London Postal History Group

Number 80
December, 1986

NOTEBOOK

In This Issue.....

EDITORIAL

We very nearly managed to get the actual issue to match the date and if members continue to send in material, especially some of the longer items, we have every hope of getting the five issues for 1987 to readers in that year.

The long contribution from Maurice Barette will be of great interest to all those who collect the Squared Circle cancellations and will enable those with collections to review their material in the light of what he writes.

Although not the Editor's prime collecting interest, he would be pleased to hear from those with some knowledge to comment on the Hammer Identification theory which forms the core of the series of publications with which Maurice is so closely connected. The amount of material they have examined is large but, with the all important HI being capable of removal and the ability of the well known Mr Murphy to create havoc, the need to satisfy ourselves there was no substitution is obvious. Without doubt the HI provides a very clear and ready guide for collectors: let us all be satisfied it is foolproof.

As mentioned elsewhere being active in publishing presents problems with the large stock we hold. Although it will, no doubt, all sell in due course, it does restrict our ability to continue producing further sections of the Handbook as the hard work of the many contributors is completed. Our first appeal for funds fortunately carried us thus far but, to be blunt, at least as much again is now needed to make a start on the 1987 publications. You are reminded it is a small loan we ask from as many as possible and just £5 from every member would resolve the problem for some time to come. Cash or cheques direct to our Hon.Treasurer please.

A very Happy New Year.

REG SANDERS
4 WINDERMERE GARDENS
ALRESFORD, HANTS
SO24 9NL
096 273 2866

A TECHNOLOGICAL APPROACH TO SQUARED CIRCLE HAMMER MANUFACTURING AND RECUTTING.

by Maurice Barette

1. - Squared Circle handstamps.

Unlike the fancy geometric postmarks, some of which had been used on Pearson Hill machines in the Inland Branch (1), it seems that all the squared circle dies were fitted on handstamps, with the exception of one, proofed for Manchester on NO 30 80, with the mention "Machine Die" (2).

De Lacy and Massey were, inter alia, handstamp manufacturers and supplied the Post Offices with such devices during the period when squared circles were employed.

In May 1870, D. Berri, contractor for date stamps had been detected lending money to officers of the Stationery Department (3) and was consequently informed that his contract would come to an end on 31st March 1871.

Responding to a tender from the Post Office, an offer of £ 981 6/ 6d from De Lacy was accepted (4) and a new contract was signed with that firm in March 1871. From then on, De Lacy began supplying the whole of British post offices with handstamps.

J.E. Massey had patented in 1875 some improvements in date stamps (5) and offered these to the GPO in 1878 (6) (7). Two experimental stamps were tried in the E.C. Office from May 1878, and one in the Inland Branch from June 1879. In April 1880, it was arranged that further handstamps needed in the E.C. Office would be ordered from J.E. Massey (6).

A report of Edw. Sanderson, Sub-Controller, dated 5th September 1889 (8), notes that "all the stamps used in the Inland Branch are of the "De Lacy" pattern, whilst the majority of those in the E.C. Office are "Massey" stamps." The Mount Pleasant Date Stamp Impression Book, however, mentions Massey handstamps (9), but does not specify if they were really used in the Inland Branch or in the LONDON E.C. Office, which were both included in the same "Circulation Department".

There is no evidence that Massey handstamps had been supplied to any other office.

They were fitted with the various designs of postmarks used in the LONDON E.C. Office : fancy geometrics, squared circles, hooded circles, circular date stamps, etc... (7). Nevertheless, only a limited number of squared circles seem to have been mounted on Massey devices, and this was done in the E.C. Office only.

The twelve squared circles proofed for LONDON E.C. on NO 26 1879 and the three proofed on AP 16 1880 were issued before the Massey devices were adopted. The only "Massey" squared circle handstamps seem to have been six unproofed hammers with "hammer identification" (HI) letters D to I, issued in the second half of 1880, three others with HI's J, L and R, issued at the end of 1881 and the series of twelve unidentified hammers proofed on JU 17 1884.

Although the commencement of the De Lacy and Massey contracts can be accurately dated, no information has been found in the PO Archives about their discontinuation.

References :

(1) *PO Archives : Date Stamp Proof Impression Book, Vol. 39, p. 163.*
(2) *PO Archives : Date Stamp Proof Impression Book, Vol. 38, p. 231.*
(3) *PO Archives : E.15080/97 : "Berri's contract, irregular practices".*
(4) *PO Archives : E.15080/97 : "De Lacy's contract".*
(5) *Patent Office : Patent N° 1957, 28th May 1875, J.E. Massey, "Date and other stamps".*
(6) *PO Archives : E.15080/97 : "Extended trials of patent spring hinge stamp invented by Mr. J.E. Massey".*
(7) *M. Barette : Early squared circles and Massey Trials, LPHG Notebook N° 56.*
(8) *PO Archives : E.15080/97 : "Proposed new contracts".*
(9) *NPM : Mount Pleasant Date Stamp Impression Book : 10 NO 82, 10 OC 89, ...*

In ref. (9), in PO Archives, the file begins with a memo dated 15th March 1889 from the Secretary of the Post Office, stating that the De Lacy's contract had been in existence for 18 years, and asking whether any modifications... were desirable, or if it might be found expedient to put the contract up to public tender as was done in 1870-1.

But, before anything was done in that direction, lengthy considerations were given to the patterns of stamps to be kept, cancelled or modified, and, by 1897, it does not seem that any tender was proposed for the supply of handstamps, which is virtually after the squared circles had ceased to be issued.

It would seem that, except for the few LONDON.E.C. squared circles fitted on Massey's handstamps, the bulk of hammers of this pattern were "screw type" - which was the De Lacy model - and made by De Lacy for the Post Office.

2. - Comparisons between Massey and De Lacy handstamps.

2.1. - Massey Patent.

The name of Massey is famous in British philately as W.G. Stitt Dibden had connected him with the experiments on "combined stamps" carried out by the Post Office in about the same period that his handstamps were under trial. But a chronological survey shows that the combined stamp experiment was already in progress before the Massey handstamps were adopted and the connection is just a matter of coincidence, as Massey had nothing to do with that experiment (7).

Following the testing of these handstamps, interesting reports remain in the PO Archives files "on relative merits of various stamps" (6), comparing the old Berri "hinge stamp", De Lacy "screw stamp" and Massey "spring stamp". Further reference will be made to these comparisons after describing Massey and De Lacy devices.

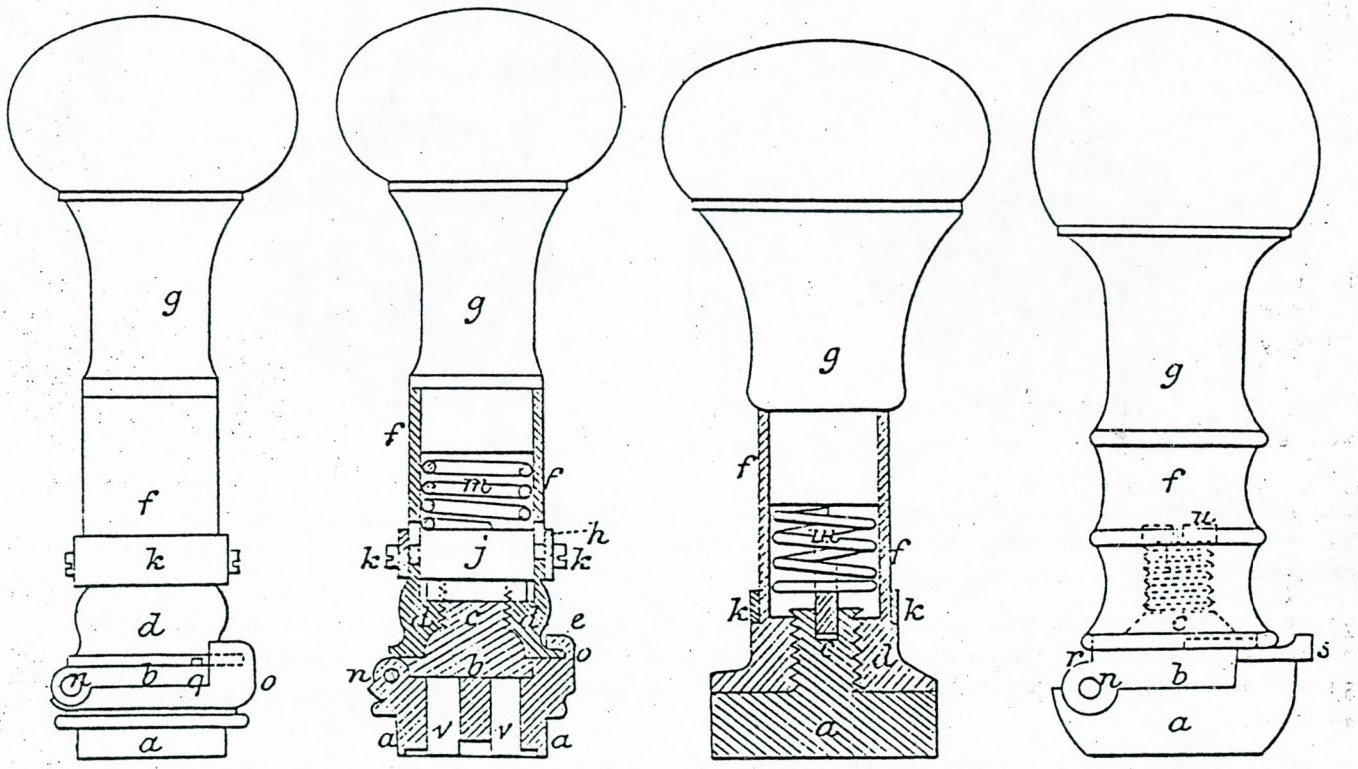

Fig. 1 : Some of the Massey models (2nd drawing is cross section of 1st)

The main feature patented by J.E. Massey (5) was a handstamp with a hinged face plate, locked by a sliding or rotating device. A transverse bar sliding in a cylinder between handle and body could fit into a slot of the face plate and prevent any movement of the parts when locked. A spring might be added above the bar for

extra safety. The patented improvement could be used with or without bar or spring.

