Syracusan Dekadrachms of the Euainetos Type

Albert Gallatin

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In any study of Greek art of the fifth or fourth centuries before Christ we are constantly confronted by the lack of existing works signed by the artists who were most famous in their day or works which may be definitely attributed to them. It has been the general fate of the monuments of the greater arts to perish, or to have survived only in ruins or fragments, while we have innumerable specimens of the masterpieces of the minor arts in an excellent state of preservation, often bearing the signatures of the artists. The painted vases have been the subject of many admirable studies, and are now, thanks to the inspiration of Mr. Pottier, in the course of being presented to the world through the Corpus Vasorum Antiquorum; the engraved gems have been studied and illustrated, but the works of the great die-cutters of antiquity have not as yet received sufficient attention or been adequately published from the point of view of works of art, and this appears the more remarkable when it is realized that examples of these men's skill are available in considerable quantity in as perfect condition as when they left the artist's hand.

Mr. George F. Hill in his book "Select Greek Coins" has presented a general survey of the subject, and has furnished the material for comparative study by a most carefully selected series of enlarged reproductions, while in his too-short text he gives the approximate date of each coin illustrated, together with a brief account of the development of the medallic art in Greece.

Sir Arthur Evans in his "Syracusan Medallions and their Engravers" discusses with vivid imagination the life and activities of the two most celebrated die-cutters of antiquity, Euainetos and Kimon, but he illustrates only a few varieties of their masterpieces, the Syracusan dekadrachms. Du Chastel and Forrer in their books contribute little to aid in forming an estimate of the number of dies engraved by these artists.

In this book I have attempted to illustrate all the known varieties of the Syracusan dekadrachms which bear the signature of Euainetos or which have a similar head on the obverse and are similar in design to the coins so inscribed: forty-two obverse dies, together with five varieties of the same, and twenty-four reverse dies are illustrated, and a list is given of the known specimens from each die.

The illustrations are twice the diameter of the coins and were made from photographs by P. A. Juley & Son of New York from casts, with the following exceptions: A. I and R. II, photographed from the coin by the Hughes Company of Baltimore; H. I, photographed from the coin by W. V. Chappel of Philadelphia; and C. IV and F. VI, reproduced from photographs from the coins furnished me by the Copenhagen Museum. The enlarged photograph of the black glazed cup in the Louvre was made for me by Giraudon of Paris.

It is hoped that this work will enable numismatists to identify and classify their dekadrachms more exactly than hitherto, and will offer to lovers of Greek art an opportunity to study and analyze a work of art which has maintained its position for over 2000 years as one of the world's masterpieces.

I gladly acknowledge whatever indebtedness I may owe for anything contained herein which agrees with statements in the above-mentioned books; it hardly seems worth while to cite, except in certain instances, the points wherein we agree or disagree. I wish to express my appreciation of the invariable courtesy and ready cooperation of the museums, private collectors, and dealers, who have so generously allowed me to examine the specimens in their collections and furnished me with casts of their coins, and have always responded so promptly to my requests for information.

Dr. Jacob Hirsch has given me casts of a great number of dekadrachms which have passed through his hands, and has obtained casts for me of coins in private collections; he also sent me a photograph of a cup in the Hamburg Museum fűr Kunst und Gewerbe which contains the impression of a coin similar to the one in the cup in the Louvre which I have illustrated.

The work would have been an impossible undertaking without the aid and advice of Mr. Edward T. Newell, whose ample knowledge and scanty time have always been most generously at my disposal; Mr. Sydney P. Noe has also rendered me invaluable assistance. Mrs. Joseph C. Hoppin helped me greatly in the original classifications.

Aside from the coins themselves little information is available to aid in their study. Some evidence as to their date is afforded by their association with other coins in the hoards which have at times been unearthed, but these hoards as a rule have been poorly recorded, if at all. While the sequence of the coins has been established to a large degree, the actual date of any of them is as yet unknown. It is, however, generally believed, and probable, that these dekadrachms were struck by the city of Syracuse in connection with the Assinarian games, first held in 412 B.C. in honor of the victory over the Athenians in the preceding year.

The dekadrachms issued were of two distinct types: on one the hair of the head is confined in an ornate net, many of these dies bearing the initial or signature of Kimon; on the other the hair is free, with a crown of leaves; the earliest dies for these coins bear the signature of Euainetos. The side bearing the head is designated as the obverse, since this has so long been the custom, although from a technical standpoint it might more accurately have been designated as the reverse, owing to the manner in which the coins were struck.

The classification and the order followed have been determined by examination and comparison of the condition of the obverse and reverse dies in regard to flaws, cracks, and rusting. The sequence established by this means follows in general certain characteristics of the coins and appears to be logical; the order given to some of the C. series is arbitrary, since they appear to have been contemporary. H. I, with two griffin heads, is placed after G. Ia, a peculiar die to which one griffin head was added after a flaw had obscured a shell by which it was previously distinguished. Except for the griffins the dies are as unlike as any two in the list. H. I more closely resembles L. I, but its reverse tends to confirm the position assigned to it on account of the griffins.

The K. series, with the eight-rayed star, is placed after the J. series, which bears a dot, owing to K. Ia, of which no specimen is recorded without a dot; but the precedence of the dot series is not definitely established.

R. IV is possibly R. III cracked; R. III shows some of the defects which appear on R. IV, but the goad is raised and the head of the third horse is changed. No other case of a recut die has been observed.

Flaws in the dies are not noted, since they are subject to change, but the following are usually present and will aid in the identification of their dies: a crack across the back of the head and a spot on the neck in F. IX; a flaw on the lower eyelid in F. I; a flaw on the earring in F. II; a spot on the cheek in F. III; a spot on the nose and a spot on the lip in F. VIIa; the cracks on R. IV mentioned above.

C. V., in the Copenhagen Museum (Beutze Collection Catalogue 1863, No. 141), is not num-

bered among the C. series, as I doubt its authenticity. However, Dr. Galster, the keeper of the coins at the Copenhagen Museum, writes me that he cannot see how this coin can be a forgery, and it is therefore included in the list.

A full description of each die appears unnecessary in conjunction with the plates. Any coin may be identified in the following manner: all emblems in the field are given separate classifications; coins with a dot and another emblem are listed under the other emblem, except in the case of those with the dot and the four-pointed star, where the coins are listed under the dot series, since the star in these cases was added to the dot. The minor varieties in the various classes may be distinguished by the position of the emblem, if one appears; by the position of the dolphins or the necklace; by the position and form of the letters of the inscriptions; by the angle formed by the upper leaf in the hair, at times a straight line with the back of the neck as in C. XVI, or bent back as in C. VIII or C. VI. On some dies a small curl appears just back of this leaf, and this curl varies in form; a small curl is sometimes added in front of this leaf in the angle formed with the large leaf extending across the top of the head. The small locks which fall from the edge of the hair along the line from the front of the ear to the leaf that points to the eye present the greatest and most easily recognized variety in form as well as in number, and owing to their protected position are almost always sufficiently evident for identification. The reverses show only minor variations, such as the position of the arms of the Nike, wide apart or close together; the position of her knee in relation to the head of the third horse; the angle at which the goad is held; the position of the driver's hands; the reins and horses' collars, and especially the position of the horses' legs and hoofs; and, in the exergue, the position of the helmet and greaves and the presence or absence of the inscription AOAA, which however is rarely to be seen on the coin even when present on the die. From the specimens examined it has been impossible to determine whether the following reverses were so inscribed: R. I, R. XV, R. XVII, R. XVIII, R. XXI, R. XXIII.

The statement contained in the catalogue of the Bunbury collection (Sotheby, June 1896, No. 415), that "on the reverse on the exergual line to right there appears to be a portion of the artist's signature E ...N," is hardly possible, nor is the statement in the same catalogue in regard to No. 416: "behind the head of Persephone is a large star of eight rays, there appear to be traces of the artist's initials on the dolphin to right." Although both of these statements are quoted by Forrer in his "Signatures de Graveurs sur les Monnaies Grecques," where many of Evans' surmises are likewise repeated as facts. I have found no trace of any signature on any reverse, nor any signature on any obverse, other than the usual one in large letters below the dolphin below the neck.

The evidence of the cracked and rusted dies shows that A. I was first struck with R. I, then with R. II (crack between the dolphin and neck); R. II was used at about the same time with B. I, and later with C. I, C. VII, and C. VIII in that sequence. C. I was first struck with R. III (a scar appears on the lower left dolphin's nose); C. VII was first struck with R. IV (crack over the eye); C. VIII was first struck with R. V, then with R. II, and lastly with R. IV (crack at front leaf). It appears more reasonable to suppose that the full signature preceded the shorter form than that it was a contemporary variety, but this is not proven; it certainly was not later.

C. XV was first struck with R. IV, then with R. VIII and R. VII (crack between dolphin and neck); R. VIII was then used with C. XVI, which was later struck with R. IX (crack on upper side of dolphin under neck). R. VIII was later used in a badly rusted condition with F. I, which was also struck with R. IX, likewise badly rusted.

R. IX was used in the following sequence: C. XVI, new; D. I, a spot above the right greave; D. II, spots forming a semi-circle from the right greave to helmet; F. I, die badly corroded (it should be noted that D. II is C. XVI with the delta added). D. I was struck with R. IX first, before the crack between the dolphin and the neck had extended to the front; then with R. X; and at about

the same time with R. XI.

R. XI was first used with D. I; then, a trifle rusted, with E. I; and lastly, badly rusted, with F. II.

This establishes the order of A. B. C. D. E. F., which together form the first group. R. XIV was used in the following sequence: F. IV, F. VII, F. VIIa, and (badly rusted) F. IX; F. IX was first struck with R. XIV; then with R. XVI, which cracked; then with R. XV, which it used at about the same time as F. VIIa and F. VIII; F. IXa also used R. XV.

R. XXI was first used with J. I at about the same time as R. XXII; it was then used with J. II, and about the same time with F. IXa, which had been first struck with R. XV; and it was used last with J. III.

F. IV, the first to use R. XIV, was the last to use R. XII, which had been used simultaneously by F. II and F. III; F. II used R. XI and R. XII at the same time.

The order is thus established: D. I before E. I, and E. I before F. II by R. XI.

That F. II and F. III were contemporary and earlier than F. IV is shown by R. XII.

R. XIV proves the sequence F. IV, F. VII, F. VIIa, F. IX.

F. I is proved later than C. XVI, D. I, D. II, by R. IX; and later than C. XV and C. XVI by R. VIII.

In the second group G. I was first struck with R. XVII, which cracked; it was then struck with R. XIX, which reverse was used at the same time with J. VIa, and was also used with G. Ia.

J. VI used R. XXII, which was used in the following sequence: J. I, J. IV, J. V, J. VI, J. VIIa.

J. I was struck with R. XXI before J. II and J. III.

J. V used R. XXIII before K. II, K. III, and F. IXa, but after K. Ia; the G. series is thus connected with the J. series by R. XIX, and the J. series with the K. by R. XXIII.

The connection of the two groups A. B. C. D. E. F. and G. H. J. K. L. rests on F. IXa, which is F. IX with a dot added below the chin. This dot was added after two large cracks had appeared across the back of the head, and these cracks serve to identify these coins as F. IXa rather than F. IX, when the dot does not show, as in the case of the specimen Caprotti, Milan, 1910, No. 425, where a bad cut has destroyed part of the obverse, but the cracks on the back of the head are even greater than on the Berlin coin, which is evidently F. IXa.

F. IXa was struck first with R. XV (E. T. Newell Collection, and Hirsch XXXII 1912, No. 327); then with R. XXI (Berlin); and lastly with R. XXIII (Caprotti, Milan 1910, No. 425). It is thus shown that F. IXa connects with its own F. group through F. VIIa, F. VIII, and F. IX by R. XV; with the J. group, J. I, J. II, and J. III by R. XXI; and with the J. and K. groups, J. V, K. Ia, K. II, and K. III by R. XXIII.

The order established by the condition of the dies is confirmed by certain details on the reverses. The Nike from R. I to R. XII holds her arms and hands apart and has a heavy roll of drapery around her thigh, while the horses' reins pass over the right hand, or last horse's neck; at R. XV the Nike holds her hands closer together; at R. XVI they are close. The drapery becomes lighter on R. XVIII, and only two reins pass over the last horse's neck. At R. XVII, when the second group begins with G. I, the drapery is light and the hands close together, although the arms are still slightly apart and the reins pass over the last horse. At R. XIX the arms and hands are together, the drapery light, and only one rein passes over the last horse's neck. These features remain the same through R. XXIV, with the exception that on R. XXII two reins pass over the last horse. G. F. Hill, in *Le Musée* (I, [1904], 50 f.) places L. I as the last of this series of dekadrachms, and the evidence of the reverse dies tends to confirm his opinion. The fact that a transition can be noted through R. XIV, R. XV, R. XVI, and R. XVIII, which have been shown to have been

nearly contemporary by F. VIIa and F. IX, confirms the order of the dies at that point and the precedence of the A. B. C. D. E. F. series over the G. H. J. K. L.

Single specimens and hoards of these coins continue to be found, and more dies will probably be added to the list here given. Examples of other dies may be hidden in some of the smaller private collections or museums. That my list is not complete is proved by two black glazed cups, No. 1927, 38 in the Museum fűr Kunst und Gewerbe, Hamburg, and a similar cup in the Louvre, Salle H, Vitrine D, M. N. C. 204, the interior of which is reproduced, enlarged two diameters, as the frontispiece.

These cups have in their centre a relief which has been made from a mould made from the impression of a Syracusan dekadrachm of the Euainetos type of die, of which up to the present no coin has been recorded. This die resembles F. VIIa, but back of the neck, in place of the shell, there is a symbol which has been found on no other coin. The earring is evidently a clumsy attempt by the potter to restore a detail which had failed to make a sufficiently strong impression in the mould.

There is no way of determining the identity of the artists who were responsible for any of the dies other than those which bear a signature. G. F. H. (G. F. Hill) says in the *British Museum Quarterly* (vol. II, no. 4. [1928], p. 95, n. 64 "Greek Coins"): "No. 4 is a decadrachm of Syracuse of about 400 B.C. the well-known type of the head of Arethusa is that associated with the engraver Euaenetus, but this is one of the unsigned issues for which he was probably not responsible." The comment is pertinent, although the coin happens to be the specimen from the Murray collection which I have listed under C. VIII, one of the signed dies, since other specimens show the signature which does not appear on the Murray coin.

It is unlikely that a man who took sufficient pride in his work to cause him to place his name in large letters upon it in a most conspicuous position should have also made the dies which bear the various symbols but lack the signature. No coin bears both a symbol and a signature with the exception of the two coins with the delta, and one of these, D. II, is simply C. XVI with the delta added. The delta dies are given a separate series since the signature is so often lacking from the coin, owing to careless striking, and since these coins have so long been classified as different from and earlier than the other signed coins.

It is possible, in view of the great number of dies required, that assistants were employed by Euainetos who were allowed to identify their work in this manner with various symbols but could not place their names upon coins for which Euainetos alone was responsible, while on the other hand the master would not place his name upon the work of another artist. The variations among the dies with the shell or the dot make it also possible that the symbol was the mark of a hall or branch of the mint or factory and was used indiscriminately by all of the men employed there, an original die by Euainetos serving as a model in all cases. Where a design is so closely followed it is impossible to say how many men were responsible for the minor differences which may be noted; they are little more than may be observed in the series which bear the signature. The resemblance between the coins bearing the eight-pointed star and the gold coins which are marked with the same symbol is interesting.

The designs of both the obverse and reverse were old ones which had been used and modified by many engravers. Euainetos and Kimon each created his own type, and the entire series here illustrated shows a most amazing repetition of the details of the arrangement of the hair, locks and curls being slavishly repeated. C. I and C. VIII are almost identical, the inscription being the main point at which they differ. The lettering was always added haphazard, the final N of ΣΥΡΑΚΟΣΙΩΝ being frequently obscured entirely or in part by the tail of a dolphin. Both forms of the N were used indiscriminately (compare the signatures on C. VII and C. XVI). The reverse

dies are rather monotonous. In R. XIV, evidently anxious to introduce some added action, the artist in raising the horses completely off the ground forgot the last pair of hind legs. This he attempted to remedy in R. XVI, but the added legs produced such an unfortunate effect that the horses were brought down to earth again and remained there. R. XXIV, like its obverse L. I, is the only pronounced variety in the series.

To attempt to date coins of the end of the fifth century B.C. within a decade, or to place one as earlier than another from its style or by the action or lack of action in the design, is futile. One hundred years earlier Greek artists, struggling for expression, made new discoveries every year which were recorded in their works, but as time went on the lesson was learned and by 412 B.C. there was little field for experiment. The engravers of these coins were fully equipped, and when the first die of the series was engraved the artist who designed it had all of the knowledge and artistic development which are displayed in the latest, whichever one that may be. It was a case of personal variation such as may be found in the work of any artist and not part of the artistic development of a race; art still developed — it never stands still — but its progress was slower in 400 than in 500 B.C., and dating by style, always uncertain, becomes more difficult and less reliable.

Many questions are raised by these coins which remain unanswered. Why should an artist continue to engrave dies which were too large for the coins for which they were intended? Coins which show the entire die are almost unknown; even when large enough they are carelessly struck and badly centred. This is in strong contrast with Kimon's coins, which are often well struck from dies which fit the coins. How was the line below the chin removed from the die of F. VII? Die G. I has no inscription whatever, its straight profile is unlike that of any other coin, it looks unfinished. Why was it reissued with a griffin's head beneath the chin after a large flaw had obscured the shell behind the head? The shell is unique in that it is turned down instead of up. The two griffins' heads on H. I are slightly different from the one on G. Ia; what connection was there between the two coins? L. I, with its reverse R. XXIV, is unlike any other die, and the two known examples are more carefully struck than the normal type. Were they trial pieces, or were they struck for some special holding of the games?

If the first issue of the Euainetos dekadrachms is dated 412 B.C., the occasion of the tenth anniversary of the victory may have been celebrated by the placing of the delta on the coins D. I. The demand for these pieces being great, one of the older dies, C. XVI, was brought out and reissued with the delta added (D. II).

The normal eyesight of a man would not permit his engraving one of these dies much after his fortieth year without artificial aid. D. I is the last die which bears the signature of Euainetos; if he was forty years old in 403 B.C. he might have placed his signature on dies which he cut twenty-two years earlier at the age of eighteen. This would place his earliest tetradrachms at about 425 B.C., which agrees with previously held theories; it would also account for the lack of signed dies after the delta series, as well as the necessity for reissuing one of the signed coins at this time.

The dot may likewise have been added to older dies and new dies engraved with the dot to denote the second ten-year period after the victory. This would bring the last of the dekadrachms down to about 393 B.C.

Shortly after the signed series came to an end the change in the type of the reverse began, and the Nike as she appears on these later dies is almost identical in every detail with the Nike on the reverses of the dekadrachms signed by Kimon; the arrangement of the reins is also similar. This fact, taken together with the character of the head on F. I, which resembles the heads on the Kimon coins far more than the Euainetos type of head, suggests the possibility that the men employed in copying the Euainetos models were influenced by Kimon's dekadrachms; none of the

reverses are signed, and the same man or men may even have made reverse dies for both artists. The K. series, with the eight-pointed star, might have been contemporary with the shell series, and may owe its distinctive type of head to the coins which have been generally classified as Kimon's earliest; the resemblance is striking.

Sir Arthur Evans in his book calls attention to the probable derivation of the design of this dekadrachm of Kimon's from two Syracusan tetradrachms, one signed by Euainetos and an earlier one (judging from its style) by an unknown artist. That Kimon developed his art in Syracuse in the company of the older and more celebrated artist, established his own mint, and influenced with his strong personality the other die engravers of his time appears to be evident. While Kimon's signature is found only on the coins of Syracuse, Euainetos signed his name on a coin of Katanē, which is interesting for several reasons: his signature appearing on the coins of two cities is one of the strongest reasons for believing that he signed as an artist rather than as a magistrate; the head on the Katanē coin resembles in type that found on the dekadrachms with the shell F. V and the dot J. VI more than any of the signed series A., B., or C.; the fact that Euainetos signed coin dies for two cities provides one of the few pieces of definite evidence in regard to the history of his life.

Many forgeries of these coins are in existence, and some have found places in great collections. Forged dies have been cut and coins of correct weight struck; while the obverse dies are rarely well executed the reverse is sometimes excellent. Certain of the coins listed in this book have been suspected; as already stated, I doubt the authenticity of C. Y., but I know this coin only from a photograph and a cast. Reverse XIII is unusual: the trophy is full-face instead of three-quarters, the helmet is different from the others, and the grouping of the reins is strange. However, the type of the Nike and the action of the driver and the horses is correct for coins of the F. series. This reverse is used with F. V, which I have examined and believe to be genuine; it is also used with F. VI, in Copenhagen, which has a peculiar head, but with such variations from the normal as may be found in the obverse of G. I and the obverse and reverse of L. I; it is dangerous to state that a coin is false simply because it does not conform to a type. The exact position in the series of F. V and F. VI and R. XIII is uncertain, since they do not connect with any other dies.

The Naples Museum considers Naples 5123 and Naples 5124, both listed by me under C. VIII, as doubtful; this, however, is simply a question of replicas of known dies.

The coins which have been selected to illustrate the obverse dies are identified in the following lists by a *, those selected to illustrate the reverse dies by a †.

1 List of Known Specimens

A. I

ϵY·PA·KOϵI·ΩN

Below the lower dolphin, EYAINETOY·

R. I †1 New York, A. Gallatin Collection. Gr. 42.62.

R. II *†1 Baltimore, J. W. Garrett Collection. Gr. 42.96.

Hill, "Select Greek Coins," Pl. *xxviii*, 1.
Evans, "Syr. Med.," Pl. *v*, 13a, 13b., Sta. Maria Hoard.

Forrer, "Signatures de Graveurs," p. 119; Euainetos, 40.
Montagu Collection, Sotheby, 1896, 150.

2 New York, E. T. Newell Collection. Gr. 43.12.
Weber Collection, Hirsch *xxi*, 685.

B. I

ϟY·P(AK)·OϟIΩN

Below the lower dolphin, **EY·AINE·TO·**

R. II *1 Munich.

C. I

ϟY·PA·K·O·ϟIΩΛ·

Below the lower dolphin, **EY·AINE·**

R. II *1 Paris, Private Collection. Gr. 42.75.
Naville *xiii*, 344.
Perrin Collection, Rollin & Feuardent, May 1909, 5.
Rollin & Feuardent, May 1908, 188.
Hoskier Collection, Hirsch *xx*, 159.
(Warren Collection) Sotheby, 1905, 213.
Regling, Warren Collection 364.

