Working Dies for the British 4d Vermilion Stamp Embossed on 1889 Bechuanaland Registration Envelopes

by Peter Thy

The 1889 Bechuanaland registration envelopes with a vermilion stamp were made by embossing a 4d British postage stamp, originally made for a stamped-to-order program, on the then current McCorquodale registration envelopes. In addition, the envelopes were overprinted ‘BRITISH BECHUANALAND’ and ‘FOR REGISTRATION ONLY.’ The latter overprint was required because the original postage stamp did not specify registration, as was common for the British registration envelopes at the time. The existing essays (Figures 1 and 2A) suggest that the overprinting was done in one setting and that the stamp was subsequently embossed (Thy and Inglefield-Watson, 2004; Thy, 2008). Thus both overprinting and stamping were done individually on fully prepared, printed, folded, and glued envelopes. The overprinting was done prior to stamping. The only way that that could have been achieved would have been to print on folded-out envelope flaps. The printings were probably done at the Inland Revenue Department of Somerset House that would have held stocks of the current unstamped British registration envelopes.

Security Features

There are two important security features of the early British embossed stamps that are important for understanding their production. The stamps were until 1883, according to information given by Huggins (1970), engraved at the base of the Queen’s bust with die number in colorless letters and numbers (see Stanley Gibbons, 1973). The master die was engraved by William Wyon based on his Queen Victoria City Medal of 1837. The dies are thus inscribed by W.W. for William Wyon preceded or followed by a serial die number. The dies were further drilled at the bases for the insertion of date plugs specifying the printing day. The earliest seen date plugs give the year as 1855 for the 4d vermilion stamp, but the practice was terminated around 1894, being replaced by purely ornamental plugs (5 or 9-dots florets).

Registration and Printing Dates

The imprimatur books at Somerset House contain the registration imprints of the individual dies without which the dies were not authorized for usage. A total of four original 4d vermilion stamp dies with two different registration dates (12.11.55 (dies 2 and 4, drilled, but still without inserted dates) and 26.9.89 (die 3, with inserted dates; Huggins, 1961, 1970).
Figure 2. Embossing of stamps. (A) Essay embossed on British envelope with compensation notice that was not in effect in Bechuanaland (RE E(17)). (B) Stamp embossed on envelope with overprint (Figure 1) (RE 15a). (C) Enlargement of detail from Figure 2B to illustrate that the stamp was embossed on envelope with overprint.

Figure 3. Post Office Notice dated 26th November 1855 with the 4d stamp with an 8.12.55 date plugs.
Huggins (1961) was, however, not able satisfactory to identify the registration date for die 1, but suggested 27.11.01. In his 1970 study, Huggins, nevertheless, gives the registration dates for both dies 1 and 3 as 26.9.89, both with inserted date plugs for that day.

Ewen (1905) gives the earliest seen date plugs (not registration dates) for the four dies as 11.11.89 for die 1; 21.11.61 for die 2 (not including the 1855 Post Office Notice); and 23.5.83 for die 4. Die 3 is listed used first in 1894 with ornamental florets. Ewen further identifies three reasons why the detailed book-keeping of these dies may be complicated: (1) all four working dies were made in 1855, (2) plug holes were drilled in all dies just after being prepared, and (3) die numbers for dies 1 and 4 were switched during handling. This means that the registration order of the dies may have been random (not in order of production sequence) and that the true die number may have been misidentified in the imprimatur registers. However, if we trust that Ewen’s observation of the switching of the dies is correct, the registration dates given by Huggins (1961) makes better sense: dies 1 and 2 in 1855, die 3 in 1889, and die 4 in an uncertain 1901 (or also 1889 according to Huggins, 1970). The observation on which Ewen (1905) based his suggestion about a die mix-up is that a die proof of die 1 exists without drilled date plugs. Its impression has very clearly identifying characteristic, only found on die 4 after the drilling (broken ‘S’ of ‘POSTAGE’).

Despite that odd thus are stacked against us, there is still some help that may identify the die numbers. Ewen (1905) gives distinguishing features for the dies (although it is not clear how this information was obtained in the ‘lack’ of die numbers in the design):

Die 2: white dot under bust over center plug, colored dot on left arm of ‘T’ in ‘POSTAGE’; white dot before ‘P’ of ‘POSTAGE’.
Die 3: no distinguishing marks.
Die 1 (4): central white dot on lower edge of burst; white scratch under left foot of ‘A’ of ‘POSTAGE’.

