THE PATTERN HALFPENNIES OF 1788 AND 1790
BY J. P. DROZ.

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The pattern halfpennies of 1788 and 1790, by J. P. Droz can claim attention for several reasons.

1. They are the first British pieces issued from the new steam presses set up by Matthew Boulton at the Soho Mint, Birmingham.

2. They are excellent examples of the earlier work of Droz, and exhibit the improvements he brought about in the processes of striking.

3. They are an interesting series, which has never been properly described, nor separated from the re-strikes.

Classification.

These pieces are best divided into three classes:—

A. Patterns of which contemporary strikings exist.

B. Trial pieces.

C. Modern concoctions.

Class A.—Patterns of which Contemporary Strikings exist.

It is obviously so advantageous to keep to the existing standard reference for these patterns, viz., Montagu's Copper Coins of England, that I have followed his classification as closely as possible, and Nos. 1, 4, 5 and 8 in the following list refer to the patterns he describes. There is, however, among those of 1788 a very interesting and unnoticed pattern, and to leave a place for it in the list as No. 2, I have
classed those given in Montagu as Nos. 2 and 3 together as No. 3. They only differ as regards their edge, and have no greater claim to division than Nos. 4 and 8, which show the same varieties.

The pattern Montagu gives as No. 5 refers to the same and probably unique piece that I describe. He, however, gives no description of it, though the whole figure of Britannia is entirely different.

In arranging the patterns of 1790, Montagu suggests the distinction of the presence or absence of a flower at the end of the legend on the reverse, and thus separates two patterns as Nos. 6 and 7. This distinction does not exist, and so these numbers are left for patterns with two distinct types of reverse.

No. 8 is as Montagu describes it, and all examples of it have the reverse of No. 6.

No. 1, Montagu, No. 1.—See Plate I, No. 1.

Obverse.—GEORGIUS III • D • G • REX •
Laureated bust to the right, resembling that of Louis XVI.

Below the tie-knot to the hair, a thick and nearly straight mass of hair descends behind the neck and then curls forward under the bust, a curl also falling on the shoulder. The point of the bust in front nearly reaches to the beaded margin of the coin, which is present on all these patterns. On the truncation is D.F. in raised letters; and below the bust is an eagle's head above a thunderbolt. Four lozenge-shaped stops occur in the legend.

Reverse.—In the field, "BRITANNIA • 1788 •"

Britannia seated on the globe; the robe is flowing and its lower margin has an embroidered edge showing a pattern of leaves and berries on a stem. The raised right hand clasps a spear, the left hand holds a garland and rests on a shield. The right leg is extended and the left bent to a right angle. On the supporting base is shown a bunch of leaves in front of the globe and also under the shield, the letter D being just in front of the latter. In the exergue are a ship's rudder and palm branch crossed. A lozenge-shaped stop occurs after BRITANNIA and after the date.

This pattern occurs as bronzed with a plain edge. The coin illustrated on the plate is from the Brice and Caldecott collections. It is now in that of Fleet-Surgeon Weightman and is referred to by Mr. Montagu in his book as a genuinely struck specimen.
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Pl. I.
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No. 2. This pattern is not described in Montagu. Plate I, No. 2.

Obverse.—Resembles No. 1 but the eagle’s head and thunderbolt are absent.

The hair on the crown of the head and below the bust also shows more finished curls, some further work having been added to the die. The D.F. is present as on No. 1.

Reverse.—As No. 1.

This pattern occurs as bronzed with a guilloche edge. The only two which I have seen are in Mr. Weightman’s and my own collections, and they are fine and contemporary strikings.

No. 3. Montagu Nos. 2 and 3, which only differ as to their edges.

Obverse.—Resembles No. 2 but the die has been altered by a process of grinding. The point of the bust has been shortened and is in lower relief; there is also less hair below the bust. The D.F. is present as on Nos. 1 and 2.

Reverse.—As Nos. 1 and 2.

This pattern occurs as copper, bronzed, gilt, and silver-plated. The edge is plain, guilloche, or inscribed in raised letters:—RENDER TO CESAR THE THINGS WHICH ARE CESARS:

No. 4. Montagu No. 4. Plate I, No. 4.

Obverse.—This presents an entirely new die. The legend and the features of the face are the same as before. The truncation of the neck is more everted and the D.F. is absent from it. The front of the bust nearly reaches to the beaded margin, but the end is not so pointed. The tie-knot stands further out from the head, and the hair falling below it is thinner but more curled, nor does it now cover the outline of the back of the shoulder. On the beaded margin a flaw appears below the back of the shoulder.

Reverse.—As patterns Nos. 1, 2 and 3.

