handbook, No. 4931. Crusty, green patina. The outer surface is considerably corroded. Acc. No. C.B. 359.


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## IMPLEMENTS AND UTENSILS

Cups, Bowls and Plates

595 KYLIX, on high foot and with long, slender handles, the attachments in the form of lanceolate leaves. The body, which is undecorated, consists of a round, shallow bowl, with wide, flaring rim.

Fourth to third century B.C. For similar cups from Corinth see W. Froehner, Collection H. Hoffmann, Antiquités, II (Sale Catalogue), i888, Nos. 423-429, pl. XXXIII; A. Furtwängler, Sammlung Sabouroff, II, pl. 145; B. Pharmakowsky, Archäologischer Anzeiger, I9IO, p. 219, figs. 18, 19, and O. M. von Stackelberg, Gräber der Hellenen, pl. VII, i3 (where a cup of this type is described as found with a Corinthian coin of the late fourth century B.C.). See also the cups of this general type found in the Crimea (cf. S. Reinach, Antiquités du Bosphore Cimmérien, pl. XXXVIII, 5) with decorations in the style of the early Hellenistic period. Kylikes with the same slender handles also occur in terracotta; they are covered with brilliant black glaze and evidently imitate metal prototypes (cf. e.g. A. Furtwängler, Berliner Vasensammlung, Nos. 2765, 2766). On some of these a facsimile of a Syracusan coin is found stamped in the centre, which would date them to the fourth century B.C.

Height, $3^{\frac{1}{4}}$ in. ( 8.2 cm .). Diameter, 5 in. ( 12.6 cm .). Purchased in 1907. Published by E. R[obinson] in the Museum Bulletin, May, 1909, p. S1, fig. 5. Cast. The crusty, green patina has been mostly removed. One handle was broken off and reattached. Parts of the attachments are missing. The base and rim of the cup are much encrusted. Acc. No. 07.286.130.


595


596

596 CUP, on high foot and with long, slender handles, of which the attachments are in the form of lanceolate leaves. The body consists of a round, deep bowl, without rim, and is undecorated.

For an account of cups of this type see under preceding example.
Height, $3^{\frac{1}{2}} \mathrm{in}$. ( 8.8 cm .). Diameter, $3 \frac{1}{2} \mathrm{in} .(8.8 \mathrm{~cm}$.). Purchased in 1907. Described by G. M. A. R[ichter] in the Museum Bulletin, May, 1908, p. 90, No. 10. Cast. The rough, green patina has been mostly removed. The foot and the

## VASES AND KITCHEN LTTENSILS

handles were broken off and reattached. Small pieces of the attachments are missing. Acc. No. 07.2S6.97.

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597 CUP, with long, slender handles, the attachments in the form of lanceolate leaves. The body, which is mounted on a short, broad foot of Alaring outline, consists of a deep bowl with convex sides and wide, upright rim.

For an account of cups of this type see under No. 595.

Length, with handles, $6 \frac{1}{2} \mathrm{in}$. ( 16.5 cm .). Height of cup, $2 \frac{3}{4}$ in. ( 7 cm .). Diameter of cup, 3 in. ( 7.6 cm .). Gift of Garrett C. Pier, 1911. Unpublished. Cast. Crusty, green
 patina. There are a few cracks in the bowl and one handle is broken in two. Both handles and the foot have been broken off and reattached. Acc. No. II. 106.

598 PATERA WITH HANDLE in the form of a winged Lasa. She is standing in an easy attitude with crossed legs, her right arm raised above her head, the left extended and holding a rhyton in the shape of an animal's head. She is nude, but wears shoes and has a string of amulets hanging from her right shoulder. The feathers of her wings are indicated with engraved lines and dots. The figure is represented as standing on a round disk to which a large ring is attached for suspension. The attachment to the patera is in the form of a cluster of leaves. Round the edge of the patera are a tongue pattern and beading in relief; on the inside the word Suthina is inscribed in large letters (cf. p. 182).

Etruscan, fourth to third century B.C. The execution is fair and the effect of the whole distinctly pleasing. The elongated proportions and sinuous attitude of Lasa are characteristic of Etruscan works of the period.

Paterae of this form are common in late Etruscan tombs (cf. e.g. L. A. Milani, Museo archeologico di Firenze, pl. XXIII (III century B.C.).

Female figures of this type inscribed Lasa are frequently found engraved on Etruscan mirrors. From such representations it appears that Lasa was a ministering goddess connected chiefly with women s toilet (cf. J. Martha, in Daremberg et Saglio, Dictionnaire, under Lasa, p. 953).

Total height, including ring, $18 \frac{1}{4} \mathrm{in}$. ( 46.4 cm .). Diameter, $9 \frac{5}{8} \mathrm{in}$. ( 24.5 cm .). Purchased in 1903. Found in a tomb of the IV to III century B.C., at Bolsena (cf. pp. ${ }_{1} 79$ ff.). Published by A. Furtwängler, in Sitzungsberichte der kgl.

## IMPLEMENTS AND UTENSILS

Cups, Bowls bayerischen Akademie der Wissenschaften, 1905, Heft II, p. 271 (d), pl. VIII. and Plates Illustrated in S. Reinach, Répertoire, IV, p. I97, No. 4. The crusty, green patina has been largely removed. Intact. Acc. No. G.R. $44^{8 .}$


598
599 PATERA, with low foot and horizontal rim. On the outer side below the rim are horizontal bands, incised. The loandle is missing, but the outlines of the attachment in the form of a palmette ornament are clearly visible. The word Suthina is inscribed on the inside in Etruscan letters (cf. p. 182).

Etruscan, fourth to third century B.C.
Diameter, 14 in. ( 35.6 cm .). Height, $2^{\frac{3}{4}} \mathrm{in} .(7 \mathrm{~cm}$.).


599 Purchased in 1903. Found at Bolsena in an Etruscan tomb of the fourth to third century B.C. (cf. pp. 179 ff .). Unpublished. The crusty, green patina has been partly removed. The rim is chipped in places. Acc. No. G.R. 453.

## VASES AND KITCHEN UTENSILS

605 BOWL, fluted in imitation of a shell, with short cylindrical foot Cups, Bowls and no handles.

Similar bowls have been found at Pompeii (cf. J. Overbeck, Pompeii, pp. $44^{-4+5}$, fig. 241, s) and Boscoreale (cf. E. Pernice, Archäologischer Anzeiger, i900, p. I86). J. Overbeck thought they were cake forms, a theory against which E. Pernice (loc. cit.) has advanced convincing arguments. The latter's suggestion that they were fruit dishes is more probable, though it does not seem necessary thus to limit their use, as they might well have served for other purposes with equal appropriateness.

Height of bowl, $1 \frac{15}{16} \mathrm{in}$. ( 5 cm .). Diameter of bowl, $5 \frac{1}{8}$ in. ( $13 . \mathrm{I} \mathrm{cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4940. Illustrated in the Cesnola Atlas, III, pl. XLVII, i. Crusty, green patina. Considerably cracked and repaired, with a few pieces missing. Acc. No. C.B. 358 .


606 LARGE DEEP BOWL, with broad, flat rim. Undecorated. Uncertain date.

Height of bowl, $6 \frac{5}{16}$ in. ( 16 cm .). Diameter, $14 \frac{7}{8}$ in. ( 37.8 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4946. Illustrated in the Cesnola Atlas, III, pl. XLVIII, 3. The crusty, green patina has been partly removed. Considerably broken, with large pieces missing. Acc. No. C.B. 372.

607 LARGE SHALLOW BOWL, with narrow, flat rim. Undecorated. Uncertain date. Illustrated, p. 22i.

Height, $4^{\frac{15}{16}}$ in. ( 12.6 cm .). Diameter, $17 \frac{1}{2}$ in. ( 44.5 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4947. Illustrated in the Cesnola Atlas, III, pl. XLVIII, 2. The green patina has been largely removed. There are two holes in the centre of the bowl. Acc. No. C.B. 373.

## IMPLEMENTS AND UTENSILS

Cups, Bowls and Plates

608 HEMISPHERICAL BOWVL, undecorated.
Uncertain date.
Height, $3 \frac{1}{5}$ in. ( 7.9 cm .). Diameter, $7 \frac{1}{5} \mathrm{in}$. ( I 8.1 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4937. Illustrated in the Cesnola Atlas, III, pl. XLIX, i. The crusty, green patina has been largely removed. There are several small holes in the bowl. Acc. No. C.B. 367 .

609 HEMISPHERICAL BOWL, similar to the preceding.
Height, $2 \frac{5}{8} \mathrm{in} .\left(6.7 \mathrm{~cm}\right.$.). Diameter, $6_{16}^{\frac{7}{6}} \mathrm{in} .(16.4 \mathrm{~cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4942. Illustrated in the Cesnola Atlas, III, pl. XLIX, 2. The green patina has been partly removed. There are a number of small holes. Acc. No. C.B. 369.

610 HEMIISPHERICAL BOWL, similar to No. 608 .
Height, $2 \frac{1}{4} \mathrm{in}$. ( 5.8 cm .). Diameter, $5 \frac{9}{15}_{6}^{6} \mathrm{in}$. ( $\mathbf{1}+2 \mathrm{~cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4938. Crusty, green patina with brown patches. No parts missing. Acc. No. C.B. 361 .

6II HEMISPHERICAL BOWL, similar to No. 608.
Height, $2 \frac{15}{16} \mathrm{in}$. ( 7.5 cm .). Diameter, $6 \frac{3}{3} \mathrm{in}$. ( 16.2 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 494. Crusty, blue-green patina. Indented and cracked in places, with two small pieces missing. Acc. No. C.B. 362 .

6I2 HEMISPHERICAL BOWL, similar to No. 608.
Height, $2 \frac{1}{2}$ in. ( 6.4 cm .). Diameter, 6 in. ( $\mathbf{1 5 . 2 \mathrm { cm } \text { .). From Cyprus. Cesnola }}$ Collection. cf. J. L. Myres, Cesnola Handbook, No. 4943. The rough, green patina has been partly removed. There are several small holes. Acc. No. C.B. 370.

6I3 DEEP BOWL, with flat bottom, undecorated. Uncertain date.
Height, $3 \frac{1}{5}$ in. ( 7.9 cm .). Diameter, 8 in. ( 20.3 cm. ) From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4939. Rough, green patina with brown patches. The rim is cracked on one side. Acc. No. C.B. 365 .

## VASES AND KITCHEN UTENSILS

6If FLAT PLATE, with broad horizontal rim. Embossed medallion and Plates in the centre and embossed circular bands on plate and rim. Uncertain date.
 Myres, Cesnola Handbook, No. 4944. The green patina has been largely removed.


A large piece is missing and the surface is considerably corroded. Acc. No. C.B. 726.

6I5 FLAT PLATE, with broad rim and incised concentric circles on the inside of the plate. Uncertain date.

Diameter, $7^{\frac{3}{4}}$ in. ( 19.7 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4945. Greenish patina. Several largish pieces are missing and the surface is much corroded. Acc. No. C.B. 725.

## IMPLEMENTS AND UTENSILS

## CAULDRONS, PAILS, ETC.

Cauldrons, Pails, Etc.

The following cauldrons and pails (unless otherwise stated) are hammered, with handles and other attachments cast.

620 FLAT HORIZONTAL RIM AND TWO HANDLES OF A LARGE CAULDRON. The rim is decorated on its upper surface with a


DETAIL OF 620
spirited relief of lions pursuing boars and bulls (there being apparently four lions, three boars, and thirteen bulls), with a rope ornament on its edges. On each of the handles are represented, also in relief, three superimposed groups of two upight monsters facing each other in heraldic fashion, each holding up a jug of Mycenaean shape by its handle and foot. The monsters are in the shape of lions, each wearing on its back a curious

## VAsES AND KITCHEN UTENSILS

garment or hide, decorated with several borders and a row of dots, and ending below in a point. On the round plates which form the lower attachments of the handles are three heads of bulls (Bovipóvo ), with their horns brought round, each enclosed in a signet ring.

The style of the reliefs belongs to the Mycenaean period, probably about ${ }^{1300-1200 ~ B . C . ~ F o r ~ a ~ s i m i l a r ~ e x a m p l e, ~ a l s o ~ f r o m ~ C y p r u s, ~ c f . ~ M 1 . ~ M a r k i-~}$ des, A Mycenaean Bronze in the Cyprus Museum, British School Annuat,


XVIII, igil-igi2, pp. 95 ff., pl. \III. Compare also the tripod, No. ifso, in our collection.

The type of monster represented on the handle, which also occurs frequently on Mycenaean gems, has been the subject of much controversy. A Milchhöfer (Die Anfänge der Kunst in Griechenland, pp. 54 ft.) was the first to bring together and discuss examples of these monsters, which he connected with the Black Demeter. A. B. Cook (Journal of Hellenic Studies, 1894, pp. $8_{4}, 106,120,138,153$ ) differentiates them into a number of well-defined types and interprets them as votaries in an animal-cult, clad in the skin of the animal worshiped. In G. Perrot et C. Chipiez, Histoire de l'art, III, p. 794, the garb at the back is called a fish-skin, and the monster derived

## IMPLEMENTS AND UTENSILS

Cauldrons, from the Assyrian god Anou. A. Furtwängler, in Antike Gemmen, III, Pails, Etc. pp. 39 ff., holds that the monsters are throughout of lion form, though sometimes with horse's or donkey's ears, and are conceived of variously as mighty hunters, which in their turn are overcome at times by a higher human or godlike creature, and as being in the possession of a wonderful fertilizing liquid, as e.g. on our bronze handle. For the various types cf. the examples brought together by A. Furtwängler, Antike Gemmen, I, pl. II, $30-35$, and pl. VI, 16; and vol. III, p. 37, fig. 16.

Whether these monsters have really any cult significance is rendered very doubtful by the additional evidence which has recently been supplied from Crete. The monsters depicted on Cretan gems are of an almost infinite variety and clearly suggest a somewhat fanciful modification of foreign types on the part of the Cretan artists, who probably cared more for the artistic possibilities of these creatures than for their religious significance (cf. D. G. Hogarth, The Zakro Sealings, Journal of Hellenic Studies, NXII, p. 90 f.).

Heights of handles: $8 \frac{3}{4}$ in. $\left(22.2 \mathrm{~cm}\right.$.) and $8 \frac{1}{4} \mathrm{in}$. ( 20.9 cm .). Diameter of rim, ${ }^{15} \frac{3}{4} \mathrm{in}$. ( 40 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myers, Cesnola Handhook, No. 4703. Illustrated in the Cesnola Atlas, III, pl. LIV, 1 and 2, where it is said to have been found at Kition. Also published by G. Perrot et C. Chipiez, Histoire de l'art, III, pp. 794 ff., figs. 555 and 556 . A. B. Cook, Journal of Hellenic Studies, XIV, 1894, p. 103 f., fig. 5; A. Furtwängler, Sitzungsberichte der kgt. bayerischen Akademie der Wissenschaften, 1905, p. 269, No. ro. Cast. Rough, dark green patina. The reliefs have become blurred in places from corrosion. One of the handles is hent out of position, and there are a number of breaks in the rim and two in one of the handles. The rim and handles were attached to the cauldron, and similarly the handles to the rim, by rivets, which are still in place. Acc. No. C.B. 452 .

62 I CAULDRON with lid and arched swinging handle. The attachments are in the form of five open-work ornaments, with rings for the insertion of the handle. The cauldron has a rounded top, short neck, and narrow flat rim. The lid is secured by means of a chain to one of the rings of the attachments.

This cauldron can be dated to about the middle of the sixth century, since it was found in the same tomb as the Etruscan chariot (No. 40); cf. p. 177 f.

Total height to top of lid, $1 \frac{1}{\frac{1}{8}} \mathrm{in}$. 28.3 cm .). Greatest girth, $12 \frac{1}{\frac{1}{3}} \mathrm{in} .(30.8 \mathrm{~cm}$.). Diameter of mouth (on outside of rim), $6 \frac{1}{4}$ in. ( 15.9 cm .). Published by A. Furtwängler, Brunn-Bruckmann, Denkmäler griechischer und römischer Skulptur,


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624


## IMPLEMENTS AND UTENSILS

Cauldrons, Pails, Etc.
text to pls. $5^{86}, 587, \mathrm{pp} .4,5$, No. $7, \mathrm{fig} .7$. The crusty, green patina has been removed in places. There are several cracks and some pieces are missing. Acc. No. G.R. 399.

622 CAULDRON with rounded top and broad, flat rim. It has no feet or handles and was probably intended to be placed on a stand over a charcoal fire. Illustrated, p. 225.

Like the preceding this cauldron was found in the same tomb as the Etruscan chariot (No. 40) ; cf. p. 177 f.

For archaic Greek cauldrons of this type see A. Furtwängler, Olympia, IV, Die Bronzen, p. 123 f .

Height, $12 \frac{1}{2} \mathrm{in}$. ( 38.9 cm .). Greatest girth, $21 \frac{1}{4} \mathrm{in}$. ( 54 cm .). Diameter of mouth (on outside of rim) $16 \frac{5}{16} \mathrm{in}$. ( 41.5 cm .). Published by A. Furtwängler, Brunn-Bruckmann, Denkmäler griechischer und römischer Skulptur, text to pls. 586,587 , p. 4, No. 5, fig. 5. The crusty, green patina has been partly removed. There are a number of cracks and holes. Acc. No. G.R. 394.

623 CAULDRON with arched, swinging handle. The handle, as well as the attachments, which are in the form of large loops, are of iron. Like No. 622 this was intended to be placed on a stand. Illustrated, p. 225 .

This cauldron, like Nos. 621, 622, was found in the same tomb as the Etruscan chariot (No. 40), and is thereby dated to the middle of the sixth century B.C.; cf. p. 177 f.

Height, $8_{8}^{3}$ in. ( 21.3 cm .). Diameter, $14 \frac{15}{16} \mathrm{in}$. ( 37.9 cm .). Published by A. Furtwängler, Brunn-Bruckmann, Denkmäler griechischer und römischer Skulptur, text to pls. 586,587, p. 5, No. 8. fig. 8. Crusty, green patina with blue patches. The iron is much corroded and the surface of the bronze is covered in places with iron rust. There are a few cracks and holes. The handle attachments are riveted to the body of the cauldron. Acc. No. G.R. 398.

624 CAULDRON with flat, rounded rim, two horizontal handles, and three feet. The feet end below in paws; their attachments to the body of the vessel are in the form of an open-work ornament surmounted by the fore part of a winged figure in barbaric style. Each handle is decorated with three raised bands; the attachments are roughly triangular in shape and ornamented with incisions. Illustrated, p. 225 .

Found in the same tomb as the Etruscan chariot (No. 4o); cf. p. in7f. Middle of sixth century B.C.

Probably of Italic manufacture. The combination of a winged figure with lion's claws to form feet of various vessels is a frequent device in

## VASES AND KITCHEN UTENSILS

archaic Greek art (cf. A. Furtwängler, Olympia, I<br>, Die Bronzen, pl. LI, Cauldrons, No. 858 , and text, p. 137), where a number of examples are cited.

Height, without handle, $10 \frac{1}{2}$ in. ( 26.7 cm .). Diameter, $23 \mathrm{in} .(59.4 \mathrm{~cm}$.). Published by A. Furtwängler, Brunn-Bruckmann. Denkmäler griechischer und römischer Skulptur, pp. $4-5$, No. 6, fig. 6. Crusty, green patina; some traces of iron rust on the inside. There are several small holes and indentations: otherwise in a splendid state of preservation. Acc. No. G.R. 395.

625 LARGE CAULDRON, of angular outline and with short cylindrical neck. Undecorated. Illustrated, p. 225.

Uncertain date.
Height, $12 \frac{7}{16}$ in. ( 31.6 cm .). Largest girth, $16 \frac{13}{16} \mathrm{in} .(42.7 \mathrm{~cm}$.). Diameter of mouth, $8 \frac{\pi}{\frac{\pi}{3}} \mathrm{in}$. ( 22.5 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myrres, Cesnola Handbook, No. 4948. Illustrated in the Cesnola Atlas, Ill, pl. XLV, r. The crusty, green patina has been partly removed. Two rectangulat patches have been riveted on in antiquity. The surface is somewhat corroded and several pieces are missing. Acc. No. C.B. 400 .

## 626 LARGE CAULDRON, similar to the preceding.

Height, $10 \frac{1}{\frac{1}{1}}$ in. ( 26 cm .). Largest girth, $15 \frac{1}{5}$ in. ( 38.4 cm .). Approximate diameter of mouth, $9_{16}^{16}$ in. ( 23 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4949. The crusty, blue-green patina has been largely removed. Indented in places and bent out of shape. Several small pieces are missing. Acc. No. C.B. $\not 03$.

630 SO-CALLED CISTA A CORDONI, or ribbed pail of cylindrical form with two arched swinging handles. The handles are twisted and the attachments are in the form of double loops riveted to the vessel. There are nine flutings on the body of the cista, and on the bottom are concentric circles, embossed. The pail consists of two sheets of bronze, one for the body, riveted together on one side, and one for the bottom. The rim has an iron core.

Pails of this type (also with two horizontal handles on the sides instead of the swinging handles) have been found in great numbers in the district between the Alps and the Apennines, especially at Bologna; also north of the Alps and as far south as Tarentum (cf. J. Martha, L’Art étrusque, p. gr f. and A. Mau, Pauly-Wissowa, Realencyklopädie, under cista, p. 2605). Two chief varieties can be distinguished: one of smaller dimensions with only five to eight ribs spaced so as to allow decorations to be introduced between

## IMPLEMENTS AND UTENSILS

Cauldrons, them, and another of larger size ( $20-40 \mathrm{~cm}$. high) with nine to fifteen ribs Palls, Etc. brought close together (cf. Mau, op. cit. p. 2605). The first belongs to the Villanova period and was apparently a simple tomb offering; the second is chiefly found in fifth-century tombs and served, at least in Italy, almost invariably as an urn containing ashes. Our example, which is dated to the middle of the sixth century B.C., since it was found in the tomb with the chariot (cf. p. 177 f.), appears to stand midway between the two types.

The origin of these ribbed pails is disputed. They are probably neither Greek nor Etruscan, but were originated in the territory where they have been found most frequently, namely, in the valley of the Po (cf. A. Furtwängler, Brunn-Bruckmann, Denkmäler griechischer und römischer Skulptur, text to pls. 586,587 , p. I.

Height, without handles, $7 \frac{5}{5}$ in. ( 19.4 cm .). Diameter, $8 \frac{13}{16}$ in. ( 22.4 cm .). Published by A. Furtwängler, Brunn-Bruckmann, Denkmäler griechischer und römischer Skulptur, text to pls. $5^{86}, 587$, pp. I, 3, No. 3, fig. 3. The crusty, green patina has been partly removed; on the inside are considerable traces of iron rust. There are several holes and the bottom has been somewhat bent. Acc. No. G.R. 412.


63 I PAIL (Situla), of flaring outline, with rim bent slightly inward. The handles are missing; the place for their attachments is shown by rivetholes below the rim. They were probably of iron, as is seen from the considerable traces of iron rust. On the bottom are concentric circles, embossed.

This pail was found in the same tomb as the Etruscan chariot, No. 40 , and is thereby dated to about the middle of the sixth century B.C.

Height, $9 \frac{15}{16}$ in. $\left(25.3 \mathrm{~cm}\right.$.). Diameter, $1 \frac{17}{\frac{7}{8}} \mathrm{in} .(30.2 \mathrm{~cm}$.). Published by A. Furtwängler, Brunn-Bruckmann, Denkmäler griechischer und römischer Skulp-

## Vases and kitchen utensils

tur, text to pls. 586,587, p. 5, No. 10, fig. 10. Crusty, green patina. The bot- Cauldrons, tom is bent and cracked in places, with some pieces missing. Acc. No. G.R. 414. Pails, Etc.

632 LID OF A VESSEL. It has a flat, horizontal handle, attached by rivets.

This lid was found in the same tomb as the Etruscan chariot, No. 40, and is thereby dated to about the middle of the sixth century B.C.

Approximate diameter, $9_{8}^{5} \mathrm{in}$. ( 24.5 cm .). Unpublished. Crusty, green patina, with some traces of iron rust. Somewhat bent out of shape; there are a number of cracks and holes. Acc. No. G.R. 415.


633 DISH COVER. It has a loop handle in the centre fastened by rivets.

Date uncertain; probably late.
Greatest length, $8 \frac{1}{5}$ in. ( 20.6 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4950. Illustrated in the Cesnola Atlas, III, pl. XLV', 3. Crusty, blue-green patina. Nost of the rim is missing. Acc. No. C.B. 413.

## STRAINERS

A large number of ancient strainers ( $\dot{\eta} \theta \mu \dot{\prime} s, \dot{\lambda} \lambda \iota \sigma t \dot{\eta} \rho$, colum) have Strainers survived. They were used for the same purpose as they are today, for straining liquids of all kinds. On Greek vase-paintings and Etruscan paintings and reliefs a cup-bearer is frequently represented holding a stainer (cf. A. Furtwängler und R. Reichhold, Griechische Vasenmalerei, pl. s $_{4}$; P. Hartwig, Die griechischen Meisterschalen, pl. XXXIV; and Monumenti dell'Instituto, IX, pl. 13). Martial, XIV', 103, speaks of the colum nivarium which was filled with snow and served not only as a strainer for wine, but also as a cooler at the same time.

For strainers in general see E. Saglio, in Daremberg et Saglio 's Dictionnaire under colum, p. 1331.

638 STRAINER, with handle, all in one piece. The handle terminates in a ring and is decorated with the head of a girl and a festoon, roughly engraved on its upper surface. The rim of the bowl is moulded with bead and tongue pattern, and the perforations in the centre of the bowl are arranged in the form of a rosette.

This type of colander can be assigned to the sixth to fifth centuries B.C., as it occurs in tombs together with blackfigured and red-figured vases. (See A. Zannoni, Scavi della Certosa, pl. CXXXX, II, pl. L, 23; cf. also the examples from Nocera in Bullettino archeologico napolitano, nuova serie, V, 1857 , pl. III). A similar engräved design, but with a male instead of a female head, is seen on an example in the Bibliothèque Nationale; cf. E. Babelon et J.-A. Blanchet, Catalogue des Bronzes, No. 143 I.

Length, $15 \frac{9}{16}$ in. ( 29.4 cm .). Diameter of bowl, $5^{\frac{3}{8}}$ in. ( 13.7 cm .). Purchased in 191 I . Described by G. M. A. R[ichter] in the Museum Bulletin, May, 1912, p. 98. The green
 patina has been mostly removed. Preservation good; no parts missing. Acc. No. 11.212.2.

639 STRAINER. It consists of a circular perforated bowl (much broken) with flat rim and handle, ending in a ring for suspension. Opposite the handle is a hook-shaped projection terminating in a small oblong plate. It has no decorations. The projection opposite the handle appears to have served two purposes, as a means of resting the strainer across the mouth of the jar into which wine was poured, and for hanging the strainer from the lip of the jar when not in use.

This type of strainer is comparatively rare and seems to belong only to Central Italy. For an example with an archaic Latin inscription assigned

## VASES AND KITCHEN UTENSILS

to the third century B.C. cf. H. L. Wilson, in the American Journal of Stranners Philology, XXVIII, 1907, pp. +5 I ff., where a list of similar strainers is also given. Compare also one in the Museum of Fine Arts, Boston, described by E. Robinson in the Annual Report, I899, p. 50.

Length, $12 \frac{1}{16}$ in. ( 30.6 cm .). Diameter, $5^{\frac{1}{i}} \mathrm{in}$. $(13.3 \mathrm{~cm}$.). Purchased in 1896 . Unpublished. Crusty, bluish patina. The interior part of the bowl is missing and the end of the hook on the handle is broken off. The whole piece is made of a single piece of bronze, excepting only the little oblong plate. Acc. No. G.R. ${ }^{1}+3$.


640 STRAINER. It consists of a shallow, circular bowl with flat rim and hemispherical strainer in the centre. The bowl is divided into two parts, an upper and a lower. There are three horizontal horse-shoe handles fastened to the under side of the rim by means of rivets. Uncertain date.

Diameter, $1^{\frac{3}{4}} \mathrm{in} .(37 .+\mathrm{cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4935. The patina, which has been remored in parts, is crusty and green with blue patches. Most of the actual strainer is missing and there is a small hole in the rim. Acc. No. C.B. 371 .

64I STRAINER, similar to the preceding.
Diameter, $11 \frac{3}{4}$ in. ( 29.9 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4936. Illustrated in the Cesnola Atlas, III, pl.

## IMPLEMENTS AND UTENSILS

Strainers LII, 1. The green patina has been largely removed. The three horse-shoe handles are missing, but the places for their attachment are indicated by the rivet-holes, in some of which the rivets are still preserved. Acc. No. C.B. 374.

## LADLES

Ladles A ladle was commonly used in Greek times for dipping the liquor from larger receptacles into cups, as is seen from representations on vases (cf. Museo Borbonico, XII, pl. 2 I; Monumenti dell’ Instituto, VI, pl. 65, IX, pl. 46; L. von Stephani, Compte-rendu, i868, pp. I $54^{-1} 56$ ). Its essential characteristics are a spoon-shaped bowl and a long handle generally curved at its upper end for suspension. The Greek name for this utensil appears to have been кúatos or кvotis (cf. Scholiast, Aristophanes, Wasps, 855; Pollux, Onomastikon, X, 75, who mention кúaOos as a vase for drawing wine, and Scholiast, Aristophanes; Acharnians, IO53, who compares it to a spoon); but this word was not exclusively confined to this shape, as we find it also cited as a perfume vase (cf. Pollux, Onomastikon, VI, IO5; Athenaeus, X, p. 424-B).

The Roman equivalent was the simpulum (cf. Varro, De lingua latina, V, I24, who says that the Roman simpulum took the place of the Greek cyathus, but was confined to sacrifices).

For ladles in general cf. E. Pottier, Daremberg et Saglio, Dictionnaire, under cyathus and simpulum.

645 LADLE. The upper end of the handle is bifurcated, each part terminating in an animal's head. Both the handle and the bowl are decorated with graceful designs in flat relief. The outer side of the bowl is decorated with a large rosette, surrounded by a guilloche pattern; at the base of the handle in front is a floral pattern, on the back, a running Satyr, with spirals beneath; at the top of the handle, both front and back, is an inverted palmette. On the outer edge of the bowl is beading in relief. Both the shape and the scheme of the decoration are of great beauty. The style is archaic Greek of the sixth century B.C.

Height, $11 \frac{1}{1}$ in. ( 28.5 cm .). Purchased in 1908. Probably from Cività Castellana. Described by E. R[obinson] in the Museum Bulletin, May, 1909, p. 81. Patina blue-green and crusty. The surface is considerably corroded. It was much encrusted and was cleaned on its arrival in the Museum; the patina has been restored in one or two spots where it was removed for cleaning. Acc. No. 08.258.2.


## IMPLEMENTS AND UTENSILS

Ladles 646 MINIATURE LADLE. It consists of a four-sided stem, terminating in a deep, rounded bowl. The small size of the ladle suggests that it was used for toilet or chirurgic purposes. Illustrated, p. 233.

Ladles of this general type belonging to the sixth century were found at Amathus, Cyprus (cf. British Museum, Excavations in Cyprus, p. 102, fig. I $4^{8, ~ I) . ~}$

Length, $4 \frac{1}{8} \mathrm{in}$. ( 10.5 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4838 . Illustrated in the Cesnola Atlas, III, pl. LXIV, 1. The crusty, greenish patina has been removed in places. The surface is corroded in places, and there is a largish hole in the bowl. Acc. No. C.B. 230.

647 LADLE BOWL, with tang for insertion in a wooden or bone handle. Illustrated, p. 233.

Sixth to fifth-century type (cf. J. L. Myres, Cesnola Handbook, No. 4925).

Height of bowl, $1 \frac{5}{16}$ in. ( 3.3 cm .). Diameter, $3 \frac{1}{16}$ in. ( 7.8 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4925. Illustrated in the Cesnola Atlas, III, pl. LXI, 4. Crusty, green patina. No parts missing. Acc. No. C.B. 368.

648 LADLE, with round, shallow bowl and long, four-sided handle, which is curved at its upper end and terminates in two heads of ducks. Otherwise there is no decoration. Illustrated, p. 233 .

The shape is distinguished for its grace and simplicity. Sixth to fifth century B.C. Ladles of this shape are commonly found together with Athenian black-figured and red-figured vases in tombs in Etruria (cf. A. Zannoni, Scavi della Certosa di Bologna, pl. XIX, 8-ı ; pl. XXIX, if; pl. L,3; pl. LIV, 12 ; pl. LXIV, 5; pl. CXXXX, io).

Height, $1_{3} \mathrm{in}$. ( 33 cm .). Diameter of bowl, $3 \frac{5}{8} \mathrm{in}$. $(9.2 \mathrm{~cm}$.). Purchased in 1910. Said to be from Cività Castellana. Mentioned in the Museum Bulletin, December, 1910, p. 275. Cast. Crusty, light green patina. Intact. Acc. No. 10.210 .35 .

652 LADLE, with deep, oval bowl and long, four-sided handle, which is curved at its upper end and terminates in the head of a duck. Otherwise there is no decoration. Illustrated, p. 233.

A ladle of this shape is seen in actual use on a red-figured kylix signed by Brygos (cf. Monumenti dell' Instituto, IX, pl. 46), and ladles of the same

## VASES AND KITCHEN UTENSILS

shape have been found at Pompeii (cf. J. Overbeck, Pompeii, p. 4t4, fig. $24^{1} 9$ ), so that this type seems to have enjoyed a long period of popularity.

Height, ${ }^{1} 7 \frac{15}{16}$ in. ( 45.6 cm .). Probably purchased in 1897. Unpublished. Crusty, greenish patina. No parts missing. Ace. No. G.R. i 47.

653 LADLE, with round, shallow bowl and flat ornamental handle decorated on its outer side with a floral design, incised. On the under side of the bowl are concentric circles, also incised. Probably Roman period.

Height, $+_{\frac{5}{5}}^{2} \mathrm{in}$. (11. 8 cm .). Diameter of bowl, $2 \frac{1}{4} \mathrm{in} .(5.7 \mathrm{~cm}$.). Purchased in 1896. Unpublished. Rough, greenish patina. No parts missing. Acc. No. G.R. 3t. Illustrated, p. 233.

654 LADLE, with deep cylindrical bowl, small foot, and tlat ornamental handle. The handle is decorated on its outer side with incisions. The bowl has groups of horizontal bands and beading on its outer side, and concentric circles beneath. Probably Roman period. Illustrated, p. 233.

Height, $4 \frac{1}{2}$ in. ( 1 I .5 cm .). Diameter of bowl, $2 \frac{1}{16} \mathrm{in}$. $(5.2 \mathrm{~cm}$.). Purchased in 1900 . Unpublished. Rough, green patina. No parts missing. Acc. No. G.R. 390 .

## MISCELLANEOLS LTENSILS

657 FIRE SHOVEL, with twisted handle and rectangular blade bent up at the sides to form a rim.

The type is characteristic of the late Mycenaean Age. For other examples from Enkomi, Cyprus, of. British Museum, Excavations in Cyprus, p. 15, fig. 25, Nos. 1461-1 463 .

Length, $19 \frac{5}{16} \mathrm{in} .(49.1 \mathrm{~cm}$. ). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4700 . Illustrated in the Cesnola Atlas, pl. LXVII, 5. Crusty, green patina. The surface is partly covered with incrustations. The lower half of the blade and the upper end of the handle are missing. Acc. No.C.B. 89.

658 SHOVEL with short handle. The handle is modelled in the form of a Corinthian column cut in half lengthwise and terminating at its outer end in an animal's hoof and
 a leaf-shaped projection. The sides of the blade are decorated with arabesques in relief, and with three rows of beading on the rim; at each

Miscellaneous
Utensils

## IMPLEMENTS AND UTENSILS

Miscella- of the upper corners is attached a small conical socket. On the unNEOUS Utensils der side of the shovel are five knobs, one at each comer and one in the centre.

Shovels of this type have been found at Pompeii (cf. e.g. Museo Borbonico, X, pl. LXIV), and belong to the Roman period. They are commonly explained as


658 having been used for burning incense or perfumes, and are identified with the Latin batillum (cf. E. Saglio, Daremberg et Saglio, Dictionnaire, under batillum).

Length, $16 \frac{1}{4} \mathrm{in}$. ( 41.3 cm .). Purchased in 1900 . Said to have been found in the Hauran, Syria. Unpublished. Rough, greenish patina; slightly injured in some places. Acc. No. G.R. ${ }_{3} 37$.

659 SHOVEL, similar to the preceding. The lower half of the column is decorated with leaf-shaped ornaments, incised. The sides of the blade are undecorated. On the under side of the shovel are four knobs.

Length, $12 \frac{1}{2} \mathrm{in}$. ( 31.8 cm .). Purchased in 1900 . Said to have been found in the Hauran, Syria. Unpublished. Rough, greenish patina, partly removed on the blade. No parts missing. Acc. No. G.R. $1+1$.

660 SHOVEL, similar to No. 658. The column has become very conventionalized. The sides of the blade are undecorated and the rim has simple grooves. The sockets at the corners are in the shape of animals' ears. On the upper side of the blade have been stamped concentric circles, one at each corner and one in the centre. On the under side of the blade are four knobs.

Length, 10 in. ( 25.4 cm .). Purchased in 1900 . Said to have been found in the Hauran, Syria. Unpublished. Rough, greenish patina. No parts missing. Acc. No. G.R. 139 .

665 MEAT-HOOK ( $\kappa \rho \epsilon \alpha \gamma \rho \alpha$, harpago). It consists of a shaft ending in a ring from which radiate seven curved prongs. At the juncture of the shaft and the ring is an eighth prong to which a second ring is attached. The shaft is decorated with twisted flutings and has a socket at its outer end for the insertion of a wooden handle.

A considerable number of these hooks have been found, chiefly in Etruria. Various theories have been advanced regarding their purpose

## VASES AND kITCHEN UTENSILs

(cf. J.-Adrien Blanchet, in Daremberg et Saglio's Dictionnaire, harpago, p. I2), but the one most generally accepted is that they are identical with the к $\rho \epsilon \alpha \gamma \rho \alpha$, which is described by the Scholiast on Aristophanes' Knights, 772, as an instrument used in cooking, resembling a hand with the fingers bent inward, used to take boiled meat out of the cauldron. Hooks of this general type employed


665 in such a way are represented on a redfigured vase-painting (cf. A. Furtwängler, Berliner Vasensammlung, II, p. 5 ro, No. 2188) and on the design of a cista (cf. L. Duvan, Mélanges d’archéologie de l'École de Rome, I890, X, p. 309, pl. VI). The suggestion made by W. Helbig (Das Homerische Epos, and ed., pp. 353 ff.) that this utensil is a later development of the Homeric $\pi \epsilon \mu \pi \dot{\omega} \beta o \lambda o v$, has been disputed by R. Engelmann (Jahrbuch des archäologischen Instituts, i891, pp. 173 ff.).

Length, $1^{\frac{3}{16}} \mathrm{in}$. ( 36 cm .). Purchased in 1896 . Unpublished. Crusty, green patina. The tips of most of the prongs are broken: otherwise in good preservation. Acc. No. G.R. I 42 .

666 IRON GRATE on four feet and with eight transverse rods. The rods end in plates of semicircular outline.

Found in the same tomb with the Etruscan chariot, No. fo, and thereby dated to about the middle of the sixth century B.C.


For grates in general cf. E. Saglio, Daremberg et Saglio, Dictionnaire, craticula, p. 1536.

Height, $3 \frac{1}{4}$ in. $\left(8.3 \mathrm{~cm}\right.$.). Length, $1+\frac{5}{16}$ in. $\left(36.4 \mathrm{~cm}\right.$.). Width, $11 \frac{3}{\frac{3}{4}} \mathrm{in}$. (29.9 cm .). Unpublished. The iron is much corroded and several pieces are missing. Acc. No. G.R. 435 .

## IMPLEMENTS AND UTENSILS

MiscellaNEOUS Utensils

667, 668 PAIR OF IRON FIRE-DOGS. Each consists of a rod of square section inserted at each end in a stand of double horseshoe shape.

Found in the same tomb with the Etruscan chariot, No. 40 (cf. p. 177 f.), and thereby dated to about the middle of the sixth century B.C.

For fire-dogs in general cf. E. Saglio, Daremberg et Saglio, Dictionnaire, craticulum, p. 1537.

Length of No. $667,39 \frac{1}{\frac{1}{4}}$ in. ( 99.7 cm .); of No. $668,37 \frac{7}{8}$ in. ( 96.2 cm .). Unpublished. Much corroded. The rod in No. 668 is somewhat bent. Acc. Nos. G.R. 433, 434 .


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669 IRON ANDIRON. It consists of a horizontal support curved upward at each end and resting on four feet, each two of which are made of a single sheet of bronze.

This piece, as well as Nos. 670-672, was found in an Etruscan tomb of the fourth to third century B.C. (cf. pp. iso ff.).

Length, $14 \frac{15}{16} \mathrm{in} .(37.9 \mathrm{~cm}$.). Purchased in 1903 . Unpublished. The iron is considerably corroded. Acc. No. G.R. 462.


670-672 THREE IRON ANDIRONS, similar to the preceding and found with it in the same tomb. Unpublished. No. 670 has

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one foot missing; Nos. 671, 672 are both fragmentary. Acc. No. G.R. $463-465$.

Miscella-

673 IRON FIRE-TONGS, consisting of two curved rods fastened together with a rivet.

This piece was found in an Etruscan tomb of the fourth to third century B.C. (cf. pp. 180 ff.).

For fire-tongs in general cf. J. A. Hild, Daremberg et Saglio, Dictionnaire, under forceps, pp. 1239 ff .

Length, $21 \frac{5}{8}$ in. ( 55 cm .). Purchased in 1903 . Unpublished. The iron is considerably corroded. Acc. No. G.R. 461.

## 673

674 IRON FIRE-RAKE. It consists of a four-sided rod, bent at right angles and flattened at one end.

This and the succeeding piece were found in an Etruscan tomb of the fourth to third century B.C. (cf. pp. I8o ff.).

Length, $6 \frac{1}{4}$ in. ( 15.9 cm .). Purchased in 1903. Unpullished. The iron is considerably corroded. Acc. No. G.R. 457.


675 IRON FIRE-RAKE, similar to the preceding and found with it in the same tomb. Unpublished. Acc. No. G.R. 458.

676 IRON SPIT (?). It consists of a rod of four-sided section with one end pointed, the other flattened.

## IMPLEMENTS AND UTENSILS

Miscella- This piece was found in an Etruscan tomb of the fourth to third century neous Utensils B.C. (cf. pp. iso ff.).

Length, $23 \frac{3}{5} \mathrm{in}$. ( 59.3 cm .). Purchased in 1903. Unpublished. The iron is considerably corroded. Acc. No. G.R. 460.

## 676

677 SPIT(i), of square section, ending above in a rounded plate, which is perforated in the centre.

Found in the same tomb with the Etruscan chariot, No. 40 (cf. p. 177 f.), and thereby dated to about the middle of the sixth century B.C.

Height, 3 feet $\frac{1}{2}$ in. ( 1.04 m.). Unpublished. The crusty, green patina has been partly removed. There are a few traces of iron rust. Acc. No. G.R. 416.


678-68I Four examples like the preceding, of about the same dimensions and likewise found with the Etruscan chariot. Acc. Nos. G.R. 417420 .

685 CLUSTER OF THREE CHAINS, perhaps used to support a small cooking pot or lamp. Each chain has a long hook suspended from its lower end, while on its upper end it is attached to a long flat link. The three links are joined together by a common loop. Uncertain period.

Length, $11 \frac{1}{2}$ in. ( 29.2 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4984. Illustrated in the Cesnola Atlas, III, pl. LXIV, 6. Crusty, greenish patina with blue patches. Part of one hook is missing, as is also the upper part of the member which terminates below in a loop. Acc. No. C.B. 200.


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## VASE HANDLES

A large number of separate bronze handles have been found in most excavations. The reason for this is the fact that the vessels themselves were mostly hammered out of thin plate and were, therefore, easily destroyed; while the handles, which were generally cast solid in separate pieces, naturally proved more durable.

690 VERTICAL HANDLE OF A WIDE-NECKED JUG. It is Huted to form three ridges, of which the centre one becomes the stem of a lotos flower, and the two outer ones are continued to fit against the rim of the vase. The lower attachment is in the shape of a palmette ornament.

The form and style of this handle suggest an Egyptian model of the XVIII and XIX Dynasties. For similar handles still in place on bronze jugs of that period see D. Randall-MacIver and A. C. Nace, El Amrah and Abydos, Egypt Exploration Fund, pl. XLIT, D 33, and pl. XLTI, D 116.

Length, $3^{\frac{1}{8}} \mathrm{in}$. $(7.9 \mathrm{~cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4701. Illustrated in the Cesnola Atlas, III, pl. LiN, 3. The green patina has been largely removed. The handle was attached to the vase by means of three rivets, two of which are still preserved. Acc. No. C.B. 195. Illustrated, p. $2+3$.

69 I ATTACHMENT FOR THE HANDLE OF A BOWL. It is in the form of a horizontal rod of semicircular section, curved to fit against the rim of the bowl, with a rectangular plate projecting below; a bird is perched on top of the rod, while on its outer side are two rings for the insertion of the handle. Illustrated, p. $2+3$.

For handles of similar type cf. the Assyrian bowls from Nineveh in the British Museum which belong to the VIII-VII centuries B.C.

Length, $4^{\frac{1}{5}}$ in. ( 10.5 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4 $^{890}$. The green patina has been mostly removed. The surface is somewhat corroded in places. The attachment was fastened to the bowl by means of two rivets. Acc. No. C.B. 178.

692 VERTICAL HANDLE OF A JUG. The handle itself is fluted to form two ridges. The upper attachment is effectively modelled in the shape of a bird, with wings spread to embrace the neck of the vessel, and with head protruding above the top of the handle. The feathers are indi-

Vase cated by incised lines. The treatment of the bird shows Egyptian influence. Seventh or sixth century B.C.

Length, 5 in. ( 12.7 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. $4^{891}$. Illustrated in the Cesnola Atlas, III, pl. LIX, 1. The green patina has been largely removed. The lower attachment is missing, as is also the lower end of the bird's tail and pieces of the wings. Acc. No. C.B. 192.

693 VERTICAL HANDLE OF A JUG, ending below in a plain triangular plaque and above in two curving arms, which embrace the rim of the vessel; in the centre projecting above the neck is a leaf-like ornament. Probably seventh to sixth century B.C. (cf. J. L. Myres, Cesnola Handbook, No. 4892). The leaf-like ornament occurs also on Roman vases; for one from Boscoreale cf. E. Pernice, Archäologischer Anzeiger, 1900, p. 189, fig. 17.

Length, $4 \frac{15}{16}$ in. ( 12.5 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. +892. The green patina has been mostly removed. The surface is somewhat corroded. Acc. No. C.B. 194.

694 SMALL HORIZONTAL HANDLE OF A BOWL, consisting of a horizontal rod curving upward and surmounted in the centre by a lotos flower.

For similar handles compare the larger examples on the bowls Nos. 533, 534. Seventh or sixth century B.C.

Length, $I \frac{11}{116}$ in. $(4.3 \mathrm{~cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4897. Crusty, blue-green patina. The lower ends of the handle and the attachments are missing; also one of the petals of the lotos flower. Acc. No. C.B. 183.

695 HORIZONTAL SWINGING HANDLE OF A BOWL. The attachment is in the shape of three spools, cut in halves lengthwise and joined at the edges. The handle itself is ornamented with two raised bands.

Handles of similar type are still preserved on the bowl No. 533, which belongs to the seventh or sixth century B.C. For similarly shaped handles cf. references there given.

Length, $5 \frac{1}{16} \mathrm{in}$. ( 12.8 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4898. Itlustrated in the Cesnola Atlas, III, pl. LIX, 4. The crusty, green patina has been removed in places. The attachment


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## IMPLEMENTS AND UTENSILS

Vase was fastened to the bowl by means of two rivets, which are still preserved. Acc.
Handles No. C.B. 190.

696 HORIZONTAL SWINGING HANDLE OF A BOWL. Of the same type as the preceding, but with the attachment in the form of two spools instead of three. The handle itself is undecorated. Illustrated, p. $2+3$.

Length, $2 \frac{3}{\frac{3}{1}}$ in. ( 7 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres. Cesnola Handbook, No. 4899 . Illustrated in the Cesnola Atlas, III, pl. LVII, 5. The crusty, green patina has been removed in places. Acc. No. C.B. 188.

697 HORIZONTAL HANDLE, probably from a bowl like No. 533. It curves upward and was surmounted by an ornament (lotos-flower?). The round attachments have a rosette ornament in relief and are joined to each other by a crossbar. Probably seventh or sixth century B.C.

Length, 3 in. ( 7.6 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4900. Illustrated in the Cesnola Atlas, III, pl. LVII, 6. Crusty, green patina. The greater part of the ornament at the top of the handle is missing. The handle was attached to the vessel by means of six rivers, which are still partly preserved, with pieces of the vessel still adjoining. Acc. No. C.B. 177. Illustrated, p. 243.

698 HORIZONTAL HANDLE, probably from a cauldron or bowl. The round attachments are joined to each other by a cross-piece. The attachments have protruding edges, which perhaps were covered with a thin bronze plate. Illustrated, p. $2+3$.

For bowls belonging to the seventh to sixth centuries with somewhat similar handles in place cf. K. Schumacher, Antike Bronzen in Karlsruhe, pl. VIII, 3 ff.

Length, $3^{\frac{11}{16}} \mathrm{in}$. $(9.3 \mathrm{~cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4909. Illustrated in the Cesnola Atlas, III, pl. LVII, I. The patina has been largely removed. In the attachments are three rivets still in place, round which are preserved pieces of the vessel to which the handle belonged. Acc. No. C.B. 184.

699 SWINGING HANDLE FROM A BOWL. It is attached by means of rings to a tubular flange with expanded ends which fitted on half of the circumference of the bowl. Illustrated, p. $2+3$.

Shallow bowls with handles of this shape were found in a tomb at

## VASES AND KITCHEN UTENSILS

Amathus, Cyprus, with objects belonging to the sixth century B.C. (See Vase British Museum Excavations in (yprus, p. Ioz, fig. iq8). Bowls with Handles similar handles but somewhat shorter flanges have been found at Nineveh (cf. A. H. Layard, Nineveh and Babylon, 1853, pp. 183-185).

Length of flange. from end to end, $12 \frac{7}{5}$ in. ( 32.7 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4918. Illustrated in the Cesnola Atlas, III, pl. LVII, 3. Crusty, green patina with blue patches. No parts missing. Acc. No. C.B. 411 .

## 704 ATTACHMENT FOR A SINGLE SWINGING HANDLE OF

 A PAIL. It is in the form of a closed loop with upturned ends. A piece of the pail is still preserved. Illustrated, p. 243 .Attachments of this type occur both early (cf. the sixth-century ribbed pail in this collection, No. 630) and late (cf. e.g. the Roman examples, F. B. Tarbell, Naples Bronzes, No. III); so that it is impossible to date an isolated specimen.

Length, $3_{16}^{\frac{3}{16}} \mathrm{in}$. ( 8.4 cm. ). Date of purchase uncertain (hefore 1906). Unpuhlished. Crusty, blue-green patina. The surface is somewhat corroded. The three rivets by which it was fastened to the pail are still in place. Acc. No. G.R. 337.

705, 706 PAIR OF ARCHED, SIVINGING HANDLES, probably from a bowl. Each has an attachment in the form of a horizontal rod, of semicircular section, curved to fit against the rim of the bowl.

These handles were found in the same tomb as the Etruscan chariot, No. fo (cf. p. 177 f. ), and are thereby dated to about the middle of the sixth century B.C. No. $70 \%$ is illustrated, p. $2+3$.

For a bowl with somewhat similar handles in position cf. e.g. No. 538. Compare also C. Carapanos, Dodone, pl. XLV, 8; P. Perdrizet, Fouilles de Delphes, p. 78, fig. 272; C. Waldstein, Argive Heraeum, pl. CXXI, Nos. 2133-2142.

Width of No. $705,3 \frac{3}{16}$ in. ( 8.1 cm .), of $706,3 \frac{5}{16} \mathrm{in}$. ( 8.4 cm .); length of attachment, $2 \frac{1}{16}$ in. ( 5.2 cm .). Unpublished. The crusty, green patina has been mostly removed. No parts missing. Acc. Nos. G.R. $4+^{1}, \psi^{2}$.

707 HANDLE of same type as the preceding, but the attachment ornamented with a raised band in the middle.

Found in the same tomb as the Etruscan chariot, No. 40; cf. p. 177 f.

## IMPLEMENTS AND UTENSILS

Vase Width, $4^{\frac{1}{4}} \mathrm{in}$. ( 10.8 cm .). Length of attachment, $2 \frac{5}{8} \mathrm{in}$. ( 6.7 cm .). UnHandles published. The crusty, green patina has been removed in places. Acc. No. G.R. 443 .

708 VERTICAL HANDLE OF A JUG. The lower attachment is ornamented with an inverted palmette and volutes, in low relief. The handle itself is twisted and is made in one piece with the mouth of the vase. The style of the palmette ornament belongs to the sixth century B.C.

Length, $6 \frac{5}{8}$ in. ( 16.8 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4893. Illustrated in the Cesnola Atlas, III, pl. LVIII, 5. The patina has been mostly removed. The surface is considerably corroded. A piece of the mouth of the vase is still preserved. Acc. No. C.B. 198.

709 VERTICAL HANDLE OF A JUG. The lower attachment is ornamented with an inverted palmette and volutes, incised. The handle, which is made in one piece with the mouth of the vase, is divided into two ridges by a deep groove along the centre. The style of the palmette ornament belongs to the sixth to fifth century B.C.

Length, $4 \frac{11}{16}$ in. ( 12.2 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4894. Illustrated in the Cesnola Atlas, III, pl. LVHI, 2. The green patina has been mostly removed. Part of the mouth of the vase is still preserved. In the lower attachment is a rivet by which the handle was fastened to the jug. The lower attachment is cracked. Acc.No. C.B. r91.

710 VERTICAL HANDLE OF A JUG. The lower attachment is decorated with an inverted palmette and volutes in relief. The handle, which is made in one piece with the mouth of the vase, is divided into two ridges by a deep groove along its centre, and is embraced at the top by a moulded collar. The style of the palmette ornament belongs to the fifth century B.C.