2 Naples, Santangelo 8512.

3 Philadelphia, Academy of Fine Arts.
Spink plate, "Add. Med. from Sta. Maria Hoard," 12.

4 New York, E. T. Newell Collection. Gr. 42.38.
Benson Collection, Sotheby, 1909, 336.

5 Butler Collection, Sotheby, 1911, 82.

6 Feuardent, 1914, 145.
Butler Collection, Sotheby, 1911, 83.

7 Cantoni Collection, G. Sambon, Milan, 1887, 4216.

R. III 1 Brussels (Hirsch).

†2 Acireale, Barone Pennisi di Floristella Collection 679. Gr. 43.15.

3 Paris, R. Jameson Collection 828. Gr. 43.28.
Allatini Collection, Sotheby, 1904, 2.

Bunbury Collection, Sotheby, 1896, 418.
Woodward Collection.

4 Hirsch *xi*, 120.

Du Chastel 146. B.

C. II

ϵY·PA·K·OϵIΩN

Below the lower dolphin, **EY·AINE·**

R. III *1 Paris, de Luynes 1248. Gr. 42.85.

2 Berlin.

3 Boston. 04.536. Gr. 42.79.

Regling, Warren Collection 366.
Forrer, "Signatures de Graveurs," p. 117, cut.
Evans, "Syr. Med.," Pl. *v*, 12 and Pl. *ix*.
Evans Collection, Sotheby, 1898, Sta. Maria Find, 102.

4 Boston. 97.387 (689). Gr. 42.79.

5 Cefalu, Mandralisca Museum.

6 Copenhagen. Gr. 42.00.

7 Leningrad. Gr. 42.48.

8 Palermo, Legato Valenza.

9 Philadelphia, Academy of Fine Arts.

10 Toronto.

11 Vienna.

12 Acireale, Barone Pennisi di Floristella Collection 680. Gr. 42.90.

13 New York, W. B. O. Field Collection. Gr. 42.25.

A. Cahn Sale, July 1928, 225.
Pozzi Collection, Naville *i*, 615. Gr. 41.98.
Rome Collection, Sotheby, 1904, 107.

14 Paris, H. de Nanteuil Collection 361 bis.

15 Naville *xii*, 953. Gr. 42.74.

Helferich-Eisenach Collection, S. Rosenberg, March 1914, 36.
Prowe Collection, Egger, 1904, 252.
Montagu Collection, Sotheby, 1897, 77.

16 Nordheim Collection, Glendining, Dec. 1929, 712. Gr. 42.50.

17 Weber Collection, 1922, 1614. Gr. 42.98.

"(Sparkes & Nelligan Collections.)"

18 Hirsch *xxxiii*, 464. Gr. 42.40.

19 Benson Collection, Sotheby, 1909, 335. Gr. 42.93.

20 Martinetti Collection, Sambon Canessa, 1907, 770. Gr. 43.10.

21 Egger, 1899, 48.

C. III

ϵY·PΛ··K·OϵIΩ·

Below the lower dolphin, **EY·AINE·**

R. III *1 Glasgow, Hunter 52. Gr. 43.15.

2 London 176. Gr. 42.73.

3 Syracuse. Gr. 42.60.

4 Naples, de Ciccio Collection.

5 Egger, 1906, 176. Gr. 43.13.
Giesecke, "Sicilia Numismatica," Pl. *XIII*, 8.

6 R. Hobart Smith Collection, Sotheby, 1897, 54. Gr. 42.89.

C. IV

ϵY·PΛ·K·O·ϵIΩN

Below the lower dolphin, **EY·AINE·**

R. III *1 Copenhagen, Musee Thorvaldsen 1307.

2 Berlin.

3 Hirsch *xix*, 258. Gr. 41.98.

4 Merzbacher, 1909, 2572. Gr. 42.76.

C. V

(ϵY)·PA·KO·ϵ·IΩN

Below the lower dolphin, **(EY·AI)NE·**

R. III *1 New York, E. T. Newell Collection. Gr. 42.90.

C. VI

ϚY·PA·KOϚ·IΩN·

Below the lower dolphin, EY·AINE·

R. III *1 Brussels (A. F.).

Du Chastel 146.
Forrer, "Signatures de Graveurs," Pl. *III*, 15.

2 Berlin.

3 London 178. Gr. 42.97.

4 Acireale, Barone Pennisi di Floristella Collection 681. Gr. 42.85.

5 Naville *xiii*, 346. Gr. 42.37.

Prowe Collection, Egger, 1904, 251.
Montagu Collection *ii*, Sotheby, 1897, 76.

6 Bement Collection, Naville *vi*, 516. Gr. 42.75.

G. H. Earle Jr. Collection, Chapman, 1912, 112.

C. VII

ϚY·PA·KO·Ϛ·IΩN·

Below the lower dolphin, EY·AINE·

R. II 1 Copenhagen, Musee Thorvaldsen 1308.

2 Paris, R. Jameson Collection. Gr. 42.34.

R. IV *1 Berlin.

2 Berlin.

3 Berlin.

4 The Hague.

5 Cambridge, A. H. Lloyd Collection 1020. Gr. 43.16.

6 New York, E. T. Newell Collection. Gr. 42.87.

7 Paris, Private Collection 141.

Booth Collection, Sotheby, 1900, 60.

8 (Rhousopoulos Collection), Hirsch *xiii*, 428. Gr. 43.15.

9 Hess, 1912, 24. Gr. 43.20.

Hess, 1902, 657.
Fox Collection.

10 Burel Collection, Feuardent, 1913, 96.

11 Von Kaufmann Collection, L. Hamburger, 1929, 141. Gr. 42.95.

C. VIII

ϵΥ·ΡΛ·Κ·Ο<·ΙΩΝ·

Below the lower dolphin, **ΕΥ·ΑΙΝΕ·**

R. II *1 New York, A. Gallatin Collection. Gr. 42.99.

2 Paris, Private Collection.

3 Hirsch, stock.

R. IV 1 Cambridge, Leake. Gr. 42.83.

2 London, Murray.

3 Naples, Santangelo 8513.

4 Syracuse. Gr. 41.70.

5 Syracuse. Gr. 43.20.

6 Syracuse. Gr. 42.80.

7 (Evans Collection), Sotheby, 1898, 104. Gr. 43.03.

8 Sambon Canessa, 1927, 975. Gr. 43.05.

9 Vienna, Leopoldstädter Communal-Real- und Obergymnasium 531. Gr. 43.117.

R. V †1 Vienna.

2 Naples 5122. Gr. 43.20.

3 Naples 5123. Gr. 38.90.

4 Naples 5124. Gr. 40.17.

C. IX

ϵΥ·Ρ(ΑΚΟ)·ϵ(ΙΩΝ)

Below the lower dolphin, **ΕΥ·ΑΙΝΕ·**

R. IV *1 New York, A. Gallatin Collection. Gr. 43.26.

Naville *xiii*, 345.

2 Otto Helbing Nachf. stock 1929. Gr. 43.00.

Sambon Canessa, 1927, 976.

3 E. Merzbacher Nachf., 1910, 260. Gr. 40.50.

Hirsch *xxxiv*, 198.
Hirsch *xxxi*, 221.
Serrure, 1903, 206.

C. X

ϵY·PA··KO·ϵIΩN

Below the lower dolphin, **EYAINE·**

R. IV *1 Berlin.

R. Weil, Winckelmannsfeste, 1884, Pl. *II*, 2.

2 Berlin.

3 Syracuse.

4 Sartiges, 1910, 137. Gr. 43.25.

Sambon Canessa, 1907, 363.

5 Martinetti Collection, Sambon Canessa, 1907, 774.

R. VI 1 London, Ford.

2 Munich.

3 Philadelphia, Academy of Fine Arts.

4 Philadelphia, Academy of Fine Arts.

5 New York, A. Gallatin Collection. Gr. 42.96.

Glendining 2, 1929, 238.
Naville *xii*, 952.
Hirsch *xxxii*, 323.

6 Naville *v*, 1116. Gr. 41.90.

Egger *xxxix*, 98.
A. Löbbecke Collection, Hirsch *xxvi*, 98.

7 Caprotti Collection *iii*, Clerici, Milan, 1910, 424. Gr. 42.85.

Leo Hamburger, 1910, 69. Gr. 43.20.

C. XI

ϵY·PA·K·Oϵ·IΩN

Below the lower dolphin, **EY·AINE·**

R. IV 1 Pozzi Collection, Naville *i*, 616. Gr. 42.72.

R. VI *1 Paris 1.382.

2 Berlin.

3 Berlin.

4 Brussels (A. F.).

5 New York, Hoyt Miller Collection.

6 Paris, H. de Nanteuil Collection 361. Gr. 43.09.

Bougerol Collection Bourgey, 1909, 165.

7 Fenerly Bey Collection, Egger *xli*, 154. Gr. 41.97.

Ratto, Milan 1911, 190.
Stiavelli Collection, Santamaria, Rome, 1908, 205.
(Rhousopoulos Collection), Hirsch *xiii*, 429.

8 De Molthein Collection, Rollin & Feuardent, 1895, 579. Gr. 43.20.

De Molthein Collection, A. Cahn, 1901, 579.

C. XII

ϚY·PΛ··KO·ϚIΩN·

Below the lower dolphin, **EY·AINE·**

R. IV *†1 Paris, de Luynes 1250. Gr. 43.28.

Dupré Collection.

2 Boston, Warren, Recent Accession, 1929.

3 London, Bank.

4 New York 295. Gr. 41.64.

Ward Collection, Sta. Maria Hoard, 295.

5 Syracuse. Gr. 42.80.

6 The Hague.

7 Acireale, Barone Pennisi di Floristella Collection 682. Gr. 42.78.

8 Baltimore, J. W. Garrett Collection.

9 New York, W. G. Beatty Collection. Gr. 42.78.

10 Ratto, 1912, 496. Gr. 43.32.

Egger, 1909, 240.

R. VI 1 London 177. Gr. 42.15.

2 Syracuse. Gr. 43.20.

3 New York, Mrs. G. P. Cammann Collection. Gr. 42.98.

Polese Collection, Canessa, 1928, 632.

4 Schulman, 1912, 45. Gr. 41.50.

C. XIII

ϵY·PA·K·OϵIΩ·

Below the lower dolphin, **EY·AINE·**

R. VI *1 Berlin.

2 Philadelphia, Academy of Fine Arts.

Spink plate, "Add. Med. from Sta. Maria Hoard," 11.

3 Syracuse. Gr. 42.70.

4 New York, A. Gallatin Collection. Gr. 42.81.

5 De Remusat Collection, Feuardent, 1900, 352.

6 Weber Collection, Hirsch *xxi*, 684. Gr. 43.26.

7 Sotheby, 1894, 61.

R. ? Billoin Collection, Rollin & Feuardent, 1886, 232.

C. XIV

ϵY·PΛ·K·O·ϵIΩN

Below the lower dolphin, **EY·AINE·**

R. VI 1 Berlin.

2 Boston. 03.946. Warren C. & M. 1239. Gr. 43.04.

3 Boston. 03.947. Warren C. & M. 1240. Gr. 42.56.

4 Naples, Santangelo 8514.

5 Naples, Santangelo 8515.

6 Philadelphia, Academy of Fine Arts.

Spink plate, "Add. Med. from Sta. Maria Hoard," 10.

7 Philadelphia, Academy of Fine Arts.

8 New York, E. T. Newell Collection. Gr. 42.79.

(Duruflé Collection), Rollin & Feuardent, 1910, 213.
P. d'Amecourt 58.

9 New York, A. Gallatin Collection. Gr. 43.20.

"Collection Hongroise," Schulman, 1924, 321.
Hazeldine Collection, Sotheby, 1914, 58.

10 Naville *x*, 306. Gr. 43.03.

Regling, Warren Collection 363.

(Warren Collection), Sotheby, 1910, 110.

11 Bougerol Collection, Bourgey, 1910, 116. Gr. 42.20.

Sambon Canessa, 1907, 365.
Sambon Canessa, 1906, 229.

R. VII *†1 Paris, de Luynes 1249. Gr. 43.20.

2 Paris 1, 380.

3 Paris 1, 381.

4 Copenhagen. Gr. 43.19.

5 Philadelphia, Academy of Fine Arts.

Spink plate, "Add. Med. from Sta. Maria Hoard," 14.

6 Florence, Marchese Venturi Collection.

7 Paris, Colonel Godefroy Collection. Gr. 42.72.

Evans Collection, Sotheby, 1898, 103.

8 E. Bourgey stock, 1929.

9 Naville *v*, 1115. Gr. 43.17.

10 Hirsch *xiv*, 209. Gr. 41.72.

11 Hirsch *xxxii*, 322. Gr. 43.22.

12 Evans, "Syr. Med.," Pl. *vi*, 1.

C. XV

ϚY·PAK·O·ϚI·ΩN

Below the lower dolphin, **EY·AINE·**

R. IV 1 Basle. Gr. 42.92.

2 Dresden. Gr. 42.70.

3 Philadelphia, Academy of Fine Arts.

Spink plate, "Add. Med. from Sta. Maria Hoard," 15.

4 Philadelphia, Academy of Fine Arts.

5 Syracuse. Gr. 42.70.

6 Vienna.

7 Hirsch *xiv*, 211. Gr. 41.48.

8 Naville *iv*, 363. Gr. 42.52.

9 Bunbury Collection *i*, Sotheby, 1896, 413. Gr. 43.29.

Thomas Collection.

R. VII 1 Berlin.

2 Dresden. Gr. 39.20.

3 Paris, H. de Nanteuil Collection 360. Gr. 42.28.

G. Picard Collection, Sambon, 1923, 344.
Burel Collection, Feuardent, 1913, 95.

4 Leo Hamburger stock, 1929. Gr. 42.58.

Naville *x*, 307.

5 Rollin & Feuardent stock, 1929. Gr. 41.98.

Naville *xii*, 954.

6 Ratto, 1929, 181. Gr. 42.00.

Ratto, 1926, 258. Gr. 41.85.
Adolph Hess, 1912, 23.
Hirsch *xxxiii*, 465.
Hirsch *xiv*, 210. Gr. 41.95.

7 Von Kaufmann Collection, L. Hamburger, 1929, 140. Gr. 43.07.

8 Rollin & Feuardent, 1908, 189.

G. R. Smith Collection, 1890.

R. VIII 1 London 175. Gr. 43.09.

2 Munich.

3 Odessa. Gr. 43.04.

4 Syracuse. Gr. 42.90.

5 Acireale, Barone Pennisi di Floristella Collection 685. Gr. 42.77.

6 Helferich-Eisenach Collection, S. Rosenberg, March 1914, 37. Gr. 43.05.

E. Merzbacher Nachf., 1910, 259.
Dr. Rousset Collection, Bourgey, 1908, 68.
Hoskier Collection, Hirsch *xx*, 160.
Hirsch *xvi*, 290.
Mackerell Collection, Sotheby, 1906, 6.

7 Sambon Canessa, 1907, 364. Gr. 42.60.

C. XVI

ϚY·PA·K·OϚ·IΩN

Below the lower dolphin, **EY·AINE·**

R. VIII †1 Munich.

2 Paris 1.383.

3 Adolph Hess Nachf., 1912, 22. Gr. 40.20.

4 Sotheby, July 1910, 111. Gr. 43.03.

R. IX *1 Brussels (A. F.).

Du Chastel 147.
Forrer, "Signatures de Graveurs," Pl. *III*, 16 and Cover.

C. Y

No ϟYPAKOϟIΩN inscription.
Below the lower dolphin, **EY·AINE·**

R. Y *1 Copenhagen. Gr. 43.21.

Reutze Collection Catalogue, 1863, 141.

D. I

ϟY·PA·K·O·ϟION

Below the lower dolphin, **EY·AINE·**
In the field, below the chin, Δ

R. VIII 1 Palermo, dono Tagliavia.

2 Cambridge, C. T. Seltman Collection.

R. IX *1 Paris, Private Collection 289.

2 Cambridge, Leake. Gr. 43.21.

3 Munich.

4 Naples 5121. Gr. 43.00.

5 Paris, de Luynes 1245.

6 Syracuse. Gr. 43.30.

R. X 1 Florence, Archaeological Museum.

2 The Hague.

3 London 174. Gr. 43.26.

4 Naples, Santangelo 8518.

†5 Acireale, Barone Pennisi di Floristella Collection 695. Gr. 43.20.

6 New York, W. G. Beatty Collection. Gr. 42.57.

7 New York, A. Gallatin Collection. Gr. 42.55.



Vogel Collection, Adolph Hess Nachf., 1929, 151.

R. XI 1 Berlin.

2 Copenhagen. Gr. 43.30.

†3 Rochester, G. J. Bauer Collection. Gr. 42.15.

Pozzi Collection, Naville *i*, 614.
O'Hagan Collection, Sotheby, 1908, 218.
Ashburnham Collection, Sotheby, 1895, 51.

4 Naples, Santangelo 8519.

5 Paris 1, 378.

6 Paris 1, 379.

7 Philadelphia, Academy of Fine Arts.

8 Collignon Collection, Feuardent, 1919, 117.

9 Martinetti Collection, Sambon Canessa, 1907, 773. Gr. 43.05.

10 Hirsch *xvii*, 531. Gr. 43.05.

Hirsch *xiv*, 208.

D. II

ϚY·PA·K·OϚ·IΩN

Below the lower dolphin, EY·AINE·
In the field, below the chin, Δ

R. IX *1 Cambridge, A. H. Lloyd Collection 1021. Gr. 43.37.

2 Berlin.

3 Berlin.

4 Boston 04.1605 C. & M. 1285. Gr. 43.03.

5 Copenhagen, Musee Thorvaldsen 1309.

6 Glasgow, Hunter 53. Gr. 42.58.

7 London 173. Gr. 42.83.

Evans, "Syracusan Medallions," Pl. *v*, 11.
Head, British Museum Guide, Pl. *XXV*, 28.
Head, "History of the Coinage of Syracuse," Pl. *iv*, 3.

8 Milan.

9 Naples 5119. Gr. 43.30.

10 New York 294. Gr. 42.37.

Ward Collection 294. Sta. Maria Hoard.

11 Palermo G. 14703.

12 Palermo, Ripostiglo Salinas.

13 Philadelphia, Academy of Fine Arts.

Spink plate, "Add. Med. from Sta. Maria Hoard," 16.

14 Syracuse. Gr. 42.20.

15 Syracuse. Gr. 42.80.

16 Vienna.

17 Winterthur. Gr. 42.60.

18 Berlin, von Gwinner Collection 1.

19 New York, A. Gallatin Collection. Gr. 43.10.

20 New York, J. P. Morgan Collection. Gr. 43.40.

Sambon Canessa, 1907, 366.

21 New York, J. P. Morgan Collection. Gr. 43.23.

Sambon Canessa, 1907, 368.

22 New York, E. T. Newell Collection. Gr. 43.36.

23 Paris, R. Jameson Collection 827. Gr. 43.28.

Egger, 1906, 175.

24 W. H. Woodward Collection 137. Gr. 43.39.

"From the 1925 find."

25 Ravel stock, 1929.

26 Otto Helbing Nachf., 1930, 139. Gr. 41.70.

Otto Helbing Nachf., 1928, 108.
(J. R. MacClean Dup.), Sotheby, 1909, 53.
H. P. Smith Collection, Sotheby, 1905, 120.

27 Benson Collection, Sotheby, 1909, 334. Gr. 43.13.

28 Prowe Collection, Egger, 1904, 253.

29 Prowe Collection, Egger, *xlvi*, 86. Gr. 43.06.

30 Egger, 1908, 103. Gr. 43.42.

31 Otto Helbing Nachf., Oct. 1927, 2686. Gr. 43.56.

Ratto, 1927, 430.
Egger, 1909, 239.
Egger, 1908, 102.

32 Weber Collection, Hirsch *xxi*, 683. Gr. 42.26.

33 Hirsch *xxxiv*, 197. Gr. 43.30.



Hirsch *xviii*, 2280.

34 Hirsch *xxxii*, 319. Gr. 43.42.

35 Hirsch *xxxii*, 320. Gr. 43.00.

36 Naville *xiii*, 340. Gr. 43.19.

37 Naville *xiii*, 341. Gr. 43.33.

38 Naville *xiii*, 342. Gr. 43.29.

39 Naville *xiii*, 343. Gr. 43.30.

40 Naville *xii*, 951. Gr. 43.50.

Lambros Collection, Hirsch *xxix*, 121.

41 Bement Collection *i*, Naville *vi*, 515. Gr. 43.29.

Hirsch *xxxii*, 318.

42 Naville *v*, 1114. Gr. 43.13.

Hirsch *xxxii*, 321.

43 Leo Hamburger, 1921.

44 Sambon Canessa, 1907, 367. Gr. 42.27.

45 P. P. Santamaria, 1928, 108.

E. I

ϚY·PA·K·O·ϚIΩN

Behind the neck a scallop shell, turned up.
The shell has eleven scallops.

R. XI *1 Paris, R. Jameson Collection 829. Gr. 43.09.

Sotheby, 1900, 150.
Gonin Collection.

2 Berlin.

3 Boston 04.1604. Warren C. & M. 1284. Gr. 43.16.

Regling, Warren Collection 359.

4 Glasgow, Hunter 55. Gr. 43.32.

5 Acireale, Barone Pennisi di Floristella Collection 687. Gr. 43.06.

6 Berlin, von Gwinner Collection 5. Gr. 42.55.

Hirsch *xxxiii*, 466.
Martinetti Collection, Sambon Canessa, Rome, 1907, 772.

7 New York, E. T. Newell Collection. Gr. 42.52.

Prowe Collection, Egger *xl*, 423.
Hirsch *xv*, 1182.
Bunbury Collection, Sotheby, 1896, 415.
Stewart Collection (1844).

8 Naville *iv*, 365. Gr. 43.22.

Hirsch *xxxii*, 325.

9 Weber Collection, Hirsch *xxi*, 686. Gr. 43.27.

10 (R. Hobart Smith Collection), Sotheby, 1909, 71. Gr. 42.76.

Hirsch *xviii*, 2281.
Sambon Canessa, 1906, 228.

