

NOTICE OF A DIE FOR STRIKING HELVETIAN OR GAULISH
GOLD COINS; FOUND AT AVENCHES, IN SWITZERLAND.

From communications by Dr. FERDINAND KELLER, President of the Society of Antiquaries
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DURING the last summer, an object of most curious and rare description was found by a peasant at Avenches, anciently the chief city of the Helvetii, and situated in a part of the Canton de Vaud which lies enclosed by that of Fribourg. The site is near the northern extremity of the Lake of Neuchâtel, and at a short distance from the Lake of Morat, memorable in the eventful struggles for Swiss independence.

Avenches, designated by Tacitus "*Aventicum gentis caput*,"¹ in his relation of its surrender to Cæcina, during the disastrous revolutions which ensued on the murder of Galba (A.D. 69), is not mentioned by Cæsar. He speaks, however, of the Tigurini, one of the four Helvetic *pagi*, and *Aventicum* originally appears to have been their chief city. In the time of Vespasian it became a Roman colony. Ammianus Marcellinus, who wrote towards the later part of the fourth century, mentions "*Aventicum, desertam quidem civitatem, sed non ignobilem quondam, ut ædificia semirutata nunc quoque demonstrant*."² The ruins of its amphitheatre, its aqueduct, and the walls, which may be traced for a circuit of more than five miles, still testify the ancient importance of the city in Roman times. Numerous valuable inscriptions have been found there at various times. They have been collected by the learned Mommsen, in the Transactions of the Zürich Antiquaries.³

The remarkable relic recently brought to light, to which allusion has been made, was speedily sent by M. Gaspari, conservator of the Museum at Avenches, for the inspection of his friends at Zürich. By his courtesy we are enabled to

¹ Taciti Historia, lib. i., 68.

² Amm. Mare. Gest., lib. xv., c. xi.

³ Inscriptiones Confœderationis Helvet. Lat., ed. Theod. Mommsen; Mit-

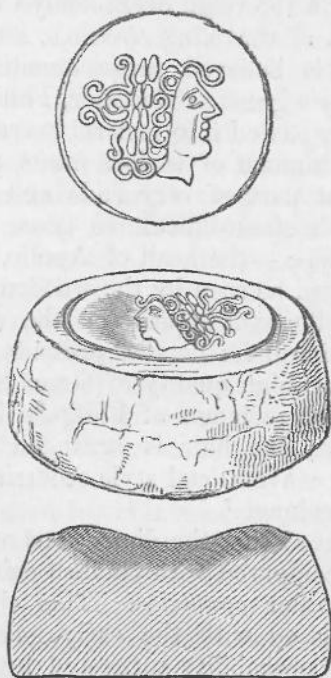
theilungen d. Antiqu. Gesell. in Zürich; vol. x., p. 26, where notices of the early history of Avenches may be found.

call attention to so curious a discovery.⁴ It is a die for striking the obverse of Gaulish or, more correctly speaking, Helvetian imitations of the gold *stater* of Philip II., King of Macedon. This die consists of a cylindrical block of iron, measuring about $1\frac{7}{8}$ in. in diameter, and $\frac{4}{5}$ in. in thickness. On one of its faces is inserted a disk of bronze, slightly elevated above the iron base; diameter about $1\frac{1}{2}$ in. The surface of the bronze is concave, polished, and engraved with a head, profile to the left, beardless, the hair in snake-like locks, encircled by a chaplet or diadem. (See woodcuts.) This head, in slight intaglio, appears to have been executed with a broad-pointed tool, producing strokes of uniform breadth. On the surface of the bronze, although fairly polished, may be perceived in the field, around the head, slight *striæ*, indications of a scraping or shaving instrument employed in producing the concavity of the die. The iron portion has been corroded by rust; the bronze insertion, slightly patinated, is so well preserved, that it might now serve to produce coins as distinct, probably, in impression as those originally struck by the Helvetian coiner. The bronze is exceedingly hard, indicating doubtless a comparatively greater proportion of tin in its composition, and its colour is rather lighter than that of ordinary bronze. The thickness of the disk of bronze cannot be ascertained; the cavity formed in the block of iron to receive it appears somewhat irregular, not being perfectly circular, and the bronze has been firmly fixed therein by hammering around the edge of the disk. (See woodcuts. The darker shading of the section indicates the bronze of uncertain thickness.) This mode of construction is extremely ingenious. It was doubtless found that the bronze, when not confined by an iron collar, was subject to expand with use; whilst its being dished had the effect of preventing the *flans*, or pieces of gold prepared for minting, from slipping or rolling out of place. The weight of the die is 278 *grammes*.