The patent displayed drawings of several models, three of which are shown on Fig. 1, but which of these were used in the E.C. Office is not known.

2.2 - De Lacy Handstamps.

The name of De Lacy does not appear in the Reference Library of the Patent Office and no patent is to be found. Fortunately the appearance of the De Lacy's "screw type" handstamp is known to us as an example fitted with a squared circle is kept in the National Postal Museum (10).

This is the only known squared circle hammer still surviving : it is the GREENWICH. S.O./S.E. hammer, now housed at the NPM, by whose kind permission it has been examined and photographed (Fig. 2).

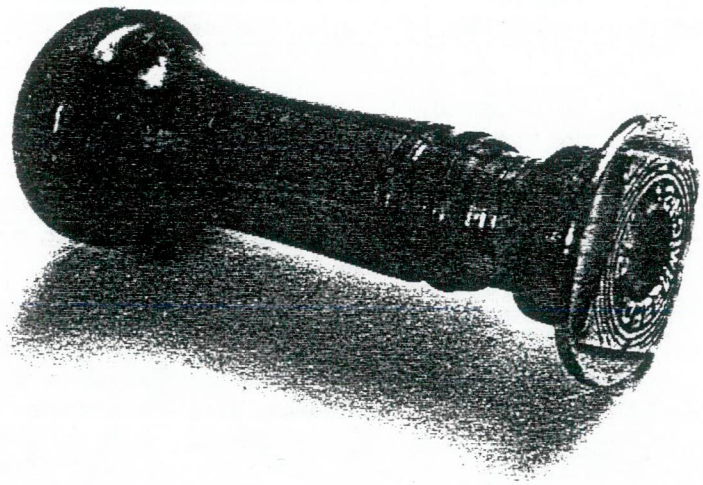

Fig. 2 : The Hammer ; Handle with Head attached

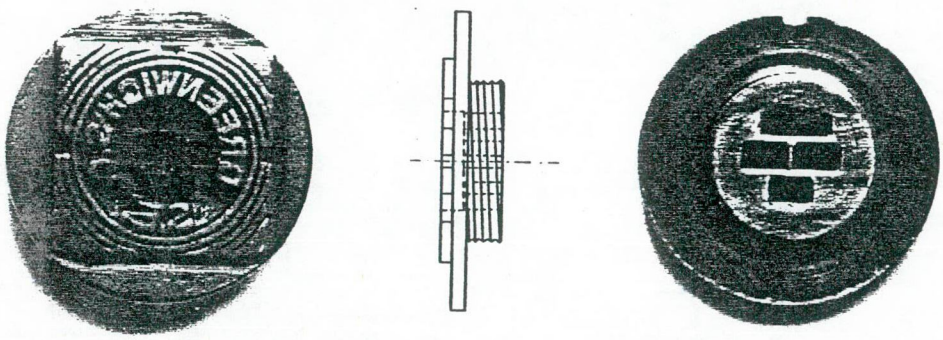

Fig. 3 : The Head : Face, Side, Back

This handstamp was composed of three parts : a head, a handle and a set of moveable type slugs, but the latter have not been kept with the device and only the head and handle are to be found.

The head, or die, is the part on which the features and letters of the hammer are cut out. The back of the head is threaded for attaching to the handle. The head is pierced with four rectangular slots for inserting the type slugs of codes and dates (Fig. 3).

The type slugs appertaining to this particular hammer have disappeared, but the shape of such parts is well known : they have a square or rectangular section with a flange to clamp them between the hammer head and handle.

Reference :

(10) NPM : The GREENWICH.S.O./S.E. Handstamp.

The wooden handle was fitted with a brass collar and tapped socket for screwing on the head of the hammer.

2.3. - Metal Composition.

An interesting aspect is the quality of the metal which made up the heads of the hammers as it had an effect upon durability and ability to repair the handstamps.

John Fletcher, then storekeeper, reported on 23rd January 1880 : "The hinge stamps (Berri), screw stamps (De Lacy) and Mr. Massey's stamps, are all made of metal of precisely the same description" (6).

But T. Jeffery, Controller, did not seem to agree as he wrote on 23rd September 1881 : "...the stamps furnished by Mr. De Lacy, the metal of which is soft, while those supplied by Mr. Massey, last and keep in good condition a very long time"(6).

This was confirmed by Edw. Sanderson, sub-controller, who reported on 5th September 1889 : "These stamps (De Lacy), too, are made of soft metal with a surface of hard steel...", and on next page, "They (Massey stamps) are made of hardened metal throughout, which renders them capable of being recut a greater number of times"(8).

It has not been possible, of course, to analyse the composition of the Greenwich handstamp or measure its hardness. The matter has been discussed with two experts, both graduates in metallurgy, with a fine library (11) (12), who have suggested as follows :

In the 1880's and 90's, special alloyed steels were just coming out of research laboratories and were not available for common use. It can be assumed that the dies were then made of plain carbon steel, which could be hardened for better durability. It can be assumed that the carbon content was comprised between 2.5 % and 6 % ; lower carbon steels cannot harden properly ; higher concentrations can yield a greater hardness, but the metal gets exceedingly brittle and the hammers would have broken in consequence of the heavy strain of stamping.

Within that range and with the variety of possible heat treatments, a hardness comprised between 120 and 150 on the Brinell scale could be attained, and, under certain conditions, the gradient recorded in De Lacy hammers could be obtained. In all probability, the homogenous hardness of Massey's dies was obtained by tempering, and De Lacy's differential result by a case hardening treatment.

The dies were of course manufactured before being hardened ; as to the recutting, it is likely that the dies were previously annealed to be restored to their former softer condition. Anyhow, the hardness attained was not so high as to prevent further working with a harder chisel or file, as Sanderson seems to assume, but the tools would have suffered a lot in the process.

LONDON E.C. shows a good example of comparison between the resistance to wear of De Lacy and Massey hammers : six De Lacy hammers were proofed on NO 26 79 ; they seem to have been used mainly on newspaper mail. Their usage has been recorded to March 1884, but from 1881 they were already badly worn. They were replaced by twelve Massey hammers, proofed on JU 17 1884, which still produced very clear strikes when retired in September 1897. None of them seems to have been recut during their recorded periods of usage.

There is another LONDON E.C. example : three De Lacy squared circles were proofed on AP 16 80. They are recorded, with HI's A, B and C, from May 1880 to October 82 and had to be recut four times in that short lapse. Six unproofed Massey hammers followed, with HI's D to I ; they are recorded from the end of 1880 and four of them were still used at the end of the 90's with only one or two recuttings.

References :

(11) R. Barat : Technologie d'Atelier (Ecole Nationale des Arts et Métiers).
(12) Open University : 9, Steels, how to treat them.

3. - Technology of Squared Circle Hammers.

3.1. - Squared Circle Hammer Manufacturing.

After a thorough examination of the GREENWICH.S.O./S.E. handstamp in the NPM, it is interesting to speculate about the ways squared circle hammers were made and repaired at that time.

No contemporary documents on the subject have been found in the PO Archives - the manufacture of handstamps was the concern of the contractors rather than the GPO - However, a 1932 memorandum about a R.J. Fewing's invention of an improved hand date stamp (13) gives useful clues as to the processes involved, specially about "letters and figures being handcut". Another comment concerns recutting.

We shall mostly examine the hammer head and just have a look at the slugs, as usage, wear and repairs of these form the base of the history of the postmarks applied on stamps and entires, the evolution of which can be followed along series or families of hammers. The handle does not present the least interest in that respect.

The hammer head was made of a cylindrical steel block. The Greenwich one is about 39 mm diameter and remains about 8 mm thick. The "stamp" side is still about 1½ mm thick, but it is supposed that its thickness was greater when new ; the hammer was used with special code, then recut and used with clear time. It is now in a worn state again, specially the angles which are very worn down.

This circular part was made in one piece and the letters of the name were hand cut direct from the block ; chisel marks can be seen around them.

The cylindrical block was placed on a lathe and a flat surface machined at one end of it. Then circles were cut in that surface by turning and a deeper recess was cut in the centre of the block.

The metal surface was left untouched on the outside "crown", from which the corners of the square were made, on four circles, which gave the arcs and the inside circle of the postmark ; and on an inner crown, where the letters of the office name were cut out (see Fig. 4 to 12, p. 6 & 7).

Screw cutting the back of the head is without interest for our purpose, but four significant operations were left to be performed : cutting in the letters, filing the circular block into a square, piercing four rectangular slots for type slugs and hardening the finished hammer head. It can be thought that square filing and slot piercing might have been made after letter engraving, to ensure a good setting of the name in the square and type slots parallel to square sides. It may also be supposed that the part was acid pickled or wire brushed to eliminate surface oxide or scale resulting from heat treatment.

