SAPPDIRE

This book has been generated from a scan of the original and we cannot guarantee that it is free from errors or contains the full content of the original.


This compilation<br>copyright © Sapphire Publications Ltd

STRICTLY NOT FOR RESALE OR REDISTRIBUTION

## THE

## LINE-ENGRAVED POSTAGE STAMPS OF GREAT BRITAIN PRINTED BY PERKINS, BACON \& CO.

13Y<br>EDWARD DENNY BACON, M.V.O. (President of the Royal Philatelic Society:<br>Lonvor).

A HISTORY OF THEIR PRODUCTION DURING THE FORTY YEARS1840 10 I880-MAINLY COMPILED FRON THE RECORDS
of the firm, with tife Assistance of MR. JAMES DUNBAR HEATH, MANAGING DIRECTOR.

With Fifteen Plates of Collotype and otier Illustrations.
IN TWO VOLUMES
VOL. I.

Published by
CHAS. NISSEN \& CO., LIMITED.
63 High IIolborn, London, W.C.i.
(All Rights Reserved)
1920

## FOREWORD.

By J. D. HEATH.

For some time past I have felt that it was my duty as Managing Dircctor to arrange, white the opportunity offercel, for the publication of an authentic, or, as I may call it, an official account of the production of the British postage stamps produced by the firm now knoten as Perkins, Bacon \& Co., Limited. For the bencfit of philatelists, both presentday and more particularly of the future, it secmed filting and, indeed necessary, that the information conlained in our records, dating from before ISfo, and now fortunatcly arailable for reference, should be siven to the public, so that the many questions as to which philatelisls are still divided in opinion should be sellld, so far as possible, once and for all.

With this object in view, I had arranged with my friend, Mr. E. D. Bacon, to whom the records of Perkins, Bacon \& Co. were already as an open book, that I should collaborate with him in producing the book; but the daily round of a somochat cxacting business, rendered the more exacling by the stremuous time that our country has just passed Through, allowed me no time for performing my share of the work. Mr. Bacon. by undertaking single-handed the wolole of the research and literary work required, has not only relieved me of my difficulty, but earned the thanks of all philatelists interested in the history of the "Mother of Postage Stamps," for reithout his unselfish devotion, the history in its present complete form could never have been written.

It has been to him, I know, alabour of love; nerertheless, his antiving industry, extending over a period of more than len years, merits suitable recognition from those who will reap the bencfit of his labours.

So far as the records of the firm were concerned, no stone wers left unturnct, no letter or document that could be found in any u'ay bcuring on the subject left unexamined. and no fact recorded or statement made that could not be sutported by cvidence considered satisfactory, and in many cases information derived from other sources was obtained in corroboration, and, on difficull lechnical questions, the opinions of our cxperts were alworys considerad.

I think, therefore, that this historical account can be put forth withoul hesitation as Perkins, Bacon \& Co.'s official record of their Great Britain postage stamps, written by

Mr. Bacon by their express wish, and with their full anthority, and, white glad that my debt in this matter to philatelists is paid, I express my decp gratitude to him teho has cnabled me to pay it.

The publication of the history in celebration of the Jubilee of the Royal Philatclic Socicty, Lonton, which occurred in A pril 1919 is very opportume: for it scems cqually appropriate that Perkins Bacon \& Co. should in the same way merk their centenary vear-19I9-by assisting the President of that Socicty in giving to the Philatelic World a record, as faithful as it is possible to make it of what may be considered the firm's greatest achievement, one which, while creating the very foundation upon which the Science of Philately has been buill up, will I believe remain in the memory of mankind so long as the present Postal Services of the World remain. I feet therefore, most thankflet that we hare been able, in the face of many difficulties to complete the work at this time and I acknoactedge reith loyal gratitude the appreciation of our labours by His Majesty the King, shown by his gracious permission to dedicate the history to him.

With this bricf foreword, I will commend our woork to the Philatelic World, merely stating that zehile responsible for what is zeritten any omissions there may be are beyond our poacer to rectify, as they are due to the absence of the necessary records.

## PREFACE.

The reader who consults this book will doubt less expect to find some definition of its scope and aim. The two standard volumes on the stamps of Great Britain, ${ }^{1}$ to which frequent reference will be found in our pages, deal with the whole of the values and varieties of the postage stamps issued in the country. The present work is designed to give the history of the production of the first adhesive postage stamps ever issued, with an account of the other British line-engraved stamps printed by the honse of Perkins Bacon throughout the period of forty years from 18 to to 1880 , during which the firm held contracts for the supply of Postage stamps to the Government.

The account is written on different lines to those of the two works we have mentioned, inasmuch as it is compiled from a comparison of the records of the printers with other sources of information, and a study of the Essays, Proofs and Specimens of the issued stamps that are known to collectors.

Our story opens with the passing of the Act for establishing a Reduced and Uniform rate of Postage, which received the Royal Assent on August 17th, 1839, and particulars are given of the competition and prizes offered by the Treasury in the following month for suggestions and designs for the stamps.

We record the negotiations that took place between Rowland Hill and Henry Cole and Perkins, Bacon \& Petch, which resulted in the firm obtaining the Contract for the supply of the adhesive postage stamps and we add a short biography of the firm from its foundation in 1819 to the present day, followed by an account of the "Perkins" process of printing from line-engraved plates.

