

REPORT AND COMMUNICATIONS.

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PRESENTED TO THE

Cambridge Antiquarian Society,

AT ITS THIRTY-EIGHTH ANNUAL GENERAL MEETING,

MAY 27, 1878,

WITH AN ABSTRACT OF THE PROCEEDINGS OF THE SOCIETY

1877—1878.

ALSO

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No. XX.

BEING No. 2 OF THE FOURTH VOLUME.

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X. ON COINING AND THE IMPLEMENTS OF COINING.
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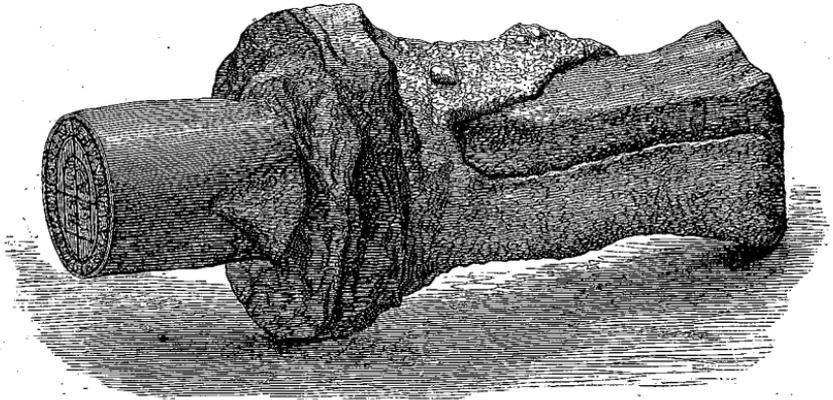
[March 18, 1878.]

THE subject of the present paper was suggested by a very interesting pair of coin-dies in the possession of the Secretary of the Society, of which Mr Lewis asked me to furnish a description, a task which I have the more willingly undertaken, as I feel that the existence of relics of so much antiquarian and numismatic interest should not remain unrecorded.

Before proceeding, however, to describe the dies in question, I think it may not be uninteresting to make some prefatory remarks on coining and coining implements in general.

Until the introduction of the screw-press in the middle of the sixteenth century—probably suggested by the invention of the printing press—the process of coining in mediæval times had undergone little or no alteration from the method employed by the ancients. This process is very simple, and may be described in a few words. The lower die, called the *pile* or *standard*, was firmly fixed in a large block of wood, similar to a butcher's block. On this die the obverse of the coin to be struck was always engraved, because being the more important from its bearing the prince's title, and usually his portrait, it was essential that it should be perfectly steady in

the striking. Upon this die was then placed the *flan*¹, or blank piece of metal, which was to receive the impression, previously



cut to the proper weight, thickness and size, and carefully made smooth and bright by a process called *blenching*. This was effected by "heating the flans, shaking them in a copper sieve, and afterwards throwing them into boiling water mixed with common salt and the ashes of the burnt lees of wine, in which they were boiled till quite bright, and then again thrown on the copper sieve and dried with rubbers²." The moneyer, holding in his left hand the upper die, or *trussell* (derived from the Ital. *torso*, *torsolo*), on which the reverse of the coin was engraved, then applied it to the flan, and gave it several good blows with a hammer, which he held in his right.

The antiquity of these implements for coining money is demonstrated by their appearing as mint marks on some denarii of the family Roscia³. It has been generally supposed

¹ The word "flan," which in old French is spelt *flaon*, is derived from *flatum*. The verb *flare* is regularly employed for casting metal in a mould, and the blanks were prepared in this way in Roman times. The mint-masters were officially designated III VIRI. A. A. A. F. F., *i. e.* Triumviri auro, argento, æri, *flando*, feriundo.

² Cochran-Patrick, *Records of the Coinage of Scotland*, Vol. I. p. xlix.

³ Figured in Morellius' *Thesaurus*, Vol. I., sub ROSCIA, Nos. 19 and 20.

that they are also represented on a coin of T. Carisius, but such is not in reality the case. I have been favoured with some very interesting remarks on this subject, by Mr C. W. King, Senior Fellow of Trinity College, which while bearing upon the matter in hand, are further valuable as correcting a popular mistake, and I cannot therefore do better than quote them here at length.