Letters were hand cut in the upper part of the "letter crown". In certain postmarks, other pieces of information might be cut in the lower part : district initials, county or chief office name, or hammer identification indicia when the hammer was initially issued as a Type E (see later on page 12). Any surplus crown surface was then cut off with a chisel.

Circle grooving and letter cutting were bevelled, as clearance was necessary to withdraw the tools. It resulted in circles and letters being thinner at the surface than at their "roots" below surface level. This explains why worn hammers gave thicker impressions of arcs and letters and thinner spaces between the arcs. This was amplified by the hammer metal being beaten down under the strikes. At the same time, the projecting corners started wearing first and lost their sharp angles and the original flat surface became more or less convex. When a hammer was considered as too worn, it was sent for recutting, as many times as feasible, until "worn beyond repair" - quite a frequent sentence in contemporary instruction books.

The circular block was then filed square in relation with the office name. It is

Reference :

(13) *PO Archives : Minute 13342/1932 : Memo on "Claim of Mr. R.J. Fewings".*

not possible to say if the filing was done by hand or on a machine. The Greenwich hammer shows irregular tool marks, but as the die is worn out, these lines may have become distorted through usage or from recutting.

Fig. 4 shows the "target" pattern machined on the end of the original block. It may be thought that all squared circle hammers began with a similar pattern and that the variants recorded during the history of squared circle postmarks were obtained by cutting into the circles in different ways.

Earliest hammers were cut square inside the second inner circle and show only tiny corners, subject to a rapid wear : e.g. LONDON E.C. (Fig. 4)

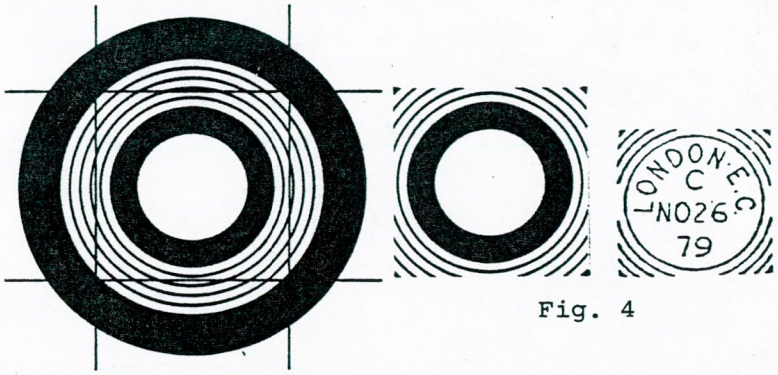

Fig. 4

Fig. 5

About mid 1880, the Proof Book shows a few proofs where the second inner circle is hardly cut into, and which are practically Type VI hammers (i.e. with two complete circles) : e.g. WEDNESBURY or WOLVERHAMPTON (Fig. 5). But the previous pattern was quickly re-established.

From mid 1881, the filing was left well outside the second circle, which was cut into with a chisel to obtain the wanted arcs. The corners of the squares were thicker : e.g. BARHAM (Fig. 6). The cuts could be made at various angles and leave wider or more narrow gaps. A large range of variants have been recorded : e.g. CAMBERWELL.S.O./S.E. or EALING.W. (Fig. 7)

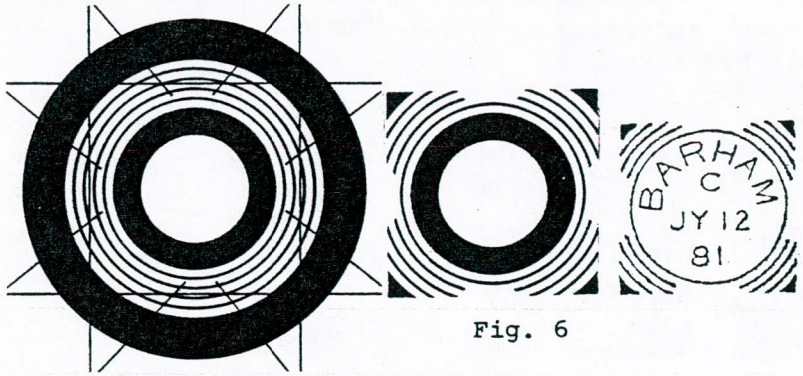

Fig. 6

Fig. 7

Later on, the squares were left larger, and in the nineties, the third inner circle was left untouched in the filing operation. Two circles were cut into by hand and these hammers show very large corners : e.g. EALING.DEAN/W (Fig. 8)

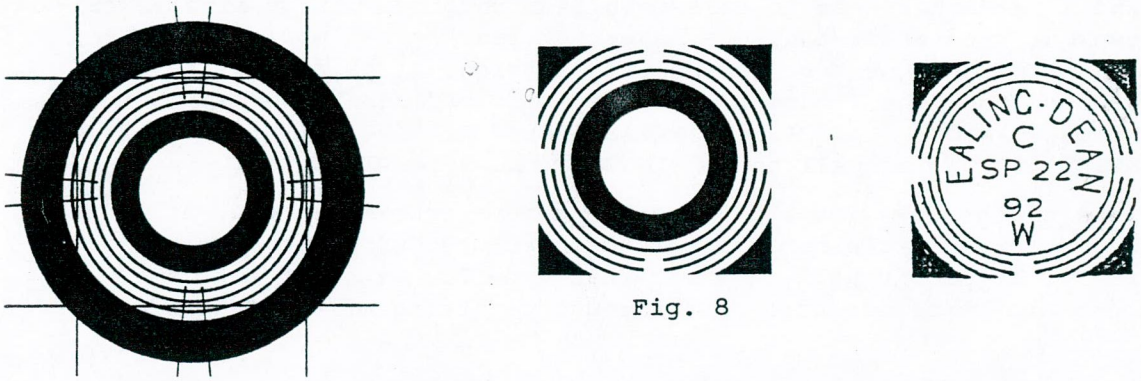

Fig. 8

Squared circles with two complete circles (Type VI) were delivered to four offices : BOW.S.O./E., MAWGAN, SAXMUNDHAM and TERRINGTON (Fig. 9). Only the BOW.S.O./E. Type VI hammer was proofed ; the others have been recorded from 1892 - 1893.

By the wearing of Type I hammers, some offices happened to have squared circles which showed two complete circles : e.g. LONDON.E.C., 2nd I A-D hammer, which transformed to Type VI about 1891 (Fig. 10).

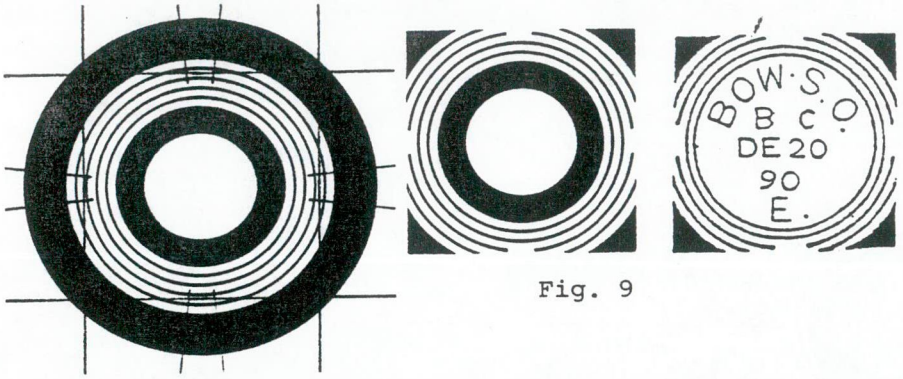

Fig. 9

Fig. 10

In the nineties, about 18 offices received squared circles with three complete circles and one arc (Type V) : e.g. GANTON, PEEL/ISLE OF MAN, etc, (Fig. 11).

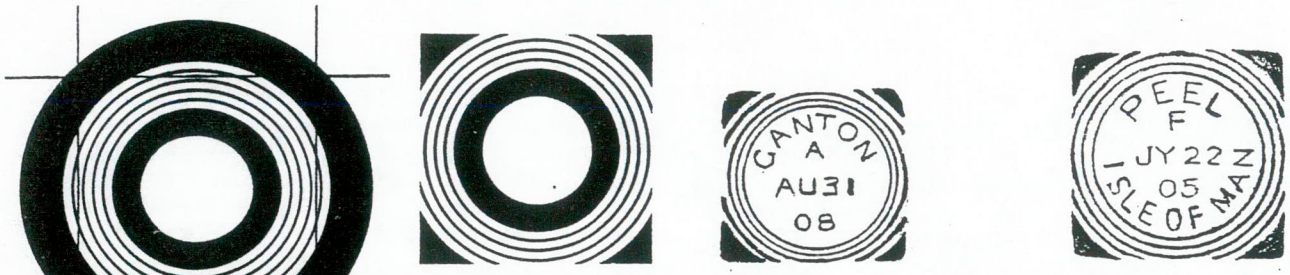

Fig. 11

BRENTWOOD had a hammer with practically the four circles untouched (Type IV). A hammer of BATH sometimes shows the same pattern, but most of its strikes appear as a Type V (three circles, one arc) (Fig. 12, Fig. 13).

