

## PERFIN DIE CONFIGURATIONS – 1868 - 1880

Joseph Sloper applied for his first patent for the perforation of documents as a means of identification and security in 1858. For the next ten years he mainly produced machines for cancelling cheques and receipts. It was not until 1868 that Sloper was



Single headed machine  
S0010.07 – S – Used 1912 - 1940

granted permission to perforate postage stamps as a means of preventing theft. Although in general many customers were happy with a machine that would perforate only one stamp at a time, larger users of stamps such as the Great Western Railway needed larger machines. In this early period of perfin Sloper experimented with numerous sizes of machine.

During the early Victorian period stamps had four corner letters which means that the location of any variation of the perfin die can be determined. Using the location of pin varieties the size of the machine can often be determined.

There are nearly 1370 perfin dies found on the line engraved issue. Many of these dies are very rare and there is no way that the configuration of the die will ever be known. However it has been possible to work out the likely configuration for over 40% of the dies in this period.



6 x 1 Machine with die B.E. - B2320.02aM.  
Used 1939 - 1946

The table below shows what has been found so far. You'll note that at this time Sloper had not developed his 12 die treadle perforator, so the largest machine was still only 6 x 1.

## DIE CONFIGURATIONS – 1868 - 1880



Single headed machine  
S0010.07 – S – used 1912 - 1940



Single headed machine for producing  
advertising label JS/Co



Cummins – 10 headed machines



6 x 1 Machine with die B.E. - B2320.02aM.  
Used 1939 - 1946



Sloper 4 x 1 machine SM/C  
used 1947 - 1974 in Hong Kong



Hurlin – 12 headed treadle machine  
HM/SO – H5200.01M

## DIE CONFIGURATIONS – 1868 - 1880



1 x 1



2 x 1



3 x 1



4 x 1



6 x 1



1 x 2



2 x 2



3 x 2

Die Configuration	No. of Dies	%	Earliest Date		
			Customer Dies	Customer Die No.	Sloper In House
1 x 1	271	48.6	13/05/1868	No. 2609	-
1 x 2	40	7.0	28/03/1868	No. 2607	12/05/1870
2 x 1	22	3.9	01/03/1870	No. 2666	03/11/1871
2 x 2	3	0.5	-	-	17/12/1873
3 x 1	34	6.1	11/12/1869	No. 2676	18/07/1870
3 x 2	2	0.4	-	-	14/12/1869
4 x 1	37	6.6	12/05/1870	No. 2734	28/06/1868
6 x 1	150	26.9	-	-	04/03/1869
Total	559	100.0			



CONFIGURATION OF DIE C5360.01 – C/N.H – 1 x 1



Column A



Column B



Column C



Column D



Column E



Column F



Column G



Column H



Column I



Column J



Column K



Column L



186



170



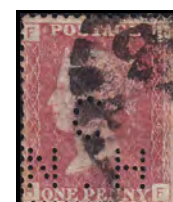
205



169



187



154



181



156



177



177

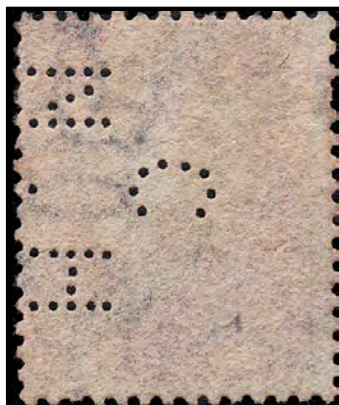


210



140

This die is Sloper m/c No. 4280, which was fitted with a single headed die and completed July 17<sup>th</sup> 1874.  
 Inspection of actual copies shows no discernable difference between strikes and the existence of both vertically and horizontally struck perfins all confirm a single headed die.



