uted by the writers, producing a more satisfactory result than would uniform notices in condensed, encyclopedic style.

The titles of the medals have been corrected and expanded, and dates, processes, metals or materials, sizes, etc., added where possible. The new volume is equipped with an introduction, and also an index of artists and their works. As large a number of artists as possible have been represented in the illustrations. Many of the exhibitors furnished supplementary photographs of their works, which have been utilized to the extent compatible with the size of a single volume.

This new edition will, it is hoped, fill a need felt by the lovers of the medallic art. It is an attempt to supply in English a sort of text-book from which to begin the study of the modern or, more accurately, the contemporaneous medal. This catalogue of medals, with its illustrations, and the brief outline of the history of the medallic art given in the introduction, are designed to place the reader in a position to pursue the study of medallic art in the numerous foreign works dealing with the subject. The stress laid by modern critics and collectors upon the purely artistic quality of the medal is a comparatively recent viewpoint. Furthermore, the element of technique has played no minor rôle in the evolution of style; hence, a clear understanding of the technical processes should conduce to an appreciation of the conceptions of the artistic nature and function of the medal held by present-day artists of different temperaments and nationalities.

In a work burdened with details supplied chiefly by correspondence, it is not to be supposed that all errors have been avoided. If any appear, the readers are asked indulgently to bear in mind the difficulties engendered in gathering materials from so many scattered sources.

## INTRODUCTION

THE medal in the sense of a metallic souvenir, usually monetiform, commemorating an individual or an event, but not destined for circulation as a coin and not sharing with the coin its legal character, is distinctly modern.

In order to clarify this statement, it will be instructive to trace the history of the word medal. The Low Latin medalia, medalea or medalla was used in two senses: first, to denote the smallest coin current, to wit, the obol, the half of the denier; secondly, old coins which were no longer in circulation.1 This later meaning is employed in the "Chronicon Patavinum," quoted in Muratori's "Antiquitates Italiæ,"—thesaurus magnus in medallis auri optimi,—a reference to a find of Roman aurei in 1274. From the Low Latin came the Italian medaglia, which was also used in the second meaning to apply to old coins which had become the object of collectors' interest. When the custom of collecting old coins spread from Italy to France, the word médaille came into the French language, the earliest known writing in which it occurs dating at the end of the XVth century. This earlier meaning of médaille persisted for several centuries, and was until very recently used by French numismatic writers on Greek and Roman coins.

When in Italy the idea of making commemorative pieces after the style of the old Roman coins and "medallions" was conceived, about the middle of the XVth century, and the medal in the modern sense was created, medaglia took on this new meaning, and at a later period, when the medal became known in France, médaille, from which is derived our medal, assumed also this second meaning.

From the derivation of the word and the absence of medals among the numismatic monuments of the Middle Ages, it would appear that the medal was invented in the modern period. But was it not known to the ancient world? Two answers have been given to this question: an unqualified denial, and an assertion that some at least of the numismatic products of the Roman series at any rate correspond to the medal as it is defined today. This definition explains the medal as a piece of metal whose function is purely commemorative, and which does not possess a legal value enabling it to circulate as a coin in the settlement of contracts. It is agreed by all numismatic authorities that in the Greek series the so-called "medallions" of Syracuse, the dodecadrachms of the Ptolemies in Egypt, and the twenty-stater gold piece of Eucratides of Bactria are simply higher denomi-

<sup>1</sup> On this transfer of meaning, cf. E. Babelon, Traité, I<sup>1</sup>, p. 7.

nations, multiples of the drachm and stater unit. By reason of their unusual denomination they are somewhat removed from the ordinary currency, and they possess a commemorative character and high artistic value. But they were struck at the regular mints as a circulating numerary, and had not the purely personal and occasional character of the medal. Parallels for the issue of such coin-multiples exist in many modern coinages. The Japanese oban, which differs from the lower denominations in size only, is an example of such a magnified coin. Like the multiple-thalers of Germany, it did not pass freely in common circulation, but was reserved for official gifts on state occasions. The Venetian osella, though not a multiple, is another example of a piece which lies on the border that separates the coin from the medal, partaking as it does of the nature of both. All such pieces—coin-medals or medallic coins—should be recognized as part coin and part medal, but as none the less belonging to the coin class.