We then give in chronological sequence, as far as possible, a detailed narrative of the production of the stamps during the years $1840-80$, including a description of all the known Essays and Proofs of the dies and plates, and the various watermarked papers, gumming and perforations used for the stamps.

An account of the experiments made in 1878-79 for lighter and more fugitive colours for the stamps follows, with a description of the Essays for surface-printed stamps which were submitted by the firm to the Board of Inland Revenue in 1879-80.

At the end we have added a "Reference List with the dates of issuc of the different varieties of the stamps" in order to help those collectors who may desire to make use of it in the arrangement of their specimens of Great Britain stamps.

The scope of the work has not permitted the treatment in any extended form of the varieties found in the corner lettering of the stamps, nor of the subjects of what are known to collectors as "re-entries," "retouches," et loo genus omne; and the same remark applies to the making up of sheets of stamps from the first cleven and subsequent plates of the One Pemy and those of the other values. There is ample material on these points alone for a separate treatise, and we only draw attention to a few of the more salient varieties, as examples of the classes to which they belong. But

[^0]although it was necessary to restrict our notes on these subjects, a description is included of the way the varieties occurred, and the technical means adopted by the printers in their treatment of them.

Comparatively few commercial houses have retained their correspondence and account books for so long a period as eighty years as Perkins, Bacon \& Co. fortumately have done. Owing, howewe to the removal of the Company's business from ong. Fheet Street to Southwark Bridge Buildings in 1904, it is not surprising that their old records have got a good deal out of order. The extracts given in the Appendices and other researches connected with the printing and production of the stamps have not, therefore, been found in the chronological order in which they are arranged, but have been collected piece by piece irrespective of the date. In a few instances no particulars are available of certain minor details, dear to the heart of a collector, owing to the documents being missing, such as the letters received by the firm in the year $18+\mathrm{r}$. which, with the exception of a few odd letters, lave apparently been lost. In the case of the letters written by the firm during the first twenty years or so of the period under review, several of the copies in the books have become undecipherable through age, but an application of a solution of tamnic acid has generally been effectual in restoring them to a readable form, even when the witing had to all appearances faded entirely away. In swme instances, where no particulars could be found, the lack of records is in all probability due to the fact that documents never existed, as many proposals, instructions and alterations were settled at personal interviews and no correspondence passed concerning them.

We acknowledge with loyal and dutiful gratitude the honour the King has conferred upon us in graciously granting us permission to dedicate the Work to him. The illustrations are in mearly every instance reproduced from specimens in his superb collection of the stamps of Great Britain, and we are thus once again beholdern to His Majesty for his gracious assistance by allowing us to make use of the specimens for this purpose. Nlany of them are of the highest degree of rarity, no other copies being known to have survived to the present day. In the description of the specimens given in our pages we refer to their provenance and make use of the title the "Royal Collection " to designate their present resting place.

Our grateful thanks are due to Mr. G. J. C. Taylor and Mr. A. E. Fisher, the heads, respectively, of the engraving and transferring departments of Perkins, Bacon \& Co., Limited, who have taken a lively interest in the compilation of the book, and have furnished us with valuable information on technical details peculiar to the line-engraved process of printing.

We are also much indebted to Mr. James V. Dixon, the head of the countinghonse department of the Company, for the assistance he has rendered us in our searel through the old records of the firm, which would have been still fur ther protracted but for his help in finding the papers and books we required. We owe him thanks, too, for the carefully typed copies of the work he has been good enough to make and which have been of great service to us.

With these few words of preface we take leave of the book expressing a hope that the contents may be found of some interest and service to collectors and craving indulgence for any defects there may be in the composition.