CONFIGURATION OF DIE F3110.01 – FOX – 1 x 1



Column A



Column B



Column C



Column D



Column E



Column F



Column G



Column H



Column I



Column J



Column K



Column L



162



148



163



134



198



213



199



202



177



181



186



146



Plate 202 1J/JJ



Plate 204 AC/BC



Plate 204 AE/BE



CONFIGURATION OF DIE F0330.02 – F.B.&Co.. – 2 x 1



Column A



Column B



Column C



Column D



Column E



Column F



Column G



Column H



Column I



Column J



Column K



Column L



218



198



194



183



190



200



207



212



184



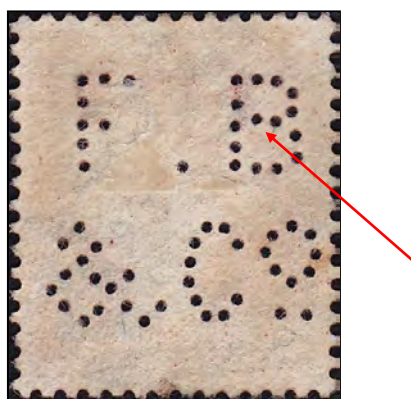
199



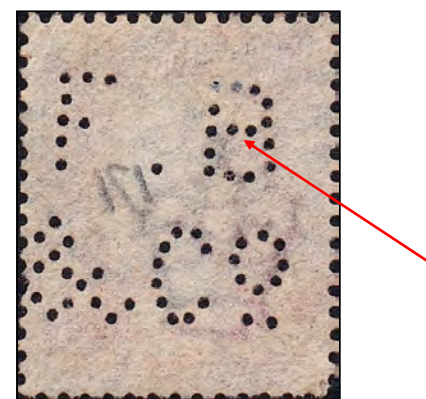
170



215



Columns A,C,E,G,I,K



Columns B,D,F,H,J,L

The angle of the centre bar of the "B" is either 'downhill' to the right (columns A,C,E,G,I,K) or horizontal (columns B,D,F,H,J,L).

CONFIGURATION OF DIE C5680.04 – COX – 2 x 1



Column A



Column B



Column C



Column D



Column E



Column F



Column G



Column H



Column I



Column J



Column K



Column L



185



178



167



197



210



170



183



206



193



180



215



168



Position 1



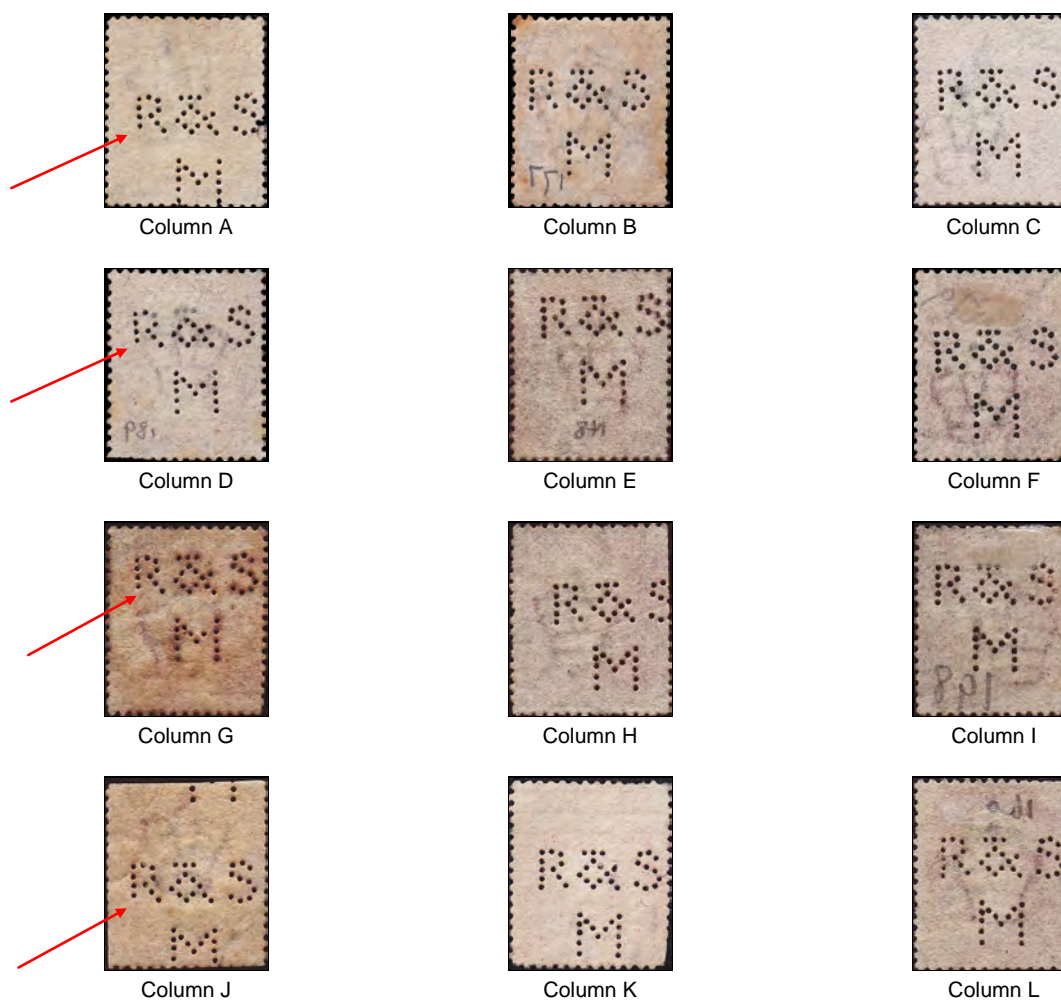
Position 2



2 x 1 evidence



CONFIGURATION OF DIE R4870.02 – R&S/M – 3 X 1



Die R4870.02M has been determined to have probably had a 3 x 1 configuration. A key characteristic is a pin break in the "R" found in the 'A', 'D', 'G' and 'J' columns. This pin break has been found on the following stamps.