Length, $5 \frac{1}{16}$ in. ( 12.9 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4995. Illustrated in the Cesnola Atlas, III, pl. LIX, 5. The crusty, green patina has been largely removed. Part of the mouth of the jug is still preserved. Acc. No. C.B. 196.

7II ATTACHMENT FOR THE SWINGING HANDLES OF A PAIL, in the form of two rings with an ornament of bud and volutes above.



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## IMPLEMENTS AND UTENSILS

Vase The attachment is cast in one piece with the rim of the pail, of which a part is still preserved.

Similar attachments occur on pails found in fifth-century tombs (cf. A. Zannoni, Scavi della Certosa, pl. LIV, 5 ; LXIII, 7 and 9).

Length, $2 \frac{3}{8}$ in. ( 6 cm .). Date of purchase uncertain (before 1906). Crusty, blue-green patina. The surface is considerably encrusted. Acc. No. G.R. 345 .

7 I2 HORIZONTAL HANDLE FROM A BOWL, in the shape of a horse-shoe. Similar handles are still in place on the strainer No. 640, where they are riveted to the under side of the rim. Uncertain period.

Length, from end to end, $2 \frac{7}{8}$ in. ( 7.3 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handhook, No. 490 I. Crusty, greenish patina. A rivet is attached at each end, round which are still preserved pieces of the vessel to which it helonged. Acc. No. C.B. 179. Illustrated, p. 247.

713 HORIZONTAL HANDLE, similar to the preceding, but smaller.
L.ength, from end to end, $2 \frac{3}{3}$ in. ( 6 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4902. Crusty, greenish patina. A rivet is attached at each end, and round it are preserved pieces of the vessel to which the handle belonged. Acc. No. C.B. 180.

7 If HORIZONTAL HANDLE OF A KYLIX, undecorated.
Sixth to fifth century B.C. Illustrated, p. $2+7$.
l.ength, $2 \frac{3}{16}$ in. ( 5.5 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4905. Crusty, green patina. The surface is somewhat corroded. Acc. No. C.B. 175.

715,7I6 PAIR OF HORIZONTAL HANDLES FROM A HY'DRIA. The round attachments have a rosette ornament, roughly worked in relief. Probably fifth to fourth century B.C. Illustrated, p. 247.

Length of each, from end to end, $2 \frac{5}{8} \mathrm{in}$. ( 6.7 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, Nos. 4903, 490t; 716 is illustrated in the Cesnola Atlas, III, pl. LVII, 4. The patina has been largely removed. On each attachment are three rivets, still in place. Acc. Nos. C.B. 182, 186.

720 HORIZONTAL HANDLE OF A BOWL. The attachments are in the form of ivy leaves, and the handle proper is decorated with knobs and collars. Probably Roman period. Illustrated, p. ${ }^{2}+7$.

## VASES AND KITCHEN UTENSILS

Length, $4 \frac{1}{5} \mathrm{in}$. ( 10.5 cm .) From Cyprus. Cesnola Collection. cf. J. L. Vase Myres, Cesnola Handbook, No. 4906. Illustrated in the Cesnola Atlas, III, pl. Handees LVIII, 4. Crusty, green patina. Acc. No. C.B. 18 i.

72 I HORIZONTAL SWINGING HANDLE OF A BOWL. The handle, which is in the form of a large open loop, is attached to the vessel by means of two rings. Part of the rim of the bowl is still preserved.

Uncertain date. Handles of this type occur both on early vases (cf. K. Schumacher, Antike Bronzen, pl. VIII, 32) and on specimens of the Roman period (cf. F. B. Tarbell, Naples Bronzes, fig. 203).

Length, $2 \frac{3}{4} \mathrm{in}$. ( 7 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4907. Crusty, green patina. Acc. No. C.B. 176. Illustrated, p. 247.

722 HORIZONTAL SWINGING HANDLE, similar to the preceding, but attached to the vessel by means of a hinge instead of two rings.

Length, $1 \frac{1}{2} \mathrm{in} .(3.8 \mathrm{~cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4908. Crusty, green patina. Acc. No. C.B. 185. Illustrated, p. 247.


723


723, 724 PAIR OF HORIZONTAL HANDLES OF A BOWL, curving up at each end and terminating in rams' heads. In the centre of each handle is a three-leaved ornament, modelled in high relief.

Probably Roman period. For a bowl with somewhat similar handles cf. F. B. Tarbell, Naples Bronzes, No. 189.

Length of $723,6 \frac{1}{\frac{1}{2}} \mathrm{in}$. ( 15.9 cm .); of $724,6 \frac{1}{8} \mathrm{in}$. ( 15.5 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, Nos. 4910, 4911. The crusty, green patina has been partly removed. The surface is somewhat corroded in places. Acc. Nos. C.B. 187, 189.

## INIPLEMENTS AND UTENSILS

725 HORIZONTAL HANDLE OF A BOWL. The handle curves upward and is decorated with three moulded bands. Each attachment ends in the head of an animal (doe?). Illustrated, p. 249.

Uncertain date.
Length, $6_{1}^{1}$ in. ( 15.9 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres. Cesnola Handbook, No. 4912. Illustrated in the Cesnola Atlas, III, pl. L'ill, 3. The patina has been largely removed. The surface is somewhat corroded. Acc. No. C.B. 193.

726 VERTICAL HANDLE OF A JUG, ending below in a vine leaf with roughly incised veins, and above in two arms (one missing) to embrace the rim of the vase. The stem of the handle has a plait ornament, in high relief, on its lower part, and a lanceolate leaf, incised, on its upper part.

Probably Roman period.
Length, $9^{\frac{7}{8}}$ in. ( 25.1 cm .). From Cyprus. Cesnola Collection. ef. J. L. Myres, Cesnola Handbook, No. 4895. llustrated in the Cesnola Atlas, IIl, pl. LIX, 2; L. P. di Cesnola, Cyprus, pl. IV, where it is said to have come from Dali. The crusty, green patina has been partly removed. One of the arms forming the upper attachment to the vase is missing. Ace. No. C.B. 197.


727 HORIZONTAL HANDLE OF A BOWL. The handle is roughly oval in shape and is decorated with moulded collars; below is an attachment with a design of palmette and volutes roughly worked in relief.

Roman period. For a similar handle of. K. Schumacher, Antike Bronzen in Karlsruhe, pl. VIII, 34.

Length, $3 \frac{5}{8}$ in. $(9.2 \mathrm{~cm}$.). Date of purchase uncertain (before 1906). Unpublished. Crusty,


727 green patina. A small piece from the attachment is missing. Acc. Nu. G.R. 330 .

# TOILET ARTICLES AND PERSONAL ORNAMENTS 

MIRRORS

The employment of mirrors (e้voatpov, speculum) for reflection goes back as far as Egyptian times, where they appear to have been in regular use from the Old Empire. They were also known to the Mycenaeans, and formed an indispensable article of the toilet in Greek and Roman times. These ancient mirrors, however, differ in many respects from those used nowadays; for until the Roman period at least, the material of mirrors was not glass, but burnished metal, preferably bronze, which was sometimes covered with gold or silver foil (cf. J. de Witte, Revue archéologique, XVII, 1868, pl. XIII, p. 373 f.; S. Reinach, Antiquités du Bosphore Cimmérien, pl. DXXI, 7, p. 82). At present, of course, the surface of the bronze is generally covered with a patina and can, therefore, no longer be used for reflection. In order to keep the mirrors bright the ancients provided them with lids (cf. Nos. 757 ff .), or kept them in cases of cloth or straw, of which traces are occasionally preserved (cf. Archäologische Zeitung, I876, p. 39, and G. Bénédite, Catalogue général des antiquités égyptiennes du Musée du Caire, Nos. 44001-4+102, Miroirs, pp. NXIX ff., pl. XXIV; also an example in the Morgan Collection in this Mluseum, No. P.M. 732. Furthermore, the ancient mirrors are as a rule of small dimensions, the diameter being generally under rather than over ten inches. Large mirrors were doubtless also used (cf. Lucian, Adversus indoctum, 29), but in the average household people seem to have been content with small specimens corresponding to our own hand-mirrors. Their form is mostly round or rounded; though square mirrors were also used, both by the Etruscans (cf. J. Martha, L'Art étrusque, p. 199, fig. 155), and the Romans (cf. No. 8fo). The disk itself is ofren either slightly convex or concave, in which cases the objects reflected were respectively enlarged or diminished in size.

Scenes depicted on vases and some terracotta statuettes show us the various ways in which mirrors were used. When they are not in use, we often see them hung up by a nail on the wall; otherwise, the woman holds the mirror in one hand while attending to her toilet with the other; or she supports it on her knee to have both hands free; or an attendant holds it

## IMPLEMENTS AND UTENSILS

Mirrors up for her-all the many ways, in fact, in which it is natural to use handmirrors. (For references see A. de Ridder, Daremberg et Saglio, Dictionnaire, speculum, p. 1423; also the terracotta statuette No. 12.229.19 in our collection.) The mirrors supported on a foot (cf. No. 751) were, of course, placed on the table.

The Egyptian mirrors, which served as prototypes to the Mycenaean and classical examples, were generally slightly oval in form and supplied with a tang which was inserted in a handle often decorated with various Egyptian motives (cf. G. Bénédite, Catalogue général des antiquités égyptiennes du Musée du Caire, Nos. 4 fooi- 4 102, Miroirs, and several examples in this Museum, in the Egyptian collection).

The Mycenaean mirrors which have been found at various localities such as Ialysos, Mycenae, Vaphio, Menidi, and Thoricos are round and were similarly provided with a handle, attached by two large nails (for references see A. de Ridder, op. cit., p. 1423). There are no examples in our coilection.

Greek
Mirrors

## GREEK MIRRORS

For Greek Mirrors in general see
A. de Ridder in Daremberg et Saglio, Dictionnaire, speculum (an excellent up-to-date resumé on the subject with many valuable references).
A. Dumont et I. Chaplain, Céramiques, 1888 , II, pp. 167 ff.
F. Pottier, in Dumont et Chaplain, Céramiques, I888, III, pp. $2 \neq 2 \mathrm{ff}$. (gives a list of Greek mirrors known at that time with references to their publications).
E. Michon, Monuments grecs publiés par l'association pour l'encouragement des études grecs, Nos. 19-20 (1891-1892), pp. 33 ff. (makes additions to Pottier's list).
H. F. de Cou, Argive Heraeum, II, p. 264, Nos. 5560 ff., pls. JCIII ff.

See also catalogues of the various collections of bronzes in museums or in private possession; and S. Reinach, Répertoire, II-IV, passim.

Greek mirrors can be divided into three classes, according to their shapes:-

## I. Mirrors with Handles

Of these the earliest known to us are the so-called Argivo-Corinthian mirrors, which date from the sixth century B.C. These consist of round disks with flat handles of flaring outline which are supplied above with a rectangular attachment and terminate below in a round piece; all three parts

## TOILET ARTICLES AND PERSONAL ORNAMENTS

of the handle are decorated with scenes in low relief. The disk and the handle are worked in one piece (cf. A. Furtwängler, Historische und philo-

Greek Mirrors logische Aufsätze Ernst Curtius gewidmet, I88f, pp. 179 ff.; A. de Ridder, Daremberg et Saglio, Dictionnaire, speculum, p. If24, fig. 6527, and the references there cited).

Another early type is that with a handle in the form of a human figure terminating in a suspension ring (cf. E. Pottier in Dumont et Chaplain, Les Céramiques de la Grèce propre, II, p. 243, and de Ridder, op. cit., p. I +25 , fig. 6531).

From the "Argivo-Corinthian" mirrors was evidently developed a form prevalent from the sixth to the fifth centuries B.C. and perhaps also later, in which the handle is similarly cast in one piece with the disk, but is of simpler shape and has no relief decoration. It is either perfectly plain or has some ornamental designs incised on the handle (cf. e.g. Argive Heraeum, II, pls. XCII ff.).

In another form in vogue at the same time, the disk was supplied with a tang in which a separate handle of bone, ivory, or wood was inserted. The tang was either in one piece with the disk, or made separately. The attachment which connected the handle with the disk was often ornamented with various decorations, incised or in relief, ranging from human or animal figures to decorative designs (for references cf. de Ridder, op. cit., p. I425). Sometimes a rectangular plaque ornamented with a scene in à jour relief was introduced between the mirror disk and the handle (cf. e.g. H. B. Walters, Catalogue of Bronzes in the British Museum, No. 302, and de Ridder, op. cit., p. I 425). The mirror disk is often ornamented along its edge with beading and tongue pattern. Rarely the back was also decorated with a scene either incised (cf. a round archaic mirror found in 1904 at Kelermes in the Kouban district, which has an engraved design on the back, [cf. B. Pharmakowsky, Archäologischer Anzeiger, XX, I 005 , p. 59; G. Radet, Revue des études anciennes, X , 1908, 128 , fig 26]; and one from Greece, Archäologischer Anzeiger, 1904, pp. 23, 24), or in relief (Gazette archéologique, 1878 , p. 25, fig. I4I). But as a rule the chief ornamentation was confined to the handle.

## FROM CYPRUS (CESNOLA COLLECTION)

The disk, which is nearly circular, is worked in one piece with the tang and has an attachment with an incised design of two volutes and a palmette at the junction. The mirrors are all cast.

Similar mirrors have been found in a sixth-century tomb at Amathus,

## IMPLEMENTS AND UTENSILS

Greer Cyprus (cf. British Museum Excavations in Cyprus, p. io2, fig. 148, 2, 3 ).
Mirrors The examplesinourcollection must date from approximately the same period.

## 740

Diameter, $6 \frac{1}{4} \mathrm{in}$. ( 55.9 cm .). Length, with tang, $8 \frac{9}{16}$ in. ( 21.7 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4794. The green patina has been largely removed, and the surface is somewhat corroded. Acc. No. C.B. iqs.

## 74I

Diameter, $5^{\frac{1}{8}}$ in. ( 13 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4795. The green patina has been largely removed and the surface is somewhat corroded. The tang is broken off. Acc. No. C.B. i46.

742 There is a slight rim on the mirror side.

Diameter, $6 \frac{1}{8} \mathrm{in}$. ( 55.5 cm .). Length,


740 with tang, $7 \frac{1}{2} \mathrm{in}$. (I9 cm.). cf. J. L. Myres, Cesnola Handbook, No. 4796. The green patina has been largely removed and the surface is considerably corroded. Largish pieces are missing. Acc. No. C.B. I41.

## 743

Diameter, $5^{\frac{7}{8}}$ in. ( 14.8 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4800. Greenish patina. The surface is much corroded. Several pieces, as well as the end of the tang, are missing. Acc. No. C.B. I63.

## 744

Diameter, $5^{\frac{3}{4}} \mathrm{in}$. ( 14.6 cm .). Length, with tang, $7 \frac{3}{8} \mathrm{in}$. ( 18.7 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4797. Illustrated in the Cesnola Atlas, III, pl. LXI, 3. The green patina has been largely removed, and the surface is considerably corroded. A largish piece is missing. Acc. No. C.B. 156.

## 745

Diameter, $6 \frac{5}{16} \mathrm{in}$. ( 16 cm .). Length, with tang, $8 \frac{9}{16} \mathrm{in}$. ( 2 I .8 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4798. The green patina has been largely removed, and the surface is much corroded. Acc. No. C.B. i42.

746 There is a slight rim on the mirror side.
 J. L. Myres, Cesnola Handbook, No. 4799. The green patina has been partly removed and the surface is somewhat corroded. Acc. No. C.B. 136.

TOILET ARTICLES AND PERSONAI. ORNAMENTS
747 Part of A handie front A mirror. Only the attach- Greek ment and a small part of the tang are preserved. The attachment has a Mirrors design of volutes in relief; at the top is a flanged edge into which the mirror fitted, which was therefore cast separately, not in one piece with the tang as Nos. $7 \not{ }^{\circ} \mathrm{off}$.

The design of the volutes is in the style of the sixth to fifth centuries B.C.

Length, 3 in. ( 7.6 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4 Sor. The green patina has been partly removed. Acc. No. C.B. 150 .


747

## II. Mirrors Supported on a Stand

The stand supporting the mirror is in the form generally of a female figure and occasionally of a male figure or an architectural member. On each side of the attachment, connecting the mirror disk with its stand, small figures were introduced, while the disk itself was at times similarly decorated along its edge with animal or floral motives. The supporting figure was generally mounted on a base and the back of the disk was often decorated with concentric circles.

This type of mirror remained in vogue from the middle of the sixth to the end of the fifth century B.C.

75 I The stand is in the form of a female figure, standing in a somewhat rigid pose and dressed in a sleeveless Doric chiton, which falls in simple, straight folds. She holds her right arm extended in front of her, with the palm of the hand outward. With the left hand she lifts a fold of her drapery. Her hair is arranged in simple fashion, parted in front

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Greek
and coiled at the back around a small fillet which encircles her head. The mirror-support terminates at each end in a rosette and is decorated in the centre with a lotos flower and scrolls, lightly incised. The disk is ornamented behind with concentric circles. The figure rests on a small round base, supported on three lion's feet, which is ancient and belongs to it; it is decorated with a moulding of tongue pattern.


751

From the style of the figure the mirror can be dated in the transitional period, about $480-460$ B.C. The execution is careful.

Total height, $16 \frac{7}{15} \mathrm{in}$. ( 11.8 cm .). Height of the figure itself without the base, $6 \frac{1}{2}$ in. ( 16.5 cm .). Purchased in 1906 . Provenance unknown. The mirror was cast in three pieces: the disk, the statuette with the support (solid), and the base

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256
$$

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(hollow). Published by G. M. A. R [ichter] in the Museum Bulletin, February, 1907. p. 18, fig. 3. Patina crusty green with blue patches; a considerable part of this has heen removed from the front of the figure. The surface of the mirror is somewhat corroded, but the figure, which is cast solid, is in excellent condition, except that the front half of the left fout and the fingers of the right hand are missing. The disk was broken off and attached. Acc. No. o6.1059 $a$ and $h$.

For other mirror supports without disks, cf. Nos. $28,77,86$.

## III. Mirrors with Covers

These consist of two parts: the round mirror disk and a cover fitting over it. The cover was often attached to the disk by means of a hinge and then opened at right angles. Sometimes a suspension ring was added to the hinge, and another ring was fixed to the opposite side for raising the lid. At times a separate flat disk was placed between these two parts, which thereby formed a box (A. de Ridder, Collection de Clercq, Ill, 535, p. 324 ).

A large number of these mirrors are decorated on the outside of the cover with a scene in relief. This either covers the entire surface (cf. Nos. 760,765 ) or permits the surface of the lid to appear as a background (ct. Nos. $757,758,759,761,766,767,775$ ). Round the relief is generally a moulded border, and the outside of the rim is sometimes similarly decorated. The inside of the lid was variously treated. Sometimes it was polished like a mirror disk to serve likewise for reflection, or it was omamented with concentric circles; or again it was decorated with an incised scene, silvered occasionally (for the latter cf. e.g. M. Collignon, Bulletin de correspondance hellénique, i885, pl. IX; J. Dumont, Bulletin de correspondance hellénique, 1884, pl. XVI). In the commoner examples the two outer surfaces of the mirror were ornamented with concentric circles and beading placed along the edge.

Mirrors of this type occur from the middle of the fifth century down to Hellenistic times.

The disks and covers of the following mirrors are cast; but the decorative reliefs are repoussé and tooled.

757 On the cover is a female head in relief, profile to right. The hair is arranged in loose flying locks, and she wears an opisthosphendone, a band or kerchief with which the hair was caught up behind, and an earring in the shape of a pendant rosette. The treatment of the eye belongs to

## IMPLEMENTS AND UTENSILS

Greek what is known as the transitional type, being neither in full front as on archMirrors aic reliefs, nor yet wholly in profile. The outlines of the iris and the pupil are lightly incised. The probable date of the relief is the second half of the fifth century B.C. The head bears a certain resemblance to types which occur on the coins of Syracuse and Southern Italy in the last quarter of the fifth century B.C.

Encircling the design is a moulded band. The mirror disk has a slightly raised rim on its upper side into which the cover fits; below, it has a cylindrical rim, decorated with moulded bands. On the under side of the disk are concentric mouldings.


757

Diameter, $5 \frac{3}{8} \mathrm{in}$. ( 13.5 cm .). Purchased in 1906. Said to have been found in Akarnania. Mentioned in the Museum Bulletin, February, 1907, p. 18. Patina bluish and crusty. The preservation is good; only the pin of the hinge and the handle are missing. Acc. No. 06.106r.

758 On the cover is a female head, three-quarters front to left, in very high relief. She has long, wavy hair which falls in loose curls about the head. Incised lines, drawn with great delicacy, are used to indicate the brows and lashes and the shorter hairs on the forehead. The nobility of the features shows that this is an ideal head, not a portrait, and probably represents one of the greater divinities. Among these Aphrodite is the most likely to be the subject, both from her appropriateness to serve as the decoration of a mirror and from the action of the right hand, which holds a lock of hair, a characteristic of some representations of that goddess. The distinctly sculpturesque character of the head (the relief is so high that it might have been the section of a bust modelled in full round) and the somewhat forced introduction of the hand suggest that the artist has here reproduced a statue of Aphrodite. Should this be so, it would furnish us with a new type of Aphrodite, with all the loveliness shown in other representations of that goddess, but with an added element of severity which is unfamiliar. The large style of the modelling and the type of face with the low forehead, the heavy, strongly marked eyelids, and the simple

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contour of the cheeks place this head not later than the end of the Pheidian age.

Greek
Mirrors

In both execution and preservation this is one of the most beautiful of all known Greek mirrors.

The cover has a rim which fits on the bevelled edge of the mirror disk. The latter is provided with a cylindrical rim and has concentric mouldings on the under side. Round the edge of the mirror, and on the outside of both rims are moulded bands. On the cover is a small ring handle.

Diameter, $7 \frac{7}{5}$ in. ( 20 cm .) . Purchased in 1907. For the provenance see No. 760. Published by E. R[obinson] in the Museum Bulletin, April, 1908, pp. 68-69, fig. 2. Patina green. The preservation is excellent, only the tip of the nose being restored and a few bits in the hair missing. Acc. No. 07.255.


759 On the cover is an ideal head of a maiden, full front, in high relief, with her hair loose and flying about her head in wavy locks. In her ears, which are shown full front instead of in profile, she wears earrings of the simple rosette shape. All the features, as well as the locks of hair, are represented with great precision of outline.

In the absence of definite attributes it is impossible to identify this head with any special goddess. Heads of the same general character with flying hair begin to appear on the coins of various Greek cities about the end of the

Greek
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fifth century B.C., where they are associated with different divinities and local nymphs, according to the place for which they were struck. This mirror dates from the same period, as is seen from the broad, round face, the low forehead, the simple modelling, and the absence of any tendency toward sentimentality or emotion in the expression. Unlike the mirror just described (No. $75^{\circ}$ ), the treatment of the head, especially in the arrange-


759
ment of che hair, is not sculptural, but seems to have been designed for the round setting in which it appears. Like its companion, this mirror is of exceptional beauty and in a remarkable state of preservation.

Encircling the design are moulded bands. The mirror disk is surrounded by a border of silver plating, in the form of a wreath, the details of which are indicated with roughly incised marks. It has a slightly raised rim on its upper side into which the cover fits. Below, it has a cylindrical rim decorated with moulded bands. On the under side of the disk are concentric mouldings. There is a hinge joining the cover and the disk.

Diameter, $6 \frac{1}{8} \mathrm{in}$. ( 15.5 cm .). Purchased in 1907. For the provenance see No. 760. Published by E. R[ohinson] in the Museum Bulletin, April, r908, pp. 67,68 , fig. 1. The green crust with which it was partly covered has heen almost entirely removed, and the color is now a rich brown; in some places the gold tint which the surface had originally can still be seen. The preservation is practically perfect; only a few insignificant pieces of the relief are missing. Acc. No. 07.256.

760 This mirror is exhibited in three parts: (a) the mirror proper; Greek (b) the cover, the inside of which is decorated with an engraved design; Mirrors (c) the relief, which was attached to the outside of the cover and which is now mounted on a separate modern disk.

The engraved design represents Herakles and Atlas. Herakles has placed his club and quiver on the ground, and is on the point of taking the

weight of heaven from Atlas. He is beardless and nude, except for the lion's skin which is swung over his left arm. Atlas is represented as a bearded old man with long, bushy hair. He wears high laced boots with flaps at the top (endromides) and a short tunic (exomis) of the type distinctive of the laboring classes, which was fastened only on the left shoulder, leaving the right arm and shoulder bare. The heaven is represented by two horizontal lines crossing the top of the design, not in the usual manner as a rock or ball.

The drawing is excellent, being spirited yet careful. In both figures the muscles are indicated by shaded lines, those of Herakles being represented with considerable detail. The style of the drawing, as well as of the relief on the cover, places this mirror in the second half of the fifth century.

For another example of Herakles and Atlas represented on a mirror cf. E. Gerhard, Etruskische Spiegel, II, pl. is7.

## IMPLEMENTS AND UTENSILS

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The relief from the outside of the cover is unfortunately in a fragmentary condition. It is due to the skill of M. Alfred André that the existing portions have been sufficiently cleaned and repaired to show the beauty of the modelling and the spirit of the composition. Hitherto it has not been possible to determine the subject represented, though the artist had evidently

a definite mythological scene in mind. A male figure, identified by the lion's skin tied under his throat as either Herakles or Theseus, is represented in violent struggle with a woman who is falling to the ground. She wears a thin, clinging chiton and a himation which envelops the lower part of her body and flies behind her. She seems to be resisting the attack with all her might. With her left hand she has seized her opponent under the armpit and is pushing him from her. Her right arm, now missing, was raised and was perhaps grasped by her opponent. The modelling in both figures suggests intense muscular exertion. On a rock by the male figure lies a dead eagle. Around the feet of the two figures appears a long inscription which is meaningless and a modern addition.

There is no legend known to us of a contest of either Herakles or Theseus with a woman, except their struggles with the Amazons. That the female figure here represented cannot be an Amazon is shown by the long flowing

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garments which she wears. The presence of the eagle suggests a connection with the Prometheus myth; but there is no extant legend associating any

Greek
Mirrors woman with Herakles' liberation of Prometheus. On an archaic Etruscan mirror in the British Museum (H. B. Walters, Catalogue of the Bronzes in the British Museum, No. $54^{2}$ ) Herakles is represented carrying off a woman who seems to be resisting him. She is there inscribed "Mlacush", which has been connected with "Malacisch ", a word which sometimes occurs on Etruscan bridal toilet scenes and has, therefore, been interpreted as the epithet of a bride. But if Mlacush is the Erruscan rendering of a Greek name, the scene referred to may represent an exploit of Herakles not known through literature. In that case it is possible that our relief represents the same subject, though the introduction of an eagle, which does not occur on the Etruscan representation, makes this possibility only slight. For a scene in which Theseus is grappling with a woman there is not even this analogy.

The mirror disk has a slightly raised rim on its upper side into which the cover fitted. Below, it has a cylindrical rim decorated with moulded bands. On the under side of the disk are concentric mouldings.

Diameter, $6 \frac{1}{\frac{1}{1}} \mathrm{in}$. ( 16 cm .). Purchased in 1906. This mirror is one of seven which were found at Vonitza in Akarnania. Of these one is in the British Museum (Unpublished; Inventory No. 1904, 7-8, 1 and 2); the others are Nos. 758, 759. 761, 766, 767 in this Museum. Unpublished. The patina, blue-green and crusty, has been removed from the surface of the engraved design and from portions of the relief. The following restorations have been made: a piece between the right foot and the thigh of the draped figure, part of the drapery between the figures, and the left knee of the male figure. The illustration shows what parts are missing. Acc. No. 06.1228.

76I On the cover is an $\grave{a}$ jour relief of a conventional floral pattern consisting of a palmette rising from the heart of a bell-shaped flower, from each side of which springs a curly tendril ending in a bud, the whole resting upon a bed of akanthos leaves. In design and execution this omament is of great beauty. Every leaf and petal is modelled minutely but without impairing the freedom and animation of the whole. The mirror probably belongs to the end of the fifth century B.C.

The cover has a rim which fits on the bevelled edge of the mirror disk. The latter is provided with a cylindrical rim and has concentric mouldings on its under side. Round the edge of the cover and on the outside of both rims are moulded bands.

Diameter, $6 \frac{1}{5}$ in. ( 15.5 cm .). Purchased in 1907 . For the provenance see

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Greek Mirrors

No. 760. Published by E. R[obinson] in the Museum Bulletin, April, 1908, pp. 68,69 , and tailpiece on p. 70 . The patina on the cover is bright green, on the inside blue and green. The preservation is excellent, only the centre petal of the palmette being missing and a small tendril on the right restored. Acc. No. 07.257.


761
765 On the cover is a relief representing two Pans engaged in a quarrel, with Eros intervening. One Pan has seized the other by the arm and is pulling him away against his will. Eros, who has apparently just arrived on the scene, is about to strike a blow at the remonstrant. The object with which he is striking seems to be one of those bags which are frequently represented in the hands of Greek children, in which they carried their balls and other toys. The locality of the scene is indicated as a mountain side by the rocky ground and the flowering plants. The two Pans are bearded and have shaggy hair and goat's ears, horns, legs, and tails. The one on the left wears an animal's skin as a cloak, two ends of which are tied together at his throat. Eros is represented as a youth with long hair and large wings; except for the drapery which is swung over his left shoulder he is nude.

Both the composition of this group, which is skilfully adapted to the circular field, and the execution are excellent. The thick-set bodies of the Pans with their coarse-featured faces are well contrasted with the slender figure of Eros, and the physical exertion and intentness of all three are splendidly portrayed. The unusually good preservation of the mirror enables us to appreciate the beautiful modelling and the minute care with which the artist has represented every detail, such as the faces of the Pans, the hair on their heads and legs, and the feathers on the wings of Eros.

## TOILET ARTICLES AND PERSONAL ORNAMENTS

The date of the mirror cannot be later than the middle of the fourth century B.C., as the type of the Eros betrays none of the influence of Praxi-

Greek Mirrors teles and his period.

The mirror disk has a groove round the edge on its upper side into which

the cover fitted; below, it has a cylindrical rim, decorated with moulded bands. On the under side of the disk are concentric mouldings.

Diameter, $5^{\frac{1}{4}}$ in. ( 13.3 cm .). Purchased in 1907. From the Peloponnesos; said to have come from Elis. Published by E. R[obinson] in the Museum Bulletin, April, 1908, p. 69 f., fig. 3. The cover, which was considerably damaged, has been skilfully repaired and cleaned by M. Alfred André; the rim of the cover is modern and was introduced to hold the fragments of the telief together. The hinge is missing, but there are clear traces of its original outline. Acc. No. 07.259.

766 On the cover is a relief representing Dionysos and Ariadne. Dionysos, recognizable by his long hair and effeminate appearance, is seated on a rock to the left. With his left hand he holds up a corner of his drapery, leaving the front of his body nude. Ariadne, seated on a rock opposite Dionysos, is resting her right hand on the head of a panther which stands between them. She is clothed in a sleeveless chiton, has long, wavy hair, and wears a necklace. Above, flying from Ariadne to Dionysos, was probably an Eros. Of the figure itself nothing is left, but its silhouette is clearly indicated on the bronze.

The execution is careful, but the composition conventional. The style is that of the fourth century B.C.

For a vase-painting with a similar scene of Dionysos, Ariadne, and Eros, see C. O. Müller-F. Wieseler, Denkmäler der alten Kunst, 2, 424.

## IMPLEMENTS AND UTENSILS

Greek
The cover has a rim which fits on the bevelled edge of the mirror disk. Mirrors The latter is provided with a cylindrical rim, decorated with moulded bands. On the under side of the disk are concentric mouldings. There is a suspension ring attached to the rim.


766
Diameter, $8 \frac{1}{8}$ in. ( 20.5 cm .). Purchased in 1906. For the provenance see No. 760 . Unpublished. The patina on the relief, hright green and crusty, has mostly been removed, disclosing a light brown which is not the color of the bronze itself; on the face of the mirror the patina is blue and green on which are patches of light brown. The relief is much corroded, and important parts of both figures, as well as the whole of the Eros above, are missing. The hinge connecting the cover and the mirror disk has disappeared; but there are clear traces of its original outline. Acc. No. 06.1229.

767 On the cover is a relief of the head of a woman, profile to left. Her hair is carried back from her forehead in parallel waves, which are commonly known as the "melon" style, and gathered in a knot behind; it is encircled by a broad fillet decorated with incised patterns. She wears an earring of the open ring type ending in an animal's head.

The detailed modelling of the eye and the firmness of the chin lend a certain individuality to the face of this relief. It is probably a work of the latter part of the fourth century B.C. For a similar mirror see H. B. Walters, British Museum Catalogue of Bronzes, No. 32 ir , pl. XXXII.

Encircling the design is a band ornamented with a rope pattern. The

## TOILET ARTICLES AND PERSONAL ORNAMENTS

cover has a rim which fits on the bevelled edge of the mirror disk. The latter is provided with a cylindrical rim below, and has concentric mouldings

Greer Mirrors on its under side. On the outside of both rinss are moulded bands. There is a suspension ring above.

Diameter, $6 \frac{1}{1} \mathrm{in}$. ( 15.8 cm .). Purchased in 1907. For the provenance see No. 760. Published by E. R[obinson] in the Museum Bulletin, April, 1908, p. 70, fig. 4. Patina bright green with patches of blue on the interior. The head has been slightly restored; parts of the upper lip, the two lowest waves of the hair, with the knot, and the base of the neck being modern. The suspension ring has been broken and reattached, with slight restorations in plaster. The hinge


767 is missing, but there are clear traces of its original outline. Acc. No. 07.25\%.

775 On the cover is a relief of Eros represented as a nude, chubby infant of Hellenistic type with wings spread. He is seated on rocky ground holding up in his left hand a slender oval object. His right hand, now missing, apparently rested on the rock by his side. Behind the head is a cluster of akanthos leaves. Probably third century B.C.


775
Encircling the design are concentric mouldings. The cover has a slight rim which fits on the bevelled edge of the mirror disk. The latter is provided with a cylindrical rim below, decorated with moulded bands. On the under side of the disk are concentric mouldings.

Diameter, $5 \frac{1}{9}$ in. ( 13 cm .). Purchased in 1906 . Provenance unknown. Mentioned in the Museum Bulletin, February, 1907, p. 18. Patina light green

## IMPLEMENTS AND UTENSILS

Greek
Mirrors
and crusty in parts; on the surface of the mirror there are patches of blue. The bronze of which the relief is made is very thin and the corrosion has broken it open in several places. The parts actually missing are the lower part of the right wing, a small piece of the left wing, the right hand, the front of the left foot, a portion of the rocks, and pieces of the akanthos leaves. There are no remains of the handle or the hinge. Acc. No. of.rofo A and B.

776 The cover is missing. On the under side are concentric circles.
Diameter, $4^{\frac{7}{5}}$ in. ( 9.7 cm .). Purchased in 1896 . Unpublished. Patina green and crusty. Acc. No. G.R. 127.


777 The cover is missing. On the under side are concentric circles.
Diameter, $4^{\frac{5}{8}}$ in. ( 11.8 cm .). Purchased in 1896 . Unpublished. Patina green and crusty: Acc. No. G.R. izs.

IROMCYYRUS (CESNOLA COLLECTION)
These consist of heavy circular disks, provided with low cylindrical rims. They were made in pairs, and polished (and sometimes silvered) respectively on the recessed and flat sides, the latter being provided with a bevelled edge, into which the other fitted like a cover. Both polished surfaces were thus protected. The unpolished sides were ornamented with concentric-circle ornaments and concentric mouldings. There are no actual pairs in this collection.
(a) With flat side polished.

780 On the recessed side there are seven concentric-circle ornaments and


780
two concentric mouldings.

## TOILET ARTICLES AND PERSONAL ORNANENTS

Diameter, $5 \frac{11}{16}$ in. ( 14.4 cm ). cf. J. L. Myres, Cesnolat Handbook, No. 4802. The green patina has been largely removed. The surface is slighty corroded. Acc. No. C.B. $I_{3} 8$.

78 I On the recessed side are concentric mouldings.
Diameter, $4 \frac{1}{4} \mathrm{in}$. (II. 4 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4803. The green patina has been partly removed. Acc. No. C.B. ifir.

782 On the recessed side are concentric mouldings.
Diameter, $4 \frac{9}{16} \mathrm{in} .(11.6 \mathrm{~cm}$.). cf. J. L. Myres, Cesnola Handbook, No. 4 Sot. The green patina has been partly removed. Acc. No. C.B. 15 I.

783 On the recessed side are concentric mouldings.
Diameter, $4^{\frac{1}{2}}$ in. ( 11.4 cm .). cf. J. L. Myres, Cesnola Handbook, No. $4^{2} \mathrm{~F}$. The green patina has been partly removed. There is a hole in the disk. Acc. No. C.B. ${ }_{15}$ S.

784 On the recessed side are seven concentric-circle ornaments and two concentric mouldings.

Diameter, $4^{\frac{9}{16}}$ in. ( 11.6 cm .). cf. J. L. Myres, Cesnola Handbook, No. $4^{\text {Sob }}$ The green patina has been removed in places and the surface is somewhat encrusted. Acc. No. C.B. 137.


785 On the recessed side are seven concentric-circle ornaments and two concentric mouldings.

Diameter, $4 \frac{1}{2}$ in. ( 1 I .4 cm .). cf. J. L. Myres, Cesnola Handbook, No. $4^{807}$. The green patina has been almost entirely removed and there are several holes in the disk. Acc. No. C.B. ifo.

786 The disk has no bevelled edge. There are two concentric mouldings.

Diameter, $2 \frac{11}{16}$ in. ( 6.8 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4808 .

## IMPLEMENTS AND UTENSILS

Greek The green patina has been partly removed and the surface is slightly corroded. Mirrors Acc. No. C.B. 147.
(b) With recessed side polished

787 On the flat side are concentric mouldings. Illustrated, p. 269.
Diameter, $5 \frac{7}{\frac{7}{8}}$ in. $(15 \mathrm{~cm}$.). cf. J. L. Myres, Cesnola Handbook, No. 4809. The green patina has been largely removed and the surface is slightly corroded. Acc. No. C.B. ${ }^{4} 4$.

788 On the flat side are concentric mouldings.
Diameter, $5^{\frac{3}{4}}$ in. ( 14.6 cm .). cf. J. L. Myres, Cesnola Handbook, No. 48 r . The green patina has been largely removed and the surface is slightly corroded. Acc. No. C.B. 139 .

789 A swinging handle is attached to the disk by means of attachments in the form of bulls' heads. On the flat side are concentric mouldings. Illustrated, p. 269.

Diameter, $4^{\frac{3}{8}} \mathrm{in}$. ( $\mathrm{If} . \mathrm{I} \mathrm{cm}$.). Length, with handle, $6 \frac{1}{4} \mathrm{in}$. ( 15.9 cm .). cf. J. L. Myres, Cesnola Handbook, No. $4^{811}$. Illustrated in the Cesnola Atlas, III, pl. LXI,, $2 ;$ L. P. di Cesnola, Cyprus, pl. IV, where it is said to have come from Dali. The green patina has been partly removed and the surface is slightly corroded. Acc. No. C.B. 149 .

790 On the flat side are concentric mouldings.
Diameter, $3 \frac{3}{16}$ in. ( 8.1 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4812 . The green patina has been largely removed and the surface is slightly corroded. Acc. No. C.B. 159.

## 79I On the flat side are concentric mouldings.

Diameter, $2 \frac{15}{15} \mathrm{in}$. $(7.4 \mathrm{~cm}$.). cf. J. L. Myres, Cesnola Handbook, No. 4813. The green patina has been largely removed and the surface is slightly corroded. Acc. No. C.B. 157.

792 On the flat side are concentric mouldings.
Diameter, $2 \frac{15}{16} \mathrm{in} .(7.4 \mathrm{~cm}$.). cf. J. L. Myres, Cesnola Handbook, No. 4814. The green patina has been partly removed and the surface is slightly corroded. Acc. No. C.B. 160.

793 On the flat side are concentric mouldings.
Diameter, $2 \frac{15}{16} \mathrm{in}$. $(7.4 \mathrm{~cm}$.). cf. J. L. Myres, Cesnola Handbook, No. 4815 . The green patina has been largely removed and the surface is slightly corroded. Acc. No. C.B. 162.

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## ETRUSCAN MIRRORS

For Etruscan Mirrors in general see
E. Gerhard, Etruskische Spiegel I-IV, 1843-1867; V, by A. Klügmann und G. Körte, 1884-1897.
A. de Ridder, Daremberg et Saglio, Dictionnaire, speculum, pp. $1+27 \mathrm{ff}$.
K. Schumacher, Eine praenestinische Ciste in Karlsruhe, 1891, p. 20 f .
G. Matthies, Die praenestinischen Spiegel, 1912.
P. Ducati, Contributo allo studio degli specehi etruschi figurati, in Mitteilungen des archäologischen Instituts in Rom, 1912, pp. 243 ff .
J. Martha, L’ Art étrusque, I889, pp. 542 ff .
A. Furtwängler, Antike Gemmen, III, p. I 89.

There are three types of Etruscan mirrors, corresponding to those prevalent among the Greeks; namely, mirrors with handles, mirrors with stands, and mirrors with covers.

## I. Mirrors with Handles

Mirrors with handles form by far the most numerous class, almost two thousand of them having already been unearthed. Their chief interest lies in the decorations which ornamented the backs of the mirror-disks, which were generally incised, and sometimes executed in relief (for the latter cf. e.g. H. B. Walters, Catalogue of Bronzes in the British Museum, pl. XVIII).

The time of their manufacture extended from the sixth to the third century B.C., and within this period the shape of the mirrors underwent certain important modifications. At first, that is, at the end of the sixth century and during the fifth century B.C., the mirror disk is round and heavy and is provided with a tang, which either projects directly from the disk or has an intervening attachment (cf. e.g. mirrors found in the Certosa cemetery, A. Zannoni, Scavi della Certosa, pls. XX, sep. 39; XXXXIII, sep. 86; XLIX, sep. 101; LXXXVI, sep. 252). At the end of the fifth century and during the fourth century the tangs become gradually longer and wider and the attachments larger; the mirror-disk itself grows lighter and is generally slightly convex, with the rim bent up on the back or concave side to protect the incised design (cf. L. A. Milani, Monumenti scelti, pp. 8 ff., III-V, and text $\mathrm{I}_{5}$, fig. 7, pl. V, 17 , where a mirror of this type is stated to have been found in a grave at Populonia which can be dated about 400 B.C.). Toward the end of the fourth century and during the third century B.C. the form again changes. The handle, which was heretofore formed by a tang

Etruscan inserted in a wooden or bone covering, now is cast in one piece with the Mirrors disk and terminates generally in the head of an animal. The attachment is now strongly curved outward, and the disk is sometimes round, sometimes pear-shaped (cf. e.g. E. Gabrici, Necropoli di età ellenistica a Teano dei Sidicini, Monumenti antichi, XX, 1910, p. 135, fig. 103, where a mirror of this form is said to have been found in the necropolis of Teanum, which belongs to the second half of the fourth century B.C.).

Mirrors with handles cast in one piece with the disk have been found chiefly at Praeneste (cf. D. Vaglieri, Notizie degli scavi, 1907, figs. 18-23, pp. 479-481), and were therefore probably both invented and mainly manufactured there. Though in many respects to be distinguished from the genuine Etruscan products, they must still be regarded as intimately connected with them (cf. G. Matthies, Die praenestinischen Spiegel, especially pp. 57 ff.).

The subjects represented on the mirrors are almost entirely based on Greek mythology, native legends being rarely treated (for isolated examples cf. Bullettino, 1868, p. 216; Annali dell’ Instituto, 1879, p. 38 ; Monumenti dell' Instituto, XI, pl. III). This fact shows the close dependence of Etruscan artists on Greek models. It has often been pointed out that these models must have been chiefly the designs on Greek vases, since Greek mirrors with incised decorations are not so common. But though vases which were imported in such quantities into Etruria naturally must have supplied many ready-made motives, the Etruscan artist would not confine himself solely to these, but borrow freely from all Greek works at his disposal. Round the design is generally a floral wreath, while the attachment is also variously decorated.

For the question of the technique of the engraved designs of. Introduction pp. xxiiff.

The execution of the scenes on these mirrors is often very coarse and cursory. Sometimes, however, they are of great beauty (cf. e.g. No. $8_{14}$ of our collection) and approximate so closely to the pure Greek style that they must either have been executed by Greeks residing in Etruria, or at any rate by artists who were thoroughly imbued with the Greek spirit.

An interesting feature of these mirrors is the fact that inscriptions are often added to the scenes, generally giving the names of the various personages represented (a custom probably borrowed from Greek vase-paintings), rarely that of the artist (cf. G. Matthies, op. cit., p. 47 f.). In the earlier examples they are Etruscan, both in script and in form, and occur with great frequency (cf. E. Gerhard, Etruskische Spiegel IV, pp. ioo ff.,

## TOILET ARTICLES AND PERSONAL ORNAMENTS

V, p. 233 f.). Later, in the Praeneste specimens, they become rare and are in Latin, which was the language current in that district (cf. Matthies,

## Etruscan

 Mirrors op. cit., pp. +4ff.; E. Gerhard, op. cit. IV, p. 100, V, p. 235).FIFTH TO FOURTH CENTURY B.C.
The following mirrors, which are all cast, are provided with a tang for insertion in a wooden or bone handle (preserved in No. 798).


797
797 The engraved design represents Aphrodite persuading Helen to join Paris. In the centre stands Aphrodite identified by her Etruscan name Turan (HAロVT) inscribed at her left. She turns toward Helen holding her coaxingly by the chin. Helen $(1$ AИIV $)$ is seated on a rock and seems to resist the persuasions of Aphrodite. With one hand she is holding the goddess by the wrist to push her gently aside; the other she is hiding behind her back, either refusing to yield it to the goddess, or perhaps because

## IMPLEMENTS AND UTENSILS

Etruscan she does not want to accept a gift which Aphrodite may have held in her Mirrors proffered right（this hand and the object which it possibly held have been mostly effaced）．Behind Aphrodite，Paris or Alexander（ヨロTИヨて）JA） is seated on a rock，leaning on a staff upon which he rests his chin，quietly watching the scene．He wears a mantle which leaves most of the upper part of his body uncovered．Aphrodite and Helen both wear a long－ sleeved chiton，a himation，a diadem，earrings，a necklace，and bracelets． Around the design is an ivy－wreath；on the attachment are a palmette and scrolls；a palmette is also engraved at the bottom of the front or mirror side；and along the edge is a tongue pattern．The mirror disk is flat，with the edge slightly bent up on the back or engraved side．

The drawing of the design is of great beauty，and was probably closely copied from a Greek original．

The same subject is represented on other mirrors，but these are greatly inferior in execution（cf．E．Gerhard，Etruskische Spiegel，pls．CXCVII and CXCYIII）．

Length，with handle， $9^{\frac{1}{2}}$ in．$\left(24.0 \mathrm{~cm}\right.$ ．）．Diameter， $6_{16}^{16} \mathrm{in}$ ． 15.4 cm ．）．Pre－ sented by Henry G．Marquand，1897．From Perugia．Published by A．Klüg－ mann und G．Körte in Gerhard，Etruskische Spiegel，V，pl． 107 and p．1＋o．Patina green，hard，and smooth．The handle in which the tang was inserted is missing． Acc．No．G．R． 131 r．

798 The engraved design represents Athena between Thalna and Sime． In the centre stands Athena，fully armed，identified by her Etruscan name Menrva（ $コ$ コロレヨ M ）．Before her is a nude female figure with averted head，inscribed Thalna（ $A \forall \vee A O$ ）．She is seated on her drapery，a fold of which she clasps between her knees．Behind Athena is a nude Satyr， inscribed Sime（ ヨMIて），holding a thyrsos，and also turning his head away from Athena．The latter wears an Attic helmet with upturned cheek－ pieces，the aegis，a long sleeveless chiton，a necklace，earrings，and bracelet． In one hand she holds a spear，in the other a round shield．Thalna has ear－ rings，necklace，bracelet，and diadem．All three figures wear low shoes． Between Athena and the Satyr is a flower on a long stem．The design is encircled by a garland of ivy，terminating in a design of palmette and volutes on the attachment．The mirror disk is slightly convex and has beading along the edge．The rim is sharply bent up on the back or engraved side． The handle，of bone，in which the shaft was inserted is still preserved．

The drawing，though more careful than on the average Etruscan mirror， is somewhat mannered．

Sime，as the name of a Satyr，occurs in other cases；cf．E．Gerhard，

## TOILET ARTICLES AND PERSONAL ORNAMENTS

Etruskische Spiegel, IV, pl. CCXCIX. Many identifications have been suggested for Thalna, e.g. Artemis, Thallo (the goddess of growth), and Flora; cf. Gerhard, Etruskische Spiegel, IV, pl. CCCX, and p. 53 .

Length, with handle, $11 \frac{9}{16}$ in. (24.9 cm.$)$. Diameter, $6 \frac{13}{16} \mathrm{in}$. $(17.3 \mathrm{~cm}$.). Presented by Henry G. Marquand, 1897. From Chiusi. Described by A. Klügmann und G. Körte in Gerhard, Etruskische Spiegel, V, p. 215. The green patina has mostly been removed from the surface. Acc. No. G.R. 135.

799 The engraved design represents Peleus surprising Thetis at her toilet. Thetis $(2 \mid O \exists \odot)$ is standing in the centre arranging her hair with one hand and with the other holding by the handle a mirror in which her face is shown in reflection. Seated in front of her is another woman, inscribed Calaina ( $\because И \mid ด 寸 A$ )), who is looking up, as if conversing with Thetis. Both are absorbed in their own doings and seem quite unconscious of Peleus ( $\Gamma$ ELE), who is approaching cautiously from the left, with hands outstretched as if ready to seize the goddess. On the floor are placed a basket with perfume bottles and dipping-rod, a folded garment, and a pair of shoes. Thetis has a light mantle with ornamented border thrown over her shoulders, which leaves the right side of her body bare, a diadem, a necklace, and bracelets. Calaina wears a long-sleeved chiton, a himation with embroidered border, sandals, and a diadem. In her left hand she holds a necklace or bracelet with pendants; in her right

Etruscan a small round object. Around the design is a thick wreath of ivy-leaves Mirrors and berries with two clusters of berries at the top and a floral ornament at the bottom. In the exergue is a fox (?) lying down; on the edge a tonguepattern and beading; at the bottom of the front or mirror side is an ornament of palmettes and scrolls. The mirror disk is flat, with the rim turned up on the back or engraved side.

The execution of the design, which is deeply incised, is careful and lifelike. The subject of Peleus lying in wait for or pursuing Thetis is depicted on several Greek vases; cf. the list given by B. Graef in Jahrbuch des archäologischen Instituts, I, p. 20I. The representation which comes closest to our scene is on a pelike from Kameiros (cf. A. Salzmann, Nécropole de Camirus, pl. 58), where Peleus is surprising Thetis in her bath. The name Calaina is doubtless derived from the Greek $\Gamma \alpha \lambda \dot{\eta} \nu \eta$, which occurs as the name of a Nereid.

Diameter, $6 \frac{3}{5}$ in. ( 16.2 cm .). Purchased in 1909. Found between Orvieto and Bolsena on the estate of Count Bugiosanti of Orvieto, in whose possession it was in 1878. Published by A. Klügmann und G. Körte in E. Gerhard, Etruskische Spiegel, V, pl. 96, p. 123, and by G. M. A. R[ichter] in the Museum Bulletin, April, 1910, p. 95 f. See also F. von Duhn, Bullettino dell' Instituto, 1878, p. 139; Notizie degli scavi, 1877, p. 261; A. Fabretti, Corpus inscriptionum italicarum, Appendix, No. 651. The olive-green patina has been mostly removed from the surface of the design; the mirror side is largely encrusted. The tang with the attachment is missing. Acc. No. 09.221.16.

800 The engraved design represents Odysseus attacking Circe. A bearded man, identified by the inscription as Odysseus ( $\exists$ TROV), is attacking with drawn sword Circe ( CED (A), who is seated on a chair in the centre and is raising both hands in supplication. On her other side stands
 threatening the sorceress. In the foreground is one of Odysseus's companions partly transformed into a pig, only the hind legs retaining human shape. Odysseus wears a chlamys fastened at his throat and leaving the front part of his body bare. In his right hand he holds the sword with which he is attacking Circe, in his outstretched left the sheath. Circe is wearing a long-sleeved chiton, a himation, sandals, a necklace, and bracelets. Elpenor has a chlamys and a crested helmet. Encircling the design is an ivy-wreath, with a cluster of berries at the top. At the bottom of the front or mirror side is an ornament of palmettes and scrolls; along the edge, beading. The mirror disk is slightly convex, with the edge bent up a little on the back or engraved side.

## TOILET ARTICLES AND PERSONAL ORNAMENTS

The presence of Elpenor in this scene as the companion who escaped the wiles of Circe and helped Odysseus to save his friends, is contrary to the

Etruscan Mirrors story as told in Homer's Odyssey (E 135 ff .), where that rôle is assigned to Eurylochos. The Etruscan artist was evidently not concerned about having his representation archaeologically correct; he needed another figure on the right to balance Odysseus on the left, and he supplied him with the name of Elpenor, as one he remembered to be associated with Odysseus.

The drawing of the scene on this mirror is of great delicacy and spirit. The subject occurs not infrequently on Greek vases (cf. Seeliger, Roscher's Lexikon, Kirke, p. 1197 f.). For similar representations on Etruscan mirrors see especially E. Gerhard, Etruskische Spiegel, IV, C D III (1), which


800 is almost identical with ours, differing only in small details, such as the shape of Elpenor's helmet, the position of the inscriptions, the decoration on the chair, etc.; and one in the Louvre (E. Gerhard, Etruskische Spiegel, IV, C D III (2)).

Length, with handle, $8 \frac{11}{16}$ in. ( 22 cm .). Diameter, $6 \frac{1}{2} \mathrm{in}$. ( 16.5 cm .). Purchased in 1909. Published by G. M. A. R[ichter] in the Museum Bulletin, April, 1910, pp. 95, 99, fig. 8. Patina green. The design has been picked out with white paint in the Museum to make it clearer. The handle, in which the tang was inserted, is missing. Acc. No. 09.221.17.