See Ewen (1915) for other distinguishing marks, including progressive changes to the dies.

The dates given by the British inserted plugs can be summarized according to information by Ewen (1905) as earliest and latest dates:

Die 4 (1): 23.5.83 to 29.7.89 and a late date of 17.10.93.
Die 2: 21.11.61 to 8.6.78. On the postmaster’s notice, this die occurs with 7.12.55 and 8.12.55.
Die 3: in use from 1901 with florets.
Die 1 (4): 11.11.89 to 1894 after which used with florets.

(The numbers in parentheses after the die numbers are the corrected die numbers.)

The date censuses for the British dies by Huggins (1970) and Huggins and Baker (2007) do not discriminate between the various dies. Huggins and Baker (2007) suggest 1859 as the earliest year of usage and illustrate a stamp with a 23.5.83 date. Huggins (1970) gives the printing dates as between 21.11.61 and 4.1.94. These early British dates appear rather late considering that the 4d stamp was announced and ready to be used for private orders already in 1855. The date plugs were around 1892-94 replaced by plugs with florets (Huggins, 1970; Huggins and Baker, 2007). Ascher (1923) identify die 1 as only having been used for the postmaster’s notices, but lumps dies 1 to 3 together to between 21.11.61 and 29.01.94. Ascher (1923) further identify die 4 as having exclusively been used only for the Bechuanaland envelopes. As we will see, this is not correct since two different dies were used for the Bechuanaland envelopes.

**Bechuanaland Registration Envelopes**

The printing dates for the Bechuanaland are 28.2.89 (Sizes G and H), 1.3.89 (Sizes H and K), 2.3.89 (Size G) (Thursday-Saturday), and 28.4.90 (Sizes G, H, and K) (Monday) (Thy and Inglefield-Watson, 2004). Ascher (1923) does not list the 2.3.89 date for the Size G envelope, but the date is possible being the day (Tuesday) immediately after the precious printing day. These dates suggest that the Bechuanaland envelopes were produced in two printings. The first printing stretched over three days during late February and early March 1889. The second
printing was done in very early April 1890. Both printings included all three envelope-sizes. Envelopes from both the 1889 (Sizes G, H, and K) and 1890 (Size G) printings occur with a UPU specimen (Type 2) overprint done in September 1890 in Vryburg (Hurst, 2007a), after the last 1890 printings were made.

The impressions on the Bechuanaland envelopes suggest that at least two different dies were used. The 1889 impressions all reveal distinct damages to the central part of the ‘S’ of ‘POSTAGE’ (Figure 5B-D). The same die was used for producing the only known essay for the stamp impression (Ewen, 1905, Samuel and Huggins, 1980). The 1890 envelopes were made with an entirely different working die without the damaged ‘S’ (Figure 5E-F), but without any clear permanent marks to distinguish it from the other dies. On some imprints there are, nevertheless, a downward extension of the right upward stroke of ‘A’ of ‘POSTAGE’ as on Figure 5E, but is not always discernible as for Figure 5F. Ewen (1905) lists a ‘white scratch under left foot of A of “Postage.”’ for die 1 (4); however, other identifying features also given by Ewen cannot be seen on the Bechuanaland 1890 imprints. A further complicating factor is that the 1890 imprints always show strong bleeding-through of the ink on the reverse suggesting a different ink-type (Figure 6) that does not make the die identification easy. This means that we cannot positively determine the second working die used for the 1890 Bechuanaland envelopes, although die 1 (4) is a possibility. It is, however, quite clear that the 1889 envelopes were made from die 4 (1).

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Die Production and Printing Techniques

Why is the chronology of these early British stamp dies important for understanding the production of the Bechuanaland envelopes? To answer this question, we need to understand how the dies were produced and how the printing was done. The following is largely based on the description in Scott (2001). Printed embossed stamps have the colorless or white parts raised above the colored flat background. Three different die stages are involved in producing an embossed working die. The master die is engraved on the surface of a soft steel rod and is used to produce all subsequent dies. The parts that are to be colorless are engraved into the steel below the flat steel surface that will carry the ink. The master die is thus the negative image of the embossed stamp.

The master die is after hardening transferred to an intermediate die (hub die) by hard pressing a soft steel rod into the hardened master die. The intermediate die is thus positive with the colorless part protruding above the flat steel surface that will carry the ink. The master die is thus the negative image of the embossed stamp.

