

BELGIAN CONGO



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BULLETIN NO. 47

MARCH 1983

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NEWS AND VIEWS

October 1982 Meeting at Tadworth (This report arrived a bit late for the December 1982 Issue, and is now being printed as a matter of record.)

Although the meeting at Tadworth was somewhat poorly attended, only 5 members being present, it was greatly enjoyed by those there. The first half of the meeting was devoted to a display of the 1947 Idols Issues of the Congo and Ruanda Urundi. Mr. Keach's presentation illustrated his detailed study of these stamps as recorded some years ago in Bulletin Nos. 17 and 18. Almost every value was also represented in complete sheet(s) and die proofs of several values, some marked "approved" were also shown. Mr. Keach also tried to obtain each value on cover, by itself and paying a valid postage rate, and remarked how difficult this was proving to be in a number of cases.

The remainder of the meeting was a new departure for the Study Cir-

cle, as it was a real "workshop session". Although the 1921 "15" and "30" overprints on postal stationery cards had been written up by several eminent Belgian philatelists, it was still extremely difficult to identify the 6 different types of each from the information given. Mr. Keach had prepared sets of different surcharges and notes including the most useful pointers from the earlier articles, and those present set about attempting to find further identifying features and also took the opportunity of sorting out their own holdings of these cards. This was an altogether useful and interesting session and could well be repeated on other subjects which present difficulty.

Our thanks go both to Mr. Keach for his display and guidance and to Mrs. Keach who provided hospitality entirely in keeping with the high standard that old "Tadworth Buffs" will remember.

#### Change of Address

W. Deynckens, Mariettalei 38, 2130 Brasschaat, Belgium.

#### New Member

We are most pleased to welcome to our Study Circle Mr. Roy N. Pawlucki, P. O. Box 2594, Kirkland, Washington, 98033, U.S.A.

#### Awards

Mrs. H. Jelde<sup>a</sup> was awarded a vermeil for her exhibit of Belgian Congo Postal Stationery at Belgica 1982 International.

Mr. Anders Molander was awarded a silver medal for his exhibit of Belgian Congo and Ruandi-Urundi at the Australian National Exhibition at Brisbane in 1982.

Mr. Joe Babicki and Gene Adams both received a silver award at the SESCAL show in Los Angeles. At the ARIPEX show in Tucson, Arizona Gene took a silver award and the American Philatelic Award for the best post 1940 in the show. Joe came away with a silver-bronze award. Also at ARIPEX, your Editor and Joe Babicki had a chance to visit and to reflect on the good times we had at the American Meeting at Reno with the Morvays!

#### "All Risk" Insurance Policy

Our Secretary has details for this new coverage, available to any U.K. member as we are affiliated members of the British Philatelic Federation.

#### Annual General Meeting

It is requested that any items to be raised at the Annual General Meeting under any other business be advised to the Secretary as soon as possible, and certainly not later than 1 May. Also, this is the second year of Mr. L. G. Green's term of office as President and we must have a new President as from the AGM, so nominations, which must have the agreement of the nominee to accept the Office if elected, will be most welcome.

PERFORATION VARIETIES OF THE MOLS ISSUES

In my article in Bulletin 39 I identified six perforation gauges used by Waterlow and Sons for the Mols stamps: four 'regular' (p13½, p14, p15 and p16) and two 'irregular' (p14½-15 and p12-14). In the regular gauges the spacing of the pin-holes is regular and constant whereas in the irregular gauges it varies between the figures stated. Thus a stamp from a sheet perforated by the 14½-15 perforator may measure p14½, p15, 14½x15 or 15x14½.

My previous article included a listing of the Mols values and varieties known with each perforation gauge. Since then further varieties have been found and I have extended my study of the gauges themselves, including the identification of two new gauges. The results of these studies are incorporated in the table following this article which gives an updated listing of all perforation varieties known to me together with their relative frequency.

The two new perforation gauges are both fairly scarce. The first is a regular p12½ (actually 12.6 to 12.7) which appears to be found only on issues between 1896 and 1900. I have just six examples of it, all single stamps: one is a 1900 25c while the other five are the 1896 40c, four of them with the typo CONGO BELGE overprint. It therefore appears that the 40c typo is the only stamp on which this perforation gauge appears with any regularity.

Originally I had classified these stamps as the irregular p12-14 gauge. Closer inspection however showed this to be wrong. On a complete sheet perforated by the p12-14 machine each line of perforation shows the following pattern: from the left edge, a section at p13.5; then 7 holes p13.9; 11 holes p13.5; 126 holes p13.9; 7 holes p12.0; 18 holes p12.8; and the remaining section, to the right edge, p13.9. Thus while this gauge clearly produces many stamps which are a regular p14 it cannot, and does not, produce stamps which on all four sides are a regular 12.6 to 12.7.

The second new gauge, which I call 'irregular p14-14½', is also fairly scarce. I have about 40 single copies and one block of four, but no sheets. In the block of four the horizontal perforations on each stamp, reading from left to right and from top to bottom, are 14.4, 14.1; 14.4, 14.1; 14.4, 14.1. The vertical perforations reading from top to bottom and left to right are 14.0, 14.2; 14.0, 14.3; 14.4, 14.1.

This gauge appears to be found only on stamps printed between 1894 and 1900. Originally I had classified it together with the p14½-15 stamps and had called the whole group 'irregular p14-15'. It is now clear however that the two gauges can be distinguished. A sheet of 14½-15 shows a clear pattern with about 6cms of p14.4 alternating on each line with 6cms of p14.9, which obviously cannot produce the readings for the block of four described in the previous paragraph.

Study of p14½-15 sheets has also enabled me to distinguish stamps from this perforator which measure p15 all round from those from the 'regular p15' perforator. The latter are usually p15.1 and never less than 15.0, whereas the former (as we have seen) are never more than

14.9. This may appear a small difference, but the Instanta perforation gauge is quite accurate enough to recognise it. In my previous article I did not make the distinction, so that all stamps shown as existing with p14½-15 were also shown as existing p15. Subsequent examination has shown that the following are in fact found with 14½-15 only, not with 'regular p15':

5c: I2+B2, III1+B3  
 10c: I3+B2, I4+B2  
 15c: I+A2, III1+A3b  
 40c: I2+A1 typo, II+A2  
 50c: I2+A2 typo, III1+A3

On the other hand, of the 1910 early printings 5c III1+B4a, 10c III1+C1a, 15c III1+A3a and 25c II1+A3 are all found both p14½-15 and p15.

To recap, the eight perforation gauges and their apparent periods of usage, as deduced from the table of varieties, are as follows.

Regular p12½ (12.6 to 12.7). A scarce perforator in use between 1896 and 1900 and so far found only on the 1896 40c (mostly with typo overprint) and 1900 25c.

Regular p13½ (13.7). Brought into use in 1900 or 1901 (the only pre-1900 issue to show it is the 1896 15c with corroded centres, which was printed in April 1901) and continuing throughout the Mols period (for instance it is found on 1915 5c VI+F, 10c V2+E, 15c V+C2 and 25c III2+D, all of which were printed in January 1920). However p13½ is seldom common (the 1900 25c I2+A2 and 1fr carmine are the only exceptions), and is never found on Ruanda Urundi stamps apart from the 15c with Havre overprint where it accounts for about 75% of copies.

Regular p14 (13.9 to 14.1). Much the most common gauge, probably representing several different perforating machines. In the early issues the gauge tends to be 13.9 or 14.0 while from 1910 onwards it is mostly 14.1. Note that although common throughout the period, p14 is less common than p15 in most printings before 1900, and is not found at all on certain stamps, notably 1894 10c brown, 5fr deep carmine, 1fr lilac (as opposed to carmine-lilac), 1fr carmine with local or typo overprint, 10c typo and 25c I2+A2 typo.

Regular p15 (15.0 to 15.1). Common in the early printings but much less common in the stamps with typo overprint and the issues from 1909 onwards. It is possible that two different perforating machines were involved, one in the 1890s and one later on, but they cannot be distinguished.

Regular p16 (15.6 to 15.8). A relatively scarce perforator easily distinguished by its unusually narrow gauge. The earliest stamps on which it is found were printed in November 1896 and the latest in the early 1900s. The only stamps on which p16 is at all common are the 1895 10c I2+A3 blue-green, the 1900 50c yellow-olive and the 1900 1fr carmine (including stamps with local and typo overprints).

Irregular p12-14 (long stretch of 13.9 and short stretches of 12.0, 12.8 and 13.5). The most distinctive of the irregular perforators, it is found on most of the early issues and was in use from 1894 until the early 1900s. With local overprint it is found only on the 40c and 50c, and with typo only on the 40c. It is never particularly common, but then it must be born in mind that the majority of stamps from a sheet perforated by this machine are indistinguishable from 'regular p14'.

Irregular p14-14½ (14.0 to 14.4). Since complete sheets have not been studied, the 'pattern' of this gauge cannot be determined. It may be that it is mostly 14.0 or 14.1, with only short stretches of 14.4, in which case many of the stamps from the sheet would be indistinguishable from regular p14. This perforator was in use between 1894 and 1900 and has been found only on the 5c brown, 10c blue, 15c, 25c orange, 50c green and 1fr violet.