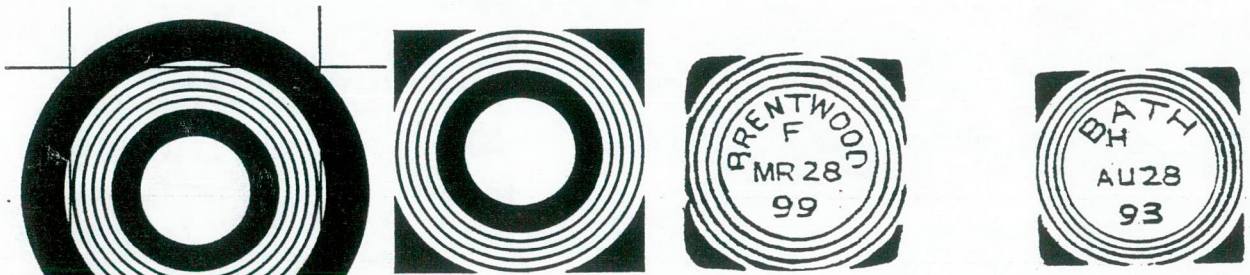

Fig. 12

Fig. 13

These Type IV and V hammers appear to have resulted from the outside circles failing to have been cut into after the squares were filed. It is impossible to say whether this was intentional or mere accidental omission. It is strange to note, however, that half of the Type V hammers were made for offices in Yorkshire : BROMPTON, CASTLETON, GANTON, GLAISDALE, KIRKHAM ABBEY, RILLINGTON, STRENSALL, WELBURN and WEST.HESLERTON, as well as TERRINGTON (the Type VI above).

With the exception of the few Type IV, V and VI hammers recorded above, it appears that all original squared circle hammers were manufactured with one circle and three arcs (Type I). It is virtually certain that Type II, with two arcs and Type III, with one arc, were produced only through recutting of previous hammers.

The hammer head was pierced with four rectangular slots to accommodate the code and date type slugs. In hammers where inscriptions ran all the way round the letter crown, these slots were inscribed in the central recess (see GREENWICH.S.O./S.E. hammer, Fig. 3). When the unused portions of the letter crown had been chiselled off, the year slot could be placed lower.

After the head was given its final dimensions and details, it went through a heat treatment to improve its resistance to wear. We have no information about this process, but ref. (8) confirms that hammers were hardened in some way.

A "type set" was supplied with every new hammer and followed it throughout its whole career : usage and recuttings, as the type slugs had to be recut at the same time as the hammer (13). Type slugs were inserted in the slots and clamped by their flanges between the hammer head and the handle (Fig. 21). They could show one or two digits.

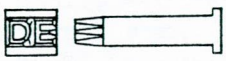

Fig. 21

The slugs were clamped by screwing the head on the handle in the De Lacy "screw type" hammers. In the Massey hammers, type pieces were clamped between the body and hinged face fastened by a sliding or rotating lock and spring.

The processes described above for manufacturing hammer heads have been conceived from the study of the GREENWICH.S.O./S.E. handstamp, which is De Lacy screw type. They should have been basically similar for Massey hammers, the differences arising when making the body and handle of the handstamp.

"Normal" squared circles had three lines for code and date indicia : 1, time (in code or clear), 2, day and month - or month and day -, 3, year (Type E hammers showed their HI's on a 4th line under the year (see page 13, Fig. 47) ; they nevertheless are a regular format). But a few early hammers were issued showing features deviating from the general pattern.

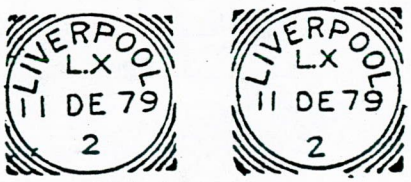

Fig. 14

Fig. 15

Two Type I E hammers, both with HI 2, were proofed for LIVERPOOL EXCHANGE on 11 DE 1879, showing day, month and year on the same line (Fig. 14).

A further squared circle was proofed for the same office on 25 AU 80, also showing the date on one line. It was considered as a Type 1 E by Stitt Dibden, but it is a real Type I A, with HI A prefixed to the time code, but owing to the presence of the initials LX in the code slot - LX mean "Liverpool Exchange" Branch Office - the HI and time code had to be shown below the date (Fig. 15).

Another deviating format, with indicia on four lines, was recorded in LIVERPOOL, again on account of District or Branch Office initials showing in code slot :

Fig. 16

Fig. 17

Fig. 18

Fig. 19

Fig. 20

A hammer was proofed for LIVERPOOL Northern District on NO 15 80 (Fig. 16). The code at base below the year shows the letter N followed by a numeral time code. It is not known if the N indicates an HI or is just confirmation of "Northern".

Three more hammers were proofed for LIVERPOOL EXCHANGE on NO 15 80, DE 3 80 and DE 28 80. They show LX in the upper line, and their HI's (E, F and G) with the time code are on a fourth line at the bottom (Fig. 17, 18 and 19).

The same feature was proofed for CHELTENHAM on DE 11 80, with a hammer showing initials BP on top line and a single letter time code on the fourth line in the bottom (Fig. 20). It is not known if BP was for a Branch Office, or an abbreviation for "Book Post".

In a way, the BRADFORD/YORKS Type C hammers, with their HI's above time codes (see p. 13, Fig. 52, 53 and 54) could be associated with the above "four line" hammers.

3.2. - Squared Circle Hammer Recutting.

The word "recutting" may cover quite a range of operations according to the degree of wear of the hammer to be repaired. It could have been just a touch up with a file or chisel to restore a few letters or a corner, and this may not have been apparent in the resultant hammer, or it could involve a complete reconditioning of a very worn hammer. The latter hypothesis has been followed and the operations that were performed have been studied.

To demonstrate what happened when recutting a worn hammer, a hammer has been chosen in the London proof range. It happens to be the LONDON.E. Type I A-C, proofed on DE 11 89. This particular hammer has been chosen as a diagonal cross section of the head will pass through one of the letters. It is illustrated (see Fig. 23 and 24) with its original lathe and cut work.

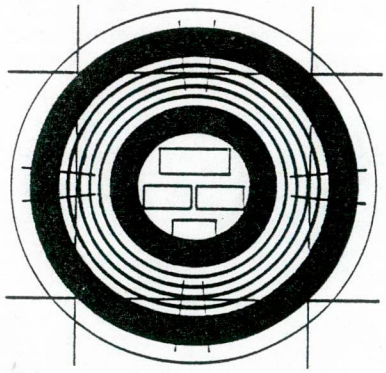

Fig. 22

Fig. 23

Fig. 24

As the lower part of the letter crown was not used for any inscription, the year slot can overlap this surface.

Fig. 24 shows a cross section along a diagonal of the newly manufactured hammer head. Surface dimensions are close to those of the real hammer, but thickness and depth of grooving are just a guess, as we do not exactly know what they were.

Fig. 25 shows a worn impression from the previous hammer and Fig. 26 a diagonal cross section of the same worn hammer. It shows the hammer face getting convex, reliefs wearing down and corners rounding off.

Fig. 25

Fig. 26

Five operations were necessary to make such a hammer fit for re-use, four of them being performed on the hammer head, and the last one on the type set.

It can be supposed that the hammer head was annealed before recutting, to restore the metal to its softer state and make the work of cutting easier, but there is no evidence that it was so. The processes involved would have been unchanged anyhow.

The operations to be done were :

- Restore flatness to the hammer surface.
- Recut new circles and arcs.
- Recut fresh letters.
- Recut the square sides.
- Shorten the type slugs to adapt them to the thickness of the new hammer.

Fancy theoretical models have been drawn up to explain the results of these operations.

It is not known how the first one was done. The head could have been filed flat, or it could have been placed on a lathe again, which seems the probable procedure as the next step was turning, to recut new circles and arcs.

It was first assumed that only a small amount of metal was taken off (as along line 1 of cross section on Fig. 27), still leaving rounded corners.

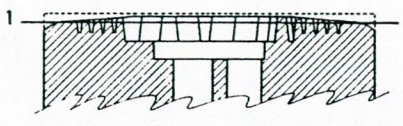

Fig. 27

Fig. 28

Fig. 29

A hammer in such a state would have given an impression similar to Fig. 28, from which fresh circles and letters would be cut. The square would have to be filed smaller to recover its sharp corners. Fig. 29 shows one of the possible results of such recutting as, although freedom for circles was relatively tight, a large variety of letter styles could already be cut from the letter roots and, for example, some of them could have been quite similar to the original ones.

It has been also supposed that more metal was machined off, down to line 2, as shown on Fig. 30, to come back to the original dimensions of the square. Such a reduced head would have given an impression similar to Fig. 31

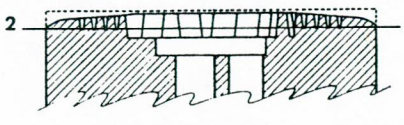

Fig. 30

Fig. 31

The thickness of features gives much more freedom for recutting any type of circles and letters. Possible examples of Types I, II and III recut from it are shown on Fig. 32, 33 and 34. Any style or size of letters could have been cut in. They only had to be centered in the old roots to ensure an even spacing in the office name and a good setting in the square.

In practice, it is probable that far less metal was removed at any one time, but rather that consecutive recuttings were carried out, without waiting until a hammer was worn to the extent of needing such a drastic treatment as illustrated above.

It is also possible that the grooves were not so deep in the hammer head and could be taken out without removing so much metal.