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Figure 5. Summary of dies and plugs. (A) From 1855 British postmaster notice. (B) From essay RE E(17). (C and D) From Bechuanaland registration envelopes with 1889 printing year. (E and F) From Bechuanaland registration envelopes with 1890 printing year. The enlargement scales as well as the colors may not be exact.

Figure 6. Bleeding through of ink to the back-side of flap. (A) From Bechuanaland registration envelope with 1889 printing year. (B) From Bechuanaland registration envelope with 1890 printing year.
The working die is made by pressure transfer from the intermediate die and thus is a duplicate of the master die (meaning that it is negative). This means that the working die can be further engraved and modified, however, without reducing or eliminating embossed parts. At this point, the negative die numbers are engraved from the base of the already engraved Queen’s burst. It also appears that the Queen’s low hanging pendant curls may have been engraved at this point (Huggins, 1970). Two working dies may therefore not be exactly similar despite originating from the same master and even intermediate dies. A working die may also wear with use and may further require ‘touch-ups’ to improve a deteriorating print product.

This method of printing may result in various printing flaws. The first group of these is non-constant flaws when accidentally ink fills or paper flakes cover engraved parts resulting in inking of what was supposed to be embossed. Such flaws do not represent die varieties. The second group of flaws is constant defects that appear on all subsequent imprints. Scratches and other defects in the surface will appear as un-inked embossing on the imprinted stamp. Other die modifications are intentional and represent changes to either the intermediate or working die. These are constant changes to the die and helps identifying the die and their progressive modifications.

Albino embossed imprints are the result of printing either without inking or with more than one envelope at a time fed into the press. Other typical printing errors are off-positioned and multiple embossed imprints. Such printing errors are common for many similarly embossed US envelopes, but are nevertheless not reported for the Bechuanaland envelopes, probably due to a good quality control by the printer; although the small quantities produced may share part of the responsibility.

Another type of printing error that often is recorded is off-centered back inking. This happens when the press is used without paper and not cleaned before next envelope is fed into the press. Such characteristic back inking has not yet been reported for the Bechuanaland envelopes despite being common on some US embossed envelopes. For our purpose, only constant modifications to the dies (intentional or accidental) are of interest for understanding the chronology of printing and the dies used.

Bechuanaland Working Dies

By observing the six selected imprints in Figure 5, it can readily be seen that a few characteristic features appears on some, but not all imprints. The weak ‘S’ of ‘POSTAGE’ appears on all examples of the first printing of the Bechuanaland envelopes (1889; Figure 5B-D), but is not present on the remaining imprints, including the early post office note imprints (Figure 5A) and the 1890 Bechuanaland imprints (Figure 5E-F). There are other irregularities that can be observed. The ‘A’ of ‘POSTAGE’ is sometimes partially filled by a gash on the horizontal stroke on some of the 1889 imprints (Figure 5D), but may not be constant. The low hanging pendant curls of the Queen’s hair may also be used to distinguish groups of working dies as done for other British stamp dies (Huggins, 1970). The majority of imprints in Figure 5 show nearly detached curls only hold in place by two thin hair threads. Although more detailed work needs to be done to support the point, it is felt that all the dies show the same nearly detached pendant curls. Differences appear to be caused by variable imprint pressure. It is significant that the 1890 Bechuanaland imprints show very variable degrees of detachments of the curls (Figure 5E-F).

The overall shapes of the Queen’s neck regions are compared in Figure 7. When the neck outline is traced for the 1889 Bechuanaland imprints (Figure 7A) and overlain on the necks of the 1890 (Figure 7B), it is clear that the 1890 dies have the front necklace enlarged with the addition of a weak projection of the Adam’s apple. The question is obviously how was this achieved. We must assume that all four working dies were made on the same day from the same master die (Ewen, 1905). It is not clear how many intermediate dies that were used, however, the simplest guess is that only one die was used to produce the four working dies; after all there were only four working die. These observations suggest that the dies used for the Bechuanaland envelopes represent two working dies produced from the same master die and their progressive modifications.
master die or intermediate die. The 1889 die was prepared from one of the early dies prepared for the British stamped-to-order envelopes (one of the dies with 12.11.55 registration date, die 4 (1)). A different working die with a slightly enlarged Queen’s neckline was used for producing the 1890 envelopes (one of the dies with 26.9.89 registration date, probably die 1 (4)).

It is currently not possible in details to compare the Bechuanaland imprints with those of the British envelopes for the simple reason that no detailed study of the British imprints appears to exist, including a date census. It is also a problem that clear images of the die imprints in the imprimatur books at Somerset House have as yet not been available for study.