80I The engraved design represents Bellerophon slaying the Chimaera. Bellerophon, mounted on Pegasos, has already transfixed with one lance the goat's neck of the Chimaera, and is plunging another into the mouth of its lion's head. Bellerophon wears a chlamys which is flying behind him. Pegasos has an elaborate bridle. On the background are drawn various objects to fill the spaces not taken up by the design, such as ornamental stars, flowering plants, and a bird walking along a rock. The design is encircled by a loose ivy-wreath, springing from a palmette on the attachment. The mirror disk is flat, with the edge slightly bent up on the back or engraved side.

## IMPLEMENTS AND UTENSILS

Etruscan Mirrors

The execution of the design is fair and animated. Noteworthy is the representation of Chimaera as female, with udders, which is contrary to the usual custom in Greek art. For other instances of a female Chimaera see a Melian terracotta relief (C. O. Müller - F. Wieseler, Denkmäler der alten Kunst, pl. XIV), and coins from Sikyon (P. Gardner, Types of Greek coins, pl. VIII, 20).

Length, 9 in. ( 22.8 cm .). Diameter, $6 \frac{3}{8} \mathrm{in}$. ( 16.2 cm .). Purchased in 1909. In 1879 it was in the possession of Alessandro Castellani. Published by A. Klügmann und G. Körte in Gerhard, Etruskische Spiegel, V, pl. 72, p. 89, and described by G. M. A. R[ichter] in the Museum Bulletin, April, 1910, p. 96. The patina, green and crusty, has mustly been removed from the surface of the design. The design has been picked out with white paint in the Museum to make it clearer. The handle, in which the tang was in-


801 serted, is missing. Acc. No. 09.221.15.

802 The engraved design represents Admetos and Alkestis kissing each other. A youth identified by the inscription as Admetos ( $\operatorname{\exists \top IMTA}$ ), and a fully draped woman inscribed Alkestis (1ヨ「23) JA) are holding each other in an affectionate embrace. As a sign of their union a chain is hung around both figures. To the right a girl, clothed in a long-sleeved chiton, is applying perfume to Alkestis's hair by means of a little stick (dipping-rod) from the alabastron which she holds in her left hand. (For figures with alabastra and dipping-rods cf. E. Gerhard, Etruskische Spiegel, IV, pl. CCCXXII; V, pl. 22, etc.) On the left a nude youth, standing with his back toward the spectator, is on the point of departing. He has swung a chlamys over his left shoulder; in one hand he carries a pair of shoes by their lacings, in the other he holds up a short-handled instrument ending in seven prongs (a harpago? cf. No. 665), around which is twisted a long flexible object of indefinable character. Admetos wears a himation which falls from his left shoulder and is draped around the lower part of his body. He has sandals on his feet and on his head a diadem decorated with a design like a figure 8. Alkestis wears a long-sleeved chiton, a himation, sandals,

## TOILET ARTICLES AND PERSONAL ORNAMENTS

a necklace, earrings, and a crown or diadem. Encircling the design is an ivy wreath; on the attachment a design of a palmette and scrolls; on the edge beading. The mirror disk is flat and only slightly turned up on the back or engraved side.

The drawing is free and rather better than the average. Among Etruscan works there are many similar representations of two figures embracing, though this is the only mirror in which the names Atmite and Alcestei appear. (For their occurrence on an Etruscan vase with this subject see G. Dennis, Cities and Cemeteries of Etruria, II, frontispiece.) In the majority of instances the figures are inscribed Atunis and Turan, i.e. Adonis and Aphrodite; cf. E. Gerhard, Etruskische Spiegel, I, pls. CXI, CXII; IV, pl. CCCXXII; V, pls. 25-25; and it is probable that these scenes served

as prototypes for the representation of other couples (cf. E. Gerhard, Etruskische Spiegel, V, p. 35). Where, as in the present case, the principal figures are Admetos and Alkestis, the probability that the scene represents their parting at once suggests itself.

Length, $10 \frac{3}{16}$ in. ( 25.8 cm .). Diameter, $6 \frac{1}{2} \mathrm{in}$. ( 16.5 cm .). Purchased in I 896 . From Cività Castellana. Published by A. Klügmann und G. Körte in E. Ger-

## IMPLEMENTS AND UTENSILS

Etruscan Mirrors
hard, Etruskische Spiegel, V, p. 217. The patina, smooth and green, has been almost entirely removed from the surface. The handle in which the tang was inserted is missing. Acc. No. G.R. 132.

8I3 The mirror is undecorated, except for a tongue pattern on the edge with beading above, and a design of palmette and scrolls at the bottom of the mirror side. Illustrated, p. 279.
 Provenance not known. Unpublished. Patina green with patches of blue, and crusty in places. The handle in which the tang was inserted is missing. Acc. No. G.R. 129.

## FOURTH TO THIRD CENTURIES B.C.

The following mirrors all have an ornamented handle cast in one piece with the disk. The handle terminates below in an animal's head (deer?).

8I 4 The engraved design represents a charming genre scene of Aphrodite fishing with Eros aiding her. The landscape is suggested by the rocks on which the goddess is seated, the palm tree between her and Eros, and the flowering plants in the background. Aphrodite rests her left hand on the rock at her side and holds a fishing-rod in her right. Eros, who stands before her, is taking hold of the same rod with both hands, evidently helping the goddess to pull out the fish which has just caught the bait. At the edge of the water is a small cuttle-fish. A dove is perched on Aphrodite's shoulder. Aphrodite has short curly hair and somewhat puffy cheeks; she wears a long-sleeved chiton, sandals, a necklace, and bracelets. Eros is nude and wears over his left shoulder a girdle on which beads are strung. Around the design is a border of laurel leaves and berries. At the bottom of the front or mirror side an ornament of palmettes and scrolls; around the edge a


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## TOILET ARTICLES AND PERSONAL ORNAMENTS

tongue pattern．The mirror disk is flat and turned up on the back or engraved side．

Etruscan Mirrors

The drawing is very graceful and lifelike and，if not executed by a Greek artist，was certainly directly inspired by a Greek original．

For other Praenestine mirrors with detailed landscape rendering of．G． Matthies，Die praenestinischen Spiegel，p． 67 （his group A II）．For rep－ resentations of fishing－scenes in Greek art cf．P．Hartwig＇s publication of a kylix in the Museum of Fine Arts，Boston，in his Griechische Meisterschalen， p． $5+$ ，pl．5，and his references to similar scenes．

Length， $13 \frac{1}{8}$ in．（ 33.3 cm ．）．Diameter， $7 \frac{1}{5} \mathrm{in}$ ．（ 18 cm ．）．Purchased in 1907. Provenance unknown．Published by G．Ml．A．R［ichter］in the Museum Bulletin， May，1908，pp．89，90，fig．I．Patina green and crusty；this has been removed from several parts of the design．There was a break across the buttom of the disk which has been repaired．A portion of the border is obliterated．Acc．No． 07.260 ．

8i 7 The engraved design represents the release of Prometheus．In the centre stands Prometheus（ $\exists$ OAMVO1）with an expression of pain on his face；he is in a drooping attitude，and has borh arms extended，one of which he leans on a youth to his right（ $\exists$ ）A 小 2 ヨヨ，Es－ place），the other on Athena（ $\mathcal{A}$ 绿 $M$ ． Menrva）to his left．Next to Athena is Herakles（ $\exists$ フノロヨ日，Hercle）seated on his lion－skin and looking down at the eagle which he has just killed and which is lying prostrate at the feet of Prome－ theus．The youth Esplace is probably to be identified with Asklepios，the god of healing，especially as he appears to be engaged in bandaging the wounds of Prometheus and has a table by his side with a vase presumably containing some ointment．Prometheus is nude except for a mantle which falls over his right leg； he is bearded and wears a fillet．Askle－


## IMPLEMENTS AND UTENSILS

Etruscan pios wears a chlamys falling loosely over his shoulders, a fillet, and shoes. Mirrors Athena has a long, sleeveless chiton, the aegis, a plumed helmet, and earrings. Herakles is nude; he has his club resting against his right leg and what appears to be his quiver hanging from a strap on his left side. The background is occupied by an Ionic façade and the field is punctured. Encircling the design is a thick laurel wreath tied at four places. The inscribed names are placed in the border above the corresponding figures. On the mirror side is the inscription (AMIOVM) Suthina in large and deep-cut letters (cf. p. 182).

The execution of this mirror is fair, but the languid figures and rather carelessly drawn features of the persons represented are characteristic of the decadent period to which it belongs.

Representations of the release of Prometheus are not uncommon in ancient art, but the moment usually chosen in these is the actual killing of the eagle by Herakles (see K. Bapp, Roscher's Lexikon, under Prometheus, 3089 ff.). Prometheus released from his fetters and surrounded by his saviour and protectors is a more infrequent scene. For a mirror with a similar representation, in relief, see E. Gerhard, Etruskische Spiegel, II, pl. CXXXVIII.

Height, 11 in. $\left(27.8 \mathrm{~cm}\right.$.). Diameter, $5 \frac{12}{16}$ in. ( 14.5 cm .). Purchased in 1903. Found in an Etruscan tomb at Bolsena belonging to the fourth to third century B.C. (cf. p. 180 f.). Published by A.Furtwängler, Sitzungsberichte der kgl. bayerischen Akademie der Wissenschaften, 1905, Heft II, p. 271 (b), fig. 5, pl. VII. The green, crusty patina has been almost entirely removed, exposing the rich golden color of the bronze. Intact. Acc. No. G.R. $4+7$.

818 The engraved design represents the Dioskouroi with two women. Castor and Pollux are represented seated at either end facing each other. Between them are two female figures, each turning toward one of the Dioskouroi. In the background the architrave of a building is indicated, with a wavy line above. Castor and Pollux are recognizable by their Phrygian caps; each has a chlamys thrown over his back and wears high laced shoes. The woman on the right (Aphrodite?) wears a himation which hangs at her back leaving the greater part of the figure nude. She has shoes, a diadem, a necklace, and a cross-belt. The other woman (Helen?), who stands behind her, wears a Phrygian cap and a long chiton. Around the design is a laurel-wreath; on the edge, beading. The mirror disk is convex with the edge turned up on the back or engraved side.

## TOILET ARTICLES AND PERSONAL ORNAMENTS

The Dioskouroi represented in the company of two women is a favorite subject on Etruscan mirrors. The execution is generally careless and often

Etruscan Mirrors coarse. This is one of the better examples. For similar representations see E. Gerhard, Etruskische Spiegel, III, pls. CCLXXYI-CCLXXYIII.

Length, $10^{5}$ in. ( 27 cm .). Diameter, $5 \frac{3}{16} \mathrm{in}$. ( 13.1 cm .). Purchased in 1896. Unpublished. The patina, brownish, has been mostly removed from the surface of the design. Acc. No. G.R. Iz3.


819 The engraved design represents the same scene as No. 818, but the execution is very coarse and the following variations are introduced: Castor and Pollux are not seated, but each is leaning against a short pillar with one arm placed behind, and they wear short chitons. The woman on the right has no cross-belt or stephane, and there is no indication of a building. Round the design is a wreath tied in four places; on the edge,

## IMPLEMENTS AND UTENSILS

Etruscan beading. The mirror disk is convex, with the edge turned up on the back Mirrors or engraved side.

Length, $6 \frac{7}{8}$ in. ( 17.5 cm .). Diameter, $3 \frac{3}{16} \mathrm{in}$. (8.1 cm.). Purchased in 1896. Unpublished. Patina blue-green and crusty. Acc. No. G.R. 122.


820 The engraved design represents the two Dioskouroi, a woman, and a youth (one of the Cabeiri?). As in No. 819, each of the Dioskouroi wears a Phrygian cap, chiton, and high laced shoes, and is leaning against a pillar. The third youth is nude and wears high laced shoes. The woman has a long sleeveless chiton and a Phrygian cap. Behind the heads of the figures is indicated the architrave of a building. Encircling the design is a laurel wreath. On the face of the mirror the word Cragna (AH)A 9 ) is in-

## TOILET ARTICLES AND PERSONAl ORNAMENTS

scribed. The mirror disk is convex with the rim turned up on the back or engraved side. The execution is coarse.

For similar representations see E. Gerhard, Etruskische Spiegel, pls. CCLXII-CCLXYII.
 1896. Unpublished. The patina, blue-green and crusty, has been mostly removed from the design. Acc. No. G.R. 126.

82I The engraved design represents the two Dioskouroi, who stand facing each other with crossed legs and one hand placed on hip. They wear short girt chitons and Phrygian caps. Behind each stands a round shield. Between the two figures is a curious horizontal object represented by three lines, which occurs often on similar scenes and has been interpreted as crossbeams (cf. E. Gerhard, Etruskische Spiegel, III, p. 35). Above this object are a large star and two small balls. The mirror disk is convex, with the rim turned up on the back or engraved side.

The execution is careless. For similar representations see E. Gerhard, Etruskische Spiegel, I, pls. XLV and XLVI.

Length, $8 \frac{1}{2} \mathrm{in}$. ( 21.6 cm .). Diameter, $4 \frac{1}{5}$ in. ( 10.5 cm .). Purchased in 1896 . Unpublished. The patina, bluish-green and crusty, has been mostly removed from the surface of the design. Acc. No. G.R. $12+$.

822 The engraved design represents a winged Lasa. She is nude and wears a Phrygian cap and shoes. In her left hand she has an alabastron; in her right a little stick which she holds between her thumb and forefinger. From the bottom rays shoot up into the design. On the upper end of the handle is a lotos flower. The edge is beaded. The execution is careless.

For similar representations see E. Gerhard, Etruskische Spiegel, I, pls. XXXIXXXYI.

Length, $5^{\frac{5}{8}} \mathrm{in}$. $\left(14.3 \mathrm{~cm}\right.$.). Diameter, $4 \frac{9}{16}$ in. ( 11.5 cm .). Purchased in 1896 . Provenance not known. Unpublished. Patina olivegreen, hard, and smooth. The lower part of the handle is missing and there are several cracks in the mirror. Acc. No. G.R. 123.


## IMPLEMENTS AND UTENSILS

Etruscan Mirrors

827 The engraved design on the back represents the union of Juno and Hercules. Jupiter is seated in the centre. With his right hand he has taken hold of Juno to push her gently toward Hercules, who is coming to meet her. Jupiter wears a himation, or mantle, which has fallen from his shoulders leaving the torso nude. Juno wears a chiton, shoes, and bracelets; in one hand she holds an olive branch, the other is placed on Jupiter's shoulder. Hercules, who is youthful and beardless, grasps the club in one hand; he is nude but carries a chlamys (not the lion's skin) over his left arm. All three figures have their names inscribed in Latin (IOVEI, IVNO, HERCELE). Between Jupiter and Juno is placed a female herma, between Jupiter and Hercules a phallus. The curious wavy lines about the heads of the figures are probably meant to represent clouds, indicating that the scene of action is Olympos. Around the design is an ivy wreath; on the edge a tongue pattern. The mirror disk is convex, with the edge turned up on the back or engraved side.

The subject goes back to a Latin, not a Greek, origin. We learn from a number of statements of Latin authors, as well as from several representations, that among the Romans Hercules and Juno were closely allied as deities of matrimony (cf. R. Peter in Roscher`s Lexikon, pp. 2258-2265). It is in this character that they are here shown.

The execution of this mirror is very coarse and its interest is purely mythological and epigraphical.

On the subject of Latin inscriptions appearing on finds from Praeneste, cf. introductory note on mirrors p. 273 .

Length, with handle, $12 \frac{3}{8}$ in. ( 31.4 cm .). Diameter, $6 \frac{5}{8} \mathrm{in}$. ( 16.8 cm .). Purchased in 1896. Provenance not known. This appears to be identical with a

## TOILET ARTICLES AND PERSONAL ORNAMENTS

mirror formerly in the Museo Kircheriano and published as follows: E. Gerhard, Etruskische Spiegel, II, pl. CXLVII; III, p. 138 f.; Museum Kircherianum, I, 13 , 1; L. Lanzi, Saggio di lingua Etrusca, 2, 198, pl. 10, 3; A. L. Millin, Galerie mythologique, pl. 119,463 ; E. Gerhard, Annali dell' Instituto XIX, 1847, pl. T, p. 331 f.; Die Gottheiten der Etrusker, pl. I, 3; O. Jahn, Ficoronische Cista, p. 58; F. W. Ritschl, Priscae latinitatis monumenta epigraphica, pl. i, G; R. Peter, Roscher's Lexikon, Hercules p. 2259; J. H. Hild, Daremberg et Saglio, Dictionnaire, under Junones, p. 691, fig. 4190. For the inscription see Corpus Inscriptionum Latinarum, 1, 56. The patina, green, has been entirely removed from the design; otherwise the mirror is intact. Acc. No. G.R. 134.

## II. Mirrors with Stands

These follow the Greek models in that the support consists generally of a female figure (cf. e.g. H. B. Walters, Catalogue of Bronzes in the British Museum, Nos. $5 t^{8} \mathrm{ff}$.), rarely of a male figure (cf. e.g. Walters, op. cit., No. 553), with lions and sphinxes sometimes introduced on each shoulder. They begin in the archaic period but continue to later times.

There are no examples in our collection.

## III. Mirrors with Covers

Their form is the same as that of the Greek specimens, from which they are evidently copied (cf. J. Martha, L’Art étrusque, pp. $5 \not{ }^{2} \mathrm{ff}$. and the references there quoted).

There are no examples in our collection.

> ROMAN MIRRORS

## For Roman Mirrors in general see

A. de Ridder, Daremberg et Saglio, Dictionnaire, speculum, p. 148 f .
A. Héron de Villefosse, Le Trésor de Boscoreale, in Monuments Piot, V, pp. 186 ff.

In Roman times the three types of mirrors prevalent among the Greeks and Etruscans continued to be made, with certain important modifications. Rectangular mirrors were now used side by side with the rounded variety (cf. No. 840), and small lead mirrors with glass were introduced for the first time (cf. e.g. an example in the Cesnola Collection, J. L. Myres, Cesnola Handbook, No. 5975 ; E. Michon, Bulletin archéologique, 1909, pp. 231-250, figs. $\mathrm{I}-6$ ). The borders of the mirrors, which are now sometimes cast separately from the disk, are often indented in various ornamental ways (cf.

Roman Monuments Piot, V, pl. XIX and fig. 46, p. i89); or worked in relief (cf. e.g. A. de Ridder, Daremberg et Saglio, Dictionnaire, speculum, p. 1429, fig. 6537; and an unpublished example in the British Museum with a beautiful design of peacocks and vines); or supplied with a series of perforations (cf. Nos. 830-833). Engraved designs disappear on the mirrors with handles, and concentric circles form their only decoration (cf. Nos. 830 ff .). The mirror supports are sometimes in the form of statuettes (cf. A. Mau, Pompeii, p. 372 , fig. 206 a; E. Babelon et J.-A. Blanchet, Bronzes antiques de la Bibliothèque Nationale, No. 1358), but, like the handles, are often of complicated designs. The covers of the mirrors are sometimes surmounted by coins (cf. A. de Ridder, op. cit., p. 1429). It is also noteworthy that silver mirrors become more popular during the Imperial period (cf. No. 07.286.127 in the Gold Room [Gallery C. 32]), though they were probably never so common as the enthusiastic Pliny would lead us to believe (cf. Pliny, XXXIII, 45 f., and A. de Ridder, op. cit., p. if29).

## FROA CYPRUS (CESNOLA COLLECTION)

These consist of thin disks, without rim or flange, and are decorated with concentric mouldings on the back. Round the edge they are generally perforated with small holes. Handles of the type of Nos. 836,837 were apparently used with these mirrors, being soldered to the disks.

For mirrors similarly perforated round the edge cf. e.g. Monuments Piot, V, p. 19I, 5.
(a) Perforated with small holes round the edge

830 There are two concentric mouldings on the back.
Diameter, $4^{\frac{1}{16}} \mathrm{in}$. ( r 0.3 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4816. The green patina has been mostly removed. The surface is somewhat corroded. Some pieces along the edge are missing. Acc. No. C.B. $15+$.

83 I There are two concentric mouldings on the back.
Diameter, $3^{\frac{3}{5} \mathrm{in} .}\left(8.6 \mathrm{~cm}\right.$.). J. L. Myres, Cesnola Handbook, No. $4^{817}$. Illustrated in the Cesnola Atlas, III, pl. LX, I. The green patina has been largely removed. The surface is somewhat corroded and encrusted. Acc. No. C.B. 153.

832 There are two concentric mouldings on the back.
Diameter, $3 \frac{1}{8}$ in. ( 7.9 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4818. The patina has been largely removed. The surface is somewhat corroded, and a piece along the edge is missing. Acc. No. C.B. 155 .

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## S33 There are two concentric mouldings on the back.

Diameter, $=\frac{15}{16} \mathrm{in}$. ( 7.5 cm .). cf. I. L. Myres, Cesnola Handbook, No. 4519.

Roman
Mifroro The green patina has been largely removed. The surface is somenthat corroded and a piece along the edge is missing. Acc. No. C.B. $1_{j 2}$.
(b) Not perforated

Sjf There are tro concentric mouldings on the back.
 The patina has been largely removed and the surface is somewhat corroded. Acc. No, C.B. 145.


## 835

Diameter, 2 in. ( 5.1 cm. ). cf. I. L. Myres, Cesnola Handbook, No. 4821. The patina has been partly removed and the surface is considerably corroded. Acc. No. C.B. $1+3$.

836 MIIRROR HANDLE. The shaft, which is decorated with two moulded rings, is surmounted by two arms, with a pointed attachment in the centre, to which the mirror was soldered.

This type of handle was used with mirrors of the preceding type (Nos. 830 ff .) and belongs to the Roman period.

Length, $3^{\frac{3}{4}} \mathrm{in}$. $(9.5 \mathrm{~cm}$.). cf. J. L. Myres, Cesnola Handbook, No. $\mathbf{4}^{\text {\$22. F }}$ From Cyprus. Cesnola Collection. The green patina has been partly removed. The surface is slightly corroded. tec. No. C.B. 227.

837 MIRROR HA工DLE, sinilar to the preceding.


Length, $3^{\frac{3}{4}} \mathrm{in} .(9.5 \mathrm{~cm}$.$) . cf. I. L. Myres, Cesnola Handbook, No. 4 \$ 2 j$.

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## IMPLEMENTS AND UTENSILS

Roman Mirrors

The green patina has been largely removed. The surface is slightly corroded. Acc. No. C.B. 232.

## 840 PLAIN RECTANGULAR FLATE of oblong shape.

This plate probably served as a mirror in Roman times. On the subject of rectangular mirrors cf. A. de Ridder, Daremberg et Saghio, Dictionnaire, speculum, p. If29. In the British Museum is a similar plain rectangular mirror from Halikarnassos.

Length, $6 \frac{11}{16}$ in. ( 17 cm .). Width, $6 \frac{1}{4} \mathrm{in} .(15.9 \mathrm{~cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4898. The smooth, light green patina has been partly removed. The surface is corroded in places. Acc. No. C.B. 412 .


## CISTAE OR TOILET BOXES

Cistae The word cista (kiorn, cista) really means a basket; but as an archaeological term it has been restricted to certain cylindrical utensils, generally of bronze, but sometimes of wood, ivory, or bone.

These cistae have a long history, appearing as early as the seventh century and lasting to the second century B.C. (cf. K. Schumacher, Eine praenestinische Ciste im Museum zu Karlsruhe, pp. 32 ff.). During this time various forms were evolved (cf. Schumacher, loc. cit.; for an example of a cista "a cordoni" in our collection cf. No. 630); but by far the largest number of the extant examples are of a later type dating mostly from the third century B.C. and found chiefly at Praeneste. (For examples of this type found elsewhere cf. A. Mau, in Pauly-Wissowa, Realencyclopädie, cista, 2593 f ., who also points out that the employment of similar cistae in Etruria is shown both by the number of feet from cistae found there and by their appearance on the engraved designs of Etruscan mirrors.) This type

## TOILET ARTICLES AND PERSONAL ORNAMENTS

consists of a cylindrical, rarely oval, receptacle of bronze, supported on three (if oval on four) feet, and closed by a cover with a handle in the form of one or more figures. At about two thirds of its height (which averaged 7 to 10 in. [20-25 cm.]) was generally attached a row of rings from which chains were suspended to facilitate the carrying of the cista. The feet are in the form of animals' claws or hoofs, often with a scene in relief on the attachment. The sides of the cista were made of one plate of bronze which was bent into the cylindrical shape and soldered at the edges; the bottom was either made of the same piece as the sides, or separately and attached.

The chief interest of these cistae consists in the engraved designs with which they are generally decorated, which comprise decorative borders, as well as figured scenes. The latter are either mythological or every-day scenes, or, and these form the majority, would-be mythological subjects of arbitrarily grouped figures. The design is often partly obscured by the attachments of the rings and of the feet, which were evidently added after the scenes were engraved.

The execution of these designs varies. Sometimes, as in the case of the famous Ficoroni cista in the Museo Kircheriano, they are of great beauty; but often they are very cursory and of little artistic merit. In a few cases the decorations, instead of being engraved, were executed in relief (cf. Mau, op. cit., 2602).

With regard to the use for which these cistae served it is clear, both from the objects found inside them (such as mirrors, strigils, combs, hair pins, rouge pots, etc.) and from the representations of them on mirror scenes, that they served as toilet boxes (cf. Mau, op. cit., 2594).

For cistae in general cf.
A. Mau, Pauly-Wissowa, Realencyclopädie, cista, 259 I ff. (i899).
K. Schumacher, Eine praenestinische Cista im Museum zu Karlsruhe (1891).
E. Gerhard, Etruskische Spiegel, I, 3 ff. ( $18 \mathfrak{4 j}$ ).
O. Jahn, Die ficoronische Ciste (1852).
R. Schöne, Annali dell' Instituto, I866, pp. I亏I ff; I868, pp. $\mathrm{f}_{\mathrm{I}} \mathrm{ff}$ f. (giving complete list of the 75 cistae then known).
J. Martha, L'Art étrusque, pp. 532 ff . ( 1889 ).
F. Lenormant, Daremberg et Saglio, Dictionnaire, cista, pp. 1202 ff . (1887).

There are as yet no cistae with engraved designs of the developed Praeneste type in our collection. The only example we possess is a plain cista with ornamental handle and feet.

## IMPLEMENTS AND UTENSILS

Cistae
845 CISTA. It rests on three feet in the shape of paws surmounted by human busts. The handle on the cover is in the form of a boy, who is sitting with crossed legs, one hand resting on his right knee, the other holding a small round object by his side. The word Suthina is inscribed both on the cover and on the body of the cista (cf. p. 182).

The decorations are crudely executed.
This cista was found in an Etruscan tomb at Bolsena belonging to the fourth or third century B.C. (cf. p. 180 f.).

Total height, $7 \frac{5}{8}$ in. ( 19.4 cm .). Published by A. Furtwängler, Neue Denkmäler antiker Kunst, III, pp. 270, 271, fig. 4. The crusty, green patina has been removed in places. There is a hole in the cover; otherwise the cista is intact. Acc. No. G.R. $\ddagger \ddagger^{6}$.

$8+6$ FOOT OF A CISTA, in the form of an animal's paw resting on a ball, with a plain attachment above. The attachment is shaped like two wings and has a bronze-headed, iron rivet in the centre; at the back is a projecting piece for the support of the bottom of the cista.

Height, $1 \frac{3}{4}$ in. ( 3.2 cm .). Date of purchase uncertain (before 1906). Crusty, green patina with blue patches. Traces of iron rust on the inner side. Acc. No. G.R. 326 .


847 FOOT OF A CISTA, in the form of an animal's paw resting on a ball, with a plain attachment in the shape of a floral design above. At the back is a projecting pin for the support of the bottom of the cista.

Height, 2 in . ( 5.1 cm. ). Date of purchase uncertain (before 1906). Crusty, green patina. There is one rivet-hole in the attachment. Acc. No. G.R. 340.

## TOILET ARTICLES AND PERSONAL ORNAMENTS

848 FOOT OF A CISTA, in the form of an animal's paw resting on a ball, with a plain attachment in the shape of a floral design.

Height, 2 in . ( 5.1 cm .). Date of purchase uncertain (before 1906). Crusty, green patina with blue patches. There are two rivets in the attachment. Acc. No. G.R. 3 3.

849 FOOT OF A CISTA, in the form of an animal's paw with an attachment shaped like two wings above. The feathers of the wings are indicated by incised lines. At the back is a projecting piece for the support of the bottom of the cista.

Height, $5 \frac{7}{8}$ in. ( 14.9 cm. ). Date of purchase uncertain (before 1906). Crusty, green-
 ish patina. The surface is considerably encrusted. There is a rivet in the attachment and a rivet-hole in the projection at the back. Acc. No. G.R. 163.

## STRIGILS OR SKIN-SCRAPERS

The strigil ( $\sigma \tau \lambda \epsilon \gamma \gamma i s$, strigilis) was commonly used both in Greek and Roman times as a bath implement for scraping the body; it was employed by athletes for remoring the oil with which they anointed themselves, as well as the dirt and perspiration after exercise. The blade of the strigil is curved and slightly hollowed out inside, with both edges sharpened. Though the general shape remained the same from the first introduction of this implement, probably in the sixth century B.C., down to Roman times, there are slight changes both in the curvature of the blade and in the form of the handle. In the earlier examples the blade is generally only slightly curved, and the handle forms a rounded loop, which is fastened to the blade by a leaf-shaped attachment; the loop is sufficiently wide for comfortable insertion of the fingers. In the Roman examples the handle is generally rectangular and the fingers were placed round it, not inserted in it. The curvature of the blades varies from being very slight to forming an acute angle, but this seems to be independent of the period in which they were made, being dictated apparently rather by individual taste (cf. e.g. examples in this collection). As is natural, various materials were used for strigils. The commonest seem to have been iron

## IMPLEMENTS AND UTENSILS

Strigils and bronze; but examples of silver, electrum, lead, bone, and ivory have also been found (cf. references given by S. Dorigny in Daremberg et Saglio, Dictionnaire, strigilis, p. 1533. For a silver strigil found in an Etruscan tomb of the fourth to third century B.C. cf. p. i8i f.).

The method of employing the strigil is obvious from the shape; it is also shown in a number of monuments where it appears in actual use (cf. e.g. references cited by Dorigny, loc. cit.). It is noteworthy that the strigil was used by women as well as by men (cf. e.g. E. Gerhard, Etruskische Spiegel, IV, pls. 317,318 ; H. B. Walters, Catalogue of Bronzes in the British Museum, No. 665).

Strigils are variously decorated. Sometimes the handle is in the form of a human figure (cf. H. B. Walters, Catalogue of Bronzes in the British Museum, No. 665), or ornamented with moulded or incised designs, or with reliefs; the back of the blade is often fluted.

Inscriptions and stamps are frequent on strigils. The commonest give a proper name, which may be either that of the maker or of the owner (cf. Dorigny, op. cit., p. i533, Note 15 ).

For strigils in general cf.
S. Dorigny, Daremberg et Saglio, Dictionnaire, strigilis, p. 1532.

British Museum, Greek and Roman Life, p. 112 (1908).
Friederichs, Kleinere Kunst und Industrie im Alterthum, p. 88 (1871).

855 STRIGIL. The blade is broad and is bent to an obtuse angle. The handle, which is in one piece with the blade, forms a wide loop and is fastened to the blade by a leaf-shaped attachment, riveted on.

Greek, probably fifth century B.C.

Length, $10 \frac{5}{8} \mathrm{in} .(27 \mathrm{~cm}$.$) . Gift of$ Edward Robinson, 1911. Purchased in Athens. The crusty, greenish pa-
 tina has been partly removed. The surface is partly covered with incrustations. Acc. No. 11.107.

## TOILET ARTICLES AND PERSONAL ORNAMENTS

856 STRIGIL. The blade, which is unusually broad, is bent to a right angle. The handle, which is in one piece with the blade, forms a loop and is fastened to the blade by an attachment, soldered on.

Probably fifth century B.C. lection. cf. J. L. Myres, Cesnola Handbook, No. fin. Crusty, green patina. Part of the attachment of the handle is missing. The blade may have been bent. Acc. No.C.B. 204 .


856

857 STRIGIL. The blade is broad and bent to a right angle. The handle, which is in one piece with the blade, forms a loop and is fastened to the blade by an attachment. This attachment was soldered on, but is now detached. On the handle is a stamp representing a Nereid riding on a sea-horse and carrying the shield of Achilles.

Nereids bringing the armor fashioned by Hephaistos to Achilles formed a favorite subject in Greek art, though the incident is not mentioned in literature. Such representations became especially popular after the middle of the fourth century (cf.


857 Weizsäcker, Roscher's Lexikon, Nereiden, $\$ \$ 223$ ff., and H. Herdemann, "Nereiden mit den Waffen des Achill," in the Gratulationsschrift der Universität Halle zum 50 jährigen Jubiläum des archäologischen Instituts).

Probably fourth century B.C.
Length, $7 \frac{1}{4}$ in. ( 18.4 cm .). Purchased in 1914. Unpublished. The crusty, blue-green patina has been partly removed. The surface is somewhat encrusted. The blade is chipped and cracked in places, and slightly bent. Acc. No. 14.105.2.

859 STRIGIL. The blade, which is narrow and fluted on its outer side, is bent to a right angle. The handle, which is in one piece with the

## IMPLEMENTS AND UTENSILS

Strigils blade and works on a spring, forms a closed rectangular loop, soldered to the blade. On the blade is punctured the name of the owner, or maker, aГEMLAXOY (of Agemachos).

Both the shape of the strigil and the style of the inscription place it in the Roman period.


859

Length, $8 \frac{7}{16}$ in. ( 21.4 cm .). Purchased in 1906. Perhaps from Elis. Mentioned in the Museum Bulletin, February, 1907, p. 20. Fine, smooth, bluishgreen patina. The surface is slightly corroded in places. The upper part of the handle, which was soldered to the blade, has been detached. Acc. No. 06.1082.

860 STRIGIL. The blade is bent to an acute angle. The handle, which is in one piece with the blade, is in the form of a rectangular loop


860
with cross-piece in the middle. On the back of the handle are incised lines.

Roman period.

TOILET ARTICLES AND PERSONAL ORNAMENTS
Length, 9 in. ( 22.8 cm .). Purchased in 1897. Stated to have been found in Strigils Tyre. Crusty, greenish patina. Acc. No. G.R. 332.

86I STRIGIL. The blade, which is narrow and fluted on its outer side, is bent to an obtuse angle. The handle, which is in a separate piece and riveted to the blade, forms a rectangular loop. It is provided with two stamps, one star-shaped, the other bearing the inscription: L. M U C. F (Lucius Mucius Fecit-Lucius Mucius made it).

Roman period.


861
Length, 9 in. ( 22.9 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres. Cesnola Handbook, No. 4825. Illustrated in the Cesnola Atlas, III, pl. L, 5. The green patina has been partly removed. The surface is considerably corroded and the edges of the blade are chipped. Acc. No. C.B. 202.

862 BLADE FROM A STRIGIL, similar to the preceding. The blade is narrow and is bent to an acute angle. On its outer side it is ornamented with flutings.

Roman period.
Length, $4 \frac{7}{8}$ in. ( 12.4 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4826. The patina has been mostly removed. The surface is slightly corroded and the edges are somewhat chipped. Acc. No. C.B. 203.


862

863 IRON STRIGIL, of similar form to No. S6I, but with broader blade and made all in one piece, with long leaf-shaped attachment, riveted on.

Roman period.
Length, $9 \frac{3}{4} \mathrm{in}$. ( 24.7 cm .). From Cyprus. Cesnola Collection. of. J. L.

## IMPLEMENTS AND UTENSILS

Strigils Myres, Cesnola Handbook, No. 4827. Illustrated in the Cesnola Atlas, III, pl. LXVI, 4. The iron is much corroded. Acc. No. C.B. 199 .

864 IRON STRIGIL, similar to preceding.
Length, $9^{\frac{1}{4}} \mathrm{in}$. ( 23.5 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4828. The iron is much corroded. Acc. No.C.B. 201.


863

## RAZORS

Razors 867 RAZOR. It consists of a crescent-shaped blade and a small handle in the form of a stirrup.

Knives of this type are characteristic of the early Italian civilization, where they occur with great frequency in tombs of the Villanova period, or Early Iron Age. For a list of examples found cf. W. Helbig, Das Homerische Epos, p. $24^{8}$, Note 3; S. Gsell, Fouilles dans la Nécropole de Vulci, p. 296, Note 3; and G. Gozzadini, In-


867 torno agli scavi fatti dal Sig. Arnoaldi-Veli presso Bologna, pp. 59-91. A few specimens are said to have been found in Greece, but their provenance has been doubted (cf. W. Helbıg, Das Homerische Epos, p. 248, Note 2).

They were identified as razors by Gozzadini, op. cit., pp. 54-56, and W. Helbig, Im neuen Reich, 1875, I, pp. 14-15. This identification is convincing; for it is evident that they must have been used to cut some substance that gave little resistance.

Length, $3 \frac{13}{16} \mathrm{in} .(9.7 \mathrm{~cm}$.). Date of purchase uncertain (hefore 1906). Crusty green patina. The edges are considerably chipped. Acc. No. G.R. 339.

## RINGS FOR BATH IMPLEMENTS

869 RING for the attachment of bath implements. It is of circular form, four fifths of its circumference being broad and flat, while the remaining part is occupied by the handle. The latter consists of two animal's

## TOILET ARTICLES AND PERSONAL ORNAMENTS

heads emerging from volutes and placed face to face, with a ballin their open mouths.

Roman period, of fair workmanship.
A similar ring, with four strigils, one ointment bottle, and one saucer attached, was found at Pompeii (cf. A. Mau, Pompeii [English edition], p. 377, fig. 209).

Diameter. $5 \frac{5}{16}$ in. ( 13.5 cm .). Date of purchase uncertain (before 1906). Unpublished. Crusty, green patina, with blue patches. The surface is considerably corroded. Acc. No. G.R. 322.


869

Rings for Bath Implements

Dipping
Rods

87 I The knob is in the form of a ribbed bead. Just below the ring is a small plate decorated with incised lines.


871
Length, $7 \frac{1}{4} \mathrm{in}$. ( 18.4 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4 83I. Illustrated in the Cesnola Atlas, III, pl. LXVIII, 5. The crusty, green patina has been removed in places. Acc. No. C.B. 172 .

872 The knob is in the form of a ribbed bead.
Length, $6 \frac{7}{5}$ in. $(17.5 \mathrm{~cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Mlyres, Cesnola Handbook, No. 4832. The crusty, greenish patina has been removed in

Dipping places. The disk is somewhat bent, and the ring is cracked. Acc. No. C.B. 173. Rods


872
873 The knob is in the form of a pointed nail-head.
Length, $6 \frac{9}{16}$ in. ( 16.7 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4833. Greenish patina, removed in places. The ring is somewhat bent. Acc. No. C. B. r7i.

## TWEEZERS

Tweezers
One of the commonest uses of the tweezers or the forceps ( $\tau \rho \iota \chi o \lambda \alpha \beta$ is, vulsella) in antiquity was the removal of superfluous hairs; but they were also employed for raising or snuffing the wicks of lamps, and by artisans for the finer manipulations of their crafts (cf. J. S. Milne, Surgical Instruments in Greek and Roman Times, pp. 90 ff.).

## EARLY BRONZE AGE

The tweezers of the Bronze Age period are either of simple U-shape or have a loop at the top. They have flaring sides and expanded edges. Specimens of this type have been found not only on Greek sites (cf. H. Schliemann, Mycenae, p. 3o8, fig. 469 (of silver); H. B. Hawes, Gournia, pl. IV, 32; C. Carapanos, Dodone, pl. 51, 2I; A. Furtwängler, Olympia, IV, Die Bronzen, pl. XXV, 493-494, etc.); but throughout Central and Northern Europe (cf. Furtwängler, op. cit., p. 68). The form apparently remained in use throughout the Bronze Age. Thus, some examples from Cyprus have been found in very early tombs (cf. A. Furtwängler und G. Löschcke, Mykenische Vasen, p. $2_{4}$ f.), while the silver example from Mycenae is much later.

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FROM CYPRUS (CESNOLA COLLECTION)
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(a) Of U-shaped outline

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876
$$

Length, $2 \frac{3}{4} \mathrm{in} .(7 \mathrm{~cm}$.). cf. J. L. Myres, Cesnola Handhook, No. 4658 . Illustrated in the Cesnola Atlas, III, pl. LXIV, 7. Crusty, greenish patina. Acc. No. C.B. 168.

## 877

Length, $3 \frac{3}{16}$ in. $(5.1 \mathrm{~cm}$.). cf. J. L. Myres, Cesnola Atlas, No 4659. The green patina has been largely removed. Acc. No. C.B. 164.


876

## TOILET ARTICLES AND PERSONAL ORNAMIENTS

(b) With Loop at Top

878
Length, $3^{\frac{1}{4}}$ in. ( 8.2 cm .). cf. J. L. Myres, Cesnola Handbook, No. $4^{660}$. The crusty, greenish patina has been partly removed. The edges are chipped in places. Acc. No. C.B. 166.


878


881


885

879
Length, $2 \frac{11}{16}$ in. ( 6.8 cm .). cf. J. L. Myres. Cesnola Handbook. No. 466 r . Rough, green patina. Acc. No. C.B. 169.

880
Length, $2 \frac{3}{4}$ in. ( 7 cm .). cf. J. L. Myres, Cesnola Handbook, No. 466 . Rough, green patina. The edges are chipped in places. Acc. No. C.B. 165.

## FROM GOURN1A, CRETE

## 88I

Length, $3 \frac{1}{2} \mathrm{in}$. ( 8.9 cm .). Gift of the American Exploration Society, 1907. Crusty, light green patina. The surface is considerably encrusted. Acc. No. 07.232 . 1 .

## ROMAN PERIOD

With long arms curving inward at the ends, and with moulded handle.
This form is that commonly found in late tombs (cf. A. Furtwängler, Olympia, die Bronzen, pl. LXY, iro7; F. B. Tarbell, Naples Bronzes, pl. CXV. figs. 291, 292).

# IMPLEMENTS AND UTENSILS 

Length, $5^{\frac{1}{8}}$ in. ( 53 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4830. Crusty, green patina. Acc. No. C.B. 167.

## PINS

Pins Pins ( $\pi \epsilon \rho o \nu \eta$, acus), like needles, have been in use from very early times. They were used to fasten both the clothing and the hair, which explains the comparatively large size of most ancient examples. The former use was particularly prevalent before the introduction of the fibula or safetypin (cf. p. 307). They were made in either metal or bone.

## BRONZE AGE

The Bronze Age examples in this collection all come from Cyprus and belong to the Cesnola Collection. Two types can be distinguished:-

TYPE I. Of simple form with small, indistinct head
For similar examples cf. H. Schliemann, Ilios, p. 249, figs. 106-I07; J. Evans, Ancient Bronze Implements in Great Britain, p. 365, fig. 447; C. L. Woolley, Liverpool Annals of Archaeology and Anthropology, VI, February, i9If, pl. XX (b).

888

## 888

Length, $\mathbf{1}^{\frac{1}{2}} \mathrm{in} .(34.3 \mathrm{~cm}$.). cf. J. L. Myres, Cesnola Handbook, No. 4674. The green patina has been mostly removed. The surface is somewhat corroded. Acc. No. C.B. $2 \neq 9$.

889
Length, $11 \frac{1}{4}$ in. ( 28.6 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4675. The patina has been mostly removed. The surface is somewhat corroded. The head is missing. Acc. No. C.B. 248.


890
890
Length, $3 \frac{7}{8}$ in. ( 9.8 cm.). cf. J. L. Myres, Cesnola Handbook, No. 4676.

## TOILET ARTICLES AND PERSONAL ORNAMENTS

The patina has been mostly removed. The surface is somewhat corroded. Acc. Pins No. C.B. 99.

TYPE II. "Eyelet" type, with a perforation half-way down the shaft.
This form was developed from the simple straight pin to give greater security to the fastening. A thread could be passed through the hole in the pin and tied round the head or point, thus keeping it in place. The heads of these pins vary in form, being either small and indistinct, or large and conical, or spherical.

These "eyelet" pins commonly occur in Cyprus during the Middle and Late Bronze Ages, and have also been found in Egypt (cf. W. M. Flinders Petrie, Illahun, XXII, $\mathbf{I - 3}$ (Gurob); in Hittite tombs (cf. C. L. Woolley, Liverpool Annals of Archaeology and Anthropology, VI, February, 1914, pls. MXI (c), XXI (c) ; in Palestine (cf. F. J. Bliss, Mound of Many Cities, p. 59, figs. 98-100); at Hissarlik (M. Ohnefalsch-Richter, Kypros, die Bibel, und Homer, pl. 146, 4-A) ; in Italy (O. Montelius, La Civilisation primitive en Italie, pl. 7, passimı) ; and in Northern and Central Europe (J. Undset, Zeitschrift für Ethnologie, p. 209 f.); they are unknown in Crete and other Minoan sites.
(a) With small, indistinct head

89 I
Length, $6 \frac{1}{4} \mathrm{in} .(15.9 \mathrm{~cm}$.). cf. J. L. Myres, Cesnola Handbook, No. 4677. The crusty, green patina has been partly removed. The surface is somewhat corroded. Acc. No. C.B. 262 .

## 892

892
Length, $5^{\frac{5}{8}} \mathrm{in}$. ( 14.9 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4678 . The patina has been mostly removed. Acc. No. C.B. 263.

893
Length, $5^{\frac{3}{4}} \mathrm{in}$. ( 14.6 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4679. Illustrated in the Cesnola Atlas, III, pl. LXVIII, s. The crusty, green patina has been removed in places. Acc. No. C.B. 264 .

## 894

Length, $4^{\frac{1}{4}} \mathrm{in}$. ( 10.8 cm .). cf. J. L. Myres, Cesnola Handhook, No. 4680. The crusty, green patina has been removed in places. Acc. No. C.B. 265.

## IMIPLEMENTS AND UTENSILS

Pins 895
Length, 4 in. (Io.I cm.). cf. J. L. Myres, Cesnola Handbook, No. 468 I The patina has been almost entirely removed. Acc. No. C.B. 266.

896 The shaft is unusually thick.
Length, $4^{\frac{5}{8}}$ in. (II. 7 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4682. Illustrated in the Cesnola Atlas, III, pl. LXVIII, 9. Crusty, greenish patina. The surface is considerably corroded. Acc. No. C.B. 268.


897 On the shaft are moulded rings.
Length, $3^{\frac{3}{3}} \mathrm{in}$. ( 8.6 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4683. Illustrated in the Cesnola Atlas, pl. LXIX, 7. The green patina has been largely removed. Acc. No. C.B. 270 .
(b) With large, conical, or mushroom-shaped head.

## 898

Length, $5 \frac{5}{8}$ in. ( 14.3 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4684. Illustrated in the Cesnola Atlas, III, pl. LXVIII, 7. Crusty, green patina with blue patches. The surface is corroded in parts, and pieces from the head are missing. Acc. No. C.B. 105.


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8,8
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899
Length, $2 \frac{7}{3}$ in. $(7.3 \mathrm{~cm}$.). cf. J. L. Myres, Cesnola Handbook, No. 4685 . The patina has been removed. The surface is somewhat corroded, and some small pieces are missing. Acc. No. C.B. 108 .

900
Length, $4 \frac{13}{16}$ in. ( 12.2 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4686. Crusty, green patina. Acc. No. C.B. 113 .

## TOILET ARTICLES AND PERSONAL ORNANENTS

## 90 I

Pins
Length, 5 in. ( 12.7 cm .). cf. I. L. Myres, Cesnola Handbook, No. 4687. Greenish patina. The surface is largely covered with incrustation. Acc. No. C.B. 109 .

## 902

 The patina has been removed. The surface is somewhat corroded. Acc. No. C.B. 269 .

## 903

Length, $\boldsymbol{q}^{\frac{11}{16}}$ in. ( 11.8 cm .). cf. J. L. Myres. Cesnola Handbook, No. $\boldsymbol{q}^{689}$. The crusty, greenish patina has been removed in places. The point is missing. Acc. No. C.B. $=67$.

904 The profile of the head forms an acute angle. Cn the shaft are moulded rings.

Length, $3^{\frac{1}{4}} \mathrm{in}$. ( 8.2 cm .). cf. J. L. Myres, Cesnola Handbook, No. $\boldsymbol{q}^{690}$. The greenish patina has been mostly removed. The surface is considerably corroded. Acc. No. C.B. 271.

(c) With "distaff" head, made of intersecting circular plates

905 The shaft is unusually slender.
Length, $2 \frac{13}{16}$ in. ( 7.1 cm .). cf. J. L. Myres, Cesnola Handbook, No. 469 I . Illustrated in the Cesnola Atlas, III, pl. LXIX, 9. The patina has been removed. The surface is somewhat corroded. The point is missing. Acc. No. C.B. 272.


905

## LATER PERIODS

910 PIN (:) of semicircular section, with curved head ending in the head of an animal (snake ? ).

## IMPLEMENTS AND UTENSILS

Pins Found in the same tomb with the Etruscan chariot, No. 40, and thereby dated to about the middle of the sixth century B.C.

Height, $9_{16}^{15}$ in. ( 25.3 cm .). Unpublished. The crusty, green patina has been mostly removed. The tip is broken off. Acc. No. G.R. 514.

## 910

9II PIN. The head is in the form of a female figure holding a patera in her right hand; with her left she grasps the drapery, which passes over her left shoulder, and round her right leg, leaving the front part of the body nude. She wears a necklace and bracelets. An inscription in Etruscan letters is written across the front $(く(\otimes ף)$. The stem itself, which is twisted on its upper part and has a moulded top, emerges from an animal's head.

Late Etruscan style, of fair execution.
Height, 16 in. ( 40.6 cm .). Gift of Henry G. Marquand, 1897 . Unpublished. Smooth, greenish patina. Chipped in places; otherwise intact. Acc. No. G.R. 136.

9I4 PIN, with plain spherical head and shaft of round section.

Roman period.
Length, $5 \frac{3}{16}$ in. ( 13.2 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4851. Illustrated in the

914
Cesnola Atlas, III, pl. LXIX, 5. The patina has been removed. The surface is somewhat corroded. Acc. No. C.B. 542.

## TOILET ARTICLES AND PERSONAL ORNAMENTS

9I5 PIN, with strongly tapering shaft and silver neck in the form of a Pins spool. The head, which was probably also of silver, is missing.

Probably Roman period.
Length, $4 \frac{7}{16} \mathrm{in}$. $(11.3 \mathrm{~cm}$.). From Cyprus. Cesnola Collection. cf. I. L. Myres, Cesnola Handbook, No. 4852. Crusty, greenish patina. The surface is much corroded. Acc. No. C.B. 234.

915

## FIBULAE OR SAFETY PINS

The oldest method employed for fastening a dress was by means of straight pin (cf. Nos. 888 ff .). The lack of security that this entailed led in some places to the invention of various devices, such as the "eyelet" pin, with a perforation half-way down the shaft through which a thread could be passed and wound around the head (cf. Nos. S9I ff. in this collection), or the "double spiral hook" (cf. J. Undset, Zeitschrift für Ethnologie, 1889, p. 208). A still better substitute, however, was found to be the fibula, or safety-pin, in which the point of the pin is bent back to the head and caught in a guard, thus preventing both the pin from coming out and the wearer from being pricked. The fibula when once introduced became exceedingly popular, not only in classical lands, but throughout most of Europe. It passes through a number of trpes, which can be more or less accurately dated and thus afford valuable chronological evidence for the objects found with them in tombs.

Where the fibula was first invented is still a matter of uncertainty. In Greek lands it appears only rarely in the Bronze Age, and then only at the end of that period (Athenische Mitteilungen, I887, pp. 8 ff.: 'E $\phi \eta \mu \epsilon \rho$ is 'Ap $\alpha \alpha 0 \lambda о \gamma \kappa \dot{\eta}$, 1888, pl. 9, I and 2, p. 167; British Museum Excavations in Cyprus, p. 68, Note 1). From Northern Italy, however, and from Central Europe, there are undoubted examples from the Terramare Civilization (cf. Undset, op. cit., pp. 205 ff .), and it is probable, therefore, that this implement originated somewhere in those countries, perhaps in the Balkan peninsula. The development of the fibula in Italy and in Greece is more or less distinct. The earliest forms (cf. Types I and II in both classi-

## IMPLEMENTS AND UTENSILS

Fibulae fications) occur in both countries; but after that the forms begin to differ. However, a number of fibulae of Italian type, that is, of the boat-shaped and serpentine varieties, have been found in Greece (cf. A. Furtwängler, Olympia, IV, Die Bronzen, Nos. $342-361$ A , and A. Furtwängler, Aegina, pl. $116,3,5,8-11,26)$. But as this number is not large, it is possible that these fibulae were importations (cf. J. Undset, Zeitschrift für Ethnologie, 2 I, 1889, pp. 228 ff.).

For fibulae in general cf.
J. Undset, Zu den ältesten Fibeltypen, in Zeitschrift für Ethnologie, 21, 1889, pp. 205 ff.
O. Tischler, Uber die Formen der Gewandnadeln, in Beiträge zur Anthropologie und Urgeschichte Bayerns, 4, 1881, pp. 47 ff.
S. Reinach, Daremberg et Saglio, Dictionnaire, fibula, p. ifor.
O. Montelius, La Civilisation primitive en Italie.
O. Montelius, Spännen från bronsåldern (Antiqvarisk tidskrift för Sverige, 6, 1880-82).
H. B. Walters, Catalogue of Bronzes in the British Museum, pp. LIX ff.
A. Furtwängler, Olympia, IV, Die Bronzen, pp. 5 Iff. and I 83 f.
H. Thiersch, in Furtwängler, Aegina, pp. 400 ff . (on p. 408 f. an interesting account of the uses of the fibula in classical times).
W. Ridgeway, Early Age of Greece, I, pp. 552 ff.

## GREEK FIBULAE ${ }^{1}$

Grefk The Eastern fibulae in our collection all come from Cyprus. The Fibulae following classification, therefore, is limited to the types occurring in that island. Of these some are peculiarly Cypriote; but the majority occur elsewhere on Greek sites.