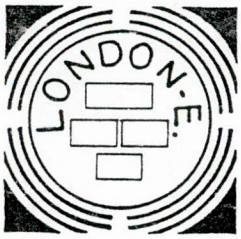

Fig. 32

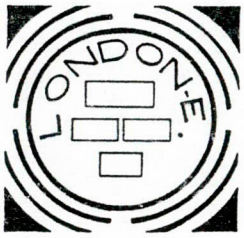

Fig. 33

Fig. 34

When recutting to a Type II or III, as more surface area was available, it was possible to recut circles larger than the original ones, and letters around a larger circumference. This could be done to allow more room in the code slot when shifting from Special Code to Clock Code or Clear Time, both of which needed more space to accommodate more digits ; e.g. JERSEY (Fig. 35).

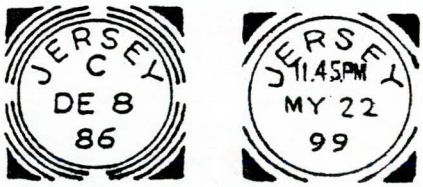

Fig. 35

A recut hammer would give strikes indistinguishable from those impressed by a new one and it is sometimes difficult to say if a hammer was new or recut. But, by carefully examining the letter positions, arc features and square setting, it is usually possible to determine if a hammer was recut and from which hammer it was recut ; in the recutting process, the letters had to be left in identical positions relative to the inner circle and square. The recut would normally be slightly smaller in size overall than the original whilst the outer arcs would be slightly shorter. A tracing of any recut will be found to fit the original in most respects.

As some hammers may have been recut consecutively up to five or six times, series of hammers can be found, which started from an original Type I hammer and can be followed to further Types I, II or III, or even sub-types (see page 12). In such recutting series, all hammers show a certain "family likeness" ; e.g. LONDON.W. I E-66 (Fig. 36 to 40), all consecutively recut from the original hammer.

Fig. 36

Fig. 37

Fig. 38

Fig. 39

Fig. 40

In such series, as each hammer is a recut from the previous one, no dates can possibly overlap in usage between the hammers. However, the date gaps between the usage of two consecutive hammers will shorten as new earliest or latest dates are reported, down to a minimum time due to administrative and technical recutting delay. The same does not apply to a new replacement or to a hammer that has simply been converted from one time style to another.

Hammers were normally recut to an existing type ; but a few anomalies have been recorded ; a 1st Type I A-QQ hammer was proofed for BIRMINGHAM on OC 30 86 (Fig. 41) ; when it was recut for the first time, between August and December 1887, an

extra cut on the lathe gave a fourth arc (Fig. 42).This 2nd I A-QQ hammer (with four arcs) is recorded from NO 87 to MR 89. It was recut to a further hammer with 4 arcs (JY 89-JY 90) and eventually to a normal 4th I A-QQ hammer with three arcs

Fig. 41

Fig. 42

Fig. 43

Fig. 44

Another hammer presented the same unusual feature : the LONDON.N.W. 1st I A-9 was proofed on OC 2 85, and recorded until FE 87. It was recut to a 2nd I A-9, recorded from AU 88 to MY 91, which also showed four arcs (Fig. 43, Fig. 44). It was eventually recut to a normal 3rd Type I A-9, recorded from DE 91 to JA 92.

The two hammers were recut to these "4 arc" hammers in the same period, probably in 1887. It could be imagined that they were recut together during their common "gap", AU 87 - DE 87, by the same absent-minded recutter... But, this is pure speculation and should not be taken too seriously...

4 . - Changing Hammer Styles.

Except for some hammers originally issued as Types E, with a HI in the lower part of the circle, most hammers were made as Types I, unidentified, with only a time or duty code, or Types I A, with an added HI placed at the left of the code slot (*). When Clock Code and Clear Time were introduced, the number of digits needed for these new styles did not leave room enough for an HI in the code slot. In some hammers, this slot was not even long enough for the new digits. Examples show that sometimes it could have been cut longer, with eventually simultaneous recutting of smaller letters around a larger circumference to leave more space inside, the central recess being made larger (see JERSEY, Fig. 35). Some others could not be adjusted and had to be discarded or left with their Special Code indicia.

HI's of Type I A hammers had to be moved to other places, and such positions are known as Sub-Types (or Types) D, E, F and G (with an additional Type C)

The most widely used was Type D, with a pair of HI's in the lower corners of the squares. It was obtained by inserting plugs into holes drilled in the lower arcs (Fig. 45 and 46). Presumably these plugs were square to prevent indicia from rotating in their holes. In any event, cuts in the arcs of Type D hammers usually present a square surface. The plugs, being forced into the holes, became integral parts of the hammers. Indicia could be cut into these plugs and later be recut as the other features of the hammers. It does not appear that many hammers were made initially as Types I D, but squared circles were widely recut to this pattern when being changed to Clock Code or Clear Time.

Fig. 45

Fig. 46

When recutting to a Type E hammer, a plug was inserted in a hole drilled inside the circle at the bottom. This could be done when the year slot left enough room for such an operation, although special examples show that such a case was not

(*) A few Type B hammers exist, with their HI's placed at the right of the code.

impossible : e.g. PADDINGTON.W. Types I E-68 and I E-69 (Fig. 47 and 48), though these seem to have been rather experimental with their tiny figures.

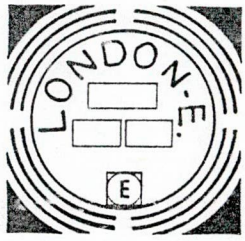

Fig. 47

Fig. 48

The Type F was obtained by inserting a plug into a hole drilled at the bottom of the hammer, just outside the circle (Fig. 49 and 50). Protruding outside the main hammer made such additional HI's very fragile and subject to wear.

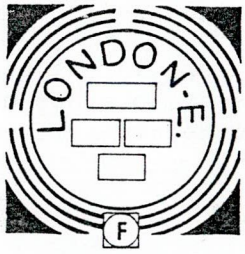

Fig. 49

Fig. 50

Type G hammers were obtained by inserting a plug into a hole drilled at the bottom of the hammer and cutting into the circle (Fig. 51). Famous examples of this procedure are the LONDON.W. Types G with HI's 49, 50, 51 and 53, where indicia were added to new Type I hammers before they were brought into use (Fig. 52).

Fig. 51

Fig. 52

Types F and G seem to have been rather experimental ; in offices where they are recorded they usually appeared first in series where hammers were recut from Special Code to Clock Code or Clear Time, and in most cases Type F or G hammers were eventually recut to Types D or E.

A unique variant was used at BRADFORD/YORKS, in three series with HI's 5, 6 and 7. It is the Type C, where the HI is located above the code line (Fig. 52, 53 and 54). After three consecutive Type I C hammers in each series, I C-5 was eventually recut to I D-5 and I C-6 to I D-6 ; I C-7 was recut to I E-7, as erasing the word YORKS left enough room for inserting a Type E HI in its place (Fig. 55).

Fig. 52

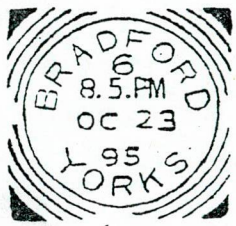

Fig. 53

Fig. 54

Fig. 55

The procedure of erasing words was also used in another way : e.g. CHICHESTER/STATION OFFICE recut to plain CHICHESTER (Fig. 56) or LEWES/STATION OFFICE recut to LEWES (Fig. 57).

Fig. 56

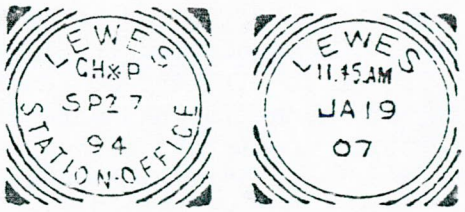

Fig. 57

The above process of drilling and plugging seems also to have been used in other circumstances, for instance, when only one or two letters had to be changed in a hammer : e.g. LOMBARD.ST. changed from BO to SO (Fig. 58) or THREADNEEDLE ST, when a hammer erroneously proofed as THERADNEEDLE was reissued only two days later with the right spelling (Fig. 59). In both cases, all other features were left unchanged.

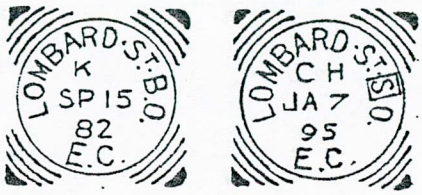

Fig. 58

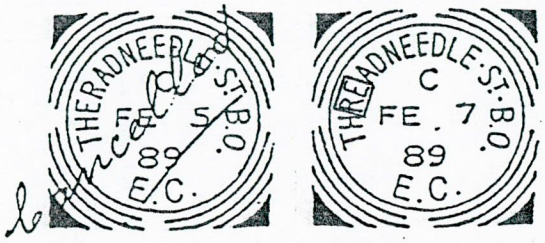

Fig. 59

It can be noted that four types of inscriptions can be found in squared circle hammers :
- name letters cut out direct from the block,
- sub-type HI indicia cut out from additional plugs,
- code and time indicia made of moveable type slugs,
- Type A and B HI's that, though of moveable type, were not normally moved.

The exactness of these theories is not absolutely certain, as contemporary evidence is rather scarce on the subject, but observation and reasoning make highly probable most of the processes described above.