THE "MONETA" OF T. CARISIUS.

The science of Numismatics, like all others, has its "vulgar errors," the origin of which goes too far back to be traced, and which are accepted by successive generations of collectors without distrust or examination. Of these errors one of the most implicitly believed, and at the same time the most unfounded, is that the coiner's tools, "instruments de monnayage," used in the Roman mint, are exhibited upon a coin of T. Carisius, one of Augustus' mint-masters. These objects are clearly defined upon the coin; they are a hammer, tongs, anvil, and hemispherical cap wreathed with myrtle. The two last, according to the received explanation, are the dies of the obverse and reverse; the tongs served for placing the *heated* "blank" between the dies¹, and the hammer for striking them together.



It is strange that no one should have observed that one of the objects in the centre is unmistakably an anvil, and being so, the hemisphere placed upon it must from its relative pro-

¹ This is a gratuitous theory to explain the presence of the tongs. Its author never reflected that a few applications of red-hot blanks would speedily destroy the fusible bronze of which the dies were composed.

portion be much too large for any coin-die, its magnitude being further put out of doubt by the myrtle branch wreathed about it—to say nothing of its form, so unsuited for the purpose of a die. But the hallucination appears to have arisen from the too exclusive attention paid to the type of the obverse, which, by its representing Juno “*Moneta*,” made the first writers on medals jump to the conclusion that the reverse must needs represent the implements dedicated to her service. But if a more careful attention had been paid to the actual forms of the objects making up the reverse, it would have become apparent that they are the attributes of Vulcan, or perhaps of his sons, the Cabiri, considering the high veneration in which the Samothracian Mysteries were held in republican Rome. His proper distinction, the conical cap wreathed with myrtle (to imply that grace, equally with force, belong to the great artificer), is a sufficient declaration of the meaning of the group, added as it is to the hammer, tongs, and anvil. Of the correctness of this explanation any one may satisfy himself by a single glance at the very common denarius minted by L. Aurelius Cotta. The obverse shews the head of Vulcan in the self-same conical cap, and with the same great blacksmith’s tongs upon his shoulder. And still more to the purpose is a copper piece of the same mint-master, with heads of the Cabiri, his patron-gods, on each side; the one bearded, similarly capped, carries the same large tongs upon his shoulder; his brother, without a beard, has a star above his cap.

If anything more were necessary for proving the absurdity of discovering a pair of dies in Vulcan’s cap and anvil, it can be furnished by a most decisive argument. Amongst the immense variety of implements, figured for mint-marks on the denarii of the family Roscia, may be found the actual tools employed in striking the piece. These are the *die*, slightly conical, on the one side; and the *hammer* with heavy head and wide-spread “feather,” on the other. It is a curious fact that Louis

le Debonair—a prince who in many other ways has left tokens of his knowledge and love of art, amidst the dense barbarism of his times—has taken the hint from the Augustan moneyer, and made a tasteful reverse to a denier out of a pair of dies, and two hammers; an elegant design, but rudely executed by the artless engraver. The legend METALLVM shews it to belong to the mint of Melle, a town of much importance under the Carlovingian kings.



It will thus be seen that the engraver of the Carlovingian die was acquainted with much the same description of coining-iron as the Roman die-sinker,—that the representation of the tools used by the Roman coiner was perfectly intelligible to the moneyer of Louis le Debonair. It is at least evident that the form of these implements had undergone but little change. This conical shape of die seems to have been not uncommon in early times. In the *Revue Archéologique* for May, 1867, four Gaulish dies are described, two of which are stated to be conical. Both of these are very small, measuring each about $1\frac{1}{4}$ in. in height. One of them was for a denier of Togirix. Of the other two, one was of the shape of a mushroom, with a concave face and the edge turned over. The fourth is of different construction, consisting of a disc of iron, about $1\frac{3}{4}$ in. in diameter, into which the actual die, of bronze, is fitted. This seems closely to resemble the pile of a pair of dies for a denarius of the Gens Cornelia, which are in the British Museum. In this case too the obverse die is imbedded in a cylinder of iron $3\frac{3}{4}$ in. in diameter. Round the top of the cylinder, and made out of the same piece of iron, runs a collar ($\frac{11}{16}$ in. in height, and about $\frac{1}{2}$ in. thick,) for two-thirds of the circumference, the open space being left to facilitate the insertion and removal of the flan. The reverse die is fixed into