Irregular 14½-15 (alternating stretches of 14.4 and 14.9). This one is far from uncommon and its period of use can be established quite accurately, from the 5c blue of 1894 to the first printings of the lower values (5c to 50c) of the 1910 issue. It therefore fell out of use in 1910 or 1911. It is found on all the values issued between 1894 and 1900 except for the 1fr lilac (including carmine-lilac) and carmine. It is also found on most of the stamps with local or typo overprint. On the 10c typo it is the only perforation found.

Notes to the table

The table attached follows the nomenclature for the plate combinations and sub-states established in my article 'A Revised Listing of the Mols Plate Combinations' (Bulletin 42). The labelling of overprints and surcharges also follows this article: thus under 'Tombeur' K, G and H mean the Kigali, Grysolle and le Havre overprints respectively.

For the EAA overprints I have however departed from the previous nomenclature and substituted the one proposed in the very comprehensive study of these overprints undertaken by Messrs Gudenkauf and Vindevoghel (This study has recently been, or shortly will be, published in the Bulletin.\*) Briefly, the overprinting plates which used to be labelled L1, L5, L6 and L7 are now called L1T (extended T in column 2), L2, L2' and L1o respectively. There is also L1G (damaged G in column 4) and L1I (damaged I in column 3). In addition there are a number of states of the overprinting plates caused by foreign bodies lodged between the letters (L1(.)a, L1(.)b etc) but in the interests of space I have not listed their perforation varieties separately in the table below. A full listing of them is given in the Gudenkauf and Vindevoghel article.

The table distinguishes the major shade varieties. Some colours have been abbreviated thus: bl=blue, br=brown, car or carm=carmine, gr=green, l=lilac, or=orange, r=red, y=yellow. Where the colour is in brackets it denotes the shade of the surcharge rather than the stamp.

Where plate combinations can be distinguished only in one or two

\* now published in Bulletin 46

positions in the sheet, they are not shown separately in the list. Thus in the 10c of 1915 V1+D2 and V2+D2 can be distinguished only in the positions which show portions of the guide-marks which were added to create V2. The listing there shows simply V+D2. On the other hand in the 5c of 1915 V1 and V2 can be distinguished by the clear and coarse centres, and the listing therefore shows V1+E and V2+E separately.

A '-' in the table means that the perforation variety in question either does not exist or is not yet known, at any rate to me. Where it is known its relative commonness or scarcity is indicated according to the following code:

- A - very common
- B - common
- C - scarce
- D - rare
- E - very rare

Since these gradings are subjective and are based mainly on my own collecting experience, they are inevitably arbitrary and other collectors may well disagree with some of them. Nevertheless I hope they are of interest as a broad guide. 'A' are stamps where my sheet reconstructions are well advanced, 'B' where I have up to say 25 copies of the stamp, 'C' where I have not more than say 10 and 'D' where I have not more than two or three. I have used 'E' very sparingly for varieties where it is known, or it is likely, that not more than a few hundred copies at the most were issued.

Any corrections to the list should be sent to me at 92 Oakley Street, London SW3.

B P Hudson

VARIETIES OF THE MOLS ISSUES

BELGIAN CONGO		Perf: regular				irregular			compound
		12½	13½	14	15	16	12-14	14-14½	
<u>1894</u>									
5c	I1+A	-	-	D	B	-	D	-	C
10c	I1+A1	-	-	-	-	-	-	-	D
	I1+A2	-	-	-	B	-	-	-	B
25c	I1+A1 or-yellow	-	-	C	A	-	D	C	C
	I1+A1 orange	-	-	C	A	-	C	D	C
	I1+A1 or-bistre	-	-	C	B	-	D	-	C
50c	I1+A1 bl-green	-	-	A	C	-	C	D	C
	I1+A1 y-green	-	-	A	B	C	C	D	C
1fr	I1+A1 violet	-	-	B	A	-	D	C	B
5fr	I+A1 deep carmine	-	-	-	B	D	-	-	C
	I+A1 rose-carmine	-	-	D	C	-	D	-	-
<u>1895-8</u>									
5c	I1+A brown	-	-	B	C	-	-	D	D
	I1+A red-brown	-	-	A	A	D	C	C	B
	I1+A brown-red	-	-	D	B	-	D	-	-
10c	I1+A2 gr-blue	-	-	B	A	-	C	C	B
	I2+A3 bl-green	-	-	C	A	B	D	-	D
15c	I+A1a	-	-	B	A	C	C	D	C
	I+A1b	-	C	A	C	-	D	D	C
	I+A2	-	D	C	-	-	-	-	D
40c	I+A1 pale green	-	-	D	B	-	D	-	C
	I+A1 bl-green	D	-	A	A	C	C	-	C
1fr	I1+A1 lilac	-	-	-	B	-	-	-	-
	I1+A1 car-lilac	-	-	B	D	-	D	-	-
3½fr	I+A	-	-	B	-	-	-	-	-
10fr	I1+A1	-	-	A	-	-	-	-	-
	I2+A1	C*	-	-	-	-	-	-	-
<u>1900</u>									
5c	I1+B1	-	-	B	A	C	-	-	B
	I2+B2	-	C	A	-	-	-	-	C
10c	I2+B1	-	D	B	A	-	D	-	B
	I3+B2	-	C	B	-	-	-	-	C
	I4+B2	-	D	B	-	-	-	-	C
25c	I2+A2	D	B	C	A	-	-	-	B
	I3+A2	-	-	E	-	-	-	-	-
50c	I+A2 olive	-	-	B	A	-	D	-	B
	I2+A2 y-olive	-	C	A	C	B	D	-	B
1fr	I2+A2	-	A	C	C	B	D	-	-

E (12x14)  
 E (14x12)  
 E (11x14)  
 E (12x14)  
 E (14x12)

\* perf 12

## VARIETIES OF THE MOLS ISSUES

	Perf: regular					irregular			compound
	12½	13½	14	15	16	12-14	14-14½	14½-15	
<u>Brussels overprint</u>									
5c I1+B1	-	-	-	C	-	-	-	C	
I2+B2	-	-	C	-	-	-	-	-	
10c I2+B1	-	D	-	C	-	-	-	-	
I3+B2	-	-	D	-	-	-	-	-	
I4+B2	-	-	C	-	-	-	-	D	
15c I+A1b	-	-	C	-	-	-	-	-	
25c I2+A2	-	-	-	D	-	-	-	C	
40c I2+A1	-	-	C	-	-	D	-	-	
50c I+A2 olive	-	-	C	C	-	-	-	-	
1fr I1+A1 violet	-	-	-	-	-	-	-	E	
I1+A1 lilac	-	-	E	-	-	-	-	-	
I2+A2	-	-	-	C	C	-	-	-	
3½fr I+A	-	-	D	-	-	-	-	-	
5fr I+A1 deep carmine	-	-	-	-	-	-	-	D	
I+A1 rose-carmine	-	-	D	-	-	-	-	-	
10fr I1+A1	-	-	D	-	-	-	-	-	
<u>Local overprint</u>									
5c I1+B1	-	-	-	D	-	-	-	-	
I2+B2	-	D	B	-	-	-	-	C	
10c I2+B1	-	-	D	D	-	-	-	-	
I3+B2	-	-	D	-	-	-	-	D	
I4+B2	-	-	B	-	-	-	-	-	
15c I+A1b	-	-	C	D	-	-	-	-	
I+A2	-	D	B	-	-	-	-	-	
25c I2+A2	-	C	D	D	-	-	-	C	
I3+A2	-	-	B	-	-	-	-	D	
40c I2+A1	-	-	B	D	-	C	-	-	
50c I+A2 olive	-	-	B	D	-	-	-	D	
I2+A2 y-olive	-	D	D	-	-	D	-	D	
1fr I1+A1 lilac	-	-	E@	-	-	-	-	-	
I2+A2	-	B	-	D	B	-	-	-	
3½fr I+A	-	-	C	-	-	-	-	-	
5fr I+A1 deep carmine	-	-	-	D	-	-	-	D	
I+A1 rose carmine	-	-	C	D	-	-	-	D	
10fr I1+A1	-	-	D	-	-	-	-	-	
I2+A1	C*	-	-	-	-	-	-	-	
<u>Typo overprint</u>									
5c I2+B2	-	-	B	-	-	-	-	-	
10c I4+B2	-	-	-	-	-	-	-	B	
15c I+A2	-	-	B	-	-	-	-	B	
25c I2+A2	-	B	-	D	-	-	-	C	
I3+A2	-	-	A	D	-	-	-	C	
40c I2+A1	D	-	B	-	-	C	-	C	
50c I2+A2 olive	-	-	A	-	-	-	-	C	
I2+A2 y-olive	-	-	D	-	-	-	-	-	
1fr I2+A2	-	A	-	D	C	-	-	-	