These theories have been proposed to several mechanical engineers, tool makers and technology teachers, who admitted that they were quite plausible and had no other alternative to offer.

Whether these hammers have been made exactly with these processes or slightly different ones, we nevertheless have to admire the skill and craftmanship of those men who made them, mostly with their hands and simple tools, these same hands that, with mere flint implements, had carved the walls of the caves with bison, stag or reindeer, four hundred centuries ago.

Acknowledgements.

The author wishes to thank the British Patent Office, the National Postal Museum and the Post Office Archives for the amiable help afforded by their managements and staffs, and kind permission to make use of the data in their keeping (see references at bottom of pages) ; his friends : John Davies, then in the NPM, who assisted about the Greenwich handstamp ; Raymond Marie and Ian Whilde, who helped to solve the mystery of the hammer head metal ; Ian also helped the French speaking author to weed out the most flagrant gallicisms from his text ; John Hine, who suggested that the "abnormal" hammers should be mentioned, and sent the apposite information, and his learned colleagues Stanley F. Cohen and Daniel G. Rosenblat, whose universal knowledge on squared circles was the source of numerous details exposed in this paper.

LONDON CIRCULAR DATE STAMPS - TWO APPEALS by R.M. Willcocks

A few London offices used the provincial circular date stamps with serifs, issued up to 1843/44. All Shooters Hill I have seen have been on byepost letters in - wards or outwards and my two Blackheath are local; letters from both offices through the Chief Office have straight line undated stamps. The two latter are interesting, 1844 Greenwich to Blackheath with Maltese Cross and 1856 Black - heath to Greenwich with the 20 numeral. The color of the inks proving with - out doubt both cancellations were at Blackheath. Although issued to Greenwich, there is lttile doubt that office did not use them there. Shooters Hill may have been issued with the stamps because it was classed for convenience as a provin - cial post town : but why did Blackheath (or Chelsea, another I remember) need a dated stamp ? Woolwich and Greenwich had country sorting office date stamps, although,in fact, the latter was also used at Blackheath, not the apparent office of issue. The result, the same office used Greenwich and Blackheath dated stamps: Greenwich had none.

If readres will send me details of all London serif circular date stamps of the provincial double arc type we may get an idea where they were issued and where they were used and why. The one illustrated is interesting, showing Hounslow was

careful in their use. Presumably a cross or bye post letter into the Hounslow 2d Post Office, both they and the Hounslow General Post Office (these could have been just different rooms in the same building) struck their date stamps, so this does not count as a London local stamp, it is General Post.

The other appeal is about Deptford. After the L.P.H.G. Annual General Meeting, one member showed a circular undated sans serif stamp and I did not make a de - tailed note - please, would he send me, if possible, a photocopy and those details to me at 7 Shooters Hill Road, SE37AR.

We decided at the time it was after the reverse bye post ended and Deptford was downgraded, but it is more complicated (things always are). I am sure LPHG mem- bers know the story. The original bye post was a Walk from Peckham area to Shoo- ters Hill, where the letters collected were put on the Dover coach : the extra 1d charged saved the 2d. into London. On the 10th. May, 1844 the Dover Coach was re- placed by the railway and the Walk was reversed from Shooters Hill to Deptford, where it was put on the train at New Cross Gate.

Deptford had a sans serif circular date stamp, without code, 25mm, which I have seen from 25th.July,1844 to the 26th.October, 1854 and having an envelope to Rochester with a Shooters Hill straight line from the same correspondence 18 days later, which went to the Chief Office and out again, I jumped to the conclusion

London Circular Date Stamps.....

this was the end of the bye post. This could cause downgrading. Now I find I have a revived bye post (if it ceased in 1854) having :

i. 1857 Woolwich 21 cancellation to Rochester, Deptford c.d.s. 5 June, 23 mm, no code.

ii. 1858 Hurst Green to Woolwich, Deptford 16 April, 25 mm, MG code.

iii. 1858 Woolwich 21 to Rochester, small Deptford enclosed in circle, 13 December.

So, now where are we ? It appears the bye post ended between the 26th.October and 14th.November, 1854, Deptford was downgraded to an undated circle. It then was restarted by 5th.June, 1857, using the old dated stamp, with two new ones issued within a year. I don't believe it but postal history is fun! Incidentally, as with Shooters Hill and Blackheath and Blackheath, Deptford was using a straight line undated stamp (Barrie Jay's fig. 514) on mail into the Chief Office. The Deptford cds of (ii) above, with the MG code, presumably ' morning ', looks very like a small country sorting office type with two arcs below. Have any other normal c.d.s. been found with codes MG, AF or EV ?

-o-o-o-o-o-o-o-o-o-o-o-

ANNUAL GENERAL MEETING

Delayed from July, the AGM was held at the November meeting. The Hon.Treasuer's report and the accounts are contained elsewhere in this issue of Notebook.

The proposal to increase the subscription to £8 was discussed briskly and an amendment to restrict the increase to £2 was carried without dessent.

The new subscription rate will apply from 1st.May, 1987, which is the start of the LPHG financial year.

In order to assist members we are enclosing a standing order form at the new rate. Would those who already subscribe please complete for the new rate and all others are strongly urged to urge a standing order to ensure the prompt payment of dues.

As can be seen from the balance sheet, we are carrying £1,100 worth of publications, with the loan fund standing at £473. This sum has been of great help in the past but we really need to be able to cover more of the stock to continue to publish.

During 1987 it is hoped to have Handbook sections on Hooded Circles, Inland Branch and Maritime Mail ready for printing. Each section is comprehensive and will not be easy to finance without your further support. If each member would provide a further £5 towards the loan fund, this would resolve the matter sufficiently to allow the lauch of at least one section, the sales from which leading to the next section.

Your continued support as members and active collectors, with contributions to Notebook is greatly valued. The benefits of membership are not limited to the individual, as no doubt you appreciate.

-o-o-o-o-o-o-o-o-o-o-o-o-o-o-

L.P.H.G. RECEIPTS and PAYMENTS ACCOUNT for the YEAR ENDING 30th.APRIL 1986

TREASURER'S ACCOUNT

Balance at 1st.May 1985		£ 632
RECEIPTS:		
Subscriptions		441
Auction		135
Publication Sales		448
Postages		62
Packet Commission		38
Creditor		10
		£1,766
PAYMENTS:		
Notebook	£ 758	
Expenses	268	
Publications	121	
Meetings	20	
Editor (contra)	200	£1,367
Balance at 30th.April		399
		£1,766

BUILDING SOCIETY ACCOUNT

Balance at 1st.May 1985		£ 116
Interest		8
To Editor		(100)
Balance at 30th.April 1986		£ 24

EDITOR'S ACCOUNT

Balance at 1st. May 1985		£ 8
RECEIPTS:		
Auction		165
Sales Commission		11
Creditor		41
Building Society		100
Treasurer		200
Balance 30th April, 1986		525

Note: this balance was required to meet an account for Notebook £468, shown as "Creditor" in the Balance Sheet.

BALANCE SHEET AT 30th.APRIL 1985

Cash at Bank		£ 254	
Cash with Editor		525	
Building Society		24	£ 803
Debtor (now paid)			145
Cash Assets			948
Publications Stock at Valuation(cost£1500)			1,100
Library (nominal)			1
			£2,049
LESS			
Creditors	£ 1,418		
Publication Loans	473		1,891
ACCUMULATED FUND			£ 158

As agreed at the AGM last year, the Editor has opened a " SALES A/c "in the name of the Group. It seems better to show the two accounts separately rather than amalgamate them, hence comparative figures are not shown. For information, the subscriptions were considerably down (the arrears are coming to hand). ' Notebook ' costs and running expenses both show reductions and only one account for a meeting has so far been received!

At the same time the Group has for some time had a cash flow problem. Subscription income is well below the cost of Notebook, despite the reductions in costs achieved. For a long time our ' Surplus ' has been tied up in Publications Stock, which at present represents three years sales. It is, however, mainly old stock and will take much longer to sell. Meantime we have no resources to publish and a backlog of manuscripts is discouraging members.

Notebook is very good value, especially when compared with some other Societies with three times the current subscription and I think members would not grudge an increase from £5 to £8. This would bring in about £400 extra a year - not riches but it would ease the strain !

My thanks are due again to Mr. Parkin who has now audited our accounts for seven years - he confirms that the above figures give an accurate report of our fin - ances for the year.

Reg Sanders

Hon Treasurer.

-o-o-o-o-o-o-o-o-o-o-o-o-o-o-

PARLIAMENTARY REPORTS: WRITTEN ANSWERS 4 NOVEMBER 1986

MR. PAWSEY asked the Secretary of State for Trade and Industry what are the financial targets set for the Post Office for 1985-86 and 1986-87, respectively.

MR. PATTIE : As I announced on 24 July 1985 each of royal mails and counters was required to secure a 4.5 per cent. return on turnover, on the current cost accounting convention, before tax, but after interest for the financial year 1985-86.

As to 1986-87, I announced on 31 July this year that the postal business of the Post Office had been set an overall target of securing a return on turnover of 3.25 per cent. before interest and tax in each of the years 1986-87 to 1988-89. The full text of my announcement was as follows:

" Last year the Post Office moved towards the separation of the Royal Mail and Counters business, and earlier this year it announced its decision to divide Royal Mail into two separate businesses, Letters and Parcels. The process of establishing these three businesses and of separating their accounts will not be complete for about another two years. This limits the robustness of the available figures.