11 Otto Helbing Nachf., Oct. 1927, 2687. Gr. 41.70.

Sotheby, 1920, 33.

12 E. Merzbacher Nachf., 1910, 262. Gr. 43.20.

13 New York, E. T. Newell, cast of lost coin.

R. ? Butler Collection, Sotheby, 1911, 84.

F. I

ϵY·PA·K·OϵIΩ·N

Behind the neck a scallop shell, turned up.
The shell has seven scallops.

R. VIII *1 New York, A. Gallatin Collection. Gr. 43.11.

2 Philadelphia, Academy of Fine Arts.

3 Vienna.

4 New York, E. T. Newell Collection. Gr. 43.17.

White-King Collection, Sotheby, 1909, 77.

5 New York, T. C. Schmuck Collection.

6 Colgate Collection, Glendining, 1918, 56.

7 Naville *v*, 1119. Gr. 43.22.

Marquis Durazzo Collection, Ratto, 1896, 473.

8 Egger, 1908, 104. Gr. 43.41.

R. IX 1 Brussels (Hirsch).

2 Philadelphia, Academy of Fine Arts.

Spink plate, "Add. Med. from Sta. Maria Hoard," 6.

F. II

ϵY·PΛ·K·O·ϵIΩN

Behind the neck a scallop shell, turned up.
The shell has seven scallops.

R. XI *1 Syracuse. Gr. 43.30.

2 E. Merzbacher Nachf., 1910, 261. Gr. 43.21.

(Rhousopoulos Collection), Hirsch *xiii*, 430.

R. XII 1 Athens. Gr. 42.43.

Hirsch *xi*, 121.

Journal International d'Archéologie Numismatique, *ix*, 1906, Pl. *XII*, 2.

2 Boston 11.1768. Gr. 43.39.

Regling, Warren Collection 361.

†3 Oxford, Ashmolean.

4 Palermo, Barone Bordonaro Collection 369.

5 Spink plate, "Add. Med. from Sta. Maria Hoard," 4.

F. III

ϵY·P·Λ·K·OϵIΩ·

Behind the neck a scallop shell, turned up.
The shell has seven scallops.

R. XII *1 Boston 11, 1767. Gr. 42.71.

Regling, Warren Collection 358.

2 Naples 5118. Gr. 43.25.

3 Syracuse. Gr. 43.40.

4 Hirsch *viii*, 995.

5 Sambon Canessa, 1907, 362. Gr. 42.70.

F. IV

ϵY·PA·K·Oϵ·(IΩN)

Behind the neck a scallop shell, turned up.
The shell has seven scallops.

R. XII 1 Headlam Collection, Sotheby, 1916, 112.

R. XIV *1 Syracuse. Gr. 42.50.

2 Leo Hamburger, 1910, 70. Gr. 40.00.

3 L. & L. Hamburger, 1894, 216.

F. V

ϚYPAK·OϚI·ΩN

Behind the neck a scallop shell, turned up.
The shell has seven scallops.

R. XIII *†1 Naples, Santangelo 8516.

2 Martinetti Collection, Sambon Canessa, Rome, 1907, 771.

F. VI

ϚY·PAKO·ϚIΩN

Behind the neck a scallop shell, turned up.
The shell has seven scallops.

R. XIII *1 Copenhagen, ex King Christian VIII Collection. Gr. 43.35.

F. VII

Ϛ·YPA·K·O·Ϛ·IΩN

Behind the neck a scallop shell, turned up.
The shell has seven scallops.
Below the chin a short vertical line.

R. XIV *†1 London, Montagu. Gr. 43.35.

Montagu Collection, Sotheby, 1896, 151.

2 Berlin.

3 Cambridge, McClean. Gr. 42.40.

4 Syracuse. Gr. 42.80.

5 Florence, Marchese Venturi Collection. Gr. 43.01.

Naville *v*, 1118.

6 New York, E. T. Newell Collection. Gr. 42.99.

7 Naville *xii*, 957. Gr. 42.97.

Sandeman Collection, Sotheby, 1911, 61.

8 Egger, 1906, 181. Gr. 43.42.

F. VIIa

ϟ·ΥΡΑ·Κ·Ο·ϟ·ΙΩΝ

Behind the neck a scallop shell, turned up.
The shell has seven scallops.
This die is the same as F. VII but the vertical line below the chin has been removed.

R. XIV *1 Paris 1, 365.

2 Paris 1, 370.

3 Berlin.

4 Berlin.

5 Munich.

6 Naples 5120. Gr. 42.20.

7 Syracuse. Gr. 42.90.

8 Acireale, Barone Pennisi di Floristella Collection 698. Gr. 43.31.

9 Naples, De Ciccio Collection.

10 Paris, Count Chandon de Brialles Collection. Gr. 43.28.

11 Paris, Private Collection 107.

Whitehead Collection, Sotheby, 1898, 7.
Lake Price Collection 248.

12 Prichard Collection, Sotheby, 1929, 21.

13 Naville *iv*, 366. Gr. 43.26.

14 Pozzi Collection, Naville *i*, 617. Gr. 43.24.

Hirsch *vii*, 131.

15 Collignon Collection., Feuardent, 1919, 116.

Maddalena Collection, Sambon Canessa, 1903, 651.

16 Ratto, 1912, 497. Gr. 43.12.

Sandeman Collection, Sotheby, 1911, 62.
Subhi Pacha Collection, 1878.

17 Egger, 1906, 179. Gr. 43.37.

18 H. P. Smith Collection, Sotheby, 1905, 119.

R. XV 1 Berlin.

Evans, "Syracusan Medallions," Pl. *v*, 10.

†2 Paris 1, 371.

3 Syracuse. Gr. 43.10.

4 New York, A. Gallatin Collection. Gr. 42.82.

Naville *v*, 1117.

R. XVIII †1 Acireale, Barone Pennisi di Floristella Collection 688. Gr. 43.24.

F. VIII

ϚY·PA·K·O·ϚIΩN

Behind the neck a scallop shell, turned up.
The shell has seven scallops.

R. XV *1 Paris 274. de Luynes 1247. Gr. 43.38.

2 Brussels.

3 London, South Kensington, Salting Collection. Gr. 43.13.

O'Hagan Collection, Sotheby, 1908, 219.

4 Philadelphia, Academy of Fine Arts.

5 Acireale, Barone Pennisi di Floristella Collection 694. Gr. 43.23.

6 London, Cyril Lockett Collection.

R. XVIII 1 Copenhagen. Gr. 43.23.

F. IX

ϚY·P·A·K·OϚIΩN

Behind the neck a scallop shell, turned up.
The shell has seven scallops.

R. XV 1 Berlin, von Gwinner Collection 4. Gr. 42.71.

Spink plate, "Add. Med. from Sta. Maria Hoard," 5.
Merzbacher, 1909, 2573.
Inderwick Collection, Sotheby, 1908, 43.

R. XIV *1 Boston 00.118. Gr. 43.05.

2 London 186. Gr. 43.04.

3 Philadelphia, Academy of Fine Arts.

4 Acireale, Barone Pennisi di Floristella 686. Gr. 42.76.

5 Baltimore, J. W. Garrett Collection.

J. S. Jenks Collection, Chapman, 1921, 45. (Catalogued as Kimon.)

6 New York, Charles Gould Collection. Gr. 42.24.



Egger, 1906, 180.

7 Paris, Private Collection 138.

Locker Lampson Collection 97.
Baron de Belliu Collection.

8 New York, 293. Gr. 43.03.

Ward Collection 293, "Sta. Maria Hoard."

9 Spink stock, 1929. Gr. 43.10.

G. Gallet Collection, Ciani, 1924, 5.

10 Ratto, 1927, 429.

11 Engel Gros Collection, Feuardent, Paris, 1921, 14.

12 Egger, 1909, 241. Gr. 43.39.

13 Fenerly Bey Collection, Egger *xli*, 153. Gr. 40.67.

14 Sambon Canessa, 1907, 360.

15 Sambon Canessa, 1907, 361.

R. XVI 1 Athens. Gr. 43.04.

2 Vienna.

3 New York, A. Gallatin Collection. Gr. 43.04.

Naville *xii*, 958.
Hirsch *xxxii*, 326.

†4 Paris, Private Collection 137. Gr. 43.34.

Evans Collection, Naville *iv*, 364.

5 Guzman Collection, Sotheby, 1914, 103. Gr. 43.16.

Volon Collection.
Jameson Collection.

F. IXa

ϵY·PA·K·OϵIΩN

Behind the neck a scallop shell, turned up.
The shell has seven scallops.
Below the chin a dot.

R. XV *1 New York, E. T. Newell Collection. Gr. 42.80.

2 Hirsch *xxxii*, 327.

R. XXI 1 Berlin.

2 Naples 5117. Gr. 43.10.



3 Palermo, Barone Bordanaro 371.

R. XXIII 1 Caprotti Collection, Clerici, Milan, 1910, 425. Gr. 41.60.

G. I

No inscription.
Behind the neck a scallop shell, turned down.
The shell has eight scallops.

R. XVII *†1 Paris, de Luynes 1246. Gr. 42.25.

2 Berlin.

3 Brussels (A. F.).

Du Chastel 144.

4 Gotha. Gr. 43.19.

5 Philadelphia, Academy of Fine Arts.

Spink plate, "Add. Med. from Sta. Maria Hoard," 7.

6 New York, A. Gallatin Collection. Gr. 43.00.

Santamaria Catalogue, *vii*, 1929, 13.
Santamaria, 1928, 107.

7 New York, A. Gallatin Collection. Gr. 42.43.

8 Paris, H. de Nanteuil 359. Gr. 42.71.

Luneau Collection Sale, Paris, 1922, 255.

9 (Warren Collection), Sotheby, 1905, 215. Gr. 42.74.

Regling, Warren Collection 362.

10 Kreling Coll., Schulman, 1913, 138. Gr. 42.20.

Ordoñes Collection, Schulman (1914) and *lxii*, 124.

11 Ratto, 1926, 259. Gr. 42.55.

Naville *v*, 1120. Gr. 42.64.
Ratto, 1908, 292. Gr. 42.67.

R. XIX 1 Syracuse. Gr. 43.70.

2 (Duruflé Collection), Rollin & Feuardent, 1910, 215.

G. IA

No inscription.
A break in the die conceals the scallop shell behind the neck.
Below the chin a griffin head.

R. XIX *†1 London 187. Gr. 43.28.

2 Berlin.

3 Philadelphia, Academy of Fine Arts.

Spink plate, "Add. Med. from Sta. Maria Hoard," 8.

H. I

ϚYPA·K·O·Ϛ·(IΩN)

Behind the neck a griffin head.
Below the chin a griffin head.

R. XX *1 Philadelphia, Academy of Fine Arts.

Spink plate, "Add. Med. from Sta. Maria Hoard," 9.

†2 Acireale, Barone Pennisi di Floristella Collection 678. Gr. 43.25.

J. I

ϚY·P·A·K·OϚIΩ·

Below the chin a dot.

R. XXI †1 London 180. Gr. 43.39.

2 Naples 5115. Gr. 43.30.

R. XXII *†1 Copenhagen. Gr. 43.10.

2 Boston 95.104 (593) P 85. Gr. 43.11.

3 Palermo, Ripostiglio Salinas.

4 Palermo, Barone Bordonaro Collection 370.

5 Ratto, 1912, 495. Gr. 42.42.

Norman Collection, Bourgey, 1910, 52.

J. II

ϚY·PA·KO·(Ϛ·)I(ΩN)

Below the chin a dot.

R. XXI *1 London 179. Gr. 43.37.

2 Acireale, Barone Pennisi di Floristella Collection 684. Gr. 43.20.

3 Berlin, von Gwinner Collection 3.

4 New York, E. T. Newell Collection. Gr. 43.24.

J. III

ϵY·PAK·O·ϵIΩN

Below the chin a dot.

R. XXI *1 London 181. Gr. 42.76.

2 Munich.

3 Naville *xii*, 955. Gr. 42.89.
Hirsch *xxxii*, 324.

4 Naville *xii*, 956. Gr. 41.59.

5 Sambon Canessa, Paris 1927, 977. Gr. 40.80.

J. IV

ϵYP·AK·O·ϵ·IΩN

Below the chin a dot.

R. XXII *1 Glasgow, Hunter 54. Gr. 43.11.

2 Berlin.

3 Brussels (Hirsch).

4 Naples 5114. Gr. 42.65.

5 Vienna, Richter.

6 New York, A. Gallatin Collection. Gr. 42.80.
Bement Collection *i*, Naville *vi*, 517.
Delbeke, Collection Sotheby, 1907, 64.
Egger, 1899, 47.

J. V

ϵY·P·A·K·OϵIΩN

Below the chin a dot.

R. XXII *1 New York, J. P. Morgan Collection. Gr. 42.94.
Hartwig Collection, Santamaria, 1910, 626.

2 Naples 5116. Gr. 43.30.

3 Syracuse. Gr. 37.60.

4 (Duruflé Collection), Rollin & Feuardent, 1910, 214.

5 R. Carfrae Collection, Sotheby, 1894, 67. Gr. 43.09.

R. XXIII 1 Cambridge, A. H. Lloyd Collection 472. Gr. 42.40.

J. VI

ϵYP·AK·OϵI·ΩN

Below the chin a dot.

R. XXII *1 Berlin, von Gwinner Collection 2.

Rollin & Feuardent, 1908, 190.

2 Collignon Collection, Feuardent, 1919, 115.

Warren Collection, Sotheby, 1905, 214.

J. VIa

ϵYP·AK·OϵI·ΩN

Below the chin a dot.
Behind the neck a star of four rays.

R. XIX *1 London 183. Gr. 42.73.

2 Syracuse. Gr. 43.20.

J. VIIa

ϵY·(PA)K·O·ϵIΩN

Below the chin a dot.
Behind the neck a star of four rays.

R. XXII *1 London 182. Gr. 42.85.

2 Paris, 1, 384.

3 Acireale, Barone Pennisi di Floristella Collection 683. Gr. 41.73.

4 Barrachin Collection, Drouot, Paris, 1924, 172. Gr. 43.02.

Benson Collection, Sotheby, 1909, 337.

5 Sotheby, July 1899, 69.

K. Ia

ϵ·Y·PA·K·O·ϵIΩN

Below the chin a dot.
Behind the neck a star of eight rays.

R. XXIII *†1 London 184. Gr. 43.20.

2 Berlin.

3 Philadelphia, Academy of Fine Arts.

Spink plate, "Add. Med. from Sta. Maria Hoard," 13.

4 Rome, Vatican.

5 Paris, Colonel Godefroy Collection. Gr. 43.16.

6 Paris, R. Jameson Collection 830. Gr. 43.28.

Egger, 1906, 178.

K. II

ϵ·YPA·K·O·ϵ·I·ΩN

Behind the base of the neck, between the third and fourth dolphins, a star of eight rays.

R. XXIII *1 Berlin.

2 Boston 03.950. C. & M. 1243. Gr. 42.98.

3 London 185. Gr. 43.38.

4 Naples, Santangelo 8517.

K. III

(ϵYPAKOϵIΩN)

Inscription not visible on either specimen.
Behind the neck, partly covered by the hair, a star of eight rays.

R. XXIII *1 Munich.

2 Hirsch *xi*, 122.

L. I

ϵY·PA·KO·ϵIΩN

The inscription is placed below the head.

R. XXIV *†1 Paris, R. Jameson Collection 835. Gr. 41.91.

Evans, "Syr. Med.," Pl. *iv*, Sta. Maria Hoard.
Forrer, "Signatures de Graveurs," p. 110 and Pl. *III*, 14.
Du Chastel, 145.

2 London, acquired 1922. Gr. 42.77.

Thomson-Yates Collection.
Ashburnham Collection, Sotheby, 1895, 53.
Num. Chron., 1923, Pl. *ix*, 1.
Hill, "Select Greek Coins," Pl. *xxviii*, 2, Pl. *lii*, 1.
Hill, "Coins of Ancient Sicily," p. 103, Pl. *i* and Frontispiece, No. 7.
Burlington Fine Art Club Greek Art Exhibition, 1903, p. 156, No. 432 and Pl. *cv*.

2 Table of Die Combinations

The *A* above the reverse die indicates the die has the inscription AΘΛA , the - that is has no inscription.

	I	– II	*A* III	*A* IV	*A* V	– VI	*A* VII	VIII	*A* IX	*A* X	*A* XI	*A* XII	– XIII	– XIV	*A* XV	– XVI	XVII	XVIII	*A* XIX	*A* XX	XXI	*A* XXII	XXIII	*A* XXIV	Y	?	
A. I	1	2																									3
B. I		1																									1
C. I		7	4																								11
C. II			21																								21
C. III			6																								6
C. IV			4																								4
C. V			1																								1
C. VI			6																								6
C. VII		2		11																							13
C. VIII		3		9	4																						16
C. IX				3																							3
C. X				5		7																					12
C. XI				1		8																					9
C. XII				10		4																					14
C. XIII						7																				1	8
C. XIV						11	11																				22
C. XV				9			8	7																			24
C. XVI								4	1																		5
C. Y																									1		1
D. I								2	6	7	10																25
D. II									45																		45
E. I											13															1	14
F. I								8	2																		10
F. II											2	5															7
F. III												5															5
F. IV												1	3														4
F. V														2													2
F. VI														1													1
F. VII														8													8
F. VIIa														18	4				1								23
F. VIII															6				1								7
F. IX														15	1	5											21
F. IXa															2						3		1				6
G. I																	11		2								13
G. Ia																			3								3
H. I																		2									2
J. I																					2	5					7
J. II																					4						4
J. III																					5						5
J. IV																						6					6
J. V																						5	1				6
J. VI																						2					2
J. VIa																				2							2
J. VIIa																						5					5
K. Ia																							6				6
K. II																							4				4
K. III																							2				2
L. I																								2			2
48	1	15	42	48	4	37	19	21	54	7	25	11	3	44	13	5	11	2	7	2	14	23	14	2	1	2	427

3 Collections by Location

Acireale
- Pennisi Coll.
  - 678–H. I: R. XX–2
  - 679–C. I: R. III–2
  - 680–C. II: R. III–12
  - 681–C. VI: R. III–4
  - 682–C. XII: R. IV–7
  - 683–J. VIIa: R. XXII–3
  - 684–J. II: R. XXI–2
  - 685–C. XV: R. VIII–5
  - 686–F. IX: R. XIV–4
  - 687–E. I: R. XI–5
  - 688–F. VIIa: R. XVIII–1
  - 694–F. VIII: R. XV–5
  - 695–D. I: R. X–5
  - 698–F. VIIa: R. XIV–8

Athens
- F. II: R. XII–1
- F. IX: R. XVI–1

Baltimore
- Garrett Coll.
  - A. I: R. II–1
  - C. XII: R. IV–8
  - F. IX: R. XIV–5

Basle
- C. XV: R. IV–1

Berlin
- C. II: R. III–2
- C. IV: R. III–2
- C. VI: R. III–2
- C. VII: R. IV–1
- C. VII: R. IV–2
- C. VII: R. IV–3
- C. X: R. IV–1
- C. X: R. IV–2
- C. XI: R. VI–2
- C. XI: R. VI–3
- C. XIII: R. VI–1
- C. XIV: R. VI–1
- C. XV: R. VII–1
- D. I: R. XI–1
- D. II: R. IX–2
- D. II: R. IX–3
- E. I: R. XI–2
- F. VII: R. XIV–2
- F. VIIa: R. XIV–3
- F. VIIa: R. XIV–4
- F. VIIa: R. XV–1
- F. IXa: R. XXI–1
- G. I: R. XVII–2
- G. Ia: R. XIX–2
- J. IV: R. XXII–2
- K. Ia: R. XXIII–2
- K. II: R. XXIII–1
- von Gwinner Coll.
  - 1–D. II: R. IX–18
  - 2–J. VI: R. XXII–1
  - 3–J. II: R. XXI–3
  - 4–F. IX: R. XV–1
  - 5–E. I: R. XI–6

Boston
- 95.104(593)–J. I: R. XXII–2
- 97.387(689)–C. II: R. III–4
- 00.118–F. IX: R. XIV–1
- 03.946–C. XIV: R. VI–2
- 03.947–C. XIV: R. VI–3
- 03.950–K. II: R. XXIII–2
- 04.536–C. II: R. III–3
- 04.1604–E. I: R. XI–3
- 04.1605–D. II: R. IX–4
- 11.1767–F. III: R. XII–1
- 11.1768–F. II: R. XII–2
- Recent accession, 1929–C. XII: R. IV–2

Brussels
- C. I: R. III–1
- C. VI: R. III–1
- C. XI: R. VI–4
- C. XVI: R. IX–1
- F. I: R. IX–1
- F. VIII: R. XV–2
- G. I: R. XVII–3
- J. IV: R. XXII–3

Cambridge
- Leake
  - C. VIII: R. IV–1
  - D. I: R. IX–2
- McLean
  - F. VII: R. XIV–3
- Lloyd Coll.
  - 472–J. V: R. XXIII–1
  - 1020–C. VII: R. IV–5
  - 1021–D. II: R. IX–1
- Seltman Coll.
  - D. I: R. VIII–2