E. D. BACON.

## CONTENTS.

## VOLUME I.

PAGE
PreliminariI
Tife Act for Establishing a Reduced and Uniform Rate of Postage of 1839 ..... 2
Prizes Offered by the Treasury for Suggestions on thie Use of Postage Stamps .. ..... 3
Negotiations of Rowland Hill and Herry Cole with Perkins, Bacon and Petch fron July to November, I839 ..... 3
Result of the Treasury Competition .....  .. .. 4
Rowland Hill and William Wyon, R.A ..... 7
Tife Fira of Perkins, Bacon \& Co., Limited . ..... 8
The Perkins Process of Printing from Engraved Plates ..... II
Negotiations of Rowland Hill and Henry Cole witi Perkins, Bacon \& Petch in December, 1839 . ..... 13
Henry Corbould's Drawing of the Queen's Head for the Stamp ..... If
The First Experinents for the Background of the Stamp .....  .....  $\mathrm{I}_{4}$
Tife First Die for the One Penny Stamp ..... 16
Tife Engraver of the Queen's Head ..... 16
Continuation of the History of the First Die for tiee One Penny Stamp ..... 19
Experimental Die for the One Penny Stamp ..... 21
The Second Die for the One Penny Stamp. .....  .. .. ..... 24
Proofs and Sketches of the Die sent to Rowland Hill ..... 26
Colour Trials for the Stamps ..... 27
The Colours Selected for the Stamps ..... 27
Trial Obliterations for the Stamps ..... 28
Experiments for the Labels at the Top and Bottom of the One Penny Stanip ..... 28
Tie Water-colour Sietches of the Stamps in the Royal Collection . ..... 29
Continuation of the History of the Second Die for the One Penny Stamp ..... 30
Recapitulation of the Various Known Stages of Exgraying of the Second or Actual. Die Used for the Stamps ..... 31
Impressions Taifen from the Die in 187 I ..... 31
Tile First Governament Contract ..... 32
Later Contracts with the Government ..... 34
The " Small Crown " Watermarked Paper for the Stamps ..... 36
Tile Gumaing of tie Stamps ..... 48
The Plates for the One Penny and Two Pence Stamps ..... 55
The Lettering of the Plates for the One Penny and Two Pence Stamps ..... 61
PACre
Mistajes made in Insierting the Letters ..... 62
Tue Differext Types of lettering, cosed for the Plates ..... 6
The Margical Lascription on the Phates of the One Penvy Stamps ..... 6
The lievgth of thme it toon to make a Plate . . ..... 6
The Pristing of the ()we PenNy black stamps ..... ${ }^{6}$
The: "Implinatr'r" Shei:TS ..... 128
The: Offichal Warraxts forr Printing the Stamps ..... 69
The date of Issule of the Stamps to the Pebibic ..... 70
The Privting of the Owe Penny black stimps, continien ..... 71
The Profisional Printing of One Pensy black stamps ..... 7.3
The Total Number printed of the One Penny blace stamps .....  74
Rephers to Plates i to íl of the Owe Pexny Stamps ..... 75
The Great Demand for the Sthips nechssitaten their Printhog by Night as weif as by D.ay ..... 79
The One Penty black " Y.R." Stanip ..... 79
The One Pexiv Blue Cofour Trial ..... 8
Tife Two Pexce Value ..... 87
The Rei Ink Used for Obifterating the Stamps ..... S)
Tie Substitution of Black for Red Ink for Oblitteriting the: Stanips ..... 9
Experinents for New Colours for the Stamps ..... 92
Trial Obliterations found on the Experimental Stamps ..... $\mathrm{O}^{6}$
Trial Obliterations Found on the then Current One Pency ani Two Pexce Stamps and the One Penny " V.R." Sthip ..... 96
Continuation of the Experiments for New Colohtrs for the: Stamps ..... 97
Change in the Design of the Two Pence Stamp ..... (10)
Further New Cololtr Trials for the Two Pexce Value ..... Ifir
Experiments for a New Black Obliterating Ink ..... 105
The Issue of the One Penny Red Stamps ..... 107
Tue Issue of Two Pexce Stanis with " White Lives" Added. ..... 108
Tiee Blueing of the Paper caused by thef new Colours of tier Stamps ..... II)
Tile trath printings on " Dichinson " paper. ..... II3
Complant of Badly Printed Stames from Plate 10 of the One Pexny ..... 115
Plates Used for Ordinary Printing before the Registrition of the Imprimatur" Sheets ..... II 6
The Plates used for time One Penny anjo Two Pence Stamps issued in 1845 ..... 117
Repars made to the One Penny Piates ..... 117
Tue Admifion of a Dot and a Vertical hine in the Cupper anj Lowfr Mafgisi of the: Plates ..... IIS
The Two Plates of the One Peniy Numbered " 95 ". . ..... 118
The Abittion of a Star-life Ornament in the Rigitt and Left Side Margins of tile One Penny llates ..... IIS
The Defacement and Destruction of the Plates ..... II9
Removal of tie Rooms for printing the Stamps to anotier part of Prikins, Bacon \& Petch's Premises ..... 120
Tife Printing Presses used for the Stamps .. .. ..... 120
Appointment of a New Revenle Officer to superintend the Printing of the Sthaps
PAGE:
The Invention of Mr. Henry Archer for perforating the Stamps. His FIRST TWO MACHINES ..... I2I
The So-Called "Treasury Rol"lette " ..... 12.4
Mr. Archer's third machine for PerforatiNg the Stamps ..... 124
The Adoption of Perforation for tile Stamps by the Goiernment ..... 131
The Addition of a Cross, etc., in the Upper and Lower Margins of the, Plates ..... I3 4
The " Reserve " Plates ..... 135
Defectite Impressions from Plate 122 ..... 135
Fragins by Patching Stamps ..... 136
Coniplaints of the Printing of the Stanps ..... 136
Fraud by Covering the Stanips with Ggid-Beater's Shin ..... 137
Trial Printing of the One Penny Stamps from Plates that were not Hardened ..... 137
The Making of a Neif Die for tine One Pexiy Stamps ..... 13 K
Proof Impressions of the New Die of the One P'enny Stamps ..... $14: 3$
Reserte Plates a to 6 of the One Peniy Yalde L'sed por Printing Stamps ..... $14^{2}$
Tie Plates made in i $85+55$ from the New Die of the One Penny Valee ..... I 42
Varieties in the Corner lettering, including the so-califd " Gothic K" on some of the Plates of 1855 ..... I 4.3
Corrosion of the Piates ..... 1.4
Trials made to Print the Stamps by Maciunery ..... $1+4$