The occurrence of any implement for coining, even of comparatively recent periods, is very rare, and the combination of bronze with iron is so singular a constructive feature, that it seems desirable to describe so curious a numismatic relic

⁴ A short notice of the die by Dr. Meyer has appeared in the *Indicateur d'Histoire et d'Antiquités Suisses* for

Aug., 1862, but not accompanied by any representation of the object, which is now figured for the first time.



Die, formed of iron and bronze, for striking Gaulish gold coins, Found at Avenches, in Switzerland.

Preserved in the Museum at Avenches, Canton de Vaud.

Scale—slightly less than the size of the original.

with minuteness of detail which may appear tedious to the general reader. No die of so remote a period as that found at Avenches has come under our observation.⁵ There can, it is believed, be no doubt that the object under consideration was destined for the reproduction of the gold coin of Philip II., King of Macedon, which supplied, as is well known, the prevalent type of the Gaulish gold coinage. After the disastrous invasion of Macedonia by the Gauls, under their chieftain Belgius, in the reign of Ptolemy Ceraunus, and the ignominious death of that king *circa* B.C. 280, the conqueror brought back, it is believed, large quantities of the gold staters of Ptolemy's great predecessor, Philip, son of Amyntas; they speedily passed into general currency in Gaul, and caused the establishment of various mints, producing imitations, for the most part of very rude and unskilful execution, in which it is often difficult to trace any tradition of the Macedonian type,—the head of Apollo, with the *biga* on the reverse. It will be seen by the woodcut that the laureated head of Apollo, as it appears on the die at Avenches, although distinct in all its details, presents no trace of the ideal expression or high quality of Greek art which characterise the admirable coinage of Philip.⁶ The features are devoid of beauty; the hair is arranged with mechanical symmetry, in the conventional style occurring in other types of early Gaulish coinage.⁷

It will be observed that the dimensions of this die are unusually large, as compared with Gaulish coins familiar to the archaeologist in other countries. This circumstance is of interest in connection with the early gold coinage of the Helvetii, and the probability suggested by the discovery of the die, that at their chief city, *Aventicum*, the mint may have been established from which the currency of the *pagus* was supplied. The Helvetian imitations of the gold Macedonian

⁵ Dr. Keller writes that he had sought in vain for any notice of such a die known to antiquaries in England, France, or elsewhere. We are indebted to the skilful numismatist, Mr. John Evans, F.S.A., for the assurance that, so far as he is aware, no die of the kind has hitherto been found; in fact, ancient dies are extremely rare. Mr. Evans had seen one only, a die for striking the reverse of coins of Berenice, Queen of Ptolemy Euergetes, *circa* B.C. 247. It was exhibited by Mr. Büöcke at a meeting

of the Soc. of Ant., Feb. 2, 1854. Proc. Soc. Ant. Lond., vol. iii. p. 54.

⁶ See numerous coins figured in Lambert's "Essai sur la Numismatique Gauloise," pl. ii., and in other works. The nearest approach to the head on the Avenches die appears to be pl. x., fig. 29, in Lelewel's Atlas, a type, however, which he assigns to the country of the Redones, in Brittany.

⁷ Mr. Evans is disposed to assign to the die a comparatively early date, about B.C. 200.

stater appear to have been of comparatively large module ; in the Museum of the Antiquaries of Zurich four gold pieces are preserved, found in the cantons of Lucerne, Schaffhausen, and Berne, identical with the Avenches die in their large dimension, and in the type of the obverse, namely, the laureated head of Apollo. Gold coins of similar character have been found also repeatedly at Baden (*Aquæ Helvetiorum*), 12 English miles from Zurich ; at Ober Winterthur (*Vitodurum*), and at several other places.⁸ Some coins found in the northern parts of Switzerland are of *electrum*.