The pattern occurs as copper and also bronzed, with either an inscribed or guilloche edge.

No. 5. Montagu No. 5. Plate I, No. 5.

Obverse—From the same die as No. 4, and showing the flaw.

Reverse.—In the field, BRITANNIA. In exergue, 1788.
This presents an entirely different figure of Britannia. The robe is absent and the figure is clothed with clinging drapery. The left leg is extended and the right bent behind it at a right angle. Thus a larger area of the globe is shown than on the previous patterns, where the left leg is bent backwards partly covering it. The right arm is raised to grasp the spear, but the drapery does not reach to the elbow as on the previous patterns. The supporting base is narrower, and there is no bunch of leaves in front of the globe; also the D is absent. The date in the exergue takes the place of the crossed rudder and palm branch.

This pattern is in copper with a plain edge. It is in my collection, being from the Brice, Montagu and Murdoch cabinets, and is a brilliant and original striking. The surface shows that two bad cracks had occurred in the die, and probably the piece is unique. I have mentioned that Montagu gives no description of this figure of Britannia in his book, and although under No. 760, in Messrs. Spink and Son’s Catalogue of his collection it is well illustrated, no more detail is given.

No. 6. Plate I, No. 6.

Obverse.—GEORGIUS III. D. G. REX, followed by a flower in the form of a horizontal V, as stop.

Laureated head of George III. to right. Hair curling under bust but not so full as on the patterns of 1788, and no curl on the shoulder. On the truncation is DROZ F in sunk letters, which are in a straight line and have no stops. Three lozenge-shaped dots and a flower occur in the legend. Also the U in the King’s name on the patterns of 1788 is changed into a V on those of 1790.

Reverse.—In the field, BRITANNIA followed by the same flower as stop. In exergue 1790.

Similar figure of Britannia with globe and shield; the left hand resting on the shield and grasping the spear instead of a garland. The right hand is extended, only showing clearly the thumb and bent first finger. Clinging draperies take the place of the embroidered robe, and the left foot is hidden behind the extended right leg. There is a laurel branch behind the shield. The supporting base is narrower between the shield and the spear, and the part behind the lower end of the spear rises into a conical excrescence. A flower occurs after BRITANNIA. In exergue is DR. F. below the feet, and a pierced quatrefoil occurs both before and after the date, although that to the left is only distinguished from a lozenge by careful examination of the coin itself. A marked
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flaw runs from the F through the 1 of the date, and is the easiest factor to distinguish this reverse.

This pattern occurs as copper, bronzed or gilt; and the edge is plain, guilloche, or inscribed in raised letters with the RENDER, etc., legend. In the National Collection are two specimens of this pattern acquired in 1810 from the Roberts cabinet, and another acquired in 1818 from the Banks collection.

No. 7. Plate I, No. 7.

Obverse.—As No. 6.
Reverse.—Diffs from the reverse of No. 6 in the following four main points:—
(1) The extended right hand clearly shows two bent fingers.
(2) The supporting base is of the same width throughout, and there is no conical excrescence behind the spear.
(3) In the exergue, there is only one quatrefoil, which follows the date.
(4) The flaw is absent.

This pattern occurs as bronzed or gilt; and the edge is guilloche, or inscribed in either raised or sunk letters with the RENDER, etc., legend.

The three specimens I have seen with the inscription in sunk letters are all bronzed; that in the National Collection came from the Freudenthall cabinet in 1870; and it is curious that this pattern is the only example in the Museum with this reverse. Mr. Weightman has a gilt pattern with inscribed edge in raised letters, and in its original metal box. The box has a label on which is written Gill penny given to me by Mr. Boulton 1790 at Soho, Birmingham. B.F.G. The piece also has a history that dates it back to nearly this time, and so confirms that this reverse was not only an original design by Droz, but also used at the time.

No. 8. Montagu No. 8.

Obverse.—Resembles that of Nos. 6 and 7, but the hair does not curl forward under the bust. Instead of occurring on the truncation of the shoulder DROZ. F. is below the bust near the beaded margin, and
following its curve. In the legend, three pierced quatrefoils take the place of the lozenge-shaped stops.

Referne.—As No. 6.

This pattern occurs as bronzed, and in silver and gold. The edge is guilloche, or inscribed in raised letters with the RENDER, etc., legend. Mr. Montagu mentions mules struck from the obverse of No. 8 and the reverse of No. 1, and I have the two specimens he describes, one having been kindly given to me by Mr. W. J. Davis. They, as well as similar pieces, have a guilloche edge and are all, apparently, late strikings from the Soho Mint.