Irregularity in the Spacing of the Impressions of Plate 13 of tife One Pexiy Value ..... 145
Plates 5 and 6 of the Two Penct. Valee ..... 146
The " Large Crown " Waternarked Paper for the Stamps ..... 140
Trial to Engraye, instead of Punch, the Letters in the Lowfr Corners of the One Penny Stamps ..... 154
Proposal to Number the Rows of Stamps ox the Sheets ..... 155
Plate fi of the One Pexiy Value Reparied ..... 155
The Fire at Perkins Bacos \& Co.'s Printing Works . ..... 155
Alterations to the Jremises of Perkins. Bacon \& Co. ..... 156
Spechene of the Two Pexce Value supposed to be Printed in Black Ink ..... 156
Decision to Insert Letters in all Four Corners of the Stamps ..... 157
Esshy of the One Penvy Value with Letters in the Four Corvers ..... 158
The New Die for the Two Pence Value ..... 155
Proof Lapressions of the New Die of the Two P’ence Stamp ..... 159
The Plates madf from the New Die of the Two Pence in 1858 And 1850 ..... 159
Pi.ate 65 of the One Penty incorrectly laid down for perforation ..... 160
Reserve Plates i5. if and if of the One Pexiy falue used por printheg Stamps ..... IOI
The First Plates made of the One Penny with letters in tie four CORNERS ..... 162
page
No " Imprimatur" Sheets registered of Plates 69. 70.75 and 77 of the One Penvy value ..... 162
The So-called inverted corner letter " $S$ " on the One Penny yalue ..... 165
Tine Date of Issle of the One Penvy stamps with letters in the fold CORNERS ..... 165
The so-called Proof of the One Peniy of is63 ..... 166
Tue Plate Number at the corners of each sheet exclosed within a Circie and the " Current Number" added ox the top and fottom margins ..... 166
The so-called Reprint of the One Pexiy black ..... 167
Experment made of Coating the Sheets of Paper before they were used for Printing ..... I6S
Machine for Danping and Affining Postage Stamps intented by Messrs. Gill \& Bird ..... 168
Names of Firms © \& c., Printed on the Stamps ..... I6S
Proof sheets of One Pency and Two Pexce stamps for the Paris Exhibition of 1867 ..... 169
Expernments for a New blue colour for the Two Pexce stamp .....  170
Plates io, il and 12 of the Two Pexce Valle .....  173
Repairs to Plates of the One Pexiy and Two Pence Stamps ..... 173
Plate llj of the One Penny valle condemned, bi't afterwards ACCEPTED ..... 174
No "Imprinatur" sheets registered of Plates i26 and i28 of the One Pexiy valee ..... 174
Plates i3. itand i5 of the Two Pence valle ..... 175
Imperforate varieties of the One Penjy with letters in the four CORSERS ..... ${ }^{1} 75$
The Last Plate used for the One Penny stanps ..... 176
Reserve Roller of the One Peniy, Three-halfpejce, and Two Pejce stamps for Somerset Hot'se ..... r77
Trials on Paper chemically prepared by Dr. Perkins ..... 177
Proof Sheets printed for the AnNtal Internationil Eminbition at South Kensingtos in 1872 ..... ${ }_{1}{ }^{2} 8$
Alteration in the Crosses on the top and bottom margins of the Plate ..... 179
Forgeries of the One PenNy stamp ..... I79
Officlal Inhtation of the One Pexny stamp ..... I82
The Three-halfpeece Valee ..... 183
Essafs for the Three-halfpence stamp ..... $\mathrm{I}_{1} \mathrm{~S}_{3}$
The Die for the Three-halfresce stamp ..... IS5
Proof Lmpressions of the Die of the Three-hialfpexce stamp .....  186
The first plate for the Thiree-halffence stamp ..... 187
Tile stamp printed in ifoo from the plate of the Thrfe-halfpence ..... ISS
The Issue of Three-haliprence stamps in i8jo ..... ISS
The Cololr of the Three-haliplence stamps of i8jo ..... I89
The Plates u'sed for the Thiee-haifpecice stamps ..... I 89
The W'atermark and Perforation of the Tirree-halfpence stanips ..... r90
Contract for printing the Three-halfpence stamps .. 190
The Halfpensy value ..... I90
Essays and Contract for the halffeñy stanp ..... 190
The Background used for the Halfpeniv stamp .....  193
The Engraing of the Queen's Hean for the Ilalfpeniy stamp .....  . 104
Proof hapressions of tile Die of the Halfpenny stamp .....  I94
The Plates for the Halfpenny stamps ..... 105
The Colour of the Halfpenij stamps ..... I9)
Tile Watermarked Paper used for the Halfpenny stamps ..... 200
The Grdmang and Perforition of the Halfpenny stamps ..... 201
Expermients for Lighter and more liditive Colours for tife stamps ..... 202
Notices to Terminate the Contracts for printing the stamps ..... 205
Essaýs for Surface-printed stamps .....  . 206
Tender for the Supply of One Penny stamps by Surface-printing ..... 208
CONTRACT FOR THE SUPPLY OF ONE PENXY STAMPS By SURFACE-PRINTING, GIVEN TO ANOTHER FIRM ..... 2 IO
Fexperiments for change of colours of the Halfpeniv, Thife-ilalf- pence and Two Pexce values ..... 21 I
Decision to substitute Surface-printed stamps for tile HalfpenNi. Three-halfpexce and Two Pence valles ..... 214
Tender for Surface-printed stamps of Halfpeniy, Three-halfpence and Two Pexce valles ..... 214
Designs for Surface-printed stamps of Halfpenny, Three-haifpences and Two Pence values -. . ..... 215
Contract for Surface-printed stimps of Halfpeniy, Tilree-halfpence, AND Two Pence given to another Fina ..... 217
Application by Perkins, Bacon \& Co. to retain a steel die of the Queen's head visen for the One Penny stamp . . ..... 218
Destrlction of Halfpeniy, Tiref-ihalfpence and Two Pence Plates. . ..... 218
Enquiry by Perlins, Bacon ď Co. regarding a New contract ..... 219
Destruction of the Reserve stock of Dies, Rollers and Plates kept at Somerset House . . ..... 220
Total Numbers issued of the Malfpeñy; One Peñy, Three-ialfpence adid Two Pence stanifs ..... 220
Reference List. witil the dates of Issue of the differext Varieties of the Stamps ..... 222
INDEX . . . . . . .....  230
VOLUME II.
APPENDIX A.
Extracts from Newspapers
APPENDIX B.
Specification of Patext of Jacob Perkins, and Two Advertisementsof Messrs. Perkins, fairman \& Heath on the formation of thefirmi in December, ISI9IO