a trussell, 9 in. in length, the end of which is constructed to fit exactly into the collar of the pile, the handle being finished off into an octangular form for convenience of grasping it. This simple but ingenious contrivance enabled the coiner without further trouble to ensure the two dies exactly coinciding, while at the same time the trussell was prevented from jumping aside after receiving a blow, thus obviating all danger of the coin being double-struck. In later times under William the Conqueror, a moveable collar was adopted, according to Mr Hawkins, for the same purpose, the result being that the coins "are uniformly round, of the same size, and a pile of them is as perfectly cylindrical as one composed of coins of the present day¹." If we come to later times, there are a set of dies, 187 in number, extending over a period from Edward III. to Henry VII., which were discovered a good many years ago in one of the vaults of the Record Office. They were in the usual proportion of very nearly two trussells to one pile, the former die having the chief part of the work; some, in fact, were split from the force of the blows. These dies have been described by Mr Field in Akerman's *Numismatic Chronicle* (Vol. VII. p. 20) accompanied by a good plate. The piles usually differ from that belonging to Mr Lewis, in their terminating in a spike, or tang, for the purpose of fixing them into the block of wood. Besides these I do not know of any mediæval dies of this country except a trussell for a single long-cross sterling of Alexander III. of Scotland, figured by Mr Cochran-Patrick in his *Records of the Coinage of Scotland*. It is $3\frac{3}{4}$ in. long, nearly cylindrical, but somewhat smaller towards the die.

Some piles were made tapering off into a wedge, instead of having a tang, to fix them into the block, and from this peculiar shape the officers, who had charge of them, doubtless derived

¹ This supposition is, however, no doubt erroneous. The uniform roundness of the coins would not depend upon a collar, but it points to the use of some early form of flan-cutter.

their name of "Custodes Cuneorum." The office of these "Clerks of the Irons" was one of great responsibility. It was their duty to receive every evening all the dies which had been delivered to the coiners in the morning, and to place them securely under lock and key. So strict were these regulations, that under James V. of Scotland, in 1519, the keys having been lost, an order of the Lords of the Council was given authorising the Treasurer to have the locks taken off, in order to deliver the irons to the Earl of Arran, who had obtained a commission to coin; but this was only to be done in the presence of the Privy Seal, Lord Erskine, and the Captain of Edinburgh Castle, although the Treasurer was himself to be responsible for the safe keeping of the irons all the while they were in use by the Earl of Arran¹. Equal precautions were taken when the dies were worn out, or a new coinage was to be introduced, to prevent the abduction of any of the dies or puncheons. In 1451 we find it ordered "that the prouision be maid for the grauouris of yrnis, and now incontinent (*forthwith*) traist sworne men pas furth and resaif al the yrnis of the kingis strikaris bath of gold and siluir togidder with the letteris of grauing fra the grauouris; and befor the king and his consal thai be distroyit. Ande the new yrnis that sal be maide sal be graiuin within the cunye place²." In the English Mint faulty dies were to be delivered to the Clerk of the Irons, and to be defaced in presence of the Warden, Master and Comptroller, and not otherwise. Many other instances could be quoted to shew how great was the care taken to prevent forgery, but the foregoing will be sufficient to account for the rarity of implements, which were in such common use.

I now proceed to explain the manner in which the dies themselves were prepared. This process has been fully described by Benvenuto Cellini in his *Oreficeria* (chap. vii.), writ-

¹ Cochran-Patrick, *Records of the Coinage of Scotland*, Vol. I. p. 62.

² Cochran-Patrick, *Records, etc.*, Vol. I. p. 20 (c. 13).

ten only a few years later than the date of the dies before us, and from it my remarks on this portion of the subject are in the main taken. Cellini lived from 1500 to 1571.