An apparent exception to the absence of the veritable medal from the Greek series is met with in two groups of struck pieces of artistic design and large dimensions which do not bear monetary legends and do not correspond in weight to contemporaneous coin-standards. These are the three medallions found in 1865 at Tarsus in Cilicia, now in Paris, and the twenty medallions found in 1902 in Egypt at Aboukir. They bear Greek inscriptions, albeit of a very late period, and the types relate to Alexander the Great and his family. But they date from the IIId century A. D., which classes them as Greco-Roman products, and hence as outside of the Greek series proper. They were probably prizes given to victors in the games held in honor of Alexander the Great, 242 A. D., and, while not personal medals in the modern sense, they are quite distinct from the medallic coins mentioned above.

The case is more complex when we come to the Roman series. M. Babelon² does not admit the existence of the medal in the modern sense among the Romans any more than among the Greeks. But Signor Gnecchi³ contends that certain of the "medallions," by their weight, size, and method of striking, appear to be medals rather than coin-multiples. He writes: "Uno studio più serio, più ponderato dei fatti, quali si vengono presentati dai monumenti, mi portò alla ferma convinzione—e ne darò le prove—che non solo la medaglia esitte veramente presso i Romani, ma e anzi a Roma, che essa ebbe origine." The gold and silver "medallions" are de-

<sup>1</sup> Japan und sein Münzwesen, Monatsblatt der Num. Gesell. in Wien, June-July, 1911.

<sup>2</sup> Traité des monn. gr. et rom., I1, p. 652 ff.

monstrably multiples of the *aureus* and *denarius*. Whether they ever circulated as coins, or only served as gifts, marks of distinction, etc., is the debated point.

However this question may be ultimately decided, the infinitely broader scope of the modern medal, its absolute demarcation from the coin, the fact that it is no longer the prerogative of sovereigns alone, characterize it as a



Carrara Medal. Size: 33 mm. (From a cast reproduction.)



new production. That the old Roman "medallions" were its inspiration is apparent from the origin of the word *medaglia* as shown above, and from the style of the earliest medals. The first medals known to us are two pieces struck in 1390 by the Carraras, lords of Padua. The one illustrated above commemorates the surrender of Padua in 1390. The obverse shows the head of Francesco II, and is a copy of a Roman coin, perhaps the silver denarius of the emperor Vitellius. The reverse bears the type of the four-wheeled car, the canting badge of the Carraras.

That this medal and the companion piece with the portrait of Fran-



Medal by Marco Sesto, in style of a Roman coin. Size: 34 mm.



cesco's father were actually made in the XIVth century, as they are dated, is proved by an entry in the inventory of the collection of Jean, Duc de Berry, dated 1401: a "leaden impression having on one side the visage of Francesco of Carrara, on the other the mark of Padua." Additional proof is found in a MS. of Livy (from the second half of the XVth century), in the Bibliothèque Nationale, on which is sketched a head of Francesco Carrara, copied apparently from a medal of 1390. One of the extant specimens of these medals is a struck bronze piece, others are casts.¹ Struck pieces were also made by the Sestos of Venice (1393 to 1493 or later).

<sup>1</sup> For further reference on the technique compare M. Babelon in André Michel's *Histoire de l'Art*, 1910, Vol. III, Pt. II, pp. 897-924.

La medaglia presso i Romani, Rivista Ital. di Num., 1911, Pt. I. Cf. Contributions à la théorie des médaillons. R. Mowat. Rivista Ital. di Num., 1911, Pt. II.; and Dr. Menadier, in Führer durch das Kaiser Friedrich Museum, 1911, p. 109.