Class B.—Trial Pieces.

No. 9.

Obverse.—In the field, BRITANNIA. In exergue, 1790.

The figure of Britannia resembles that on the patterns of 1790; but a paddle takes the place of the spear, and there is no laurel branch behind the shield. Upon the paddle are shown a dolphin and trident.

In exergue, under the foot is DROZ., under the shield is F., and below the date is DROZ. INV.

Reverse.—Similar figure of Britannia but nude, and the shield and paddle are plain. There is no inscription, and the edge also is plain.

Obverse impressions of these pieces are struck from two dies; the sharper shows a long flaw through the first four letters of the legend, and when the die cracked a second was made. Mr. Montagu is mistaken in saying that contemporary examples of this piece exist. The Rev. G. F. Crowther kindly writes me that when he visited the late Mr. W. J. Taylor’s workshops about 1884, he was told that the die of the nude Britannia had not been hardened when it came into the latter’s possession. In the Proceedings of the Numismatic Society, under the date of April 24th, 1862, it is reported that “Mr. Madden exhibited a cast of a pattern of a halfpenny of the reign of George III. It is similar to the halfpennies designed by the French artist Droz, save that Britannia is nude. The work is beautiful, but the design evidently the mere whim of the artist.” Also in the same year, 1862, the British Museum acquired from the late Mr. Whelan a piece with
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one side blank and the nude Britannia on the other side. But there is no piece in the Collection, as Mr. Montagu asserts on page 103 of his book, with an incuse obverse of Pattern No. 8. This date probably indicates the beginning of the re-strikes. So that although this piece cannot be put into Class 1, the dies were undoubtedly made by Droz, and I have classed it as a trial piece.

No. 10. Plate II, No. 10.

This is a model by Droz of the nude Britannia type. It is struck on a thick flan, the size of the penny of 1797, that is 37 mm. in diameter, one side and the edge being plain, and it has a well raised and sharp rim on the engraved side. The general outline and size of the nude Britannia, globe, shield and paddle are the same as on the piece just described. The right arm exhibits an alternative position for the forearm: in one it is extended with a pointing first finger, showing also a thumb and two bent fingers; in the other it is raised and holds a wand which extends downwards as far as the middle of the right thigh. This forearm for its whole length continues close to the wand, whereas in the patterns of 1788 the arm only reaches the spear at the hand.

The other chief differences from the ordinary patterns are as follows:—The head is more gracefully poised on the shoulders, and has a more definitely round knob of hair at the back. No space is shown between the knees, and the lower margin of the shield is well raised above the supporting base. The upper end of the paddle is hollowed out, a raised line running down its centre, and the handle terminates in a round knob, whilst in the centre of the globe is a dot. The surface of the piece is divided into rectangular spaces by eleven perpendicular and nine horizontal lines, two circular lines are also drawn at distances of one mm. and four mm. from the rim. Unfortunately these lines are so faint that they are scarcely discernible in the illustration. The ends of the supporting base just touch the inner circle.

This is a beautiful trial piece and very carefully executed, especially as regards the junction of the two forearms at the elbow and the delicate lines which are for the purposes of copying. The concentric circles are drawn from the navel as the centre, and might indicate the position of the lettering and the inner edge of the ornamental border, if Droz...
intended the finished piece to be of this size, and so a pattern for a penny. However, it is much more likely that it was an early model for the halfpenny patterns.

No. 11. Plate II, No. 11.

This is an unfinished trial piece, by Droz, of the type of the patterns of 1790. It is struck on a thin flan the size of the halfpennies, one side being plain. All that is shown is a figure of Britannia with globe and shield and the base which supports them. The piece is not centrally struck, and shows three-quarters of the circumference of a circular line which would approximately mark the inner limit of the ornamental border, and which touches the left extremity of the supporting base. The figure of Britannia is like that on the patterns of 1790, but the right arm is missing from the shoulder. The shield is similar, but the globe is considerably reduced in size, and touches neither shield nor supporting base, the latter not being prolonged to the right beyond the shield. The surface shows definite lines indicating the position of the spear, and starting from the amputated shoulder the outlines of two arms are also faintly scratched in, although the lower of the two is rather difficult to trace. One arm is raised, and the open hand has the palm turned upwards: whilst the other is extended, and points a little downwards. Probably Droz was designing a new device but never completed it, as these lines were in the die. It is an interesting point of resemblance between this and the previous trial piece, that both show an alternative position of the right arm. I am much indebted to M. Georges Gallet for kindly presenting me with this piece, which is illustrated in Mr. Forrer's Dictionary of Medallists, under "Droz."

CLASS C. MODERN CONCOCTIONS.