\* perf 12 @ not verified



## VARIETIES OF THE MOLS ISSUES

	Perf: regular					irregular			compound
	12½	13½	14	15	16	12-14	14-14½	14½-15	
<u>Typo</u> (continued)									
3½fr I+A	-	-	B	-	-	-	-	-	
5fr I+A1 deep carmine	-	-	-	E	-	-	-	-	
I+A1 rose carmine	-	-	B	C	-	D	-	-	
10fr I1+A1	-	-	E	-	-	-	-	-	
I2+A1	B*	-	-	-	-	-	-	-	
<u>Princes</u>									
5c-10fr: no overprint	-	-	E	-	-	-	-	-	
Brussels	-	-	E	-	-	-	-	-	
typo	-	-	C	-	-	-	-	-	
<u>1909 unilingual</u>									
5c II+B2	-	C	A	-	-	-	-	-	
10c II+B2	-	-	A	-	-	-	-	-	
15c II+A2 ochre	-	-	A	-	-	-	-	-	
II+A2 br-ochre	-	-	C	-	-	-	-	-	
50c II+A2 olive	-	-	A	-	-	-	-	-	
II+A2 br-olive	-	C	B	-	-	-	-	-	
<u>1910 bilingual</u>									
5c III1+B3 bl-green	-	D	B	-	-	-	-	D	
III1+B4a y-green	-	C	A	D	-	-	-	D	
III1+B4b	-	D	A	D	-	-	-	-	
III1+B5	-	D	A	C	-	-	-	-	
III2+B5	-	D	C	-	-	-	-	-	
III2+B6	-	-	C	D	-	-	-	-	
III2+C	-	-	C	-	-	-	-	-	
IV+D1	-	-	D	-	-	-	-	-	
IV+D2	-	-	C	-	-	-	-	-	
10c III1+C1a	-	C	A	C	-	-	-	C	
III+C1b	-	C	A	C	-	-	-	-	
III2+C2	-	-	B	B	-	-	-	-	
III3+C2	-	D	B	D	-	-	-	-	
IV+D1 carmine	-	-	C	-	-	-	-	-	
IV+D1 car-lake	-	-	D	-	-	-	-	-	
15c III1+A3a	-	C	A	C	-	-	-	C	
III1+A3b	-	C	A	-	-	-	-	D	
III1+A4	-	-	D	-	-	-	-	-	
III1+A5	-	-	C	-	-	-	-	-	
III1+A6	-	D	C	C	-	-	-	-	
III1+A7	-	-	B	C	-	-	-	-	
III1+A8	-	-	C	-	-	-	-	-	
III2+B1	-	D	B	C	-	-	-	-	
III2+B2	-	-	D	-	-	-	-	-	
III3+B2	-	-	B	-	-	-	-	-	
III3+B3	-	-	D	-	-	-	-	-	

\* perf 12

## VARIETIES OF THE MOLS ISSUES

		Perf: regular					irregular			compound
		12½	13½	14	15	16	12-14	14-14½	14½-15	
<u>1910 (continued)</u>										
25c	II1+A3	-	C	A	C	-	-	-	B	
	II1+A4	-	C	A	C	-	-	-	-	
	II2+A4	-	D	B	-	-	-	-	-	
	II3+B	-	-	B	-	-	-	-	-	
40c	II+A2	-	D	A	-	-	-	-	C	
50c	III1+A3	-	-	A	-	-	-	-	D	
	III2+A4	-	-	C	-	-	-	-	-	
1fr	II1+A3	-	-	A	C	-	-	-	-	
	II1+A4	-	-	C	-	-	-	-	-	
3fr	II1+A	-	-	B	-	-	-	-	-	
	II2+A	-	-	C	-	-	-	-	-	
5fr	II1+A3	-	-	B	C	-	-	-	-	
10fr	II+A1 y-green	-	-	B	-	-	-	-	-	
	II+A bl-green	-	-	C	-	-	-	-	-	
<u>1915</u>										
5c	V1+E	-	C	A	C	-	-	-	-	
	V2+E	-	-	A	C	-	-	-	-	
	V3+E y-green	-	-	B	D	-	-	-	-	
	V3+E bl-green	-	-	A	C	-	-	-	-	
	VI+F	-	D	C	D	-	-	-	-	
	1(1) booklets	-	-	A	-	-	-	-	-	
	1(2) "	-	-	E	-	-	-	-	-	
	2nd "	-	-	A	-	-	-	-	-	
	3rd "	-	C	A	C	-	-	-	-	
10c	V+D2	-	D	A	B	-	-	-	-	
	V2+D3	-	-	A	C	-	-	-	-	
	V2+E	-	D	B	D	-	-	-	-	
	1st booklets	-	-	A	-	-	-	-	-	
	2(1) "	-	-	C	-	-	-	-	-	
	2(2) "	-	-	B	-	-	-	-	-	
	3rd "	-	C	B	C	-	-	-	-	E (14x15)
15c	III4+B3	-	C	A	C	-	-	-	-	
	III5+C1	-	-	A	C	-	-	-	-	
	IV1+C1	-	-	A	C	-	-	-	-	
	IV2+C1	-	-	C	-	-	-	-	-	
	V+C1	-	-	B	E	-	-	-	-	
	V+C2	-	C	A	C	-	-	-	-	
	1st booklets	-	-	A	-	-	-	-	-	
	2nd "	-	-	A	-	-	-	-	-	
	3rd "	-	-	A	C	-	-	-	-	
25c	III1+B	-	-	A	C	-	-	-	-	
	III+Ca	-	D	A	C	-	-	-	-	
	III2+Cb	-	-	A	C	-	-	-	-	
	III2+D	-	D	B	D	-	-	-	-	
	1st booklets	-	-	A	-	-	-	-	-	
	2(1) "	-	-	B	-	-	-	-	-	
	2(2) "	-	-	C	E	-	-	-	-	
	3rd "	-	-	A	C	-	-	-	-	E (14x15)

## VARIETIES OF THE MOLS ISSUES

		Perf: regular					irregular			compound
		12½	13½	14	15	16	12-14	14-14½	14½-15	
<u>1915 (continued)</u>										
40c	II+A2	-	D	B	D	-	-	-		
	II+A3	-	-	A	C	-	-	-		
50c	III3+A5 lilac-br	-	-	B	D	-	-	-		
	III3+A5 red-brown	-	-	C	D	-	-	-		
	III3+B lilac-br	-	-	C	C	-	-	-		
	III3+B red-brown	-	-	A	C	-	-	-		
1fr	II1+A4	-	-	A	C	-	-	-		
	II2+A5	-	-	A	-	-	-	-		
	II4+A5	-	-	D	-	-	-	-		
	II5+A5	-	D	A	D	-	-	-		
	II6+A5	-	-	C	-	-	-	-		
	II6+A6	-	-	C	-	-	-	-		
	III+A7	-	-	B	D	-	-	-		
5fr	II1+A3 y-brown	-	C	A	C	-	-	-		
	II1+A3 ochre	-	-	A	C	-	-	-		
	II+A4a	-	-	A	C	-	-	-		
	II2+A4b	-	-	B	-	-	-	-		
<u>1918 Red Cross</u>										
5c	V3+E	-	-	A	C	-	-	-		
10c	V2+D3	-	-	A	C	-	-	-		
15c	V+C1	-	-	A	C	-	-	-		
25c	III2+D	-	-	A	C	-	-	-		
40c	II+A3	-	-	A	C	-	-	-		
50c	III4+B	-	-	A	C	-	-	-		
1fr	III+A7	-	-	A	-	-	-	-		
5fr	II2+A4a	-	-	B	-	-	-	-		
10fr	III+B	-	-	C	-	-	-	-		
<u>1921 Recuperation</u>										
5/40c	I2+A1 typo	-	-	D	-	-	-	-		
	II+A2	-	C	A	-	-	-	C		
10/5c	III1+B3 bl-gr	-	-	D	-	-	-	-		
	III1+B4b	-	-	D	-	-	-	-		
	III1+B5	-	-	C	C	-	-	-		
	III2+B5	-	-	C	D	-	-	-		
	III2+B6	-	-	C	D	-	-	-		
	III2+C	-	-	B	D	-	-	-		
	IV+D1	-	C	A	B	-	-	-		
	IV+D2	-	-	C	C	-	-	-		
15/50c	I2+A2 typo	-	-	D	-	-	-	-		
	II+A2 uni	-	-	D	-	-	-	-		
	III1+A3	-	D	A	-	-	-	C		
	III2+A4	-	-	B	-	-	-	-		
25/15c	III1+A3a	-	-	C	-	-	-	D		
	III1+A3b	-	-	D	-	-	-	-		
	III1+A4	-	-	D	-	-	-	-		
	III1+A5	-	-	C	-	-	-	-		