Cefalu
C. II: R. III–5
Copenhagen
C. II: R. III–6
C. XIV: R. VII–4
C. Y: R. Y–1
D. I: R. XI–2
F. VI: R. XIII–1
F. VIII: R. XVIII–1
J. I: R. XXII–1
Thorvaldsen Museum
1307–C. IV: R. III–1
1308–C. VII: R. II–1
1309–D. II: R. IX–5
Dresden
C. XV: R. IV–2
C. XV: R. VII–2
Florence
D. I: R. X–1
Venturi Coll.
C. XIV: R. VII–6
F. VII: R. XIV–5
Glasgow
52–C. III: R. III–1
53–D. II: R. IX–6
54–J. IV: R. XXII–1
55–E. I: R. XI–4
Gotha
G. I: R. XVII–4
The Hague
C. VII: R. IV–4
C. XII: R. IV–6
D. I: R. X–2
Leningrad
C. II: R. III–7
London
173–D. II: R. IX–7
174–D. I: R. X–3
175–C. XV: R. VIII–1
176–C. III: R. III–2
177–C. XII: R. VI–1
178–C. VI: R. III–3
179–J. II: R. XXI–1
180–J. I: R. XXI–1
181–J. III: R. XXI–1
182–J. VIIa: R. XXII–1
183–J. VIa: R. XIX–1
184–K. Ia: R. XXIII–1
185–K. II: R. XXIII–3
186–F. IX: R. XIV–2
187–G. Ia: R. XIX–1
Bank–C. XII: R. IV–3
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Montagu–F. VII: R. XIV–1
Murray–C. VIII: R. IV–2
Acquired 1922–L. I: R. XXIV–2
South Kensington
F. VIII: R. XV–3
Lockett Coll.
F. VIII: R. XV–6
Woodward Coll.
137–D. II: R. IX–24
Milan
D. II: R. IX–8
Munich
B. I: R. II–1
C. X: R. VI–2
C. XV: R. VIII–2
C. XVI: R. VIII–1
D. I: R. IX–3
F. VIIa: R. XIV–5
J. III: R. XXI–2
K. III: R. XXIII–1
Naples
5114–J. IV: R. XXII–4
5115–J. I: R. XXI–2
5116–J. V: R. XXII–2
5117–F. IXa: R. XXI–2
5118–F. III: R. XII–2
5119–D. II: R. IX–9
5120–F. VIIa: R. XIV–6
5121–D. I: R. IX–4
5122–C. VIII: R. V–2
5123–C. VIII: R. V–3
5124–C. VIII: R. V–4
Santangelo
8512–C. I: R. II–2
8513–C. VIII: R. IV–3
8514–C. XIV: R. VI–4
8515–C. XIV: R. VI–5
8516–F. V: R. XIII–1
8517–K. II: R. XXIII–4
8518–D. I: R. X–4
8519–D. I: R. XI–4
de Ciccio Coll.
C. III: R. III–4
F. VIIa: R. XIV–9
F. I: R. VIII–1
F. VIIa: R. XV–4
F. IX: R. XVI–3

G. I: R. XVII–6
G. I: R. XVII–7
J. IV: R. XXII–6
Gould Coll.
F. IX: R. XIV–6
Miller Coll.
C. XI: R. VI–5
Morgan Coll.
D. II: R. IX–20
D. II: R. IX–21
J. V: R. XXII–1
Newell Coll.
A. I: R. II–2
C. I: R. II–4
C. V: R. III–1
C. VII: R. IV–6
C. XIV: R. VI–8
D. II: R. IX–22
E. I: R. XI–7
F. I: R. VIII–4
F. VII: R. XIV–6
F. IXa: R. XV–1
J. II: R. XXI–4
Cast–E. I: R. XI–13
Schmuck Coll.
F. I: R. VIII–5
New York
293–F. IX: R. XIV–8
294–D. II: R. IX–10
295–C. XII: R. IV–4
Beatty Coll.
C. XII: R. IV–9
D. I: R. X–6
Cammann Coll.
C. XII: R. VI–3
Field Coll.
C. II: R. III–13
Gallatin Coll.
A. I: R. I–1
C. VIII: R. II–1
C. IX: R. IV–1
C. X: R. VI–5
C. XIII: R. VI–4
C. XIV: R. VI–9
D. I: R. X–7
D. II: R. IX–19
Odessa
C. XV: R. VIII–3
Oxford
F. II: R. XII–3
Palermo
G. 14703–D. II: R. IX–11
Salinas–D. II: R. IX–12
Salinas–J. I: R. XXII–3
Tagliavia–D. I: R. VIII–1
Valenza–C. II: R. III–8
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369–F. II: R. XII–4
370–J. I: R. XXII–4
371–F. IXa: R. XXI–3
Paris
1365–F. VIIa: R. XIV–1
1370–F. VIIa: R. XIV–2
1371–F. VIIa: R. XV–2
1378–D. I: R. XI–5
1379–D. I: R. XI–6
1380–C. XIV: R. VII–2
1381–C. XIV: R. VII–3
1382–C. XI: R. VI–1
1383–C. XVI: R. VIII–2
1384–J. VIIa: R. XXII–2
de Luynes
1245–D. I: R. IX–5
1246–G. I: R. XVII–1
1247–F. VIII: R. XV–1
1248–C. II: R. III–1
1249–C. XIV: R. VII–1
1250–C. XII: R. IV–1
de Brialles Coll.
F. VII: R. XIV–10
de Nanteuil Coll.
359–G. I: R. XVII–8
360–C. XV: R. VII–3
361–C. XI: R. VI–6
361bis–C. II: R. III–14
Godefroy Coll.
C. XIV: R. VII–7
K. Ia: R. XXIII–5
Jameson Coll.
827–D. II: R. IX–23
828–C. I: R. III–3
829–E. I: R. XI–1
830–K. Ia: R. XXIII–6
835–L. I: R. XXIV–1
C. VII: R. II–2
de Sartiges Coll.
137–C. X: R. IV–4
Private Coll.
107–F. VIIa: R. XIV–11
137–F. IX: R. XVI–4

138–F. IX: R. XIV–7
141–C. VII: R. IV–7
289–D. I: R. IX–1
C. I: R. II–1
C. VIII: R. II–2

Philadelphia

C. I: R. II–3
C. II: R. III–9
C. X: R. VI–3
C. X: R. VI–4
C. XIII: R. VI–2
C. XIV: R. VI–6
C. XIV: R. VI–7
C. XIV: R. VII–5
C. XV: R. IV–3
C. XV: R. IV–4
D. I: R. XI–7
D. II: R. IX–13
F. I: R. VIII–2
F. I: R. IX–2
F. VIII: R. XV–4
F. IX: R. XIV–3
G. I: R. XVII–5
G. Ia: R. XIX–3
H. I: R. XX–1
K. Ia: R. XXIII–3

Rochester

Bauer Coll.
D. I: R. XI–3

Rome

Vatican
K. Ia: R. XXIII–4

Syracuse

C. III: R. III–3
C. VIII: R. IV–4
C. VIII: R. IV–5
C. VIII: R. IV–6
C. X: R. IV–3
C. XII: R. IV–5
C. XII: R. VI–2
C. XIII: R. VI–3
C. XV: R. IV–5
C. XV: R. VIII–4
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D. II: R. IX–14
D. II: R. IX–15
F. II: R. XI–1
F. III: R. XII–3
F. IV: R. XIV–1
F. VII: R. XIV–4
F. VIIa: R. XIV–7
F. VIIa: R. XV–3
G. I: R. XIX–1
J. V: R. XXII–3
J. VIa: R. XIX–2

Toronto

C. II: R. III–10

Vienna

C. II: R. III–11
C. VIII: R. V–1
C. XV: R. IV–6
D. II: R. IX–16
F. I: R. VIII–3
F. IX: R. XVI–2
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Winterthur

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4 Private Collections

Bauer, G. J. Rochester
Beatty, W. G. New York
Bordonaro, Barone Gabriele Chiaramonte. Palermo
de Brialles, Count Chandon. Paris
Cammann, Mrs. G. P. New York
de Ciccio. Naples
Field, W. B. O. New York
Gallatin, A. New York
Garrett, J. W. Baltimore
Godefroy, Colonel. Paris
Gould, Charles. New York
von Gwinner, A. Berlin
Lloyd, A. H. Cambridge
Lockett, C. London
Miller, H. New York
Morgan, J. P. New York
de Nanteuil, H. Paris
Newell, E. T. New York
Pennisi, Barone Pennisi di Floristella. Acireale
Sartiges, Viconte de. Paris
Schmuck, T. C. New York



Seltman, C. T. Cambridge
Venturi, Marchese Roberto Venturi Ginori. Florence
Ward, J. New York (Metropolitan Museum)
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Private Collection. Paris

5 Publications

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145–L. I: R. XXIV–1
146–C. VI: R. III–1
146B–C. I: R. III–4
147–C. XVI: R. IX–1
Evans, "Syracusan Medallions"
Pl. iv–L. I: R. XXIV–1
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Forrer, "Signatures de Graveurs"
p. 117–C. II: R. III–3
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15–C. VI: R. III–1
16–C. XVI: R. IX–1
Giesecke, "Sicilia Numismatica"
Pl. xiii–8–C. III: R. III–5
Head, "British Museum Guide"
Pl. xxv–28–D. II: R. IX–7
Head, "History of Coinage of Syracuse"
Pl. iv–3–D. II: R. IX–7
Hill, "Coins of Ancient Sicily"
Pl. i and Frontispiece
7–L. I: R. XXIV–2
Hill, "Select Greek Coins"
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Pl. lii–1–R. XXIV–2
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359–E. I: R. XI–3
361–F. II: R. XII–2
362–G. I: R. XVII–9
363–C. XIV: R. VI–10
364–C. I: R. II–1
366–C. II: R. III–3
Spink, Sta. Maria Hoard. Pl.
4–F. II: R. XII–5
5–F. IX: R. XV–1
6–F. I: R. IX–2
7–G. I: R. XVII–5
8–G. Ia.: R. XIX–3
9–H. I: R. XX–1
10–C. XIV: R. VI–6
11–C. XIII: R. VI–2
12–C. I: R. II–3
13–K. Ia: R. XXIII–3
14–C. XIV: R. VII–5
15–C. XV: R. IV–3
16–D. II: R. IX–13
Weil, "Winckelmannsfeste"
Pl. ii–2–C. X: R. IV–1

6 Catalogues: Under Names of Owners

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Ashburnham
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Barrachin
172–J. VIIa: R. XXII–4
Belliu
F. IX: R. XIV–7
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515–D. II: R. IX–41
516–C. VI: R. III–6
517–J. IV: R. XXII–6
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84–E. I: R. ?
Cantoni
4216–C. I: R. II–7
Caprotti
424–C. X: R. VI–7
425–F. IXa: R. XXIII–1
Carfrae
67–J. V: R. XXII–5
Colgate
56–F. I: R. VIII–6
Collignon
115–J. VI: R. XXII–2
116–F. VIIa: R. XIV–15
117–D. I: R. XI–8
d'Amecourt
58–C. XIV: R. VI–8
Delbeke
64–J. IV: R. XXII–6
De Moltheim
579–C. XI: R. VI–8
De Remusat
352–C. XIII: R. VI–5
Dupré
C. XII: R. IV–1
Durazzo
473–F. I: R. VIII–7
Duruflé
213–C. XIV: R. VI–8
214–J. V: R. XXII–4
215–G. I: R. XIX–2
Earle
112–C. VI: R. III–6
Engel-Gros
14–F. IX: R. XIV–11
Evans
1898—102–C. II: R. III–3
103–C. XIV: R. VII–7
104–C. VIII: R. IV–7
1922—364–F. IX: R. XVI–4
Fenerly Bey
153–F. IX: R. XIV–13
154–C. XI: R. VI–7
Fox
C. VII: R. IV–9
Gallet
5–F. IX: R. XIV–9
Gonin
E. I: R. XI–1
Guzman
103–F. IX: R. XVI–5
Hartwig
626–J. V: R. XXII–1
Hazeldine
58–C. XIV: R. VI–9
Headlam
112–F. IV: R. XII–1
Helferich-Eisenach
36–C. II: R. III–15
37–C. XV: R. VIII–6
Hoskier
159–C. I: R. II–1
160–C. XV: R. VIII–6
Inderwick
43–F. IX: R. XV–1
Jameson
F. IX: R. XVI–5
Jenks
45–F. IX: R. XIV–5
Kreling
138–G. I: R. XVII–10
Lambros
121–D. II: R. IX–40
Lampson
97–F. IX: R. XIV–7
Löbbecke
98–C. X: R. VI–6
Luneau
255–G. I: R. XVII–8
MacClean

53–D. II: R. IX–26
Mackerell
6–C. XV: R. VIII–6
Maddalena
651–F. VIIa: R. XIV–15
Martinetti
770–C. II: R. III–20
771–F. V: R. XIII–2
772–E. I: R. XI–6
773–D. I: R. XI–9
774–C. X: R. IV–5
Montagu
1896—150–A. I: R. II–1
151–F. VII: R. XIV–1
1897—76–C. VI: R. III–5
77–C. II: R. III–15
Nelligan
C. II: R. III–17
Nordheim
712–C. II: R. III–16
Norman
52–J. I: R. XXII–5
O'Hagan
218–D. I: R. XI–3
219–F. VIII: R. XV–3
Ordõnes
124–G. I: R. XVII–10
Perrin
5–C. I: R. II–1
Picard
344–C. XV: R. VII–3
Polese
632–C. XII: R. VI–3
Pozzi
614–D. I: R. XI–3
615–C. II: R. III–13
616–C. XI: R. IV–1
617–F. VIIa: R. XIV–14
Price
248–F. VIIa: R. XIV–11
Prichard
21–F. VIIa: R. XIV–12
Prowe
I—251–C. VI: R. III–5
252–C. II: R. III–15
253–D. II: R. IX–28
II—423–E. I: R. XI–7
III—86–D. II: R. IX–29
Reutze
141–C. Y: R. Y.–1
Rhousopoulos
428–C. VII: R. IV–8
429–C. XI: R. VI–7
430–F. II: R. XI–2
Rome
107–C. II: R. III–13
Rousset
68–C. XV: R. VIII–6
Sandeman
61–F. VII: R. XIV–7
62–F. VIIa: R. XIV–16
Smith, G. R.
C. XV: R. VII–8
Smith, H. P.
119–F. VIIa: R. XIV–18
120–D. II: R. IX–26
Smith, R. H.
I—54–C. III: R. III–6
II—71–E. I: R. XI–10
Sparkes
C. II: R. III–17
Stewart
E. I: R. XI–7
Stiavelli
205–C. XI: R. VI–7
Subhi Pacha
F. VIIa: R. XIV–16
Thomas
C. XV: R. IV–9
Thomson-Yates
L. I: R. XXIV–2
Vogel
151–D. I: R. X–7
Volon
F. IX: R. XVI–5
VonKaufman
140–C. XV: R. VII–7
141–C. VII: R. IV–11
Warren
I—213–C. I: R. II–1
214–J. VI: R. XXII–2
215–G. I: R. XVII–9
II—110–C. XIV: R. VI–10
Weber
1908—683–D. II: R. IX–32
684–C. XIII: R. VI–6
685–A. I: R. II–2
686–E. I: R. XI–9
1922—1614–C. II: R. III–17
Whitehead

7–F. VIIa: R. XIV–11

White-King
77–F. I: R. VIII–4

Woodward
C. I: R. III–3
D. II: R. IX–24

6.1 In Commerce, 1929

Bourgey
C. XIV: R. VII–8

Hamburger, Leo
C. XV: R. VII–4

Helbing
C. IX: R. IV–2

Hirsch
C. VIII: R. II–3

Ravel
D. II: R. IX–25

Rollin & Feuardent
C. XV: R. VII–5

Spink
F. IX: R. XIV–9

7 Catalogues: Under Names of Dealers

Bourgey
1908—68–C. XV: R. VIII–6
1909—165–C. XI: R. VI–6
1910—52–J. I: R. XXII–5
1910—116–C. XIV: R. VI–11

Cahn
1901—579–C. XI: R. VI–8
1928—225–C. II: R. III–13

Canessa
1907—770–C. II: R. III–20
1927—975–C. VIII: R. IV–8
1928—632–C. XII: R. VI–3
See also Sambon-Canessa

Chapman
1912—112–C. VI: R. III–6
1921—45–F. IX: R. XIV–5

Ciani
1924—5–F. IX: R. XIV–9

Clerici
1910—424–C. X: R. VI–7
425–F. IXa: R. XXIII–1

Egger
1899—47–J. IV: R. XXII–6
48–C. II: R. III–21
1904—251–C. VI: R. III–5
252–C. II: R. III–15
253–D. II: R. IX–28
1906—175–D. II: R. IX–23
176–C. III: R. III–5
178–K. Ia: R. XXIII–6
179–F. VIIa: R. XIV–17
180–F. IX: R. XIV–6
181–F. VII: R. XIV–8
1908—102–D. II: R. IX–31
103–D. II: R. IX–30
104–F. I: R. VIII–8
1909—239–D. II: R. IX–31
240–C. XII: R. IV–10
241–F. IX: R. XIV–12
XXXIX—98–C. X: R. VI–6
XL—423–E. I: R. XI–7
XLI—153–F. IX: R. XIV–13
154–C. XI: R. VI–7
XLVI—86–D. II: R. IX–29

Feuardent
1900—352–C. XIII: R. VI–5
1913—95–C. XV: R. VII–3
96–C. VII: R. IV–10
1914—145–C. I: R. II–6
1919—115–J. VI: R. XXII–2
116–F. VIIa: R. XIV–15
117–D. I: R. XI–8
1921—14–F. IX: R. XIV–11
See also Rollin & Feuardent

Glendining
1918—56–F. I: R. VIII–6
1929—712–C. II: R. III–16
1929—238–C. X: R. VI–5

Hamburger, Leo
1910—69–C. X: R. VI–7
70–F. IV: R. XIV–2
1921—D. II: R. IX–43

1929—140–C. XV: R. VII–7
141–C. VII: R. IV–11

Hamburger, L. & L.

1894—216–F. IV: R. XIV–3

Helbing

1927—2686–D. II: R. IX–31
2687–E. I: R. XI–11
1928—108–D. II: R. IX–26
1930—139–D. II: R. IX–26

Hess

1902—657–C. VII: R. IV–9
1912—22–C. XVI: R. VIII–3
23–C. XV: R. VII–6
24–C. VII: R. IV–9
1929—151–D. I: R. X–7

Hirsch

VII—131–F. VIIa: R. XIV–14
VIII—995–F. III: R. XII–4
XI—120–C. I: R. III–4
121–F. II: R. XII–1
122–K. III: R. XXIII–2
XIII—428–C. VII: R. IV–8
429–C. XI: R. VI–7
430–F. II: R. XI–2
XIV—208–D. I: R. XI–10
209–C. XIV: R. VII–10
210–C. XV: R. VII–6
211–C. XV: R. IV–7
XV—1182–E. I: R. XI–7
XVI—290–C. XV: R. VIII–6
XVII—531–D. I: R. XI–10
XVIII—2280–D. II: R. IX–33
2281–E. I: R. XI–10
XIX—258–C. IV: R. III–3
XX—159–C. I: R. II–1
160–C. XV: R. VIII–6
XXI—683–D. II: R. IX–32
684–C. XIII: R. VI–6
685–A. I: R. II–2
686–E. I: R. XI–9
XXIV—198–C. IX: R. IV–3
XXVI—98–C. X: R. VI–6
XXIX—121–D. II: R. IX–40
XXXI—221–C. IX: R. IV–3
XXXII—318–D. II: R. IX–41
319–D. II: R. IX–34
320–D. II: R. IX–35
321–D. II: R. IX–42
322–C. XIV: R. VII–11
323–C. X: R. VI–5
324–J. III: R. XXI–3
325–E. I: R. XI–8
326–F. IX: R. XVI–3
327–F. IXa: R. XV–2
XXXIII—464–C. II: R. III–18
465–C. XV: R. VII–6
466–E. I: R. XI–6
XXXIV—197–D. II: R. IX–33

Merzbacher

1909—2572–C. IV: R. III–4
2573–F. IX: R. XV–1
1910—259–C. XV: R. VIII–6
260–C. IX: R. IV–3
261–F. II: R. XI–2
262–E. I: R. XI–12

Naville

I—614–D. I: R. XI–3
615–C. II: R. III–13
616–C. XI: R. IV–1
617–F. VIIa: R. XIV–14
IV—363–C. XV: R. IV–8
364–F. IX: R. XVI–4
365–E. I: R. XI–8
366–F. VIIa: R. XIV–13
V—1114–D. II: R. IX–42
1115–C. XIV: R. VII–9
1116–C. X: R. VI–6
1117–F. VIIa: R. XV–4
1118–F. VII: R. XIV–5
1119–F. I: R. VIII–7
1120–G. I: R. XVII–11
VI—515–D. II: R. IX–41
516–C. VI: R. III–6
517–J. IV: R. XXII–6
X—306–C. XIV: R. VI–10
307–C. XV: R. VII–4
XII—951–D. II: R. IX–40
952–C. X: R. VI–5
953–C. II: R. III–15
954–C. XV: R. VII–5
955–J. III: R. XXI–3
956–J. III: R. XXI–4
957–F. II: R. XIV–7
958–F. IX: R. XVI–3
XIII—340–D. II: R. IX–36
341–D. II: R. IX–37
342–D. II: R. IX–38
343–D. II: R. IX–39
344–C. I: R. II–1
345–C. IX: R. IV–1



346–C. VI: R. III–5
Ratto
1896—473–F. I: R. VIII–7
1908—292–G. I: R. XVII–11
1911—190–C. XI: R. VI–7
1912—495–J. I: R. XXII–5
496–C. XII: R. IV–10
497–F. VIIa: R. XIV–16
1926—258–C. XV: R. VII–6
259–G. I: R. XVII–11
1927—429–F. IX: R. XIV–10
430–D. II: R. IX–31
1929—181–C. XV: R. VII–6
Rollin & Feuardent
1886—232–C. XIII: R. ?
1908—188–C. I.: R. II–1
189–C. XV: R. VII–8
190–J. VI: R. XXII–1
1910—213–C. XIV: R. VI–8
214–J. V.: R. XXII–4
215–G. I: R. XIX–2
Rosenberg
1914—36–C. II: R. III–15
37–C. XV: R. VIII–6
Sambon
1887—4216–C. I: R. II–7
1923—344–C. XV: R. VII–3
Sambon-Canessa
1903—651–F. VII: R. XV–15
1906—228–E. I: R. XI–10
229–C. XIV: R. VI–11
1907—360–F. IX: R. XIV–14
361–F. IX: R. XIV–15
362–F. III: R. XII–5
363–C. X: R. IV–4
364–C. XV: R. VIII–7
365–C. XIV: R. VI–11
366–D. II: R. IX–20
367–D. II: R. IX–44
368–D. II: R. IX–21
1907—770–C. II: R. III–20
771–F. V: R. XIII–2
772–E. I: R. XI–6
773–D. I: R. XI–9
774–C. X: R. IV–5
1927—975–C. VIII: R. IV–8
976–C. IX: R. IV–2
977–J. III: R. XXI–5
Santamaria
1908—205–C. XI: R. VI–7
1910—626–J. V: R. XXII–1
1928—107–G. I: R. XVII–6
108–D. II: R. IX–45
1929—13–G. I: R. XVII–6
Schulman
1912—45–C. XII: R. VI–4
1913—138–G. I: R. XVII–10
1914—124–G. I: R. XVII–10
1924—321–C. XIV: R. VI–9
Serrure
1903—206–C. IX: R. IV–3
Sotheby
1894—61–C. XIII: R. VI–7
67–J. V: R. XXII–5
1895—51–D. I: R. XI–3
53–L. I: R. XXIV–2
1896—150–A. I: R. II–1
151–F. VII: R. XIV–1
1896—413–C. XV: R. IV–9
415–E. I: R. XI–7
418–C. I: R. III–3
1897—54–C. III: R. III–6
1897—76–C. VI: R. III–5
77–C. II: R. III–15
1898—7–F. VIIa: R. XIV–11
1898—102–C. II: R. III–3
103–C. XIV: R. VII–7
104–C. VIII: R. IV–7
1899—69–J. VIIa: R. XXII–5
1900—60–C. VII: R. IV–7
1900—150–E. I: R. XI–1
1904—2–C. I: R. III–3
1904—107–C. II: R. III–13
1905—119–F. VIIa: R. XIV–18
120–D. II: R. IX–26
1905—213–C. I: R. II–1
214–J. VI: R. XXII–2
215–G. I: R. XVII–9
1906—6–C. XV: R. VIII–6
1907—64–J. IV: R. XXII–6
1908—43–F. IX: R. XV–1
1908—218–D. I: R. XI–3
219–F. VIII: R. XV–3
1909—53–D. II: R. IX–26
1909—71–E. I: R. XI–10
77–F. I: R. VIII–4
1909—334–D. II: R. IX–27
335–C. II: R. III–19
336–C. I: R. II–4
337–J. VIIa: R. XXII–4

1910—110–C. XIV: R. VI–10
111–C. XVI: R. VIII–4
1911—61–F. VII: R. XIV–7
62–F. VIIa: R. XIV–16
1911—82–C. I: R. II–5
83–C. I: R. II–6
84–E. I: R. ?
1914—58–C. XIV: R. VI–9
1914—103–F. IX: R. XVI–5
1916—112–F. IV: R. XII–1
1920—33–E. I: R. XI–11
1929—21–F. VIIa: R. XIV–12





A. I.



B. I.



C. I.



C. II.



C. III.



C. IV.



C. V.



C. VI.



C. VII.



C. VIII.



C. IX.



C. X.



C. XI.



C. XII.



C. XIII.



C. XIV.



C. XV.



C. XVI.



C.Y.