This class comprises two reverses and three obverses, all of which I believe to be concoctions. Examples are only found on pieces which are obviously modern. As regards the scroll-pattern border to the robe, I have an unfinished die showing this border, which is one of those which belonged to the late Mr. W. J. Taylor, and it is on a modern die-block.
No. 12.

This reverse resembles that of No. 1, but the embroidered edge of the robe shows a scroll pattern, instead of leaves and berries on a stem.


This reverse has a similar figure of Britannia to No. 12, with the scroll pattern border to the robe. The date, 1788, is in the exergue, and on the supporting base the bunch of leaves in front of the globe and the D are absent.


This obverse is from the altered die for the Bermuda penny, so the stops in the legend are round instead of lozenge-shaped. The signature on the truncation is almost, but not quite, obliterated.

This obverse only occurs with reverse from a rusted die of that of Pattern No. 7. The specimens are in gilt or bronzed, and always have the inscribed edge which is very well put on. Mr. Montagu describes the piece as a variety of his Pattern No. 6.

No. 15. Plate II, No. 15.

This obverse resembles that of No. 6, except for slight differences in the curls of the hair, and that the truncation of the shoulder, which is more everted, has DROZ. F. following its upper curve and two stops added.

I have two specimens in silver struck with reverses Nos. 12 and 13.

No. 16. Plate II, No. 16.

This obverse is the same as the last as regards the truncation and signature, but the hair does not curl forward under the bust.

The Rarity of the Patterns of Class I, and Their Re-strikes.

No. 1. Exceedingly rare as a contemporary striking. Re-strikes showing this obverse are very plentiful, but with this reverse are not so, although the die was used.
No. 2. Very rare. No re-strikes with this obverse are known.
No. 3. Frequently occurs both as original and late strikings. Rarer bronzed than gilt, silver plated uncommon. Rare with plain edge, most plentiful with inscribed edge.
No. 4. Rare. No re-strikes with this obverse are known. Rarer with guilloche than with inscribed edge.
No. 5. Probably unique.
No. 6. This pattern is not uncommon, and probably all with this reverse were struck, early or late, at Soho. Rare with plain edge, and most frequent with inscribed edge; rarer gilt than bronzed.

The re-strikes showing this head of George III., with other reverses, are usually from slightly altered dies.
No. 7. The reverse die is very seldom met with on original strikings, so this pattern is rare. Very rare with inscribed edge incuse, and no modern re-strikes of this variety are known. The dies for the reverse have been very extensively used for modern re-strikes, many of the pieces showing alterations to them.
No. 8. Is fairly rare in bronze and very rare in silver. Edge usually guilloche, but a piece in the National Collection has an inscribed edge. Also the pattern in gold with an inscribed edge, from the Thomas (1862), Chetwynd, Marshall, Brice, Montagu and Murdoch collections, is probably unique. These dies escaped the modern re-striker.

Re-strikes in general, I will leave for my future paper on the Soho Mint, but these pieces were first struck outside the mint by the late Mr. W. J. Taylor sometime between 1862 and 1880. Another crop has sprung up more recently, to which belong all those which are also struck in aluminium or gold, with the exception of that of pattern No. 8, just mentioned.

The Murdoch collection contained thirty-four quite modern "patterns" of halfpenny-pieces of George III. in gold.
A number also of the patterns by Droz were undoubtedly "late
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striking at the mint. They are from dies which are neither “touched up” nor repolished, but which were somewhat rusty. A die quickly rusts if not properly cared for, and no doubt these were used to supply examples of the elegant patterns to visitors to the mint, or to friends of the authorities. However, at what date these “late strikings” were made it is impossible to say; but they are not difficult to distinguish from the great class of modern re-strikes.

It is curious that the examples of No. 14 have an excellently inscribed edge; for re-strikes very seldom have it at all, and when present it is generally very uneven. Mr. J. H. Dormer, who has kindly given me some information on this subject, remembers seeing the split collar with which this edge was put on, at Mr. Taylor’s workshop. He tells me it was a heavy and cumbrous thing and difficult to use; so probably it merely chanced that in striking these few examples of No. 14 the collar worked satisfactorily.

Mr. Dormer also made a list of the dies in Mr. Taylor’s possession, which confirms my statement as to which patterns were never re-struck.

The quite recent pieces in aluminium present the following dies:—obverse of No. 1, reverse of No. 7, the two reverses Nos. 12 and 13, the obverse No. 15, also both obverse and reverse of No. 9.