## APPENDIS C.

E.ftracts from the records of Messrs. Perkins, Bacon \& Co. Limited, AND COPIES OF OTHER DOCUMENTS CONNECTED WITH TIIE DIESIG.NS ANJ Printing of tie Postage Stanfs

APPENDIX D.
Extracts from the records of messrs. Perkins B.icon \& Co. Jimited, AND COPIES OF OTHER DOCUMENTS CONNECTED WITII THE WIAERMARKED P'aper l'sed for the Postage Stamps

## APPENDIX E.

Extracts from tife records of Messrs. Perkins, Jacon \& Co., Limited, AND COPIES OF OTHER DOCUMENTS CONNECTED With THE GUMMiNG of the Postage Stamps

## APPENDIX F .

Copies of Contracts made between the Governalent and the firm of Perkins Bacos

APPENDIX $G_{\text {. }}$
Extracts from the Exgrating Book of Jeriins Bacon .. .. $27^{2}$
. IPPENDIS H.
Number of Stamps priated of the Two Peace, mue, isfo. Plates i AND 2

## APPENDIS 1.

Copifs of INvoices of the deliveries of sheets of the Postage Stamps furnished by Perkins Bacon to the Commissioners of Stamps AND TANES ..$28_{2}$

## APPESDIX J.

Copies of Documents relating to the Perfordtion of the Postage Stamps

## DESCRIPTION OF COLLOTYPE PLATES.

## PLATE I.

(I) Proof impression of a suggested design for the back of a Bank-note submitted to the Bank of England, by Perkins and Heath in 1822 or thereabouts, the central dark band of which shews the background used in I8fo for the One Penny and Two Pence stamps.

Pages 15, $^{2}$ 2I, 172
PLATE 11.
(2) -Obverse of the medal struck to commemorate Queen Victoria's visit to the City of London on Lord Nayor's Day, 8837 , from which the locad of the Qucen was copied for the stamps of 1840 .

Page $\mathrm{I}_{4}$
(3)-Pen and ink sketch made for the stamps by Mr. Wilhiam Wyon, R.A., in 1839. Page 7
( 4 ), (5), (6)-Essays prepared by Perkins, Bacon \& Petch for the stamps of 18 \&o. Pages If, 15
(7), (8), (9), (ro)-Essays prepared by Perkins, Bacon \& Petch for the inscription on the One Penny stamp of IS 40 .

Pages 15, 29
(Ir) -Water-colour sketches of the stamps prepared for Rowland Hill in order to give him a rough idea of what the stamps would look like. Pages 29, 30
(I2)-Essays prepared for the Two Pence value in 18 fo by Perkins, Bacon \& Petch to shew the effect of the introduction of one white line or two white lines above and below the Oucen's head. The words "two pence" are obliterated in each instance.

Page 100

## PLATE III.

(13)-Proof impressions of the First Dic prepared for the stamp, taken after a part only of the head had been engraved.

Page 19
( I ) - Proof impression of the same die taken after the engraving was completed. with the blank spaces round the head filled in with Indian ink and the background surrounding the head darkened by an application of the same ink.

Page 20
(15)-Proof impression of the same die taken after the blank spaces round the head had been filled in by engraving and the background surrounding the head had been made darker by the same process.

Page 20
(16)-Proof impression of the same die taken after the inscription had been added at the foot.

Pages 20, 208
( 17 ) -Proof impression taken from a small plate to which five impressions of Die I and the same number of the background of Die 2 had been transferred.

Pages $24,25,49$
PLATE IV.
(r8)-Proof impression taken from an Experimental Die with the head of Die I and the background of Die 2.

Page 22
(I9)-Proof impression of the background prepared for Die 2 .
Pages $24,26,27,28,31$
(20)-Proof impressinn of the same die after the head had been engraved. shewing the blank spaces left at the back of the chignom and neck.
(Ifhstrations Lios. 27, 28. Plate V. should fullow on here). Page 25. 31
(2I) lerof impression taken from an experimental plate slewing the design of the One Penny stamp reversed.
l'age 55
(22) - Proof impuession of the die of the One Penny stamp taken after the chosses had been inserted in the upper comers and the die was hardened. lages 30.3 I
(23) Specinsen of the One Penny stamp with Plate N"o. " I ."