D.I.



D.II.



E.I.



F.I.



F.II.



F. III.



F. IV.



F. V.



F. VI.



F. VII.



F. VIIa.



F.VIII.



F.IX.



F.IXa.



G.I.



G.Ia.



H.I.



J.I.



J.II.



J.III



J.IV.



J.V.



J.VI.



J. VIa.



J. VIIa.



K. Ia.



K. II.



K. III.



L. I.



R. I.



R. II.



R. III.



R. IV.



R. V.



R. VI.



R. VII.



R. VIII.



R. IX.



R. X.



R. XI.



R. XII.



R. XIII.



R. XIV.



R. XV.



R. XVI.



R. XVII.



R. XVIII.



R. XIX.



R. XX.



R. XXI.



R. XXII.



R. XXIII.



R. XXIV.

SYRACUSAN DEKADRACHMS OF THE EUAINETOS TYPE

BY

ALBERT GALLATIN



CAMBRIDGE
HARVARD UNIVERSITY PRESS
1930

SYRACUSAN DEKADRACHMS OF THE EUAINETOS TYPE

THE EUAINETOS DEKADRACHMS

IN ANY study of Greek art of the fifth or fourth centuries before Christ we are constantly confronted by the lack of existing works signed by the artists who were most famous in their day or works which may be definitely attributed to them. It has been the general fate of the monuments of the greater arts to perish, or to have survived only in ruins or fragments, while we have innumerable specimens of the masterpieces of the minor arts in an excellent state of preservation, often bearing the signatures of the artists. The painted vases have been the subject of many admirable studies, and are now, thanks to the inspiration of Mr. Pottier, in the course of being presented to the world through the Corpus Vasorum Antiquorum; the engraved gems have been studied and illustrated, but the works of the great die-cutters of antiquity have not as yet received sufficient attention or been adequately published from the point of view of works of art, and this appears the more remarkable when it is realized that examples of these men's skill are available in considerable quantity in as perfect condition as when they left the artist's hand.

Mr. George F. Hill in his book "Select Greek Coins" has presented a general survey of the subject, and has furnished the material for comparative study by a most carefully selected series of enlarged reproductions, while in his too-short text he gives the approximate date of each coin illustrated, together with a brief account of the development of the medallic art in Greece.

Sir Arthur Evans in his "Syracusan Medallions and their Engravers" discusses with vivid imagination the life and activities of the two most celebrated die-cutters of antiquity, Euainetos and Kimon, but he illustrates only a few varieties of their masterpieces, the Syracusan dekadrachms. Du Chastel and Forrer in their books contribute little to aid in forming an estimate of the number of dies engraved by these artists.

In this book I have attempted to illustrate all the known varieties of the Syracusan dekadrachms which bear the signature of Euainetos or which have a similar head on the obverse and are similar in design to the coins so

inscribed: forty-two obverse dies, together with five varieties of the same, and twenty-four reverse dies are illustrated, and a list is given of the known specimens from each die.

The illustrations are twice the diameter of the coins and were made from photographs by P. A. Juley & Son of New York from casts, with the following exceptions: A. I and R. II, photographed from the coin by the Hughes Company of Baltimore; H. I, photographed from the coin by W. V. Chappel of Philadelphia; and C. IV and F. VI, reproduced from photographs from the coins furnished me by the Copenhagen Museum. The enlarged photograph of the black glazed cup in the Louvre was made for me by Giraudon of Paris.

It is hoped that this work will enable numismatists to identify and classify their dekadrachms more exactly than hitherto, and will offer to lovers of Greek art an opportunity to study and analyze a work of art which has maintained its position for over 2000 years as one of the world's masterpieces.

I gladly acknowledge whatever indebtedness I may owe for anything contained herein which agrees with statements in the above-mentioned books; it hardly seems worth while to cite, except in certain instances, the points wherein we agree or disagree. I wish to express my appreciation of the invariable courtesy and ready coöperation of the museums, private collectors, and dealers, who have so generously allowed me to examine the specimens in their collections and furnished me with casts of their coins, and have always responded so promptly to my requests for information. Dr. Jacob Hirsch has given me casts of a great number of dekadrachms which have passed through his hands, and has obtained casts for me of coins in private collections; he also sent me a photograph of a cup in the Hamburg Museum für Kunst und Gewerbe which contains the impression of a coin similar to the one in the cup in the Louvre which I have illustrated.

The work would have been an impossible undertaking without the aid and advice of Mr. Edward T. Newell, whose ample knowledge and scanty time have always been most generously at my disposal; Mr. Sydney P. Noe has also rendered me invaluable assistance. Mrs. Joseph C. Hoppin helped me greatly in the original classifications.

Aside from the coins themselves little information is available to aid in their study. Some evidence as to their date is afforded by their association

with other coins in the hoards which have at times been unearthed, but these hoards as a rule have been poorly recorded, if at all. While the sequence of the coins has been established to a large degree, the actual date of any of them is as yet unknown. It is, however, generally believed, and probable, that these dekadrachms were struck by the city of Syracuse in connection with the Assinarian games, first held in 412 B.C. in honor of the victory over the Athenians in the preceding year.

The dekadrachms issued were of two distinct types: on one the hair of the head is confined in an ornate net, many of these dies bearing the initial or signature of Kimon; on the other the hair is free, with a crown of leaves; the earliest dies for these coins bear the signature of Euainetos. The side bearing the head is designated as the obverse, since this has so long been the custom, although from a technical standpoint it might more accurately have been designated as the reverse, owing to the manner in which the coins were struck.

The classification and the order followed have been determined by examination and comparison of the condition of the obverse and reverse dies in regard to flaws, cracks, and rusting. The sequence established by this means follows in general certain characteristics of the coins and appears to be logical; the order given to some of the C. series is arbitrary, since they appear to have been contemporary. H. I, with two griffin heads, is placed after G. Ia, a peculiar die to which one griffin head was added after a flaw had obscured a shell by which it was previously distinguished. Except for the griffins the dies are as unlike as any two in the list. H. I more closely resembles L. I, but its reverse tends to confirm the position assigned to it on account of the griffins.

The K. series, with the eight-rayed star, is placed after the J. series, which bears a dot, owing to K. Ia, of which no specimen is recorded without a dot; but the precedence of the dot series is not definitely established.

R. IV is possibly R. III cracked; R. III shows some of the defects which appear on R. IV, but the goad is raised and the head of the third horse is changed. No other case of a recut die has been observed.

Flaws in the dies are not noted, since they are subject to change, but the following are usually present and will aid in the identification of their dies: a crack across the back of the head and a spot on the neck in F. IX; a flaw on the lower eyelid in F. I; a flaw on the earring in F. II; a spot

on the cheek in F. III; a spot on the nose and a spot on the lip in F. VIIa; the cracks on R. IV mentioned above.

C. Y., in the Copenhagen Museum (Reutze Collection Catalogue 1863, No. 141), is not numbered among the C. series, as I doubt its authenticity. However, Dr. Galster, the keeper of the coins at the Copenhagen Museum, writes me that he cannot see how this coin can be a forgery, and it is therefore included in the list.

A full description of each die appears unnecessary in conjunction with the plates. Any coin may be identified in the following manner: all emblems in the field are given separate classifications; coins with a dot and another emblem are listed under the other emblem, except in the case of those with the dot and the four-pointed star, where the coins are listed under the dot series, since the star in these cases was added to the dot. The minor varieties in the various classes may be distinguished by the position of the emblem, if one appears; by the position of the dolphins or the necklace; by the position and form of the letters of the inscriptions; by the angle formed by the upper leaf in the hair, at times a straight line with the back of the neck as in C. XVI, or bent back as in C. VIII or C. VI. On some dies a small curl appears just back of this leaf, and this curl varies in form; a small curl is sometimes added in front of this leaf in the angle formed with the large leaf extending across the top of the head. The small locks which fall from the edge of the hair along the line from the front of the ear to the leaf that points to the eye present the greatest and most easily recognized variety in form as well as in number, and owing to their protected position are almost always sufficiently evident for identification. The reverses show only minor variations, such as the position of the arms of the Nike, wide apart or close together; the position of her knee in relation to the head of the third horse; the angle at which the goad is held; the position of the driver's hands; the reins and horses' collars, and especially the position of the horses' legs and hoofs; and, in the exergue, the position of the helmet and greaves and the presence or absence of the inscription AOΛA, which however is rarely to be seen on the coin even when present on the die. From the specimens examined it has been impossible to determine whether the following reverses were so inscribed: R. I, R. XV, R. XVII, R. XVIII, R. XXI, R. XXIII.

The statement contained in the catalogue of the Bunbury collection

(Sotheby, June 1896, No. 415), that "on the reverse on the exergual line to right there appears to be a portion of the artist's signature E . . . N," is hardly possible, nor is the statement in the same catalogue in regard to No. 416: "behind the head of Persephone is a large star of eight rays, there appear to be traces of the artist's initials on the dolphin to right." Although both of these statements are quoted by Forrer in his "Signatures de Graveurs sur les Monnaies Grecques," where many of Evans' surmises are likewise repeated as facts. I have found no trace of any signature on any reverse, nor any signature on any obverse, other than the usual one in large letters below the dolphin below the neck.

The evidence of the cracked and rusted dies shows that A. I was first struck with R. I, then with R. II (crack between the dolphin and neck); R. II was used at about the same time with B. I, and later with C. I, C. VII, and C. VIII in that sequence. C. I was first struck with R. III (a scar appears on the lower left dolphin's nose); C. VII was first struck with R. IV (crack over the eye); C. VIII was first struck with R. V, then with R. II, and lastly with R. IV (crack at front leaf). It appears more reasonable to suppose that the full signature preceded the shorter form than that it was a contemporary variety, but this is not proven; it certainly was not later.

C. XV was first struck with R. IV, then with R. VIII and R. VII (crack between dolphin and neck); R. VIII was then used with C. XVI, which was later struck with R. IX (crack on upper side of dolphin under neck). R. VIII was later used in a badly rusted condition with F. I, which was also struck with R. IX, likewise badly rusted.

R. IX was used in the following sequence: C. XVI, new; D. I, a spot above the right greave; D. II, spots forming a semi-circle from the right greave to helmet; F. I, die badly corroded (it should be noted that D. II is C. XVI with the delta added). D. I was struck with R. IX first, before the crack between the dolphin and the neck had extended to the front; then with R. X; and at about the same time with R. XI.

R. XI was first used with D. I; then, a trifle rusted, with E. I; and lastly, badly rusted, with F. II.

This establishes the order of A. B. C. D. E. F., which together form the first group. R. XIV was used in the following sequence: F. IV, F. VII, F. VIIa, and (badly rusted) F. IX; F. IX was first struck with R. XIV;

then with R. XVI, which cracked; then with R. XV, which it used at about the same time as F. VIIa and F. VIII; F. IXa also used R. XV.

R. XXI was first used with J. I at about the same time as R. XXII; it was then used with J. II, and about the same time with F. IXa, which had been first struck with R. XV; and it was used last with J. III.

F. IV, the first to use R. XIV, was the last to use R. XII, which had been used simultaneously by F. II and F. III; F. II used R. XI and R. XII at the same time.

The order is thus established: D. I before E. I, and E. I before F. II by R. XI.

That F. II and F. III were contemporary and earlier than F. IV is shown by R. XII.

R. XIV proves the sequence F. IV, F. VII, F. VIIa, F. IX.

F. I is proved later than C. XVI, D. I, D. II, by R. IX; and later than C. XV and C. XVI by R. VIII.

In the second group G. I was first struck with R. XVII, which cracked; it was then struck with R. XIX, which reverse was used at the same time with J. VIa, and was also used with G. Ia.

J. VI used R. XXII, which was used in the following sequence: J. I, J. IV, J. V, J. VI, J. VIIa.

J. I was struck with R. XXI before J. II and J. III.

J. V used R. XXIII before K. II, K. III, and F. IXa, but after K. Ia; the G. series is thus connected with the J. series by R. XIX, and the J. series with the K. by R. XXIII.

The connection of the two groups A. B. C. D. E. F. and G. H. J. K. L. rests on F. IXa, which is F. IX with a dot added below the chin. This dot was added after two large cracks had appeared across the back of the head, and these cracks serve to identify these coins as F. IXa rather than F. IX, when the dot does not show, as in the case of the specimen Caprotti, Milan, 1910, No. 425, where a bad cut has destroyed part of the obverse, but the cracks on the back of the head are even greater than on the Berlin coin, which is evidently F. IXa.

F. IXa was struck first with R. XV (E. T. Newell Collection, and Hirsch XXXII 1912, No. 327); then with R. XXI (Berlin); and lastly with R. XXIII (Caprotti, Milan 1910, No. 425). It is thus shown that F. IXa connects with its own F. group through F. VIIa, F. VIII, and

F. IX by R. XV; with the J. group, J. I, J. II, and J. III by R. XXI; and with the J. and K. groups, J. V, K. Ia, K. II, and K. III by R. XXIII. The order established by the condition of the dies is confirmed by certain details on the reverses. The Nike from R. I to R. XII holds her arms and hands apart and has a heavy roll of drapery around her thigh, while the horses' reins pass over the right hand, or last horse's neck; at R. XV the Nike holds her hands closer together; at R. XVI they are close. The drapery becomes lighter on R. XVIII, and only two reins pass over the last horse's neck. At R. XVII, when the second group begins with G. I, the drapery is light and the hands close together, although the arms are still slightly apart and the reins pass over the last horse. At R. XIX the arms and hands are together, the drapery light, and only one rein passes over the last horse's neck. These features remain the same through R. XXIV, with the exception that on R. XXII two reins pass over the last horse. G. F. Hill, in *Le Musee* (I, [1904], 50 f.) places L. I as the last of this series of dekadrachms, and the evidence of the reverse dies tends to confirm his opinion. The fact that a transition can be noted through R. XIV, R. XV, R. XVI, and R. XVIII, which have been shown to have been nearly contemporary by F. VIIa and F. IX, confirms the order of the dies at that point and the precedence of the A. B. C. D. E. F. series over the G. H. J. K. L.

Single specimens and hoards of these coins continue to be found, and more dies will probably be added to the list here given. Examples of other dies may be hidden in some of the smaller private collections or museums. That my list is not complete is proved by two black glazed cups, No. 1927, 38 in the Museum für Kunst und Gewerbe, Hamburg, and a similar cup in the Louvre, Salle H, Vitrine D, M. N. C. 204, the interior of which is reproduced, enlarged two diameters, as the frontispiece.

These cups have in their centre a relief which has been made from a mould made from the impression of a Syracusan dekadrachm of the Euainetos type of die, of which up to the present no coin has been recorded. This die resembles F. VIIa, but back of the neck, in place of the shell, there is a symbol which has been found on no other coin. The earring is evidently a clumsy attempt by the potter to restore a detail which had failed to make a sufficiently strong impression in the mould.

There is no way of determining the identity of the artists who were responsible for any of the dies other than those which bear a signature. G. F. H. (G. F. Hill) says in the *British Museum Quarterly* (vol. II, no. 4. [1928], p. 95, n. 64 "Greek Coins"): "No. 4 is a decadrachm of Syracuse of about 400 B.C. the well-known type of the head of Arethusa is that associated with the engraver Euaenetus, but this is one of the unsigned issues for which he was probably not responsible." The comment is pertinent, although the coin happens to be the specimen from the Murray collection which I have listed under C. VIII, one of the signed dies, since other specimens show the signature which does not appear on the Murray coin.

It is unlikely that a man who took sufficient pride in his work to cause him to place his name in large letters upon it in a most conspicuous position should have also made the dies which bear the various symbols but lack the signature. No coin bears both a symbol and a signature with the exception of the two coins with the delta, and one of these, D. II, is simply C. XVI with the delta added. The delta dies are given a separate series since the signature is so often lacking from the coin, owing to careless striking, and since these coins have so long been classified as different from and earlier than the other signed coins.

It is possible, in view of the great number of dies required, that assistants were employed by Euainetos who were allowed to identify their work in this manner with various symbols but could not place their names upon coins for which Euainetos alone was responsible, while on the other hand the master would not place his name upon the work of another artist. The variations among the dies with the shell or the dot make it also possible that the symbol was the mark of a hall or branch of the mint or factory and was used indiscriminately by all of the men employed there, an original die by Euainetos serving as a model in all cases. Where a design is so closely followed it is impossible to say how many men were responsible for the minor differences which may be noted; they are little more than may be observed in the series which bear the signature. The resemblance between the coins bearing the eight-pointed star and the gold coins which are marked with the same symbol is interesting.

The designs of both the obverse and reverse were old ones which had been used and modified by many engravers. Euainetos and Kimon each

created his own type, and the entire series here illustrated shows a most amazing repetition of the details of the arrangement of the hair, locks and curls being slavishly repeated. C. I and C. VIII are almost identical, the inscription being the main point at which they differ. The lettering was always added haphazard, the final N of ΣYPAKOΣIΩN being frequently obscured entirely or in part by the tail of a dolphin. Both forms of the N were used indiscriminately (compare the signatures on C. VII and C. XVI). The reverse dies are rather monotonous. In R. XIV, evidently anxious to introduce some added action, the artist in raising the horses completely off the ground forgot the last pair of hind legs. This he attempted to remedy in R. XVI, but the added legs produced such an unfortunate effect that the horses were brought down to earth again and remained there. R. XXIV, like its obverse L. I, is the only pronounced variety in the series.

To attempt to date coins of the end of the fifth century B.C. within a decade, or to place one as earlier than another from its style or by the action or lack of action in the design, is futile. One hundred years earlier Greek artists, struggling for expression, made new discoveries every year which were recorded in their works, but as time went on the lesson was learned and by 412 B.C. there was little field for experiment. The engravers of these coins were fully equipped, and when the first die of the series was engraved the artist who designed it had all of the knowledge and artistic development which are displayed in the latest, whichever one that may be. It was a case of personal variation such as may be found in the work of any artist and not part of the artistic development of a race: art still developed — it never stands still — but its progress was slower in 400 than in 500 B.C., and dating by style, always uncertain, becomes more difficult and less reliable.

Many questions are raised by these coins which remain unanswered. Why should an artist continue to engrave dies which were too large for the coins for which they were intended? Coins which show the entire die are almost unknown: even when large enough they are carelessly struck and badly centred. This is in strong contrast with Kimon's coins, which are often well struck from dies which fit the coins. How was the line below the chin removed from the die of F. VII? Die G. I has no inscription whatever, its straight profile is unlike that of any other coin, it

looks unfinished. Why was it reissued with a griffin's head beneath the chin after a large flaw had obscured the shell behind the head? The shell is unique in that it is turned down instead of up. The two griffins' heads on H. I are slightly different from the one on G. Ia; what connection was there between the two coins? L. I, with its reverse R. XXIV, is unlike any other die, and the two known examples are more carefully struck than the normal type. Were they trial pieces, or were they struck for some special holding of the games?

If the first issue of the Euainetos dekadrachms is dated 412 B.C., the occasion of the tenth anniversary of the victory may have been celebrated by the placing of the delta on the coins D. I. The demand for these pieces being great, one of the older dies, C. XVI, was brought out and reissued with the delta added (D. II).

The normal eyesight of a man would not permit his engraving one of these dies much after his fortieth year without artificial aid. D. I is the last die which bears the signature of Euainetos; if he was forty years old in 403 B.C. he might have placed his signature on dies which he cut twenty-two years earlier at the age of eighteen. This would place his earliest tetradrachms at about 425 B.C., which agrees with previously held theories; it would also account for the lack of signed dies after the delta series, as well as the necessity for reissuing one of the signed coins at this time. The dot may likewise have been added to older dies and new dies engraved with the dot to denote the second ten-year period after the victory. This would bring the last of the dekadrachms down to about 393 B.C.

Shortly after the signed series came to an end the change in the type of the reverse began, and the Nike as she appears on these later dies is almost identical in every detail with the Nike on the reverses of the dekadrachms signed by Kimon; the arrangement of the reins is also similar. This fact, taken together with the character of the head on F. I, which resembles the heads on the Kimon coins far more than the Euainetos type of head, suggests the possibility that the men employed in copying the Euainetos models were influenced by Kimon's dekadrachms; none of the reverses are signed, and the same man or men may even have made reverse dies for both artists. The K. series, with the eight-pointed star, might have been contemporary with the shell series, and may owe its distinctive type of head to the coins which have been generally classified as Kimon's earliest; the resemblance is striking.