The first thing requisite for engraving a die, was to prepare a set of small *puncheons* or *matrices* (the "letteris of grauing" of the proclamation cited above), on which all the separate parts of the coin required were engraved. The head of the prince was usually made in two parts, groups of figures or other objects being distributed over as many matrices as the die-sinker deemed necessary. The letters of the legend, the mint-marks, ornamentations, bordering, and all other minor details were engraved separately, each on its own puncheon. The puncheons were made of the finest steel and were prepared for engraving in the following manner. After being filed to the right shape the head was covered with a thick coat of a luting, made out of a mixture of clay, pounded glass, soot, bole armenian earth, and a little horse-dung, reduced to the consistency of dough with human urine, and it was then placed into a fire, hot enough to anneal it perfectly, and was there left by itself to cool, care however being taken to ensure the fire keeping up its temperature all through "a whole winter's night." When removed from the fire, the head was rubbed perfectly smooth on a stone, and was then ready to receive the engraving. The pile and trussell were made of the best iron, with heads of pure steel, about a finger's-breadth in thickness, fastened upon them, of the size of the coin required. These heads were prepared for engraving by exactly the same process as that just described for the puncheons, and this being done, the positions which the portrait, letters, bordering, etc., were to occupy were carefully marked out upon it with a pair of compasses. The "iron" was then firmly fixed into a very heavy block of lead, and was ready to receive the impressions of the different matrices. First the more important portions—the portrait, figures or arms—would be put together; then the

letters, bordering, counter-marks, and small details would be inserted till all was complete. The weight of the hammer used for striking these impressions was in proportion to the size of each puncheon; the larger ones, used for the portrait and the like, requiring a hammer of about three pounds weight. This operation was one which needed much practice and skill, for the greatest care had to be taken to lift up the puncheon from the die directly the blow was administered, for its rebounding ever so little would leave a mark on the die, and consequently blemish the work. When the engraving was completed, the die was filed all round the edge right up to the bordering, at the same time being bevelled off considerably, to prevent the edge turning up and the die becoming spoilt. It had now to be tempered, and in doing so, care had to be taken to subject it to no more heat than was just sufficient to temper it, while it was especially important that it should throw off a *fine* scale, for otherwise the work would be spoilt. This done, some of this fine iron-scale, unmixed with any other substance, was put upon a board, and the die was well rubbed upon it, to give it a polish, in order that the coin might leave the die perfectly smooth and bright, the uneven parts and hollows being treated with the same substance, thoroughly worked into them with a piece of cork. With this last finish the dies were ready to hand over to the coiner. Cellini mentions, as a proof of the expedition with which dies could be prepared by this mode of procedure, that he was able to stamp *thirty* dies, that is, piles and trussells, in one day, whereas, if he had prepared each die separately with graving tools—stiplers, gravers, chisels—he could not have finished two in the same time.

I now come to the description of the dies before us. The pile is 3 in. long, the trussell $4\frac{1}{2}$ in.¹ In each case the steel head is fixed into a circle of iron, about $2\frac{1}{4}$ in. in diameter, and

¹ The trussell is figured on p. 110, drawn to scale, about seven-ninths of the original size.

I cannot be certain what the mint mark is, but it seems to be one unknown in this coinage, and not to be the same on both sides.

The workmanship of the pile is exceedingly rude. The portrait is barbarous and in very low relief¹; the crown, the lettering, and the king's dress are clumsy and coarse; the inner circle instead of being neatly engrailed is composed merely of a thick line; finally, the legend, as will have been seen above, is most remarkably blundered. It forms in fact a contrast in every respect to the extremely neat execution and excellent portrait of the actual pieces of this issue, and would almost have been a disgrace to Henry in the worst days of his debasement of the coinage.