But after consulting the Post Office I have decided that the time is right for separate medium-term targets to be set for the three businesses for the three years 1986-87 to 1988-89. National Girobank is already targeted separately.

Last year the Government set the Royal Mail business the performance aim of reducing its real unit costs by 2.2 per cent. in 1985-86 compared with 1984-85, and the Counters business was targeted for a reduction of 1.5 per cent. compared with 1984-85. In the event, Counters achieved its target and Royal Mail bettered its target by 0.2 per cent. I congratulate the management and work force of the Post Office on their achievement.

Nevertheless, I am confident that those employed in the Post Office understand that in order to protect the future of the business, it is essential to retain existing customers and attract new work. Further improvements in efficiency remain the key to maintaining and improving the Post Office's competitiveness.

Accordingly I have set the Post Office the target of achieving a reduction of 5.5 per cent. in the real unit costs of the postal business at the end of 1988-89, compared with 1985-86, with at least a 1.5 per cent. reduction to be achieved by the end of 1986-87. I have agreed with the Post Office that the component business should be set individual targets to reduce real unit costs over the same period. These will be 6 per cent. for Letters; 5.4 per cent. for Parcels; and 3.7 per cent. for Counters.

The lengthy process of separating the accounts of the new business raises problems in attempting to set financial objectives. The review that was announced in July last year of the financial objective for Royal Mail and Counters concluded that the appropriate overall objective was a return on turnover of 3.25 per cent. before net interest and tax, on the current cost accounting basis, in each of the years 1986-87 to 1988-89.

Although the Post Office has proposed profit targets for each of the three businesses in each of those years there must be uncertainty about the reliability of the underlying assumptions until further progress has been made with the new information systems.

To support the overall target of 3.25 per cent. in 1986-87 I have agreed with the Post Office that the three businesses should secure returns in that year on the same basis as the overall target. These will be 3 per cent. for Letters; 6 per cent. for Parcels; and 1.3 per cent. for Counters.

It is my intention before the end of March next year to agree with the Post Office and announce target returns for the three businesses for 1987-88. "

-o-o-o-o-o-o-o-o-o-

THE WALTHAM CROSS 5d CHARGE MARKS by Barrie Jay

Between 1836 and 1839 a handstruck ' 5 ' was used at Waltham Cross on letters to London carried by the Waltham Cross Penny Post, the ' 5 ' indicating the

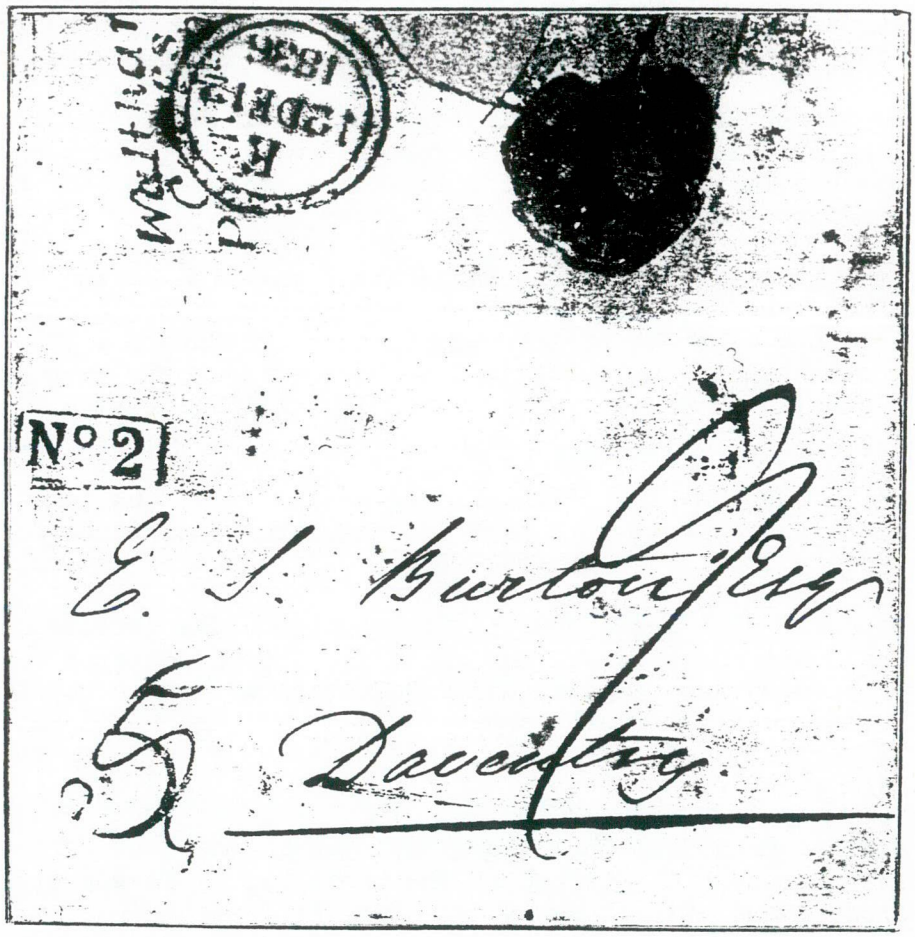

fig. 1

General Post rate to London (4d) plus the Penny Post charge. This very scarce handstamp is illustrated in figure 1 on a letter from Waltham Cross to Daventry. This letter was incorrectly charged 5d and the handstruck ' 5 ' was deleted in manuscript and replaced with the correct charge of ' 9 'in manu - script (the General Post rate from Waltham Cross to Daventry plus the Penny Post charge).

On the following pages are further examples of this fivepence charge. Martin Willcocks recently sent me a part cover of 1835 to London with a hitherto un- known ' Paid 5 ' Waltham Cross handstamp in red (figure 2). This was app- lied to a prepaid letter. The ' Paid ' has a characteristic appearance and is similar to other ' Paid ' handstamps of this period used at Waltham Cross (figures 3 and 4). Figure 4 is interesting in that it was used during the Fourpenny Post period, the ' 4 ' being in manuscript. This series of hand - stamps was superseded by the ' Paid 1 ' (figure 5), ' Paid 1^{d} ' and ' Paid 4 ' handstamps of the Uniform Penny Post, the ' Paid of these later stamps being similar in appearance to those of the earlier stamps.

Editor's Note :

This ' 5 ' appears in the London catalogue at L 633 and in Hertfordshire at HE 554. Would members who have a copy please send in full details of this and any of the others illustrated here. As usual a photocopy will be most helpful.

-o-o-o-o-o-o-o-o-o-

The Waltham Cross 5d Charge Mark.....

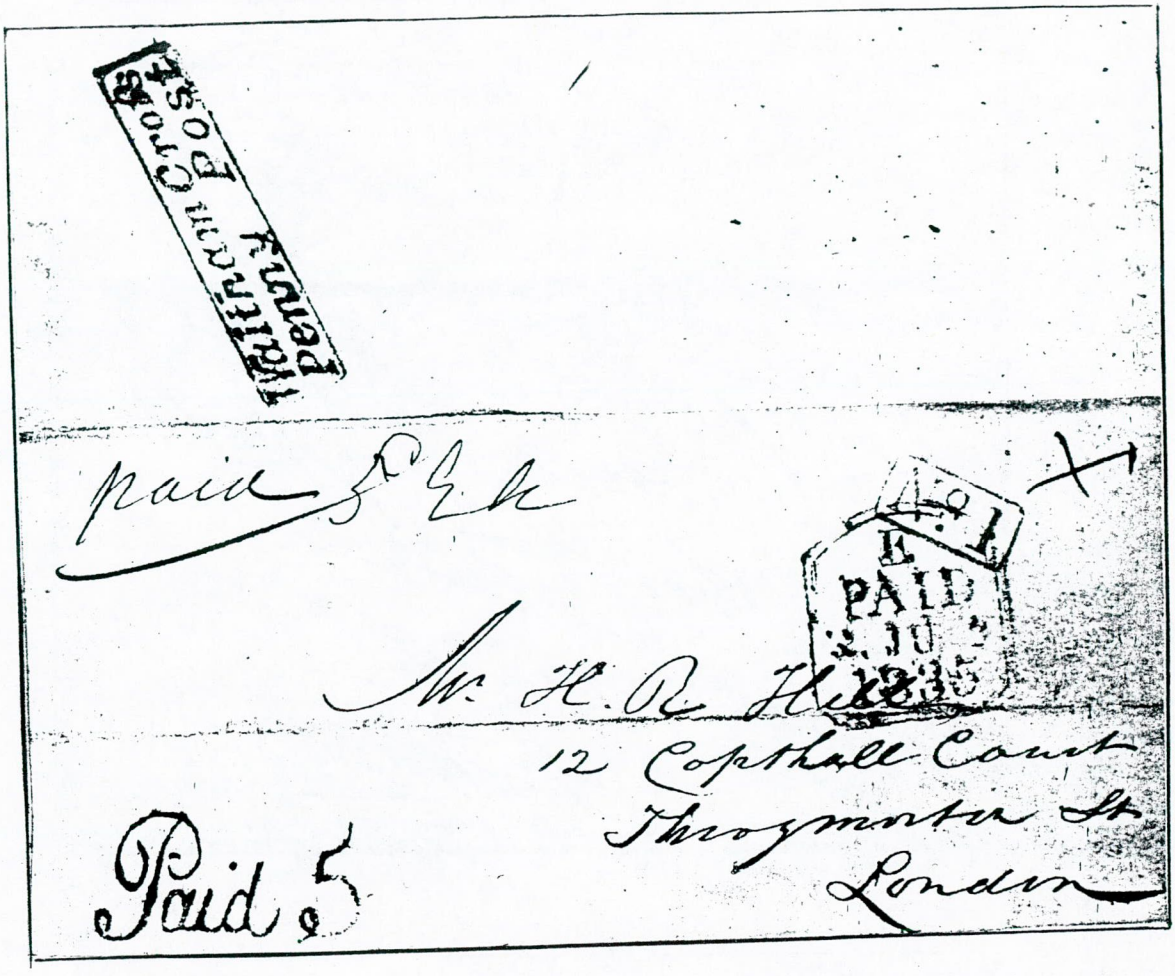

fig 2.