Sir Arthur Evans in his book calls attention to the probable derivation of the design of this dekadrachm of Kimon's from two Syracusan tetradrachms, one signed by Euainetos and an earlier one (judging from its style) by an unknown artist. That Kimon developed his art in Syracuse in the company of the older and more celebrated artist, established his own mint, and influenced with his strong personality the other die engravers of his time appears to be evident. While Kimon's signature is found only on the coins of Syracuse, Euainetos signed his name on a coin of Katanē, which is interesting for several reasons: his signature appearing on the coins of two cities is one of the strongest reasons for believing that he signed as an artist rather than as a magistrate; the head on the Katanē coin resembles in type that found on the dekadrachms with the shell F. V and the dot J. VI more than any of the signed series A., B., or C.; the fact that Euainetos signed coin dies for two cities provides one of the few pieces of definite evidence in regard to the history of his life.

Many forgeries of these coins are in existence, and some have found places in great collections. Forged dies have been cut and coins of correct weight struck; while the obverse dies are rarely well executed the reverse is sometimes excellent. Certain of the coins listed in this book have been suspected; as already stated, I doubt the authenticity of C. Y., but I know this coin only from a photograph and a cast. Reverse XIII is unusual: the trophy is full-face instead of three-quarters, the helmet is different from the others, and the grouping of the reins is strange. However, the type of the Nike and the action of the driver and the horses is correct for coins of the F. series. This reverse is used with F. V, which I have examined and believe to be genuine; it is also used with F. VI, in Copenhagen, which has a peculiar head, but with such variations from the normal as may be found in the obverse of G. I and the obverse and reverse of L. I; it is dangerous to state that a coin is false simply because it does not conform to a type. The exact position in the series of F. V and F. VI and R. XIII is uncertain, since they do not connect with any other dies.

The Naples Museum considers Naples 5123 and Naples 5124, both listed by me under C. VIII, as doubtful; this, however, is simply a question of replicas of known dies.

The coins which have been selected to illustrate the obverse dies are identified in the following lists by a *, those selected to illustrate the reverse dies by a †.

LIST OF KNOWN SPECIMENS

A. I

ΣΥ·ΡΑ·ΚΟΣΙ·ΩΝ

Below the lower dolphin, ΕΥΑΙΝΕΤΟΥ·

R. I †1 New York, A. Gallatin Collection. Gr. 42.62.

R. II *†1 Baltimore, J. W. Garrett Collection. Gr. 42.96.
Hill, "Select Greek Coins," Pl. XXVIII, 1.
Evans, "Syr. Med.," Pl. v, 13a, 13b., Sta. Maria Hoard.
Forrer, "Signatures de Graveurs," p. 119; Euainetos, 40.
Montagu Collection, Sotheby, 1896, 150.

2 New York, E. T. Newell Collection. Gr. 43.12.
Weber Collection, Hirsch xxi, 685.

B. I

ΣΥ·Ρ(ΑΚ)·ΟΣΙΩΝ

Below the lower dolphin, ΕΥ·ΑΙΝΕ·ΤΟ·

R. II *1 Munich.

C. I

ΣΥ·ΡΑ·Κ·Ο·ΣΙΩΝ·

Below the lower dolphin, ΕΥ·ΑΙΝΕ·

R. II *1 Paris, Private Collection. Gr. 42.75.
Naville xiii, 344.
Perrin Collection, Rollin & Feuardent, May 1909, 5.
Rollin & Feuardent, May 1908, 188.
Hoskier Collection, Hirsch xx, 159.
(Warren Collection) Sotheby, 1905, 213.
Regling, Warren Collection 364.

2 Naples, Santangelo 8512.

3 Philadelphia, Academy of Fine Arts.
Spink plate, "Add. Med. from Sta. Maria Hoard," 12.

4 New York, E. T. Newell Collection. Gr. 42.38.
Benson Collection, Sotheby, 1909, 336.

5 Butler Collection, Sotheby, 1911, 82.

6 Feuardent, 1914, 145.
Butler Collection, Sotheby, 1911, 83.

7 Cantoni Collection, G. Sambon, Milan, 1887, 4216.

R. III 1 Brussels (Hirsch).

†2 Acireale, Barone Pennisi di Floristella Collection 679. Gr. 43.15.

3 Paris, R. Jameson Collection 828. Gr. 43.28.
Allatini Collection, Sotheby, 1904, 2.
Bunbury Collection, Sotheby, 1896, 418.
Woodward Collection.

4 Hirsch xi, 120.
Du Chastel 146. B.

C. II

ΣΥ·ΡΑ·Κ·ΟΣ·ΙΩΝ

Below the lower dolphin, ΕΥ·ΑΙΝΕ·

R. III *1 Paris, de Luynes 1248. Gr. 42.85.

2 Berlin.

3 Boston. 04.536. Gr. 42.79.
Regling, Warren Collection 366.
Forrer, "Signatures de Graveurs," p. 117, cut.
Evans, "Syr. Med.," Pl. v, 12 and Pl. ix.
Evans Collection, Sotheby, 1898, Sta. Maria Find, 102.

4 Boston. 97.387 (689). Gr. 42.79.

5 Cefalu, Mandralisca Museum.

6 Copenhagen. Gr. 42.00.

7 Leningrad. Gr. 42.48.

8 Palermo, Legato Valenza.

9 Philadelphia, Academy of Fine Arts.

10 Toronto.

11 Vienna.

12 Acireale, Barone Pennisi di Floristella Collection 680. Gr. 42.90.

13 New York, W. B. O. Field Collection. Gr. 42.25.
A. Cahn Sale, July 1928, 225.
Pozzi Collection, Naville i, 615. Gr. 41.98.
Rome Collection, Sotheby, 1904, 107.

14 Paris, H. de Nanteuil Collection 361 bis.

15 Naville xii, 953. Gr. 42.74.
Helferich-Eisenach Collection, S. Rosenberg, March 1914, 36.
Prowe Collection, Egger, 1904, 252.
Montagu Collection, Sotheby, 1897, 77.

16 Nordheim Collection, Glendining, Dec. 1929, 712. Gr. 42.50.

17 Weber Collection, 1922, 1614. Gr. 42.98.
"(Sparkes & Nelligan Collections.)"

18 Hirsch xxxiii, 464. Gr. 42.40.

19 Benson Collection, Sotheby, 1909, 335. Gr. 42.93.

20 Martinetti Collection, Sambon Canessa, 1907, 770. Gr. 43.10.

21 Egger, 1899, 48.

C. III

ϚY·PΛ··K·OϚIΩ·

Below the lower dolphin, EY·AINE·

R. III *1 Glasgow, Hunter 52. Gr. 43.15.

2 London 176. Gr. 42.73.

3 Syracuse. Gr. 42.60.

4 Naples, de Ciccio Collection.

5 Egger, 1906, 176. Gr. 43.13.
Giesecke, "Sicilia Numismatica," Pl. XIII, 8.

6 R. Hobart Smith Collection, Sotheby, 1897, 54. Gr. 42.89.

C. IV

ϚY·PΛ·K·O·ϚIΩN

Below the lower dolphin, EY·AINE·

R. III *1 Copenhagen, Musee Thorvaldsen 1307.

2 Berlin.

3 Hirsch xix, 258. Gr. 41.98.

4 Merzbacher, 1909, 2572. Gr. 42.76.

C. V

(ϚY)·PA·KO·Ϛ·IΩN

Below the lower dolphin, (EY·AI)NE·

R. III *1 New York, E. T. Newell Collection. Gr. 42.90.

C. VI

ϚY·PA·KOϚ·IΩN·

Below the lower dolphin, EY·AINE·

R. III *1 Brussels (A. F.).
Du Chastel 146.
Forrer, "Signatures de Graveurs," Pl. III, 15.

2 Berlin.

3 London 178. Gr. 42.97.

4 Acireale, Barone Pennisi di Floristella Collection 681. Gr. 42.85.

5 Naville xiii, 346. Gr. 42.37.
Prowe Collection, Egger, 1904, 251.
Montagu Collection ii, Sotheby, 1897, 76.

6 Bement Collection, Naville vi, 516. Gr. 42.75.
G. H. Earle Jr. Collection, Chapman, 1912, 112.

C. VII

ϚY·PA·KO·Ϛ·IΩN·

Below the lower dolphin, EY·AINE·

R. II 1 Copenhagen, Musee Thorvaldsen 1308.

2 Paris, R. Jameson Collection. Gr. 42.34.

R. IV *1 Berlin.

2 Berlin.

3 Berlin.

4 The Hague.

5 Cambridge, A. H. Lloyd Collection 1020. Gr. 43.16.

6 New York, E. T. Newell Collection. Gr. 42.87.

7 Paris, Private Collection 141.
Booth Collection, Sotheby, 1900, 60.

8 (Rhousopoulos Collection), Hirsch xiii, 428. Gr. 43.15.

9 Hess, 1912, 24. Gr. 43.20.
Hess, 1902, 657.
Fox Collection.

10 Burel Collection, Feuardent, 1913, 96.

11 Von Kaufmann Collection, L. Hamburger, 1929, 141. Gr. 42.95.

C. VIII

ΣΥ·ΡΛ·Κ·ΟΣ·ΙΩΝ·

Below the lower dolphin, ΕΥ·ΑΙΝΕ·

R .II *1 New York, A. Gallatin Collection. Gr. 42.99.

2 Paris, Private Collection.

3 Hirsch, stock.

R. IV 1 Cambridge, Leake. Gr. 42.83.

2 London, Murray.

3 Naples, Santangelo 8513.

4 Syracuse. Gr. 41.70.

5 Syracuse. Gr. 43.20.

6 Syracuse. Gr. 42.80.

7 (Evans Collection), Sotheby, 1898, 104. Gr. 43.03.

8 Sambon Canessa, 1927, 975. Gr. 43.05.

9 Vienna, Leopoldstädter Communal-Real- und Obergymnasium 531. Gr. 43.117.

R. V †1 Vienna.

2 Naples 5122. Gr. 43.20.

3 Naples 5123. Gr. 38.90.

4 Naples 5124. Gr. 40.17.

C. IX

ϹY·P(AKO)·Ϲ(IΩN)

Below the lower dolphin, EY·AINE·

R. IV *1 New York, A. Gallatin Collection. Gr. 43.26.
Naville xiii, 345.

2 Otto Helbing Nachf. stock 1929. Gr. 43.00.
Sambon Canessa, 1927, 976.

3 E. Merzbacher Nachf., 1910, 260. Gr. 40.50.
Hirsch xxxiv, 198.
Hirsch xxxi, 221.
Serrure, 1903, 206.

C. X

ϹY·PA··KO·ϹIΩN

Below the lower dolphin, ·EYAINE·

R. IV *1 Berlin.
R. Weil, Winckelmannsfeste, 1884, Pl. II, 2.

2 Berlin.

3 Syracuse.

4 Sartiges, 1910, 137. Gr. 43.25.
Sambon Canessa, 1907, 363.

5 Martinetti Collection, Sambon Canessa, 1907, 774.

R. VI 1 London, Ford.

2 Munich.

3 Philadelphia, Academy of Fine Arts.

4 Philadelphia, Academy of Fine Arts.

5 New York, A. Gallatin Collection. Gr. 42.96.
Glendining 2, 1929, 238.
Naville xii, 952.
Hirsch xxxii, 323.

6 Naville v, 1116. Gr. 41.90.
Egger xxxix, 98.
A. Löbbecke Collection, Hirsch xxvi, 98.

7 Caprotti Collection iii, Clerici, Milan, 1910, 424. Gr. 42.85.
Leo Hamburger, 1910, 69. Gr. 43.20.

C. XI

ϚΥ·ΡΑ·Κ·ΟϚ·ΙΩΝ

Below the lower dolphin, ΕΥ·ΑΙΝΕ·

R. IV 1 Pozzi Collection, Naville i, 616. Gr. 42.72.

R. VI *1 Paris 1.382.

2 Berlin.

3 Berlin.

4 Brussels (A. F.).

5 New York, Hoyt Miller Collection.

6 Paris, H. de Nanteuil Collection 361. Gr. 43.09.
Bougerol Collection Bourgey, 1909, 165.

7 Fenerly Bey Collection, Egger xli, 154. Gr. 41.97.
Ratto, Milan 1911, 190.
Stiavelli Collection, Santamaria, Rome, 1908, 205.
(Rhousopoulos Collection), Hirsch xiii, 429.

8 De Molthein Collection, Rollin & Feuardent, 1895, 579. Gr. 43.20.
De Molthein Collection, A. Cahn, 1901, 579.

C. XII

ϚΥ·ΡΛ··ΚΟ·ϚΙΩΝ·

Below the lower dolphin, ΕΥ·ΑΙΝΕ·

R. IV *†1 Paris, de Luynes 1250. Gr. 43.28.
Dupré Collection.

2 Boston, Warren, Recent Accession, 1929.

3 London, Bank.

4 New York 295. Gr. 41.64.
Ward Collection, Sta. Maria Hoard, 295.

5 Syracuse. Gr. 42.80.

6 The Hague.

7 Acireale, Barone Pennisi di Floristella Collection 682. Gr. 42.78.

8 Baltimore, J. W. Garrett Collection.

9 New York, W. G. Beatty Collection. Gr. 42.78.

10 Ratto, 1912, 496. Gr. 43.32.
Egger, 1909, 240.

R. VI 1 London 177. Gr. 42.15.

2 Syracuse. Gr. 43.20.

3 New York, Mrs. G. P. Cammann Collection. Gr. 42.98.
Polese Collection, Canessa, 1928, 632.

4 Schulman, 1912, 45. Gr. 41.50.

C. XIII

ΣΥ·ΡΛ·Κ·ΟΣΙΩ·

Below the lower dolphin, ΕΥ·ΑΙΝΕ·

R. VI *1 Berlin.

2 Philadelphia, Academy of Fine Arts.
Spink plate, "Add. Med. from Sta. Maria Hoard," 11.

3 Syracuse. Gr. 42.70.

4 New York, A. Gallatin Collection. Gr. 42.81.

5 De Remusat Collection, Feuardent, 1900, 352.

6 Weber Collection, Hirsch xxi, 684. Gr. 43.26.

7 Sotheby, 1894, 61.

R. ? Billoin Collection, Rollin & Feuardent, 1886, 232.

C. XIV

ΣΥ·ΡΛ·Κ·Ο·ΣΙΩΝ

Below the lower dolphin, ΕΥ·ΑΙΝΕ·

R. VI 1 Berlin.

2 Boston. 03.946. Warren C. & M. 1239. Gr. 43.04.

3 Boston. 03.947. Warren C. & M. 1240. Gr. 42.56.

4 Naples, Santangelo 8514

5 Naples, Santangelo 8515.

6 Philadelphia, Academy of Fine Arts.
Spink plate, "Add. Med. from Sta. Maria Hoard," 10.

7 Philadelphia, Academy of Fine Arts.

8 New York, E. T. Newell Collection. Gr. 42.79.
(Duruflé Collection), Rollin & Feuardent, 1910, 213.
P. d'Amecourt 58.

9 New York, A. Gallatin Collection. Gr. 43.20.
"Collection Hongroise," Schulman, 1924, 321.
Hazeldine Collection, Sotheby, 1914, 58.

10 Naville x, 306. Gr. 43.03.
Regling, Warren Collection 363.
(Warren Collection), Sotheby, 1910, 110.

11 Bougerol Collection, Bourgey, 1910, 116. Gr. 42.20.
Sambon Canessa, 1907, 365.
Sambon Canessa, 1906, 229.

R. VII *†1 Paris, de Luynes 1249. Gr. 43.20.

2 Paris 1, 380.

3 Paris 1, 381.

4 Copenhagen. Gr. 43.19.

5 Philadelphia, Academy of Fine Arts.
Spink plate, "Add. Med. from Sta. Maria Hoard," 14.

6 Florence, Marchese Venturi Collection.

7 Paris, Colonel Godefroy Collection. Gr. 42.72.
Evans Collection, Sotheby, 1898, 103.

8 E. Bourgey stock, 1929.

9 Naville v, 1115. Gr. 43.17.

10 Hirsch xiv, 209. Gr. 41.72.

11 Hirsch xxxii, 322. Gr. 43.22.

12 Evans, "Syr. Med.," Pl. VI, 1.

C. XV

ΣΥ·ΡΑΚ·Ο·ΣΙ·ΩΝ

Below the lower dolphin, ΕΥ·ΑΙΝΕ·

R. IV 1 Basle. Gr. 42.92.

2 Dresden. Gr. 42.70.

3 Philadelphia, Academy of Fine Arts.
Spink plate, "Add. Med. from Sta. Maria Hoard," 15.

4 Philadelphia, Academy of Fine Arts.

5 Syracuse. Gr. 42.70.

6 Vienna.

7 Hirsch xiv, 211. Gr. 41.48.

8 Naville iv, 363. Gr. 42.52.

9 Bunbury Collection i, Sotheby, 1896, 413. Gr. 43.29.
Thomas Collection.

R. VII 1 Berlin.

2 Dresden. Gr. 39.20.

3 Paris, H. de Nanteuil Collection 360. Gr. 42.28.
G. Picard Collection, Sambon, 1923, 344.
Burel Collection, Feuardent, 1913, 95.

4 Leo Hamburger stock, 1929. Gr. 42.58.
Naville x, 307.

5 Rollin & Feuardent stock, 1929. Gr. 41.98.
Naville xii, 954.

6 Ratto, 1929, 181. Gr. 42.00.
Ratto, 1926, 258. Gr. 41.85.
Adolph Hess, 1912, 23.
Hirsch xxxiii, 465.
Hirsch xiv, 210. Gr. 41.95.

7 Von Kaufmann Collection, L. Hamburger, 1929, 140.
Gr. 43.07.

8 Rollin & Feuardent, 1908, 189.
G. R. Smith Collection, 1890.

R. VIII 1 London 175. Gr. 43.09.

2 Munich.

3 Odessa. Gr. 43.04.

4 Syracuse. Gr. 42.90.

5 Acireale, Barone Pennisi di Floristella Collection 685.
Gr. 42.77.

6 Helferich-Eisenach Collection, S. Rosenberg, March 1914, 37.
Gr. 43.05.
E. Merzbacher Nachf., 1910, 259.
Dr. Rousset Collection, Bourgey, 1908, 68.
Hoskier Collection, Hirsch xx, 160.
Hirsch xvi, 290.
Mackerell Collection, Sotheby, 1906, 6.

7 Sambon Canessa, 1907, 364. Gr. 42.60.

C. XVI

ΣΥ·ΡΑ·Κ·ΟΣ·ΙΩΝ

Below the lower dolphin, ΕΥ·ΑΙΝΕ·

R. VIII †1 Munich.
2 Paris 1.383.
3 Adolph Hess Nachf., 1912, 22. Gr. 40.20.
4 Sotheby, July 1910, 111. Gr. 43.03.

R. IX *1 Brussels (A. F.).
Du Chastel 147.
Forrer, "Signatures de Graveurs," Pl. III, 16 and Cover.

C. Y

No ΣΥΡΑΚΟΣΙΩΝ inscription.

Below the lower dolphin, ΕΥ·ΑΙΝΕ·

R. Y *1 Copenhagen. Gr. 43.21.
Reutze Collection Catalogue, 1863, 141.

D. I

ΣΥ·ΡΑ·Κ·Ο·ΣΙΟΝ

Below the lower dolphin, ΕΥ·ΑΙΝΕ·

In the field, below the chin, Δ

R. VIII 1 Palermo, dono Tagliavia.
2 Cambridge, C. T. Seltman Collection.

R. IX *†1 Paris, Private Collection 289.
2 Cambridge, Leake. Gr. 43.21.
3 Munich.
4 Naples 5121. Gr. 43.00.
5 Paris, de Luynes 1245.
6 Syracuse. Gr. 43.30.

R. X 1 Florence, Archaeological Museum.
2 The Hague.
3 London 174. Gr. 43.26.
4 Naples, Santangelo 8518.

†5 Acireale, Barone Pennisi di Floristella Collection 695. Gr. 43. 20.

6 New York, W. G. Beatty Collection. Gr. 42.57.

7 New York, A. Gallatin Collection. Gr. 42.55.
Vogel Collection, Adolph Hess Nachf., 1929, 151.

R. XI 1 Berlin.

2 Copenhagen. Gr. 43.30.

†3 Rochester, G. J. Bauer Collection. Gr. 42.15.
Pozzi Collection, Naville i, 614.
O'Hagan Collection, Sotheby, 1908, 218.
Ashburnham Collection, Sotheby, 1895, 51.

4 Naples, Santangelo 8519.

5 Paris 1, 378.

6 Paris 1, 379.

7 Philadelphia, Academy of Fine Arts.

8 Collignon Collection, Feuardent, 1919, 117.

9 Martinetti Collection, Sambon Canessa, 1907,773. Gr. 43.05.

10 Hirsch xvii, 531. Gr. 43.05.
Hirsch xiv, 208.

D. II

ΣΥ·ΡΑ·Κ·ΟΣ·ΙΩΝ

Below the lower dolphin, ΕΥ·ΑΙΝΕ·

In the field, below the chin, Δ

R. IX *1 Cambridge, A. H. Lloyd Collection 1021. Gr. 43.37.

2 Berlin.

3 Berlin.

4 Boston 04.1605 C. & M. 1285. Gr. 43.03.

5 Copenhagen, Musee Thorvaldsen 1309.

6 Glasgow, Hunter 53. Gr. 42.58.

7 London 173. Gr. 42.83.
Evans, "Syracusan Medallions," Pl. v, 11.
Head, British Museum Guide, Pl. XXV, 28.
Head, "History of the Coinage of Syracuse," Pl. iv, 3.