VARIETIES OF THE MOLS ISSUES

		Perf: regular					irregular			compound
		12½	13½	14	15	16	12-14	14-14½	14½-15	
<u>1921 (continued)</u>										
25/15c	III1+A6	-	-	D	-	-	-	-		
	III1+A7	-	-	A	D	-	-	-		
	III1+A8	-	-	C	-	-	-	-		
	III2+B1	-	D	A	D	-	-	-		
	III3+B2	-	-	A	D	-	-	-		
	III3+B3	-	-	D	-	-	-	-		
30/10c	III1+C1a	-	-	D	-	-	-	-		
	III+C1b	-	-	D	-	-	-	-		
	III2+C2	-	-	D	D	-	-	-		
	III3+C2	-	C	A	-	-	-	-		
	IV+D1 carmine	-	C	A	C	-	-	-		
	IV+D1 car-lake	-	-	B	D	-	-	-		
50/25c	II1+A3	-	-	D	-	-	-	-		
	II1+A4	-	D	A	C	-	-	-		
	II2+A4	-	C	B	-	-	-	-		
	II3+B	-	-	A	-	-	-	-		
1fr	I2+A2 typo	-	D	-	-	-	-	-		
	I2+A2 princes	-	-	E	-	-	-	-		
	II1+A3	-	-	A	B	-	-	-		
	II1+A4	-	-	A	B	-	-	-		
3fr	II1+A	-	-	C	-	-	-	-		
	II2+A	-	-	A	-	-	-	-		
5fr	I+A1 local	-	-	E@	-	-	-	-		
	I+A1 typo	-	-	D	-	-	-	-		
	II1+A3	-	-	B	C	-	-	-		
10fr	I2+A1 local	E*	-	-	-	-	-	-		
	I2+A1 typo	D*	-	-	-	-	-	-		
	II+A1 y-green	-	-	B	-	-	-	-		
	II+A1 bl-green	-	-	B	-	-	-	-		
<u>1922 Malines</u>										
5/50c	III3+A5	-	-	E	-	-	-	-		
	III3+B matt	-	-	A	-	-	-	-		
	III3+B shiny	-	-	B	-	-	-	-		
10/5c	V2+E	-	-	D	D	-	-	-		
	V3+E y-green	-	-	D	-	-	-	-		
	V3+E bl-green	-	-	A	D	-	-	-		
	VI+F	-	C	A	C	-	-	-		
25/40c	II+A2 (red)	-	-	D	-	-	-	-		
	II+A2 (carmine)	-	-	D	D	-	-	-		
	II+A3 (red)	-	-	A	C	-	-	-		
	II+A3 (carmine)	-	-	C	C	-	-	-		
30/10c	V2+D2	-	-	A	D	-	-	-		
	V2+D3	-	-	A	C	-	-	-		
	V2+E	-	C	A	C	-	-	-		
50/25c	III1+B (red)	-	-	D	-	-	-	-		
	III1+B (carmine)	-	-	C	-	-	-	-		
	III2+Ca (red)	-	-	C	-	-	-	-		
	III2+Ca (carm)	-	-	B	D	-	-	-		

\* perf 12 @ not verified

VARIETIES OF THE MOLS ISSUES

			Perf: regular					irregular			compound
			12½	13½	14	15	16	12-14	14-14½	14½-15	
<u>Malines (continued)</u>											
50/25c	III2+Cb (red)		-	-	D	D	-	-	-	-	
	III2+Cb (carm)		-	-	C	-	-	-	-	-	
	III+D (carmine)		-	C	A	D	-	-	-	-	
<u>1922 Boma</u>											
10/5c	III1+B5	C	-	-	E	-	-	-	-	-	
	V1+E	C	-	-	D	-	-	-	-	-	
	V2+E	B	-	-	C	-	-	-	-	-	
	V2+E	C	-	-	B	-	-	-	-	-	
	V2+E	D	-	-	D	D	-	-	-	-	
	V3+E bl-gr	B	-	-	C	D	-	-	-	-	
	V3+E bl-gr	C	-	-	C	D	-	-	-	-	
	V3+E bl-gr	D	-	-	D	D	-	-	-	-	
	VI+F	A	-	-	B	D	-	-	-	-	
	VI+F	B	-	-	D	D	-	-	-	-	
	VI+F	C	-	D	B	D	-	-	-	-	
	VI+F	D	-	-	D	-	-	-	-	-	
10/1fr	II4+A5		-	-	D	-	-	-	-	-	
	II5+A5		-	-	A	-	-	-	-	-	
	II6+A5		-	-	C	-	-	-	-	-	
25/40c	II+A2	B	-	-	C	-	-	-	-	-	
	II+A2	C	-	C	C	D	-	-	-	-	
	II+A2	D	-	-	D	-	-	-	-	-	
	II+A3	A	-	-	A	D	-	-	-	-	
	II+A3	B	-	-	B	D	-	-	-	-	
	II+A3	C	-	-	A	C	-	-	-	-	
	II+A3	D	-	-	C	D	-	-	-	-	
25/5fr	II2+A4a		-	-	A	D	-	-	-	-	
	II2+A4b		-	-	C	-	-	-	-	-	
<u>1923 Elisabethville</u>											
30/10c	III3+C2	A	-	D	C	-	-	-	-	-	
	III3+C2	B	-	-	D	-	-	-	-	-	
	IV+D1	A	-	-	C	-	-	-	-	-	
	IV+D1	B	-	-	C	-	-	-	-	-	
	V2+E	A	-	-	D	-	-	-	-	-	
	V2+E	B	-	D	C	-	-	-	-	-	
<u>1925 Campagnes</u>											
25+25c	III+B French		A	-	-	-	-	-	-	-	
	III+B Flemish		A	-	-	-	-	-	-	-	

VARIETIES OF THE MOLS ISSUES

RUANDA URUNDI			Perf: regular					irregular			compound
			12½	13½	14	15	16	12-14	14-14½	14½-15	
<u>1916 Tombeur</u>											
5c	V1+E	K,G	-	-	E	-	-	-	-	-	
	V1+E	H	-	-	C	-	-	-	-	-	
10c	V1+D2	K,G	-	-	E	-	-	-	-	-	
	V1+D2	H	-	-	C	-	-	-	-	-	
15c	III4+B3	K,G	-	-	E	-	-	-	-	-	
	III4+B3	H	-	C	D	-	-	-	-	-	
25c	III1+B	K,G	-	-	E	-	-	-	-	-	
	III1+B	H	-	-	C	D*	-	-	-	-	
40c	II+A2	K,G	-	-	E	-	-	-	-	-	
	II+A2	H	-	-	C	-	-	-	-	-	
50c	III3+A5 1-br	K	-	-	E	-	-	-	-	-	
	III3+B r-br	G	-	-	E	-	-	-	-	-	
	III3+A5 1-br	H	-	-	C	D*	-	-	-	-	
	III3+A5 r-br	H	-	-	C	D	-	-	-	-	
1fr	II1+A4	K	-	-	-	E	-	-	-	-	
	II2+A5	G	-	-	E	-	-	-	-	-	
	II1+A4	H	-	-	D	-	-	-	-	-	
5fr	II1+A3	K,G	-	-	-	E	-	-	-	-	
<u>1916 EAA</u>											
5c	V2+E	S	-	-	B	-	-	-	-	-	
	V2+E	Sa	-	-	D	-	-	-	-	-	
	V2+E	L1G	-	-	C	C	-	-	-	-	
	V2+E	L1o	-	-	A	B	-	-	-	-	
	V3+E	L1I	-	-	C	-	-	-	-	-	
	V3+E	L2	-	-	A	B	-	-	-	-	
	V3+F	L2'	-	-	B	D	-	-	-	-	
10c	V2+D2	S	-	-	E	-	-	-	-	-	
	V2+D2	L1o	-	-	A	B	-	-	-	-	
	V2+D2	L2	-	-	A	C	-	-	-	-	
15c	III5+C1	S	-	-	B	-	-	-	-	-	
	III5+C1	L1T	-	-	B	-	-	-	-	-	
	III5+C1	L1G	-	-	A	C	-	-	-	-	
	III5+C1	L1o	-	-	C	-	-	-	-	-	
	IV+C1	L1I	-	-	C	-	-	-	-	-	
	IV+C1	L2	-	-	A	C	-	-	-	-	
25c	III1+B	S	-	-	D	-	-	-	-	-	
	III1+B	L1T	-	-	B	D	-	-	-	-	
	III1+B	L1G	-	-	C	-	-	-	-	-	
	III1+B	L1o	-	-	A	C	-	-	-	-	
	III+Ca	L2	-	-	A	D	-	-	-	-	
40c	II+A3	L1I	-	-	A	C	-	-	-	-	
	II+A3	L1o	-	-	A	B	C	-	-	-	
	II+A3	L2	-	-	B	-	-	-	-	-	
50c	III3+B 1-br	S	-	-	C	-	-	-	-	-	
	III3+B 1-br	L1T	-	-	B	-	-	-	-	-	
	III3+B 1-br	L1o	-	-	C	-	-	-	-	-	
	III3+B r-br	L1I	-	-	D	-	-	-	-	-	
	III3+B r-br	L1o	-	-	C	-	-	-	-	-	
	III3+B r-br	L2	-	-	A	-	-	-	-	-	