**Imprint and Color Sheets**

Several imprint sheets exists that sometimes can be dated from inserted date plugs. The early collection of stamp and stationery essays assembled by F.A. Philbrick prior to 1890 (Hahn, 2008) included a proof sheet with impressions of one or more dies for each stamp used for printed-to-order stationery (Figure 8), all with inserted florets. This sheet included two impressions of the 4d vermilion stamp. The Philbrick collection was sold to Phillip de Ferrari in 1888. Since de Ferrari had little interest in essays, he donated this part of the collection to a Viennese stamp dealer that displayed it in his private museum (Sigmund Friedl) until 1896 when his stamp business was liquidated (Hahn, 2008). However, the imprint proof sheet was probably added to the original collection after being sold in 1888, because of the insertion of floret plugs dates to 1894. Menuz (2010, attributed to Alan Huggins) showed another proof sheet with two examples of each of seven of the stamps. The first die of each stamp is with date plugs (24-1-94) and the other die with florets inserted in the plug holes.

Samuel and Huggins (1980, p. 219-226) show several color standard sheets all with specimen cancellations. The dies used for these imprints are said to be dies 1, 2, and 4 with dates from 1858 to 1893, after which the date are replaced with florets. Unfortunately, the illustrations provided of many of these color control sheets and other imprints (all with specimen overprints) are unfortunately not sufficiently clear to identify details of the imprints. Of particular interest, however, is a clear die 1 from 1866 without drilled holes said to have been prepared for the 1867 Paris Exhibition. This may be the same imprint listed by Ewen (1915) as die 1 without date holes. Whatever the case, it does question the assertion that all dies were drilled in 1855. A later drilling of die 1 may be supported by the observation of Samuel and Huggins (1980) that the first color standard sheet with an imprint of die 1 with inserted date plugs is dated 8.5.90. Menuz (2010), however, shows a clear die 1 with a 20.5.84 date placing the drilling prior to 1890.

**Printing Quantities**

It may perhaps be a bit puzzling that the 4d canceled-to-order program only required four working dies. The program was in effect from 1855 until 1902 (47 years), when King Edward VII dies replaced the Queen Victoria dies, and moreover in addition was able to provide for the need in Bechuanaland for
registration envelopes. Dagnall (1987) gives the total number of printings with the 4d dies in the financial year of 1862-1863 as about 8,000. It is not known how many envelopes were imprinted for use in Bechuanaland. A surviving 1888 requisition order for the first 1887 4d blue British overprinted registration envelopes for British Bechuanaland requested a total of 700 envelopes for three different sizes (Hurst, 2007b; Thy, 2009), but this may, however, have been the requisition for a second printing before the 4d vermilion envelopes were first supplied in 1889. The first Bechuanaland Protectorate definitive registration envelope about 10 years later was printed in about 5,000 copies (Thy and Inglefield-Watson, 2004). It is thus clear that the Bechuanaland need was insignificant compared to the total domestic British requirements of say 376,000 imprints, or 94,000 per working die. It also only took less than five days to stamp the Bechuanaland envelopes. This is still peanuts, when compared to the printing of the 1893 US Columbian Exposition envelopes that produced a total of nearly 110 million envelopes using 31 working dies, or on average 3-4 million per working die. It is thus clear that there were no need for specially designated working dies for the Bechuanaland envelopes.

Conclusion

The Bechuanaland registration envelopes were produced in 1889 and 1890 using two different working dies. The same two dies were used to produce the British stationery of the stamped-to-order program with the latest recorded imprints between 1883 and 1889. The 1890 Bechuanaland working die was again in use shortly later the same year to produce further British stamped-to-order envelopes, this time using normal non-bleeding ink (Figure 9). The working die used for the 1889 Bechuanaland envelopes are recorded used in November 1889 (11.11.89), after having been used for the British Bechuanaland program.

It has proven to be difficult to identify the die numbers for the two dies used for the Bechuanaland registration envelopes. Best estimates are die 1 for the 1889 envelopes and die 4 for the 1890 envelopes. The lack of good descriptions and illustrations of the various working dies and inconsistencies between previous studies, however, makes clear identifications difficult. In conclusion, the Bechuanaland registration envelopes were produced using working dies that before and after were employed in the British program. The working dies for the Bechuanaland envelopes were thus not specifically produced and reserved for the Bechuanaland registration envelopes.

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References


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**Highlights From Journals and Newsletters**


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**New Books**