## TyPE I. Fiddle-Bow Type

The bow is straight and long, giving the appearance of a fiddle-bow or modern safety-pin. This appears to be the earliest type of safety-pin; it was produced by simply bending a straight pin spirally upon itself and securing it in a fastening.

There are no specimens of this ty'pe in our collection. Several examples, however, have been found in Cyprus in Mycenaean tombs, belonging to
${ }^{\text {I }}$ The data for this classification are chietly derived from J. L. Myres, Handbook of the Cesnola Collection, pp. 483 ff ., and Liverpool Annals of Archaeology and Anthropology, III, pp. 138 ff.; J. Undset, Zeitschrift für Ethologie, 1889, 21, pp. 213 ff.
the end of the Late Bronze Age, about izoo B.C. (British Museum Excavations in Cyprus, p. 68, Note i). They also occur rarely elsewhere in

Greek
Fibulae Greek lands at the end of the Bronze Age (Athenische Mlitteilungen, 1887 ,
 Early Age of Greece, p. 561). For Italian fibulae of this form see p. $3^{1}+$.

TyPE II. Semicircular Type
It was soon found that in a fibula of Type I there was not enough room for the material and a more convenient form was developed in which the bow was more or less in the form of a semicircle, slightly swollen in the middle, and the foot a small, bent-up plate of semicircular outline. The bow remains symmetrical in shape, and is often ornamented with beads and collars, in imitation of the actual beads strung on the bows of western fibulae (cf. Nos. 1013 -1015).

This form begins in the Transition Period between the Bronze and Early Iron Ages, and remains in use in the Geometrical Period. For other examples from Cyprus of. British Museum Excavations in Cyprus, p. 68, Note 1; and J. L. Mlyres and M. Ohnefalsch-Richter, Catalogue of the Cyprus Nuseum, p. 138, Nos. $4821-4823$; see also the silver examples in this Museum, J. L. Myres, Cesnola Handbook, Nos. $3199-3203$.

For fibulae of this type found outside Cyprus on Greek sites, cf. e.g. J. Undset, Zeitschrift für Ethnologie, 1889, 21, p. 21 4, fig. 15; A. Furtwängler, Olympia, IV, Die Bronzen, No. 342; H. Tiersch, in Furtwängler, Aegina, p. 400 , Nos. $94-96$; cf. also the fibulae recently found in later Hittite tombs (C. L. Woolley, Liverpool Annals of Archaeology and Anthropology, II, February 1914, pl. XXII a).

For Italian fibulae of this form cf. Nos. 950,95 I.

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FRONCYPRUS (CESNOLA COLLECTION)
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920 The bow is thin, plain, and four-sided. The head is formed by a spiral of one turn. Illustrated, p. 310 .

Length, $1 \frac{7}{5}$ in. ( 4.8 cm. ). cf. J. L. Myres, Cesnola Handbook, No. 4730. Illustrated in the Cesnola Atlas, III, pl. LXIII, 4. Crusty, greenish patina. The surface is corroded in places. Acc. No. C.B. 304.

92 I The bow is thin and plain. The head is formed by a spiral of one turn.

Length, $2 \frac{11}{16} \mathrm{in} .(6.8 \mathrm{~cm}$.). cf. J. L. Myres, Cesnola Handbook, No. 4731. Crusty, greenish patina. The surface is corroded. The pin is missing and the tow is broken in two pieces and reattached. Acc. No. C.B. 307.

## IMPLEMENTS AND UTENSILS

Greek 922 The bow is thick and ornamented with two moulded beads. Fibulae The head is formed by a spiral of two turns.

Length, $4_{1 \frac{1}{16}}$ in. ( 10.3 cm. ). cf. J. L. Myres, Cesnola Handbook, No. 4732. Crusty, greenish patina, with blue patches. Acc. No. C.B. 311 .

923 The bow is thick and ornamented with two moulded beads. The head is formed by a spiral of two turns.

Length, 5 in. ( 12.7 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4733. Illustrated in the Cesnola Atlas, III, pl. LXIII, iI. Crusty, greenish patina. The surface is corroded. The foot and the pin are missing. Acc. No. C.B. 312 .


TYPE III
In order to include a still larger fold of drapery Type II was developed into Type III by supplying the bow with one or two stilted prolongations, thus giving it a roughly quadrilateral appearance. The bow is generally ornamented with beads and collars, like Type II. The foot remains a small, bent-up plate.

For other examples of this type from Cyprus of. the silver fibulae in Gallery C. 32, Nos. 3199-3203; British Museum Excavations in Cyprus, p. 68, figs. 92, 93; J. L. Myres and M. Ohnefalsch-Richter, Catalogue of the Cyprus Museum, Nos. $4^{824^{-}} \boldsymbol{4}^{839}$, where references to examples from other sites are also given.

This type of fibula, but with the foot enlarged into a plate, sometimes of enormous proportions and variously decorated, became popular in Greece during the geometric period (cf. A. Furtwängler, Olympia, IV, Die Bronzen, Nos. 362 ff.; J. Undset, Zeitschrift für Ethnologie, 1889, pp. 220 ff.; F. Studniczka, Athenische Mitteilungen. XII, pp. I \& ff.).

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FROM CYPRUS (CESNOLA COLLECTION)
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924 The bow is ornamented with three moulded collars. The head is formed by a spiral of two turns.

Length, $1 \frac{1}{2}$ in. ( 3.8 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4734. The crusty, greenish patina has been mostly removed. Acc. No. C.B. 308 .

## TOILET ARTICLES AND PERSONAL ORNANIENTS

925 The bow is ornamented with three moulded collars. The head is formed by a spiral of two turns.

Length, $1 \frac{9}{16}$ in. ( 4 cm .). cf. J. L. Myres, Cesnola Handhook, No. 4735 . Crusty, greenish patina. Acc. No. C.B. 305 .

926 The bow is omamented with three moulded collars. The head is formed by a spiral of two turns.

Length, $1 \frac{3}{3}$ in. $(4.4 \mathrm{~cm}$.). cf. J. L. Myres, Cesnola Handbook, No. 4736. Illustrated in the Cesnola Atlas, III, pl. LXYIII, 6. Crusty, greenish patina. The lower half of the pin is missing. Acc. No. C.B. jog.

927 The bow is ornamented with three moulded collars. The head is formed by a spiral of two turns.

Length, $\frac{1}{16}$ in. ( 4 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4737. Illustrated in the Cesnola Atlas, III, pl. LXVIII, io. Crusty, green patina. The foot and the end of the pin are missing. Acc. No. C.B. 301.

928 The bow is ornamented with three moulded collars.
Length, $2 \frac{1}{5}$ in. $(5 .+\mathrm{cm}$.$) . cf. I. L. Myres, Cesnola Handbook, Nu. 4738$. The crusty, greenish patina has been partly removed. The head and the pin are missing. Acc. No. C.B. 302.

929 The bow is ornamented with three moulded collars. The head is formed by a spiral of two turns.

Length, $1 \frac{1}{8}$ in. ( 2.8 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4739. Crusty, greenish patina. The pin is missing. Acc. No. C.B. 316 .

930 The bow consists of four globular beads and a plain rectangular block. The head is formed by a spiral of two turns.

Length, $1 \frac{3}{5} \mathrm{in} .(3.5 \mathrm{~cm}$.$) . cf. J. L. Myres, Cesnola$


Handbook, No. 4740 . Illustrated in the Cesnola Atlas, 111, pl. LXVIII, 12. The crusty, green patina has been removed in places. The pin is missing. Acc. No. C.B. 303.

## TYPE IV

The bow is bent up at an angle with a bulbous knob on top and a flat rectangular piece shaped like a double axe on either side. The foot is slightly elongated and the pin is curved.

This type of fibula is found in tombs of the geometrical period and may have begun as early as the Transitional Age. It is generally referred to as Cypriote, since most extant examples have been found in Cyprus

Greek
Fibulae

## IMPLEMENTS AND UTENSILS

Grefe (cf. J. L. Myres, Liverpool Annals of Archaeology and Anthropology, Fibulae III, p. ifi, Note f). When it occurs elsewhere, it was probably imported from Cyprus (cf. H. Thiersch, in Furtwängler, Aegina, pl. 116, 25). The development of this form is clearly seen by a comparison of examples such as No. 931, which shows the original simple loop; No. 932, where the loop is already enclosed by a collar; and Nos. 933-938, where the loop has become a knob. For the derivation of the rectangular pieces on the sides from double-axe symbols, cf. J. L. Myres, Cesnola Handbook, Nos. $47+1$ ff., who cites examples from Sicily of the Late Bronze Age, in which double axes are strung as separate amulets on the wire of the bow.


This type of fibula may be connected with the Western serpentine form (cf. J. L. Myres, op. cit., III, p. 142). Compare also the somewhat similar fibulae found at Tartûs (W. Ridgeway, Early Age of Greece, I, p. 563 , fig. I 16), and recently more copiously at Carchemish ${ }^{1}$, in which the how is twofold and joined by a neck at an angle, from which pendants are often suspended.

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FROM CYPRUS (CESNOLA COLLECTION)
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93 I The bow has a loop at the apex, but no collar, and flat, leafshaped sides. This form probably marks the beginning of the type at ${ }^{1}$ This information I owe to Mr. J. L. Myres.
the point where it diverges from the Tartûs form. The head is formed by a spiral of one turn.

Length, $2 \frac{3}{8}$ in. ( 6 cm .). cf. J. L. Myyres, Cesnola Handbook, No. $47+1$. Illustrated in the Cesnola Atlas. III, pl. LXVIII, 9. Crusty, greenish patina. Acc. No. C.B. 306.

932 The central knob is here in the form of a loop, clearly showing its original meaning. The head is formed by a spiral of one turn.

Length, $3 \frac{15}{15}$ in. ( 10 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4742 . Crusty, greenish patina. The surface is somewhat corroded. The foot and the lower half of the pin are missing. Acc. No. C.B. 299.

933 The knob is four-sided. The head is formed by a spiral of one turn.

Length, $4^{\frac{1}{2}} \mathrm{in}$. $(11.4 \mathrm{~cm}$. ). cf. J. L. Myres. Cesnola Handbook, No. 4745. Crusty, greenish patina. The foot is missing. Acc. No. C.B. 295.

934 The knob is four-sided. The head is formed by a spiral of one turn.

Length, $4^{\frac{3}{4}}$ in. ( 12.1 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4744. Illustrated in the Cesnola Atlas, III, pl. LXill, it (head and pin only figured). Crusty, greenish patina. The surface is corroded and encrusted. The bow is broken above the head and reattached. Acc. No. C.B. 296.

935 The knob is four-sided. The head is formed by a spiral of one turn.

Length, $4 \frac{1}{6}$ in. ( 10.3 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4745 . Crusty, greenish patina. Part of the foot and most of the pin are missing. Acc. No. C.B. 298.

936 The knob is four-sided.
Length, $4^{\frac{5}{16}}$ in. ( 10.9 cm .). cf. J. L. Myres, Cesnola Handbook, No. $47+6$. Crusty, greenish patina. The surface is corroded in places. The head and most of the pin are missing. Acc. No. C.B. 300.

937 The knob is slightly flattened and the collar small. The head is formed by a spiral of one turn.

Length, $3 \frac{9}{16}$ in. $(9 \mathrm{~cm}$.). cf. J. L. Myres, Cesnola Handbook, No. $47+7$. The crusty, greenish patina has been partly removed. The surface is corroded in places. Acc. No. C.B. 297.

938 The knob is olive-shaped and the collar small. The head is formed by a spiral of one turn.

Length, $3 \frac{1}{8}$ in. $(7.9 \mathrm{~cm}$.). ff. J. L. Myres, Cesnola Handbook. No. 4748 .

## IMPLEMENTS AND UTENSILS

Greek Crusty, greenish patina. The surface is corroded in places. The pin and the Fibulae foot are missing. Acc. No. C.B. 294.

939
Length, 4 in. (ro.1 cm.). cf. J. L. Myres, Cesnola Handbook, No. 4749. Only the pin and a small part of the bow are preserved. The patina has been removed. Acc. No. C.B. 310.

## EARLY ITALIAN FIBULAE ${ }^{\text {I }}$

Early Italian Fibulae

Unless otherwise mentioned, the following fibulae were all purchased by the Museum in 1896 .

## TYPE I. Fiddle-Bow Type (cf. Type I of Greek fibulae)

The bow is straight and long, giving the appearance of a fiddle-bow or modern safety-pin. The foot is in the form either of a disk or a rounded, bent-up plate (cf. O. Montelius, La Civilisation primitive en Italie, pls. I-IV, figs. 1-23).

Fibulae of this form have been found on Bronze Age sites in North Italy (cf. Montelius, op. cit., pl. 8, figs. I-7).

There are no examples in our collection. The following two specimens, though they have the fiddle-bow type of bow, have the later, slightly elongated form of foot.

945 The bow is flat and oval-shaped. The head is formed by a spiral of one turn. The foot is in the form of a small, bent-up plate.

Length, $\mathrm{I} \frac{3}{16}$ in. ( 3 cm .). The crusty, green patina has been partly removed. The surface is somewhat corroded in places. A piece from the foot is missing. Acc. No. G.R. 51.


946 Similar to the preceding.
Length, $\mathrm{I} \frac{1}{8}$ in. ( 2.9 cm .). The crusty, green patina has been partly removed. The surface is corroded in places. Part of the foot is missing. Acc. No. G.R. $5^{2}$.

TyPE II. Simple Semicircular Type (ad arco semplice) (see Type II of Greek fibulae)

The bow is in the form of a semicircle. Two main varieties of this type can be distinguished, according as the fastening (a) consists of a
${ }^{1}$ In this classification I have chiefly followed O. Tischler, Beiträge zur Anthropologie und Urgeschichte Bayerns, IV, I88ı, pp. 50 ff. for the differentiation of types; and O . Montelius, La Civilisation primitive en Italie, Texte, pp. IV-VI, for the dating.
plate bent lengthwise to form a catch of semicircular outline (cf. O .
Early
Montelius, La Civilisation primitive en Italie, pl. IV, figs. 2f ff.), or (b) was formed by prolonging the foot by twisting it first into two loops and then rolling it spirally into a disk (cf. Mlontelius, op. cit., pl. I, figs. 3 ff .), or making it terminate in a flat piece of metal (cf. Montelius, op. cit., pl. I, fig. (I). In both varieties the bow is often decorated in various ways, with incisions, collars, beads, disks, or spiral twists.

This type of fibula occurs in Italy during the Late Bronze Age (cf. Montelius, op. cit., pl. IV, pl. 4 I, figs. it, I5).

TYPE II (a)
950 The bow is twisted spirally. The head is formed by a spiral of one turn.

Length, $\mathrm{I}^{\frac{3}{4}}$ in $(4.4 \mathrm{~cm}$.). Black patina. The lower part of the pin is missing. Acc. No. G.R. 109.

95 I The bow is four-sided The head is formed by a spiral of two turns.

Length, $2 \frac{11}{16} \mathrm{in}$. ( 6.8 cm .). Crusty. greenish patina. Part of the foot and most of the pin are missing. Acc. No. G.R. 115 .

TYPE II (b)
No examples in our collection.

## TYPE Ill (a). Boat-Shaped Type

Type II was developed into Type III by making the bow swell in the middle, so as to resemble a boat (cf. O. Nontelius, La Civilisation primitive en Italie, pl. VI, figs. $52_{2} \mathrm{ff}$.). This thickened bow was either solid, or hollow, with the under side closed, or provided with a small hole, or left open. The surface was generally decorated with incised lines. Sometimes the bow was drawn out in the middle to form points, which were occasionaliy provided with horn-like knobs (cf. Montelius, op. cit., pl. IX, figs. ior ff.). These several varieties are often called by different names, such as the leech type (a sanguisuga), the boat type (a navicella), the kite type. It is simpler, however, to group all these sarieties under the larger heading of boat-shaped type, and only distinguish two main subdivisions: (1) those with a short foot formed by a bent-up, elongated plate (cf. Montelius, op. cit., pl. VI, figs. 52 ff.); and (2) those with a long

## IMPLEMENTS AND UTENSILS

Early foot shaped like an open sheath, terminating sometimes in a knob (cf.

Italian
Fibulae Montelius, op. cit., pl. VIII, figs. go ff.).

The short-footed variety is the earlier of the two and belongs to the Early Iron Age. The long-footed one, without knob at the end, comes next in date, being partly contemporary with the other, but occurring occasionally as late as the sixth century. The fibulae with long foot terminating in a knob belong mostly to the sixth to fourth centuries B.C.


WITH SHORT FOOT, $1 N$ THE FORM OF A SEMICIRCLE
955 The bow is solid and decorated on its upper surface with incised zigzag lines and bands.

Length, $1_{15}^{15} \mathrm{in} .(4.9 \mathrm{~cm}$.). The crusty, blue-green patina has been partly removed. The head and the pin are missing. Acc. No. G.R. 70.

956 The bow is hollow. On its upper surface it is decorated with incised patterns, consisting of cross-hatched triangles and squares, and bands ornamented with punctured dots. The head is formed by a spiral of two turns.

Length, $2 \frac{5}{8} \mathrm{in}$. ( 6.7 cm. ). Crusty, greenish patina. The pin and part of the foot are missing. On the under side of the bow are several holes. Acc. No. G.R. 98.

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WITH SLIGHTLY ELONGATED FOOT
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957 The bow is hollow and closed. The head is formed by a spiral of two turns.

Length, 2 in . ( $5 . \mathrm{I} \mathrm{cm}$.). Crusty, green patina. The surface is considerably corroded. The larger part of the pin is missing. Acc. No. G.R. 71.

958 The bow is hollow and open on the under side. Its upper surface is decorated with incised lines. The head is formed by a spiral of two turns.

## TOILET ARTICLES AND PERSONAL ORNAMENTS

Length, $2 \frac{5}{8} \mathrm{in} .(6.2 \mathrm{~cm}$.). Crusty, green patina. Broken in several places and reattached. Acc. No. G.R. 117.

959 The bow is hollow and open on the under side. Its upper surface is decorated with incised bands. The head is formed by a spiral of two turns.

Length, 3 in. ( 7.6 cm .). Blackish patina. There is a hole in the upper side of the bow. The head and pin have been attached and do not certainly belong. Acc. No. G.R. 94.

> WITH LONG, SHEATH-L1KE FOOT


962 The bow is solid and of angular section. It is decorated at each end with a series of incised lines. On the foot are incised zigzag lines. The head is formed by a spiral of two turns.

Length, $4^{\frac{1}{5}} \mathrm{in}$. ( 10.5 cm .). Crusty, greenish patina. The end of the foot is missing. Acc. No. G.R. 69.

963 Similar to the preceding.
Length, $\frac{9}{16} \mathrm{in}$. ( 11.6 cm .). The crusty, greenish patina has been partly removed. The head and the pin have been attached and probably do not belong. The end of the foot is missing. Acc. No. G.R. 72.

964 The bow is solid. The head is formed by a spiral of two turns.
Length, $3 \frac{7}{16} \mathrm{in} .(8.7 \mathrm{~cm}$.). Crusty, greenish patina. The surface is considerably corroded. The pin and the end of the foot are missing. Acc. No. G.R. 112 .

965 The bow is hollow and open on its under side. Its upper surface is decorated with incised bands. The head is formed by a spiral of two turns.

Length, $4^{\frac{1}{4}} \mathrm{in}$. ( 10.8 cm .). Crusty, hrownish patina. The surface is much encrusted. Acc. No. G.R. Io3.

966 The bow is hollow and open on its under side. Its upper surface is decorated with incised patterns. The head is formed by a spiral of two turns.

## IMPLEMENTS AND UTENSILS

Early Length, $3^{\frac{1}{2}} \mathrm{in}$. ( 8.9 cm .). Green patina with blue patches. Pieces from the bow are missing. The plate and the pin with part of the head have been attached and probably do not helong. Acc. No. G.R. I1I.

967 The bow is hollow and open on the under side. Its upper surface is decorated with incised bands. The head is formed by a spiral of two turns. From the pin is suspended a short chain. Illustrated, p. 317.

Length, $3^{\frac{3}{4}} \mathrm{in}$. $(9.5 \mathrm{~cm}$.). Crusty, green patina. The pin has been broken off and reattached. Acc. No. G.R. 106.

968 The bow is hollow and open on its under side. On its upper surface it is decorated with incised bands. The head is formed by a spiral of two turns.

Length, $3 \frac{5}{16}$ in. ( 8.4 cm .). Crusty, green patina. The pin has been attached, but probably belongs. Most of the foot is missing. Acc. No. G.R. 91 .

969 The bow is hollow and open on its under side. Its upper surface is decorated with incised lines. The head is formed by a spiral of two turns.

Length, $1 \frac{1}{2} \mathrm{in} .(3.8 \mathrm{~cm}$.). The patina has been mostly removed. Parts of the pin and of the foot are missing. Acc. No. G.R. 54.

970 The bow is hollow and open on the under side. Its upper surface is decorated with incised patterns. The head is formed by a spiral of two turns.

Length, $31 \frac{15}{16} \mathrm{in}$. ( 10 cm. .). Crusty, green patina. The end of the foot is missing. The pin has been attached and does not certainly belong. Acc. No. G.R. 102.

## WITH LONG, SHEATH-LIKE FOOT AND BOW D) RAWN OUT IN THE MIDDLE



975 The bow is solid and decorated on its upper surface with incised lines.

Length, $2 \frac{1}{4} \mathrm{in}$. $(5.7 \mathrm{~cm}$.). The greenish patina has been mostly removed. The head and the pin have been attached and do not belong. The end of the foot is missing. Acc. No. G.R. 100.

## TOILET ARTICLES AND PERSONAL ORNAMENTS

976 The bow is solid and decorated on its upper surface with incised lines.

Length, $1 \frac{7}{8}$ in. ( 4.8 cm .). Crusty, greenish patina. The head and the pin have been attached and do not certainly belong. Part of the foot is missing. Acc. No. G.R. 101.

977 The bow is solid and decorated on its upper surface with a ridge. The head is formed by a spiral of two turns.

Length, $1 \frac{1}{2} \mathrm{in} .(3.8 \mathrm{~cm}$.). Crusty, greenish patina. The head with the pin is broken off and reattached. Part of the foot is missing. Acc. No. G.R. 63.

978 The bow is hollow and open on its under side. On its upper surface it is decorated with incised patterns, consisting of bands, zigzag lines, and punched circles.

Length, + in. ( 10.1 cm .). Crusty, greenish patina. The pin has been attached, but probably belongs. Most of the foot is missing. Acc. No. G.R. 113.

979 The bow is solid and plain. The head is formed by a spiral of two turns.

Length, $1 \frac{5}{8}$ in. ( 4.1 cm .). The patina has been mostly removed. Part of the foot is missing and the pin is bent. Acc. No. G.R. 59.

Like preceding, but points provided with knobs:-
982 The bow is hollow. On its upper surface is a punched circle. The head is formed by a spiral of two turns.

Length, $4^{\frac{3}{8}} \mathrm{in}$. ( I .1 cm .). The patina has been mostly removed. The surface is slightly corroded in places. Acc. No. G.R. 99.

983 The bow is hollow. The head is formed by a spiral of two turns.

Length, $3^{\frac{1}{2}} \mathrm{in}$. $(8.9 \mathrm{~cm}$.). The patina has been mostly removed. Acc. No. G.R. 107.

984 The bow is solid and plain. The head is formed by a spiral of two turns.

Length, $1 \frac{5}{8} \mathrm{in}$. ( 4.1 cm .). Green patina. The surface is slightly corroded in places. The pin, part of the foot, and a piece from one knob are missing. Acc. No. G.R. 55 .

## IMPLEMENTS AND UTENSILS

Early
Italian Fibulae


987


990


992

987 The bow is solid and decorated on its upper surface with a series of ridges. The head is formed by a spiral of two turns.

Length, $3^{\frac{3}{4}} \mathrm{in} .(9.5 \mathrm{~cm}$.). Crusty, green patina. The pin is missing. Acc. No. G.R. 78.

988 Like the preceding.
Length, $4 \frac{1}{16} \mathrm{in}$. ( 10.3 cm .). Crusty, green patina. A piece of the head is missing. Acc. No. G.R. 88.

989 The bow is hollow and closed. It is decorated on its two ends with incised lines.

Length, $3 \frac{1}{2} \mathrm{in}$. $(8.9 \mathrm{~cm}$.). The patina has been removed. Acc. No. G.R. 76 .
990 The bow is hollow and open on its under side. Its upper surface is decorated with incised bands and zigzag lines. The head is formed by a spiral of two turns.

Length, $6 \frac{3}{8} \mathrm{in}$. ( 16.2 cm .). The patina has been removed. Acc. No. G.R. 50.
991 The bow is hollow and open on the under side. It has been drawn out in the middle to form two points which are provided with knobs.

Length, $2 \frac{3}{16} \mathrm{in}$. $(5.5 \mathrm{~cm}$.). Smooth, green patina. The surface is partly corroded. The head and the pin are missing. Acc. No. G.R. $6_{4}$.

992 The bow is very shallow, almost flat, and decorated on its outer side with beaded mouldings. The outer half of the foot is surrounded with a bone cylinder. On the bronze part of the foot are zigzag lines and a swastica, incised. The head is formed by a spiral of two turns.

For a similar example cl. O. Montelius, La Civilisation primitive en Italie, pl. X, I2z.

Length, $3^{\frac{7}{16}} \mathrm{in}$. $(8.8 \mathrm{~cm}$.). Smooth, greenish patina. The surface is corroded in places. Acc. No. G.R. ${ }^{1} 16$.

## TOILET ARTICLES AND PERSONAL ORNANENTS

## WITH FOOT MISSING

(a) With bow swollen, but not drawn out in centre

998 The bow is hollow and open on the under side. On the upper

Early
Italian
Fibulae side it is decorated with incised patterns.

Length, $2 \frac{13}{16} \mathrm{in}$. ( 7.1 cm .). Crusty, green patina. The surface is somewhat corroded. The head and pin are missing. Acc. No. G.R. 81.

999 The bow is hollow and open on the under side. On the upper side it is decorated with incised patterns.

Length, $2 \frac{7}{16} \mathrm{in} .(6.2 \mathrm{~cm}$.). The patina has been mostly removed. The surface is somewhat corroded in places. The head and the pin are missing. Acc. No. G.R. 87 .
$\mathbf{I O O O}$ The bow is hollow, and closed on the under side. On its upper surface it is decorated with incised patterns consisting of bands and concentric circles.

Length, $1 \frac{13}{16} \mathrm{in} .(4.6 \mathrm{~cm}$.). Crusty, green patina. The head and the pin are missing. A small piece is missing from the under side of the bow. Acc. No. G.R. 66.

IOOI The bow is hollow and open on the under side. On its upper surface it is decorated with hatched bands, incised. The head is formed by a spiral of two turns.

Length, 2 in. ( 5.1 cm .). Crusty, greenish patina. The surface is corroded in places. The pin is missing. Acc. No. G.R. $9^{2}$.

IOO2 The bow is solid and flat; on its upper surface it has an incised collar. The head is formed by a spiral of two turns.

Length, $1 \frac{3}{4} \mathrm{in} .(4.4 \mathrm{~cm}$.). The foot is missing. The patina has been removed. Acc. No. G.R. 110.

IOO3 The bow is hollow and broken on its under side. On its upper surface it is decorated with incised patterns.

Length, $1 \frac{3}{4} \mathrm{in} .(4.4 \mathrm{~cm}$.). Crusty, green patina. The surface is somewhat corroded. The head and the pin are missing. Acc. No. G.R. 83.

IOO4 The bow is hollow and closed on its under side. On its upper surface it is decorated with incised patterns.

Length, $1 \frac{3}{4} \mathrm{in}$. ( 4.4 cm .). Crusty, green patina. The surface is much corroded. The head and the pin are missing. Acc. No. G.R. 74.

IOO5 The bow is hollow and broken on its under side. The upper

## IMPLEMENTS AND UTENSILS

Early surface is decorated with incised lozenges. The head is formed by a spiral

Italian
Fibulae of two turns.

Length, $1 \frac{1}{4}$ in. ( 3.2 cm .). Crusty, green patina. The pin is missing. Acc. No. G.R. 96 .
(b) With bow drawn out in the centre to form points

IOO8 The bow is hollow and open on its under side. On its upper surface it is decorated with incised patterns consisting of zigzag lines, hatched bands, and punctured concentric circles.

Length, $2 \frac{7}{5}$ in. ( 7.3 cm .). Smooth, dark green patina. The head and pin are missing. Acc. No. C.B. 89 .

IOO9 The bow is solid and flat. On its upper surface it is decorated with incised patterns. The head is formed by a spiral of two turns.

Length, $1 \frac{13}{16} \mathrm{in}$. ( 4.6 cm .). Crusty, greenish patina. The surface is corroded in places. Part of the head and the pin are missing. Acc. No. G.R. 85 .

IOIO The bow is hollow and open on its under side. On its upper surface it is decorated with a moulded ridge. The head is formed by a spiral of two turns.

Length, $\frac{1}{16}$ in. ( 3.6 cm .). Smooth, green patina. The pin is missing. Acc. No. G.R. 57.

TYPE III (b).
Contemporary with the boat-shaped type is another variety in which the bow is formed by a simple wire, without swelling, but often strung with beads or disks of various materials, such as amber, glass, bone, or bronze. The foot is either quite small, or elongated, or sheath-shaped (cf. O. Montelius, La Civilisation primitive en Italie, pl. VII, figs. 68, 70).


1011


1012

IOI I The bow is four-sided in section, and is strung with an amber

## TOILET ARTICLES AND PERSONAL ORNANIENTS

bead. The foot is only slightly elongated. The head is formed by a spiral of two turns.

Length, $2 \frac{3}{4} \mathrm{in} .(7 \mathrm{~cm}$.). Crusty, green patina. The surface is corroded in places. Pieces from the foot are missing. Acc. No. G.R. 67.

IOI2 The bow is four-sided in section. The foot is only slightly elongated. The head is formed by a spiral of two turns.

Length, $2 \frac{1}{8}$ in. ( 5.4 cm .). Crusty, greenish patina. The surface is slightly corroded in places. Acc. No. G.R. 97.

IOI3 The bow is four-sided in section, and strung with a small bone bead. The foot is long and sheath-like. The head is formed by a spiral of two turns.

Length, $3 \frac{15}{15} \mathrm{in}$. ( rocm .). The patina has been mostly removed. The foot is somewhat bent. Acc. No. G.R. 79.

IOI 4 The bow is four-sided in section and strung with a small silver bead. The foot is long and sheath-like. The head is formed by a spiral of two turns.

Length, $3 \frac{7}{8}$ in. $(9.8 \mathrm{~cm}$.). The patina has been mostly removed. The surface is slightly corroded. Acc. No. G.R. go.

IOI 5 The bow is four-sided in section and strung with three large amber beads. The head is formed by a spiral of two turns.

Length, $4^{\frac{3}{8}}$ in. ( 11.1 cm .). Green patina. The surface is somewhat corroded. The end of the pin and most of the foot are missing. Acc. No. G.R. 119.


1015
TYPE IV. Serpentine Type (a drago, serpeggiante)
Alongside with Types II and III there was developed the serpentme type of fibula. It was formed by twisting the bow into all manner of shapes, -first by introducing a spiral or simple loop, then by adding swellings and horn-like knobs. The bow is sometimes decorated with incisions, or spiral twists, or it is strung with beads or disks. Some gold examples are elaborately ornamented with granulation.

## IMPLEMENTS AND UTENSILS

Early Italian Fibulae

This type of fibula is dated most conveniently according to the shape of its foot, which developed on parallel lines with that of Types II and III. Simplicity of form in the bow is not necessarily a sign of early date, since the simplest shapes are found quite late. The foot is either (a) of the disk variety (cf. O. Montelius, La Civilisation primitive en Italie, pl. XIV, figs. 195 ff .), or (b) it is formed by a bent-up plate, rounded (cf. Montelius, op. cit., pl. XVI, figs. 218 ff.), or elongated (cf. Montelius, op. cit., pl. XVI, figs. 233 ff .), or sheath-like with or without knob at end (cf. Montelius, op. cit., pl. XVIII, figs. 258 ff .). Serpentine fibulae of the disk variety and those with semicircular foot occur as early as the latter part of the Bronze Age, and are rarely found in the Early Iron Age. Those with elongated foot range from the Early Iron Age to the fifth century B.C., the longer foot being later than the shorter one, and the introduction of a knob at the end being a mark of lateness. Fibulae with horns belong mostly to the seventh century B.C.

## W1TH FOOT TERMINATINGINA DISK



1020


102I


1022

1020 There are two spirals, one of one turn, the other of two. The disk is formed by a flat piece of metal rolled once spirally.

Length, $4_{16}^{\frac{7}{6}} \mathrm{in}$. ( 11.3 cm .). Crusty, green patina. The surface is somewhat corroded. Pieces from the disk are missing. The disk was broken off and has been repaired, apparently in antiquiry. Acc. No. G.R. if 4.

IO2 I There are two spirals, one of one turn, the other of two.
Length, $3 \frac{1}{8}$ in. ( 7.9 cm .). Crusty, green patina. The surface is considerably. corroded. The disk is missing, only two loops of the foot being preserved. The end of the pin is missing. Acc. No. G.R. 118.

1022 There are two spirals, both of one turn. The bow has a series of moulded beads. The foot, which is missing, was either of the disk variety or a small bent-up plate.

Length, $3 \frac{3}{8} \mathrm{in}$. ( 8.6 cm .). The dark green patina has been largely removed. Acc. No. G.R. 86.

## TOILET ARTICLES AND PERSONAL ORNAMENTS

WITH LONG, SHEATH-LIKE FOOT
IO25 The bow is formed by two loops with cross-pieces. The head consists of a knob. The pin is strung with two bronze rings.

Length, $j^{\frac{12}{16} \mathrm{in} .}(9 .+\mathrm{cm}$.). Crusty, greenish patina. The surface is some-

Efrly Italian Fibulae what corroded. Part of the foot is missing. Acc. No. G.R. 75.


1025


1028

WITH LONG, SHEATH-LIKE FOOT AND BOW IDECORATED WITH HORNS AND BOSSES

IO28 The bow has two loops, a spiral of one turn, and one pair of horns. The head consists of a knob.

Length, $6 \frac{7}{16} \mathrm{in}$. ( 16.3 cm .). The patina has been removed. The end of the foot and one horn are bent, and part of the other horn is missing. Acc. No. G.R. sos.

IO29 Similar to the preceding.
Length, $4 \frac{7}{16}$ in. ( 11.2 cm .). The patina has been removed. The surface is somewhat corroded, and the edges of the foot are chipped. Acc. No. G.R. $8_{4}$.

1030 Similar to No. io28, but fragmentary.
Length, $2 \frac{3}{4} \mathrm{in}$. ( 7 cm .). The patina has been removed. The surface is somewhat corroded. Part of the bow, the pin, and pieces from the foot are missing. Acc. No. G.R. 53.

IO3I The bow has two loops and two pairs of bosses. The head consists of a knob.

Length, $2 \frac{3}{16} \mathrm{in}$. $(5.6 \mathrm{~cm}$.). The patina has been mostly removed. The foot and the pin are missing. Acc. No. G.R. 82.

IO32 The bow has two loops with one cross-piece and two pairs of bosses. The head is formed by a knob.

Length, $2 \frac{3}{8} \mathrm{in}$. ( 6 cm .). Smooth, green patina. Part of the pin and most of the foot are missing. Acc. No. G.R. 93.

IO33 The bow has two loops and two pairs of bosses. The head is formed by a knob. The foot terminates also in a knob.

## IMPLEMENTS AND UTENSILS

Early Length, $5 \frac{3}{8}$ in. ( 13.6 cm .). The patina has been removed. Acc. No. G.R. 95 . Italian Fibulae


1034 The bow has two loops and four pairs of bosses. The head is formed by a knob.

Length, $2 \frac{5}{8} \mathrm{in}$. ( 7.6 cm .). The green patina has been largely removed. Part of the bow, the pin, and the foot are missing; also one of the bosses. Acc. No. G.R. 77.

1035 Only part of the bow is preserved; it has two loops and four pairs of bosses.

Length, $1 \frac{5}{8}$ in. ( 4.8 cm .). The patina has been mostly removed. The surface is somewhat corroded. Acc. No. G.R. 61.

## TyPE V. "Certosa" Type

This type of fibula, which is generally of small size, has a sharply arched bow, and a turned-up foot (cf. O. Montelius, La Civilisation primitive en Italie, pl. XI, figs. I37-I 42 ). A number of specimens were found during excavations in the Certosa cemetery near Bologna, from which it derives its name (cf. A. Zannoni, Scavi della Certosa, pls. XLIX, io, $\mathrm{I}_{3}$, 16; XC, 2 ; CXVII, 4, etc.). From the objects with which it was found it can be dated as belonging to the sixth to fifth centuries B.C.

IOto With plain bow and long, sheath-like foot, turned up at the end.
Length, $1 \frac{7}{8}$ in. ( 4.8 cm .). Crusty, green patina. The surface is considerably corroded. Most of the head and the pin are missing. Acc. No. G.R. 62.


1040

Type Vi. "La Tène" Type


1045
The "La Tène" type appears to be a development from the "Certosa" fibula. It has the same turned-up foot, but the head, instead of consisting

## TOILET ARTICLES AND PERSONAL ORNANENTS

of a one-sided coil, becomes a double coil projecting on each side of the body (cf. O. Montelius, La Civilisation primitive en Italie, pl. XII, figs. I6I ff.). The turned-up foot was gradually lengthened more and more until it

Early
Italian
Fibulae touched the bow (cf. Montelius, op. cit., pl. XII, figs. 169 ff.). The bow was often richly ornamented with enamel work or strung with beads of glass or bronze.

The name of the "La Tène" fibula is derived from the so-called La Tène civilization, of which it is a distinguishing mark. The civilization apparently had its home in Southeastern France, but had a very wide distribution. In Italy the occurrence of the "La Tene" fibula is not very frequent.

From the shape of its head this type of fibula is also sometimes called T-shaped.

The earliest "La Tène" fibulae in Italy are contemporary with the "Certosa" ones. The later ones occupy the succeeding centuries until the Roman period.

IO 5 5 The bow is broad and flat and decorated on its inner side with punctured lines.

Length, $1 \frac{5}{5} \mathrm{in}$. ( 4.1 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4750. The green patina has been partly removed. The pin and parts of the head and foot are missing. Acc. No. C.B. 314.

Io46 The bow is plain and rounded.
Length, $\mathrm{I}_{\frac{7}{5}}^{\mathrm{j}}$ in. ( 4.8 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres. Cesnola Handbook, No. 475 r. The green patina has been partly removed. The foot is missing. Acc. No. C.B. 315 .


1046

$10+7$

1047 The bow is narrow and flat. The foot is short and sheath-like and turned up at the end.

Length, $1 \frac{5}{5} \mathrm{in}$. ( 4.1 cm .). Crusty, greenish patina. The surface is somewhat corroded. The head is broken and reattached. Acc. No. G.R. $5^{6}$.

## IMPLEMENTS AND UTENSILS

## ROMAN FIBULAE ${ }^{\text {I }}$

Roman Fibulae

The large majority of Roman fibulae have been found not in Italy itself, but in the North, in the valleys of the Danube and the Rhine. Their respective dates can be ascertained from the Roman coins which are frequently found with them.

The following chief varieties can be distinguished:
TYPE I. With double-coiled head, like the "La Tène" fibula, but with upturned foot united with the bow, leaving only a ring on the bow to show the place where the two used to meet. It is further distinguished from the La Tène type by the fact that the double coil of the spring is generally protected by a sheath, and the head is enlarged to form a regular catch-plate (cf. O. Tischler, Beiträge zur Anthropologie und Urgeschichte Bayerns, p. $7^{2}$, fig. II).

This type of fibula is found chiefly in the northern Roman provinces and dates from the beginning of the Roman Empire until the end of the second century A.D.

There are no examples in our collection.
TYPE II. With double-coiled head like the La Tène fibula, but with foot turned, not upward, but downward, to form a loop which finally joins the bow (cf. Tischler, op. cit., p. 75, fig. III). This type of fibula has been mostly found in the Rhine country. From the coins which have been found with it, it appears to date from the end of the second and the beginning of the third century A.D.


1050, 1051


1052

1050 The end of the foot is twisted spirally round the bow.
Length, $2 \frac{3}{4} \mathrm{in} .(7 \mathrm{~cm}$.). Crusty, green patina. The surface is somewhat corroded. Acc. No. G.R. so.
${ }^{1}$ In this classification I have chiefly followed O. Tischler, Beiträge zur Anthropologie und Urgeschichte Bayerns, IV, 188ı, pp. 68 ff.

## TOILET ARTICLES AND PERSONAL URNAMENTS

## IO5 I The end of the foot is twisted spirally round the bow.

Length, $2 \frac{15}{16} \mathrm{in} .(7.5 \mathrm{~cm}$.). Crusty, green patina. The surface is somewhat corroded. The end of the pin and pieces from the foot are missing. Acc. No. G. R. $38_{4}$.

IO52 The end of the foot is twisted spirally round the bow. The upper part of the foot is decorated with a fern pattern, incised.

Length, $2 \frac{13}{16} \mathrm{in}$. ( 7.1 cm .). Crusty, greenish patima. Most of the head and the pin are missing. Acc. No. G.R. 73.

TYPE III. With double-coiled head and straight, long foot with catch-plate either small and leaf-like or running along the foot in the form of a sheath (cf. Tischler, op. cit., p. 77, fig. IV').

This type is characteristic of the northem Roman provinces from the middle of the third century to the end of the fourth century A.D.

There are no examples in our collection.
TYPE IV. The double-coiled head is replaced by a cross-piece, the pin being made separately and attached by a hinge (cf. S. Reinach, Daremberg et Sagtio, Dictionnaire, fibula, figs. $30 \mathrm{I} ; \mathrm{ff}$.). The foot assumes a variety of forms, being either short or long; both bow and foot are often elaborately decorated.

This form has the widest distribution throughout the Roman Empire, but is chiefly characteristic of the South. It is about contemporary with Type III, dating chiefly from the second half of the third century until the end of the fourth century A.D.


1059


1060

IO58 The bow is flat and slit open along the middle. Its upper surface is decorated with incisions. The foot is slightly elongated and turned up at the end.

Length, $2 \frac{1}{4} \mathrm{in}$. ( 5.7 cm .). The patina has been removed. The surface is somewhat corroded. The pin is missing. Acc. No. G.R. 65.

## IMPLEMENTS AND UTENSILS

Roman Fibulae

IO59 The bow is flat and has an ornamental ridge running along the middle of its upper side. The foot is slightly elongated and ends in a knob. Above the head is a flat plate, inscribed A V C I S S A, with edges indented.

Length, $2 \frac{3}{16} \mathrm{in}$. ( 5.6 cm .). The green patina has been largely removed. The pin is missing. Acc. No. G.R. 68. Illustrated, p. 329.

IO60 The bow is flat and has a groove along the middle of its upper side; the two ridges thus formed are ornamented with beading. The foot is slightly elongated and ends in a knob. Above the head is a flat, ornamented plate with edges indented. Illustrated, p. 329.

Length, 2 in. ( 5.1 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4752. Illustrated in the Cesnola Atlas, III, pl. LXIII, 7. The crusty, greenish patina has been mostly removed. The surface is somewhat corroded in places. Acc. No. C.B. 317.

IO6I The bow is of four-sided section and decorated with a few incised lines. The hinge which forms the head is of large dimensions and terminates at each end in a knob. There is also a knob above the head. The foot is long and sheath-like and has a moulded top.

Length, 3 in. ( 7.6 cm .). Fine, smooth, green patina. Excellent preservation; only the pin is slightly corroded. Acc. No. 07.286.100.


1061


1062

IO62 The bow is triangular in section. The hinge is of large dimensions and terminates at each end in a knob. The foot is long and sheathlike and ornamented with open-work decoration.

Length, $2 \frac{5}{8} \mathrm{in}$. ( 6.8 cm .). The crusty, green patina has been largely removed. The surface is corroded in places. The pin is broken off from the head and reattached. One of the knobs from the hinge is missing. Acc. No. G.R. 383.

## BUCKLES

Buckles A large number of ancient buckles have survived, ranging from the simplest types to very elaborate examples. Their purpose was apparently the same as that of today, namely ${ }^{r}$, to serve as clasps for fastening together

## TOILET ARTICLES AND PERSONAL ORNAMENTS

straps, belts, etc. The majority are of bronze, but a number of them are of Bucki.es gold, silver, and ivory. Buckles have been found as early as the La Tène period, having probably been evolved from the fibula (cf. O. Tischler, Schriften der physikalisch ökonomischen Gesellschaft zu Königsberg, 1884, p. in, and J. Mestorf, Verhandlungen der Berliner Gesellschaft für Anthropologie, $188_{4}, \mathrm{pp} .27-30$ ). The great majority, however, of the extant examples belong to Roman times. cf. also S. Reinach in Daremberg et Saglio, Dictionnaire, under fibula, p. inif.

The following buckles, except where otherwise stated, are said to have come from Kertsch in the Crimea, and were purchased in I898.

1072 BUCKLE. It consists of a more or less circular rim of rounded section, with tongue fastened at one end by means of a sliding loop. Illustrated, p. 333.

Length, $\mathbf{1}_{16}^{16}$ in. ( 3.7 cm .). Crusty, green patina. Acc. No. G.R. 373.
1073 BUCKLE. Similar to preceding.
Length, $\mathrm{I} \frac{1}{16} \mathrm{in}$. ( 2.7 cm .). Crusty, green patina. The surface is somewhat corroded. Acc. No. G.R. 374.

IO7+ BUCKLE. Similar to 1072.
Length, $\frac{3}{4}$ in. ( 1.9 cm. ). Crusty, green patina. The surface is somewhat corroded. Acc. No. G.R. 371 .

IO75 BUCKLE. It consists of a curved rim of triangular section, with tongue fastened at one end by means of a loop sliding on a round bar. The tongue has a moulded collar. Illustrated, p. 333.

Length, $\frac{13}{\frac{3}{R}}$ in. ( 4.5 cm .). The crusty, green patina has been partly removed. Acc. No. G.R. 375.

IO76 BUCKLE. It consists of a flattened oval rim with tongue fastened on one side by means of a sliding loop. Illustrated, p. 333 .

Length, $\mathrm{I} \frac{\overline{5}}{8} \mathrm{in} .(4 . \mathrm{I} \mathrm{cm}$.). The crusty, green patina has been partly removed. The surface is somewhat corroded. Acc. No. G.R. 378.

1077 BUCKLE. It consists of a broad, rounded rim of curved outline, with tongue fastened on one side by means of a loop sliding on a round bar. Illustrated, p. 333.

Length, $1 \frac{5}{8} \mathrm{in}$. ( $4 . \mathrm{I} \mathrm{cm}$.). Crusty, green patina. The surface is slightly corroded in places. Acc. No. G.R. 377.

## IMPLEMEN'TS AND UTENSILS

Buckles IO78 BUCKLE. It consists of a rectangular rim, with tongue fastened on one side by means of a sliding loop.

Length, $\frac{1}{16} \mathrm{in}$. ( 3 cm .). The crusty, green patina has been partly removed. The surface is corroded in places. Acc. No. G.R. 3 S2.

IO79 BUCKLE. It consists of an oval rim of round section and a rounded back-piece fastened to the rim by means of two sliding loops. The tongue, which is also fastened to the rim by a sliding loop, is decorated with a small, incised plate. The back-piece has three rivets by which it was fastened to the strap or garment.

Length, $2 \frac{1}{16}$ in. ( 5.2 cm .). The crusty, green patina has been removed in places. Small pieces are missing. Acc. No. G.R. 367.

I 080 BUCKLE. Similar to the preceding.
Length, $1 \frac{3}{4} \mathrm{in}$. ( 4.5 cm .) Crusty, greenish patina. The back-piece is somewhat broken. Acc. No. G.R. 368.

IO8I BUCKLE. Similar to No. 1079.
Length, $3 \frac{7}{16} \mathrm{in} .(8.7 \mathrm{~cm}$.). Crusty, green patina with blue patches. The tongue is missing. Acc. No. G.R. 331.

IO82 BUCKLE. Similar to No. 1079, except that the plate on the tongue is not incised and that there is only one rivet in the back-piece.

Length, $\mathrm{I}_{\ddagger}^{\frac{1}{\ddagger}} \mathrm{in}$. ( 3.2 cm .). The crusty, greenish patina has been partly removed. The surface is somewhat corroded. Acc. No. G.R. 372.

1083 BUCKLE. Similar to No. 1079, but the rim is of angular section, the tongue has no ornamental plate, and there is only one rivet in the back-piece.

Length, $1 \frac{3}{4} \mathrm{in}$. ( 4.5 cm .). The crusty, green patina has been partly removed. The surface is somewhat corroded. Acc. No. G.R. 369.

IO84 BUCKLE. Similar to the preceding.
Length, $\mathrm{I}_{13}^{13} \mathrm{in} .(4.6 \mathrm{~cm}$.). Crusty, green patina. A piece from the back attachment is missing. Acc. No. G.R. 370.

IO85 BUCKLE. It consists of a rectangular rim of angular section, and a rectangular back-piece, fastened to the rim by means of two sliding loops. The tongue is also fastened to the rim by a sliding loop. There is one rivet in the back-piece.


1072


1075


1076


1085


1077


1073


1079


1089


1088


IO9I


1092


1093


1094

## IMPLEMENTS AND UTENSILS

Buckles Length, $1 \frac{13}{16} \mathrm{in}$. ( 4.6 cm .). The crusty, green patina has been largely removed. The surface is considerably corroded. Acc. No. G.R. 379 .
io86 BUCKLE. It consists of a broad, rectangular rim, of curved outline, with back attachment of rounded outline, all in one piece. The tongue is fastened to the rim by means of a sliding loop. There are two rivet-holes in the back-piece. Illustrated, p. 333 .

Length, $1 \frac{3}{4} \mathrm{in}$. ( 4.4 cm .). The crusty, green patina has been partly removed. Acc. No. G.R. 380.

1087 BUCKLE. It consists of a flat oval rim, with back attachment, all in one piece. The tongue is fastened to the rim by means of a sliding loop. The back attachment, which is of wavy outline, is provided with a ring on its under side. Illustrated, p. 333 .

Length, $1^{\frac{3}{16}} \mathrm{in}$. ( 3 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4889. Illustrated in the Cesnola Atlas, III, pl. LXIII, 2, and in L. P. di Cesnola. Cyprus, pl. IV, where it is said to have come from Dali. Crusty, greenish patina. Acc. No. C.B. 280.

Io88 BUCKLE. It consists of an oval rim of rounded section, with back attachment in the form of a rectangular rim, all in one piece. The tongue has a moulded ornamental plate and is fastened to the rim by means of a sliding loop. Illustrated, p. 333.

Length, $1^{\frac{1}{4}} \mathrm{in}$. ( 3.2 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4888. Illustrated in L. P. di Cesnola, Cyprus, pl. IV, where it is said to have come from Dali. Crusty, greenish patina. Acc. No. C.B. 274.

1089 BUCKLE. It consists of a curved rim of angular section and a back-piece fastened to the rim by means of two sliding rings. The tongue is also fastened to the rim by a sliding loop and has an ornamental boss. The back-piece is of floral design with open-work decoration. On its under side it is provided with two rings. Illustrated, p. 333.

Length, $1_{1 \frac{15}{15}} \mathrm{in}$. ( 4.9 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4887. Illustrated in the Cesnola Atlas, III, pl. LXIII, i. Rough, greenish patina. Acc. No. C.B. 277.

1090 BUCKLE. It consists of a rounded rim of angular section, and back attachment, all in one piece. The rim and the back attachment

## TOILET ARTICLES AND PERSONAL ORNAMENTS

are ornamented with open-work decoration. The tongue has incised patterns and is attached to the rim by means of a swivel. Illustrated, p. 333.

Length, $1 \frac{1}{2}$ in. ( 3.8 cm .). Crusty, greenish patina. The surface is somewhat corroded. Acc. No. G.R. 366.

IO9I BUCKLE. Similar to the preceding but provided with a second back-piece of rectangular shape, which is fastened to the first by means of a sliding loop. This back-piece has one rivet, by which it was fastened to the strap or garment. Illustrated, p. 333 .

Length, $2 \frac{9}{16}$ in. ( 6.5 cm .). Crusty, green patina. The surface is somewhat corroded. The edges of the rectangular back-piece are chipped. Acc. No. G.R. 365 .

1092 BUCKLE. Similar to No. rogo, but provided with a second back-piece, of rectangular shape, and with open-work decoration, which is fastened to the first by means of a sliding loop. There are two rivets in the back-piece. Illustrated, p. 333 .

Length, $2 \frac{7}{5}$ in. $(7.3 \mathrm{~cm}$.). The crusty, green patina has been largely removed. The surface is corroded in places. Part of the loop of the rectangular back-piece is missing. Acc. No. G.R. ${ }^{6} 4$

I093 BUCKLE. Similar to the preceding. The back-piece has only one rivet. Illustrated, p. 333.

Length, $3 \frac{1}{5}$ in. ( 8 cm .). The crusty, green patina has been partly removed. The surface is somewhat corroded in places. Acc. No. G.R. 363.

Io94 PART OF A BUCKLE, consisting of a rectangular plaque decorated with a group of a lion attacking a boar, in a jour relief. The tongue is on one side of the plaque and in one piece with it. Illustrated, p. 333.

Length, $2 \frac{13}{16} \mathrm{in}$. $(7.1 \mathrm{~cm}$.). Crusty, blackish patina. Acc. No. G.R. $3+2$.

## NECKLACES

IIO4 NECKLACE, of seventy-one beads, each bead in the form of a pair of human breasts, with a loop on the under side.

Perhaps used as a charm to insure the protection of the Mother Goddess (cf. J. L. Myres, Cesnola Handbook, No. 4857).

Probably seventh or sixth century B.C.
Approximate length of whole necklace, $36 \mathrm{in} .(104 \mathrm{~cm}$.). Length of each

## IMPLEMENTS AND UTENSILS

Necklaces bead, $\frac{7}{\frac{7}{3}}$ in. ( 2.2 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4857. Crusty, green patina. Acc. No. C.B. 605.

IIO5 LARGE, OPEN RING, of round section, with five ornamental collars and open, out-curving ends, terminating in knobs.

Uncertain period. It perhaps served as a necklace.
Diameter, $5 \frac{11}{16}$ in. ( 14.4 cm .). Purchased in 1896 . Crusty, greenish patina. The surface is considerably corroded. Acc. No. G.R. 321.