The assertion sometimes made, that gold coins of this type were imported into Helvetia, is obviously erroneous ; no indication had previously been noticed of any particular locality where a mint may have existed in early times. The supposition is not improbable that, amongst Gaulish gold coins of other types frequently found in Switzerland, some may have been struck at the capital, *Aventicum*. Strabo⁹ asserts that the country of the Helvetii was rich in gold ; their cupidity, however, being excited by witnessing the great treasure accumulated through pillage by the Cimbri, they joined in the predatory expeditions of the Northmen. Strabo names especially the Tigurini, the tribe before mentioned as named by Cæsar, whose chief city was *Aventicum*, as having taken part with the freebooters. Both the Cimbri and their auxiliaries were reduced to submission by the Romans. Gold is found in Switzerland in several localities, and in beds of rivers ; the Aar and the Emme still transport portions of the precious metal. In the former stream, near Brugg (Argovia), the peasantry are accustomed to wash the sands when the rivers have been swelled by heavy rains, and heaps of sand are deposited along the banks ; in these, particles of gold occur. The gold-seekers formerly used only rough boards, but at the present time frames covered with woollen cloth are employed ; and a man sometimes earns as much as five francs in a day. The sands of the Rhine also contain gold, and they are washed for the precious particles beneath Basle, in the territory of the Grand Duke of Baden ; ducats have there been coined, with inscriptions stating that

⁸ A specimen found in a sepulchral tumulus at Horgen near Zurich in 1836, is described in the Transactions of the Antiquaries of that city, vol. iii., and these imitations of the coins of Philip

are mentioned as occurring in that locality by Gessner, Numism. Regum Maced. Tiguri, 1738.

⁹ Lib. iv., c. iii., s. 3, and lib. vii., c. ii., s. 2.

they are of Rhine gold.¹ It is moreover possible, as has been suggested, that the reputation of the golden wealth of the Helvetii, to which Strabo twice alludes, may have received confirmation by the fact, of which evidence has now been adduced, that their coins were of much larger module than the ordinary gold currency of other Gaulish nations. This subject will, however, soon be placed more fully under the consideration of those who devote attention to numismatic researches. A memoir on the Gaulish coins found in Switzerland will shortly be given by Dr. Meyer in the Transactions of the Antiquaries of Zurich. Meanwhile it may not be altogether a vain hope, that further excavations at Avenches may possibly bring to light the counterpart,—the convex moiety of the Gaulish die now described, and upon which the well-known Macedonian charioteer was doubtless represented.

Since the foregoing particulars of a discovery of unusual interest were received from our obliging and learned correspondent, Dr. Keller, we have been favoured by Mr. Birch with the following observations:—

Very few ancient dies are known; the most remarkable are those in the Bibliothèque Imperiale, at Paris, described by M. Chabouillet in his "Catalogue Général des Camees," &c., p. 541. They consist of two dies of denarii of Augustus found at Nismes, two of Tiberius, two of Nero, all of bronze; and a pair, obverse and reverse, of iron, united by shanks hinged together, figured in Akerman's Roman Coins, pl. 14; these last are of an *Aureus* of Constantius I., for the Antioch mint. M. Chabouillet remarks that some of these dies may have been fabricated by forgers of monies in ancient times. The late Mr. Burgon affirmed that he had seen a conical bronze die of the reverse of a coin of a Seleucid king; it is mentioned by Mr. Poole in his article on Numismatics, Encycl. Brit. There are three flat bronze disks in the British Museum, apparently blanks for dies, having legends only without any head or subject; these, however, are of questionable antiquity. Coins of the Carisia family, having on the obverse a head with *MONETA*, have on the reverse an anvil, hammer, tongs, and a conical object supposed to be a die. (Figured, Akerman, Rom. Coins, vol. i. p. v.) The cause of the adoption of the type of the *stater* of Philip by the Gauls appears to be this. When Philip discovered the rich gold mines of Mount Pangæum in Macedonia, he issued *staters* in large quantities, and they continued in the reigns of his successors to be the principal gold currency. When Brennus plundered Greece, B.C. 279, it is supposed that he brought back a great treasure of these coins, and they became the gold currency of Gaul. The type was imitated in later times, and became so degraded as to be with difficulty recognised. There is evidence that gold formerly existed in abundance in Gaul and Britain, at a period when there were no mines of silver, and gold seems to have been the most ancient Gaulish currency.

¹ Gold occurs also occasionally at the foot of Mount Calanda, opposite Coire, where small nuggets sometimes fall from the sides of that mountain.