The trussell is of much better execution, and is evidently the work of quite another hand. The lettering and engrailing are very fairly engraved, and the legend has nothing in it to object to, except that the S in *Posui* is placed on its side. The Arms are not as neat as we usually find them on actual coins, but their most remarkable feature is the omission of one of the lions of the English arms in the second quarter. From the general appearance of the work and also from its size, I should be inclined to think that this die was intended for the reverse of Henry's first groat. It will be remembered that, according to Cellini, the die was to be made to the size of the coin required, and was to be filed away right up to the bordering. This latter injunction has been pretty carefully followed by the sinker of this trussell, and if he has also intended to observe the former, he has certainly made a die for striking larger coins than those of Henry's second coinage which have come down to us, but which would be quite suitable for producing the reverse of his first groat. On the other hand the thin thread-like circle round the shield, and the small crosses in the forks of the cross are a common characteristic of the second coinage.

¹ This is not very accurately indicated in the wood-cut.

In view of these discrepancies in style between the two dies, the question naturally arises whether they were intended to be used as a pair. For three reasons I think they were: first, because they are as nearly as possible of the same circumference; second, because they agree with one another in make and general appearance; third, because it is evident from the peculiar coat of gravel and shell with which each is encrusted that both have been lying in some river whose bed has been the means of *saving* them from corrosion. This strange property is, I believe, possessed by the bed of the Thames, and this would so far confirm the belief that they were found in the river at Gravesend. The first reason is however the one which to my mind carries most conviction with it. It will be observed that the pile, so far from being filed to the size of the required coin, has a large and useless margin all round. This is just what one would expect to find, if the dies were to be used as a pair, because the trussell being, as I have said, larger than is necessary for the coin indicated by the pile, the two could only be made to match, and the smallness of the latter be compensated for, by leaving such a margin as actually exists. I do not by this mean that I think the dies were sunk in the first instance as a pair to one another; the very incongruities of execution, style and size, which I have endeavoured to point out, would lead one to reject such a notion, but it appears to me very possible that the pile may have been made by some unskilled workman, to suit the trussell already in his possession. The whole of this question is however intimately connected with the most important consideration with respect to these dies, viz. whether they were genuine implements of the Mint, or whether they must be regarded as the tools of a forger.

In describing them I tried to call attention, more particularly in the case of the pile, to the great dissimilarity they show to the groat they are intended to represent, at least to every

specimen of that very common coin, which has come under my notice. If, again, we can fairly conclude that they were used as a pair, this consideration would by itself be sufficient to preclude the supposition of their ever having been employed in a mint so well conducted as was the Tower Mint at this time. I can give no reason of any sort for supposing this pile to have been anything but a forger's tool, though I have hinted at the bare possibility of the trussell having found its way by some dishonest means from the Mint into a false coiner's workshop, there to have a fellow adapted to it. This is however extremely unlikely when we consider how stringent were the regulations employed to secure the safety of the perfect dies, and to ensure the destruction of imperfect ones, such as this is.

On the whole, it seems probable that this trussell may have formed part of the stock-in-trade of a gang of forgers, obtained possibly from some more skilled member of the confraternity than they could count among their ranks, a prize too great to be discarded, and yet one to which they were unable to do justice, in preparing a pile to match it.

It is a matter of notoriety that forgery was very rife under this king and his successors, as the proclamations on the subject show; the debasement of the coinage which began in 1543, offering to false coiners an opportunity of carrying on their trade with less chance of detection, which they were not likely to throw away. It may at first sight seem unreasonable to affirm that a debased coinage would be a stimulus to forgery, but this seemingly paradoxical assertion is, as Mr John Evans has pointed out¹, easily explained when we consider how difficult it is to distinguish between different degrees of baseness, while a still further safeguard against detection is afforded by the legal tender itself being necessarily more or less rude and ill-struck, owing to the natural hardness of the base metal to be coined.

¹ *Numis. Chron.* 1864.

I cannot pretend to say whether these dies, imitating a fine silver coinage, were intended to produce false money while that coinage was in circulation, or whether they were employed during the subsequent debasement on the supposition that people would eagerly accept what they imagined to belong to the memory of better days. However this may be, it seems very probable that these dies were of foreign origin. Early in Edward VI.'s reign a proclamation was issued against forgery, particular notice being taken of the quantities of false coin imported from beyond the seas. That Paris was one of the places which contributed to this trade is sufficiently proved by the discovery some 20 years ago of a pair of dies for a groat of Henry VIII. in the Seine.