It is interesting to note that a modern and so-called Droz farthing, dated 1788, has a reverse closely resembling that of the unique pattern No. 5. It is reproduced below, as is also another farthing copied from the pattern halfpennies of 1790. I have the puncheon for the reverse of the latter from the late Mr. W. J. Taylor’s set of dies.
Biographical Notes.

Jean Pierre Droz, a Swiss, was born at La Chaux-de-Fonds in 1746, and died at Paris in 1823. He showed a great talent for drawing and was sent to Paris when only 18 years of age, to study the art of engraving. In 1783 he was able to offer to the Paris Mint Authorities some suggestions for improvements, and in 1786 he presented his first noticeable pieces to the Minister of Finance. These were two varieties of a pattern for an écu of six livres, which had the edges inscribed in raised letters. They were struck on both sides and on the edge with a single blow, by means of a new press which introduced Droz's invention of the virole brisée, or split collar. In 1787, he also struck a Louis d'or by the same press, but although these pieces were favourably received and much admired, the artist did not get the encouragement in France that he deserved. Droz consequently accepted an engagement with Boulton and Watt, and came to England just at this interesting period. Boulton had entered into partnership with Watt in 1772, and it was through his help that the inventor of the steam engine, after many trials and difficulties extending over seven years, was enabled to complete and introduce it.

In the year 1786, the steam engine had been applied to the stamping of money in executing the contract with the East India Company for over a hundred tons of copper coin; but these pattern halfpennies by Droz were the first British coins to be struck by the steam presses. By the end of 1788, six presses were fitted and ready for work at Soho. They were patented by Boulton in 1790, but it is uncertain whether some of the credit should not be given to Droz for his help in this work. Through the courtesy of Mr. George Tangye and Mr. Kirton I was able, at the Cornwall works, to inspect the clear and original plans for these mint engines, which are dated 1788. Also, I have a copy of a letter from the same source, written by Watt to Droz and dated November 24th, 1790, quoting the price of £1,190 for a 14-h.p. engine, or £750 for an engine of 8-h.p. It was, however, not for Droz himself but to be sent abroad, so may not have been intended for coinage purposes.
James Watt, in his manuscript memoir of his friend Boulton, gives the following account of how they came into touch with Droz:

In 1786 Mr. Boulton and I were in France, where we saw a very fine crown-piece executed by Mr. P. Droz in a new manner. It was coined in a collar split into six parts, which came together when the dies were brought in contact with the blank, and formed the edge and the inscription upon it. Mr. Droz had also made several improvements in the coining-press, and pretended to others in the art of multiplying the dies. As to his mechanical abilities Droz joined that of being a good die-sinker, Mr. Boulton contracted with him to come over to England at a high salary, and work at Soho. Mr. Droz was found to be of a very troublesome disposition. Several of his contrivances being found not to answer, were obliged to be better contrived or totally changed by Mr. Boulton and his assistants. The split collar was found to be difficult of execution; and being subject to wear very soon when in use, it was consequently unfit for an extensive coinage. Other methods were therefore invented and applied by Mr. Boulton, and the use of Droz's collar was entirely given up.

Droz also produced the following coins for his English employers:—the so-called pattern shilling, dated 1787, and sixpences, dated 1790 and 1791: the penny for Bermuda in 1793, and the reverse die used for the pattern halfpenny of 1795. Among the English medals which he executed, the best known are those of General Eliott, Governor of Gibraltar; George III. on his recovery, 1789; and several of Mudie's national series.

On his return to France, Droz was appointed by the Directoire Keeper of the Coins and Medals, and he was Keeper of the Mint Museum from 1804 to 1814. His head of Napoleon was used on the French gold coins from 1806 to 1814, and nearly to the time of his death he continued to engrave many splendid coins and medals.

I will not attempt to give any minute account of the technical inventions of Droz, but he made great improvements in the rolling-mill, chiefly as regards the gear which moves the two cylinders at the same time, and in the method of holding the upper cylinder firmly at a given distance parallel to the lower.

However, he chiefly employed his inventive genius in improving every part of the striking machine, the split collar being perhaps his
best achievement, and this afforded the safest guarantee also against counterfeiting. The halfpennies with inscribed edges show the divisions of the collar as six transverse ridges. Thus, even apart from the distinction we should grant to Droz as an engraver, we must also accord him a very high status for his other work.

References.

Montagu's Copper Coins of England.
__Quelques Notes sur La Vie et L'Œuvre du Médailleur J. P. Droz__, par Georges Gallet.

__Biographical Dictionary of Medallists__, by L. Forrer.

__Lives of Boulton and Watt__, by Smiles.
PORTRAITURE ON THE SILVER PENNY.
PORTRAITURE ON THE SILVER PENNY.