Page (6)
(24)-Specimen of the One Pemy " V.R." stamp, with llate No. " A." Page so
(25)- Specimen of the One l'enny ted stamp from l'late 77 with the letter " A" not shewing in the right lower comer.

Page 63
(20) - Proof impression of the Retouched Die of the One Pemy stamp taken after the die had been hardened.

Pages Ifo, 208

## PLATE V

(27)-Proof impression of Die 2 after the blank spaces at the back of the head had beem filled in by ergraving. The specimen illustrated has " Ist Pronf," in pencil in Mr. J. B. Bacon's handwriting, in the right upper corner. (This illustration and No. 28 should follow on No. 20).

Pages 25. 3 I
(28)-Proof impression of the same dic after the labels at the top and bettom had heen added, but before the crosses were inserted in the upper comers. The specimen illustrated has "C.H.3d." in pencil in Mr. J. B. Bacon's handwriting, in the right upper corner.
lages 30.3 I

## PLATE VI.

(29), (30), (31), (32)-The types of lettering found in the two lower cornes of the stamps, known as Alphabets I, II, II I and IV.

Pages 64, 65

## PLATE VII.

(33)-Print from small plate with three impressions of the One Pemy value, with a corner of each remosed ; used for colour-trials for the stamps in 18 fo. All three impressions shew the flaw between the leters " 0 " and " $x$ " of the word "one."

Pages 28.93
(34)-Proof from small plate with twelse impressions of the Ore Penne value, made in I8 fo for experimenting purposes, but never used in this form. Page $9+$
(35)-As last, but with a comer of each of the impressions senowed from the plate. In this form the plate was largely used for colom-tials for the stamps in isfo.

Pages 28, $9+$

## PLATE VII.

(36)- l'ont from the last plate described. but shewing flaw in the aght luwer corner of stamp No. In and with trial obliterations.

Page 94
(37)-Print from the same plate after each of the removed comers had been retouched and made more uniform.

Pages 98., 103
(38) Proof impression of the die of the Two Pence stamp. 87
(39) - Specimen of the Two Pence stamp from I'late I. Pages is, sig
(fo) Specimen of the Two Pence stamp from Mate 2 .
Page is
(+1)-Two Essays for a change in the design of the Two Pence stamp; the upper with a white line added above the Queen's had and the lower with two additional white lines, one above and one below the lead. lage ion
(42)-Print from a small plate of all impression of the One Penny: Retouched Die, taken from the roller impression numbered " 75 ," with one of the corners removed. This little plate was used for making coluur-trials for the Two Pence stamp in 1867.

Page 170
PLATE IX.
$(+3)$--Pair of the One Penny, Original Die, perforated 16.
Page 131
(44) -Block of four of the One Penny, Retouched Die, from Reserve Plate No. "Iz," perforated If.

Pag's I3I, I35. 162
(45)-Block of four of the One Penny, Retonched Die, perforated It, with the socalled " Gothic K."

Pages 13I, I 43
(46)-Block of four of the One P'enny, Retouched Die, perforated If with letters in all four corners.

Page 131
(47)-Print from a small experimental plate of twelve impressions of the Two Pence. with white lines above and below the Qucen's head, but without the letters inserted in the lower conners, made in ISti.
lages log, ift
Page 109
( 48 )-Specimen of the Two Pence stamp from Plate 3 .
(49)-Specimen of the Two Pence stamp from Plate 4 . perforated I6. Page 131
(50)-Entire sheet of cight impressions of a trial printing, made in 184 , of the Two Pence on "Dickinson" paper, taken from two 1ows of the experimental plate, illustration No. 47 , after a corner of each of the impressions had been removed.

Page IIt
(51)-Proof impression of the Retouched Die of the Two Pence. Page 158
(52)--Pair of the Two Pence, Retonched Die, perforated It, with letters in all four corners and the plate number "If" in a circle at the left upper comer of the sheet.

Pages 131, 159, 166, 175

## PLATE X

(53) to (58)-Essays of Perkins, Bacon \& Co. for the Halfpenny stamp submitted to the Board of Intand Revemuc in May, $1870 . \quad$ Pages 192, 193
(59)-Impression from an experimental plate of New South Wales stamps of 1856 , used for making colour-trials for the Halfpenny stamp in 1870 . I'age 200
(60)-Specimen of the backgronnd of the One Pemy and Two Pence stamps for comparison with No. 6I. J'age 193
(61)-Specimen of the background of the Hallpenny stamp, which was the exact reverse of the former.
l'age 193

## PLATE NI.

(62) -First sketch of the Quecu's head for the Hallpenny stamp made by Frecterick Heath.

Page 194
(03)-Proof impression of the die of the Halfpenny stamp taken " before strengthening."

Page 194
(64)-Proof impression of the same die "after strengthening " and " hardening."

I'age 194
(65)-Block of four Halfpenny stamps, perforated if, with the plate number " f" in a circle at the left upper corner of the sheet.

Page 196
(66), (67), (68)-Essays of Perkins, Bacon \& Co. for the Three-halfpence stamp submitted to the Board of Inland Revenue in February, 1860 . Pages I84, 185
(6q)-Proof impression of the die of the Three-halfpence stamp with the scroll ornaments hetween " postage " and the words of value inserted in pencil.

Page IS6
(70)-Proof impression of the same die after the scroll omaments had been engraved and the die had been hardened.