## BRACELETS

Bracelets

The custom of wearing bracelets ( $\psi \epsilon \lambda \iota o \nu, \chi \lambda \iota \delta \omega \nu$, armilla) goes back to very early times. As we learn from representations of them on other monuments, they were worn on the wrist, the upper arm, and the ankle.

In the Bronze Age they were worn apparently by men and women indiscriminately (cf. e.g. The Cupbearer from Knossos).

In Greek and Roman times they were worn commonly by women, but only rarely by men (cf. E. Saglio, in Daremberg et Saglio, Dictionnaire, armilla, pp. $+36-+37$ ). Besides gold and silver examples, there have been found a large number of bronze bracelets, probably worn by those who could not afford the more costly articles.

The dating of bronze bracelets is not always certain, as the same simple types were in use for a long time, and often there are no ornaments to afford a clue.

III5 BRACELET, with open ends terminating in volutes. It is of round section, with quadrangular blocks introduced at regular intervals. The surface


III5

## TOLLET ARTICLES AND PERSONAL ORNANENTS

is decorated with four sets of punctured concentric circles on the Bracelets quadrangular blocks, and with incised lines on the intervening spaces.

For somewhat similar bracelets of the Early Iron Age, cf. O. Montelius, Civilisation primitive en Italie, pl. 71, 1, 2; A. Furtwängler, Olympia, IV, Die Bronzen, pl. XXIII, 393, 398.

Diameter, $2 \frac{5}{8} \mathrm{in}$. ( 6.7 cm .). Date of purchase uncertain (before 1906). The crusty, green patina has been partly removed. The surface is corroded in places. Acc. No. G.R. 301.


II I6 BRACELET, consisting of a massive hoop of octagonal section with ends overlapping for about one third of the circumference.

For a somewhat similar example of the Villanova period cf. K. Schumacher, Antike Bronzen in Karlsruhe, No. 102.

Diameter, f in. ( 10.1 cm .). Date of purchase uncertain (before 1906). Crusty, greenish patina. Covered in places with iron rust. Acc. No. G.R. 298.

III7 BRACELET, consisting of a closed hoop, decorated over its outer surface with three rows of round bosses; a ring similarly decorated is attached vertically to it.

Bracelets of this type from Narce dated by the other contents of the tomb to about the seventh century B.C. are in the University Museum, at Philadelphia, unpublished.

## IMPLEMENTS AND UTENSILS

 purchase uncertain (before 1906). The crusty, green patina has been partly removed. The hoop is cracked in one place. Acc. No. G.R. 297.

I I I 8 BRACELET, similar to the preceding, but without the attached ring, and with a lump of bronze wound round the hoop at one place. Illustrated, p. 337.

Diameter, $2 \frac{3}{16} \mathrm{in}$. ( 5.5 cm .). Date of purchase uncertain (before 1906). The crusty, green patina has been partly removed. Acc. No. G.R. 302.


I I 22 BRACELET, consisting of a hoop of round section with ends overlapping.

Bracelets of this type are worn by statues in the archaic Cypriote style of the sixth to fifth centuries B.C. (J. L. Myres, Cesnola Handbook, No. 1356). Compare also the examples in gold, J. L. Myres, Cesnola Handbook, Nos. $3552-5$.

Diameter, $2 \frac{15}{16} \mathrm{in}$. ( 7.5 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4870. Crusty, green patina. The surface is considerably corroded. Acc. No. C.B. 205.

I I 23 BRACELET, consisting of a hoop of round section with ends overlapping.

Probably of the same period as the preceding.
Diameter, $3^{\frac{3}{4}} \mathbf{i n}$. 9.5 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4871. Crusty, greenish patina. The surface is much corroded. Acc. No. C.B. 215 .

II24 BRACELET, consisting of a hoop of round section, slightly tapering toward the open ends.

Diameter, $4^{\frac{13}{16}} \mathrm{in}$. ( 12.4 cm .). From Cyprus. Cesnola Collection. cf. J. L. Bracelets Myres, Cesnola Handbook, No. 4872. Crusty, green patina. The surface is mucn corroded. Acc. No. C.B. 220.

II28 BRACELET, consisting of a closed hoop, of round section, ornamented with eight sets of three round bosses, placed at equal distances from each other. Illustrated, p. 337.

For a somewhat similar example from near Modena, found with a fibula of the Certosa type, cf. O. Montelius, Civilisation primitive en Italie, pl. II3, 3. Bracelets of this type occur often in the La Tène period (cf. K. Schumacher, Antike Bronzen in Karlsruhe, No. 87ı, pl. XVI, 30).

Diameter, with bosses, $3 \frac{15}{16} \mathrm{in}$. ( 8.4 cm .). Date of purchase uncertain (before 1906). Unpublished. The crusty, green patina has been partly removed. Acc. No. G.R. 324 .

II30 BRACELET, consisting of a hoop of round section with ends slightly overlapping.

Date uncertain.
Diameter, $4^{\frac{1}{2}}$ in. ( 11.4 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4873. Crusty, green patina. Acc. No. C.B. 219.

I I 3 I BRACELET, consisting of a plain hoop of round section, with slightly overlapping ends.

Date uncertain.
Diameter, $I^{\frac{7}{8}} \mathrm{in} .(4.7 \mathrm{~cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4879. The green patina has been partly removed. Somewhat bent. Acc. No. C.B. 213.

II32 BRACELET, consisting of a plain hoop of round section, with ends overlapping for about one half of the circumference.

Uncertain date.
Diameter, $2 \frac{7}{8}$ in. ( $7 \cdot 3 \mathrm{~cm}$.). Fronı Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4874. Crusty, green patina. The surface is considerably encrusted. Acc. No. C.B. 218.

I I 33 BRACELET, consisting of a spiral of two turns with ends overlapping.

> Date uncertain.

## IMPLEMENTS AND UTENSILS

Diameter, $2 \frac{13}{15} \mathrm{in} .(7.1 \mathrm{~cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4875. Crusty, green patina Acc. No. C.B. 217.

II34 BRACELET, consisting of a spiral of two turns, with ends overlapping.

Date uncertain.
Diameter, $\mathbf{I}_{1 \frac{13}{6}}$ in. ( 4.6 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4876. Crusty, green patina. The surface is considerably corroded and encrusted. Acc. No. C.B. 2I 4.


II35 BRACELET, consisting of a round hoop with overlapping ends, which are flattened and fastened to each other with a rivet.

Date uncertain.
Diameter, $3^{\frac{3}{2}}$ in. ( 9.5 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4877. The crusty, green patina has been partly removed. The surface is somewhat corroded and encrusted in places. Acc. No. C.B. 221.

I 136 BRACELET, consisting of a plain hoop of oval section, with ends overlapping for about one half of the circumference. Illustrated,p.337.

Date uncertain.
Diameter, $3 \frac{1}{8} \mathrm{in} .(7.9 \mathrm{~cm}$.$) . Date of purchase uncertain (before 1906).$ Crusty, green patina. Acc. No. G.R. 323.

I I37 BRACELET, consisting of a plain hoop of oval section, with ends overlapping for about one half of the circumference. Illustrated, p. 337.

Date uncertain.
Diameter, $2_{1}^{3}$ in. ( 7 cm .). Date of purchase uncertain (before 1906). Crusty, green patina. Acc. No. G.R. 319.

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II38 BRACELET, consisting of a flat hoop, with a ridge running Bracelets along its outer side.

Date uncertain, probably late.
Diameter, $3 \frac{1}{5}$ in. ( 8 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. $\mathbf{4}^{\$ 78}$. Crusty, green patina. The surface is corroded in places. A small piece is missing. Acc. No. C.B. 206.

II 39 BRACELET, consisting of a tlat hoop with overlapping ends. Date uncertain, probably late.

Diameter, $1^{\frac{3}{4} \mathrm{in}}$. $(++\mathrm{cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4880 . The green patina has been largely removed. A small piece is missing. Acc. No. C.B. 210 .


II 40 BRACELET, consisting of a closed hoop of round section, over the entire surface of which a bronze wire is twisted spirally.

Roman period.
For gold bracelets of similar type cf. F. H. Marshall, Catalogue of the Jewellery in the British Museum, Nos. 2807 ff.

Diameter, $3^{\frac{1}{2}} \mathrm{in}$. ( 9 cm .). Purchased in $\mathbf{1 8 9 6}$. Unpublished. Smooth, light green patina. Parts of the twisted wire are missing. Acc. No. G.R. 296.

II 4 I BRACELET, similar to preceding.
Diameter, $2 \frac{7}{16}$ in. ( 6.2 cm .). Purchased in 1896. Unpublished. Smooth, light green patina. The surface is slightly corroded in places. Pieces of the twisted wire are missing. Acc. No. G.R. 295.

II 42 BRACELET, similar to No. rifo.
Diameter, $2 \frac{1}{5}$ in. ( 5.4 cm .). Purchased in 1896. Unpublished. Smouth,

Bracelets light green patina. The surface is slightly corroded in places. Pieces of the twisted wire are missing. Acc. No. G.R. 294.

## II 43 BRACELET, similar to No. it 40 .

Diameter, $1_{8}^{7} \mathrm{in}$. ( 4.8 cm .). Purchased in 1896 . Unpublished. Smooth, light green patina. The surface is slightly corroded in places. Pieces of the twisted wire are missing. Acc. No. G.R. 293.

II 44 BRACELET, consisting of a hoop of round section tapering toward the ends, which overlap and are then twisted round each other and wound round the hoop. Illustrated, p. $3+\mathrm{I}$.

Roman period.
For similar bracelets cf. also F. H. Marshall, Catalogue of Jewellery in the British Museum, No. 2809 (there dated second to third century A.D.).

Diameter, $3 \frac{3}{16} \mathrm{in} .(\$ .1 \mathrm{~cm}$.). Date of purchase uncertain (before 1906). Unpublished. Crusty, green patina. The twisted ends are broken in one place. Acc. No. G.R. 299.

## RINGS

A large number of bronze rings ( $\delta \alpha \kappa \tau \cup \cup \lambda c o s$, anulus) have been found, both on Greek and Italian sites. The majority of these are plain, of round section, and generally of sizes ill adapted either as finger rings or children's bracelets. They served all manner of purposes-for instance, as pendants of fibulae and bracelets, as ornaments of shields, and for practical use in the harness of horses (cf. O. Montelius, La Civilisation primitive en Italie, pls. $4^{8,3}, 4 ; 50,2,3 ; 46,4 ;$ A. Furtwängler, Olympia, IV, Die Bronzen, p. 63 f.; H. F. De Cou, in Waldstein, Argive Heraeum, II, pp. 250 ff., pls. XC ff.; H. Thiersch, in Furtwängler, Aegina, p. 417, pl. i16, 33 ff.).

## II 50 SPIRAL RING, of five turns. Undecorated.

Spirals of this type were apparently worn in the hair (cf. F. H. Marshall. Catalogue of the Jewellery in the British Museum, No. ijil, and the references there given), and also in the ears, as is shown by their appearance in the ears of the heads on "Canopic" urns (L.A. Milani, Museo di Antichità, pl. VIII, If, p. 3II). They have been found in early graves (seventh century B.C.) both on Greek and Italian sites (cf. O. Montelius, La Civilisa-


## TOILET ARTICLES AND PERSONAL ORNAMENTS

tion primitive en ltalie, pl. 91, 8; P. Orsi, Monumenti antichi, I, 1900, p. 810; A. Furtwängler, Olympia, IV, Die Bronzen, p. 58; and the silver examples from Cyprus in this Museum, J. L. Myres, Cesnola Handbook, Nos. 3261-3267).

Diameter, $\frac{7}{8}$ in. ( 2.2 cm .). Date of purchase uncertain (before 1906). Crusty, green patina. Acc. No. G.R. 313 .

II 5 I SPIRAL RING, like the preceding, but of four and a half turns. Undecorated.

Diameter, $\frac{15}{16} \mathrm{in}$. ( 2.4 cm .). Date of purchase uncertain (before 1906). Crusty, green patina. Broken in two pieces and reattached. Acc. No. G.R. 312 .

II 55 RING, decorated with five sets of three round bosses.

For a bracelet similarly decorated belonging to the Certosa or La Tène periods cf. No. ir28.

Diameter, with bosses, $\frac{7}{8}$ in. ( 2.2 cm .). Date of purchase uncertain (before 1906). The crusty, green patina has been partly


1155 removed. Acc. No. G.R. 309.

II 58 LARGE RING, consisting of a hoop decorated with ridges running lengthwise. At one place on the inner surface is a shallow indentation, one-half inch wide, which suggests that this ring was used for some special purpose, perhaps as a handle.

Uncertain date.
Diameter, $2 \frac{3}{16} \mathrm{in}$. ( 5.5 cm .). Date of purchase uncertain (before 1906). Crusty, green patina. Acc. No. G.K. 325.


I 158

Rings of round section, undecorated, and of uncertain date:-

II 60

IIGI

II 62

1163

I I 60
Diameter, $I^{\frac{3}{8}} \mathrm{in}$. ( 3.5 cm .). Date of purchase uncertain (before 1906). The surface is much corroded. Acc. No. G.R. 317.

## IMPLEMENTS AND UTENSILS

1161
Diameter, $1 \frac{3}{16}$ in. ( 3 cm .). Date of purchase uncertain (before 1906). Crusty, green patina with blue patches. Acc. No. G.R. 316. Illustrated, p. 343.

II 62
Diameter, $\frac{1}{16}$ in. ( 2.7 cm .). Date of purchase uncertain (before 1906). Crusty, greenish patina. Acc. No. G.R. 304. Illustrated, p. 343.

I 163
Diameter, I in. ( 2.5 cm .). Date of purchase uncertain (before 1906). Crusty, greenish patina. Acc. No. G.R. 306. Illustrated, p. 343.

## II64

Diameter, $\frac{7}{8}$ in. ( 2.2 cm .). Date of purchase uncertain (before 1906). Crusty, greenish patina. The surface is considerably corroded. Acc. No. G.R. 314 .

## I 165

Diameter, $\frac{15}{16} \mathrm{in}$. ( 2.4 cm .). Date of purchase uncertain (before 1906). The crusty, greenish patina has been partly removed. Acc. No. G.R. 3 II.

I I 66
Diameter, $\frac{7}{16}$ in. ( 3.6 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4885.


I 166 Crusty, greenish patina. Acc. No. C.B. 209.

## EARRINGS

Earrings II7o EARRING, consisting of a coiled ring increasing in thickness and ending in a knob. It is twisted over half its surface.

This type of horn-shaped earring is Etruscan; it is


1170 found in Italy from the sixth to the third century B.C. (cf. K. Hadaczek, Ohrschmuck der Griechen und Etrusker, p. 66).

Diameter, $\mathrm{I}_{\frac{1}{8}}$ in. ( 2.5 cm .). Date of purchase uncertain (before 1906). Smooth, bluish-green patina. The surface is corroded in places. Acc. No. G.R. 315.

II7I LARGE EARRING (?) with twisted ends and pendant in the form of a female head.


I17I
The style of the head is early, with Oriental influence. Poor workmanship.

Height, with pendant, $2 \frac{1}{4} \mathrm{in}$. ( 5.7 cm .) From Cyprus. Cesnola Collection. Earkans cf. J. L. Myres, Cesnola Handbook, No. 4859. Crusty, green patina. The surface is corroded in places. The ring is somewhat hent. Acc. No. C.B. 211.

II75 PENDANT, in the form of a fish. The details are incised. The perforation passes through the head.

Probably Roman period. Rough execution.
Length, $1 \frac{1}{5} \mathrm{in}$. ( 2.8 cm .) From Cyprus. Cesnola Collection. of. I. L. Myres, Cesnola Handbook, No. 4860. The crusty, green patina has been mostly removed. Acc. No. C.B. 293.

I 175

## FURNITURE AND PARTS OF FURNITURE

## TRIPODS

II80 TRIPOD. Base or stand, consisting of a circular rim
Tripods supported on three legs. The three legs, which are precisely similar in design, terminate each in a pair of volutes at the top and an animal's hoof at the bottom; they are ornamented for about two thirds of their surface, both inside and out, with a double rope design. Between them are hoopshaped supports, attached to the rim at the top, at which point a ring is also added. On the inside the legs were joined by horizontal braces, of which only parts are preserved. The exterior of the rim is decorated with a spirited relief representing lions pursuing stags, there being five of each.

It is possible that this tripod served to support the cauldron of which the rim and handles are still preserved (cf. No. 620). In both the reliefs are cast, not chiselled; both show the same rope ornament; and, moreover, they both belong to the same period (see below and under No. 620).

The relief on the rim of this tripod has all the freedom and élan of Mycenaean art, untainted as yet by geometric conventionalism. Its date therefore cannot well be later than about $1300-1200$ B.C., for the old theory that the Mycenaean style lived on late in Cyprus has by now been exploded (cf.

## IMPLEMENTS AND UTENSILS

Tripods A. J. Evans, Mycenaean Cyprus as illustrated in the British Museum Excavations, p. 219 f.; J. L. Myres, Cesnola Handbook, p. VII). A similar tripod was found in the Mycenaean cemetery at Enkomi, in Cyprus (cf. A. Furtwängler, Sitzungsberichte der kgl. bayerischen Akademie der Wissenschaften, I899, II, p. 415 , and E. H. Hall, University of Pennsylvania Anthropological Publications, III, p. I 33 f., pl. NXXIV, 3). This type of tripod evidently remained in use for some time, for there are several ex-


1180
amples, which, to judge from the objects found with them, belong to the geometric period: one from the Pnyx, Athens (cf. A. Brückner, Athenische Mitteilungen, 1893 , pl. 14, p. 414 f; one from Knossos, Crete (cf. E. H. Hall, op. cit., p. 132 f., pl. XXXIV, 2); and one from Vrokastro, Crete (cf. E. H. Hall, op. cit., p. 132, pl. NXXIV, i). Compare also some fragments from Olympia described by A. Furtwängler, Olympia, IV, Die Bronzen, p. 130, Nos. 823, 824. For a general account of this form of tripod cf. L. Savignoni, Monumenti antichi, VII, I897, pp. 290 ff. In style and technique our tripod should be compared with the cauldron-

DECORITION ON RIM OF IISO

## IMIPLEMENTS AND UTENSILS

Tripons support on wheels from Enkomi, Cyprus, published by A. Furtwängler, Sitzungsberichte der kgl. bayerischen Akademie der Wissenschaften, I899, II, p. qit $_{\text {I. }}$

Height, $14^{\frac{3}{4}} \mathrm{in}$. ( 37.4 cm .). Diameter of rim, $9 \frac{3^{\frac{3}{4}} \mathrm{in} .}{}(24.7 \mathrm{~cm}$ ). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4704. Illustrated in the Cesnola Atlas, III, pl. XLIV, 4, where it is said to have been found at Curium; and in L. P. di Cesnola, Cyprus, p. 335. Also published by A. Furtwängler, Neue Denkmäler antiker Kunst, III, p. 269 f., No. II, fig. 3. The rough, green patina has been partly removed. The surface is considerably corroded. There are also several cracks in the rim. Only parts of the horizontal braces are preserved and there are two breaks in the oblique supports. Acc. No. C.B. 45 r.

I I8 I "TRIPOD". Base or stand consisting of a circular rim supported on three bowed legs, which are joined to each other by horizontal braces. Beneath the rim and midway between the legs are rings with elongated pendants. The exterior of the rim is decorated with zigzag lines; the legs have vertical ridges with floral designs on the feet, all in relief.

Late Mycenaean period. For a similar stand from Enkomi see British Museum, Excavations in Cyprus, p. 16, fig. 30. Compare also the stands from Falerii, Monumenti Antichi, IV, 1894, p. 219, fig. 99, c, d, and pl. VIII, ir. For a general account of such tripods, cf. L. Savignoni, Monumenti antichi, VII, 1897, pp. 290 ff .

Height, $3 \frac{3}{4} \mathrm{in} .\left(9.5 \mathrm{~cm}\right.$.). Diameter of rim, $3 \frac{3}{8} \mathrm{in}$. 8.6 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4705. Illustrated in the Cesnola Atlas, III, pl. LXII, 2; also published by G. Perrot et C. Chipiez, Histoire de l'art, III, pp. 863 - 864 , fig. 631 . The green patina has been partly removed. The surface is somewhat corroded, but there are no missing parts. Acc. No. C.B. 344.

## PARTS OF FURNITURE

II82-II87 SIX BULLS' HEADS with horizontal tubular sockets in which are preserved remnants of an iron framework. Eacla head has one

## FURNITURE AND PARTS OF FURNITURE

socket at the back and another below the neck. In two examples (Nos. 1182, 1183) there is in addition a third socket, below the second, curving downward on each side. The eyes of the bulls were inlaid, but are missing in all the examples. The style is that of the ninth or eighth century B.C. For a bull of similar type cf. P. Perdrizet, Fouilles de Delphes, pl. XV, i.


Parts of Furniture

## IMPLEMENTS AND UTENSILS

Parts of Furniture
and in Cesnola, Cyprus, pl. XXX. The green patina has been largely removed. The surface is corroded in places and there are several holes. Acc. No. C.B. $38 z$.

## II 83

Height, $3 \frac{5}{8}$ in. ( 9.2 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4761. Green patina. The lower surface is partly covered with iron rust. The surface is corroded in places and there are a number of holes. Acc. No. C.B. $38 \mathbf{1}$.

## II 84

Height, $3 \frac{1}{16}$ in. ( 7.8 cm. ). cf. J. L. Myres, Cesnola Handbook, No. 4759. The green patina has been mostly removed. The top of one horn is broken off and there are several small holes. Acc. No. C.B. 379.

## II 85

Height, $2 \frac{15}{16}$ in. ( 7.5 cm .) cf. J. L. Myres, Cesnola Handbook, No. 4760 . The green patina has been largely removed. The surface is somewhat corroded in places and there are several holes. Acc. No. C.B. 380.

## I 186

Height, $2 \frac{1}{2}$ in. $(6 .+\mathrm{cm}$.$) . cf. J. L. Myres, Cesnola Handbook, No. 4758. The$ green patina has been removed in places. The surface of the lower part is partly covered with iron rust. There are several cracks and small holes. Acc. No. C.B. 378 .

## I 187

Height, $2 \frac{3}{3}$ in. ( 6 cm. ). cf. J. L. Myres, Cesnola Handbook, No. 4763. The green patina has been mostly removed. The surface of the lower part is largely covered with iron rust. There are several small holes. Acc. No. C.B. 383.

II 88, II 89 PAIR OF FEET from a piece of furniture, each in the form of an animal's hoof, finely modelled. In the socket of No. ins9 a piece of the iron leg is still preserved.

Probably ninth or eighth century B.C. (See under Nos. ifs2-if87).
Height of $1188,5^{\frac{1}{2}} \mathrm{in}$. ( 14 cm .) ; of 1189 , including iron fragment, $8 \frac{1}{2} \mathrm{in}$. ( 21.6 cm.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, 4757.4756. No. 1188 is illustrated in the Cesnola Atlas, III, pl. LII, 3, and in G. Perrut et C. Chipiez, Histoire de l'art, III, pp. 86 tina has been largely removed. The surface is a little corroded in places and the socket of No. irs8 is split open; otherwise in good preservation. Acc. Nos. C.B. 331,332 .

II90, II9I FEET OF A CHAIR or other piece of furniture, in the form of lion's paws with four toes. At the back are rectangular sockets with remains of iron.


1190

1189



II 9 I


II 88

## IMPLEMENTS AND UTENSILS

Parts of Furniture

The claws are finely modelled. Probably sixth or fifth century B.C. For similar examples cf. A. Furtwängler, Olympia, IV, Die Bronzen, No. 859 , and the references there cited.

Height of No. 1190, 2 in. ( 5.1 cm .) ; length, $3 \frac{1}{8}$ in. ( 8 cm .). Height of 1191 , ${ }_{2} \frac{1}{16}$ in. ( 5.2 cm .) ; length, 3 in . ( 7.6 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, Nos. 4951, 4952. No. 1190 is illustrated in the Cesnola Atlas, III, pl. LVI, 2. The light green patina has been partly removed. The surface is slightly corroded, and there are a few holes. Acc. Nos. C.B. $324-325$.

II95 RECTANGULAR SOCKET with flaring foot. Probably part of a large piece of furniture. There are several rivetholes on each of its long sides, one large rectangular and four small circular ones.

Uncertain date; probably early.
Height, $5 \frac{13}{16} \mathrm{in}$. ( 14.7 cm .). Length of inside socket, $2 \frac{5}{15} \mathrm{in}$. ( 5.9 cm .). Width of socket, $\frac{1}{2}$ in. ( 1.3 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook,


1195 No. 4955. Illustrated in the Cesnola Atlas, III, pl. LXIV, 4, where it is stated that fragments of wood were found inside. Crusty, green patina. The surface is much corroded. Acc. No. C.B. 347 .

IIg6 OBJECT OF UNCERTAIN USE, in the form of a rectangular box with flaring rim shaped like the so-called cavetto cornice of Egyptian architecture. On the inside is a bevelled edge.

Perhaps part of a piece of furniture. Uncertain date; probably early.

Height, 2 in. ( 5.1 cm .). Length, $3 \frac{1}{2} \mathrm{in}$. ( 8.9 cm .). Width, $2 \frac{5}{8} \mathrm{in}$. ( 6.7 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4953. Illustrated in the Cesnola Atlas, IIl, pl. LI, 5. The light green patina has been largely removed. The surface is somewhat corroded in places. Acc. No. C.B. 345 .

II97 OBJECT OF UNCERTAIN USE, similar to the preceding.

Parts of
Furniture:

Height, 2 in. ( 5.1 cm .). Length, $3^{\frac{1}{2}} \mathrm{in} .\left(8.9 \mathrm{~cm}\right.$.). Width, $2_{5}^{5} \mathrm{in} .(6.7 \mathrm{~cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Nyres, Cesnola Handbook, No. 4954. The green patina has been partly removed. The surface is a little corroded in places. Acc. No. C.B. 349.

I200 LEG OF A CHAIR OR COUCH. It is elaborately moulded in imitation of wooden models turned on a lathe. About midway is introduced the figure of a boy, in high relief, wearing a cloak which falls down his back and is tied underneath his chin. He is kneeling on one knee and holding a rabbit on his left leg. Two of the mouldings are decorated with patterns of akanthos leaves and leaf omaments respectively, modelled in low relief and overlaid with silver. Six fragments of the decorations of the seat-five ornamental bands and a small head of a ram in relief —are also preserved. Of the bands three are flat and decorated with a guilloche pattern; two are moulded in the form of a Lesbian cyma with a leaf ornament. These decorations are all in relief and are partly overlaid with silver.

In proportions and style this chair-leg resembles the bronze legs from Roman chairs and couches found at Pompeii and elsewhere (cf. C. L. Ransom, Studies in Ancient Furniture, p. 32, and references there given). It is to the early Imperial period, therefore, that our example belongs. The original design, however, originated with the Greeks, as can be seen by the legs of a couch from Priene (cf. T. Wiegand und H. Schrader, Priene, p. 379, fig. 480), which are of the same general
 type, but of much more graceful outline.

Height, $12 \frac{3}{4} \mathrm{in} .(32.3 \mathrm{~cm}$.). Purchased in 1gos. Mentioned and illustrated in the Museum Bulletin, May, 1909, pp. 77 and 81. Cast solid. Patina green and crusty. It was broken and repaired just below the figure of the boy. Several pieces are missing from the mouldings, as is also the right hand of the boy. Acc. No. of the leg, 08.258.1a, of the fragments of decoration, 08.258.1b-g.

## IMPLEMENTS AND UTENSILS

Parts of Furniture

I 206 BOSS of hemispherical shape, undecorated. The inside is filled with lead and is provided with a spike for attachment. Date uncertain. It probably formed part of a piece of furniture.

Diameter, $I^{\frac{3}{4}}$ in. ( 4.4 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4956. Crusty, green patina. Acc. No. C.B. 429.


1206


I 208

1207 BOSS, similar to the preceding.
Diameter, $1 \frac{5}{8} \mathrm{in}$. (t.I cm.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4957. Crusty, greenish patina. The surface is somewhat corroded and cracked in places. Acc. No. C.B. 428.

I 208 ROUND BOSS OR LID of a convex form with upright rim. Uncertain date. It may have served as a lid of a small box or as a boss on a piece of furniture.

Diameter, 2 in. ( 5.1 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4958. Crusty, green patina. On the inside is a part of a similar object corroded to it. Acc. No. C.B. 425 .

I 209 ROUND BOSS OR LID, similar to the preceding.
Diameter, $1 \frac{13}{16} \mathrm{in} .(4.6 \mathrm{~cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4960. Crusty, green patina. The edges of the rim are slightly chipped. Acc. No. C.13. 427.

I2IO ROUND BOSS OR LID, similar to No. 120 .
Diameter, $\mathrm{I} \frac{11}{16} \mathrm{in} .(4.3 \mathrm{~cm}$.$) From Cyprus. Cesnola Collection. cf. J. L.$ Myres, Cesnola Handbook, No. 4959. Crusty, green patina. Acc. No. C.B. 426.

## TABLE

I2II TABLE of variegated marble with bronze fittings. It is of rectangular form mounted on one leg. The fittings consist of a bronze rim round the table leaf, and three feet ending in claws, with an ivy leaf at each juncture in the style of the feet of bronze candelabra. The feet form an intervening member between the marble shaft and the marble base. The bronze rim is decorated on three sides with beautiful palmette and rosette ornaments, inlaid in silver and niello. Of these some are enclosed in long panels, with moulded borders. Originally, when the bronze retained its golden color, the dull black and bright silver colors of the decorations must have stood out very effectively. For this technique cf. Introduction, p. xxiv f.


This table belongs to the Roman period. The form of the leg is unlike that of the Roman table legs found at Pompeii and elsewhere (cf. A. Mau, Pompeii, pp. 368 ff.; A. de Ridder, Daremberg et Saglio, Dictionnaire, mensa, p. 1724); and as this table has been put together from a number of pieces with the missing parts restored, it is doubtful whether the present reconstruction is correct in all details.

## IMPLEMENTS AND UTENSILS

Table Height of table as restored, $2 \mathrm{ft} .8 \frac{1}{4} \mathrm{in}$. ( 82.6 cm .). Length of table leaf, $3 \mathrm{ft} .5^{\frac{3}{4}} \mathrm{in}$. ( 1.057 m .). Width of table leaf, $2 \mathrm{ft} .1 \frac{3}{4} \mathrm{in}$. $(65.2 \mathrm{~cm}$.). Purchased in 1905. Said to have been found at Boscoreale. Unpublished. The bronze portions are covered with a crusty, green patina. Acc. No. G.R. 514.


I2II


I2II

## SPOUT

Spout
I 2 I4 SPOUT, in the form of a Corinthian column, surmounted by a funnel-shaped mouth. Roman period.

Length, ${ }^{5} 5 \frac{1}{16} \mathrm{in}$. $(38.3 \mathrm{~cm}$.). Purchased in 1900. Said to have come from the Hauran, Syria. Unpublished. Crusty, green patina. Chipped in places. Acc. No. G.R. 168.


## FASTENINGS

The various fastenings of ancient boxes, etc., such as nails, hinges, and hasps, were usually of bronze, and have been preserved, while the objects which they held together have mostly disappeared, having been of wood, ivory, or other perishable material.

## FURNITURE AND PARTS OF FURNITURE

## NAILS

The nails ( $\hat{\dot{\eta}} \lambda o s, ~ \gamma o ́ \mu \varphi o s$, clavus) in our collection are all plain. Nails Nails with ornamented heads, however, have frequently been found (cf. A. Furtwängler, Olympia, IV, Die Bronzen, p. 19ı; E. Saglio, Daremberg et Saglio, clavus, pp. I238 ff.; H. Blümner und O. V. Schorn, Geschichte des Kunstgewerbes II, p. 21 .

(a) With four-sided shank and round, button-like head

## I215

Length, $8_{1 \frac{13}{6}}$ in. ( 22.7 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4985. Illustrated in the Cesnola Atlas, III, pl. LXVIII, 6. The green patina has been mostly removed. The surface is corroded in places and the lower part of the nail is slightly bent. Acc. No. C.B. Io3.

## I216

Length, $6 \frac{5}{8}$ in. ( 16.8 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4986. The blue-green patina has been partly removed. The surface is somewhat corroded, and the shaft is slightly bent. Acc. No. C.B. iro.

I217
Length, $5 \frac{1}{8}$ in. ( 13 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4988. The blue-green patina has been partly removed. The surface is somewhat corroded and the shaft is slightly bent. Acc. No. C.B. io4.

## I218

Length, $3^{\frac{13}{16}} \mathrm{in} .(9.8 \mathrm{~cm}$.). cf. J. L. Myres, Cesnola Handbook, No. 4989. The crusty, greenish patina has been partly removed. Acc. No. C.B. II2.

## I219

Length, $4 \frac{11}{16}$ in. ( 11.9 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4987. Crusty, greenish patina. The surface is much corroded. Acc. No. C.B. Irr.

## I 220

Length, 35 in. ( 9.2 cm .). cf. J. L. Myres, Cesnola Hand book, No. 4990. The

## IMPLEMENTS AND UTENSILS

Nalls green patina has been largely removed. The surface is slightly corroded. Acc. No. C.B. 96.

## I22 I

Length, 4 in. (io.2 cm.). cf. J. L. Myres, Cesnola Handbook, No. 4991. The crusty, greenish patina has been partly removed. The shaft is bent. Acc. No. C.B. 107.

## I 222

Length, $\frac{35}{16} \mathrm{in}$. ( 10 cm. .). cf. J. L. Myres, Cesnola Handbook, No. 4992. The patina has been removed. The surface is somewhat corroded. Acc. No. C.B. g8.

## I223

Length, $2 \frac{3}{\frac{3}{4}}$ in. ( 7 cm. .). cf. J. L. Myres, Cesnola Handbook, No. 4993. The patina has been removed. The surface is slightly corroded. Acc. No. C.B. 97.
(b) With round shank and round, button-like head

## 1224

Length, $3_{1 \frac{5}{16}}$ in. ( 8.4 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4994. The green patina has been mostly removed. The surface is considerably corroded, and the shaft is bent. Acc. No. C.B. iof.


## I 225

Length, $2 \frac{5}{8}$ in. ( 7 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4996. The patina has been removed. The surface is considerably corroded and the shaft is bent. Acc. No. C.B. ior.

## I 226

Length, $2 \frac{1}{2}$ in. $(6.3 \mathrm{~cm}$.). cf. J. L. Myres, Cesnola Handbook, No. 4997. Crusty, green patina. The surface is much corroded. The shaft is bent and pieces from the head are missing. Acc. No. C.B. 114.
(c) The shaft becomes four-sided toward the point. The head is round and flat.

I 227
Length, $2 \frac{3}{4}$ in. ( 7 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4995. The

## FURNITURE AND PARTS OF FURNITURE

patina has been removed. The surface is somewhat corroded. The shaft is Nails bent. Acc. No. C.B. 100.

## HINGES

I230, I23I PAIR OF HINGES, each with five knuckles. The leaves are slightly curved and must therefore have belonged to a circular box.

Length of each, $1 \frac{7}{8} \mathrm{in} .(4.8 \mathrm{~cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, Nos. 5009, 5010. Crusty, greenish patina. The surface is somewhat corroded in places. The pins are of iron; that of No. 1231 is broken. Nos. C.B. 82, 84 .


1232 HINGE, with nine knuckles and rectangular leares, each of which has four rivets still in place. Part of the bronze box to which it was attached is still preserved; it was decorated with a stamped design of circles.

Length, $3 \frac{5}{16}$ in. $(5.4 \mathrm{~cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 5011. The crusty, green patina has been largely removed. Acc. No. C.B. $8 j$.


## HASPS

I233 HASP. It consists of a plate of metal of irregular outline with a ridge in the centre. At one end it is perforated for attachment; at the other it has a projecting clasp which fitted into a hole and was secured by a pin.

Length, 3 in. ( 7.6 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 5006. The patina has been removed. The surface is slightly corroded. Acc. No. C.B. 79. Illustrated, p. 360.

## IMPLEMENTS AND UTENSILS

Hasps
I234, I235 PAIR OF HASPS. Each consists of a plate of metal of triangular outline, with a ring for attachment at one end and a projecting clasp at the other. The plate is decorated with punctured concentric circles.

Length, No. 1234, 4 in. (io.2 cm.); No. 1235, $4 \frac{1}{16}$ in. ( 10.3 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, Nos. 5007, 5008. The patina has been removed. The surface is somewhat corroded and the plates are considerably bent. Acc. Nos. C.B. 290, 292.


1233


1234, 1235

HOLDFASTS
Holdfasts I 238 HOLDFAST. It consists of a spike with a perforated plate at one end, similar to those in use today.


1238
Length, $3^{\frac{1}{2}} \mathrm{in} .(8.9 \mathrm{~cm}$.). From Cyprus. Cesnola Collection. of. J. L. Myres, Cesnola Handbook, No. 4999. The patina has been removed. The surface is somewhat corroded. Acc. No. C.B. 796.

The earliest method used for fastening a door seems to have been by a bolt which could be made to slide into a hole in the side post. In order to open from the outside a door thus fastened, a key, probably in the form of a bar with a single or double hook at one end, was inserted through a hole in the door and made to lift the pegs which held the bolt in position. The bolt was then free to be slid back by means of a strap. This seems to be the type of lock described in Homer, Odyssey, XXI, 46 ff . and I, 436 ff .

On this type of key cf. A. v. Cohausen, Die Schlösser und Schlüssel der Römer, in the Annalen des Vereins für Nassauische Altertumskunde, XIII, 1874, pp. 136 ff.; J. Fink, Der Verschluss bei Griechen und Römern, pp. 7 ff.; R. Vallois, Daremberg et Saglio, Dictionnaire, sera, pp. 1242 ff.; H. B. Walters, Catalogue of the Bronzes in the British Museum, p. LXT.

The majority of keys which have survived are of a more complicated nature. They are of three types:-

TYPE I. Consisting of a shaft, at one end of which is a ring handle, at the other a piece set generally at right angles to the shaft and provided with a number of teeth. These teeth correspond to a series of perforations in the bolt.

The key when inserted released the bolt from the pins which secured it and took their place. The bolt could then be drawn to and fro as if by a temporary handle. Many of these keys have either no shaft at all or a very short one, and were apparently worn on the finger.

This type of key was in common use during Roman times. Whether it is of Greek or Roman invention is uncertain. It is possible that it is identical with the Laconian key referred to in Aristophanes's Thesmophoriazusae, 42 Iff., as having three teeth (cf. R. Vallois, Daremberg et Saglio, Dictionnaire, sera, p. 12+4). But keys of this shape have not yet been found belonging certainly to the classical period ${ }^{I}$ and to judge from other references to the Laconian key, it may have been similar to the Homeric type (cf. J. Fink, Der Verschluss bei Griechen und Römern, p. 26). cf. also A. v. Cohausen, Die Schlösser und Schlüssel der Römer, in the Annalen des Vereins für Nassauische Altertumskunde, XIII, i $\$ 74$, pp. I 4 I ff.; L. Jacobi, Die Schlösser der Saalburg und ihr Zubehör, in Das Römerkastell Saalburg bei Homburg, 1897, p. 471.

I The key found at Mycenae and figured in H. Schliemann, Mycenae, fig. I 20, cannot be certainly dated.

## IMPLEMENTS AND UTENSILS

Locks and Keys

I 245 There are five triangular teeth, a flat shaft of rectangular section with two transverse ridges, and a ring handle with two projections at the top.

Length, $1 \frac{11}{16} \mathrm{in} .(4.3 \mathrm{~cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handhook, No. 5000. The green patina has been largely removed. The surface is slightly corroded in places. Acc. No. C.B. 91.

I 246 There are five triangular teeth, a flat shaft of rectangular section with transverse grooves, and a ring handle.

Length, $1 \frac{3}{4} \mathrm{in}$. ( 4.5 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 5001. The crusty, green patina has been partly removed. The surface is somewhat corroded. One of the teeth is missing. Acc. No. C.B. 94.

I 247 There are four teeth, of which two are triangular, two rectangular, a thick, quadrilateral shaft, and a ring handle. On the shaft are incised lines.

Length, $1 \frac{3}{4} \mathrm{in}$. ( 4.5 cm .). Purchased in 1896 . Unpublished. Greenish patina. The surface is slightly corroded. Acc. No. G.R. 327.

I248 There are ten teeth, of which eight are triangular, two quadrilateral. The shaft is very short and has transverse grooves, and the ring handle has a boss at the top.

Length, $1 \frac{1}{4} \mathrm{in} .(3.2 \mathrm{~cm}$.). Date of purchase uncertain (before 1906). Crusty, green patina with patches of iron rust. The ring handle is cracked in one place and part of one tooth is missing. Acc. No. G.R. 334.

I 249 There are seven teeth, of which four are square and three of oblong form, and a ring handle, but no shaft.

Length, $1 \frac{1}{16}$ in. ( 2.7 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 5002. The green patina has been removed in places. The surface is slightly corroded. Acc. No. C.B. 9o.

I250 There are nine short teeth of square section. The shaft is round and hollow and the ring handle is not in one piece with the shaft, but attached to it by means of a hinge. This key is of iron and is now rusted in a downward position.

Length of shaft, $1 \frac{1}{16} \mathrm{in}$. ( 2.7 cm .). Length of ring handle, $1 \frac{1}{4} \mathrm{in} .(3.2 \mathrm{~cm}$.). Date of purchase uncertain (before 1906). Unpublished. The iron is somewhat corroded, and there is a hole in the shaft. Acc. No. G.R. 34 r.


1250


1248


1247


1245


1262


I255


1249


1258

Locks and Keys

TYPE II. Consisting of a shaft or pipe with a ring handle at one end and fitted with wards at the other.

This type of key was worked on the same principle as those in use today; the key when inserted into the keyhole passed through a series of wards corresponding to its own notches, released the spring which kept the bolt in place, and pushed it forward or backward.

This form of key, which marks a distinct development from Type I, was already in use before the destruction of Pompeii (79 A.D.), and is seen in examples found there (cf. A. v. Cohausen, op. cit., p. if6; L. Jacobi, op. cit., p. 476).

1255 With cylindrical pipe and ring handle working on a swivel. The wards, which are set in the same plane with the ring, consist of two rectangular projections and one rectangular notch. Illustrated, p. 363 .

Length, $1 \frac{11}{16} \mathrm{in} .(4.3 \mathrm{~cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 5004. Illustrated in L. P. di Cesnola, Cyprus, pl. IV, where it is said to have come from Dali. The crusty, green patina has been partly removed. The ring is rusted fast to the swivel. Acc. No. C.B. 95 .

TYPE III. Consisting of a shaft with a ring handle at one end and a rectangular plate at the other. The rectangular plate is provided with notches of certain shapes. On being inserted into the keyhole it lifted a series of tumblers and thus allowed the bolt to be shot.

For this type of key cf. A. v. Cohausen, op. cit., p. 147, figs. 33-35.
1258 The rectangular plate has a $\Pi$-shaped notch. There is no shaft, only the ring and the plate, the key having evidently been worn as a finger ring, as seems to have been the custom at times for all three types of keys. Illustrated, p. 363 .

Height, $\frac{15}{16} \mathrm{in} .(2.4 \mathrm{~cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 5005. The green patina has been partly removed. No missing parts. Acc. No. C.B. 92.

1262 LOCK-PLATE. It consists of a flat piece of metal, oblong, with one straight and three concave sides and a small hole at each corner for attachment to the lock. There are three holes, one $Q$-shaped for insertion of the key and two oblong. To one of the oblong-shaped holes there is still attached on the inside a bar which probably formed part of the mechanism of the lock. Illustrated, p. 363 .

Length, $2 \frac{5}{16} \mathrm{in}$ ( $(5.9 \mathrm{~cm}$.). Date of purchase uncertain (before 1906). Crusty, green patina. Several small pieces are missing. Acc. No. G.R. 335.

I265 BOLT, with perforations corresponding to the teeth of key No. 1245, to which it belongs. Illustrated, p. 363 .

Locks and Keys

Length, $2 \frac{1}{16}$ in. ( 5.2 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 5003. The crusty, green patina has been largely removed. Acc. No. C.B. 78 .

## LIGHTING UTENSILS

## CANDLE-HOLDERS AND LAMP-STANDS

For lighting purposes the ancients used candles of wax or tallow, and lamps, which were set up on candle-holders or lamp-stands ( $\lambda$ uर̌uêol, candelabrum). Candelabrum, the Latin name for such stands (from candela $=$ candle), suggests that the candle was of earlier use, and this is borne out by ancient writers (cf. references given by E. Saglio, Daremberg et Saglio. Dictionnaire, candelabrum, p. 869, Note 2); but both were afterward used contemporaneously. A large number of such candelabra have survived. Their shapes are very varied, but the majority consist of three principal parts: (I) the foot or base, (2) the shaft, which is either short or long according as the candelabrum was meant to stand on the table or the floor, and (3) the top support. The top support varied according to the use for which it was intended. It had either one or several spikes or sockets for the fitting of torches and candles (and occasionally lamps which were provided with tubular sockets for the purpose, cl. No. 1335); or it had a cup for the use of a floating wick; or it had a disk or ring on which lamps could be placed; or, lastly, it terminated in branches from which lamps could be suspended.

The instinct of the ancients for decoration suggested many ways for ornamenting the various parts of a candelabrum. The base is usually in the form of three animal's feet separated by leaves and palmettes. The shaft is often fluted, sometimes with a human figure or disks introduced, or with animals represented climbing on it. The top support also assumed all manner of shapes and decorations according to the taste of the maker. The common kind of lamp-stand was made of wood (Cicero, Ad Quintum Fratrem, III, 7; Martial, XIV, 4t: Petronius, 95: Athenaeus, XV', p. 700), but these have naturally not survived. They were also made of iron and of bronze (see extant examples), of silver (Ulpian, Digest, 34,2 , 19,88 ), and of stone (see large specimens e.g. in the Vatican and in the l.ouvre).

Candeeholders
and
LampSTANDS

## IMPLEMENTS AND UTENSILS

Candleholders AND Lampstands

The large majority of the examples that have come down to us have been found in Cyprus, in Etruria, and on Roman sites, especially at Herculaneum and Pompeii. Greece itself has yielded very few specimens (cf. C. Friederichs, Kleinere Kunst und Industrie im Alterthum, p. 170), though their use there is attested by representations on vase-paintings (cf. e.g. J. V. Millingen, Peintures de vases, pl. XXXVI, and Museo Borbonico, XIII, pl. XV). Roughly speaking, the Etruscan examples are mostly candle-holders (very few Etruscan lamps have been found) and the Roman ones lamp-stands.

On candelabra in general cf.
A. Mau, Pauly-Wissowa, Real-Encyclopädie, under candelabrum, p. 869; E. Saglio, Daremberg et Saglio, Dictionnaire, candelabrum; W. Smith's Dictionary, under candelabrum; J. Marquardt, Römische Privatalterthümer, II, p. 30 I ; C. Friederichs, Kleinere Kunst und Industrie im Alterthum, p. 169.

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FROM CYPRUS (CESNOLA COLLECTION)
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Two main types can be distinguished:
TYPE I. With a short stem decorated with one or more rows of lotos petals curled downward, and surmounted by three scrolled supports joined to each other by a rim. Below is a tubular socket for the insertion of a wooden shaft (now missing) ; for an example with traces of the wooden shaft preserved in the socket, see British Museum Excavations in Cyprus, p. 102, fig. 148, 6.

Lamp-stands of this type served for the support of saucer-lamps like Nos. 1323 ff . They show Oriental influence and are commonly found in Cyprus (cf. British Museum Excavations in Cyprus, loc. cit.; G. Perrot et C. Chipiez, Histoire de l'art, III, p. 863, fig. 630; J. L. Myres and M. Ohne-falsch-Richter, Catalogue of the Cyprus Museum, Nos. 3613-3620, and the references there cited), but also occur in Etruria (cf. Museo Etrusco Gregoriano, I, pl. $千^{8}$, fig. 2). They can be dated as belonging to the sixth century (see tomb group $8_{4}$ in British Museum Excavations in Cyprus, p. IO2).

I 270 With three rows of lotos petals on the stem.
Height, $1^{\frac{1}{8}} \mathrm{in} .(33.3 \mathrm{~cm}$.$) . cf. J. L. Myres, Cesnola Handbook, No. 4965$. The crusty green patina has been removed in places. No parts missing. Acc. No. C.B. 407.

I27I With three rows of lotos petals on the stem.
Height, $12 \frac{11}{16}$ in. ( 32.2 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4966.

## LIGHTING UTENSILS

Crusty green patina with purple patches. The stem and some of the petals are slightly bent out of position. Acc. No. C.B. tos.

I272 With two rows of lotos petals on the stem.
Height, $12 \frac{15}{15}$ in. ( 32.9 cm .). cf. J. L. Myres. Cesnola Handbook, No. 4964.

Candleholders
and
Lamp-
stands Illustrated in Cesnola, Cyprus, p. 336 (on the left). The light green patina

has been mostly removed. The stem is slightly bent, the socket is somewhat broken, and the petals and volutes are chipped in places. Acc. No. C.B. 406.

1273 With two rows of lotos petals on the stem.
Height, $9 \frac{11}{16}$ in. ( 24.6 cm. ). cf. J. L. Myres, Cesnola Handbook, No. 4962. Illustrated in Cesnola, Cyprus, p. 336 (at the bottom to the right). The patina, crusty green with dark blue patches, has been removed in places. Intact. Acc. No. C.B. 449 .

I274 With two rows of lotos petals on the stem.
Height, 8 in. ( 20.3 cm .). cf. J. L. Myres, Cesnola Handbook, No. 496 r. lllustrated in Cesnola, Cyprus, p. 336 (to the right at the top). The crusty,

## IMPLEMENTS AND UTENSILS

Candle- green patina has been removed in places. Part of the rim and one of the volutes

HOLDERS AND LAMPSTANDS have been broken off and reattached. Acc. No. C.B. 404.

I 275 With two rows of lotos petals on the stem.
Height, $9^{\frac{7}{8}} \mathrm{in} .(24.8 \mathrm{~cm}$.). cf. J. L. Myres, Cesnola Handbook, No. 4968. Crusty, green patina. The stem is slightly bent. Acc. No. C.B. 409.

1276 With two rows of lotos petals on the stem.
Height, $4 \frac{9}{16}$ in. (ir. 6 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4969. The green patina has been mostly removed. The socket is somewhat broken, one of the lotos petals is missing, and the surface of the others is partly corroded. In the socket there are two rivet-holes, which served for attachment. Acc. No. C.B. $4^{10}$.

I 277 With one row of lotos petals on the stem. The stem is shorter than in the other examples, but the socket is longer.

Height, $1 I^{\frac{1}{4}} \mathrm{in} .(28.3 \mathrm{~cm}$.). cf. J. L. Myres, Cesnola Handbook, No. 4967. Illustrated in the Cesnola Atlas, III, pl. LI, 3. The green patina has been largely removed. The surface is corroded in places. Acc. No. C.B. 450.

I 278 With one row of lotos petals on the stem. The stem is shorter than in the other examples, but the socket is longer.

Height, If $\frac{1}{4}$ in. ( 28.6 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4963. The patinacrusty green with dark blue patches-has been removed in places. The rim has been broken


1277 in several places and reattached; the surface, especially of the volutes, is considerably corroded. Acc. No. C.B. 405.

TYPE II. With plain, round shaft, resting on a base in the form of three feet ending in hoofs and an ivy-leaf at each juncture. The shaft was surmounted by a circular plate which served for the support of the lamp.

This type of lamp-stand is found as early as the sixth century B.C., but continues until later.

For other lamp-stands of this form from Cyprus, cf. British Museum Excavations in Cyprus, p. 67, figs. 87, 89 (from a sixth-century tomb)

## LIGHTING U' ENSILS

and J. L. Myres and M. Ohnefalsch-Richter, Catalogue of the Cyprus Museum, No. 36iI.

I285 The shaft is surmounted by a three-sided volute capital of Cypriote-Ionic form, in the style of the sixth century B.C.

CandieHolders AND

Height, $39 \frac{1}{2} \mathrm{in} .(1.03 \mathrm{~m}$.). cf. J. L. Myres, Cesnola Handbook, No. 4970. Illustrated in the Cesnola Atlas, III, pl. LXV'll, r. The green patina has been

largely removed. The circular plate is missing; also the three leaves between the feet of the base. The volute capital is bent to one side. Acc. No. C.B. 432.

I 286 The shaft is surmounted by a square knob, a pair of hooks for suspending the wick-trimmer, and a circular plate for the support of the lamp.

This and the following specimens probably belong to a somewhat later date than No. 1285.

Height, $33 \frac{3}{8}$ in. ( 85 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4972. 369

## IMPLEMENTS AND UTENSILS

Candle- The light green patina has been mostly removed. The ivy-leaves at the juncholders tures of the feet are missing; the surface is a little corroded. Acc. No. C.B. 433.

I 287 Similar to the preceding, except that the knob below the hooks is lozenge-shaped instead of square.

Height, $4 \mathrm{I} \frac{9}{16}$ in. ( IO 5.5 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4974. The green patina has been largely removed. The plate is considerably broken and the leaves between the feet of the base are missing. Acc. No. C.B. 434.

I 288 The shaft is surmounted by a circular plate.
Height, $38 \frac{1}{2}$ in. ( 97.8 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4975. Illustrated in L. P. di Cesnola, Cyprus, p. 336. The green patina has been largely removed. The plate is much broken and the hooks for the wick-trimmers and the knob at the juncture are missing; also the leaves between the feet of the base. Acc. No. C.B. 435.

I289 The shaft is surmounted by a square knob which served for the support of the plate.

Height, $36 \frac{5}{8}$ in. ( 93 cm .). cf. J. L. Myres, Cesnola Handbook, No. 497 I. The light green patina has been largely removed. The plate is missing; also two of the leaves between the feet of the base. The shaft is broken in two and reattached. The surface is considerably corroded in places. Acc. No. C.B. 43 r .

I 290 The shaft is surmounted by a square knob which served for the support of the plate.

Height, $36 \frac{3}{16}$ in. ( 92 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4976. The light green patina has been largely removed. The plate is missing, as are also two of the leaves between the feet of the base. Acc. No. C.B. 436.

I29I The shaft is surmounted by a square knob which served for the support of the plate.