1d 156 (ND), 170 (GG), 174 (JG), 174 (SA), 179 (AJ), 189 (SD), 193 (PG), 195 (GA), 197 (PJ), 204 (PJ)



CONFIGURATION OF DIE C7220.01 – CS/SA/L – 3 x 1



A broken pin in the 2<sup>nd</sup> "S" found in the 'C', 'F', 'I' and 'L' columns, this has been found on the following stamps.

1d 117 (BK), 145 (DK), 145 (BE), 151 (OE), 151 (CK), 152 (JH), 157 (KE), 158 (OK), 161 (PE), 163 (SH), 172 (RE)

A second characteristic is broken pins in the "C", 2<sup>nd</sup> "S" and "L" found in the 'A', 'D', 'G' and 'J' columns. These pin breaks have been found on the following stamps. 1d 117 (DG), 130 (SG), 149 (GG), 152 (KA), 158 (OG), 161 (DH)

CONFIGURATION OF DIE J4090.01 – J&I/B&G – 4 x 1



Column A



Column B



Column C



Column D



Column E



Column F



Column G



Column H



Column I



Column J



Column K



Column L



191



199



127



127



163



140



198



111



212



184



149



160



Die J4090.01M is thought to have had a 4 x 1 configuration. A broken pin variety is found in the "G" in th "B", "F" & "J" columns in the later stages of the die. This pin break has been found on the following stamps.

1d 179 (CF), 179 (QF), 181 (HB), 184 (RJ), 187 (DJ), 192 (LB), 193 (GF), 197 (MB), 199 (JB)  
2d 13 (PJ)

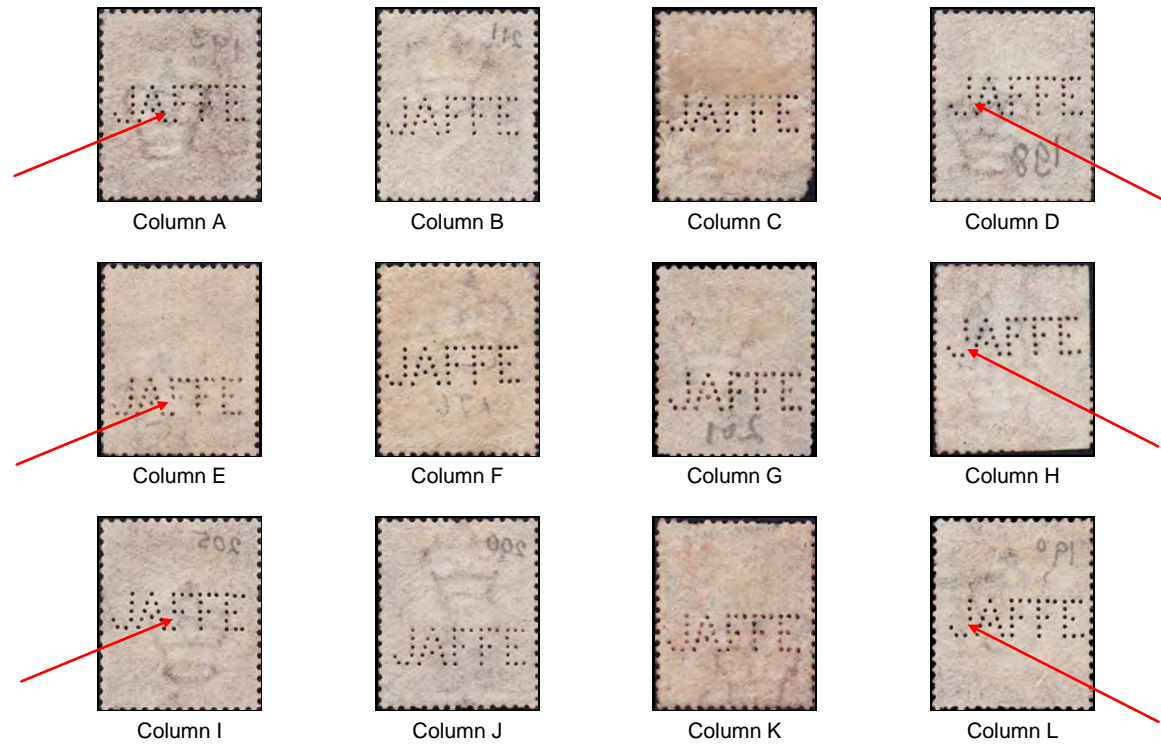
A second broken pin variety is found in the "&" in th "A", "E" & "I" columns in the final stages of the die which support the 4 x 1 configuration. This pin break has been found on the following stamps.