Page IS6
(7I)-Block of twelve Threc-halfpence stamps, perforated If, from Plate I, containing the error of lettering "O P-P C." Page 18;
( 72 )- Strip of three Three-halfpence stamps, perforated If, from Plate 3 with the correct lettering " C P-PC."

Page 190

## PLATE XII.

(73) to ( $8+$ )-Card of surface-printed essays submitted by Perkins, Bacon \& Co. to the Board of Inland Revenue on February 15th, 1879.

Pages 206-208

## PLATE NIII.

(85) to (9(1)-(Card of line-engraved essays subn itted by Perkins, Bacon di Co. to the Board of Inlind Revenue on February 15th, 1879.

Pages 206-208

## PLATE NIV.

(97). (98)-Essays of Perkins, Bacon \& Co. for surface-printed stamps. (Illustration III should precede these two).

Page 207
(99) to (104)-Surface-printed essays submitted by Perkins, Bacon \& Co. to the Board of Inland Revenuc on May 17th, 1879. (I!lustration 110 should precede these six). Pages 209, 210, 215,216
(105) to (rog)-Surface-printed essays submitted by Perkins. Bacon \& Cu. to the Board of Inland Revenue on February 7th, 1880. Pages 215, 216

## PLATE XV.

(IIo)-Surface-printed essay submitted by Perkins, Bacon $\mathbb{d}$ Co. to the Board of Inland Revenue on lay 17 th, 1879.

Page 209
(III)-Surface-printed essay of the Quecn's head by I'erkins, Bacon \& Co. I'age 207
(II2), (II3), (IIt)-Surface-printed essilys submitted by Perkins, Bacon ic Co. te the Board of Inland Revenue on February 7 thi. 1880.

Pages 215, 216, 217

## LIST OF BLOCK ILLUSTRATIONS

PAGE
Letter of Henry Cole of October 8th, 1839 ..... 3
Jacob Perkins. From a bust in the possession of Messrs. Perkins, Bacon \& Co., Limited ..... 8
An Engraved steel Die. A steel Roller ..... II
The Printing Presses used for the stamps ..... 12
Letter of Charles Heath of February 20th, i $8 .{ }_{40}$ ..... 25
"Small Crown " watermark in use for the stamps from 1840 to 1855 .. ..... 40
The Transferring Press brought into use in I868 ..... 59
Holder and loose Punch for striking the letters in the corners of the stamps. ..... $6 I$
Memorandum of Rowland Hill of March 26 th. I840 ..... 65
Government Warrant for printing stamps ..... 69
Star ornaments at the sides of shects of stamps. ..... II9
Exterior of Messrs. Perkins, Bacon \& Co.'s premises, 69, Fleet Street, E.C. ..... 120
Exterior of Messrs. Perkins, Bacon $\mathcal{\&}$ Co.'s premises, Whitefriars Street, E.C., where the stamps were printed ..... 120
"Large Crown " watermark in use for the stamps from 1855 to 186 I ..... I 47
"Large Crown " watermark in use for the stamps from 186 I to 1880 .....  150
Varieties of the " Large Crown " watermark used for the stamps ..... 152

# THE LINE-ENGRAVED POSTAGE STAMPS OF GREAT BRITAIN PRINTED BY PERKINS, BACON \& Co. 

## Preliminary.

THOUGH this work is a history of the first British Adhesive Postage Stamps, it is really more than that, for it is an account of the "First Adhesive Stamps" introduced by the Post Office of any nation. For whatever may be said to the contrary, it camnot be denied that the first practical, useful and popular issue. one " understanded of the people" was that made in May, ISfo, of steel plate printed stamps, which was successful from the first, and served as the model upon which other countries, with or without modification to suit national ideas and requirements, based their respective issues.

It will be found in the case of nearly every great invention or improvement, that some thinker or experimentalist, working it may be in solitude, has conceived the nucleus of the idea, perhaps hundreds of years before some practical man, without so much of the scientific or imaginative faculty, but with a larger measure of that most useful gift, the power of adapting ideas to practical purposes, has by his grasp of the needs of the time in which fe lives, and organising powers, brought the idea into practical use. The former may have lacked the opportunities open to the latter, as the times may not have been ripe, from political or other reasons, for the improvement or reform his mind had conceived, or he may have lacked the energy or ability to force it on an unwilling public. His ideas remained barren until rendered fruitful by the resource of some other and later worker in the same cause. This is the fortume of war, and the honours of victory go to the successful reformer, however deserving of success the other may have been.

We make these remarks, because it is not our intention, except incidentally, to tonch upon the much disputed question of who invented the Postage Stamp. Our object is to record facts, the history of what accurred in the early days of stamp printing, and we know that the new system of Uniform Penny Postage required adhesive stamps, and that the firm of Perkins, Bacon \& Petch had the honour of producing them, but, as will be seen, not withont some difficultics and controversies. The Postage Stamp, produced in IS40, was, with the exception of the improvements and variations in detail of colour, paper and perforation that might be expected to result from over threequarters of a century of experience, practically the same as the Postage Stamp of to-day, with the important exception, if we may be allowed the remark, of the lower quality of the engraving in most cases. For ignoring the cheap surface-printed stamps, with which many countries, including, we are sorry
to say, Great Britain, are contented to be supplied with, which from the nature of the process have no pretensions to be classed as "fine engravings," we are prepared to maintain, and we think that most people will agree with us, that few, if any, stamps, no matter how florrid or claborate their design, can rival, for magnificent and appropriate simplicity, combined with beanty, the chaste portrait of the then young Queen, surrounded by the background of fine machine work, with its simple legend of "Postage One Pemy," which as an ordinary matter of business was produced " to order " by the firm, then just " of age." ${ }^{1}$