8 Milan.

9 Naples 5119. Gr. 43.30.

10 New York 294. Gr. 42.37.
Ward Collection 294. Sta. Maria Hoard.

11 Palermo G. 14703.

12 Palermo, Ripostiglo Salinas.

13 Philadelphia, Academy of Fine Arts.
Spink plate, "Add. Med. from Sta. Maria Hoard," 16.

14 Syracuse. Gr. 42.20.

15 Syracuse. Gr. 42.80.

16 Vienna.

17 Winterthur. Gr. 42.60.

18 Berlin, von Gwinner Collection 1.

19 New York, A. Gallatin Collection. Gr. 43.10.

20 New York, J. P. Morgan Collection. Gr. 43.40.
Sambon Canessa, 1907, 366.

21 New York, J. P. Morgan Collection. Gr. 43.23.
Sambon Canessa, 1907, 368.

22 New York, E. T. Newell Collection. Gr. 43.36.

23 Paris, R. Jameson Collection 827. Gr. 43.28.
Egger, 1906, 175.

24 W. H. Woodward Collection 137. Gr. 43.39.
"From the 1925 find."

25 Ravel stock, 1929.

26 Otto Helbing Nachf., 1930, 139. Gr. 41.70.
Otto Helbing Nachf., 1928, 108.
(J. R. MacClean Dup.), Sotheby, 1909, 53.
H. P. Smith Collection, Sotheby, 1905, 120.

27 Benson Collection, Sotheby, 1909, 334. Gr. 43.13.

28 Prowe Collection, Egger, 1904, 253. Gr. 43.20.

29 Prowe Collection, Egger, xlvi, 86. Gr. 43.06.

30 Egger, 1908, 103. Gr. 43.42.

31 Otto Helbing Nachf., Oct. 1927, 2686. Gr. 43.56.
Ratto, 1927, 430.
Egger, 1909, 239.
Egger, 1908, 102.

32 Weber Collection, Hirsch xxi, 683. Gr. 42.26.

33 Hirsch, xxxiv, 197. Gr. 43.30.
Hirsch xviii, 2280.

34 Hirsch xxxii, 319. Gr. 43.42.

35 Hirsch xxxii, 320. Gr. 43.00.

36 Naville xiii, 340. Gr. 43.19.

37 Naville xiii, 341. Gr. 43.33.

38 Naville xiii, 342. Gr. 43.29.

39 Naville xiii, 343. Gr. 43.30.

40 Naville xii, 951. Gr. 43.50.
Lambros Collection, Hirsch xxix, 121.

41 Bement Collection i, Naville vi, 515. Gr. 43.29.
Hirsch xxxii, 318.

42 Naville v, 1114. Gr. 43.13.
Hirsch xxxii, 321.

43 Leo Hamburger, 1921.

44 Sambon Canessa, 1907, 367. Gr. 42.27.

45 P. P. Santamaria, 1928, 108.

E. I

ΣΥ·ΡΑ·Κ·Ο·ΣΙΩΝ

Behind the neck a scallop shell, turned up.
The shell has eleven scallops.

R. XI *1 Paris, R. Jameson Collection 829. Gr. 43.09.
Sotheby, 1900, 150.
Gonin Collection.

2 Berlin.

3 Boston 04.1604. Warren C. & M. 1284. Gr. 43.16.
Regling, Warren Collection 359.

4 Glasgow, Hunter 55. Gr. 43.32.

5 Acireale, Barone Pennisi di Floristella Collection 687. Gr. 43.06.

6 Berlin, von Gwinner Collection 5. Gr. 42.55.
Hirsch xxxiii, 466.
Martinetti Collection, Sambon Canessa, Rome, 1907, 772.

7 New York, E. T. Newell Collection. Gr. 42.52.
Prowe Collection, Egger xl, 423.
Hirsch xv, 1182.
Bunbury Collection, Sotheby, 1896, 415.
Stewart Collection (1844).

8 Naville iv, 365. Gr. 43.22.
Hirsch xxxii, 325.

9 Weber Collection, Hirsch xxi, 686. Gr. 43.27.

10 (R. Hobart Smith Collection), Sotheby, 1909, 71. Gr. 42.76.
Hirsch xviii, 2281.
Sambon Canessa, 1906, 228.

11 Otto Helbing Nachf., Oct. 1927, 2687. Gr. 41.70.
Sotheby, 1920, 33.

12 E. Merzbacher Nachf., 1910, 262. Gr. 43.20.

13 New York, E. T. Newell, cast of lost coin.

R. ? Butler Collection, Sotheby, 1911, 84.

F. I

ƧY·P·A·K·OƧIΩ·N

Behind the neck a scallop shell, turned up.
The shell has seven scallops.

R. VIII *1 New York, A. Gallatin Collection. Gr. 43.11.

2 Philadelphia, Academy of Fine Arts.

3 Vienna.

4 New York, E. T. Newell Collection. Gr. 43.17.
White-King Collection, Sotheby, 1909, 77.

5 New York, T. C. Schmuck Collection.

6 Colgate Collection, Glendining, 1918, 56.

7 Naville v, 1119. Gr. 43.22.
Marquis Durazzo Collection, Ratto, 1896, 473.

8 Egger, 1908, 104. Gr. 43.41.

R. IX 1 Brussels (Hirsch).

2 Philadelphia, Academy of Fine Arts.
Spink plate, "Add. Med. from Sta. Maria Hoard," 6.

F. II

ϚΥ· ΡΛ· Κ· Ο· ϚΙΩΝ

Behind the neck a scallop shell, turned up.
The shell has seven scallops.

R. XI *1 Syracuse. Gr. 43.30.
2 E. Merzbacher Nachf., 1910, 261. Gr. 43.21.
(Rhousopoulos Collection), Hirsch xiii, 430.

R. XII 1 Athens. Gr. 42.43.
Hirsch xi, 121.
Journal International d'Archéologie Numismatique, ix, 1906, Pl. XII, 2.
2 Boston 11.1768. Gr. 43.39.
Regling, Warren Collection 361.
†3 Oxford, Ashmolean.
4 Palermo, Barone Bordonaro Collection 369.
5 Spink plate, "Add. Med. from Sta. Maria Hoard," 4.

F. III

ϚΥ· Ρ· Λ· Κ· ΟϚΙΩ·

Behind the neck a scallop shell, turned up.
The shell has seven scallops.

R. XII *1 Boston 11, 1767. Gr. 42.71.
Regling, Warren Collection 358.
2 Naples 5118. Gr. 43.25.
3 Syracuse. Gr. 43.40.
4 Hirsch viii, 995.
5 Sambon Canessa, 1907, 362. Gr. 42.70.

F. IV

ϚΥ· ΡΑ· Κ· ΟϚ· (ΙΩΝ)

Behind the neck a scallop shell, turned up.
The shell has seven scallops.

R. XII 1 Headlam Collection, Sotheby, 1916, 112.

R. XIV *1 Syracuse. Gr. 42.50.
2 Leo Hamburger, 1910, 70. Gr. 40.00.
3 L. & L. Hamburger, 1894, 216.

F. V

ϹYPAK·OϹI·ΩN

Behind the neck a scallop shell, turned up.
The shell has seven scallops.

R. XIII *†1 Naples, Santangelo 8516.
2 Martinetti Collection, Sambon Canessa, Rome, 1907, 771.

F. VI

ϹY·PAKO·ϹIΩN

Behind the neck a scallop shell, turned up.
The shell has seven scallops.

R. XIII *1 Copenhagen, ex King Christian VIII Collection. Gr. 43.35.

F. VII

Ϲ·YPA·K·O·Ϲ·IΩN

Behind the neck a scallop shell, turned up.
The shell has seven scallops.
Below the chin a short vertical line.

R. XIV *†1 London, Montagu. Gr. 43.35.
Montagu Collection, Sotheby, 1896, 151.
2 Berlin.
3 Cambridge, McClean. Gr. 42.40.
4 Syracuse. Gr. 42.80.
5 Florence, Marchese Venturi Collection. Gr. 43.01.
Naville v, 1118.
6 New York, E. T. Newell Collection. Gr. 42.99.
7 Naville xii, 957. Gr. 42.97.
Sandeman Collection, Sotheby, 1911, 61.
8 Egger, 1906, 181. Gr. 43.42.

F. VIIA

ΣΥΡΑΚΟΣΙΩΝ

Behind the neck a scallop shell, turned up.
The shell has seven scallops.
This die is the same as F. VII but the vertical line below the chin has been removed.

R. XIV *1 Paris 1, 365.

2 Paris 1, 370.

3 Berlin.

4 Berlin.

5 Munich.

6 Naples 5120. Gr. 42.20.

7 Syracuse. Gr. 42.90.

8 Acireale, Barone Pennisi di Floristella Collection 698. Gr. 43.31.

9 Naples, De Ciccio Collection.

10 Paris, Count Chandon de Brialles Collection. Gr. 43.28.

11 Paris, Private Collection 107.
Whitehead Collection, Sotheby, 1898, 7.
Lake Price Collection 248.

12 Prichard Collection, Sotheby, 1929, 21.

13 Naville iv, 366. Gr. 43.26.

14 Pozzi Collection, Naville i, 617. Gr. 43.24.
Hirsch vii, 131.

15 Collignon Collection., Feuardent, 1919, 116. Gr. 43.27.
Maddalena Collection, Sambon Canessa, 1903, 651.

16 Ratto, 1912, 497. Gr. 43.12.
Sandeman Collection, Sotheby, 1911, 62.
Subhi Pacha Collection, 1878.

17 Egger, 1906, 179. Gr. 43.37.

18 H. P. Smith Collection, Sotheby, 1905, 119.

R. XV 1 Berlin.
Evans, "Syracusan Medallions," Pl. v, 10.

†2 Paris 1, 371.

3 Syracuse. Gr. 43.10.

4 New York, A. Gallatin Collection. Gr. 42.82.
Naville v, 1117.

R. XVIII †1 Acireale, Barone Pennisi di Floristella Collection 688. Gr. 43.24.

F. VIII

ΣΥ·ΡΑ·Κ·Ο·ΣΙΩΝ

Behind the neck a scallop shell, turned up.
The shell has seven scallops.

R. XV *1 Paris 274. de Luynes 1247. Gr. 43.38.
2 Brussels.
3 London, South Kensington, Salting Collection. Gr. 43.13.
O'Hagan Collection, Sotheby, 1908, 219.
4 Philadelphia, Academy of Fine Arts.
5 Acireale, Barone Pennisi di Floristella Collection 694. Gr. 43.23.
6 London, Cyril Lockett Collection.

R. XVIII 1 Copenhagen. Gr. 43.23.

F. IX

ΣΥ·Ρ·Α·Κ·ΟΣΙΩΝ

Behind the neck a scallop shell, turned up.
The shell has seven scallops.

R. XV 1 Berlin, von Gwinner Collection 4. Gr. 42.71.
Spink plate, "Add. Med. from Sta. Maria Hoard," 5.
Merzbacher, 1909, 2573.
Inderwick Collection, Sotheby, 1908, 43.

R. XIV *1 Boston 00.118. Gr. 43.05.
2 London 186. Gr. 43.04.
3 Philadelphia, Academy of Fine Arts.
4 Acireale, Barone Pennisi di Floristella 686. Gr. 42.76.
5 Baltimore, J. W. Garrett Collection.
J. S. Jenks Collection, Chapman, 1921, 45. (Catalogued as Kimon.)

6 New York, Charles Gould Collection. Gr. 42.24.
Egger, 1906, 180.

7 Paris, Private Collection 138. Gr. 43.20.
Locker Lampson Collection 97.
Baron de Belliu Collection.

8 New York, 293. Gr. 43.03.
Ward Collection 293, "Sta. Maria Hoard."

9 Spink stock, 1929. Gr. 43.10.
G. Gallet Collection, Ciani, 1924, 5.

10 Ratto, 1927, 429.

11 Engel Gros Collection, Feuardent, Paris, 1921, 14.

12 Egger, 1909, 241. Gr. 43.39.

13 Fenerly Bey Collection, Egger xli, 153. Gr. 40.67.

14 Sambon Canessa, 1907, 360.

15 Sambon Canessa, 1907, 361.

R. XVI 1 Athens. Gr. 43.04.

2 Vienna.

3 New York, A. Gallatin Collection. Gr. 43.04.
Naville xii, 958.
Hirsch xxxii, 326.

†4 Paris, Private Collection 137. Gr. 43.34.
Evans Collection, Naville iv, 364.

5 Guzman Collection, Sotheby, 1914, 103. Gr. 43.16.
Volon Collection.
Jameson Collection.

F. IXA

ΣΥ·Ρ·Α·Κ·ΟΣΙΩΝ

Behind the neck a scallop shell, turned up.
The shell has seven scallops.
Below the chin a dot.

R. XV *1 New York, E. T. Newell Collection. Gr. 42.80.

2 Hirsch xxxii, 327.

R. XXI 1 Berlin.

2 Naples 5117. Gr. 43.10.

3 Palermo, Barone Bordanaro 371.

R. XXIII 1 Caprotti Collection, Clerici, Milan, 1910, 425. Gr. 41.60.

G. I

No inscription.
Behind the neck a scallop shell, turned down.
The shell has eight scallops.

R. XVII *†1 Paris, de Luynes 1246. Gr. 42.25.

2 Berlin.

3 Brussels (A. F.).
Du Chastel 144.

4 Gotha. Gr. 43.19.

5 Philadelphia, Academy of Fine Arts.
Spink plate, "Add. Med. from Sta. Maria Hoard," 7.

6 New York, A. Gallatin Collection. Gr. 43.00.
Santamaria Catalogue, vii, 1929, 13.
Santamaria, 1928, 107.

7 New York, A. Gallatin Collection. Gr. 42.43.

8 Paris, H. de Nanteuil 359. Gr. 42.71.
Luneau Collection Sale, Paris, 1922, 255.

9 (Warren Collection), Sotheby, 1905, 215. Gr. 42.74.
Regling, Warren Collection 362.

10 Kreling Coll., Schulman, 1913, 138. Gr. 42.20.
Ordoñes Collection, Schulman (1914) and lxii, 124.

11 Ratto, 1926, 259. Gr. 42.55.
Naville v, 1120. Gr. 42.64.
Ratto, 1908, 292. Gr. 42.67.

R. XIX 1 Syracuse. Gr. 43.70.

2 (Duruflé Collection), Rollin & Feuardent, 1910, 215.

G. Ia

No inscription.
A break in the die conceals the scallop shell behind the neck.
Below the chin a griffin head.

R. XIX *†1 London 187. Gr. 43.28.

2 Berlin.

3 Philadelphia, Academy of Fine Arts.
Spink plate, "Add. Med. from Sta. Maria Hoard," 8.

H. I

ϚYPA·K·O·Ϛ·(IΩN)

Behind the neck a griffin head.
Below the chin a griffin head.

R. XX *1 Philadelphia, Academy of Fine Arts.
Spink plate, "Add. Med. from Sta. Maria Hoard," 9.

†2 Acireale, Barone Pennisi di Floristella Collection 678. Gr. 43.25.

J. I

ϚY·P·Λ·K·OϚIΩ·

Below the chin a dot.

R. XXI †1 London 180. Gr. 43.39.

2 Naples 5115. Gr. 43.30.

R. XXII *†1 Copenhagen. Gr. 43.10.

2 Boston 95.104 (593) P 85. Gr. 43.11.

3 Palermo, Ripostiglio Salinas.

4 Palermo, Barone Bordonaro Collection 370.

5 Ratto, 1912, 495. Gr. 42.42.
Norman Collection, Bourgey, 1910, 52.

J. II

ϚY·PA·KO·(Ϛ·)I(ΩN)

Below the chin a dot.

R. XXI *1 London 179. Gr. 43.37.

2 Acireale, Barone Pennisi di Floristella Collection 684. Gr. 43.20.

3 Berlin, von Gwinner Collection 3.

4 New York, E. T. Newell Collection. Gr. 43.24.

J. III

ΣY·PAK·O·ΣIΩN

Below the chin a dot.

R. XXI *1 London 181. Gr. 42.76.
2 Munich.
3 Naville xii, 955. Gr. 42.89.
Hirsch xxxii, 324.
4 Naville xii, 956. Gr. 41.59.
5 Sambon Canessa, Paris 1927, 977. Gr. 40.80.

J. IV

ΣYP·AK·O·Σ·IΩN

Below the chin a dot.

R. XXII *1 Glasgow, Hunter 54. Gr. 43.11.
2 Berlin.
3 Brussels (Hirsch).
4 Naples 5114. Gr. 42.65.
5 Vienna, Richter.
6 New York, A. Gallatin Collection. Gr. 42.80.
Bement Collection i, Naville vi, 517.
Delbeke, Collection Sotheby, 1907, 64.
Egger, 1899, 47.

J. V

ΣY·P·A·K·OΣIΩN

Below the chin a dot.

R. XXII *1 New York, J. P. Morgan Collection. Gr. 42.94.
Hartwig Collection, Santamaria, 1910, 626.
2 Naples 5116. Gr. 43.30.
3 Syracuse. Gr. 37.60.
4 (Duruflé Collection), Rollin & Feuardent, 1910, 214.
5 R. Carfrae Collection, Sotheby, 1894, 67. Gr. 43.09.
R. XXIII 1 Cambridge, A. H. Lloyd Collection 472. Gr. 42.40.

J. VI

ϹYP·AK·OϹI·ΩN

Below the chin a dot.

R. XXII *1 Berlin, von Gwinner Collection 2.
Rollin & Feuardent, 1908, 190.

2 Collignon Collection, Feuardent, 1919, 115. Gr. 43.29.
Warren Collection, Sotheby, 1905, 214.

J. VIA

ϹYP·AK·OϹI·ΩN

Below the chin a dot.
Behind the neck a star of four rays.

R. XIX *1 London 183. Gr. 42.73.

2 Syracuse. Gr. 43.20.

J. VIIA

ϹY·(PA)K·O·ϹIΩN

Below the chin a dot.
Behind the neck a star of four rays.

R. XXII *1 London 182. Gr. 42.85.

2 Paris, 1, 384.

3 Acireale, Barone Pennisi di Floristella Collection 683. Gr. 41.73.

4 Barrachin Collection, Drouot, Paris, 1924, 172. Gr. 43.02.
Benson Collection, Sotheby, 1909, 337.

5 Sotheby, July 1899, 69.

K. Ia

ϹΥΡΑΚΟΣΙΩΝ

Below the chin a dot.
Behind the neck a star of eight rays.

R. XXIII *†1 London 184. Gr. 43.20.

2 Berlin.

3 Philadelphia, Academy of Fine Arts.
Spink plate, "Add. Med. from Sta. Maria Hoard," 13.

4 Rome, Vatican.

5 Paris, Colonel Godefroy Collection. Gr. 43.16.

6 Paris, R. Jameson Collection 830. Gr. 43.28.
Egger, 1906, 178.

K. II

ϹΥΡΑΚΟΣΙΩΝ

Behind the base of the neck, between the third and fourth dolphins, a star of eight rays.

R. XXIII *1 Berlin.

2 Boston 03.950. C. & M. 1243. Gr. 42.98.

3 London 185. Gr. 43.38.

4 Naples, Santangelo 8517.

K. III

(ϹΥΡΑΚΟΣΙΩΝ)

Inscription not visible on either specimen.
Behind the neck, partly covered by the hair, a star of eight rays.

R. XXIII *1 Munich.

2 Hirsch xi, 122.

L. I

ΣΥ·ΡΑ·ΚΟ·ΣΙΩΝ

The inscription is placed below the head.

R. XXIV *†1 Paris, R. Jameson Collection 835. Gr. 41.91.
Evans, "Syr. Med.," Pl. IV, Sta. Maria Hoard.
Forrer, "Signatures de Graveurs," p. 110 and Pl. III, 14.
Du Chastel, 145.

2 London, acquired 1922. Gr. 42.77.
Thomson-Yates Collection.
Ashburnham Collection, Sotheby, 1895, 53.
Num. Chron., 1923, Pl. IX, 1.
Hill, "Select Greek Coins," Pl. XXVIII, 2, Pl. LII, 1.
Hill, "Coins of Ancient Sicily," p. 103, Pl. I and Frontispiece, No. 7.
Burlington Fine Art Club Greek Art Exhibition, 1903, p. 156, No. 432 and Pl. CV.

TABLE OF DIE COMBINATIONS

The A above the Reverse die indicates that the die has the inscription AΘΛA, the — that it has no inscription.