\* Ruanda only

VARIETIES OF THE MOLS ISSUES

			Perf: regular					irregular			compound
			12½	13½	14	15	16	12-14	14-14½	14½-15	
<u>EAA (continued)</u>											
1fr	II2+A5	S	-	-	D	-	-	-	-	-	
	II2+A5	L1o	-	-	A	-	-	-	-	-	
	II3+A5	L1o	-	-	D	-	-	-	-	-	
	II3+A5	L2	-	-	B	-	-	-	-	-	
5fr	II1+A3	S	-	-	C	C	-	-	-	-	
	II1+A3	L1T	-	-	C	D	-	-	-	-	
	II1+A3	L1o	-	-	A	C	-	-	-	-	
	II1+A3	L2	-	-	A	C	-	-	-	-	
	II2+A4a	L2	-	-	C	-	-	-	-	-	
<u>1918 AD</u>											
5c	V3+E		-	-	A	C	-	-	-	-	
10c	V2+D3		-	-	A	C	-	-	-	-	
15c	V+C1		-	-	A	C	-	-	-	-	
25c	III2+D		-	-	A	C	-	-	-	-	
40c	II+A3		-	-	A	C	-	-	-	-	
50c	III4+B		-	-	A	C	-	-	-	-	
1fr	III+A7		-	-	A	-	-	-	-	-	
5fr	II2+A4a		-	-	B	-	-	-	-	-	
10fr	III+B		-	-	C	-	-	-	-	-	
<u>1922 EAA Malines</u>											
5/50c	III3+B	matt L2	-	-	A	-	-	-	-	-	
	III3+B	shiny L2	-	-	A	-	-	-	-	-	
10/5c	V3+E	L2	-	-	A	C	-	-	-	-	
	V3+F	L2'	-	-	B	C	-	-	-	-	
25/40c	II+A3	(red) L1o	-	-	C	-	-	-	-	-	
	II+A3	(red) L2	-	-	C	-	-	-	-	-	
	II+A3	(carm) L1o	-	-	B	-	-	-	-	-	
	II+A3	(carm) L2	-	-	A	D	-	-	-	-	
30/10c	V2+D2	L1o	-	-	D	-	-	-	-	-	
	V2+D2	L2	-	-	A	D	-	-	-	-	
50/25c	III1+B	(red) L1T	-	-	C	-	-	-	-	-	
	III1+B	(red) L1G	-	-	C	-	-	-	-	-	
	III1+B	(red) L1o	-	-	D	-	-	-	-	-	
	III1+B	(car) L1T	-	-	B	-	-	-	-	-	
	III1+B	(car) L1o	-	-	D	-	-	-	-	-	
	III1+C	(red) L2	-	-	A	D	-	-	-	-	
	III1+C	(car) L1o	-	-	D	-	-	-	-	-	
	III1+C	(car) L2	-	-	A	D	-	-	-	-	
<u>1925 Campagnes</u>											
25+25c	III+B	French	A	-	-	-	-	-	-	-	
	III+B	Flemish	A	-	-	-	-	-	-	-	

THE PERFORATIONS OF THE MOLS ISSUES

An article with the above title appeared in Bulletin No. 39, March 1981, by B. P. Hudson. This was of great interest to me as it so happened that two of us in the China PS of London had been making just such a detailed analysis over the previous two years of the perforations, printings and varieties of the corresponding stamps of country, sometimes referred to as the Waterlow Dragons, which were issued over the period 1898-1910.

The results regarding the perfs. were published in the Journal of Chinese Philately, Vol. 29 No. 3, Feb. 1982, and as might be expected were very much in accordance with Mr. Hudson's results. It is not my purpose here to evaluate a comparison, as the overall picture of most, if not all of the countries using Waterlow stamps at that time, with reference to the perforations, will be examined by my collaborator, E. F. Aglen, on behalf of the Waterlow Study Circle. But one or two general comments may be found helpful, together with a detailed look at the irregular perf 12 to 14 and a note on the 14 to 15 perforation.

We had for examination nearly 100 full sheets, mostly of a large size, 395 x 450 mm, which contained 12 panes of stamps. This is considerably bigger than the sheets of Belgian Congo (about 200 x 265 mm), which consequently has an interesting bearing on the irregular perf 12 to 14 as will be seen below.

The first observation which will be equally valid for any country for which these machines were used concerns the use of two machines giving different perforations on the same sheet (or pile of sheets) of stamps. It is quite possible for a line of perforations to be missed out, giving rise to an 'imperf between' variety. On occasions this was noticed and the missing line filled in, but, either by accident or because the original machine was being used, a different machine was employed.

We found two outstanding examples of this: one sheet perf 14 was observed to have the bottom line of each row of panes perf 16, and another perf 14.4/14.7 (see below) had some vertical rows perf 13.7.

The other interesting thing to emerge arose from a consideration of the 'pattern' of perforation. Even in some of the 'regular' perforations it is possible to discern a pattern in a single row across the sheet which can be traced and identified in succeeding rows, both horizontally and vertically. Aglen and I discovered quite independently that in all the cases where this was possible there were some lines of perforation in the sheet which ran in the opposite direction to the majority. In other words at some stage the sheet must have been taken out of the machine and fed in again after having been turned through 180 degrees.

In the China sheets the retrograde lines occurred at the top or bottom, and left or right, of the rows of panes. In the normal sheet lay-out, such as the B. Congo, there will be one at either the top or bottom of the sheet and one at either the left or right. This I have checked where possible.

The probable reason for this (suggested by the works manager of a firm making perforating machines) would appear to be due to the fact that at that time the sheet or sheets of stamps would be fed into the line-perforator by hand. Now in order to get the line of holes in proper alignment the operator would need some kind of guide and it seems like-



ly that he lined up some element of the stamp design with the edge of the stripping plate, which is a straight bar drilled to fit the pins. It lies on top of the sheet(s) and is used to remove it on completion of the punhsstbake.

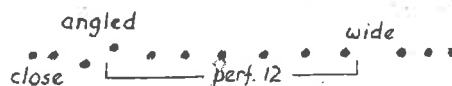
This can clearly be repeated for all rows except for the one at the bottom, for which there is no row of stamps underneath to use for a guide. Hence to fill in this last row the sheet must be taken out, turned round and fed in again. In passing it can be appreciated that it will not matter to the operator which way up the design is when he initially feeds in the sheet, which accounts for the retrograde line of perforation sometimes appearing at the top, and on either the left or the right.

If this conjecture is correct, it also gives a reasonable explanation for 'sideslip'. Where there is a recognisable pattern of perforation it is noticeable that the pattern seldom appears exactly in the same place as one goes down the sheet, but wanders sometimes minutely, sometimes quite visibly, from side to side. In other words although there may have been some sort of guide line inscribed on the bed-plate there was no form of raised guide bar to hold the sheet laterally. Again according to our technical informant the operator would have to concentrate so hard on getting the alignment correct, using both hands to do so, that it is likely that he was unable to prevent the sheet slipping sideways.

Irregular perf 12 to 14. This must surely be one of the most bizarre perforations that exist, containing as it does the perforations 12, 12.8, 13½ and 14. Articles on the various Waterlow perforations of this time were appearing as long ago as 1912, but it is fairly probable that any conclusions reached then, or later, so far as the China issues were concerned were based on pieces not larger than a complete pane of 4 x 5 stamps.

It was therefore with considerable delight that I found that we had no less than fourteen complete sheets containing some holes gauging 12 which could be examined, and my results therefrom appeared in the Journal of Chinese Philately, Vol. 28 No. 1, Oct. 1980, where I referred to this perforation as the Waterlow 'Rogue'. With the Editor's permission the relevant parts of the article are now reproduced, with a few amendments to make a fit with the standard B. Congo sheets.

The object is to try and find the order and extent of the various gauges in a perforation row, and naturally we start with the few holes gauging 12. In this area a pattern may be observed: it consists of a configuration of four holes, two very close together followed by two at an angle. This is followed by six holes gauging 12 and then a wider gap before the next succession of holes. The second 'angled' hole will also fit the 12 gauge, which gives a run of seven holes perf 12, and this is the only run of this perforation in the complete row. Diagrammatically, with some exaggeration, this appears as:



Unfortunately the three recognition points 'closing spacing', 'angled' and 'wide spacing' are not constant throughout all the sheets. Sometimes the close spacing looks to have been made regular, or the two

holes at an angle have been straightened, partially or wholly, but we are left with a basic starting point of seven holes gauging 12 followed normally by a gap from which we can work.

Before continuing it is worth while pointing out the difficulties that arise. It is quite possible that a hole at either end of a specified run may be argued to fit the previous or subsequent run. For example, in the diagram above the first of the angled pair of holes will also fit the 12 gauge quite well, but overall it has been more satisfactory to consider it the last of the previous run. If we add on to this the fact that the holes are not absolutely 'regular' inside a given gauge, it is not surprising that this 'rogue' perforation has given rise to such wide, and indeed different, speculation; not to mention the question of the direction being reversed. Using an 'Instanta' gauge brings its own problem, which may be summed up as accuracy against irregularity. A run of 13½, say, allowing for a slight displacement of a hole or two may look quite different if the 'Instanta' gauge is moved a few holes one way or the other, raising a suspicion of 13.8 or even 14.

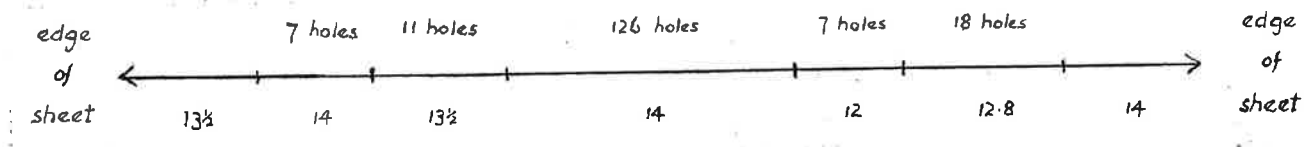
However, with these reservations in mind, it is hoped that the following will give a reasonably accurate and workable picture.