Height, $25_{4}^{3}$ in. ( 65.4 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4973. The green patina has been almost entirely removed. The plate is missing; also the leaves between the feet of the base. The shaft was broken in two and reattached, as was also one of the hoofs of the base. Acc. No. C.B. 430.

I292 Part of a similar candelabrum, of iron; only the lower end of the shaft and part of the base are

preserved. To one of the legs is rusted a clay amphora of fifth or fourthcentury type.

Height of fragment, $9 \frac{1}{8}$ in. ( 23.2 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4977. The iron is much corroded. Acc. No. C.B.

Candleholders AND Lampstands

1297 CANDELABRUN. The shaft, which is octagonal in its upper part and round in its lower, with a recurved rosette at the juncture, rests on a base in the shape of three feet ending in paws. The shaft is surmounted by a recurved rosette and by two vase-shaped receptacles, one above the other, joined to each other by a plain stem. From the lower one, which is considerably smaller than the other, emerge three spikes with loop-shaped ends terminating in birds' heads; from the upper project four curved stems with fork-like ends. These, as well as the lower spikes, probably served for the insertion of candles. The stem which joins the two receptacles projects half-way into the upper one and is unfinished at its upper end. It is possible that it was originally continued higher and was perhaps surmounted by a statuette, as is the case in so many early Etruscan examples.

This candelabrum was found in the same tomb as the large chariot (No. fo), and is thereby dated as belonging to the middle of the sixth century B.C. (See the description of the contents of that tomb, p. 177.)

Height, $47 \frac{1}{2}$ in. ( 1.206 m .). For provenance see above. Illustrated and briefly described by A. Furtwängler, Brunn-Bruckmann, Denkmäler griechischer und römischer Skulptur, Nos. $5^{86}$ and $5^{87}$, p. 6, fig. 11. One foot is broken off and has been repaired in antiquity. Two of the spikes ending in birds' heads are partly broken and one has become bent. Other parts have also been somewhat bent out of position. For the possibility of a missing top part see above. Acc. No. G.R. 4 II.


1297

## IMPLEMENTS AND UTENSILS

CandleHOLDERA AND LampsTANDS

I 298 CANDELABRUM. The shaft consists of a statuette of a human figure surmounted by a moulded stem which ends above in three pointed leaves curled downward. The whole is supported on a base with three feet ending in paws which rest on balls. The statuette represents a man standing with his weight on both legs, the left a little advanced. His right arm is lowered, the left hand is held to his hip. He is nude and has long hair which falls loose on his back.

For a similar candelabrum cf. K. Schumacher, Bronzen in Karlsruhe, No. 419, pl. V, 3. In that example there is a cup at the top with a spike in the middle, for the insertion of a candle; it is probable that our specimen originally had a similar cup.

Archaic Etruscan period, of fair execution.
Height, $13^{\frac{3}{4}} \mathrm{in}$. ( 34.9 cm .). Gift of Henry G. Marquand, 1897. Unpublished. The green patina has been mostly removed. The right hand of the statuette is missing and the ends of two of the spikes have been broken off and reattached. The shaft has also been broken from the vase and reattached. Acc. No. G.R. 175.

I 299 CANDELABRUM. The shaft, which is fluted and ornamented with a leaf pattern below, rests on three feet in the form of lion's paws on plinths, springing from heads of monsters. Between the feet are palmettes, in the round, and a rich pattern of palmettes and scrolls in relief. On the top of the shaft is an inverted bowl ornamented with tongue pattern on its under side and surmounted by a short, moulded stem on which is the figure of an athlete. The latter is represented as standing with his weight chiefly on his right leg; the right arm is raised, the left extended. He is


1290 nude and has short, straight hair. Between the moulded stem and the male figure there must originally have been spikes for the attachment of candles.

For similar examples with the spikes still in position cf. Museo Etrusco

## LIGHTING UTENSILS

Gregoriano, pls. LXXVII, 3, 5; LXXX, 3, 4 ; LXXXI, $1,2,3,4 ;$ LXXXII, 4 . The style is Etruscan, of the fifth century B.C., and the execution is fair. The manner in which the candles were fixed on such spikes is illustrated on an Etruscan painting (cf. Daremberg et Saglio, Dictionnaire, I, fig. ro86).

Height, $+\mathrm{ft} .9 \frac{9}{16}$ in. $(1.463 \mathrm{~m}$.$) . Purchased in 1896. Said to have been$ found at Chiusi. Unpublished. Crusty, blue-green patina, with brown incrustations. One leg was broken off and is reattached, and another is slightly bent from its original position. For the spikes which must originally have been between the moulded stem and the male figure, see above. Acc. No. G.R. 455 .

Candleholders and Lamp. STANDS


I298


I 303

I 303 CANDELABRUM. The shaft, which is decorated with incisions and with the figure of a panther modelled in full round and represented climbing up it, rests on three feet, terminating in hoofs, with leaves at the junctures. At the top of the shaft is a bowl with broad rim and four birds perched on it.

Late Etruscan type, of rather cursory execution. For similar examples

## IMPLEMENTS AND UTENSILS

Candle- with a bowl and with animals represented climbing up the shaft, cf. Museo holders Etrusco Gregoriano, pls. LXXXII, i, 2, 5; LXXVI, 1, 2, 4, 5; and LXXV, and Lampstands 1, 3, 4, 6 .

Height, $15 \frac{3}{4} \mathrm{in}$. ( 40 cm .). Purchased in 1896 . Said to have come from Cività Castellana. Unpublished. Rough, greenish patina. There is a hole in the bowl and in one leg. Acc. No. G.R. 170.

I3O4 CANDELABRUM (of iron). The plain, round shaft rests on three feet and ends above in three curved spikes, which served for the attachment of candles. Toward the top of the shaft are two hooks from which the wick-trimmers were suspended, one of which is still in position.

This candelabrum forms part of the contents of an Etruscan tomb belonging to the fourth to third century B.C. (cf. pp. 180 ff.).

Height, 42 in. ( 106.7 cm .). Purchased in 1903. Unpublished. The iron is much corroded; one of the feet is damaged. Acc. No. G.R. 466.

I305 CANDELABRUM (of iron). Similar to the preceding, but with only two spikes and no hooks for hanging up the wick-trimmers.

This candelabrum was found in the same tomb as No. 1304.

Height, $3 t_{1}^{3}$ in. ( 88.3 cm .). Purchased in 1903. Unpublished. The iron is much corroded. The end of one foot is broken off. Acc. No. G.R. 467.


I 306 CANDELABRUM (of iron). The top part only is preserved. It consists of part of the shaft, surmounted by an inverted bowl and twisted stem from which project three spikes ending in birds' heads. At the top of the stem is a small bowl and below the inverted bowl are hooks for the suspension of wick-trimmers.

This candelabrum was found in the same tomb as Nos. 1304, 1305 .
Height of fragment, $13^{\frac{1}{2}} \mathrm{in} .(34 \cdot 4 \mathrm{~cm}$.). Purchased in 1903. Mentioned by A. Furtwängler, Neue Denkmäler antiker Kunst, III, 1905, Heft II, p. 273, (h). It used to be mounted on three restored legs and is so described by Furtwängler;


I 315


1310



I 3 I 8

## IMPLEMENTS AND UTENSILS

Candle- the legs have now been removed. The iron is much corroded. Some parts are HOLDERS AND Lampstands

I3IO CANDELABRUM. On top of a moulded shaft is a round disk, surmounted by a spike, into which lamp No. 1335 fitted. The base is round, with a moulded edge, and ornamented on its under side with concentric circles, incised. The small size of the candelabrum suggests that it was placed on a table when in use. Illustrated, p. 375.

Height, $5 \frac{13}{16}$ in. ( 14.7 cm .). Date of purchase uncertain (before 1906). Unpublished. Crusty, greenish patina. No missing parts, but the surface is somewhat corroded in places. Acc. No. G.R. 388.

## roman

I3I5 CANDELABRUM. The shaft is plain and is surmounted by a vase-like top, with a round disk at the top for the support of the lamp. The whole rests on a base which consists of three legs ending in lion's paws on disks, with leaves between them. Illustrated, p. 375 .

This type of candelabrum belongs to the Roman period. For a number of similar examples from Pompeii and Herculaneum cf. F. B. Tarbell, Naples Bronzes, Nos. 44 ff .

Height, $51 \mathrm{in} .(1.295 \mathrm{~m}$.$) . Purchased in 1908$. From the Filangieri Collection. Mentioned in the Museum Bulletin, May, 1909, p. 81. Cast solid. The crusty, green patina has been partly removed in places. No parts missing, but the top disk and the small disks under the lion's paws were broken off and reattached. Acc. No. 08.258.15.

I 3 I 8 LAMP-STAND, in the form of a tripod. It consists of a circular disk, set in a rim which rests on three legs. The legs terminate below in paws and are continued above into arabesque patterns which occupy the spaces between each two legs. On the upper side of the disk is a shallow circular depression into which the foot of the lamp fitted. Illustrated, p. 375 .

Stands of this type have been found with their lamps, at Pompeii (A. Mau, Pompeii, p. 374, fig. 203). The patterns of the arabesques between the feet show a variety of designs (cf. F. B. Tarbell, Naples Bronzes, figs. 75-81). For an exactly similar example to ours, also from Boscoreale, cf. E. Pernice, Archäologischer Anzeiger, 1900, p. 182, fig. 7.

Height, 6 in. ( 15.2 cm .). Purchased in 1908 . Said to have come from Boscoreale. Mentioned in the Museum Bulletin, May, 1909, p. 44. Crusty, bluegreen patina. The upper surface of the circular top is much corroded. Acc. No. 08.258.12.

## LAMIPS

The use of lamps ( $\lambda$ úzvos, lucernal) in classical lands goes back as far as Minoan times (second millennium B.C.), and lasts through the Roman era. Throughout this long period the type of lamp used was essentially the same, though in form and decoration it passed through many stages of development. Its essential parts are a receptacle for the oil and a nozzle for the insertion of the wick. In Minoan times the chief form is that of an open, generally deep bowl, with an occasional bridge over the nozzle, and with a vertical or horizontal hindle. For clay examples cf. British School Annual, IX, p. 326, fig. 27, I, 2, 3; VIII, p. 285, fig. 4; VII, p. I28, fig. +I. For stone examples mounted on a high foot, cf. e.g. A. J. Evans, British School Annual, VI, p. 44.

A form introduced at the close of the Bronze Age was a plain saucer with rim pinched into a nozzle or wick-holder. For a discussion of this see under Nos. Ij23 ff.

The commonest Greek form of the fifth to the third century B.C. is a circular bowl with incurved rim (to prevent the oil from spilling), short or long trough-like nozzle, and sometimes with horizontal handle. These lamps are often covered with the brilliant black glaze characteristic of the period, and are generally wheel-made (cf. H. Schmidt, Schliemann's Sammlung trojanischer Altertümer, p. 199, Nos. 403 Iff ; R. Zahn, in T. Wiegand und H. Schrader, Priene, p. 449).

The lamps of the late Hellenistic period (circa II century B.C.) are moulded, of elongated shape, and generally have relief decorations on the upper side. They have long, trough-like nozzles, and instead of being open receptacles, are fitted with concave tops with only a hole left for pouring in the oil. Occasionally they have ring handles (cf. Zahn, op. cit., p. 450 , Nos. 174 ff.; Schmidt, op. cit., p. 200 , Nos. 4064 ff.).

From this was derived the familiar Roman type of lamp of a circular bowl, with rounded or volute nozzles and small ring-handle (cf. Zahn, op. cit., p. 453 , Nos. 187 ff.; Schmidt, op. cit., p. 201, Nos. 408 I ff.; H. B. Walters, History of Ancient Pottery, II, pp. 400 ff . etc.), which in its turn became elongated and provided with a mere projection to serve as a handle (cf. Schmidt, op. cit., p. 201, Nos. 4087-4089).

Sometimes lamps are provided with tubular sockets for insertion in a spike on the top of the lamp-stand (cf. e.g. No. 1335 in our collection; also J. L. Myres, Cesnola Handbook, Nos. 25 19-2520).

Noteworthy is the rare occurrence of Etruscan lamps. This is probably

## IMPLEMENTS AND UTENSILS

Lamps due to the fact that in Etruria candles were commonly used instead of lamps, as can be seen by the Etruscan candelabra, the majority of which served for the insertion of candles, not for the support of lamps (see under candelabrum, pp. 366, 37I ff.).

By far the greatest number of the ancient lamps are made of clay; but a considerable number of bronze specimens have also been found, as well as some examples in stone and precious metal.

On the subject of lamps cf.:-
J. Toutain, Daremberg et Saglio, Dictionnaire, under lucerna.
H. Thiersch, in Furtwängler, Aegina, p. 467 f.
A. Furtwängler, Olympia, IV, Die Bronzen, p. 205.
R. Zahn, in T. Wiegand-H. Schrader, Priene, pp. 449 ff., and especially pp. +56 ff.
H. Schmidt, Schliemann's Sammlung trojanischer Altertümer, pp. 199 ff.
S. Loeschcke, in Beschreibung römischer Altertümer gesammelt von Carl A. Niessen, $3^{\text {te }}$ Bearbeitung.

British Museum, Greek and Roman Life, p. it 8.
H. B. Walters, History of Ancient Pottery, II, pp. 393 ff.; Catalogue of Lamps in the British Museum.
J. Fink, Formen und Stempel römischer Thonlampen, in Sitzungsberichte der kgl. bayerischen Akademie der Wissenschaften, ig00, Heft 5.
C. Friederichs, Kleinere Kunst und Industrie, p. 180.

## SAUCER LAMPS

They consist of an open saucer with rim pinched to form one or more nozzles for the insertion of wicks.

This type of lamp was first introduced at the close of the Bronze Age (cf. F. J. Bliss, Mound of Many Cities, Tell-el-Hesy, fig. 174 [in XVIII dynasty layers]). In Cyprus it commonly occurs from the seventh to the fourth century B.C. (cf. J. L. Myres, Cesnola Handbook, Nos. 2501-2520); it also occurs undated in Phoenicia, and in Malta and Sicily even to the present day (cf. J. L. Myres and M. Ohnefalsch-Richter, Catalogue of the Cyprus Museum, p. So). For an example from Olympia cf. A. Furtwängler, Olympia, IV, Die Bronzen, No. 892.

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from cyprus (cesnola collection)
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The examples in this collection all have a shallow bowl and wide, flat rim. This form is the latest development of this type and belongs to the fourth and third centuries B.C. (cf. J. L. Myres and M. Ohnefalsch-Richter, Catalogue of the Cyprus Museum, p. 80).

## LIGHTING UTENSILS

## 1323

Length, $5^{\frac{7}{8}} \mathrm{in} .\left(14.9 \mathrm{~cm}\right.$.). Width, $5_{16}^{\frac{13}{6} \mathrm{in} .\left(14.8 \mathrm{~cm} \text {.). Height, } 1_{8}^{\frac{1}{8}} \mathrm{in} .(2.9)\right.}$ cm.). cf. J. L. Myres, Cesnola Mandhook, No. 4978. Illustrated in the Cesnola Atlas, III, pl. ALIV, 3. The green patina has been largely removed. The surface is considerably corroded and there are a number of small holes. Acc. No. C.B. 414 .


1323

$13: 7$

## I324

Length, $6 \frac{1}{5} \mathrm{in}$. ( 15.6 cm .). Width, $6 \frac{1}{2} \mathrm{in}$. ( 16.5 cm .). Height, $1 \frac{1}{\frac{1}{4}} \mathrm{in} .(3.2 \mathrm{~cm}$.). cf. J. L. Myres, Cesnola Handbook, No. 4981. The green patina has been largely removed. The surface is somewhat corroded and there are a number of holes. Acc. No. C.B. 4 is.

## I 325

Length, $5 \frac{5}{16} \mathrm{in}$. ( 13.5 cm .). Width, $5 \frac{1}{4} \mathrm{in} .\left(13.3 \mathrm{~cm}\right.$.). Height, $\mathrm{I} \frac{1}{16} \mathrm{in}$. ( 2.7 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4979. The light green patina has been almost entirely removed. The rim is slightly chipped and there are a few small holes. Acc. No. C.B. 415 .

## I 326

 cm.). cf. J. L. Myres, Cesnola Handbook, No. 4980. The green patina has been almost entirely removed. The surface is considerably corroded and the rim is somewhat chipped. Acc. No. C.B. $\downarrow 17$.

I327 This specimen is somewhat different from the preceding, having an open saucer with slight rim and trough-like spout. It is probably somewhat later in date. For a similar example in clay cf. J. L. Myres, Cesnola Handbook, No. 25 I 8.

Length, $4 \frac{7}{16}$ in. ( II .3 cm .). Diameter, $3 \frac{5}{16}$ in. ( 8.4 cm .). Height, $\frac{3}{4}$ in. ( 1.9 cm.). cf. J. L. Myres, Cesnola Handbook, No. 4982. The crusty, green patina

## IMPLEMENTS AND UTENSILS

Lamps has been largely removed. The rim is considerably broken and chipped. Acc. No. C.B. 416.

## LATE GREEK LAMPS

I 335 LAMP, in the form of an open, round bowl with elongated round nozzle, and lid attached by a hinge. It has a short flaring foot and ring-shaped handle with an ivy-leaf above. In the centre of the bowl is a tubular socket, which served for inserting the lamp on the spiked stand No. ijio.

For a somewhat similar lamp from Priene, cf. T. Wiegand und H. Schrader, Priene, p. 385 , figs. $488-489$.


I335 The device of the tubular socket for insertion on a spike goes back as far as Minoan times (cf. Monumenti antichi, I902, p. IOI, figs. $34^{-35}$ ).

Height, without lid, 2 in. ( 5 cm .). Length, without handle, $3 \frac{3}{8} \mathrm{in}$. ( 8.6 cm .). Date of purchase uncertain (before 1906). Unpublished. Crusty, greenish patina. The handle is broken off and part of the ring is missing. The surface is somewhat corroded. Acc. No. G.R. 387.

I336 LAMP in the form of a rounded bowl, elongated on one side to form the nozzle. The bowl is closed at the top except for a small heartshaped hole near where the bottom of the wick would come, and a round aperture which served for pouring in the oil and which is covered by a lid in the form of a shell.

There is a ring handle and a short flaring foot.


1336

For a similar example in clay, cf. R. Zahn, in T. Wiegand und H. Schrader, Priene, p. 452, No. I 86.

Height, with handle, $3 \frac{7}{16} \mathrm{in} .(8.7 \mathrm{~cm}$.$) . length, without handle, 4 \frac{7}{16} \mathrm{in}$. ( 1 I. 8 cm .). Date of purchase uncertain. Rough, green patina. The upper

## LIGHTING UTENSILS

part of the handle is missing, also the pin of the hinge for the lid. Acc. No. G.R. Lamps 386.
ROMAN LAMPS

I 340 LAMP, in the form of a round bowl on a low ring base and with an elongated nozzle, flanked on each side by a volute. The handle consists of two curved stems, united above to a large heart-shaped member and joined to the lamp by leaf-shaped attachments.

This type of lamp occurs on Roman sites in great numbers during the first century B.C. (cf. J. Fink, Formen und Stempel römischer Thonlampen, in Sitzungsberichte der Münchner Akademie, 1900, p. 686, Class I). For similar


1340 examples in bronze cf. F. B. Tarbell, Naples Bronzes, Nos. 36, 37.

Height, with handle, $3 \frac{7}{16}$ in. ( 8.9 cm .). Length of lamp, without handle, $4 \frac{7}{16}$ in. ( 11.8 cm .). Purchased in 1900. Said to have been found in the Hauran, Syria. Crusty, green patina. A small piece is missing from the handle; otherwise intact. Acc. No. G.R. 30.

I350 BRONZE SAUCER. The broad rim is divided into two sections, a flat, horizontal part decorated with incised scrolls and bearing the inscription Suthina (cf. p. I82), and a convex border with beading and egg-and-dart pattern in relief. On the latter are two small rings for the attachment of handles. Etruscan, fourth to third century B.C.

The best explanation of saucers of this type is that they were the bowls placed at the top of thymiateria or incense burners. They could hardly have served as lamps, as the bowl part is often so small as to be inadequate for a receptacle


1350 of the oil; and they cannot have been parts of candelabra, as there are no marks of attachment. For similar examples cf. K. Schumacher, Antike Bronzen in Karlsruhe, Nos. 42 Iff ., and the references there cited; there are several in the British Museum, and in the University Museum, Philadelphia, all unpublished.

Diameter, $4^{\frac{7}{16}} \mathrm{in}$. ( 11.3 cm .). Purchased in 1903. Found at Bolsena in an Etruscan tomb of the fourth to third century B.C. (cf. pp. ISoff.). Unpublished.

Lamps Crusty, green patina. There is a small hole in the rim and one of the rings is broken. Acc. No. G.R. 452.

## LAMP-HOOK

Lamp-hook I35I LAMP-HOOK. It consists of a rod from which project two hooks, curving in opposite directions; at one end of the rod is a ring, in which one link of a chain is still preserved.

The use of this hook is seen from examples still attached to Roman lamps. It apparently served both for suspension (cf. British Museum, Handbook of Greek and Roman Life, p. rig, fig. roj; K. Schumacher, Antike Bronzen, No. 404), and as a pick-wick (cf. F. B. Tarbell, Naples Bronzes, fig. 35, where a hook of this type is attached to the lid of the lamp).

Length, $3 \frac{1}{2}$ in. ( 8.9 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4983. Crusty, greenish patina. Acc. No. C.B. 93.


## ARMS AND ARMOR

Our knowledge of ancient arms and armor is derived both from frequent representations of them on monuments, and from actual specimens which have survived. The majority of extant examples are of bronze, though after the Bronze Age, and especially in Roman times, we know iron to have been commonly used, at least for the majority of weapons. This is due to the fact that iron objects have mostly perished by corrosion, while those of bronze are generally in a comparatively good state of preservation.

## DAGGER-BLADES

Daggerblades

The dagger ('̇rरetpioiov, pugio) was one of the earliest metal weapons employed, its short length and simple shape lying within the scope of the maker's ability at an early period; for during the Early Bronze Age the maker was not only inexperienced in working metal, but the material at his disposal was often almost pure copper, which, being softer
than bronze, did not admit of very efficient forms (see Introduction, p. xvi). Later, when these difficulties were overcome, the sword became popular, its greater lengtl making it more serviceable as an offensive weapon at close range (see Nos. $\mathbf{~} 460 \mathrm{ff}$.).

For daggers in general cf. A. J. Reinach, Daremberg et Saglio, Dictionnaire, pugio, pp. 76 Iff .

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EARLY BRONZE AGE (ABOUT 3OOO-2OOO B.C.)
    FROM CYPRUS (CESNOLA COLLECTION)
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The dagger-blades at this early period are of almost pure copper, generally with a high admixture of copper oxide, which gives it a little more hardness. The implements appear to have been cast in an open mould and then finished by hammering. The haft, which was of more perishable material, such as wood or bone, has in all cases disappeared. On this account it cannot now be determined whether this type of blade was also inserted into a long haft and used as a spear.

Tro main types can be distinguished:
TYPE I. Leaf-shaped, with rounded or slightly pointed base for insertion in the haft. The base was sometimes prolonged into a flat tang and rivets were added to secure the fastening further. Along the centre line of the blade runs a midrib, generally slight, but sometimes more accentuated.

This form, without the tang, may be regarded as the earliest type of bronze dagger. An example of this shape was found in the necropolis of Nagada in Egypt and belongs to the first dynasty (cf. W. M. Flinders Petrie, Ballas and Nagada, p. 48, pls. LXV, 3, and LXXXIII, 8;6; and J. Naue, Die vorrömischen Schwerter, pp. I-2, Note I, pl. I, r). The addition of the tang is a natural development of this type, as it must soon have become evident that the securer fastening it provided was advantageous.

Similar examples have been found in Hittite tombs (cf. C. L. Woolley, Liverpool Annals of Archaeology and Anthropology, February, 1914, pl. XXIV); at Troy (cf. H. Schliemann, Ilios, p. 505, fig. 957); in the Cyclades (cf. F. Dümmler, Athenische Mitteilungen, XI, Beilage, I, 1 I, p. 24); and in Central Europe (cf. M. Much, Die Kupferzeit in Europa, p. I3, figs. II-14, and R. Virchow, Gräberfeld von Koban, pl. II, i, p. 77).
(a) Without tang

I360 At the base of the blade are three rivet-holes.

## IMPLEMENTS AND UTENSILS

Dagger- Length, $6 \frac{1}{8}$ in. ( 15.6 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4601. BLADES The green patina has been partly removed. Slightly corroded in places. Acc. No. C.B. 19 .


136I At the base of the blade are three rivet-holes.
Length, $6 \frac{1}{2}$ in. ( 16.5 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4602. The greenish patina has been largely removed. Somewhat corroded in places. Acc. No. C.B. 2 .

1362 At the base of the blade are two rivet-holes.
Length, $3 \frac{13}{16}$ in. ( 9.7 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4603. The green patina has been largely removed. Considerably corroded in places. Acc. No. C.B. 21.

1363 At the base of the blade are three rivet-holes in which the rivets are still preserved.

Length, $6 \frac{3}{4}$ in. ( 17.1 cm. ). cf. J. L. Myres, Cesnola Handbook, No. 4604. Greenish patina. The surface is somewhat corroded and encrusted. Acc. No. C.B. 23 .

I364 There are no rivet-holes.
Length, $4 \frac{11}{1.6}$ in. ( 11.9 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4605. The green patina has been largely removed. The surface is considerably corroded and the edges are much chipped. Acc. No. C.B. 30 .

I 365 There are no rivet-holes.
Length, $5 \frac{1}{\star}$ in. ( r 3.3 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4606 . The patina has been partly removed. The surface is slightly corroded. Acc. No. С.B. 33.

1366 There are no rivet-holes.
Length, $4^{\frac{15}{15}} \mathrm{in}$. ( 12.5 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4607.

The patina has been partly removed. The edges are somewhat chipped. Acc.

Daggerblades
(b) With Tang

I367 There are three rivet-holes, two in the base of the blade, one in the tang.

Length, $6 \frac{3}{16}$ in. ( 15.7 cm .). cf. J. L. Myres, Cesnola Handbook, No. 460 . Illustrated in the Cesnola Atlas, III, pl. LXXI, 2. The patina has been partly removed. The surface is corroded in places. Acc. No. C.B. 26.


1367

1368 There are two rivet-holes in the base of the blade.
Length, $5^{\frac{5}{8}} \mathrm{in}$. ( $\mathrm{I}_{4} .3 \mathrm{~cm}$.). cf. J. L. Myres, Cesnola Handbook, No. 4609. The patina has been largely removed. The surface is a little corroded. Acc. No. C.B. 18.

1369 There are two rivet-holes in the base of the blade.
Length, $4^{\frac{3}{5}}$ in. (II.I cm.). cf. J. L. Myres, Cesnola Handbook, No. 4610. The patina has been partly removed. The surface is corroded in places. Acc. No. C.B. 25.

1370 There are two rivet-holes in the base of the blade, in one of which the original rivet is still preserved.

Length, $4 \frac{3}{16}$ in. (io. 6 cm .). cf. J. L. Myres, Cesnola Handbook, No. 46 II . The patina has been partly removed. The surface is slightly corroded. Acc. No. C.B. 27.

137I There are no rivet-holes.
Length, $3^{\frac{3}{4}} \mathrm{in}$. 9.5 cm .). cf. J. L. Myres, Cesnola Handbook, No. 46 I 2. The patina has been partly removed. The upper part of the blade is missing. The surface is somewhat corroded. Acc. No. C.B. 29.

I372 There are no rivet-holes.
Length, $4^{\frac{7}{8}} \mathrm{in}$. ( 12.4 cm .). cf. J. L. Myres, Cesnola Handbook, No. $4^{613}$. The patina has been largely removed. The top of the blade is missing. The surface is slightly corroded. Acc. No. C.B. 31.

DAGGERBLADES

I373 There are no rivet-holes.
Length, $5 \frac{1}{2} \mathrm{in} .(1+\mathrm{cm}$.). cf. J. L. Myres, Cesnola Handbook, No. 4614. The patina has been partly removed. The top of the blade is missing and the surface is considerably corroded, with a few pieces missing. Acc. No. C.B. 35 .


1373


1374
1374 Triangular blade with slightly concave outline. The tang is unusually broad. There are three rivet-holes, two in the base of the blade, one in the tang.

For similar dagger-blades of triangular shape from the Cyclades cf. F. Dümmler, Athenische Mitteilungen, XI, 1886, Beilage 1, Nos. 6, 7 .

Length, $3 \frac{3}{\frac{3}{i}} \mathrm{in} .(9.5 \mathrm{~cm}$.). cf. J. L. Myres, Cesnola Handbook, No. 4615 . Illustrated in the Cesnola Atlas, III, pl. LXXI, 4. The green patina has been partly removed. The surface is somewhat corroded. Acc. No. C.B. 28.

TYPE II. Leaf-shaped, with strong midrib which is prolonged into a round, tapering tang, long enough to penetrate the whole length of the handle. The end is bent back to form a hook, in order to keep the tang firmly in place. Often there are two slits at the base of the blade to separate the cutting edges from the tang (cf. J. L. Myres, Cesnola Handbook, Nos. 4616-4625).

This type of dagger is said to have been found in graves of 3000 B.C. (cf. M. Ohnefalsch-Richter, Neues über Ausgrabungen auf Cypern, in Zeitschrift für Ethnologie, XXXI, p. 32 I , fig. XXI, io). It is often referred to as Cypriote par cxcellence, and was certainly a favorite form in Cyprus, to judge from the numerous examples found there (cf. J. L. Myres and M. Ohne-falsch-Richter, Catalogue of the Cyprus Museum, p. 53, Nos. 551 ff.).

But it is not peculiar to this locality only. Daggers of the same shape have been found in Troy (cf. M. Ohnefalsch-Richter, Kypros, die Bibel und Homer, pl. CXLVI, 3 A, d), as well as in Hungary (cf. F. von Pulszky, Die Kupferzeit in Ungarn, p. 77, Nos. 3, 5, 6, 7) and other sites of Central Europe (cf. J. Undset, Die ältesten Schwertformen, in Zeitschrift für Ethnologie, XXII, I890, p. 8 f., who thinks that these were probably carried there from Cyprus by the Phoenicians).

1378
Length, $8 \frac{9}{16}$ in. ( 21.8 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4616 . The green patina has been mostly removed. The edges are slightly chipped. Acc. No. C.B. 1. Illustrated, p. 389.

## I 379

Length, $12 \frac{9}{16}$ in. ( 31.9 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4617. The green patina has been partly removed. Slightly corroded in places. Acc. No. C.B. 2.

I380
Length, $13 \frac{3}{16} \mathrm{in}$. ( 33.5 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4618. The green patina has been partly removed. Slightly corroded in places. Acc. No. C.B. 3 .

## I38I

Length, $16 \frac{7}{16}$ in. ( 4.8 cm .). cf. J. L. Myres, Cesmola Handbook, No. $\boldsymbol{q}^{619}$. The green patina has been partly removed. Slightly corroded in places. Acc. No. C.B. 4.

## 1382

Length, $15 \frac{9}{16}$ in. ( 59.5 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4620 . The green patina has been partly removed. Slightly corroded in places. Acc. No. C.B. 5 .

I383
Length, $55 \frac{13}{15}$ in. ( 40.2 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4621. The green patina has been partly removed. Slightly corroded in places. Acc. No. C.B. 6.

## 1384

Length, $19 \frac{3}{16}$ in. ( 48.7 cm .). cf. J. L. Myres, Cesnola Handbook, No. $f^{622}$. The green patina has been partly removed. Slightly corroded in places. The edges are considerably chipped. Acc. No. C.B. 7.

## 1385

Length, $19 \frac{1}{\frac{1}{4}}$ in. ( 48.9 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4623.

## IMPLEMENTS AND UTENSILS

Dager- The green patina has been partly removed. Considerably corroded in places. blades Acc. No. C.B.S.

## I386

Length, $17 \frac{9}{16}$ in. ( 44.6 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4624. Illustrated in the Cesnola Atlas, III, pl. LXXII, 2. The green patina has been partly removed. Slightly corroded in places. Acc. No. C.B. g.

## 1387

Length, $16 \frac{1}{\frac{1}{5}}$ in. ( 41 cm. ). cf. J. L. Myres, Cesnola Handbook, No. 4625. The green patina has been partly removed. Considerably corroded in places. Acc. No. C.B. ıo.

I388 The midrib is hammered flat for a short distance from the point.

Length, 20 in. ( 50.5 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4626. Illustrated in the Cesnola Atlas, pl. LXXII, 5. The green patina has been partly removed. Considerably corroded. The tang is bent a little to one side. Acc. No. C.B. it.

1389 The midrib is hammered flat for a short distance from the point.

Length, $16 \frac{1}{16}$ in. $(40.8 \mathrm{~cm}$.). cf. J. L. Myres, Cesnola Handbook, No. 4627. The green patina has been partly removed. Considerably corroded in places. Acc. No. C.B. $\mathrm{I}_{2}$.

## 1390

Length, $12 \frac{5}{8}$ in. ( 32.1 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4628. The green patina has been mostly removed. Much corroded, with pieces along the edges missing. Acc. No. C.B. I3.

## I39I

Length, $10 \frac{7}{16}$ in. ( 26.5 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4629. The green patina has been mostly removed. The edges are much chipped. Acc. No. C.B. 14 .

1392 The blade is bent back, probably intentionally to make it useless before burial (cf. J. L. Myres, Cesnola Handbook, p. 472). The end of the tang is hammered out.

Length, as bent, $1 I_{\frac{1}{2}}$ in. ( 29.2 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4630. The green patina has been partly removed. Slightly corroded in places. Acc. No. C.B. $1_{5}$.

I 393 The blade is bent like No. 1392.
Length, $11 \frac{1}{2}$ in. ( 29.2 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4631.


1378


1388


1392


1394


1395

## IMPLEMENTS AND UTENSILS

Dagger- The patina has been entirely removed. The copper has now a brownish appearBLADES ance. Much corroded. Acc. No. C.B. 16.

1394 Doubled up, probably intentionally, like Nos. 1392, I393.
Length, as bent, $6 \frac{1}{2} \mathrm{in}$. ( 16.2 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4632. Greenish patina. The surface is much encrusted and considerable parts of the blade, as well as the whole of the tang, are missing. Acc. No. C.B. 8I. Illustrated, p. 389 .

I 395 The midrib protrudes so far and the lateral wings of the blade are so narrow that the dagger is practically four-winged. Illustrated, p. 389 .

Length, ${ }^{\frac{11}{16}} \mathrm{in}$. ( 24.9 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4633 . Illustrated in the Cesnola Atlas, III, pl. LXXII, 3. The green patina has been partly removed. Much corroded, with considerable parts of the blade missing. Acc. No. C.B. 17.

1396 Four-bladed type like No. i395. Illustrated, p. 389.
Length, 14 in . ( 35.6 cm. ). cf. J. L. Myres, Cesnola Handbook, No. 4634 . Greenish patina. The surface is considerably encrusted. The bent tip of the tang is broken off. Acc. No. C.B. 37.

## LATE BRONZE AGE

In the Late Bronze Age, which corresponds to the Mycenaean colonization of Cyprus, bronze proper was used, that is, copper was mixed with 9-1I per cent of tin, and was of correspondingly greater hardness. The forms of the dagger blades accordingly became more developed. They have now broad flat tangs with flanged edges. The handle-plates were riveted to these tangs, where they were kept in place by the flanges.

For other examples of this period with similar flanged tangs cf. e.g. A. J. Evans, The Prehistoric Tombs of Kinossos, p. 82, fig. go.

FROM CYPRUS (CESNOLA COLLECTION)
I 403 There are five rivet-holes in the tang.


1403
Length, $5 \frac{5}{16}$ in. ( 13.5 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4692.

Illustrated in the Cesnola Atlas, III, pl. LNill, 3. Greenish patina. The surface is much encrusted and corroded. Acc. No. C.B. 22 .

DaggerBLADES

1404 Between the blade and the tang is a socket to secure the handleplates further. The tang, which is very long, is unsymmetrical. It contains two rivet-holes in which the rivets are still preserved.


1404

Length, $8 \frac{3}{16} \mathrm{in}$. ( 20.8 cm .). of. J. L. Myres, Cesnola Handbook, No. 4693 . Greenish patina. The surface is much corroded and encrusted. Acc. No. C.B. $2+$.

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FROM GOURNIA, CRETE
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The type prevalent in Crete during the Middle Minoan III and Late Minoan I periods (about $1800-1500$ B.C.) is the following:

Leaf-shaped, without tang or midrib, and with rounded or straight-edged base for insertion in the haft, to which it was further secured by rivets. These blades are often of very thin bronze, in which cases they could not have been used for stabbing, but merely as knife-blades.

For similar examples cf. H. B. Hawes, Gournia, pl. IV, $56-60$, and the references there cited; R. B. Seager, Explorations in the Island of Mochlos, fig. $45, \mathrm{IX}, 9$; II, 52, IV, IS. For the development of this type of blade from the earlier triangular form cf. R. B. Seager, Mochlos, op. cit., p. 106 f .


1407

I407 Slighty rounded base with three rivet-holes, in two of which the rivets are still preserved.

Length, $5 \frac{7}{16} \mathrm{in}$. ( $\mathrm{I} 3 . \mathrm{Scm}$.). Gift of the American Exploration Society, 1907. Crusty, greenish patina. The surface is corroded in places. The edges are considerably chipped. Acc. No. 07.232.7.

## IMIPLEMENTS AND UTENSILS

Daggerblades

I 408 The base is rounded and has three rivet-holes, in one of which the rivet is still preserved. The blade contracts slightly in the middle.


1408

Length, $5 \frac{7}{16}$ in. ( 13.8 cm .). Gift of the American Exploration Society, 1907. Crusty, greenish patina. The edges are somewhat chipped. Acc. No. 07.232 .6.


I 409

I 409 Straight base with three rivet-holes, in one of which the rivet is still preserved. The blade is wider in the middle than at the ends.

Length, $5^{\frac{3}{4}} \mathrm{in}$. ( 14.6 cm .). Gift of the American Exploration Society, 1907. Crusty, brown-green patina with blue patches. Considerably chipped on the edges. Acc. No. 07.232.8.


1410

IfIO Straight base with two rivets. The edges of the blade are nearly parallel.

Length, $4 \frac{15}{16}$ in. ( 12.5 cm .). Gift of the American Exploration Society, 1907. Crusty, greenish patina. Slightly chipped on the edges. Acc. No. 07.232.9.

## SPEAR-HEADS

From the beginning of the Late Bronze Age spear-heads (spear $=\delta \delta_{o u v} \quad$ Spearhasta) are provided with tubular sockets and are thus clearly distinguished heads from dagger-blades (see above, p. 383).

For spears in general cf. E. Cuq, Daremberg et Saglio, Dictionnaire, hasta, pp. 33 ff.

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FROMCYPRUS (CESNOLA COLLECTION)
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LATE BRONZE AGE
Spear-heads of this period have narrow, leaf-shaped blades generally with a midrib, which sometimes becomes so accentuated as to give a fourwinged appearance to the blade.

This trpe of spear-head is common in the Greek world in the Later Bronze and Early Iron Ages: cf. e.g. the examples from Knossos (A. J. Evans, The Prehistoric Tombs of Knossos, pl. ACI, fig. I Ij); from Gournia (H. B. Hawes, Gournia, pl. IV, \& $^{8}$ ); from Mochlos (R. B. Seager, Explorations in the Island of Mochlos, fig. $+5, \mathrm{XX}$, 10-12); from Ialysos (A. Furtwängler und G. Löschcke, Mykenische Vasen, pl. D); and from Olympia (A. Furtwängler, Olympia, IV, Die Bronzen, pl. LNIV, and p. 173).

I 415 Without midrib. The tubular socket was formed by bending the lower part of the blade around the head of the haft, a practice which mat well have originated the socket. Illustrated, p. 395.

Length, $+\frac{1}{4}$ in. ( 10.5 cm .). cf. J. L. Myres, Cesnola Handbook, No. $\mathrm{f}^{694}$. Illustrated in the Cesnola Atlas, III, pl. LXXIII, 5. Rough, dark greenish patina. A piece on the upper right-hand corner of the socket is missing. Acc. No. C.B. 533.

I 4 I6 With strongly marked midrib. Illustrated, p. 395 .
Length, $I_{3} \frac{15}{16} \mathrm{in}$. ( 35.4 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4695 . Illustrated in the Cesnola Atlas, III, pl. LXXII, i. Rough, green patina. The socket is split open and a piece on its lower part is missing. There are two rivetholes in the socket. Acc. No. C.B. 4 I.

I4I7 With strongly marked midrib.
Length of fragment, $7 \frac{7}{16}$ in. ( 18.9 cm .). cf. J. L. Myres. Cesnola Handbook, No. 4696 . Rough, green patina. The upper part is broken off and the socket is split open. Acc. No. C.B. $3^{8}$.

SpeAR-
If I 8 The midrib is so marked as to give the spear-head a four-bladed HEADS effect.

Length, $12 \frac{3}{4}$ in. ( 32.4 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4697. Rough, greenish patina. Part of the iron (?) haft is preserved and a portion of the socket is missing, as are also a few pieces in the blade. Acc. No. C.B. 39 .

## EARLY IRON AGE

Most spear-heads of the Early Iron Age resemble those of the Late Bronze period; that is, they have leaf-shaped blades and tubular sockets. But the blade is generally not so narrow, and the midrib broad and flat.

The majority of specimens found are of iron, but bronze is not wholly discarded. For the distribution of this type of spear-head see under the examples of the Bronze Age, p. 393.
(a) Of Bronze

## 1423

Length, $5 \frac{11}{16}$ in. ( 14.4 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4706. Rough, green patina. There are two rivet-holes in the socket. Chipped in places. Acc. No. C.B. 36 .

## I 424

Length, $7 \frac{3}{15}$ in. ( 18.3 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4707. The rough, greenish patina has been partly removed. The surface is encrusted in places. Chipped in places. There are two rivet-holes in the socket. Acc. No. C.B. $\boldsymbol{q}^{2}$
(b) Of Iron

## 1425

Length, $1 \frac{1}{16}$ in. ( 28.1 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4708. The tip is broken off, as is also part of the socket. Part of the haft is preserved inside the socket. Acc. No. C.B. 45.

1426
Length, $9_{1 \frac{14}{16}}$ in. ( 24.3 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4709. The iron is much corroded. Acc. No. C.B. $4^{6}$.

## I 427

Length, $8 \frac{3}{8} \mathrm{in}$. ( 20.8 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4710. The iron is much corroded, and a piece from the edge of the blade is missing. Acc. No. C.B. 47.

## 

1415

## 

1416


1418


1433

1436

SpearHEADS

I 428
Length, $7 \frac{3}{8}$ in. ( 18.3 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4711. The iron is much corroded. Acc. No. C.B. $4^{8}$.

## 1429

Length, $5 \frac{9}{16} \mathrm{in} .(14.1 \mathrm{~cm}$.). cf. J. L. Myres, Cesnola Handbook, No. 4712. Part of the iron haft is still preserved. The iron is much corroded. Acc. No. C.B. 49 .

I 430 The small size of this example suggests that it may have been used as an arrow-head. Illustrated, p. 395.

Length, $3 \frac{1}{16}$ in. $(7.8 \mathrm{~cm}$.). cf. J. L. Myres, Cesnola Handbook, No. 47 I 3.$$ Acc. No. C.B. 507.

Another variety of spear-head found in Cyprus during this period has a four-sided blade with a socket below and ending above in a point. The process of its development from the other type was probably the gradual disappearance of the wings of the blade, leaving only the long midrib.

This type of spear-head is peculiar to Cyprus and may perhaps be identified with the ociova referred to by Herodotos and other ancient writers as the Cypriote javelin (cf. J. L. Myres, The Sigynnae of Herodotos, in the Anthropological Essays presented to E. B. Tylor, 1908, pp. 255-276; and A. J. Reinach, in Daremberg et Saglio, Dictionnaire, under sigyna, p. 1336 f.; also J. L. Myres, Annals of Archaeology and Anthropology, III, p. 107, and V, p. i30).
(a) Of Bronze

## 1433

Length, 25 in. ( 63.6 cm. ). cf. J. L. Myres, Cesnola Handbook, No. 4714. Illustrated in the Cesnola Atlas, III, pl. LXVII, 2. The green patina has been largely removed. Somewhat bent. The socket is split open and broken on one side. The tip is missing. Acc. No. C.B. 42. Illustrated, p. 395.

## I 434

Length, $20 \frac{7}{8}$ in. ( 53 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4715. Crusty, green patina. Somewhat bent and corroded in places. The tip is missing. Acc. No. C.B. 43.

## I 435

Length, $27 \frac{7}{16} \mathrm{in} .(69.6 \mathrm{~cm}$.). cf. J. L. Myres, Cesnola Handbook, No. 4716. Illustrated in the Cesnola Atlas, III, pl. LXXVII, 4. Crusty, green patina. Considerably corroded in places. The tip is missing. Acc. No. C.B. 44.

## 1436

Length. $14 \frac{1}{2}$ in. ( 35.6 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4717. Rough, green patina. The socket is slit open. There are two rivet-holes in the socket. Acc. No. C.B. 116. Illustrated, p. 395.
(b) Of Iron

## I 437

Length, 11 in. ( 27.9 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4718. Much corroded. One rivet in the socket is preserved. It was broken in two and reattached. Acc. No. C.B. 115. Illustrated, p. 395.

$$
\text { FROM } \quad 1 \text { TALY }
$$

The blade is of broad, leaf-shaped form, ending in a sharp point, and provided with a flat midrib. Below is a tubular socket for the insertion of the handle.

This is the common type of spear-head found in Italy during the PreRoman period (cf. E. Cuq, Daremberg et Saglio, Dictionnaire, under hasta, p. 37, and British Museum, Greek and Roman Life, fig. 83).

The four specimens in our collection are dated as not later than the middle of the sixth century B.C., since they were found in the same tomb as the Etruscan chariot (cf. p. 177 f.).

## Of Iron

## I 442

Length, with socket, $19 \frac{7}{8} \mathrm{in}$. ( 50 cm .). Unpublished. The iron is much corroded. The tip and a piece of the socket are missing. Inside the socket a portion of the iron haft is still preserved. Acc. No. G.R. 438.


## I 443

Length, with socket, $18 \frac{5}{16} \mathrm{in}$. ( 46.5 cm .). Unpublished. The iron is much corroded. Inside the socket a portion of the iron haft is still preserved. Acc. No. G.R. 437.

## I 444

Length, with socket, $18 \frac{7}{5} \mathrm{in}$. ( 48 cm .). Unpublished. The iron is much

## IMPLEMENTS AND UTENSILS

Spearheads
corroded. The tip is missing and the edges are somewhat chipped. Inside the socket a portion of the iron haft is still preserved. Acc. No. G.R. 436.

I445 Similar to the above, but of smaller dimensions.
Length, with socket, $8 \frac{7}{16} \mathrm{in}$. ( 21.5 cm .). Unpublished. The iron is much corroded and a few pieces from the socket are missing. Acc. No. G.R. 439.

## BUTT-SPIKES

ButtSPIKES

The shafts of Greek spears were often provided on the butt ends either with another spear-head, so that the weapon could be used at both extremities, or with a simple spike (cf. E. Cuq, Daremberg et Saglio, Dictionnaire, under hasta, p. 36). The following are examples of such spikes ( $\sigma \alpha v \rho \omega \tau \eta \rho$ ), with tubular sockets.

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FROM CYPRUS (CESNOLA COLLECTION)
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EARLY IRON AGE
1450 Of four-sided section, with a moulded ring between the spike and the socket.

Implements of this form used to be classed as spear-heads (cf. A. Furtwängler, Olympia, IV, Die Bronzen, pl. LXIV, p. 175); they are, however, more probably spear-butts, for which their shape is much better adapted (cf. R. C. Bosanquet, in Essays and Studies presented to William Ridgeway, 1913, p. 275 f.).

Length, $6 \frac{1}{2}$ in. ( 16.5 cm .). cf. J. L. Myres, Cesnola Mandbook, No. 4719. Illustrated in the Cesnola Atlas, III, pl. LXXIII, 2. Crusty, greenish patina. The surface is much corroded. The upper end of the spike and the greater part of the socket are missing. Acc. No. C.B. 51 .


I45I Of round section.
Length, $7_{8}^{5}$ in. ( 8.5 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4720. Rough, greenish patina. The bronze is slit open in many places and a piece at

## ARMS AND ARMOR

the bottom is missing. About midway are traces which show that a ring of another material surrounded it. Acc. No. C.B. 50.

Butt-
SPlKES

## SWORDS

The earliest bronze swords (si申os, gladius) date from the Later Bronze Age. In the Early Bronze Age the difficulty of casting so long a weapon as the sword had not yet been overcome and short daggers had to serve the purpose of chief offensive weapon (cf. Nos. 1360 ff).

For swords in general cf.:-
E. Beurlier, Daremberg et Saglio, Dictionnaire, gladius, pp. 1600 ff . J. Naue, Die vorrömischen Schwerter.

I460 BRONZE SWORD. The blade has slightly convex edges which become concave and indented before they reach the hilt. The hilt, which is attached to the sword by two bronze rivets, has a grip of oval section and a pommel in the shape of a shallow bowl with a knob in the centre. The hilt and the adjoining portion of the sword are richly decorated with incised and punctured ornaments, consisting of rows of circles, semicircles, dots, and zigzag lines. On the grip are three raised bands, and the blade has a series of ribs running along either side of the midrib.


The workmanship is excellent, the decorations being executed throughout with wonderful finish.

This type of sword is commonly known as Hungarian and belongs to the Later Bronze Age (cf. J. Naue, Die vorrömischen Schwerter, p. 48 f., p. 53 f., p. 56, pls. XXII ff.; O. Montelius, La Civilisation primitive en Italie, pl. 31, p. 17+f., and the references there cited). For its distribution cf. J. Naue, op. cit., p. 55 .

Length, $21 \frac{1}{2}$ in. ( 54.5 cm .). Purchased in 1906 . Mentioned in the Museum Bulletin, February, 1907, p. 20. Smooth, olive-green patina. The preservation is excellent, the sword being practically intact, except for a crack in the pommel and a few slight chips in the blade. Acc. No. 06.1170.

I46I BRONZE SWORD WITH SHEATH. The blade is in the form of a long, pointed leaf with broad flat midrib, and rounded base. The hilt

## IMPLEMENTS AND UTENSILS

Swords has a crescent-shaped pommel and a grip which is wider in the middle than at the ends. The grip and the base of the blade have raised edges for the insertion of bone or ivory inlay (now missing). The blade is decorated along either side of the midrib with a series of ridges, and at its base are finely incised and punctured lines. On the base of the blade and the hilt are four rivet-holes for the attachment of the inlay.


The sheath is made of a thin plate of bronze, bent together with edges adjoining. It ends above in a knob, with disk below, and is decorated on its surface with a series of parallel ridges, zigzag lines, and hatchings

This type of sword commonly occurs in Central and South Italy. The earliest examples belong to the period between $1100-1000$ B.C. (O. Montelius, Pre-Classical-Chronologie, pl. ir), but the type continues into the Early Iron Age (cf. J. Naue, Die vorrömischen Schwerter, pp. if-i2, pl. VI, i).

Length of sword, $20 \frac{7}{8} \mathrm{in}$. 53 cm .). Lengths of sheath fragments, $11 \frac{1}{16} \mathrm{in}$. ( 28.1 cm .); $4^{\frac{1}{2}} \mathrm{in}$. ( 11.4 cm .). Purchased in 1909. Said to be from Roman excavations. Unpublished. Rough, green-blue patina. The sword is somewhat chipped and the sheath very fragmentary. Acc. No. 09.221.27.

I462 IRON SWORD, with straight-edged blade, strong midrib, and flanged tang.

This form is probably a translation into iron of a bronze form found in Greece during the late Mycenaean period (cf. H. Schliemann, Mycenae, p. 144, fig. 221, and others cited by A. J. Evans, Mycenaean Cyprus as illustrated in the British Museum Excavations, in the Journal of the Anthropological Institute of Great Britain and Ireland, vol. XXX, 1900, p. 218). It is of foreign origin and seems to have originated in Italy, where a number of bronze examples of this form have been found (cf. J. Naue, Die vorröm-
ischen Schwerter, p. 15 f., pls. VII, VIII). Our example, from its close resemblance to these Bronze Age examples, must be placed at the beginning of the Early Iron Age, that is, about inoo-rooo B.C. For similar iron swords from Cyprus, cf. J. Undset, Die ältesten Schwertformen, in Zeitschrift für Ethnologie, 1890, NX11, p. 2 f.

Length, $27 \frac{3}{5}$ in. ( 69.6 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4725. Illustrated in the Cesnola Atlas, III, pl. LXXIV, 2. The iron is much corroded. The handle-plates and rivets are missing, but the discoloration shows the handle to have run forward in a blunt point on the upper end of the blade. Acc. No. C.B. 438.


I 463 IRON SWORD, with broad, leaf-shaped blade, with recurving edges and strong midrib. The tang is semicircular above and was probably long and narrow below (the lower part is now missing); it is not flanged, but has a bronze binding which protected the edges.

Of this form only a few examples have been found, all of which come from Cyprus (cf. e.g. J. L. Myres and M1. Ohnefalsch-Richter, Catalogue of the Cyprus Museum, Nos. 391 I- $\mathbf{3 9} 13$ [three fragments of at least two swords]; M. Ohnefalsch-Richter, Zeitschrift für Ethnologie, NXXI, I899, p. (29) [a reference to a sword now in Cambridge and shortly to be published by J. L. Myres in the Liverpool Annals of Archaeology and Anthropology]). On the engraved bowl from Cyprus, which dates from the first half of the seventh century B.C. (cf. J. L. Myres, Cesnola Handbook, No. 455t) similar swords are represented. The type resembles the later form of sword at Halos, but is of more curved outline (cf. Myres, Cesnola Handbook, No. +726). Recently a number of similar but smaller daggers and swords have

## IMPLEMENTS AND UTENSILS

Swords been found in Early Iron Age tombs near Carchemish (not yet published). ${ }^{1}$

Length, $23 \frac{3}{8} \mathrm{in}$. 59.4 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4726. Illustrated in the Cesnola Atlas, III, pl. LXXIV, $\mathbf{r}$. The iron is much corroded. The lower part of the tang is missing (see above). Two bronze rivets are preserved, as well as parts of the bronze binding of the handle-plates. Acc. No. C.B. 437.