1d 200 (JA), 202 (PA), 223 (QI)





CONFIGURATION OF DIE J0170.01 - JAFFE - 4 x 1



Die J0170.01M has been determined to have had a 4 x 1 configuration. The four die positions are shown above. A key characteristic is a pin break in the "F" found in the 'A', 'E' and 'I' columns. This pin break has been found on the following stamps.

1d      174 (JE), 187 (OE), 189 (PI), 193 (FE), 193 (OI), 194 (DE), 200 (QI), 200 (OE), 200 (GI), 205 (CE), 205 (AI), 205 (OE), 205 (KE), 210 (BI), 210 (TA), 210 (TI), 214 (AI), 214 (LE)

A second key characteristic is a pin break in the "J" found in the 'D', 'H' and 'L' columns. This pin break has been found on the following stamps.

1d      170 (RL), 176 (TL), 189 (BH), 190 (PL), 193 (SD), 198 (HL), 200 (BH), 200 (OD), 202 (BD), 205 (CH), 205 (FL), 207 (RH), 210 (JD), 214 (OL), 214 (ND), 216 (JH), 216 (LH)



CONFIGURATION OF DIE I1220.01 – I.H.S.&Co – 6 x 1



Column A



Column B



Column C



Column D



Column E



Column F



Column G



Column H



Column I



Column J



Column K



Column L



154



129



131



219



171



139



157



192



166



185



205



150



Die I1220.01M has been determined to have had a 6 x 1 configuration. The six die positions are shown above. A key characteristic is a pin break in the “&” found in the ‘A’, and ‘G’ columns. This pin break has been found on the following stamps.

1d 145 (SA), 145 (QA), 147 (EA), 158 (LG)



A second key characteristic is a pin break in the “H” found in the ‘D’, and ‘J’ columns. This break is only found on later plate numbers. This pin break has been found on the following stamps.

1d 212 (TJ), 217 (KJ), 217 (PJ), 219 (MD),



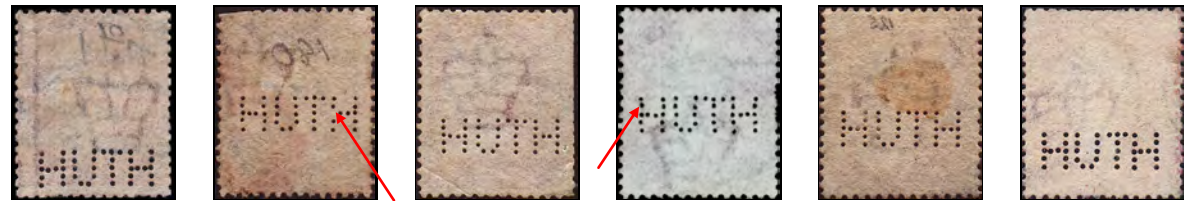
A third key characteristic is a pin break in the “o” found in the ‘F’, and ‘L’ columns. This break is only found on later plate numbers. This pin break has been found on the following stamps.

1d 129 (OL) 2d 14 (KL)

There may be two dies represented by this die number.



CONFIGURATION OF DIE H7490.02 – HUTH – 6 x 1



Column A

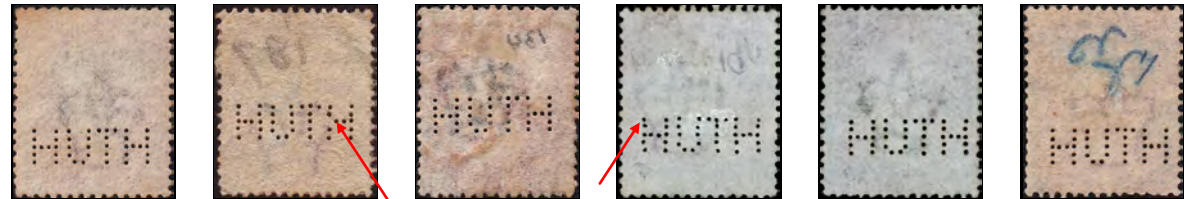
Column B

Column C

Column D

Column E

Column F



Column G

Column H

Column I

Column J

Column K

Column L



165

187

212

146

119

148



166

193

134

218

122

197



Die H7490.02M has been determined to have had a 6 x 1 configuration. The six die positions are shown above. A key characteristic is a pin break in the second "H" found in the 'B', and 'H' columns. This pin break has been found on the following stamps.