The inventory1 of the Duc de Berry also furnishes us the means of dating two medals which had long been known, but had been incorrectly dated. These are the medals of Constantine the Great and of Heraclius, the Byzantine emperor. Several copies of these medals are extant, in one or more varieties, which, previous to the publication of the inventory in 1890, had been supposed to go back to originals belonging to the XVIth century. The date of the originals of these medals is now fixed for us by the inventory at about the end of the XIVth century. The inventory shows that the duke possessed specimens in gold, and they are described under entries for 1402 and 1416-1417, respectively. We quote that portion of the entry for 1402 which concerns the Constantine medal: "Item, un autre joyau d'or roont, de haulte taille, ouquel est contrefait d'un des costez Constantin à cheval, et a escript à l'environ: Constantinus in Christo Deo fidelis, imperator et moderator romanorum, et semper Augustus, et de l'autre costé a deux femmes, et ou milieu d'icelles une fontainne où il a un arbre, et dedens ledit arbre une croix, et a escript à l'environ: Michi absit gloriari nisi in cruce Domini nostri Jhesu Christi; . . . lequel joyau Monseigneur achata en sa ville de Bourges de Antoine Manchin, marchant de Florence, demourant à Paris, le deuxième jour de novembre de l'an 1402, la somme de XI cens frans." These medals have been assigned to Italy on grounds of provenance and style, but there is also a strong claim made for Flanders and Northern France.

Were it possible to prove an Italian origin, these medals might reasonably be regarded as the precursors of the Renaissance medals. Since, however, neither by external evidence can they be positively assigned to Italy, nor by affinity of style can their parenthood to the first great medal of the Renaissance be definitely established,² they can only be regarded, in company with the Carrara and Sesto medals, as sporadic, tentative experiments in medal-making. While they antedate the Renaissance medals, they did not rapidly find imitators, as did the latter, and, consequently, no great floraison of the art succeeded their appearance. The gold originals of these medals no longer exist. The specimens which have come down to us are cast and chased copies, mostly of poor workmanship. The originals may have been hollow cast medals, that is, obverse and reverse cast separately, and afterward fastened together, or they may have been produced by the

<sup>1</sup> M. J. Guiffrey, Revue Num., 1890.

embossing, or repoussé technique. As they were of large size, 90 millimeters in diameter, they could not have been struck from dies, with the implements then in use.

We now come to those medals which stand out as the real innovation, and mark the actual birth of the art. Although we have discerned certain threads of continuity connecting the numismatic products of classical antiquity with those of modern times, and the medal is not so entirely without antecedents as to be described as genuinely autochthonous, nevertheless, the modern medal, when it makes its appearance, comes to us in such an original garb that it scarcely reveals the influences which determined its genesis. The new dress which thus differentiates the modern medal from its predecessors is its new technique.

In order to make our survey of the technical methods used in the production of medals complete, we may revert to the Greco-Roman "medallions" of Tarsus and Aboukir. These were struck from dies engraved by hand directly in a metal block. The process is analogous to gem-engraving, and is as old as the invention of Greek coinage, i.e., about 700 B. c. The execution was entirely by hand. After the engraving of the die, the blank or metal disk which was to receive the impression was heated and placed between the obverse and reverse dies, and the impression struck by successive blows of the hammer. When the Italians of the XVth century desired to execute pieces of large dimensions and strong relief which would allow them to give expression to their plastic impulse, the implements then in use for the striking of coins were more crude, and the die-sinkers less skilful than in Greek and Roman times. Recourse was therefore had to the casting process. The medal was modeled positive in wax, and negative moulds of the two halves of the medal were taken in clay or sand. The negative moulds were then placed together, embedded in sand, and an opening was left between the two halves through which the molten metal, usually bronze, was introduced. The medal thus produced was a solid casting. The rough surface of the bronze was worked smooth with sandpaper, and a graving-tool was used to touch up the finer lines and emphasize the outlines. When thus worked over and tooled, the medal was said to be cast and chased. The artist himself performed this latter process, and as the work was very arduous and required very high skill, the output of such medals was extremely limited. In place of taking a mould in two halves, the mould was not infrequently built up around the wax model, the wax melted out, and the bronze introduced by the process known as the cire perdue, or "lost wax" method. The wax model being thus destroyed, the bronze medal

<sup>&</sup>lt;sup>2</sup> It has been suggested that the reverse of the Triumph medal of Alfonso I by Pisanello was influenced by the reverse type of the Heraclius medal, and it is to be borne in mind that the first medal, namely, the Palæologus medal, is of religious import, as are also the Constantine and Heraclius medals. Cf. G. F. Hill, Pisanello; also, Num. Chronicle, 1910, p. 110.

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