This fact is mentioned by Mr Evans in a paper contributed to the "Numismatic Chronicle" in 1864. He does not mention what groat they were intended for, but this perhaps may afford a clue to the real history of the dies under discussion. He goes on however to describe a forged groat of one of the debased coinages, with the falling collar, which only differed from the genuine piece in reading FERNANDVS in place of HENRIC: VIII., and in having the lions passant in the wrong direction. It appeared to be of yellow brass, slightly silvered over. Mr Evans remarks on the cleverness of using FERNANDVS, the letters of which generally resemble HENRICVS. For my own part I fail to see any resemblance in it either to HENRIC (or HENRIC) VIII., for I am not aware that his name ever appears uncontracted. Three other groats and a half-groat of the same sort were found with it, and a false groat of the same type was found at Fulbourn, I believe, some years ago, proving that they had found their way as far as Cambridge-shire. Much more ingenious is the name PÆDRIC, used on the pile before us, which in the first letter alone materially differs from HENRIC. The D (if D it be) is artfully composed of an I and a semicircle, which might almost as easily be

taken for an R, while the final & has only the cross-stroke to distinguish it from C. The remainder of the legend has nothing peculiar about it, except the extraordinary blunder of FR7ZVQ instead of FR7RQ& in the king's style. This I can only account for by supposing that the French forger—and this I think helps to bear out the foreign origin of the dies—was too patriotic to acknowledge himself, even on a false coin, the subject of his national foe, and that rather than consent to such dishonour he has placed an unintelligible word upon his coining-iron, in place of one of the usual designations of “la belle France.” A similar display of national feeling occurs on another Anglo-French forgery, which Mr King has mentioned in a paper on the Mill and its relations to false coining, with which I conclude the present notice.

INVENTION OF THE COINING-PRESS.

The coining-press, in French *moulin* (whence our term “milled” money, as opposed to “hammered”), was invented by a carpenter, one Aubry Olivier. He was employed to use his new machine in the mint of Henri II., from the year 1553, and the excellence of that king's coinage, the “Henricus aureus,” holding the same place in the French series as the crown of Cromwell does in our own, bears ample testimony to the great superiority of the new method. But under the impoverished régime of Henri III., the use of the moulin for current coin was abandoned, as too expensive, and was restricted to the making of medals and jettons.

It is clear that this moulin of Aubry Olivier's was the complete coining-press, with horizontal lever heavily loaded at each end to give the screw impetus in its descent (hence also called *balancier*)—for Cellini, in his chapter on the striking of medals, talks of a press (*la vite*) as in common use in the

Roman mint early in the same century, and extols its advantages over the old method, declaring that by its means with a couple of turns of the screw he could produce the same work as with a hundred blows of the hammer. This *vite*, however, was a very simple machine, worked by a long arm attached to the screw which required the united force of four men to put it in action; the power of the lever not being assisted by the application of the centrifugal force, where lies the great advantage of the completed *balancier*.

Cellini's description of the *vite* of his days, somewhat hard to understand in his colloquial Tuscan, is much elucidated by the discovery of one of these primitive machines at Bourg-le-roi near Alençon (January 15, 1847)¹. It is nothing more than a stout iron case (*étai*), 10 inches in height, and slightly conical, having a long tang at the base for the purpose of fixing it steadily in a block of wood driven deeply into the ground. A *slot*, two inches square, is cut through the middle of this case, to receive the dies, which likewise were made square, and fitted edgewise into a band, or collar of iron, so as to prevent their slipping the one over the other. A male screw, $1\frac{3}{8}$ in. thick, of iron worked through a female screw of copper traversing the axis of the whole, and was turned by means of a long spanner, fitting on to its top. The other end was thus brought to bear with great power upon the dies, placed evenly within the above-mentioned slot.

The machine in question had evidently been employed by a forger for the purposes of his nefarious trade, for it was discovered a metre below the surface, carefully concealed in some old foundations of a building, along with the other instruments serving for its use.