1d 150 (HB), 150 (DH), 175 (MH), 178 (OB), 180 (KB), 181 (IH), 184 (TH), 187 (EB), 193 (TH), 197 (RB), 201 (JB), 205 (FB), 209 (KB), 217 (CB)



A second key characteristic is another pin break in the second "H" found in the 'E', and 'K' columns. This pin break has been found on the following stamps.

1d 150 (BK), 151 (SK), 157 (DK), 162 (QE), 163 (QK), 169 (LE)

CONFIGURATION OF DIE M0810.01 – MBW – 6 x 1



	A	B	C	D	E	F	G	H	I	J	K	L
A												
B										●		
C												
D												
E												
F												
G												
H				●						●		
I				●								
J												
K				●						●		
L												
M										●		
N												
O				●						●		
P										●		
Q												
R												
S				●								
T												

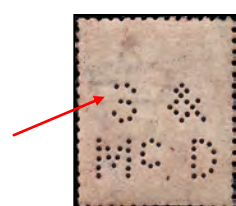
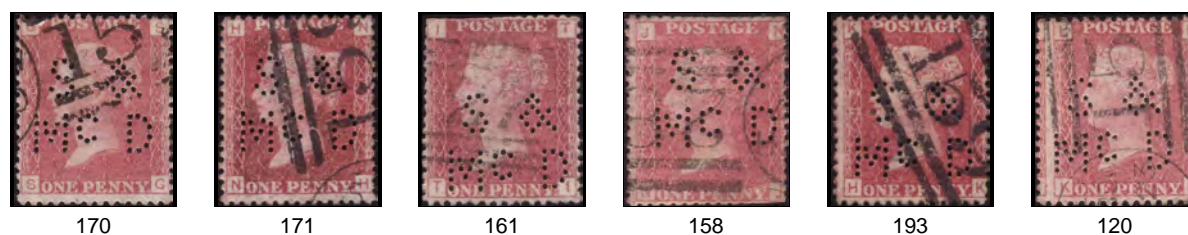
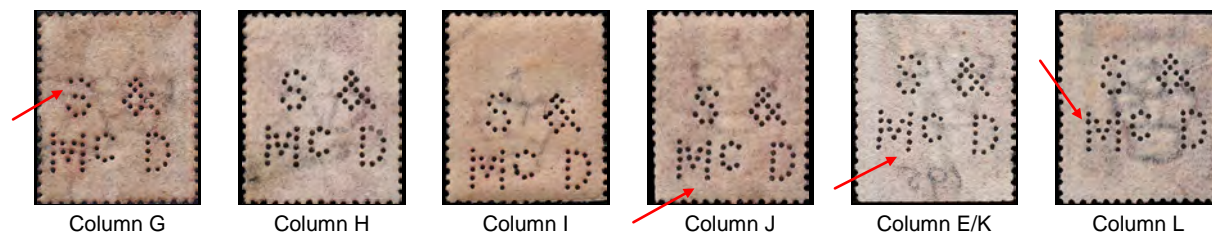
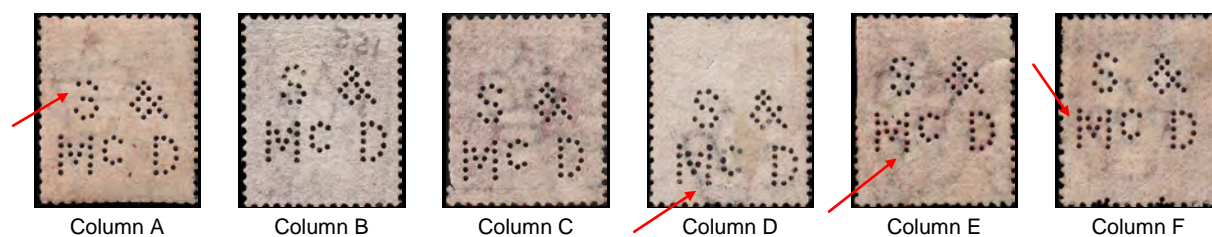
Die M0810.01M has been determined to have had a 6 x 1 configuration. The six die positions are shown above. A key characteristic pin break in the "B" found on stamps in the "D" and "J" columns. This has been found on the following stamps.