For the horizontal perforations we start with the group of seven holes gauging 12 which are followed in most cases by a discernable gap. Succeeding these to the right are eighteen holes gauging 12 3/4 (12.8) and then the remainder to the edge of the sheet gauge 14 (13.9).

Moving left from the perf 12 group there is a long run of 126 holes gauging 14 (13.9-14.1). This measures (hole centre to hole centre) just under 179 mm, and if the 'number of holes in 20 mm' rule is applied the gauge comes out at almost exactly 14.

This long run is followed (moving left) by eleven holes gauging 13½, seven holes gauging 14, and the remainder, to the edge of the sheet, 13½.

The complete horizontal row of perforations will then appear as follows (not to scale):



It must be emphasized though that, due to the small irregularities of individual pins, other observers may take a slightly different view and argue for, say, eight holes at 14 and ten holes at 13½ instead of the seven and eleven. It is almost impossible to be precise. But taking the above scheme as a workable evaluation it was found to fit not only the horizontal perforation rows but the vertical as well in all fourteen sheets studied. Also in a number of cases the change from one perforation to another seemed to coincide with a slight change of alignment or size of hole, but this observation, if not wishful thinking, can only be regarded as giving tentative support.

Purposefully the diagram above has been left drawn as it applied to the large China sheets, for if we now turn to the smaller Congo sheets an interesting point emerges, namely that it would be possible for them to be perforated by this machine without the gauges 12 or 12.8 occurring, or for a mixture of 12 and 14 and nothing else to crop up.

This can be seen if we consider the lengths involved. In round figures the lengths of the five bounded runs are:

Holes	7	11	12 $\frac{1}{2}$	7	18
Perf	14	13 $\frac{1}{2}$	14	12	12.8
Length	10 mm	16	180	12	28

There are then the unknown lengths perf 13 $\frac{1}{2}$  on the left and 14 on the right, and the Congo sheets are only about 200 mm wide.

Lastly, it is worth mentioning that the 13 $\frac{1}{2}$  gauge is exactly 13 $\frac{1}{2}$  as opposed to the machine designated 'regular 13 $\frac{1}{2}$ ' which all agree, I think, is 13.7. Should any stamps perf 13 $\frac{1}{2}$  x 14 or the reverse crop up - as they do in China - they must have come from the 'rogue' perforator.

For the period of use we agree entirely with Goodman and Hudson - the latest order-date on the sheets examined was 6/2/1902.

Irregular perf 14 $\frac{1}{2}$ . This is another curious one, which at first I thought the same as Mr. Hudson's irregular 14-15, but now I am not so sure. There were ten sheets in this category and I found considerable difficulty in pinning anything down until I realised that a specific perforation 14.4 fitted exactly for a certain length and then changed slightly but positively, so that for the next length 14.7 was an exact fit. After a good deal of playing about on the lines mentioned above - which perf does a particular hole belong to? - I regarded it as a reasonable conclusion that the various lengths could be taken as much the same, about 60 mm.

This perforation I have called 14.4/14.7 as these two gauges occur alternately in lengths of about 60 mm along the line. Individual stamps that appear to measure 14 $\frac{1}{2}$  will usually turn out to be 14.4 on careful measuring with the Instanta, while those that are not may be those coinciding with the change from 14.4 to 14.7 which it is sometimes possible to verify with a little experimentation.

K. H. BEALES

NOTES ON THE PRINTING OF ENGRAVED STAMPS BY WATERLOW & SONS LTD  
(Reprinted from The Journal of the Waterlow Study Circle, No. 6, December 1982)

I recently had the pleasure and privilege of a talk with Mr. Charles Lee, a retired Copperplate Printer, who, from 1937 to 1962, was employed by Waterlow & Sons Ltd. Mr. Lee gave me much interesting information on the printing of stamps and this needs to be recorded.

The Hand Operated Copperplate Press

Waterlow used an old type of hand operated printing press for die proofs and for some miniature sheets. This may be the press illustrated at p 180 of "Fundamentals of Philately" by L. N. & M. Williams.

The machine basically resembles an old fashioned washing mangle but with two steel rollers (called 'cylinders'), intermeshed and turned by a large wheel or six-armed 'star wheel', geared to the cylinders. Between the cylinders was nipped a plank of steel or, with older ma-

chines, of mahogany with steel inset on which the die or small printing plate was laid, so that when the cylinders were turned the plank moved backwards or forwards. Around the upper cylinder was wrapped five or six thicknesses of blanket, to provide a soft, flexible pad behind the paper to force it into the crevices engraved in the die and collect the ink embedded therein. Downward pressure on the upper cylinder was exerted by a heavy bolt above the bearing at each end of the cylinder. Separating the bolt from each bearing were four or five steel blocks and between the blocks a total of 20 to 40 thicknesses of card of visiting card thickness. When the bolts were tightened down hard the thicknesses of card gave some small degree of resilience to the cylinders. Springloading of the upper cylinder was not used.

The die or small printing plate from which the print was to be taken was placed on a separate 'hot plate', normally kept warm, but not hot, by gas. When the die was warm enough to keep the ink fluid, the surface of the die was inked by a blanket covered roller or dabber, ensuring that all the engraved crevices were filled with ink. The surface of the die was cleaned with pads of muslin and the last traces of the greasy ink removed from the surface by a cloth damped with a weak caustic potash solution. Hand wiping of the die was done only for special 'art work' and not for stamps or bank notes.

The die was moved to the plank of the press and a lightly damped sheet of paper, usually thicker than stamp printing paper, but sometimes of thin 'India' paper with a thicker backing of 'French plate paper' or vellum, placed on it. The wheel was turned and the sandwich of blanket, paper, die and plank drawn between the cylinders. The paper was stripped off the die to give the finished print.

#### The Continuous Rotary Press

The continuously operated rotary printing press, used by Waterlow for very many years, operated on generally the same principle as the hand operated press.

The 'plate' (upper) cylinder, about 2' 3" overall diameter, had the curved printing plate fixed to it. The 'make ready' (lower) cylinder was pressed against the plate cylinder by long, heavy steel rods, the tension in which could be adjusted; the paper passed between the cylinders in order to extract the ink from the plate.

Forming an integral part of the make-ready cylinder was the 'gripper', a moveable bar, extending for the full length of the cylinder, recessed in it and mechanically operated to grip a sheet of paper at a particular moment in the cycle of the cylinder to ensure that the paper was precisely located on the printing plate. The area of the make-ready cylinder in contact with the sheet of paper was covered with two thicknesses of stiff card about 1½ mm thick, 20 to 40 thicknesses of calico and, on top, a layer of American cloth in contact with the paper; this, in place of the blanket used in the hand operated press, provided the necessary resilience to force the paper into the crevices in the plate.

The plate cylinder was heated, by means of gas or electricity, to keep the ink on the plate soft (but not liquid).

In operation, the printing plate on the plate cylinder, after leaving the make-ready cylinder, met the ink roller which was covered with

felt, kept saturated with ink. After inking, the plate passed successively under the two leather or plastic covered cleaning rollers, which removed the surplus ink from the face of the plate. Each cleaning roller was itself kept clean continuously by a scraper which wiped off the ink. Ink on the scrapers was removed periodically by the Machine Manager, using a 'push knife' (like a normal paint scraper with a 3" wide blade) and returned to the ink duct feeding ink to the inking roller. The last vestiges of ink on the surface of the plate were removed by wide calico bands, almost of the same width as the length of the cylinders. The calico bands were rather like roller towels but were not continuous and ran from one elevated spool to another, the movement not being continuous but in jerks by adjustable ratchets. Two successive such bands passed under pads gently pressed against the printing plate; the pads had a slight reciprocating movement along the axis of the cylinder. There followed a third similar calico band but moistened with soda ash solution to give final cleaning to the surface of the plate and a final calico band to remove all moisture left by the soda ash band. With the printer's expertise the surface of the printing plate was sometimes left moist after the soda ash band to improve the quality of the printing. After this last calico band, the prepared printing plate again met the make-ready cylinder with a new sheet of paper between them.

### The Printing Plate

According to Mr. Lee, all Waterlow engraved plates were of copper and not steel as was used by some printers. The copper plates were chromium plated to make them more durable. Before chromium plating was an established commercial process the plates were iron plated (referred to as 'steel plating') and Mr. Lee is convinced that steel plates were never used by Waterlow. This is at variance with information given in the book 'GUATEMALA 2', where it is stated that the Waterlow Guatemala plates, inspected before they were destroyed, were a mixture of copper and steel. This may be wrong; iron plated plates would look exactly like steel plates and only by cutting through the iron skin would the underlying copper be seen. The early stamps of Guatemala, and of other 'Waterlow countries' may well all have been printed from copper plates, some iron plated, some not.

As indicated earlier, the plate was curved to a radius of about 13" to match the plate cylinder. A half-inch of the leading edge of the plate was turned over at an angle of 90 degrees and this 'flange' fitted into a slot in a 'chuck', a thick steel or brass plate that fitted snugly on to the surface of the plate cylinder. The flange was secured within the slot by a long bar filling the remaining space in the slot. The trailing edge of the plate was secured to the chuck by countersunk head screws. The chuck was clamped securely to the plate cylinder.