I464 FRAGMENT OF A SIMILAR IRON SIFORD, consisting of the greater part of the tang with its bronze binding, and a considerable portion of the ivory handle-plates, which are fastened to the tang by means of three silver rivets. The hilt is cylindrical in section and ornamented with two mouldings.

Length of fragment, $4^{\frac{3}{4}} \mathrm{in}$. ( 12.1 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4727. The iron is much corroded. Acc. No. C.B. 439.

I 469 DIMINUTIVE SWORD, probably used as a pin. The blade is long and thin, with slightly curving edges. The hilt has a guard in the form of a cross-piece, and ends above in a knob-shaped pommel.

This type of sword is that commonly used in Greece during the fifth century B.C., as can be seen from frequent representations of it on Greek
${ }^{1}$ This information I owe to Professor John L. Myres.
vase-paintings, and some datable specimens found (cf. British Museum, Greek and Roman Life, p. 99 f.).

Length, $3 \frac{3}{16}$ in. ( 8.1 cm. ). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4829. The green patina has been partly removed. Otherwise intact. Acc. No. C.B. 222.

I 475 IRON SWORD with straight-edged blade and marked midrib. The guard is of rounded form cut off sharp at the ends. The hilt has a bronze grip of oval section and flat pommel surmounted by a knob. The pommel is apparently fragmentary, having been of the antennae type with recurving ends.

Early Iron Age. For similar swords cf. J. Déchelette, Manuel d' archéologie, II, pp. 730 ff.; J. Naue, Die vorrömischen Schwerter, pls. XXXIV ff.

Length, $17 \frac{1}{4}$ in. $(43.8 \mathrm{~cm}$.). Gift of Albert Gallatin, 1913. Dredged from the Rhone at Avignon in 1911. The iron is much corroded and the edges of the blade are much chipped. The hilt, which is covered with a crusty, green patina, is slit open on one side. Acc. No. I3.134.

## ARROW-HEADS

Arrows (iós, sagitta) were used both in warfare and for the chase throughout antiquity, from the Stone Age down to Roman times. Their chronology is a matter of some difficulty, as they have mostly been found scattered on the surface, not in tombs. More or less definite date marks, however, are sometimes supplied by their occurrence on well-known battlefields.

For arrows in general cf. A. J. Reinach, Daremberg et Saglio, Dictionnaire, sagitta, pp. 997 ff.

The following types of arrow-heads are represented in our collection:
TYPE I. With flat, leaf-shaped blade, midrib, and long four-sided tang which served for insertion in the shaft.

This type appears as early as the Bronze Age (cf. F. J. Bliss, A Mound of Many Cities, Tell el Hesy, p. 81, figs. 133 ff.; E. Sellin, Tell Ta‘Annek, pl. 8 g and h; J. de Morgan, Recherches sur les origines de l'Egypte, i896, p. 210 , Nos. 569,570 ; J. Garstang, Mahâsna and Bêt Khalâf, pl. XXIII; R. C. Bosanquet, Phylakopi, pl. XXXVIII, 6); but persists until later, and is commonly found in Syria and Palestine (cf. F. J. Bliss and R. A. S. Macalister, Excavations in Palestine, pl. 79). A number of examples have

ArrowHEADS

## IMPLEMENTS AND UTENSILS

Arrow- been found in Cyprus (cf. H. B. Walters, British Museun, Catalogue of HEADS Bronzes, No. 2809; W. Ridgeway, Early Age of Greece, p. 302, fig. 57).

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FROM CYPRUS (CESNOLA COLLECTION)
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I 480 The midrib is broad and flat.
Length, $5 \frac{3}{8}$ in. ( 13.6 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4776. The greenish patina has been partly removed. The surface is encrusted in places. Acc. No. C.B. 32.

I48I The midrib is broad and flat.
Length, $2 \frac{5}{8}$ in. ( 6.8 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4777. Crusty, greenish patina. Acc. No. C.B. 60 .

1482 The midrib is narrow and marked.
Length, $1_{\frac{7}{8}}$ in. ( 4.8 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4778 . Crusty, greenish patina. The surface is considerably corroded. Acc. No. C.B. 62.

Type II. With three-edged blade and tubular socket.
This type is commonly found on Greek sites during the classical period. A number of examples were found on the battle-field of Marathon (cf. K. Schumacher, Antike Bronzen in Karlsruhe, No. $74^{8}$ [2], pl. XIV, 28), which gives them a definite date. They appear, however, to have had a long history. It is possible that they should be identified with the Homeric $\tau \rho \iota \gamma \lambda \dot{\omega} \chi \iota \nu$ or thrice-barbed arrow (cf. W. Ridgeway, Early Age of Greece, l, p. 30 I f.; A. Furtwängler, Olympia, Bronzen, p. 178, Nos. 1083 ff.). In the recent excavations at Carchemish they have been found in tombs after the fifth century B.C.

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FRON CYPRUS (CESNOLA COLLECT1ON)
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I 487
Length, $1 \frac{5}{8} \mathrm{in} .(+.1 \mathrm{~cm}$.$) . cf. J. L. Myres, Cesnola Handbook, No. 4789$. Illustrated in the Cesnola Atlas, III, pl. LXXIII, 4. Rough, green patina. Acc. No. C.B. 57.

I 488
Length, ${ }^{\frac{7}{16}}$ in. ( 3.6 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4790. Light green patina. The surface somewhat encrusted. Acc. No. C.B. 55 -

I489
Length, $1 \frac{1}{2}$ in. ( 3.8 cm .). cf. J. L. Myres, Cesnola Handbook, No. 479 I. The patina has been largely removed. The surface is somewhat corroded. Acc. No. C.B. 54 .

1480


I48I


I 487
1502

1499


15II


1510

$\mathrm{I}_{5} \mathrm{I} 2$

## IMPLEMENTS AND UTENSILS

## Arrow- I490

HEADS
Length, $1 \frac{3}{16}$ in. (3 cm.). cf. J. L. Myres, Cesnola Handbook, No. 4792. The patina has been largely removed. The surface is slightly corroded and the edges are somewhat chipped. Acc. No. C.B. 53.

## I49I

Length, $\mathrm{I} \frac{11}{16}$ in. ( 4.3 cm. ). cf. J. L. Myres, Cesnola Handbook, No. 4793. The patina has been removed. The surface is considerably corroded and the edges are chipped in places. Acc. No. C.B. 56.

TYPE III. With four-sided blade of either straight-edged, tapering outline, or leaf-shaped profile. The tang is long and either round or four-sided in section.

This type, like the preceding, occurs on Greek sites during the classical period. Again a definite date-mark is supplied by their occurrence on the battle-field of Marathon (cf. K. Schumacher, Antike Bronzen in Karlsruhe, p. I44, No. $74^{8}$, pl. XIV, 40, 41 ; British Museum, Greek and Roman Life, p. IOO, fig. 86).

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FROM CYPRUS (CESNOLA COLLECTION)
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(a) With straight-edged blade

I 499 The tang is round in section. Illustrated, p. 405.
Length, 4 in. (10.1 cm.). cf. J. L. Myres, Cesnola Handbook, No. 4779. The rough, green patina has been partly removed. The tang is bent in its lower half. Acc. No. C.B. 65.

I500 The tang is of round section.
Length, $3 \frac{7}{8}$ in. ( 9.8 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4780. Green patina. The surface is considerably encrusted. Acc. No. C.B. 66.

I50I The tang is four-sided.
Length, $2 \frac{5}{8}$ in. ( 6.7 cm .). cf. J. L. Myres, Cesnola Handbook, No. 478 I. The patina has been removed. The surface is somewhat corroded. Acc. No. C.B. 67.
(b) With leaf-shaped blade

I 502 The tang is of round section. Illustrated, p. 405 .
Length, $2 \frac{3}{8}$ in. ( 6 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4782. Greenish black patina. The surface is considerably encrustcd. Acc. No. C.B. 76.

I 503 The tang is of round section.
Length, $2 \frac{7}{8}$ in. ( 7.3 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4783.

The patina has been largely removed. The surface is somewhat corroded. Acc. ArrowNo. C.B. 73 .

I5O4 The tang is rounded.
Length, $2^{\frac{3}{4}}$ in. ( 9.5 cm .). cf. J. L. Myres, Cesnola Handbook, No. 478 . The patina has been removed. The surface is considerably corroded. Acc. No. C.B. 74 .

1505
Length, $2 \frac{13}{16}$ in. ( 7.2 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4785. The patina has been removed. The surface is considerably corroded. Acc. No. C.B. 75.

TYPE IV. With two-edged triangular blade, sometimes ending below in barbs. There is a midrib and a four-edged tang, which is broadened where it joins the blade.

This type is commonly found on classical sites during the Hellenistic period (cf. A. Furtwängler, Olympia, IV, Die Bronzen, Nos. io93 ff.; H. Thiersch, in Furtwängler, Aegina, p. 433, No. 258, pl. 117, 45; C. Carapanos, Dodone, pl. LVIII, 17, 18; M. Ohnefalsch-Richter, Verhandlungen der Berliner anthropologischen Gesellschaft, I899, p. 332), and is figured on coins of the Alexander period (cf. British Museum, Catalogue, Crete, pl. 16, i3). But it also occurs earlier, as is seen from its appearance at Marion in Cyprus at the beginning of the fourth century (cf. A. Furtwängler, Olympia, IV, Die Bronzen, p. 178; Nos. 1093 ff.), and at Eryx in Sicily in the fifth to fourth centuries B.C. (cf. an unpublished example in Sir Arthur J. Evans's collection $\left.{ }^{\mathrm{I}}\right)$. For Roman arrow-heads of this type cf. British Museum, Greek and Roman Life, p. 105, fig. 92.

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FROM CYPRUS (CESNOLA COLLECTION)
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1510 The blade has straight, flaring sides ending below in barbs.
Length, $1 \frac{7}{16}$ in. ( 3.6 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4786. Illustrated in the Cesnola Atlas, III, pl. LXXIII, 6. The patina has been largely removed. The points of the blade and the barbs, as well as most of the tang, are missing. Acc. No. C.B. 63. Illustrated, p. 405.

I5I The blade has straight, flaring sides, rounded below.
Length, $2 \frac{1}{4}$ in. $(5.7 \mathrm{~cm}$.). cf. J. L. Myres, Cesnola Handbook, No. 4787. Crusty, greenish patina. The surface is considerably corroded. Acc. No. C.B. 64. Illustrated, p. 405.
${ }^{1}$ This information I owe to Mr. John L. Myres.

## IMPLEMENTS AND UTENSILS

Arrowheads

I 5 I 2 The blade is leaf-shaped. Ihlustrated, p. 405.
Length, $2 \frac{5}{8}$ in. ( 6.7 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4788. Rough, greenish patina. The surface is somewhat encrusted. Acc. No. C.B. 61

## SHIELDS

Shieids The form of shield ( $\alpha \sigma \pi \iota s$, $\theta v \rho \epsilon o ́ s, \pi \alpha \rho \mu \eta$, clipeus, scutum, parma, pelta) in use in the Mycenaean period was of large dimensions, often extending from the neck to the feet (cf. W. Ridgeway, Early Age of Greece, I, p. 312). In the succeeding period a smaller shield of more wieldy form was adopted, and this necessitated the adoption of metal cuirasses, helmets, and greaves to compensate for the loss of the protection which the large shield afforded.

For shields in general cf.-
E. Saglio, Daremberg et Saglio, Dictionnaire, clipeus, pp. i2 48 ff .
W. Helbig, Das Homerische Epos, pp. 3 II ff.
H. B. Walters, Catalogue of Bronzes in the British Museum, p. LXVIII f.

British Museum, Greek and Roman Life, pp. 88 ff.
C. Friederichs, Kleinere Kunst und Industrie im Alterthum, p. 218.

I 522 SHIELD BOSS, consisting of a round, flat disk (fragmentary), with a pointed conical knob in the centre.

This form is of Assyrian origin. It is frequently represented on early Cypriote figures of warriors (cf. J. L. Myres, Cesnola Handbook, Nos. 2098 ff. in the Terracotta Collection and No. 746 in the Vase Collection). For a fine example with figures of lions and bulls embossed in Oriental style, from Amathus, cf. G. Perrot et C. Chipiez, Histoire de l'art, III, p. 869 f., fig. 639. Its probable date is about 700 B.C.

Diameter of fragment, $5 \frac{3}{16} \mathrm{in}$. ( 13.2 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4754. The patina has been mostly removed. The surface is much corroded in places. Less than half of the disk is preserved. Acc. No. C.B. 514.

I 523 ROUND DISK, of slightly convex shape, ornamented on its outer side with punctured, engraved, and embossed patterns arranged in concentric bands. The latter consist of concentric circles, dotted zigzag lines, hatched lines, dotted triangles, dotted meander, and a series of small and large bosses.

Disks of this type have been frequently found in Early Iron Age tombs Shields in Italy (about seventh century B.C.) and probably served as shield-bosses (cf. e.g. O. Montelius, La Civilisation primitive en Italie, pl. 46,$2 ; \mathrm{H}$. B.


Walters, Bronzes in the British Museum, p. LXIX, Nos. 368-373; W. Helbig, Das Homerische Epos, p. 3 19, fig. 122).

Diameter, $8 \frac{3}{16}$ in. ( 20.8 cm .). Purchased in 1912. Unpublished. The green patina has been partly removed. The surface is somewhat encrusted and there

## IMPLEMENTS AND UTENSILS

Shields are some rust stains. Cracked in places and repaired in antiquity; some of the old patches and rivets are still preserved. Acc. No. 12.163.i.

I524 ROUND DISK, of slightly convex shape, similar to the preceding but of smaller dimensions. The patterns consist of dotted zigzags, hatched lines, and a series of bosses.

Diameter, $3 \frac{1}{2} \mathrm{in} .(8.9 \mathrm{~cm}$.). Purchased in 1912. Unpublished. The crusty, green patina has been partly removed. Slightly cracked; there is a hole in the centre. Acc. No. 12.163.2.

I 525 ROUND DISK, of slightly convex shape, similar to the preceding. The patterns are similar.

Diameter, $3 \frac{15}{16} \mathrm{in}$. ( 10 cm .). Purchased in 1912. Unpublished. Crusty, blue-green patina. The surface is somewhat encrusted and there are some rust stains. There is a hole in the centre and the edges are somewhat chipped. Acc. No. 12.163.3.

## HELMETS

Helmets The earliest helmets ( $\kappa v \nu \epsilon \in \eta$, galea) were probably made of leather (кvข' $\eta=$ literally dog's skin). No metal helmets previous to the Early Iron Age have as yet been unearthed (cf. W. Ridgeway, Early Iron Age, p. 307). The epithets applied to helmets in the Homeric poems lead one to suppose that they were made either of bronze (cf. W. Helbig, Das Homerische Epos, p. 295), or of leather with bronze fittings (cf. W. Reichel, Homerische Waffen, p. 99 f.). Throughout the classical period metal helmets were worn by both the Greeks and the Romans. The metal employed was chiefly bronze, though in Roman times iron was also used.

For helmets in general cf.-
S. Reinach, Daremberg et Saglio, Dictionnaire, galea, pp. I429 ff.
B. Schröder, Die Freiherrlich von Lipperheidesche Helmsammlung in den kgl. Museen zu Berlin, in Archäologischer Anzeiger, XX, 1905, pp. 15 ff .
A. Furtwängler, Olympia, IV, Die Bronzen, p. i66.
P. Perdrizet, Fouilles de Delphes, pp. 98 ff .
H. B. Walters, Catalogue of Bronzes in the British Museum, pp. LVI ff. British Museum, Greek and Roman Life, p. 76.
C. Friederichs, Kleinere Kunst und Industrie im Alterthum, pp. 22 Iff.

## GREEK HELMETS

I 530 HELMET of so-called Corinthian type, with domed top and closely fitting cheek-pieces and long nose-piece, all made in one piece. Along

Greek
Helmets the border is a finely executed border of a running spiral between rows of dots. There are three small loops, two on the crown and one on the back, which served to fasten the crest. Illustrated, p. $\ddagger^{1 j}$.

This type of helmet is called Corinthian from its frequent occurrence on the coins of Corinth. It is constantly represented on Corinthian and Attic black-figured and early red-figured vases, which indicates that it was in general use in Greece from the seventh to the early fifth century B.C. (cf. S. Reinach, Daremberg et Saglio, Dictionnaire, galea, p. I443). During this period it passed through a series of developments. The earliest type is made of fairly thin bronze, of equal thickness throughout, and is of a somewhat clumsy form with a straight back and small holes around the edge for the attachment of the lining (cf. A. Furtwängler, Olympia, IV, Die Bronzen, p. 166, No. 1015 f.). Later the cheek-pieces and especially the nose-piece were made of thicker bronze than the rest of the helmet; the nose-piece was finely shaped and the back curved so as to fit the neck. The small holes around the border were dispensed with, the lining being now needed only on the crown and the neck. Sometimes the crown was distinguished from the lower part by a plastic line and the eyebrows were indicated by ridges. All details were executed with great finish (cf. Furtwängler, op. cit., p. 167).

Our helmet belongs to this later type, with reinforced cheek-pieces and nose-piece, shapely form, and no holes along the edge. It is noteworthy that while on the vase-representations these helmets in variably have a crest, on the extant examples there are often no traces of fastenings for such a purpose. Probably what was a distinctly desirable addition to the vasepainter from a decorative point of view was often felt unpractical and cumbrous in real life (cf. Furtwängler, op. cit., p. 166).

For Corinthian helmets of tater types from Italy cf. B. Schröder, Archäologischer Anzeiger, 1905, p. 16 f.

Height, $8 \frac{1}{2}$ in. ( 21.5 cm .). Purchased in 1907. From Olympia. Unpublished. Smooth, green patina with blue and brown patches. The surface is partly covered with incrustations. There are several cracks and small holes, and the ends of the cheek-pieces have been curved lackward. Acc. No. 07.286.105.

I 535 HELMET of the so-called Attic type. It consists of a cap with small nose-piece, immovable cheek-pieces, and a small peak to cover the neck. The cheek-pieces, which are rounded below and end in a point in

## IMPLEMENTS AND UTENSILS

Greek front, are cut so as to leave the ears free. Separating the crown from these Helmets appendages is a raised ridge, and the eyebrows are likewise indicated by raised ridges. On the forehead is roughly incised what appears to be a human head, full face, wearing a helmet of the Attic type with upturned cheekpieces. Beneath the eyebrows is a band of incised circles and lines, ending in volutes on the temples.

The so-called Attic helmet was apparently developed from the simple cap-like form which appears on the early Attic vases (cf. A. Furtwängler, Olympia, IV, Die Bronzen, p. 170, who gives a clear account of the history of this type). The earliest appearance of the developed form with a peak for the protection of the neck and cheek-pieces which leave the ears free is on Chalkidian vases of the sixth century B.C. (cf. e.g. Archäologischer Anzeiger, 1889, p. 91; Monumenti dell' Instituto, I, 26, I2). It also occurs on Attic late black-figured vases and early Attic coins, and becomes the prevailing form in the early fifth century B.C., as is seen from its frequent occurrence on vases of the severe red-figured period and monuments such as the Aeginetan pediment group. During the fifth and fourth centuries it retained its popularity. The cheek-pieces, which were sometimes richly ornamented (cf. British Museum, Greek and Roman Life, p. 79, fig. 57), were often attached on hinges to enable the wearer to push them up from the face when not in battle. The nose-piece is often absent. Crests were worn on the Attic helmets, just as on the Corinthian; that is, they invariably appear on the vase-representations, but are often absent on extant examples. For a very elaborate type of crest worn with a helmet of this class cf. the replicas of the Athena Parthenos of Pheidias.

Our example probably belongs to the end of the sixth century, the shape of the cheek-piece corresponding to that prevalent on Chalkidian vases (see above) and the earliest red-figured vases (cf. Wiener Vorlegeblätter, D, 7).

Height, $7 \frac{7}{\frac{7}{8}} \mathrm{in}$. ( 20 cm .). Purchased in 1904. Unpublished. The crusty, green patina has been almost entirely removed. There are several cracks and indentations. The incised and punctured ornaments have become almost obliterated. Acc. No. G.R. 503.

I 540 HELMET of conical shape, with a brim in the form of a vertical band, the upper part projecting over the brim. On each side is a rivet-hole, perhaps for the attachment of the cheek-pieces.

This type of helmet often occurs on Greek monuments of the fifth and fourth centuries B.C. (cf. S. Reinach, Daremberg et Saglio, Dictionnaire, galea, p. I445; B. V. Head, Historia Numorum, p. 530, fig. 280). Its shape


1530


I535


I 530


I535

## IMPLEMENTS AND UTENSILS

Greek Helmets
is similar to the pilos or felt hat from which it was clearly derived. The cheek-pieces are added only occasionally, and are not original to this shape, but were adopted from the other types of helmets (cf. B. Schröder, Die Freiherrlich von Lipperheidesche Helmsamnlung in den kgl. Museen zu Berlin, Archäologischer Anzeiger, XX, 1905, p. 21). For helmets of this type cf. also K. Schumacher, Antike Bronzen in Karlsruhe, No. 697, pl. XIII, 4.

Height, $8 \frac{1}{1}$ in. ( 20.9 cm .). Purchased in 1908 . Said to have been found in a well near the Peiraeus toward Eleusis. Mentioned in the Museum Bulletin, May, 1909, p. 8 r. The patina


1540 has been mostly removed. The surface is much discolored and encrusted in places. Acc. No. 08.258.14.

I54I HELMET of the same type as the preceding. There are no rivet-holes at the sides, but there are four at the apex, perhaps for the attachment of a crest.

Height, $8_{\frac{1}{16}}$ in. ( 20.5 cm .). Purchased in 1907. Said to have been found in Sicily. Mentioned in the Museum Bulletin, February, 1908, p. 39. The patina, crusty and green with blue patches, has been largely removed on the outer side. The surface is corroded in places and there is a hole on one side. Acc. No. o8.2.4.

## ITALIC HELMETS

I 546 HELMET, of hemispherical form with triangular crest and narrow border. Both the crest and the lower part of the helmet are elaborately ornamented with embossed designs consisting of circular knobs and rows of dots. The helmet is made in two pieces, which are fastened together below the crest on each side by means of plaques held in place by three long rivets.


Along the edge of the crest the


154 I


I 549


I550

## IMPLEMENTS AND UTENSILS

Italic fastening is produced by one sheet of bronze being bent over the other. On Helmets each side just above the border are two rivet-holes.

Helmets of this type have been found on Early Iron Age sites in Italy (cf. J. Martha, L’ Art étrusque, p. 60; Notizie degli Scavi, I882, pl. XIII, 8, pp. I62 ff. and ISo; O. Montelius, La Civilisation primitive, pl. 47, 10; Kopenhagen, Nationalmuseum, Führer durch die Antikensammlung, p. 104, No. 22; B. Schröder, Die Freiherrlich von Lipperheidesche Helmsammlung in den kgl. Museen zu Berlin, in Archäologischer Anzeiger XX, 1905, p. 25 f.; one in the University Museum, Philadelphia, unpublished); also in Germany and in France (cf. Notizie degli Scavi, i882, p. 164, and the references there given).

The form also appears on bronze statuettes and is imitated in clay to serve as a lid to cinerary urns (cf. B. Schröder, loc. cit.).

For the possible derivation of this type of helmet from Mycenaean prototypes cf. Schröder, loc cit., and the references there cited.

Height, as restored, $12 \frac{5}{3} \mathrm{in}$. ( 32.1 cm .). Greatest width, $12 \frac{1}{2} \mathrm{in}$. ( 3 I .8 cm .). Purchased in 1907. Found in Capua. Published by F. von Duhn, Annali dell' Instituto, 1883, p. 188, pl. N; B. Dean, Museum Bulletin, February, 1908, p. 38. Crusty, green patina with brownish patches. The apex on the crest is restored and several small pieces are missing. The protruding rivets underneath the crest may have served for the support of some ornament, perhaps in the shape of birds' wings (cf. B. Dean, loc. cit.). Acc. No. 08.2.5.

I 549 HELMET consisting of a metal cap of hemispherical form ending above in a point with a knob at the apex. It has a peak to cover the neck, and movable cheek-pieces. The knob is decorated with tongue pattern and beading on the sides, and a rosette at the top. The peak and the narrow brim, which runs round the entire edge, are covered with a plait pattern, surmounted by beading and horizontal ridges; some of the ridges have hatched lines and there is a palmette in the centre in front. The cheekpieces are modern, but parts of the original hinges are still preserved. Beneath the peak are two rings secured by a loop attachment. Illustrated, p. 415 .

This type of helmet, which is popularly known as jockey-cap, occurs from about 400 B.C. (cf. Notizie degli scavi, 1886, pl. I, 2, p. 39) and has frequently been found in Italian and Gallic tombs of the fourth and third centuries B.C. They were probably of Etruscan origin and adopted by the Galatians from the Etruscans (cf. R. Paribeni, Ausonia, I, pp. 279 ff.). For similar helmets cf. O. Montelius, La Civilisation primitive en Italie, pls. $6_{\downarrow}$, i; ifi, 3; B. Schröder, Die Freiherrlich von Lipperheidesche Helmsammlung
in den kgl. Museen zu Berlin, in Archäologischer Anzeiger, XX, r905, p. 28; Monumenti antichi, IX, pl. XXVI; S. Reinach, Daremberg et Saglio,

Italic
Helmets Dictionnaire, galea, p. 1446 ; H. B. Walters, Catalogue of Bronzes in the British Museum, Nos. 2725-2728; L. Lindenschmit, Alterthümer unsrer heidnischen Vorzeit, I, Heft III, pl. 2, 364 ; K. Schumacher, Antike Bronzen in Karlsruhe, pl. XIII, 5, No. 696, and the references there cited.

For a representation of this form of helmet in sculpture see the so-called warrior from Delos ( S . Reinach, Bulletin de la correspondance hellénique, VIII, is8 4 , p. 179, and No. 805 in our collection of casts).

Height, without cheek-pieces, $7 \frac{7}{5}$ in. ( 20 cm .). Purchased in 1907. Said to have been found in Sicily. Mentioned in the Museum Bulletin, February, 1908, p. 39. The crusty, green patina has been removed in places. The cheek-pieces are restored (see above). Acc. No. os.2.1.

1550 HELMET of the same type as the preceding. The cheekpieces are of wavy outline and each is decorated with three large concentric circles, in relief; they are attached by means of hinges. The brim and the peak are decorated with horizontal ridges of which some are covered with hatched lines. The knob is decorated with a rosette. In the middle of the peak is a hole, probably for the attachment of rings such as are still preserved in No. 1549. Illustrated, p. 415.

Height, $7^{\frac{1}{4}} \mathrm{in}$. ( 18.4 cm .). Purchased in 1907 . Stated to have come from South Italy. Mentioned in the Museum Bulletin, February, 1908, p. 39. Crusty, blue-green patina with brown patches. The surface is considerably corroded. One of the cheek-pieces is modern; the orher is much broken, with some parts restored. Acc. No. 08.2.3.

I55I HELMET of the same type as No. 1549. The cheek-pieces are missing; their place is indicated by the rivet-holes which served for their attachment. The peak is decorated with incised decorations, consisting of beading, horizontal ridges, and a wavy-line ornament, filled with dots. The brim has a plait pattern with a leaf ornament at the centre on the back. Running round the bottom of the helmet proper are horizontal lines, rows of dots, and hatched lines. The knob has a rosette ornament. In the middle of the peak is a rivet-hole, probably for the attachment of rings such as are still preserved in No. 1549. In the middle at the back is a similar rivet-hole.

Height, $7 \frac{11}{16}$ in. ( 19.5 cm .). Purchased in 189.8 . Said to have been found near

## IMPLEMENTS AND UTENSILS

Italic Helmets

Sciacca in Sicily. Unpublished. The green patina has been largely removed. There are several cracks with pieces missing and the surface is somewhat dented. Acc. No. G.R. 500.


I 552 HELMET of the same type as No. 1549 . The cheek-pieces are missing, but pieces of the hinges by which they were attached and the rivets with rosette-shaped heads are still preserved. On each side is a cylindrical attachment, each with four rivet-holes which appear to be modern. The knob at the top is decorated with tongue pattern. The peak and the brim have plait pattern, surmounted by beading and a horizontal ridge covered with hatched lines; also a leaf ornament on the edge of the peak. Beneath the peak are two rings secured by a loop attachment and a rivet with rosetteshaped head.

Height, $8_{11}^{11}$ in. ( 22 cm .). Purchased in 1908 . Said to have been found in a well between the Peiraeus and Daphne. Mentioned in the Museum Bulletin, May, 1909, p. 81. The patina has disappeared. The surface is discolored, and indented in places. The cheek-pieces are missing (see above). Acc. No. 08.258 .13 .

I 558 HELMET of hemispherical shape with a deep brim of flaring outline. On each side is a raised band of curving shape and a hemispherical boss. The bands, which are cast in one piece with the rest of the helmet, were probably derived from the strips used to strengthen felt caps. The bosses served to stop glancing blows on the head; they are made of bronze filled with an iron core and are attached by means of rivets. The two rivetholes at the top of the helmet served for fastening the crest. There is also
a rivet-hole on each side, probably for the attachment of decorations such as are still preserved in K. Schumacher, Antike Bronzen in Karlsruhe, No. 700, pl. XIII, 8a, and in an unpublished example in the University Museum at Philadelphia. The discoloration on the upper part of the brim shows that a separate metal band was attached here.

This type of helmet has had a long period of development. The earliest examples appear in tombs of the end of the seventh and the beginning of the sixth century B.C. (cf. B. Schröder, Die Freiherrlich von Lipperheidesche Helmsammlung in den kgl. Museen zu Berlin, in Archäologischer Anzeiger, XX, 1905, p. 26); while the later specimens must be dated to the third cen-

tury B.C., both from the style of their decorations (cf. Schröder, op. cit., p. 28) and from the fact that some were found on the battle-field of Cannae, 216 B.C. (cf. British Museum, Greek and Roman Life, p. S2). Our example must belong to the third century B.C. from its similarity to the specimens found on that battle-field.

Besides Italy, helmets of this type have also been found in Hallstatt and other Central European sites (cf. E. V. Sacken, Das Grabfeld von Hallstatt, pl. VIII, 5). For the manner in which such helmets were worn cf. a bronze statuette figured by R. Hoernes, Urgeschichte der bildenden Kunst, p. 677 .

Height, $6 \frac{3}{4} \mathrm{in}$. ( 17.1 cm .). Purchased in 1907. Mentioned in the Museum Bulletin, February, 1908, p. 39. The patina, crusty and green, with blue patches, has been removed in places. One of the bosses is modern. There are several cracks and holes. Acc. No. 08.2.2.

## IMPLEMENTS AND UTENSILS

## CUIRASSES

Cuirasses
No trace of a bronze cuirass ( $\theta \dot{\omega} \rho \alpha{ }_{\xi}$, lorica) belonging to the Mycenaean age has yet been found. In the Homeric poems the breast-plate is frequently mentioned and referred to as of bronze ( $\chi \dot{\alpha} \lambda \kappa \epsilon \sigma s$ ) (cf. W. Ridgeway, Early Age of Greece, I, p. 309). With the introduction of a smaller shield (cf. p. 408) the cuirass became an essential piece of defensive armor and remained in use throughout Greek and Roman times.

For cuirasses in general cf.
E. Saglio, Daremberg et Saglio, Dictionnaire, lorica, pp. 1302 ff.
H. B. Walters, Catalogue of Bronzes in the British Museum, p. LXVIII.

British Museum, Greek and Roman Life, p. 82 .
C. Friederichs, Kleinere Kunst und Industrie in Alterthum, p. 228.

I 565 CUIRASS, consisting of front and back pieces, reaching to below the waist and roughly curved to fit the forms of the body: The back plate is provided with a neck-piece. On the left side and shoulder the two pieces are held together by rivets; the fastening on the right side was produced by the insertion of a rod into metal loops. The surface of the plates is elaborately embossed by circular knobs and rows of dots arranged in patterns which follow more or less the chief lines of the body. The breast-nipples are indicated. The edges, both above and below and round the armholes, are bent upon
 themselves, enclosing an iron wire for further strengthening. Round the armholes are rivet-holes.

This type of cuirass, which is of Italic origin, is very rare, only seven specimens in all being apparently known (cf. B. Dean, Museum Bulletin, May, 1909, p. 89). It is a variety of the earliest type of Greek cuirass, which is represented on archaic statuettes (cf. British Museum, Greek and Roman Life, fig. $6_{3}$ ) from which it differs in not being bent up abruptly at the waist line, but continued below it, following the line of the hips; also in its elaborate embossed decoration. It belongs probably to the seventh century B.C.

## ARMS AND ARMOR

Height, $20_{\frac{1}{3}}^{1} \mathrm{in}$. ( 51 cm .). Width, $15_{2}^{\frac{1}{2}} \mathrm{in} .(39.4 \mathrm{~cm}$.). Purchased in 190 ). Formerly in the Forman Collection. Its provenance is not definitely known, but it has been assigned to Northern Italy and to Southern France. Published by R. Forrer, Reallexikon der prähistorischen, klassischen und frühchristlichen Altertümer, p. 591, pl. 164, 2; and Urgeschichte des Europäers, p. 456, pl. 164; B. Dean, Museum Bulletin, May, 1909, pp. 89-90. The green patina has been

largely removed. The preservation is excellent, except for a few cracks and a few missing pieces. Acc. No. 09.41.

I 570 CUIRASS, consisting of front and back pieces reaching to the waist, finely modelled to fit the forms of the body. The breast-nipples are worked in separate pieces and inserted. Along the sides are remains of hinges and rivets for fastening the two parts together.

This form of cuirass is that mostly found in Italy in fourth-century tombs, which occurs on South Italian vase-paintings of the fourth and third centuries B.C. (cf. British Museum, Greek and Roman Life, fig. 64). It is a development from the Greek cuirass of the archaic period, which consisted

## IMPLEMENTS AND UTENSILS

C'ulrasses
of two bronze plates, roughly curved to fit the body and reaching to the waist where it was bent up abruptly to allow the free movement of the hips (cf. British Museum, Greek and Roman Life, fig. 63). In the fourth-century type represented by our example the modelling of the body was reproduced and the lower edge was made to follow the line of the waist and hips.

The Greek cuirass of the fifth century was a different kind, being made of leather plated with bronze and provided with shoulder-straps to buckle down upon the breast. This type, which allowed much freer movement of the body, is frequently represented on Greek vase-paintings, occurring first on those of late black-figured style and continuing through the redfigured period.

Height, $13 \frac{7}{8} \mathrm{in} .(35.2 \mathrm{~cm}$.). Found at Campobasso. Purchased in 1907. Mentioned by B. Dean, in the Museum Bulletin, February, 1908, pp. 38-39. Blue-green patina, with large rust stains. Cracked in places, with several pieces missing. Acc. No. os.z.6.

I 575 PERFORATED DISK. It consists of a round plate covered all over its surface with perforations of various shapes, arranged in the form of concentric circles. The bands between the perforations are decorated with incised lines.

Italic. Early Iron Age (Villanova period).
For a very similar disk in the National Museum in Copenhagen cf. Führer durch die Antikensammlung, p. rof, No. 21. Such disks were probably sewed on a breast-plate of cloth or leather as ornaments and to serve for further protection.

Diameter, $5 \frac{15}{16} \mathrm{in} .(15.1 \mathrm{~cm}$.). Purchased in 1896. Unpublished. Smooth, green patina. Chipped in places. Acc. No. G.R. 310.

## ARMORED BELTS

Armored A large number of ancient armored belts have been found, especially Belts in graves in Italy, at Bologna, Corneto, Este, Ruvo, Canosa, and Paestum (cf. O. Montelius, La Civilisation primitive, pls. 52, I, and 56, 8 ff .); also at Hallstatt (cf. E. V. Sacken, Hallstatt, p. 47, and pl. IX, f.); and in Hungary (cf. A. Bertrand and S. Reinach, Les Celtes, pp. izo ff.). For their use in Greece during the classical period there is no evidence. The


I 570


1570

## IMPLEMENTS AND UTENSILS

Armored Belts
belts consist of broad, bronze bands, which were lined with leather or a similar material. For belts found with pieces of leather still attached cf. Bullettino 1834, pp. 39 and 52; and E. V. Sacken, Das Grabfeld von Hallstatt, p. 47 .

For the probable identity of the Homeric $\mu i \tau \rho \eta$ with some extant examples, cf. W. Helbig, Das Homerische Epos, pp. 290-291, and W. Ridgeway, Early Age of Greece, I, p. 3 II.

For armored belts in general cf., besides the references above cited, British Museum, Greek and Roman Life, p. $8_{4}$; C. Friederichs, Kleinere Kunst und Industrie im Alterthum, p. 230 .


1576
1576 PART OF AN ARMORED BELT, consisting of a curved, oblong plate of bronze with long hook-and-eye clasp. Along the edges are rows of dots, and small holes for fastening the leather lining. The hook is attached to the belt by means of two rivets. The eye is a separate loop of thick bronze wire inserted into two holes in the belt.

Early Iron Age.
Length of fragment, $14^{\frac{1}{2}}$ in. ( 36.8 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4755. Crusty, greenish patina with blue patches. Acc. No. C.B. So.
r 580 ARMORED BELT. It consists of a curved, broad plate of bronze with small holes along the edges for fastening the leather lining. There are two hooks and two pairs of holes for their insertion. The hooks are elaborately decorated on their attachments with fine palmette ornaments incised and punctured, and on the hooks proper with wavy lines and flutings. They are fastened to the belt by means of rivets.

For similar belts and hooks with almost identical decoration from Southern Italy belonging to the fourth or third century B.C. cf. K. Schumacher, Antike Bronzen, Nos. 715 ff. and 723 ff.

Circumference, 33 in. ( 53.8 cm .). Width of plate, 4 in . ( 10.2 cm .). Purchased

## ARMIS AND ARMOR

in 1907. Formerly in the Bateman Collection. Said to have been found in Tuscany in the year 1829. The rough, brown-green patina has been removed in

Armorell Belts places. Parts of the belt and insignificant pieces of the hooks are missing; the two hooks have become detached. At one place the helt was broken in two and mended, perhaps in ancient times. Acc. No. 08.3A.

I581 HOOK OF A SIMIlLAR BELT. The decoration is almost identical.

Length, $4^{\frac{1}{2}}$ in. ( 11.4 cm. ). Purchased in 1907. Rough, green patina. Slightly cracked and chipped in places. Acc. No. os.3B.


1580


1581

## GREAVES

The earliest metal greaves ( $\kappa \nu \eta \mu i s$, ocrea) as yet discovered are a pair from Enkomi, Cyprus, which belong to the late Mycenaean period (cf. British Museum Excavations in Cyprus, p. 16, fig. 26). In Homer metal greaves are repeatedly mentioned and the Achaeans are called both $\epsilon \dot{\epsilon} \kappa \nu \dot{\eta} \mu \dot{\delta} \epsilon \epsilon$ (well-greaved) and $\chi \alpha \lambda \kappa \circ \kappa \nu \dot{\eta} \mu \dot{\delta} \epsilon s$ (bronze-greaved) (cf. IV. Ridgeway, Early Age of Greece, p. 3 I 2 , and G. Karo, Daremberg et Saglio, Dictionnaire, ocrea, $\mathrm{p} \cdot \mathrm{I}+5$ ). On the geometric vases the presence of greaves is not indicated, but from the seventh century onward they occur with great frequency on all Greek monuments (cf. G. Karo, op. cit., p. Ifj f.). Their general adoption at this period is easily explained by the use of a smaller shield which rendered greaves, helmet, and cuirass desirable (cf. p. fo8).

For greaves in general cf.
G. Karo, Daremberg et Saglio, Dictionnaire, ocrea, pp. 145 ff .
A. Furtwängler, Olympia, IV, Die Bronzen, p. I 59.

British Museum, Greek and Roman Life, p. 86.
I 588, I 589 PAIR OF GREAVES. Each consists of a rather thick sheet of bronze, shaped to fit the leg, and reaching to above the knee. It was kept in place by its own elasticity. A ridge runs down the middle in

## IMPLEMENTS AND UTENSILS

Greaves
front. On the inner side of each the calf is roughly indicated, its contours being marked by three ridges. There are no holes along the edge. Probably sixth century B.C.

Height, $19 \frac{7}{\frac{7}{3}}$ in. ( 50.6 cm .). Purchased in 1904 . Unpublished. The patina, crusty and dark green with blue patches, has been removed in places. The surface is encrusted and corroded in places. Acc. Nos. G.R. 504, 505.

I 590 GREAVE for a right leg. It is made of thinner bronze than the preceding and has holes along the edge for the attachment of the lining. It is finely modelled according to nature, both the calf and the knee-cap being indicated. A ridge runs down the middle in front. Probably fifth century B.C.

Height, $16 \frac{3}{8}$ in. ( 41.5 cm .). Purchased in 1906. Perhaps found at Elis. Mentioned in the Museum Bulletin, February, 1907, p. 20. The crusty, light green patina has been removed in places. There are several small holes and cracks, and a piece is missing at the bottom in front. Acc. No. 06.1076.


I 590

## HORSES' TRAPPINGS

## HORSE-BITS

Horse BITS

Horse-bits ( $\chi \alpha \lambda \iota \nu o s$, frenum) were in use throughout classical times, and are mentioned as far back as Homer (Iliad XIX, 393). Two main types can be distinguished, (1) that consisting of a single bar, and (2) that consisting of two bars linked together. Most extant examples belong to the second variery, as do also those in our collection.

For horse-bits in general, cf. G. Lafaye, Daremberg et Saglio, Dictionnaire, under frenum, p. 1334, and the references there cited; E. Pernice, Griechisches Pferdegeschirr, 56tes Winckelmannsprogramm, pp. 17 ff.; see also G. Bellucci, Bullettino paletnologico italiano, XXXVIII, 1913, pp. 135-146.

I600 HORSE-BIT. It consists of two twisted bars joined in the centre by a double link and ending on the outside in rings for the insertion


Horse- of the reins. Each bar is provided with a cheek-piece, ornamented with Bits openwork.

For a similar example, dated by its decoration of palmettes on the cheekpieces as belonging to the sixth century B.C., cf. J. L. Myres and M. Ohne-falsch-Richter, Catalogue of the Cyprus Museum, No. 384 I .

Length, $12 \frac{3}{4} \mathrm{in} .(32.4 \mathrm{~cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4772. Illustrated in the Cesnola Atlas, III, pl. XLV, 2. The crusty, greenish patina has been removed in places. Acc. No. C.B. 119.


1600


1601

I60I PART OF A HORSE-BIT, consisting of four links and a bar, with bronze wire coiled round it and terminating at each end in a ring. The larger link at one end served for the insertion of the rein. Originally the bit must have had another bar and some more links.

Horse-bits of this type from Narce, dated by the other contents of the tomb to the seventh century B.C., are in the University Museum at Philadelphia, unpublished.

Length, $5 \frac{1}{16}$ in. ( I 2.8 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4773. Crusty, green patina. Acc. No. C.B. in 8 .

1605 HORSE'S MUZZLE. It is formed by an open framework consisting of two side pieces with a front piece above in the shape of a semicircle and a curved back piece below to fit under the horse's chin. The front piece has a lozenge-shaped ornament in the centre and moulded bands on each side; the side pieces are similarly decorated with moulded bands and end above in swans' heads. To the latter, rings were originally attached for fastening the muzzle over the head.

This form of muzzle, which altogether dispenses with the cage proper, is the simplest type in use among the ancients, and acted simply by the pressure exerted on the horse's nostrils. For a number of similar examples found at Pompeii cf. E. Pernice, Griechisches Pferdegeschirr, 56tes Winckelmannsprogramm, 1896, p. 12; G. Gozzadini, De quelques mors de cheval

## HORSES TRAPPINGS

italiques, pl. III, 10, and p. 25; and G. Lafaye, Daremberg et Saghio, Dictionnaire, frenum, p. 1336, fig. $328+$ (figured upside down) and the references there cited. For muzzles in general cf. also E.Saglio, Daremberg et Saglio, Dictionnaire, capistrum, p. 896 f.

With regard to the use of the muzzle in antiquity, it appears to have been put on horses only when they were led to drink, to pasture, or to be groomed, never when ridden or driven (cf. Pernice, op. cit., p. 15). It is also noterworthy that the bronze examples which have survived do not correspond to those figured on ancient monuments; the explanation probably is that bronze specimens were not in common usage, the ordinary material apparently being either leather or some other flexible substance (cf. Pernice, op. cit., p. Ij ff.).


1605

Height, $5 \frac{13}{16}$ in. ( 14.8 cm .). Purchased in 1913. Described by G. M. A. R[ichter] in the Museum Bulletin, April, 1914, pp. 94, 95. Smooth, dark green patina. Chipped in places, otherwise intact. Acc. No. 13.225.6.

## TOOLS

## AXE-HEADS OR CELTS

The axe ( $\pi \dot{\epsilon} \lambda \epsilon \kappa v s, \alpha \xi_{\xi} \iota \eta \eta$, securis) was one of the first implements used by man both as a weapon and as a tool. A large number of axe-heads belonging to the Stone Age have been discovered in all countries. When

Axe-heads
Celts metal took the place of stone, the same general forms were transferred from one material to the other and gradually developed.

For axes in general cf. A. J. Reinach, Daremberg et Saglio, Dictionnaire, securis, p. 1165 .

## EARLY BRONZE AGE

Axe-heads of this period have thin, flat blades, generally tapering toward the cutting-edge, which is more or less expanded and rounded. These blades were inserted into a cleft rod or lashed to a handle. An example from Egypt, with the rod to which it was lashed still preserved, gives a good idea of this usage (cf. G. Maspero, Histoire ancienne des peuples de l'Orient classique, I, p. 60; see also chapter on methods of hafting celts in John Evans,

## IMPLEMENTS AND UTENSILS

Axe-heads Ancient Bronze Implements of Great Britain, pp. i46 ff.). Occasionally such axe-heads were used simply as wedges (cf. No. i622).

This form, which was taken over from the Stone Age examples, has a wide distribution during the Early Bronze Age, occurring not only in Greek lands and in Italy, but throughout most of Europe (cf. M. Much, Die Kupferzeit in Europa, passim, and the references cited by A. J. Reinach, in Daremberg et Saglio, Dictionnaire, under securis, p. I 166 , Notes 3 and 4).

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FROM CYPRUS (CESNOI.A COLLECTION)
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Like the dagger-blades of this period these Cypriote axe-heads are not really of bronze, but of almost pure copper. Their small size makes it probable that they were used as implements rather than weapons. The form for both was probably the same (cf. F. Dümmler, Athenische Mitteilungen, I886, p. 2 I9f.).

## I6IO

Length, $4^{\frac{7}{8}}$ in. ( 12.4 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4635. The patina has been mostly removed. The surface is somewhat corroded. Acc. No. C.B. 122.

I6II The cutting-edge is slightly expanded.
Length, $4_{8}^{\frac{1}{8}} \mathrm{in}$. ( 10.5 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4636. The patina has been largely removed. The surface is corroded in places. Acc. No. C.B. 123.

I6I2 The cutting-edge shows a marked expansion.
Length, $4 \frac{1}{16}$ in. ( 10.3 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4637. The patina has been partly removed. The surface is corroded in places. Acc. No. C.B. 124.

I6I3 The tapering is very marked and the cutting-edge is slightly expanded.

Length, $4 \frac{1}{16}$ in. ( 10.3 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4638. Illustrated in the Cesnola Atlas, III, pl. LXX, 2. The patina has been largely removed. The surface is slightly corroded. Acc. No. C.B. 125 .

I6I4 The expansion of the cutting-edge is very marked.
Length, $4 \frac{1}{16}$ in. ( 10.3 cm.). cf. J. L. Myres, Cesnola Handbook, No. 4639. The patina has been mostly removed. The surface is corroded in places. Acc. No. C.B. 126.

I6I5 The tapering is marked; the expansion of the cutting-edge slight.


1610


1622


1612


1630


1620


163 I


1643


1636

## IMPLEMENTS AND UTENSILS

Axe-heads
OR
Celts

Length, $3 \frac{5}{8} \mathrm{in}$. ( 9.2 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4640. The patina has been largely removed. The surface is somewhat corroded. Acc. No. C.B. 128.

## I6I6

Length, $4 \frac{13}{16}$ in. ( 12.2 cm .). cf. J. L. Myres, Cesnola Handbook, No. 464 r. The patina has been largely removed. The surface is corroded in places. Acc. No. C.B. 129.

1617 Slight expansion of the cutting-edge.
Length, $5 \frac{1}{2}$ in. ( 14 cm ). cf. J. L. Myres, Cesnola Handbook, No. 4642. The patina has been removed. The surface is considerably corroded. Acc. No. C.B. 130 .

I6I8 The cutting-edge is slightly expanded.
Length, $5^{\frac{13}{16}} \mathrm{in}$. (I4.8 cm.). cf. J. L. Myres, Cesnola Handbook, No. 4643. Jllustrated in the Cesnola Atlas, III, pl. LXX, I. The patina has been largely removed. The surface is considerably encrusted. Acc. No. C.B. 13 J.

I619 The blade is unusually thick. The cutting-edge is slightly expanded.

Length, 6 in. ( 15.2 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4644. Illustrated in the Cesnola Atlas, III, pl. LXX, 4. The patina has been largely removed. The surface is somewhat corroded. Acc. No. C.B. I 33 .

I620 The expansion of the cutting-edge is marked. Illustrated, p. 431.
Length, 6 in. ( 15.2 cm ). cf. J. L. Myres, Cesnola Handbook, No. 4645. Illustrated in the Cesnola Atlas, III, pl. LXX, 3. The patina has been partly removed. The surface is considerably corroded on one side. Acc. No. C.B. 134.

162I Slight expansion of the cutting-edge.
Length, $7 \frac{1}{16}$ in. (is cm.). cf. J. L. Myres, Cesnola Handbook, No. 4646. Illustrated in the Cesnola Atlas, III, pl. LXX, 5. Dark greenish patina. The surface is considerably corroded and encrusted. Acc. No. C.B. I35.

I622 The tapering is very slight; the expansion of the cutting-edge marked. This example seems to have been used without handle, simply as a wedge. Illustrated, p. 43 I .

Length, $3 \frac{7}{8}$ in. ( 9.9 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4647. Crusty, green patina. The surface is much corroded on one side. Acc. No. C.B. I 27.

I 630 With double blade and central shaft-hole. The blades are long and slender. Illustrated, p. +ja .

The axe-head with double blade is commonly found during the Bronze Age both in Greek lands and elsewhere (cf. references given by A. J. Reinach in Daremberg et Saglio, Dictionnaire, securis, p. I167, Note 13). The earliest examples are contemporary with the XII dynasty. This example belongs to the Late Minoan I period ( $1600-\mathrm{I} 500 \mathrm{~B} . \mathrm{C}$.).

In Crete the double axe appears to have had a religious significance, and was apparently used as the symbol of the chief deity.

For a similar example from Gournia, cf. H. B. Hawes, Gournia, pl. IV, 24.
Length, $7 \frac{1}{16}$ in. ( 18 cm .). From Gournia. Gift of the American Exploration Society, 1907. Rough, green patina. The surface is somewhat encrusted. Acc. No. 07.232.12.

I63I With double blade (one half is missing) and central shaft-hole. The blade is rather shorter and broader than in No. 1630 and the cuttingedge is expanded and rounded. Illustrated, p. 43 I .

For a similar example from Gournia, cf. H. B. Hawes, Gournia, pl. IV, 23.
Length, 3 in. ( 7.5 cm .). From Gournia. Gift of the American Exploration Society, 1907. The surface is encrusted. Acc. No. 07.232.11.


$$
1632
$$

1632 With long, narrow blade, slightly curved and tapering toward the cutting-edge. At right angles to the blade is a tubular shaft-hole, ornamented with moulded rings.

This type is not otherwise known in Cyprus, but has been found along the Syrian coast (cf. J. L. Myres, Cesnola Handbook, No. 469S), and in Palestine (cf. an example from Silwân [Jerusalem] in the British Museum). Its date is not certain; but it probably belongs to the Late Bronze Age.

Length, 8 in. ( 20.3 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4698. Illustrated in the Cesnola Atlas, III, pl. L, I, and Cesnola, Cyprus, pl. V, where it is said to have come from Alambra. The green patina has been largely removed. The surface is somewhat corroded. Acc. No. C.B. 121 .

With long, narrow blade tapering toward the cutting-edge, which is more or less expanded and rounded.

This form is the same as that in use during the Early Bronze Age (cf. Nos. 16 roff .).

Of Iron
1635
Length, $6 \frac{1}{8}$ in. ( 15.5 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4723. The iron is much corroded and some pieces are missing. Acc. No. C.B. 132.

1636
Length, 5 in. (I2.7 cm.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4724. The iron is much corroded and some pieces are missing. Acc. No. C.B. 518. Illustrated, p. 431.

I640 "WINGED" CELT, with side flanges and stop-ridge. The portion of the blade which lies between the side flanges and above the stopridge is cast thinner than the rest of the blade. Into the recess thus formed the handle fitted; the blade was prevented from being driven too far into the handle by the stop-ridge.


1640
This type of celt, which is often called palstave, was in use in both Greece and Italy from about the eighth to the seventh century B.C. (cf. A. J. Reinach in Daremberg et Saglio, Dictionnaire, securis, p. 1167, fig. 6262, and the references there given).

Length, $3 \frac{15}{16} \mathrm{in}$. ( 10 cm .). Date of purchase uncertain (before 1906). The blue-green patina has been removed in places. The edges of the flanges are chipped. Acc. No. G.R. 359.

I 643 With double blade and central shaft-hole. The cutting-edges are expanded and rounded. Illustrated, p. +31 .

This type of axe-head is common during the Bronze Age (cf. Nos. 1630, 1631). During the classical period it does not appear to have been in general use; but it is often represented on fifth-century vase-paintings as a weapon in the hands of Amazons or Scythians; probably as a sacrificial instrument in Dionysiac scenes; and in the hands of Hephaistos in representations of his return to Olympos. It occurs also on coins from Tenedos. For references see those cited by E. Saglio, in Daremberg et Saglio, Dictionnaire, under bipennis, p. 7IIf.