- ½d 11 (NP), 15 (ID)  
 1d 139 (PJ), 146 (DJ), 147 (KJ), 165 (ED), 169 (PJ), 174 (BJ),  
 174 (SJ), 176 (AJ), 176 (CD), 176 (FD), 178 (QD), 179 (GD),  
 182 (KD), 188 (AD), 192 (JJ), 194 (HJ), 199 (ND), 203 (HJ),  
 203 (MJ), 213 (MJ), 218 (HD), 218 (SD), 224 (OD)  
 2d 15 (HD)

On Plate 117 (LD) and 134 (QJ) the pin is not broken so the pin break probably occurred around 1878.



CONFIGURATION OF DIE S4850.01 – S&/McD – 6 x 1



Die S4850.01M has been determined to have had a 6 x 1 configuration. A key characteristic is a pin break in the "S" found in the 'A', and 'G' columns. This pin break has been recorded on the following stamps.

1d      140 (IG), 179 (JA), 179 (NG), 187 (IA), 190 (PG), 194 (NA), 203 (QA), 206 (SG),  
213 (MA), 216 (MA), 217 (MA), 217 (PG)



The large area occupied by the warehouse of Stewart & Macdonald between Buchanan Street, Argyle Street and Mitchell Street is shown in this 1880's engraving. At the time the warehouse had no fewer than thirty-four departments, mostly related to the drapery trade. The firm was established in 1826 by the partners Robertson Buchanan Stewart and John Macdonald, and by the end of the 19th century the company was exporting to markets worldwide. The First World War brought about a decline in trade and in 1922 it merged with J & W Campbell to become Campbells and Stewart & Macdonald Co, based in Ingram Street.



CONFIGURATION OF DIE C0960.04 – C&B/SOHO – 1 x 2

	Column A	Column B	Column C	Column D	Column E	Column F	
Odd Row							Odd Row
Even Row							Even Row
	Column G	Column H	Column I	Column J	Column K	Column L	
Odd Row							Odd Row
Even Row							Even Row
		Odd Row	Sloping central bar	Flat central bar	Even Row	Closer pins in "B"	
	103	106	151	86	111	136	
	105	147	138	166	157	114	



CONFIGURATION OF DIE D4780.01 – DT&F – 1 x 2



Column A



Column B



Column C



Column D



Column E



Column F



Column G



Column H



Column I



Column J



Column K



Column L



146



198



194



203



181



216



190



183



165



147



146



209

Design "1"



The die appears to have two distinctive designs. The design shown here is characterised with closely spaced pins in the leg of the ampersand and a distinctive kink in the curve of the "D". This design appears mainly in the odd rows of the sheet although it can also be found in the even rows.

Odd Rows - Plate 122 (QE), 151 (SI), 164 (KL), 165 (MI), 175 (SL), 187 (OE)