When a plate was required to be repaired by retouching or re-entry, the chromium (or iron) plating was removed chemically, the plate flattened and the repairs effected. The plate was then recurved and replated.

### Operating the Rotary Press

In addition to the printer, two assistants, a 'layer-on' and a 'taker-off', were required to operate the rotary press. As the name indicates the 'layer-on' fed the sheets of paper to the press. The 'taker-off' removed the sheets one by one when printed, very briefly inspected

them to make sure that the machine was printing properly, added an interleaving sheet to prevent off-set of the design from the sheet beneath and laid them aside to dry.

The 'layer-on' had two most important functions (a) to ensure that there was always a sheet of paper between the printing plate and the make-ready cylinder; otherwise ink would be transferred to the cylinder and much time would be wasted in cleaning the machine before restarting, and (b) to ensure that each sheet of paper was in precisely the right position to be held by the 'gripper' on the make-ready cylinder.

It was customary for the 'layer-on' to have two piles of paper, one on which the stamps were to be printed and the other of waste paper, waste paper being fed to the machine when getting into operation and when there was any hitch in its operation; it was not possible to trip the machine and stop it suddenly.

The 'layer-on' took a sheet of paper from the pile and placed it on the 'lay-board', a wooden table sloping downwards towards the jaws of the cylinders of the press. For printing monochrome stamps or the first colour of bi-coloured stamps 'plain lay' was used; three stops were bolted on to the lay board, perhaps two at the back and one at the side, and these served to position precisely the sheet of paper for the 'gripper' to draw it on to the printing plate.

For the second printing of bi-coloured stamps with good registration of the two colours essential, great care was necessary in positioning the paper, on which the first colour had already been printed, on the lay board. Across the lay board was a 'lay-bar', adjustable in position on slides running along each side of the lay-board. On the lay-bar were 'lay-points', pointers bolted to the lay-bar and adjustable in both position and height above the lay-board. The sheet of paper was positioned by the 'layer-on' on the lay board and under the lay-bar and with the lay-points immediately above pre-determined points on the partly printed sheet of stamps such that the sheet was in precisely the correct position when automatically gripped by the 'gripper' and for the second colour to be properly registered relative to the first colour. The edges and corners of the frames of the stamps (IF PRINTED FIRST) were used for locating under the lay-points, but it was found to be more satisfactory to engrave, on the first-printed plate, marks, usually a dot and a line, spaced well apart, and to use these for positioning the sheet under the lay-points. These 'lay marks' are what we have previously called "registration guide marks". The 'layer-on' positioned the partly printed sheet on the lay-board with one lay-point immediately above the lay-mark dot and the second lay-point above the lay-mark line and held the sheet lightly until the paper was gripped by the 'gripper' and drawn into the press.

If the stamps were to be printed on watermarked paper and if the position of the watermark relative to the stamp was important, as for example the Great Britain 1939 high values with single GVIR watermark, 'shadow-lay' was used. Into the lay-board was inset a pane of glass and under that a lamp, so that with the paper on the lay-board, the watermark was clearly visible to the operator. The 'layer-on' could position the watermark accurately relative to the pre-set lay-points and the watermarks then appeared in the middle of the stamps as required.

With expert operators and the printing press operating at top speed, about 5,000 sheets a day of monochrome stamps could be printed. For bi-coloured stamps with the second colour positioned by 'pointing' the number would be reduced to about 2,300 sheets.

### Paper

In the early days the paper had to be damped before printing and then dried before gumming. In the past fifty years improved techniques have made possible printing on to dry, ready-gummed paper and this is now the normal procedure.

### General

The calico rolls used for wiping ink from the printing plate were washed in Waterlow's own laundry and re-used.

For each printing press there were the two operators and the printer or Machine Manager. The printer was fully occupied with the one machine, making sure the stamps were being properly printed, adjusting the speed of the press to the maximum possible for the ability of the operators, ensuring the supply of ink to the ink duct, removing surplus ink from the cleaning roller scraper, maintaining the correct temperature of the plate cylinder and adjusting the ratchets to provide a reasonably constant rate of feed of the various calico bands for cleaning the surface of the plate.

In printing the second colour of bi-coloured stamps the pressure and heat of the printing plate produced some 'flattening' of the first impression. In Mr. Lee's time at Waterlow, printing of the vignettes (centres) first was preferred but when the vignette was a head the casements (frames) were printed first so that the lines of the head were as clear and sharp as possible.

R. H. KEACH

### POST OFFICES OF THE CONGO c1955

FARADJE. Altitude 2658'. Territorial Hq. on left bank of Duggu River. Hospital dispensary and trading centre. Emergency landing ground 3,610' long. Catholic Mission. An item of interest is the monument commemorating the Abyssinian Campaign and the victory of Redjaf won by Chaltin over the Mahdists.

FESHI. On the left bank of the Awenge River. Territorial Hq. Radiotelegraph station, trading centre. In the Territory of Feshi, about 50 miles from the township are the Falls of the Inzia River, which are 80' high in a river 200' wide, and gives the landscape a grand aspect. There is a marked difference in the Inzia River, where above the falls it is placid and moderately restricted, and the same river below the falls where it becomes a savage torrent which cuts its path through an almost perpendicular ravine of 160 feet.

FIZI. Altitude 4396'. Territorial Hq. RT station, radio beacon, hospital, government rest house, trading centre. From Fizi there is a fine view over Lake Tanganyika and Burton's Bay.

Up to 1894, the year when the Arab slave traders were driven out of



the Maniema, the Territory of Fizi was intersected by a slave path leading from Nyangwe via Kabambare and Kalembelembe to Baraka, whence slaves were shipped in Arab dhows to Ujiji, the large slave market of Central Africa. In 1898 a column of Batatela troops, who had revolted, pushed down as far as Lake Tanganyika and Kabambare. This column was defeated by Dhanis, and the natives were finally freed from the fear which had haunted them for some forty years. The victories of Dhanis, first over the Arabs and then over the Batatela mutineers impressed the local natives to such an extent that many of them, even today, bear Dhanis as a first name. In 1875 in the course of his reconnaissance of Lake Tanganyika, Stanley christened a small island off Mboko on the shore of the lake north of Baraka, "New York Herald Island". This Territory was first occupied by the Congo Free State in 1900 when Kalembelembe was established. It remained Territorial Hq. until 1925 when Fizi was founded.

**GANDAJIKA.** Territorial Hq. Government rest home. Trading and industrial centre. Hospital. Seat of local native co-operatives. Missions, native art school. On the road to Tshibata, in the country of the Bena Nsona (9 miles) there are polishing workshops (known as those of Gandajika) situated on the Mulume Musulu River; these would appear to be prehistoric workshops of the makers of flint tools.

**GEMENA.** The largest European settlement in the Ubangi District with 150 Europeans. Territorial Hq. Radio Station. Hospital. Primary school. Trading centre. Head office for the ginneries in the area.

**GOMA.** Headquarters of North Kivu District Territory. Eastern residence of the Governor-General. Township. Telephone/telegraph. RT station. Primary school. Boarding school. Seat of the General Management of the Compagnie Miniere des Grands Lacs and of the Cimnoki. Lake Kivu port. Airfield. Goma and its neighbor Kisenyi form practically one built-up area and are complimentary. They are destined to become an important tourist centre and a very popular holiday resort and recreational centre. Situated at a mean altitude of 4920', they extend along the northeastern shore of Lake Kivu at the bottom of an immense amphitheatre formed by the imposing Kirunga Range, one of the most active volcano regions in the world. One of the great attractions of this locality is its climate which is mild owing to the close proximity of the high mountains. The air is light, dry and invigorating and exceptionally pure. The average temperature for the whole year is between 68 and 77 degrees, F. - it is like perpetual spring weather. These two towns occupy a favorable position in the heart of the most popular tourist country of Central Africa with its beautiful lake surrounded by picturesque shores, its extinct and active volcanoes, its lava fields, which are in the course of re-settlement or completely bare, in the proximity of high mountains in the west and east, in the vicinity of the most attractive National Parks (Albert, Kagera and Queen Elisabeth).

**GOMBARI.** Trading centre. Military camp. Government rest house. Hospital. Pioneer's cemetery. Ituvi oil mills. Protestant mission. School. Large bridge crosses Bomokandi River.