Length, $6 \frac{3}{4} \mathrm{in}$. ( $17 . \mathrm{I} \mathrm{cm}$.). Height, $2 \frac{11}{16}$ in. ( 6.9 cm .). Purchased in 1898. Stated to have been found at Kertsch in the Crimea. Unpublished. The crusty, brown-green patina has been removed in places. No missing parts. Acc. No. G.R. 165 .

## CHISELS

As is natural, an indispensable tool like the chisel was in use as early as the Stone Age and continued to be so throughout antiquity. The forms vary from a simple type consisting merely of a short bar of metal with a cutting-edge to more elaborate ones provided with tangs and handles of various shapes.

## BRONZE AGE

I646 Of long, narrow form, square in section, with slightly expanded cutting-edge at one end and left blunt at the other.


$$
1646
$$

This simple form is common during the Bronze Age, not only in Greek lands (cf. e.g. F. Dümmler, Athenische Mitteilungen XI, I886, p. 24 f., Beilage I, 9 [from the Cyclades]; H. B. Hawes, Gournia, pl. IV, i2-16; Phylakopi, pl. XXXTIII, i-3), but elsewhere (cf. F. J. Bliss, Mound of Many Cities [Tell el Hesy], pp. 59, 96, and 97, and others cited by J. Evans, Ancient Bronze Implements of Great Britain, p. I66).

Length, $4^{\frac{5}{8}} \mathrm{in}$. ( 11.8 cm .). From Cyprus. Cesnola Collection. cf. J. L.

## IMPLEMENTS AND UTENSILS

Chisels Myres, Cesnola Handbook, No. 4648. Illustrated in the Cesnola Atlas, III, pl. LXIX, 6. Crusty, dark green patina. Acc. No. C.B. 77.

I 647 Like the preceding, except that it is oblong in section and ends above in a blunt spike for insertion in a handle.

Length, 3 in. ( 7.6 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4649. The greenish patina has been partly removed. Acc. No. C.B. 521.

I648 Similar to No. I646.
Length, $7 \frac{7}{8}$ in. ( 20 cm .). From Gournia. Gift of the American Exploration Society, 1907. Crusty, greenish patina. The surface is considerably encrusted. Acc. No. 07.232.5.


1647


AWLS
Awls Awls were used as piercing tools from a very early period, and naturally stayed in use throughout antiquity.

The examples in our collection are of the simplest type, consisting merely of a long, narrow shaft, tapering toward each end. One end was used for piercing, the other was inserted in a handle of wood or bone, like the one preserved in No. 1660.

For similar awls cf. H. B. Hawes, Gournia, pl. IV, 17; H. Schmidt, Heinrich Schliemann's Sammlung trojanischer Altertümer, p. 25 I , Nos. 6233-39; J. Evans, Ancient Bronze Implements of Great Britain, p. 189, fig. 223.

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FROM CYPRUS (CESNOLA COLLECTION)
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Awls of this simple type occur in Cyprus in the Early Bronze Age (cf. J.L. Myres and M. Ohnefalsch-Richter, Catalogue of the Cyprus Museum, Nos. 565 ff .). But the same shape stayed in use a long time, so that the examples from Cyprus in this collection, of which there are no excavation records, are not certainly from the earliest period.
(a) Of rectangular section

I655
Length, $4^{\frac{3}{3}}$ in. (II.I cm.). cf. J. L. Myres, Cesnola Handbook, No. 4650. The patina has been removed. The surface is considerably corroded. Acc. No. C.B. 68 .


1655

1657


1660

1661


1663
1656
Length, $4^{\frac{1}{4}} \mathrm{in} .\left(10.5 \mathrm{~cm}\right.$.). cf. J. L. Myres, Cesnola Handbook, No. $4^{651 .}$ The crusty, green patina has been largely removed. The surface is somewhat corroded. Acc. No. C.B. 69.

## 1657

Length, $4^{\frac{1}{t}} \mathrm{in}$. ( 10.8 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4652. Illustrated in the Cesnola Atlas, III, pl. LXIX, 3. The patina has been removed. The surface is slightly corroded. Acc. No. C.B. 70.

## IMPLEMENTS AND UTENSILS

Awls

## 1658

Length, $3 \frac{7}{8}$ in. ( 9.8 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4653. The greenish patina has been mostly removed. The surface is considerably corroded. Acc. No. C.B. 71.

## 1659

Length, $3^{\frac{3}{4}} \mathrm{in}$. ( 9.5 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4654. The patina has been removed. The surface is somewhat encrusted. Acc. No. C.B. 72 .

I660 The bone handle is still preserved. Illustrated, p. 437.
Length, with handle, $5 \frac{3}{8}$ in. ( 13.6 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4655. The crusty, greenish patina has been removed in places. The surface is somewhat corroded, and the point is missing. Acc. No. C.B. 795.
(b) With round section

## I 66I

Length, $4^{\frac{7}{8}}$ in. ( 12.4 cm.). cf. J. L. Myres, Cesnola Handbook, No. 4656. The green patina has been largely removed. Acc. No. C.B. 260. Illustrated, p. 437.

## I 662

Length, $4^{\frac{1}{4}} \mathrm{in} .(10.8 \mathrm{~cm}$.$) cf. J. L. Myres, Cesnola Handbook, No. 4657$. Crusty, green patina. One end is missing. The surface is considerably corroded. Acc. No. C.B. 26 r.

FROM GOURNIA, CRETE
I663 The shaft is rectangular below and rounded above. Illustrated, p. 437.

Length, 5 in. ( 12.7 cm .). Gift of the American Exploration Society, 1907. Rough, green patina. The surface is considerably encrusted. The shaft was broken in two and repaired. Acc. No. 07.232.2.

## SICKLES

## Sickles

Sickles ( $\delta \rho \dot{\epsilon} \pi \alpha \nu o \nu$, falx) were apparently in use as early as the Stone Age (cf. J. Evans, Ancient Stone Implements of Great Britain, p. 320 ), and were certainly common from the Bronze Age onward. It has been suggested that their comparatively small size was due to the custom of cutting off only the ears of wheat (cf. J. Evans, Ancient Bronze Implements of Great Britain, p. 194).

For sickles in general cf. S. Reinach, Daremberg et Saglio, Dictionnaire, falx, pp. 968 ff.

1668 SICKLE. The blade is curved and has one side indented; at the base it is bent on itself to provide a socket for the insertion of a handle.

This type is not otherwise known in Cyprus, but occurs commonly in Crete during the Late Minoan period (cf. H. B. Hawes, Gournia, pl. IV, $3 t^{-}$ 36; cf. also H. Schmidt, Schliemann's Sammlung trojanischer Altertümer, p. 2ұ6, Nos. 6137-6139).

Length, $5^{\frac{1}{2}} \mathrm{in}$. ( $1+\mathrm{cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4699. The crusty, greenish patina has been partly removed. Acc. No. C.B. 86.


1668

## KNIVES

Knives ( $\mu \dot{\alpha} \alpha \alpha<\rho \alpha$, culter) are among the most ancient products of Knives human industry. The various purposes for which they were employed necessitated a variety of forms. They were generally provided with a handle, which was sometimes of a different material, and has in many cases disappeared.

For knives in general cf. S. Reinach, Daremberg et Saglio, Dictionnaire, culter, pp. 1582 ff .

I675 IRON KNIFE, with one-edged, convex blade, and long, foursided tang. Illustrated, p. +4o.

For knives with similarly shaped blades, belonging to the Early Iron Age, cf. O. Montelius, La Civilisation primitive en Italie, pl. 78, 8; pl. 47, 16 .

Length, $8_{\frac{1}{5}}$ in. ( 20.6 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4728. Illustrated in the Cesnola Atlas, III, pl. LVI, 5. The iron is much corroded. The blade is chipped in places. Acc. No. C.B. 85 .

I676 KNIFE, with one-edged blade, similar to the preceding, but not so strongly curved.

Length, $6_{8}^{5}$ in. ( 16.8 cm .). From Cyprus. Cesnola Collection. cf. J. L.

## IMPLEMENTS AND UTENSILS

Knives Myres, Cesnola Handbook, No. 4729. The iron is much corroded. The upper part of the blade is missing. Acc. No. C.B. 87.

I 677 KNIFE-HANDLE, with part of the blade, which was of iron and one-edged, still inserted. The handle is of round section; at its upper end it is ornamented with bands of zigzag lines, incised, and is perforated for a suspension ring.

Early Iron Age.
This type of knife-handle is unfamiliar in the East and resembles the early knife-handles of Italy (cf. O. Montelius, La Civilisation primitive en Italie, pls. 10, 4; 33, 3).
 Myres, Cesnola Handbook, No. 4753. The greenish patina has been partly removed. The surface is much corroded in places. Acc. No. C.B. 88.


I 679 IRON KNIFE, with one-edged convex blade, and long foursided tang.

This knife was found in an Etruscan tomb of the fourth to third century B.C. (cf. pp. 80 ff.).

Length, $8 \frac{1}{16}$ in. ( 20.5 cm .). Purchased in 1903. Unpublished. The iron is considerably corroded. Acc. No. G.R. 459.

I680 KNIFE, with curved, one-edged blade and moulded handle, all in one piece.

Uncertain period.
Length, $3 \frac{1}{8}$ in. ( 7.9 cm .). Probably purchased in 1898 . Crusty, green patina. The surface is considerably corroded. The ends of the blade and of the handle are missing. Acc. No. G.R. 346 .

168I DIMINUTIVE KNIFE with moulded handle and a movable, two-edged blade attached by means of a joint. The blade is now rusted in a half-open position.

Probably used as a surgical instrument (lancet for bleeding?).
Length of handle, $\mathrm{r}_{\frac{1}{2}} \mathrm{in}$. ( 3.8 cm .). Purchased in 1896 . Smooth, light green patina. The surface is partly encrusted and the point of the knife is chipped. Acc. No. G.R. 120.

## NEEDLES

Needles ( $\beta_{\epsilon} \lambda_{o ́ v \eta, ~}^{\rho} \alpha \varphi$ is, acus) were among the first implements invented by man. Before the introduction of metal they occur in bone and wood; during the Bronze Age they were generally of bronze; and later they were made of iron. Bone and bronze needles once introduced, however, stayed in use throughout antiquity.

For needles in general cf. E. Saglio in Daremberg et Saglio, Dictionnaire, acus, pp. 6 Iff .

> BRONZE AGE

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FROM CYPRUS (CESNOLA COLLECTION)
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Two types can be distinguished:
TYPE I. The most primitive has the eye formed by a closed hook.

For other examples of this type cf. H. B. Hawes, Gournia, pl. IV, 38 ; H. Schmidt, Schliemann’s Sammlung trojanischer Altertümer, p. 253, Nos. $6370-6379$; F. J. Bliss, Mound of many Cities (Tell el Hesy), p. 59, figs. IOI-IO2; O. Montelius, La Civilisation primitive en Italie, pl. 9. 7.

## I 686

Length, $3 \frac{13}{16} \mathrm{in} .(9.7 \mathrm{~cm}$.). cf. J. L. Myres, Cesnola Handbook, No. 4663. Crusty, greenish patina. The surface is considerably corroded. Acc. No. C.B. 237.

## I 687

Length, $3 \frac{15}{16} \mathrm{in}$. ( 10.1 cm. ). cf. J. L. Myres, Cesnola Handbook, No. 4664. Illustrated in the Cesnola Atlas, III, pl. LXIX, 15. Crusty, greenish patina. The surface is considerably corroded. Acc. No. C.B. 23 S .

TYPE II. Later the eye was drilled and was either round or oblong for use with coarser thread (cf. H. B. Hawes, Gournia, pl. IV, 39; H.

## IMPLEMENTS AND UTENSILS

Needies Schmidt, Schliemann's Sammlung trojanischer Altertümer, p. 254, Nos. 6405 ff.; O. Montelius, La Civilisation primitive en Italie, pl. 9, 8).
(a) With round eye

I688 The eye end is rounded.
Length, $5^{\frac{1}{4}} \mathrm{in}$. ( 13.3 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4665. The green patina has been mostly removed. Acc. No. C.B. 239 .

I689 The eye end is rounded.
Length, 5 in. ( 12.7 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4666. The crusty, green patina has been mostly removed. Acc. No. C.B. 240 .

I 690 The eye end is rounded.
Length, $4 \frac{1}{8}$ in. ( 10.5 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4667. The crusty, greenish patina has been removed in places. The point is broken off. Acc. No. C.B. 241.

I69I The eye end is pointed.
Length, $3 \frac{1}{8}$ in. ( 8 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4668. The crusty, greenish patina has been largely removed. Acc. No. C.B. 243 .
(b) With oblong eye

1692 The eye end is rounded.
Length, $3 \frac{7}{16}$ in. ( 8.7 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4669. The crusty, greenish patina has been mostly removed. The surface is corroded in places. Acc. No. C.B. $24^{2}$.

I 693 The eye end is almost rectangular.
Length, $2_{16}^{9} \mathrm{in}$. ( 6.5 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4670. The crusty, green patina has been mostly removed. Acc. No. C.B. 244.

1694 The eye end is pointed.
Length, $5^{\frac{1}{2}} \mathrm{in}$. ( 14 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4671. Illustrated in the Cesnola Atlas, III, pl. LXIX, 17. The crusty, green patina has been partly removed. The surface is much corroded in places. Acc. No. C.B. 245 .

1695 The eye end is square.
Length, $4^{\frac{1}{2}} \mathrm{in}$. ( 11.4 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4672. Crusty, green patina. The point is missing. Acc. No. C.B. 246.

I696 The eye end is pointed. Above and below the eye are moulded rings.

Length, $2 \frac{5}{8}$ in. ( 6.7 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4673. 442

Illustrated in the Cesnola Atlas, III, pl. LXIX, 14. Crusty, greenish patina. Neboles The lower part is missing. Acc. No. C.B. 247.

1686 I688

I 700 The eye end is broad and flat, the shaft of round section.
Late Minoan period. This type of needle with the broad end was probably used for making mats, baskets, etc. ${ }^{\text {I }}$

Length, $5 \frac{5}{16}$ in. ( 13.5 cm .). Gift of the American Exploration Society, 1907. The surface is considerably encrusted and corroded. Acc. No. 07.232.3.

## NETTING NEEDLES

Needles for making nets have been found both in Italy and in Greek lands. They consist of a long shaft, each end of which terminates in a two-

Netting Nefdles pronged fork, one set at right angles to the plane of the other.

Netting-needles of this type have been found in fifth-century tombs, and occur frequently in Roman times, the same form having evidently been in
${ }^{\text {I }}$ This information I owe to Mrs. C. H. Hawes.

## MMPLEMENTS AND UTENSILS

Netting Needles
use for a long period (cf. A. Furtwängler, Olympia, IV, Die Bronzen, p. I82, No. 1130 ).

1705
Length, $7 \frac{15}{16} \mathrm{in}$. ( 20.2 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4854. Illustrated in the Cesnola Atlas, III, pl. LXIV, 2; L. P. di Cesnola, Cyprus, pl. IV, where it is said to have come from Dali. The green patina has been largely removed. The surface is considerably corroded in places. Acc. No. C.B. 226.

## 1705

I 706
Length, $7 \frac{5}{16} \mathrm{in}$. ( 18.6 cm .). Date of purchase unknown. Unpublished. Crusty, greenish patina. Acc. No. G.R. 514.

## MISCELLANEOUS TOOLS

Miscellaneous
Tools

17IO GOLD-BEATER'S BLOCK. On various parts of its surface are cut twenty-two dies for small ornaments. They are of various designs, sizes, and depths, consisting of nine different types of rosettes, nine round bosses, both plain and ornamented, a plait pattern, a dotted circle, a rectangle with a boss and two stars, and a segment with two horn-like decorations. The style of these ornaments belongs to the Roman period.

Such moulds were used for the impression of designs on thin sheets of metal, preferably gold, where the design was repeated a number of times and labor could be saved by such a mechanical process. A thin sheet of metal was laid over the die, covered by a piece of wax or lead, and then beaten into the die by means of a wooden hammer or finer tool. A number of such


1710 moulds have been found belonging to the Mycenaean, geometric, orientalizing, and Roman periods. In the best Greek period such mechanical devices do not seem to have been in favor; at least, no moulds of that time appear to have been found (cf. F. H. Marshall, Catalogue of the Jewvellery in the British Museum, p. LI f.; T. Schreiber, Alexandrinische Toreutik in Ab-
handlungen der kgl. sächsischen Gesellschaft der Wissenschaften, XIV, pp. 277 ff.; E. Pernice, Oesterreichische Jahreshefte, 1904, pp. I80 ff.). The majority of such moulds are of stone, but bronze ones have also been found (cf. Marshall, loc. cit.).

Length, $3^{\frac{5}{8}} \mathrm{in}$. ( 9.2 cm .). Width, $2^{\frac{3}{4}} \mathrm{in}$. ( 6.9 cm .). Purchased in 1910 . Mentioned in the Museum Bulletin, December, 1910, p. 275. Smooth, green patina. There are several holes and scratches. Acc. No. 10.210.30.

## WEIGHING IMPLEMENTS

## STEELYARD

1720 STEELYARD (statera). The type is the same as that in use at the present day. It consists of a bronze bar, divided into two unequal parts, of which the longer is supplied with scale marks on three of its four faces, and the shorter has a number of hooks attached to it. Of these hooks two are suspended by chains from a collar, which is placed in a groove at the end of the rod; they were used for holding the articles to be weighed. The remaining three (only two are preserved) were suspended from movable rings and served to hang up the steelyard; each is attached to a different side of the rod and was used according as one or another of the graduations was turned to the upper side. On the first face are twelve divisions, each subdivided into twelfths. This scale was used when the steelyard was suspended by the hook nearest to the graduated bar. Objects weighing up to twelve pounds could then be weighed by moving the sliding weights along the bar. The second face begins with five pounds and goes up to twenty-two; the third at twenty and goes up to fifty-eight. These were used when the steelyard was suspended respectively by the middle hook and the one nearest the collar. All intervals of five pounds are marked by the figures V and X alternately; twenty is marked NX and fifty by the Greek letter N. The sliding weight, which is of lead coated with bronze, weighs two and a half pounds. A small bronze weight, weighing I oz. and decorated with bands and circles, also appears to have been found with the steelyard.

The steelyard was commonly used by the Romans, though apparently not by the Greeks, whose only weighing instrument seems to have been the balance. For a steelyard similar to ours and described at length, cf. British Museum, Greek and Roman Life, pp. I 49 ff.; cf. also G. Lafaye, Daremberg et Saglio, Dictionnaire, libra, p. 1227.

## IMPLEMENTS AND UTENSILS

Steelyard
Length of bar, $13 \frac{3}{3} \mathrm{in}$. ( 34 cm .). Purchased in 1900. Said to have come from Jebeil, Syria. The crusty, green patina has been partly removed. One hook is missing (see above), also the knob at one end of the bar. The bronze coating on the weight has partly disappeared. Acc. No. G.R. $355 \cdot$


## WRITING MATERIALS

For writing purposes the ancients used either paper made from the papyrus plant or parchment, and pen and ink; or wax-coated tablets and a pointed instrument called $\gamma \rho \alpha \phi \epsilon i \hat{\iota} \nu, \gamma \rho \alpha \phi i s, \gamma \rho \alpha \dot{\alpha} \phi \circ \nu$, stylus, stilus.

## STYLI

Style
The stylus consists of a shaft with a sharp point at one end and a broad, flat blade at the other. The point was used for inscribing the characters on the wax tablets, the flat end for erasing them. Most of the specimens found belong to the Roman period, but the same type was already in use in Greek times (cf. A. Furtwängler, Olympia, IV, Die Bronzen, Nos. 1123 ff.).

Styli were also used for surgical purposes (cf. J. S. Milne, Surgical Instruments in Greek and Roman Times, p. 72 f.).

## WRITING MATERIALS

## 1730 The shaft is moulded.

Length, $4^{\frac{7}{5}}$ in. ( 12.4 cm .). From Cyprus. Cesnola Cullection. cf. J. L. Myres, Cesnola Handbook, No. 4855. Illustrated in the Cesnola Atlas, III, pl. LXIX, 12. The crusty, greenish patina has been partly removed. Acc. No. C.B. 236 .


## 1730

## 1731

I73I The blade is very narrow.
Length, $4_{1 \frac{7}{16}}$ in. ( 11.2 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4856. Illustrated in the Cesnola Atlas, III, pl. LXIX, 2. The green patina has been mostly removed. Acc. No. C.B. 258.

## INKSTANDS

## 1735 SMALL CYLINDRICAL CUP

 with a moulded band on the outer surface and concentric circles on the bottom. This cup may have served for various purposes, either as an inkstand (cf. a similar example in British Museum, Greek and Roman Life, p. 188, fig. 196-a); or as a dice-box (cf. a similar example, British Museum, Greek and Roman Life, p. 196, fig. 205).Roman period.
Height, $2_{\frac{1}{4}}$ in. ( 5.8 cm .). Diameter, $1 \frac{1}{2} \mathrm{in}$. ( 3.8 cm .). From Cyprus. cf. J. L. Myres, Cesnola Handbook, No. 4934. The crusty, green patina has been partly removed. No missing parts. Acc. No. C.B. 350.


1735

## IMPLEMENTS AND UTENSILS

I736 CUP of cylindrical shape, decorated with five moulded bands on the outside; on the botton are moulded concentric circles.

Roman period. Like the preceding this may have been used as either an inkstand or a dice-box.

Height, 2 in. ( 5.1 cm .). Diameter, $1^{\frac{3}{4}} \mathrm{in}$. ( 4.5 cm .). Date of purchase uncertain (before 1906). Unpublished. Crusty, green patina. Slightly chipped in one or two places. Acc. No. G.R. 392.

I 737 CUP, like the preceding. The dimensions and decorations are the same, so that they were probably made as a pair. Acc. No. G.R. 393.


## SURGICAL INSTRUMENTS

Our knowledge of ancient surgical instruments is derived both from the numerous classical writers on medical subjects (from Hippokrates, who lived in the fifth century B.C., down to Paulus Aegineta in the sixth and seventh centuries A.D.), and from the actual specimens found. The latter are usually of bronze, the iron and steel specimens having probably mostly decayed. Most of the examples found belong to the Roman period. Large numbers were found at Herculaneum and Pompeii, and other Roman sites, and sometimes supplies of them were found in what were probably surgeons' graves.
cf. J. S. Milne, Surgical Instruments in Greek and Roman Times (1907); Gurlt, Berliner klinische Wochenschrift, i888, No. 48, p. 976 f.; Deneffe, Étude sur la trousse d'un chirurgien gallo-romain du IIIe siècle; R. Briau, Daremberg et Saglio, Dictionnaire, under chirurgia; L. Whibley, A Companion to Greek Studies, pp. 558-565.

## SURGICAL INSTRUMENTS

As will be seen, a number of the implements here classed among surgical instruments may have served for the toilet or other purposes, the same form having been in use for more than one purpose.

## PROBES

A probe ( $\mu \dot{\eta} \lambda \eta$, ко $\pi \dot{\alpha} \rho \rho \circ \nu, \dot{v} \pi \dot{\alpha} \lambda \epsilon \epsilon \pi \tau \rho o \nu, \dot{v} \pi \alpha \lambda \epsilon \epsilon \pi \tau \rho i s$, specillum) was used in antiquity both as a sound and as a means of applying medicament or toilet preparations, such as eyebrow pigments or eye ointments.

The tips of probes vary considerably, ending either (i) in sharp points, or (2) in oval enlargements, or (3) simply retaining the thickness of the shaft. Frequently one instrument was made to serve two purposes, one end of the shaft being fashioned into a probe, the other into a spatula, a spoon, or a hook
cf. J. S. Milne, Surgical Instruments in Greek and Roman Times, pp. 51 ff .

## $17+5$

I745 DOUBLE PROBE with two olivary ends (cf. Milne, op. cit., p. 56).

Length, 6 in. ( 5.5 .2 cm .). From Cyprus. Cesnola Collection. of. J. L. Mares, Cesnola Handbook, No. 4846. Crusty, green patina. The surface is somewhat corroded. Acc. No. C.B. 257.

I746 DOUBLE PROBE, like preceding.
Length, $5^{\frac{3}{5}} \mathrm{in}$. ( 13.6 cm .). From Cyprus. Cesnola Collection. cf. J. L. Mares, Cesnola Handbook, No. 4847. Crusty, green patina. The surface is considerably corroded. Acc. No. C.B. 259.

I 747 PROBE, with one olivary end, the other missing. The shaft is moulded.

Length, $6 \frac{1}{8}$ in. ( 15.6 cm .). From Cyprus. Cesnola Collection. cf. J. L. Tyres, Cesnola Handbook, No. $4^{84^{8}}$. Crusty, green patina. Acc. No. C.B. 255.

## IMPLENIENTS AND UTENSILS

I 748 PROBE, with one olivary end, the other missing. On the shaft is a moulded ring.

Length, $4^{\frac{1}{2}}$ in. ( 11.4 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4849. Crusty, green patina. Acc. No. C.B. 235.

I752 BIFURCATED PROBE. The handle is of hexagonal section and ends in a knob above.

Length, $4^{\frac{15}{16}} \mathrm{in}$. ( 12.5 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4853 . Illustrated in the Cesnola Atlas, III, pl. LXVIII, 4. The greenish patina has been largely removed. Acc. No. C.B. 225.


$$
1752
$$

## 1753

I753 EAR PROBE ( $\omega \tau \sigma \gamma \nu \varphi \varphi i s, \mu \dot{\eta} \lambda \eta \nu, \epsilon_{\xi} \xi \omega \tau i \delta \alpha$, oricularium specillum, auriscalpium) used to remove foreign bodies from the ear. It consists of a small narrow scoop at one end, and ends in a simple probe, without enlargement, at the other.

For similar examples cf. Milne, op. cit., pp. 63 ff., pl. XV, 2, 5 .
Length, $6 \frac{1}{2}$ in. ( 16.5 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4837. Illustrated in the Cesnola Atlas, III, pl. LXIX, i. The crusty, green patina has been mostly removed. The surface is corroded in places. The edges of the scoop are chipped and there are two small holes. Acc. No. C.B. 231.

## SPATULAE

Spatulae
A spatula ( $\dot{v} \pi \dot{\alpha} \lambda \epsilon \iota \pi \tau \rho o \nu, \sigma \pi \alpha \theta o \mu \dot{\eta} \lambda \eta$, spathomele) consists of a long shaft with an olivary point at one end and a broad, flat blade, usually oarshaped and blunt-edged, at the other. It was a pharmaceutical instrument,
the olive end being used for stirring medicaments, the blade for spreading them; but it was also used for other purposes, for instance, by painters for preparing and mixing their colors. cf. J. S. Milne, Surgical Instruments in Greek and Roman Times, pp. 58 ff.

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FROM CYPRUS (CESNOLA COLLECT1ON)
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I 757 There is a moulded ring between the blade and the shaft.
Length, $7 \frac{3}{16}$ in. ( 18.2 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4839 . The crusty, green patina has been largely removed. Acc. No. C.B. 250 .

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1757
$$

I 758 The blade is long and narrow. There is a moulded ring between the blade and shaft.

Length, $6 \frac{1}{\frac{1}{4}}$ in. ( 15.9 cm .). cf. J. L. Myres, Cesnola Handbook, No. $4{ }^{8}{ }^{4} 0$. Illustrated in the Cesnola Atlas, III, pl. LXIX, i1. The rough, green patina has been partly removed. Acc. No. C.B. 252.

1759 The blade is broad and short.
Length, $6 \frac{1}{5}$ in. ( 15.5 cm .). cf. J. L. Myres, Cesnola Handbook, No. $\boldsymbol{4}^{\text {S }} \mathrm{f}_{2}$. Illustrated in the Cesnola Atlas, IIl, pl. LXIX, is. Crusty, greenish patina. The top of the blade is chipped. Acc. No. C.B. 253.

I760 The sides of the blade are almost straight. There is a moulded ring between the shaft and the blade.

Length, $6 \frac{5}{16}$ in. ( 16 cm. ). cf. J. L. Myres, Cesnola Handbook, No. $4^{8}{ }^{1} 1$. Crusty, green patina. The surface is considerably corroded. Acc. No. C.B. 25 I.

I76I The blade is broad and short. Between the blade and the shaft are some incised lines.

Length, $5 \frac{5}{16}$ in. ( 13.8 cm .). cf. J. L. Myres, Cesnola Handbook, No. $4^{8} 43$. The crusty, greenish patina has been largely removed. Acc. No. C.B. 254.

## SPOON PROBES

The spoon probes are similar to the spatulae, but end in a spoon instead of a flat blade. They were likewise used chiefly for mixing

Spoon Probes

## IMPLEMENTS AND UTENSILS

Spoon Probes
and applying medicaments, and also for mixing and preparing colors.
For similar examples cf. Milne, op. cit., pl. XV, fig. 4, pp. 61-62.
1765
Length, $3 \frac{1}{8}$ in. ( 8 cm. ). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4836. Illustrated in the Cesnola Atlas, III, pl. LXVIII, 3. Crusty, greenish patina. One end is missing. Broken in two places and repaired. The surface is somewhat corroded. Acc. No. C.B. 226.


$$
1765
$$



1766

## 1767

I766 At one end is a rounded, flat spoon, at the other a sharp point. The shaft is round in section; between the spoon and the shaft is a four-sided piece ornamented with grooves.

Length, $4^{\frac{5}{8}} \mathrm{in}$. ( 11.8 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4 $\mathbf{8 5}$. The blackish patina has been removed in places. The shaft is somewhat bent. Acc. No. C.B. 229.

I 767 At one end is a diminutive spoon, which may have served as an ear-pick; at the other, what appears to be an olivary enlargement, much corroded.

Length, $6 \frac{1}{16}$ in. ( 55.4 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. $4^{85}$. Crusty, green patina. The surface is corroded in places. Acc. No. C.B. 256.

## SCALPELS OR BISTOURIES

The following are two handles of scalpels or bistouries. Each consists of a bronze bar, of square section, at one end of which is a slot for the insertion of the iron blade, at the other a leaf-shaped spatula. The latter was

Scalpels
OR
Bistouries used as a blunt dissector.

For similar examples cf. J. S. Milne, Surgical Instruments in Greek and Roman Times, pp. 24 ff., pls. I-III.

1770
Length, $3^{\frac{7}{16}}$ in. ( 8.7 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. $4^{8} 4+$. Rough, green patina. Part of the iron blade is still preserved. Acc. No. C.B. $5^{8}$


1770

## I 77 I

Length, $3 \frac{7}{16}$ in. ( 8.7 cm.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. $4^{8} 45$. The patina has been largely removed. Acc. No. C.B. 59.

For examples of styloid instruments see Nos. 1730, 1731. These have been classed among writing materials; but as implements of this shape were also used in surgery, it can be decided for which purpose an example originally served only when the circumstances of discovery throw some light on this question (cf. Milne, op. cit., p. 72). This is not the case with our specimens.

## MUSICAL INSTRUMENTS

The Greeks regarded music as an essential part of a liberal education. Nevertheless, music had not the same independent position as nowadays, but was regarded merely as an accompaniment to vocal composition. They used both wind and stringed instruments, such as the lyre and the tlute. Cymbals were also used in both Greek and Roman times, especially in religious ceremonies of an ecstatic character.

For music in general cf. R. D. Archer-Hind, in Whibley's Companion to Greek Studies, pp. 290 ff.; Th. Reinach, in Daremberg et Saglio's Dictionnaire, under musica, pp. 2072 ff .

## SISTRUM

Sistrum I777 SISTRUM ( $\sigma \in i \sigma \tau \rho o \nu$ ), a musical instrument used in the worship of the goddess Isis. This example is of the usual type, consisting of a loop-shaped frame attached to a moulded handle and fitted with a number of rods. The rods, which have curved ends, produce a rattling sound when shaken. At the top of the sistrum is a cat, somewhat roughly modelled. It is reclining and its fore legs are twice represented, once on the side and once in front.

The origin of this instrument goes back to early Egyptian times; but a great number of examples in bronze have survived dating from the Roman period, when the worship of Isis had attained great popularity in Italy. It is to this period that our example belongs. The identification of this instrument is rendered certain by a description given of it by Apuleius (Metamorphoseon XI, 4), and by a number of monuments


1777 representing Isis or one of her attendants carrying a sistrum (cf. the list given by S. de Ricci, in Daremberg et Saglio, Dictionnaire, under sistrum, p. 1356).

Height, $5^{\frac{1}{4}}$ in. ( 13.3 cm .). Gift of Henry G. Marquand, I897. Unpublished. Smooth, green patina, encrusted in places. The frame is broken on one side and chipped in several places; the curved ends of one of the rods are broken off. Acc. No. G.R. 11.

## CYMBALS

Cymbals
I778, I779 PAIR OF CYMBALS ( $\kappa \dot{\nu} \mu \beta \alpha \lambda о \nu$, cymbalum). Each consists of a round, shallow bowl with flat rim slightly turned up on the outer side. In the centre is a hole for the insertion of the handle surrounded by two moulded rings. On the rim of each is incised an inscription in letters of fifth to fourth-century style K $\alpha \lambda \lambda \iota \sigma \theta \epsilon \nu \epsilon i \alpha s$ (on No. 1778) K $\alpha \lambda \lambda \iota \sigma \theta \epsilon \nu \epsilon i \alpha \rho$ (on No. 1779), presumably the name of the owner, "of Kallistheneia." The name is not otherwise known. The substitution of P for final $\Sigma$ is a charac-
teristic of the Elean dialect (cf. E. S. Roberts, An Introduction to Greek Cymbals Epigraphy, p. 361).

Cymbals were a favorite instrument with the Greeks and Romans, especially in religious ceremonies of an ecstatic character, such as were practised in the worship of Demeter, Dionysos, and Kybele. They were, however, used also without any religious significance, especially in Roman times. On the subject of cymbals in general cf. E. Pottier in Daremberg et Saglio, Dictionnaire, cymbalum, p. 1697 f., who gives references to examples similar to ours. Compare also a pair, likewise inscribed with the name of the owner, in the British Museum, Greek and Roman Life, p. 220, fig. 230. Similar cymbals of approximately the same period have also recently been found at Carchemish (not yet published). For examples from the Roman period cf. F. B. Tarbell, Naples Bronzes, fig. 263.

Diameter of each, $3 \frac{7}{5}$ in. ( 9.9 cm .). Purchased in 1913. From Greece, probably Elis. Described by G. M. A. R[ichter] in the Museum Bulletin, April. 1914. p. 95. Crusty, light green patina, with considerable rust stains. The handles are missing, but pieces of their loop attachments are still preserved. The inscriptions have been picked out with white water-color paint. Acc. Nos. 13.225.5 a and b.


The following cymbals are from Cyprus and belong to the Cesnola Collection. They cannot be certainly dated.

1785 CYMBAL. It consists of a circular plate of convex form with flat rim. In the centre is a hole for the insertion of a handle.

For a pair of cymbals of this shape cf. F. B. Tarbell, Naples Bronzes, fig. 263.

Diameter, $2 \frac{1}{2}$ in. $(6.3 \mathrm{~cm}$.). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 488 r . Crusty, green patina. The handle is missing. Acc. No. C.B. 422.

## IMPLEMENTS AND UTENSILS

I 786 CYMBAL. Similar to the preceding.
Diameter, $2 \frac{5}{5}$ in. ( 6.7 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4882. Crusty, greenish patina. The handle and a piece from the rim are missing. Acc. No. C.B. 421.

1787 CYMBAL. Similar to No. 1785 , but with rim upturned at the edges.

Diameter, $2 \frac{1}{16}$ in. ( 5.2 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4883. Crusty, green patina. The handle is missing. Acc. No. C.B. 420.

1788 CYMBAL. Similar to the preceding.
Diameter, 2 in. ( 5.1 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4884. Crusty, bluish-green patina. The edges are chipped in places. Acc. No. C.B. 423.

## MISCELLANEOUS OBJECTS

Ingot I8Io INGOT. It consists of a large four-sided slab with incurving sides, weighing about 62 lbs . avoirdupois ( 28,086 grammes). The surface is left rough.

Similar ingots, of copper, belonging to the Bronze Age have been found at Enkomi, Cyprus, in a Mycenaean bronze foundry (cf. A. J. Evans, Mycenaean Cyprus as illustrated in the British Museum Excavations, p. 215); at Hagia Triada, Crete (cf. L. Pigorini, Bulletino di paletnologia italiana,
 1912, pp. 220 ff., fig. 31); in Sardinia (cf. Bullettino archeologo sardo, VI, 1860, p. 325; and G. Perrot et C. Chipiez, Histoire de l'art, IV, p. 99); and elsewhere (cf. those enumerated by J. Déchelette, Manuel d'archéologie préhistorique, celtique, et gallo-romaine, II, pp. 397 ff.).

Such ingots may have been used simply as ingots, or as weights, or they may have had a monetary value (cf. A. J. Evans, Corolla Numismatica in honour of B. V. Head, pp. 355 ff.). The weight of our example is approximately that of those found at Hagia Triada, which, as Mr. Evans has pointed out, is that of a light Babylonian talent. The material is bronze, not copper, according to the following analysis made by Mr. W. Kuckro, the Museum chemist: Copper $89.9{ }^{r} 0$, Tin $7.5 \%$, Lead $1.5 \%$, Iron \& Aluminium $.5 \%$, Silika $.6 \%$.

Length, $17 \frac{1}{2} \mathrm{in}$. ( 44.5 cm .). Width, $14 \frac{3}{\frac{3}{4}} \mathrm{in} .(37.5 \mathrm{~cm}$.). Thickness, about 2
in. ( 5.1 cm .). Purchased in 19II. Said to have come from Asia Minor. Un- Ingot published. Crusty, green patina. The surface is considerably encrusted. Acc. No. I1.I40.7.


1810

I8II TUBULAR SHAFT, perhaps used as a sceptre-stem. It has two pairs of opposite holes. Late Minoan I period. Illustrated, p. $45^{8 .}$

For an exactly similar example, also from Gournia, cf. H. B. Hawes, Gournia, pl. IV, 66.

Length, $4 \frac{1}{16}$ in. ( 10.3 cm .). From Gournia, Crete. Gift of the American Exploration Society, 1907. Crusty, greenish patina. The surface is considerably encrusted and corroded. Acc. No. 07.232.10.

I812 MACE-HEAD, with transverse hole for the shaft and with long tubular socket. Each side of the head is in the shape of a double shell. Perhaps seventh century B.C. Illustrated, p. 458 .

Height, $3^{\frac{1}{2}} \mathrm{in}$. ( 8.9 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4769. Illustrated in the Cesnola Atlas, III, pl. LVI, I. The green patina has been largely removed. The surface is somewhat corroded. Acc. No. C.B. 329.

Sceptres
And
Maces

## IMPLEMENTS AND UTENSILS

Sceftres AND Maces

I 8 I 3 MACE-HEAD, with ribbed conical sides and large transverse hole for the shaft. Probably seventh century B.C.

Height, $2 \frac{13}{13} \mathrm{in} .(7.1 \mathrm{~cm}$.). Greatest width, 3 in. ( 7.6 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4768. Illustrated in the Cesnola Atlas, III, pl. LI, 2. Crusty, green patina. The surface is considerably corroded. Acc. No. C.B. $35^{1 .}$


I8I4 SCEPTRE-HEAD in the form of a group of three bulls' heads with tubular socket below. The eyes and foreheads of the bulls are hollow for the insertion of inlay. The colored paste beads now in place do not seem to belong; only the crescent of red enamel in one forehead is apparently original. The bulls are vigorously modelled in the archaic Orientalizing style, of the seventh or sixth century B.C.

Height, $5 \frac{13}{16} \mathrm{in}$. ( 14.7 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4771. Illustrated in the Cesnola Atlas, IlI, pl. LII, 2; L. P. di Cesnola, Cyprus, pl. XXVIII; also published by G. Perrot et C. Chipiez, Histoire de I'art, III, p. 799, fig. 564 . The patina has been largely removed. The surface is considerably corroded. Acc. No. C.B. 792.

I8I5 SCEPTRE-STEM (?) in the form of a tubular shaft, decorated with raised horizontal bands and, in the centre, with five lozenge-shaped ornaments arranged vertically. Perhaps before sixth century B.C.

Height, $7^{\frac{3}{3}}$ in. ( 18.7 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4770. Brown-green patina. The surface is much corroded. Acc. No. C.B. 326.


1815

## MISCELLANEOUS OBJECTS

I820 SHEPHERD'S CROOK, terminating in a scroll. It has a conical socket, pierced by two rivet-holes. Uncertain date.

Shepherd's Скоокя

Height, $4^{7}$ in. ( 12.4 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4774. Illustrated in the Cesnola Atlas, III, pl. LV. 2. Crusty, brown-green patina. The surface is considerably corroded and the socket is split open. Acc. No. C.B. 327.

I82I SHEPHERD'S CROOK, with end curved outward. Conical socket. Uncertain date.

Height of fragment, $3^{\frac{3}{16}} \mathrm{in}$. ( 8.1 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4775. The crusty, green patina has been largely removed. Only the upper part of the socket is preserved. Acc. No. C.B. 393.


1820

i821

I825 SOCKETED INPPLEMENT. It is four-sided in section, ending in a point and provided with a round tubular socket. Probably Early Iron Age. Its use is uncertain. It served perhaps as a spear-point or butt-spike. Illustrated, p. 460 .

Length, $7^{\frac{5}{16}}$ in. (is.6 cm.). From Cyprus. Cesnola Collection. of. J. L. Myres, Cesnola Handbook, No. 4721. Illustrated in the Cesnola Atlas, III, pl. LXXIII, i. Rough, greenish patina. The surface is much corroded. The socket is split open and has the lower end missing. Parts of two rivet-holes are preserved. Acc. No. C.B. 117.

I826 SOCKETED INPPLEMENT. It is of four-sided section,

Socketed Implements

## IMPLEMENTS AND UTENSILS

Socketed ending in a cutting-edge. Perhaps used as a chisel. Early Iron Implements Age (?).

Length, $6_{\frac{1}{4}}$ in. ( 15.9 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4722. Illustrated in the Cesnola Atlas, III, pl. LXXIII, 3. Rough, greenish patina. The socket is split open. Acc. No. C.B. 52.


1825


1826

Kottabos
I830 KOTTABOS or implement used in the Greek game called кот $\tau \alpha \beta$ os. It consists of a shaft of round section resting on a base in the form of an inverted bowl with a moulded stem above. The base is supported on three feet, each in the shape of a paw, mounted on a plinth and ending above in two rams' heads emerging from a pair of volutes. Less than half-way up the shaft is inserted a disk with slight rim; this disk fits loosely and is kept in place by a pin below. At the top of the shaft a nude male figure, with right arm raised above his head, is balancing a small disk. The disk is ornamented on the under side with two moulded bands, and a small hollow in the centre. This hollow fits on a peg in the hand of the statuette. The statuette is mounted on a base with a hole in the middle for insertion in the shaft.

The game of kottabos was in vogue among the Greeks from the beginning of the sixth to the beginning of the third century B.C. It was probably originally a form of libation, to which an erotic significance was sometimes given (cf. G. Lafaye, Daremberg et Saglio, Dictionnaire, kottabos, p. 866). The object of the game was to throw a small quantity of wine from a cup at a mark. The great popularity of the game is attested by the frequent allusions to it by ancient authors (cf. C. Boehm, De Cottabo, pp. 5-8 and 35,

Appendices). From these accounts we learn that there were two main forms
of the game: (I) The not $\tau \tau \alpha \beta$ os $\delta i^{\circ} \dot{o} \xi \nu \beta \dot{\alpha} \phi \omega \nu$ in which a кр $\dot{\alpha} \tau \eta \rho$, or mixing vessel, was filled with water and a number of empty saucers ( $\dot{s}_{s} v \beta \dot{\alpha} \phi \phi o \imath$ ) were set floating in it. The object was to throw the wine from the bottom of a cup on to the saucers until they sank; he who sank the greatest number was the winner.
(2) The ко́т $\alpha \beta$ nos кото́ктоs necessitated a special implement. The wine was thrown at a disk ( $\pi \lambda \dot{\alpha} \sigma \pi \iota \gamma \xi$ ) balanced at the top of a bronze rod ( $\dot{\rho} \dot{\alpha} \beta \delta o s)$. The object was to dislodge the disk and make it fall (hence кот $\dot{\alpha} \kappa \tau \quad \mathrm{s}=$ let down) on the " $\mu \dot{\alpha} \nu \eta s$ " and produce a resounding noise. Besides the accounts given of this game by ancient authors, we have several representations of it in Greek vase-paintings (cf. S. Reinach, Répertoire dis vases peints, under kottabos; K. Sartori, Dis Kottabosspiel, p. for; and the other references cited by G. Lafaye, Daremberg et Saglio, Dictionnaire, kottabos, p. 869); as well as a number of the actual implements with which the kottabos kataktos was played. This example is such an implement. To judge from the vase-representatons the game was played either reclining on a couch (generally at the end of a meal) or standing on the ground. The cup from which the wine was thrown was held by inserting the first finger in one





 . . . s .
 .

Komtabos
Our example, to judge from the style of the statuette, belongs to the fifth century B.C. For other examples of such kottaboi of. the list given by K. Sartori, op. cit., pp. 113, 114. Some of these show an arrangement by which the rod could be extended at will; this is not the case in our specimen where the rod is all in one piece and riveted to the moulded stem below.

Height, 7 ft .2 in. ( 2.184 metres). Purchased in 1913. Published by G. M. A. R[ichter] in the Museum Bulletin, April, 1914, p. 95. Crusty, blue-green patina. There is a hole in the base; otherwise the preservation is excellent. Acc. No. 13.232.1.

I83I DIKAST'S TICKET. The law-courts of Athens were divided into ten sections called Dikas-


1830 teria, each having a jury of five hundred citizens. Every juror or dikast was provided with a bronze ticket as evidence of his right to sit on a jury and to draw pay therefor. These tickets bore the name of the holder (sometimes with that of the father), the name of the district in which he lived, and the number of the court in which he was entitled to sit. Our specimen is
 omission of the $\mu$ was probably due to the illiteracy of the writer. At the left is stamped an I, the ninth letter of the Greek alphabet, signify-


1831
ing that Epikrates belonged to the ninth court. At the right are two stamps, each with the device of an owl surrounded by an olive spray, the official emblem of the city.

A large number of such tickets have been found. U. L. Köhler, Corpus Inscriptionum Atticarum, II, 2, Nos. 875 ff. and 888, b,pp. 347 ff. and 537 , published sixty-seven examples, all belonging to the fourth century B.C., which is also the period to which our specimen belongs. For an account of such

## MISCELLANEOUS OBJECTS

tickets cf. E. Caillemer in Daremberg et Saghio's Dictionnaire, dikastai, pp. 189-190.

Length, $4 \frac{1}{2}$ in. ( 11.3 cm .). Width, $\frac{7}{8}$ in. ( 2.2 cm .). Purchased in 1907 . Described by G.M.A.Rlichter] in the Museum Bulletin, May, 1908, p. 90, No. 1 I. The crusty, green patina has been largely removed. Acc. No. 07.286.95.

## BELLS

Small bells have been found in great numbers on many ancient sites. Their use corresponded to a large extent to that of the present day. In the Crimea a number were found with harness (cf. L. von Stephani, Compterendu, $\mathbf{1 8 6 5}$, pl. V, 7). They are also frequently found suspended from armlets, having evidently been regarded as possessing magical properties (cf. Bronzi di Ercolano, II, pls. 96 ff.; L. von Stephani, Compte-rendu, 1865 , pp. 173 ff.).

The forms vary from rounded to rectangular, the latter being characteristic of the Roman period, the former having been found in both Greek and Roman times (cf. A. Furtwängler, Olympia, IV, Die Bronzen, p. 186). The tongues of the bells are often of iion.

## PROBABLY IV CENTURY B.C.

I835 The body is of conical shape and the tongue is attached by a chain from the loop which forms the handle. Illustrated, p. $\psi_{+}{ }_{4}$.

This and the following specimens (Nos. $1836-184^{\circ}$ ) are similar to those found in a fourth-century tomb in Crimea (cf. L. von Stephani, Compterendu, $1865, \mathrm{pl} . \mathrm{V}, 7$ ) and may belong to the same period.

Height, $1 \frac{15}{15}$ in. ( 4.9 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4862. Illustrated in the Cesnola Atlas, III, pl. LXVIII, 1. The green patina has been largely removed. Acc. No. C.B. 394.

I836 The body is rounded with the handle in the form of a ring, all in one piece. Illustrated, p. $4^{6}+$.

Height, $1 \frac{1}{2}$ in. ( 3.8 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4863. Illustrated in the Cesnola Atlas, III, pl. LXVIII, 2; L. P. di Cesnola, Cyprus, pl. IV, where it is said to have come from Dali. Crusty, green patina. The surface is considerably corroded. The tongue is missing. Acc. No. C.B. $395^{\circ}$.

1837 The body is of conical shape and the tongue is suspended from the loop which forms the handle.

## IMPLEMENTS AND UTENSILS

Bells Height, 1 in. ( 2.5 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4865. Crusty, greenish patina. A piece from the body is missing. Acc. No. C.B. 398.


1835


1836


1837

I 838 The body is of hemispherical shape, with a handle in the form of a loop from which the tongue was suspended.

Height, $\frac{7}{8}$ in. ( 2.2 cm .). cf. J. L. Myres, Cesnola Handbook, No. 4864. Illustrated in L. P. di Cesnola, Cyprus, pl. IV, where it is said to have come from Dali. Crusty, greenish patina. The tongue is missing. Acc. No. C.B. 397.

1839 Similar to the preceding.
Height, $\frac{7}{16}$ in. ( 1.1 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4867. Crusty, greenish patina. The surface is considerably corroded. The handle and the tongue are missing. Acc. No. C.B. 396.

I840 The body is of hemispherical shape with the handle in the form of a ring, all in one piece.

Height, $\frac{5}{8}$ in. ( 1.6 cm. ). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4866. Crusty, green patina. The tongue is missing; it was probably of iron, as there are traces of iron rust in the interior. Acc. No. C.B. 399.

## ROMAN PERIOD

I 845 The body is quadrilateral and has a knob at each corner. The handle is in the form of a ring, cast in one piece with the body.

For a similar example, of late date, found at Olympia cf. A. Furtwängler, Olympia, IV, Die Bronzen, pl. LXVI, 1 I70.

Height, $1_{11}^{11}$ in. ( 4 cm .). Purchased in 1898 . Stated to have been found at Kertsch in the Crimea. Crusty, greenish patina; the surface is considerablycorroded. The tongue is missing; it was probably of iron, as there are traces of iron rust. Acc. No. G.R. $34^{8}$.

## MISCELLANEOUS OBJECTS

I 846 The body is of conical shape and has open-work decoration consisting of a series of triangular perforations. The ring handle is in one piece with the body.

Date uncertain, probably Roman.
Height, $\mathrm{I}_{\frac{3}{4}}$ in. ( 4.4 cm .). Date of purchase uncertain (before 1906). The crusty, green patina has been largely removed. The tongue is missing. Acc. No. G.R. 357.


1845


1846


1855

1850 PORTION OF A CHAIN consisting of six double links.
Date uncertain.
Length, $5 \frac{1}{16}$ in. ( 12.8 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4886. The crusty, light green patina has been removed in places. Acc. No. C.B. 120.


$$
1850
$$

I855 BUTTON, of convex shape, with a loop for attachment on the inside. The outer surface is decorated with four concentric bands in relief.

Date uncertain. Perhaps used for horse-trappings.
Diameter, 2 in. ( $5 . \mathrm{I} \mathrm{cm}$. ). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4869. The green patina has been partly removed. The surface is somewhat corroded. A piece from one side is missing. Acc. No. C.B. 419 .

I 856 Similar to the preceding, but with five concentric bands.
Diameter, $\frac{1}{1 \frac{5}{15}} \mathrm{in}$. ( 4.9 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4868. The crusty, green patina has been partly

Portion
of A
Chain

## IMPLEMENTS AND UTENSILS

Buttons removed. The surface is somewhat corroded. The edges are chipped in places. Acc. No. C.B. 424.

Votive and
Uncertain Objects

I 860 OBJECT OF UNCERTAIN USE (DIPPING-ROD?), consisting of a four-sided shaft with a ring at one end and a moulded part terminating in a knob at the other. Probably Roman period.

Length, $5^{\frac{1}{2}} \mathrm{in}$. ( 14 cm .). From Cyprus. Cesnola Collection. cf. J. L. Myres, Cesnola Handbook, No. 4834. Cesnola Atlas, III, pl. LXIX, 8. The patina has been mostly removed. The surface is corroded in places. Acc. No. C.B. 562 .


1860
I865 AMULET, in the form of a bull's head. It is provided with two rings, one between the horns, another at the back. The details are indicated by incisions. Etruscan (?), of rough execution.

For similar amulets cf. K. Schumacher, Antike Bronzen in Karlsruhe, Nos. 826 ff.

Length, 2 in. ( 5.1 cm .). Date of purchase uncertain (before 1906). Smooth, green patina. Acc. No. G.R. 343 .


I 866 Similar to preceding.
Length, $2 \mathrm{in} .(5.1 \mathrm{~cm}$.). Date of purchase uncertain (before 1906). The green patina has been largely removed. Acc. No. G.R. 344.

I 867 VOTIVE RIGHT HAND, with fingers held close together. Votive and The inner side is flat and provided with a ring for suspension.

Length, $1 \frac{3}{4} \mathrm{in} .(4.5 \mathrm{~cm}$.). Stated to have been found at Kertsch, Crimea. Purchased in 189\%. Greenish patina. The surface is somewhat corroded. Acc. No. G.R. 351.

I868 OBJECT OF UNCERTAIN USE, shaped like a tassel, with a ring for suspension at the back.

Perhaps used as a votive offering.
Length, $\frac{15}{16} \mathrm{in} .(4.9 \mathrm{~cm}$.). Date of purchase uncertain (before 1906). The crusty, green patina has been largely removed. Acc. No. G.R. 352.


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[^0]:    ${ }^{I}$ I want here to acknowledge the great kindness of Mr. R. Bertelli, who showed me over his bronze foundry, the Roman Bronze Works, Greenpoint, Brooklyn, and explained all the various stages of the process in use there.

[^1]:    In this connection it is interesting to compare modern Japanese bronzes in which various metals are frequently combined in one figure.

[^2]:    ${ }^{1}$ This reference I owe to Professor F. B. Tarbell.