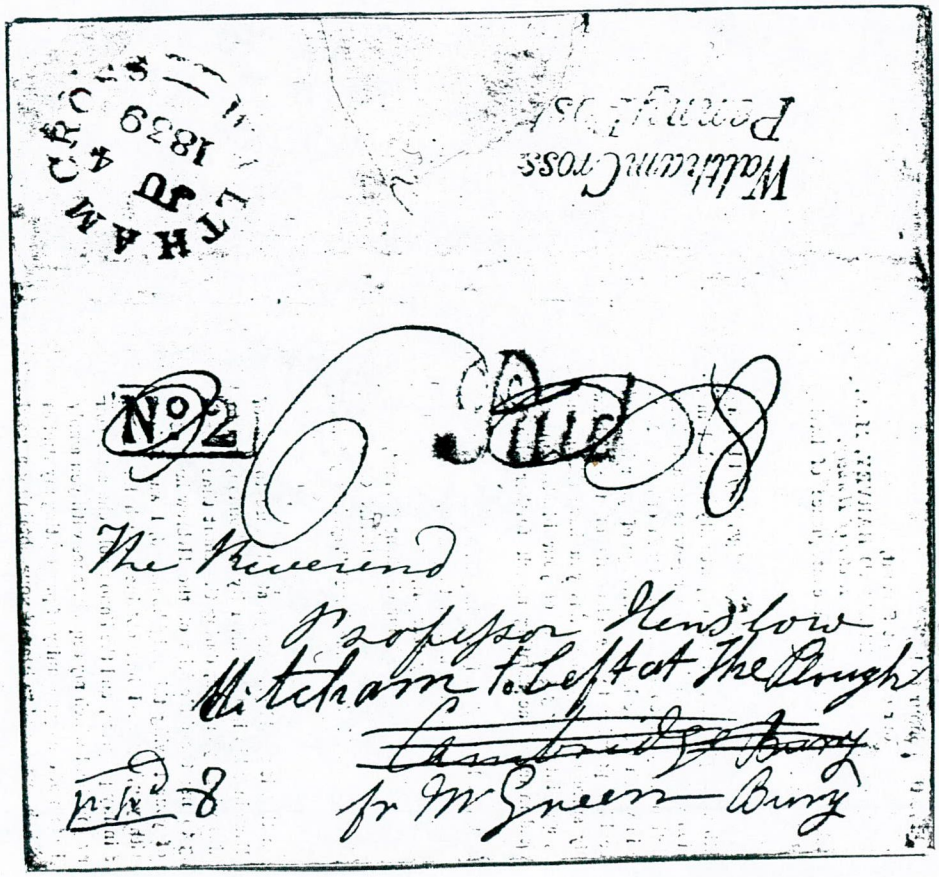

fig. 3

The Waltham Cross 5d Charge Mark.....

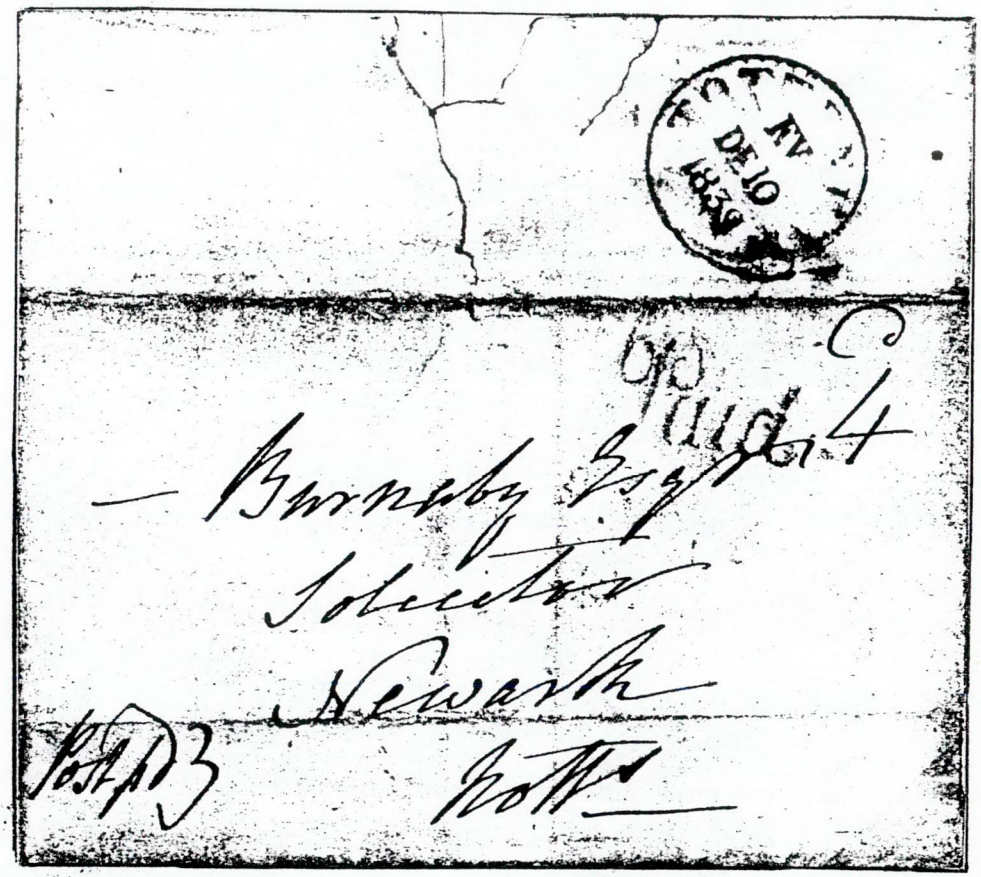

fig.4

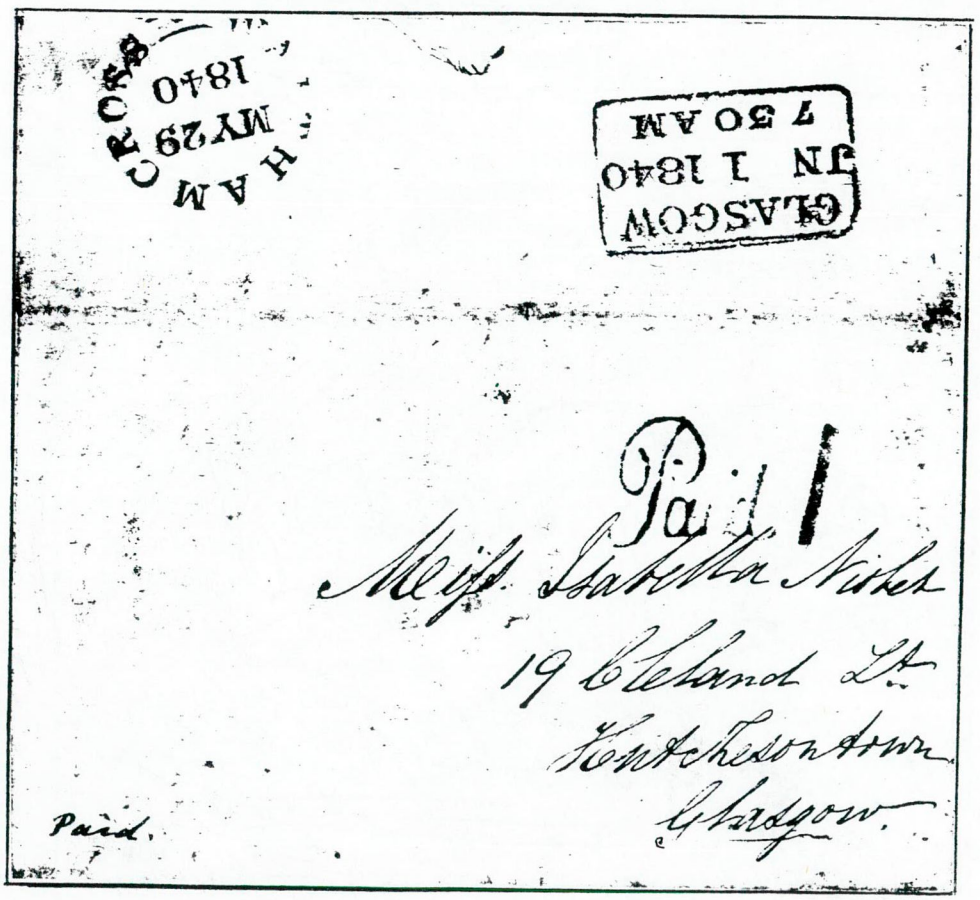

fig.5