**GOMBE.** Steamer stopping place on the Congo, near Livanga Narrows.



BELGIAN CONGOPostal Rates as of 1 Jan. 1955

Class of Mail	Inland	Belgium	Grand Duchy of Luxemburg	African Postal Union*	Other Countries
1. Ordinary letters					
a) Not exceeding 10g. Fr	3.00				
b) Each additional 10g.	1.00				
c) Not exceeding 20g.		3.00	3.00	3.00	4.50
d) Each additional 20g.		1.50	1.50	1.50	2.50
2. Ordinary Post Cards	1.20	1.20	1.20	1.20	2.50
3. Reply Paid Post Cards	2.40	2.40	2.40	2.40	5.00
4. Commercial Papers			1.80(1)		1.80(1)
per 50g.	.50	.80	.90	.80	.90
with a minimum of	3.00	3.00	3.00	3.00	4.50
5. Printed Matter					
a) Newspapers and pub- lications per 50g. or part thereof	.10	.30	.90(1) .50	.30	.90(1) .50
b) Books and brochures per 50g. or part thereof	.25	.30	.90(1) .50	.30	.90(1) .50**
c) Printed visiting cards, illustrated cards, Christmas & New Year cards, posted without en- velopes or in open envelopes and bear- ing not more than 5 written words					
Per card	.20	.80	1.80	.80	1.80
Other cards	1.20				
d) All other printed matter not exceed- ing 25g.	.20				
Not exceeding 50g.	.40		1.80(1)		1.80(1)
Per 50g. or part thereof		.80	.90	.80	.90
6. Samples			1.80(1)		1.80(1)
Per 50g. or part thereof	.50	.80	.90	.80	.90(1)
With a minimum of	1.00	1.60	1.80	1.60	1.80

7. Parcels (small) Per 50g. or part thereof with a minimum of	1.00 5.00	1.60 8.00	1.80 9.00		1.80 9.00
8. Reply coupons ***		6.00	6.00	6.00	6.00
9. Registration fee	4.00	4.00	6.00	6.00	6.00
10. Acknowledgment of Receipt	4.00	4.00	5.00	5.00	5.00
11. Express Delivery	5.00	6.00	6.00	6.00	6.00

(1) For the Grand Duchy of Luxemburg and other countries (international service) the first figure applies to the first 50g. and the second figure to each additional 50g.

\* Countries which are members of the African Postal Union.

\*\* Tariff applicable to countries granting similar reductions in respect of dispatch to the Belgian Congo. (Inquire at Post Office)

\*\*\* Also valid between the Belgian Congo and Ruandi-Urundi.

#### Air Mail - International Rates.

Special rates for mail to Belgium

	Total postage	Letter cards
Letters not exceeding 10g.	6.50	4.00
For each additional 5 g.	2.50	
Post cards	3.50	
Newspapers and Periodicals per 15g. or part thereof	2.00	
Other mail per 15g. or part thereof	3.00	
Parcels of declared value are subject to a surcharge of 2.50fr per 5g. or part thereof in addition to ordinary postage.		

Air Mail Surcharge applicable to mail posted in Belgian Congo and Ruanda Urundi and addressed to other countries.

<u>Destination</u>	Surcharge per 5g. or part thereof in Congo- lese Fr.			Letter cards
	LC	OM	Newspapers	
Europe - Countries other than Belgium	3.00	1.00	.75	6.00
Africa - African Postal Union	.75	.40	.30	3.00
Other countries	1.00	.40	.30	5.00
America - All countries	5.00	1.60	1.25	7.00
Asia - Aden, Saudi Arabia, Cypress, Iran, Iraq, Israel, Jordon, Le- banon, Mascate, Syria, Turkey & Zemen	2.00	.70	.50	5.00

Oceania - all countries 7.00 2.50 2.00 8.00

LC = letters, cards and parcels of declared value.

OM = Other mail.

L. H. LOMAX

BRAZIL TO ENGLAND VIA LEOPOLDVILLE

Mr. John Fosbery has shown me a cover which left Rio de Janeiro 6 June 1942 and arrived in London 24 September 1942, collecting a transit cancellation of LEOPOLDVILLE of 3 August 1942 and an undated Nigeria censorship.

It is presumed that the letter was intended to travel on the North Atlantic Pan-American Clipper but got into the wrong bag and crossed the South Atlantic on the Pan-American flight to Leopoldville. When it arrived at Leopoldville, there then not being an air service to Europe, it was returned to the American plane and travelled back to Bathurst, where the service called on its way back to Trinidad, Miami and Washington. The letter was censored in Nigeria, presumably to avoid its censorship when it arrived in England.

R. H. KEACH

PORTRAIT ISSUES 1886 & 1887

(The following notes were prepared by Geoffrey Wood for a presentation at the Bristol Meeting in 1981. He was prevented from doing so and they are now being published for our membership.)

In 1929 reprints were made from all the original dies and stereotypes in the Belgian Postal Museum of the Belgian material and distributed to various high ups in the Ministry, the Postal Museum and others. Some of these have since got on the market. I know of no such reprints of the Congo material. Were any made?

1886. There were no essays for this issue since the designs were based on the 1869 issue of Belgium. The 5Fr was adapted for the 5c, 10c, 15c (postal stationery) 5Fr, the 25c for the 25c and 50c for the 50c.

Some of the die proofs are illustrated in Balasse Magazine No. 247, Dec. '79.

Willy Grubben only lists Die Proofs for the 5c and 15c and Plate Proofs (2 colour trials) for 50c.

In the Postal Museum there are dies for the 5c, 10c, 25c, 50c and 5Fr apparently of copper. All the impressions of these dies were surrounded by a white frame and then a black frame, each about  $1\frac{1}{2}$  - 2 mm wide, similar to the illustrations in the Balasse Magazine; these were referred to as "Coins-Galvanos".

There were also planches d'impression and these were all of 50 subjects. That for the 5Fr was an electrotype of 50 which was screwed on to a wooden base. For the values 5c, 10c, 25c and 50c, the first 40 subjects were in blocks of ten but nos. 41-50 were in separate stereotypes. In each case the 50 items were let into a block of wood

so that one had a printing base of 50 subjects.

One wonders if the missing blocks of 10 for these four values were those used for the "Lenoir" reprints, and are they still in existence?

Why was a different method used to make the printing base of 50 for the 5Fr to that used for the other values? Was it because the panes of 50 of the four lower values had been completed and that the 5Fr was an afterthought, or was it done to improve centring?

A feature of this issue is that although only one pane of 50 subjects was used to print the stamps, the stamps were printed on paper that would take 150 subjects.

This is probably because the sheets were perforated by a harrow machine.

Balasse Magazine No. 247 illustrates a complete sheet of the 5Fr with blank panes on either side.

Furthermore many of the sheets have a marginal inscription which does not relate to the Congo stamps which are printed on it. The marginal markings would repay study. Again in Balasse Magazine No. 247, it is noted that there is a pair of the 5Fr with the inscription TIMBRES POSTE in the top border, the inscription would appear to be similar to that used for the 1887 issue.

The unrelated numbers would refer to sheets of 150 items for values 10c, 20c, 35c and 40c, but what?

I have always thought that the "Small Heads" of Greece would help us with the study of these stamps. It would be useful to see the material in the Greek Postal Museum.

Sir John Wilson was of the opinion that the quadrille paper was due to the blanket used in the printing press. Quadrille paper occurs in the "Small Heads".

It should be noted that the 50th stamp in the pane of the 10c is a substituted cliché.

The stamps are usually badly centred; two facts contribute to this. The harrow perforation: the lines did not correspond with the gaps between the rows of stamps and the spacing between the report blocks is not always regular.

I think it likely that the dry circle on the 18th stamp, Pane III, occurred during the perforation process. Have sheets been turned round and does it also occur on 33rd stamp, Pane I?

It was the custom to use colour trials made from plates of a previous issue in deciding the colours of a new issue.

I still think it probable that two panes of 50 of the 50 cent were used. I can think of no other reason for the first 0 in Congo being damaged on the 5th stamp (page 41 & 42 of Du Four). Are any colour trials known with CUNGO, or alternatively with the 5th stamp without the variety? Examination of the material in the Postal Museum might help.

The Lenoir reprints are of philatelic importance since they are taken from original report blocks.

The difference in size could be due to shrinkage of material used for the mould before the electrotpe was made for the printing base.

There seem to be many varieties of the 50c not listed. Possibly it could be plated, one should concentrate on cliche varieties.

1887. Random notes.  
Steps in production  
Die  
Report Block

Three separate panes of 50 - this is proved by misalignment, this is another cause for badly centred copies.

It should be possible to reconstruct the plates for this issue.

The ideal would be to establish a distinguishing variety for each block of 10, or better still each stamp in plate.

It should be stated that doubling is not uncommon in surface printed stamps.

The numbers on the sheets are of importance as they give an indication when the sheet was printed. As the sheets were of 150 subjects, one would expect the numbers printed to be a multiple of 150.

In his article on the Lenoir reprints of the high values, Rene Poncelet is not always accurate in his details.

GEOFFREY WOOD

#### KATANGA 1908 - 1910

Following Abbe Gudenkauf's interesting Bulletin article in issue No. 44, Mr. W. H. Hoyte writes:

I have a picture postcard sent from Elisabethville franked with 2 x  $\frac{1}{2}$ d British South Africa Company stamps (i.e. Rhodesia), cancelled NDOLA 1 January, 1909, to Brussels. I have also been sent a photo of a card from LUKAFU (?) - a British South Africa stationery card cancelled KALUNGWIZI (on Lake Mweru) May, 1899, to Belgium.

#### FULL CIRCLE PROTRACTORS

A small supply of these has been purchased through the good offices of the Hong Kong Study Circle. Such a protractor is essential to any student of the cancellations of the Belgian Congo, as the definitive book listing these, by our own members A. I. Heim and R. H. Keach, uses 360 degree angular measurements for classification of the different marks. Although the new protractors are simply on flexible acetate, this is reflected in the price, 50p plus postage to members of the Study Circle from the Secretary.