	I	— II	A III	A IV	A V	— VI	A VII	A VIII	A IX	A X	A XI	A XII	— XIII	— XIV	XV	— XVI	XVII	XVIII	A XIX	A XX	XXI	A XXII	XXIII	A XXIV	Y	?	
A. I	1	2																									3
B. I		1																									1
C. I		7	4																								11
C. II			21																								21
C. III			6																								6
C. IV			4																								4
C. V			1																								1
C. VI			6																								6
C. VII		2		11																							13
C. VIII		3		9	4																						16
C. IX				3																							3
C. X				5		7																					12
C. XI				1		8																					9
C. XII				10		4																					14
C. XIII						7																				1	8
C. XIV						11	11																				22
C XV				9			8	7																			24
C. XVI								4	1																		5
C. Y																									1		1
D. I								2	6	7	10																25
D. II									45																		45
E. I											13															1	14
F. I								8	2																		10
F. II											2	5															7
F. III												5															5
F. IV												1		3													4
F V													2														2
F. VI													1														1
F. VII														8													8
F. VIIa														18	4			1									23
F. VIII															6			1									7
F. IX														15	1	5											21
F. IXa															2						3		1				6
G. I																	11		2								13
G. Ia																			3								3
H. I																				2							2
J. I																					2	5					7
J. II																					4						4
J. III																					5						5
J. IV																						6					6
J. V																						5	1				6
J. VI																						2					2
J. VIa																			2								2
J. VIIa																						5					5
K. Ia																							6				6
K. II																							4				4
K. III																							2				2
L. I																								2			2
48	1	15	42	48	4	37	19	21	54	7	25	11	3	44	13	5	11	2	7	2	14	23	14	2	1	2	427

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Pennisi Coll.
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680–C. II: R. III–12
681–C. VI: R. III–4
682–C. XII: R. IV–7
683–J. VIIa: R. XXII–3
684–J. II: R. XXI–2
685–C. XV: R. VIII–5
686–F. IX: R. XIV–4
687–E. I: R. XI–5
688–F. VIIa: R. XVIII–1
694–F. VIII: R. XV–5
695–D. I: R. X–5
698–F. VIIa: R. XIV–8

Athens
F. II: R. XII–1
F. IX: R. XVI–1

Baltimore
Garrett Coll.
A. I: R. II–1
C. XII: R. IV–8
F. IX: R. XIV–5

Basle
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Berlin
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C. IV: R. III–2
C. VI: R. III–2
C. VII: R. IV–1
C. VII: R. IV–2
C. VII: R. IV–3
C. X: R. IV–1
C. X: R. IV–2
C. XI: R. VI–2
C. XI: R. VI–3
C. XIII: R. VI–1
C. XIV: R. VI–1
C. XV: R. VII–1
D. I: R. XI–1
D. II: R. IX–2
D. II: R. IX–3
E. I: R. XI–2
F. VII: R. XIV–2
F. VIIa: R. XIV–3
F. VIIa: R. XIV–4
F. VIIa: R. XV–1
F. IXa: R. XXI–1
G. I: R. XVII–2
G. Ia: R. XIX–2
J. IV: R. XXII–2
K. Ia: R. XXIII–2
K. II: R. XXIII–1

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1–D. II: R. IX–18
2–J. VI: R. XXII–1
3–J. II: R. XXI–3
4–F. IX: R. XV–1
5–E. I: R. XI–6

Boston
95.104(593)–J. I: R. XXII–2
97.387(689)–C. II: R. III–4
00.118–F. IX: R. XIV–1
03.946–C. XIV: R. VI–2
03.947–C. XIV: R. VI–3
03.950–K. II: R. XXIII–2
04.536–C. II: R. III–3
04.1604–E. I: R. XI–3
04.1605–D. II: R. IX–4
11.1767–F. III: R. XII–1
11.1768–F. II: R. XII–2
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C. VI: R. III–1
C. XI: R. VI–4
C. XVI: R. IX–1

F. I: R. IX–1
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G. I: R. XVII–3
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D. I: R. IX–2
McLean
F. VII: R. XIV–3

Lloyd Coll.
472–J. V: R. XXIII–1
1020–C. VII: R. IV–5
1021–D. II: R. IX–1

Seltman Coll.
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Cefalu
C. II: R. III–5

Copenhagen
C. II: R. III–6
C. XIV: R. VII–4
C. Y: R. Y–1
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1308–C. VII: R. II–1
1309–D. II: R. IX–5

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C. XV: R. VII–2

Florence
D. I: R. X–1

Venturi Coll.
C. XIV: R. VII–6
F. VII: R. XIV–5

Glasgow
52–C. III: R. III–1
53–D. II: R. IX–6
54–J. IV: R. XXII–1
55–E. I: R. XI–4

Gotha
G. I: R. XVII–4

The Hague
C. VII: R. IV–4
C. XII: R. IV–6
D. I: R. X–2

Leningrad
C. II: R. III–7

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173–D. II: R. IX–7
174–D. I: R. X–3
175–C. XV: R. VIII–1
176–C. III: R. III–2
177–C. XII: R. VI–1
178–C. VI: R. III–3
179–J. II: R. XXI–1
180–J. I: R. XXI–1
181–J. III: R. XXI–1
182–J. VIIa: R. XXII–1
183–J. VIa: R. XIX–1
184–K. Ia: R. XXIII–1
185–K. II: R. XXIII–3
186–F. IX: R. XIV–2
187–G. Ia: R. XIX–1
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Ford–C. X: R. VI–1
Montagu–F. VII: R. XIV–1
Murray–C. VIII: R. IV–2
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South Kensington
F. VIII: R. XV–3

Lockett Coll.
F. VIII: R. XV–6

Woodward Coll.
137–D. II: R. IX–24

Milan
D. II: R. IX–8

Munich
B. I: R. II–1
C. X: R. VI–2
C. XV: R. VIII–2
C. XVI: R. VIII–1
D. I: R. IX–3
F. VIIa: R. XIV–5
J. III: R. XXI–2
K. III: R. XXIII–1

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5114–J. IV: R. XXII–4
5115–J. I: R. XXI–2
5116–J. V: R. XXII–2
5117–F. IXa: R. XXI–2
5118–F. III: R. XII–2
5119–D. II: R. IX–9
5120–F. VIIa: R. XIV–6
5121–D. I: R. IX–4
5122–C. VIII: R. V–2
5123–C. VIII: R. V–3
5124–C. VIII: R. V–4
Santangelo
8512–C. I: R. II–2
8513–C. VIII: R. IV–3
8514–C. XIV: R. VI–4
8515–C. XIV: R. VI–5
8516–F. V: R. XIII–1
8517–K. II: R. XXIII–4
8518–D. I: R. X–4
8519–D. I: R. XI–4
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C. III: R. III–4
F. VIIa: R. XIV–9
New York
293–F. IX: R. XIV–8
294–D. II: R. IX–10
295–C. XII: R. IV–4

Beatty Coll.
C. XII: R. IV–9
D. I: R. X–6

Cammann Coll.
C. XII: R. VI–3

Field Coll.
C. II: R. III–13

Gallatin Coll.
A. I: R. I–1
C. VIII: R. II–1
C. IX: R. IV–1
C. X: R. VI–5
C. XIII: R. VI–4
C. XIV: R. VI–9
D. I: R. X–7
D. II: R. IX–19
F. I: R. VIII–1
F. VIIa: R. XV–4
F. IX: R. XVI–3
G. I: R. XVII–6
G. I: R. XVII–7
J. IV: R. XXII–6

Gould Coll.
F. IX: R. XIV–6

Miller Coll.
C. XI: R. VI–5

Morgan Coll.
D. II: R. IX–20
D. II: R. IX–21
J. V: R. XXII–1

Newell Coll.
A. I: R. II–2
C. I: R. II–4
C. V: R. III–1
C. VII: R. IV–6
C. XIV: R. VI–8
D. II: R. IX–22
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F. VII: R. XIV–6
F. IXa: R. XV–1
J. II: R. XXI–4
Cast–E. I: R. XI–13

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Odessa
C. XV: R. VIII–3
Oxford
F. II: R. XII–3
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Salinas–D. II: R. IX–12
Salinas–J. I: R. XXII–3
Tagliavia–D. I: R. VIII–1
Valenza–C. II: R. III–8

Bordanaro Coll.
369–F. II: R. XII–4
370–J. I: R. XXII–4
371–F. IXa: R. XXI–3

Paris
1365–F. VIIa: R. XIV–1
1370–F. VIIa: R. XIV–2
1371–F. VIIa: R. XV–2
1378–D. I: R. XI–5
1379–D. I: R. XI–6
1380–C. XIV: R. VII–2
1381–C. XIV: R. VII–3
1382–C. XI: R. VI–1
1383–C. XVI: R. VIII–2
1384–J. VIIa: R. XXII–2
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1245–D. I: R. IX–5
1246–G. I: R. XVII–1
1247–F. VIII: R. XV–1
1248–C. II: R. III–1
1249–C. XIV: R. VII–1
1250–C. XII: R. IV–1

de Brialles Coll.
F. VII: R. XIV–10

de Nanteuil Coll.
359–G. I: R. XVII–8
360–C. XV: R. VII–3
361–C. XI: R. VI–6
361bis–C. II: R. III–14

Godefroy Coll.
C. XIV: R. VII–7
K. Ia: R. XXIII–5

Jameson Coll.
827–D. II: R. IX–23
828–C. I: R. III–3
829–E. I: R. XI–1
830–K. Ia: R. XXIII–6
835–L. I: R. XXIV–1
C. VII: R. II–2

de Sartiges Coll.
137–C. X: R. IV–4
Private Coll.
107–F. VIIa: R. XIV–11
137–F. IX: R. XVI–4
138–F. IX: R. XIV–7
141–C. VII: R. IV–7
289–D. I: R. IX–1
C. I: R. II–1
C. VIII: R. II–2

Philadelphia
C. I: R. II–3
C. II: R. III–9
C. X: R. VI–3
C. X: R. VI–4
C. XIII: R. VI–2
C. XIV: R. VI–6
C. XIV: R. VI–7
C. XIV: R. VII–5
C. XV: R. IV–3
C. XV: R. IV–4
D. I: R. XI–7
D. II: R. IX–13
F. I: R. VIII–2
F. I: R. IX–2
F. VIII: R. XV–4
F. IX: R. XIV–3
G. I: R. XVII–5
G. Ia: R. XIX–3
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K. Ia: R. XXIII–3

Rochester
Bauer Coll.
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Rome
Vatican
K. Ia: R. XXIII–4

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C. III: R. III–3
C. VIII: R. IV–4
C. VIII: R. IV–5
C. VIII: R. IV–6
C. X: R. IV–3
C. XII: R. IV–5
C. XII: R. VI–2
C. XIII: R. VI–3
C. XV: R. IV–5
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D. I: R. IX–6
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F. III: R. XII–3
F. IV: R. XIV–1
F. VII: R. XIV–4
F. VIIa: R. XIV–7
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PRIVATE COLLECTIONS

Bauer, G. J. Rochester
Beatty, W. G. New York
Bordonaro, Barone Gabriele Chiaramonte. Palermo
de Brialles, Count Chandon. Paris
Cammann, Mrs. G. P. New York
de Ciccio. Naples
Field, W. B. O. New York
Gallatin, A. New York
Garrett, J. W. Baltimore
Godefroy, Colonel. Paris
Gould, Charles. New York
von Gwinner, A. Berlin
Lloyd, A. H. Cambridge
Lockett, C. London
Miller, H. New York
Morgan, J. P. New York
de Nanteuil, H. Paris
Newell, E. T. New York
Pennisi, Barone Pennisi di Floristella. Acireale
Sartiges, Viconte de. Paris
Schmuck, T. C. New York
Seltman, C. T. Cambridge
Venturi, Marchese Roberto Venturi Ginori. Florence
Ward, J. New York (Metropolitan Museum)
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8–G. Ia.: R. XIX–3
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771–F. V: R. XIII–2
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773–D. I: R. XI–9
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77–C. II: R. III–15
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712–C. II: R. III–16
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219–F. VIII: R. XV–3
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615–C. II: R. III–13
616–C. XI: R. IV–1
617–F. VIIa: R. XIV–14
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III — 86–D. II: R. IX–29
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430–F. II: R. XI–2
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120–D. II: R. IX–26

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II — 71–E. I: R. XI–10

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Thomson–Yates
L. I: R. XXIV–2

Vogel
151–D. I: R. X–7

Volon
F. IX: R. XVI–5

VonKaufman
140–C. XV: R. VII–7
141–C. VII: R. IV–11

Warren
I — 213–C. I: R. II–1
214–J. VI: R. XXII–2
215–G. I: R. XVII–9
II — 110–C. XIV: R. VI–10

Weber
1908 — 683–D. II: R. IX–32
684–C. XIII: R. VI–6
685–A. I: R. II–2
686–E. I: R. XI–9
1922 — 1614–C. II: R. III–17

Whitehead
7–F. VIIa: R. XIV–11

White–King
77–F. I: R. VIII–4

Woodward
C. I: R. III–3
D. II: R. IX–24

IN COMMERCE, 1929

Bourgey
C. XIV: R. VII–8

Hamburger, Leo
C. XV: R. VII–4

Helbing
C. IX: R. IV–2

Hirsch
C. VIII: R. II–3

Ravel
D. II: R. IX–25

Rollin & Feuardent
C. XV: R. VII–5

Spink
F. IX: R. XIV–9

CATALOGUES

UNDER NAMES OF DEALERS

Bourgey
1908 — 68–C. XV: R. VIII–6
1909 — 165–C. XI: R. VI–6
1910 — 52–J. I: R. XXII–5
1910 — 116–C. XIV: R. VI–11

Cahn
1901 — 579–C. XI: R. VI–8
1928 — 225–C. II: R. III–13

Canessa
1907 — 770–C. II: R. III–20
1927 — 975–C. VIII: R. IV–8
1928 — 632–C. XII: R. VI–3
See also Sambon-Canessa

Chapman
1912 — 112–C. VI: R. III–6
1921 — 45–F. IX: R. XIV–5

Ciani
1924 — 5–F. IX: R. XIV–9

Clerici
1910 — 424–C. X: R. VI–7
425–F. IXa: R. XXIII–1

Egger
1899 — 47–J. IV: R. XXII–6
48–C. II: R. III–21
1904 — 251–C. VI: R. III–5
252–C. II: R. III–15
253–D. II: R. IX–28
1906 — 175–D. II: R. IX–23
176–C. III: R. III–5
178–K. Ia: R. XXIII–6
179–F. VIIa: R. XIV–17
180–F. IX: R. XIV–6
181–F. VII: R. XIV–8
1908 — 102–D. II: R. IX–31
103–D. II: R. IX–30
104–F. I: R. VIII–8
1909 — 239–D. II: R. IX–31
240–C. XII: R. IV–10
241–F. IX: R. XIV–12
XXXIX — 98–C. X: R. VI–6
XL — 423–E. I: R. XI–7
XLI — 153–F. IX: R. XIV–13
154–C. XI: R. VI–7
XLVI — 86–D. II: R. IX–29

Feuardent
1900 — 352–C. XIII: R. VI–5
1913 — 95–C. XV: R. VII–3
96–C. VII: R. IV–10
1914 — 145–C. I: R. II–6
1919 — 115–J. VI: R. XXII–2
116–F. VIIa: R. XIV–15
117–D. I: R. XI–8
1921 — 14–F. IX: R. XIV–11
See also Rollin & Feuardent

Glendining
1918 — 56–F. I: R. VIII–6
1929 — 712–C. II: R. III–16
1929 — 238–C. X: R. VI–5

Hamburger, Leo
1910 — 69–C. X: R. VI–7
70–F. IV: R. XIV–2
1921 — D. II: R. IX–43
1929 — 140–C. XV: R. VII–7
141–C. VII: R. IV–11

Hamburger, L. & L.
1894 — 216–F. IV: R. XIV–3

Helbing
1927 — 2686–D. II: R. IX–31
2687–E. I: R. XI–11
1928 — 108–D. II: R. IX–26
1930 — 139–D. II: R. IX–26

Hess
1902 — 657–C. VII: R. IV–9
1912 — 22–C. XVI: R. VIII–3
23–C. XV: R. VII–6
24–C. VII: R. IV–9
1929 — 151–D. I: R. X–7

Hirsch
VII — 131–F. VIIa: R. XIV–14
VIII — 995–F. III: R. XII–4
XI — 120–C. I: R. III–4
121–F. II: R. XII–1
122–K. III: R. XXIII–2

XIII — 428–C. VII: R. IV–8
429–C. XI: R. VI–7
430–F. II: R. XI–2
XIV — 208–D. I: R. XI–10
209–C. XIV: R. VII–10
210–C. XV: R. VII–6
211–C. XV: R. IV–7
XV — 1182–E. I: R. XI–7
XVI — 290–C. XV: R. VIII–6
XVII — 531–D. I: R. XI–10
XVIII — 2280–D. II: R. IX–33
2281–E. I: R. XI–10
XIX — 258–C. IV: R. III–3
XX — 159–C. I: R. II–1
160–C. XV: R. VIII–6
XXI — 683–D. II: R. IX–32
684–C. XIII: R. VI–6
685–A. I: R. II–2
686–E. I: R. XI–9
XXIV — 198–C. IX: R. IV–3
XXVI — 98–C. X: R. VI–6
XXIX — 121–D. II: R. IX–40
XXXI — 221–C. IX: R. IV–3
XXXII — 318–D. II: R. IX–41
319–D. II: R. IX–34
320–D. II: R. IX–35
321–D. II: R. IX–42
322–C. XIV: R. VII–11
323–C. X: R. VI–5
324–J. III: R. XXI–3
325–E. I: R. XI–8
326–F. IX: R. XVI–3
327–F. IXa: R. XV–2
XXXIII — 464–C. II: R. III–18
465–C. XV: R. VII–6
466–E. I: R. XI–6
XXXIV — 197–D. II: R. IX–33

Merzbacher
1909 — 2572–C. IV: R. III–4
2573–F. IX: R. XV–1
1910 — 259–C. XV: R. VIII–6
260–C. IX: R. IV–3
261–F. II: R. XI–2
262–E. I: R. XI–12

Naville
I — 614–D. I: R. XI–3
615–C. II: R. III–13
616–C. XI: R. IV–1
617–F. VIIa: R. XIV–14
IV — 363–C. XV: R. IV–8
364–F. IX: R. XVI–4
365–E. I: R. XI–8
366–F. VIIa: R. XIV–13
V — 1114–D. II: R. IX–42
1115–C. XIV: R. VII–9
1116–C. X: R. VI–6
1117–F. VIIa: R. XV–4
1118–F. VII: R. XIV–5
1119–F. I: R. VIII–7
1120–G. I: R. XVII–11
VI — 515–D. II: R. IX–41
516–C. VI: R. III–6
517–J. IV: R. XXII–6
X — 306–C. XIV: R. VI–10
307–C. XV: R. VII–4
XII — 951–D. II: R. IX–40
952–C. X: R. VI–5
953–C. II: R. III–15
954–C. XV: R. VII–5
955–J. III: R. XXI–3
956–J. III: R. XXI–4
957–F. II: R. XIV–7
958–F. IX: R. XVI–3
XIII — 340–D. II: R. IX–36
341–D. II: R. IX–37
342–D. II: R. IX–38
343–D. II: R. IX–39
344–C. I: R. II–1
345–C. IX: R. IV–1
346–C. VI: R. III–5

Ratto
1896 — 473–F. I: R. VIII–7
1908 — 292–G. I: R. XVII–11
1911 — 190–C. XI: R. VI–7
1912 — 495–J. I: R. XXII–5
496–C. XII: R. IV–10
497–F. VIIa: R. XIV–16
1926 — 258–C. XV: R. VII–6
259–G. I: R. XVII–11
1927 — 429–F. IX: R. XIV–10
430–D. II: R. IX–31
1929 — 181–C. XV: R. VII–6

Rollin & Feuardent
1886 — 232–C. XIII: R. ?
1908 — 188–C. I.: R. II–1
189–C. XV: R. VII–8
190–J. VI: R. XXII–1

1910 — 213–C. XIV: R. VI–8
214–J. V.: R. XXII–4
215–G. I: R. XIX–2

Rosenberg
1914 — 36–C. II: R. III–15
37–C. XV: R. VIII–6

Sambon
1887 — 4216–C. I: R. II–7
1923 — 344–C. XV: R. VII–3

Sambon–Canessa
1903 — 651–F. VII: R. XV–15
1906 — 228–E. I: R. XI–10
229–C. XIV: R. VI–11
1907 — 360–F. IX: R. XIV–14
361–F. IX: R. XIV–15
362–F. III: R. XII–5
363–C. X: R. IV–4
364–C. XV: R. VIII–7
365–C. XIV: R. VI–11
366–D. II: R. IX–20
367–D. II: R. IX–44
368–D. II: R. IX–21
1907 — 770–C. II: R. III–20
771–F. V: R. XIII–2
772–E. I: R. XI–6
773–D. I: R. XI–9
774–C. X: R. IV–5
1927 — 975–C. VIII: R. IV–8
976–C. IX: R. IV–2
977–J. III: R. XXI–5

Santamaria
1908 — 205–C. XI: R. VI–7
1910 — 626–J. V: R. XXII–1
1928 — 107–G. I: R. XVII–6
108–D. II: R. IX–45
1929 — 13–G. I: R. XVII–6

Schulman
1912 — 45–C. XII: R. VI–4
1913 — 138–G. I: R. XVII–10
1914 — 124–G. I: R. XVII–10
1924 — 321–C. XIV: R. VI–9

Serrure
1903 — 206–C. IX: R. IV–3

Sotheby
1894 — 61–C. XIII: R. VI–7
67–J. V: R. XXII–5
1895 — 51–D. I: R. XI–3
53–L. I: R. XXIV–2
1896 — 150–A. I: R. II–1
151–F. VII: R. XIV–1
1896 — 413–C. XV: R. IV–9
415–E. I: R. XI–7
418–C. I: R. III–3
1897 — 54–C. III: R. III–6
1897 — 76–C. VI: R. III–5
77–C. II: R. III–15
1898 — 7–F. VIIa: R. XIV–11
1898 — 102–C. II: R. III–3
103–C. XIV: R. VII–7
104–C. VIII: R. IV–7
1899 — 69–J. VIIa: R. XXII–5
1900 — 60–C. VII: R. IV–7
1900 — 150–E. I: R. XI–1
1904 — 2–C. I: R. III–3
1904 — 107–C. II: R. III–13
1905 — 119–F. VIIa: R. XIV–18
120–D. II: R. IX–26
1905 — 213–C. I: R. II–1
214–J. VI: R. XXII–2
215–G. I: R. XVII–9
1906 — 6–C. XV: R. VIII–6
1907 — 64–J. IV: R. XXII–6
1908 — 43–F. IX: R. XV–1
1908 — 218–D. I: R. XI–3
219–F. VIII: R. XV–3
1909 — 53–D. II: R. IX–26
1909 — 71–E. I: R. XI–10
77–F. I: R. VIII–4
1909 — 334–D. II: R. IX–27
335–C. II: R. III–19
336–C. I: R. II–4
337–J. VIIa: R. XXII–4
1910 — 110–C. XIV: R. VI–10
111–C. XVI: R. VIII–4
1911 — 61–F. VII: R. XIV–7
62–F. VIIa: R. XIV–16
1911 — 82–C. I: R. II–5
83–C. I: R. II–6
84–E. I: R. ?
1914 — 58–C. XIV: R. VI–9
1914 — 103–F. IX: R. XVI–5
1916 — 112–F. IV: R. XII–1
1920 — 33–E. I: R. XI–11
1929 — 21–F. VIIa: R. XIV–12

PLATES



A. I.



B. I.



C. I.



C. II.



C. III.



C. IV.



C. V.



C. VI.



C. VII.



C. VIII.



C. IX.



C. X.



C. XI.



C. XII.



C. XIII.



C. XIV.



C. XV.



C. XVI.



C.Y.



D.I.



D.II.



E.I.



F.I.



F.II.



F. III.



F. IV.



F. V.



F. VI.



F. VII.



F. VIIa.



F.VIII.



F.IX.



F.IXa.



G.I.



G.Ia.



H.I.



J.I.



J.II.



J.III



J.IV.



J.V.



J.VI.



J. VIa.



J. VIIa.



K. Ia.



K. II.



K. III.



L. I.



R. I.



R. II.



R. III.



R. IV.



R. V.



R. VI.



R. VII.



R. VIII.



R. IX.



R. X.



R. XI.



R. XII.



R. XIII.



R. XIV.



R. XV.



R. XVI.



R. XVII.



R. XVIII.



R. XIX.



R. XX.



R. XXI.



R. XXII.



R. XXIII.



R. XXIV.