Enclosed in a leaden box were seven pairs of square dies, to be used in the *moulin*; each pair yet fixed in its collar.

¹ Described in a copious and most instructive memoir, by L. de la Sicotère, in the *Revue Numismatique* for 1847, p. 281.

They were for the half-imperial of Charles V., the rose-noble of Edward IV., the écu-au-soleil of François I., and two different testoons of the same king; the others were illegible from rust; also nine piles and eight trussells, much worn by the hammer, and in greatly more damaged condition. No more than two could be made out, one for the angel of our Henry VII., and another for a testoon of François I. The writer of the memoir notices that in the square dies the lettering and engraving (*grenetis*) had been put in with punches, but the portraits were executed with the graver. The dies were of very fine, hard-tempered steel. All the necessary tools accompanied the deposit, such as three hammers of different weights, a small cold-chisel, pair of compasses, small shears, two moulds in iron for casting the blanks, and a few lumps of lead.

This discovery attests the truth of the argument so strongly urged by the old conservatives of the 17th century, against the adoption of the press in the French mint, viz. that its general use would certainly become a great temptation to false coining, by reason of the *secrecy* with which it could be worked, making no noise at all—whereas the old method betrayed its operations to the neighbourhood by the clatter of hammer and dies.

The articles found thus carefully stowed away must have been the stock-in-trade of a forger on a grand scale, for the foregoing list shews they were intended for the imitation not merely of the coin of the realm, but for the European pieces then circulating in France. In the case of our Angel, it is amusing to observe how the national vanity of the engraver had so far got the better of his discretion, that he gave "France" the precedence of "England" in the king's style. Traces of gold leaf still adhering to the surfaces of these dies, proved that the material they were employed upon were blanks of pewter or lead thickly gilt.

The forgery of money was an art long cultivated, and brought

to high perfection by the ingenious Gauls; "solertissimum id genus hominum," as Cæsar calls them. Charles IX., a king who like our Charles II. "would have done better at any other trade than his own," and a first-rate worker in metal, greatly prided himself on the perfection with which he produced his own *écus* in base metal, and boasted that he was the best false-coiner in all his kingdom. The unlucky Philippe Mestrelle, who "intulit artes agresti Latio"—having been called over by Elizabeth to improve her coinage, and to whose skill is due the elegant *milled* money of that reign—was unable to resist the temptation of so fine a field for the exercise of his ingenuity at the expense of "perfidè Albion," and consequently finished his career at Tyburn in the year 1569. In the following century, Tavernier, in his description of Constantinople and the trade with Turkey, mentions it as a regular practice with the French merchants to import vast quantities of imitations of Turkish currency in very debased silver. This fraud had been carried to such a height as to provoke at last the long-suffering Ottoman government to make an example, which they did with truly Oriental wit. A large consignment of such debased coin, addressed to a notorious offender in this line, was seized in the port and conveyed to the mint. There it was melted down, and the silver it contained separated from the "intolerable deal" of alloy. The consignee was then sent for, was shewn the little ingot of silver, and the huge mass of brass, and told he might now take away his property without further question.

The dies, the subject of the present discussion, are an early proof of the existence of such a *fabrique pour l'étranger* at Paris, about the time when Olivier's *moulin* was first introduced into the operations of the mint. Very crafty forethought lay at the bottom of the intentional blundering of Henry's name and titles; the general appearance of the coin sufficed to impose upon the illiterate public, and at the same time

the passer ("smasher" in modern parlance) might hope to escape punishment, if detected, upon the plea that he had not forged the *current coin* of the realm. A similar evasion gave birth to the numerous "duffer" halfpence of the last, and early part of the present century, with the legend GLORIOUS PELLEW, and similar names, imitating to the casual glance the style of the Georges; but which could be put into circulation without danger to the knowing ones, as it could, if necessary, be proved that these pieces were in their nature only tokens.

The following wood-cut is copied from one in the first edition (1577) of Holinshed's Chronicles, and is here subjoined as giving a good illustration of the process of coining in mediaeval times.



1870

1871

1872

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