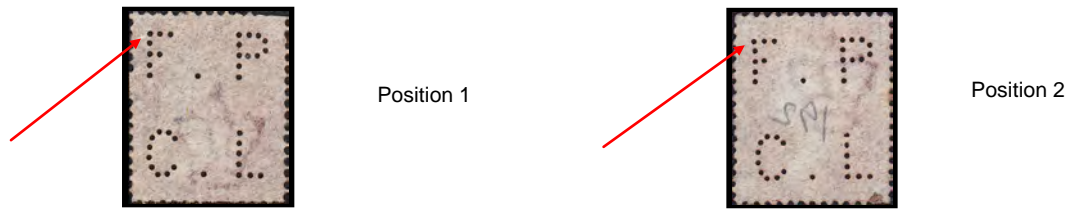
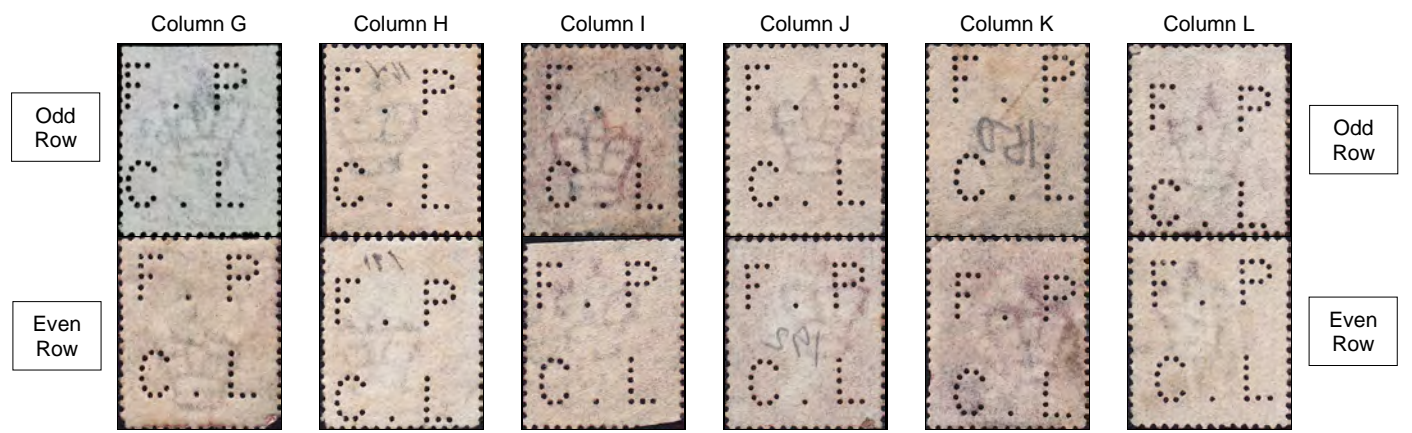
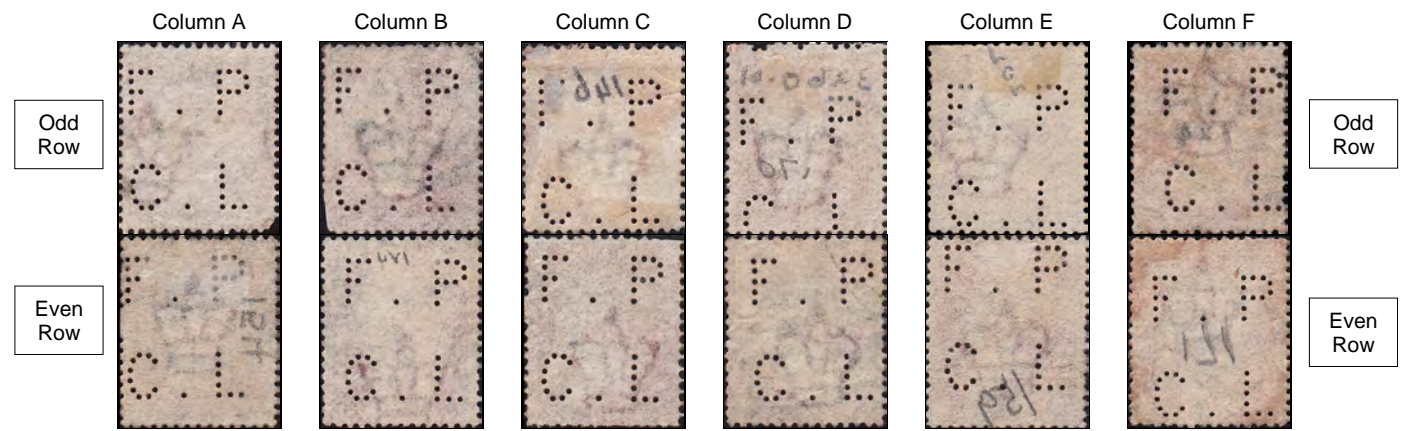
Plate 1 (KG), 3 (AA)

Even Rows - Plate 174 (BH), 175 (TH), n/k (FA)

Design "2"



CONFIGURATION OF DIE F3260.01 – F.P/C.L – 1 x 2





CONFIGURATION OF DIE D4390.07 – D&S – 2 x 2



Column A



Column B



Column C



Column D



Column E



Column F



Column G



Column H



Column I



Column J



Column K



Column L



152



184



193



173



203



208



189



160



204



167



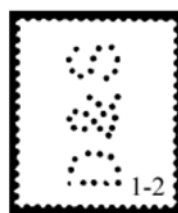
197



185



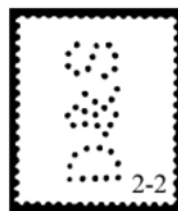
170 (FE)



152 (FA)



192 (QI)

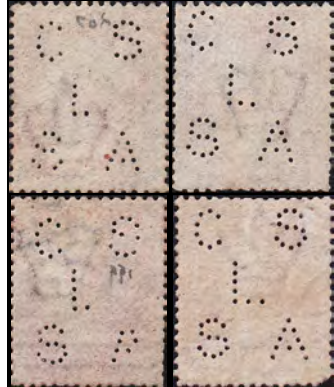


150 (BE)

Four distinct designs have been identified. All four types can be found in all positions on the plate due to the random striking of the die. Copies are often only partial and can be found inverted, horizontal or vertical.

CONFIGURATION OF DIE C7140.04A – CS/L/SA – 2 x 2

Column A  
Odd Row



Column A  
Odd Row

Column B  
Odd Row



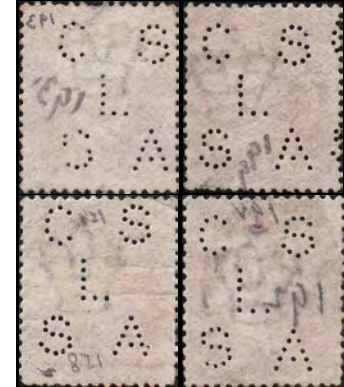
Column C  
Odd Row

Column D  
Odd Row

Column C  
Odd Row

Column D  
Odd Row

Column E  
Odd Row



Column F  
Odd Row

Column E  
Odd Row

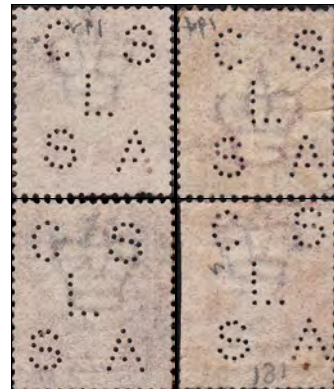
Column F  
Odd Row

Column G  
Odd Row



Column G  
Even Row

Column H  
Odd Row



Column H  
Even Row

Column I  
Odd Row

Column J  
Odd Row

Column I  
Even Row

Column J  
Even Row

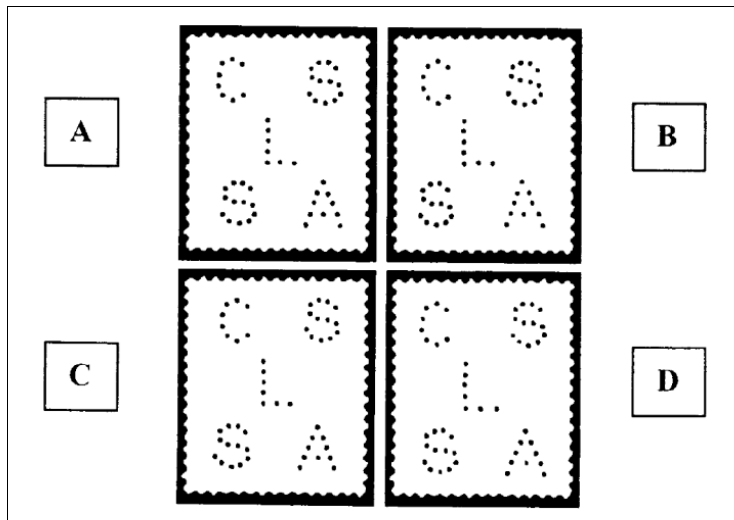
Column K  
Odd Row



Column K  
Even Row

Column L  
Odd Row

Column L  
Even Row



Odd Column  
Odd Row

Even Column  
Odd Row



Odd Column  
Even Row

Even Column  
Even Row



CONFIGURATION OF DIE E2680.01 – ELEY – 3 x 2



Column A



Column B



Column C



Column D



Column E



Column F



Column G



Column H



Column I



Column J



Column K



Column L



158



147



120



109



102



134



152



176



129



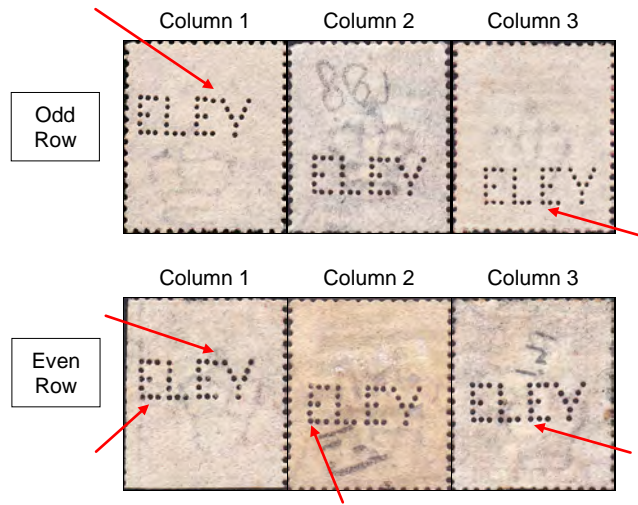
141



177



110



The exact position of the six strikes can only be confirmed with blocks.  
The six positions on the machine were probably as shown here.