## The Act for Establishing a Reduced and Uniform Rate of Postage of 1839.

The great agitation for Postal Reform, in which Rowland Hills took a prominent part, ended in 1839, the Act establishing Uniform Penny Postage receiving the Royal Assent on August 1 yth of that year. Only a very few individuals living to-day can have a more or less hazy recollection of the drastic reforms inaugurated by that Act. It is hardly possible for the rest of us to realise the great changes that it brought about in the private and business life of the nation. As an illustration of the great reductions effected, we give a table of the rates of postage in force for a letter of a single sheet, at the time of the passing of the Act :-

and a penny more for every additional 100 miles.
There were also extra charges for letters conveyed in Scotland by a mail carriage with more than two wheels and for the sea carriage of letters to Ircland. Under the new arrangement the postage was reduced on and after January ioth, I840, to an uniform charge of one penny the half ounce irrespective of distance. It is equally hard for us to realise in these days how we should get along without adhesive postage stamps, which most of us have used since the time we were able to write.

[^1]3 IVhiteleall yard f. ict. 1839.
dear lir.
Ionly zecuived the ltaroif imprepion thes thorninj. What! wanted was a dee or flate in orden to trop myself the epferinust.

The time for denoiny in my. Pafer to The Treasung having more Than elafued, I Determened to delay senonin it nolonger thave oove so nisthont mentinn. ypur krojed. If your faitt stele he iond in it enticaey.y you had hest comernemieate Sireot with the Treasony: unth many. Thanks for your Trouble.

I an dear Sí
The lat denfor receiving Wre Fuly
Papur at In Treasmy is 15 oct. Henm (ole.
Letter of Henry Cole of October Stif, I839.

$$
\psi
$$

## Prizes Offered by the Treasury for Suggestions on the Use of Postage Stamps.

The Lords of the Treasury were invested with the power of earrying into effect the Act, and six days after it became law they drew up a notice, which was published in The Times of September 6tl, 1839. ${ }^{1}$ This notice contained an invitation to "artists, men of science, and the public in general" to forward to the Treasury "any suggestions or proposals as to the manner in which the stamp may best be brought into use." All communications had to be sent in by Oetober 15th, 1839, and a premium of $£ 200$ was offered for the proposal that should be considered the most deserving and one of $\ell_{\mathrm{I}} \mathrm{I} 00$ for the next best.

On September Ifth, I839, Rowland Hill was appointed to the Treasury to assist the Government in making arrangements for putting the Penny Postage seheme into operation. In the same month Henry Cole² was appointed to help Rowland Hill, but he did not enter upon his duties until October I 3th, that year. The former remained at the Treasury until September Ifth, 1842, while the latter retired on January 8th, of the last mentioned year. Henry Cole was one of those who competed for the prizes offered by the Treasury and a letter of his of October 8th, 1839, ${ }^{3}$ to Perkins, Bacon \& Petch, shows that his paper was sent in by that date, which was some few days before he commenced his official duties. The actual date on the essay was September 3oth, $1839{ }^{4}$

## Negotiations of Rowland Hill and Menry Cole with Perkins, Bacon \& Petcil from July to Noyember, 1839.

Prior to this, in the month of July, ${ }^{5}$ Rowland Hill had received an introduction to Perkins, Bacon \& Petch, through a mutual friend, Mrr. J. E. D. Bethune, ${ }^{6}$ and had called to inspect their machinery and to see the various devices the firm employed for the prevention of forgery of the notes they were printing for a number of Banks. Between July and November, 1839, some correspondence ${ }^{7}$ took place between the firm and Rowland Hill and also with Henry Cole on the subject of the firm providing what is known as a "dry stamp." ${ }^{\text {s }}$ The specimen referred to in Mr. J. B. Bacon's letter to Henry Cole, of September 9 th, I839, which is now in the Royal Collection, consists of an impression in blark on India paper of one of Mr. Charles F. Whiting's essays for covers or envelopes. The design, which measures $105 \times 73 \mathrm{~mm}$.,

[^2]is made up of different patterns of engine-turning. In the centre is a transverse oval space intended for the address and above this is the monogram " V.R." in script type. The spandrels contain tablets inscribed, respectively, " POST OFFICE-pekmit-price id.- $\frac{1}{2}$ ousce," and between the two last are the words "Matter Not to exceed in weight." The specimen is pasted on a piece of white paper, at the top of which Henry Cole has written: "An estimate of the cost and time of making a plate to be printed by letter or type press and capable of being stereetyped." Below the essay, in the same handwriting, is: "The plate to be half an inch wider and half inch longer than the pattern-the wording bolder-and the centre of the oval to be larger-but the workmanship and pattern to be PRECISELY similar without any variation whatever." Mr. J. B. Bacon had one or two interviews with Henry Cole and made certain suggestions concerning a stamp, but nothing came of the negotiations with him or with Rowland Hill at that time.

In our researches amongst the records of the firm of Perkins Bacon, for the years IS39-40, we have come across a paper headed "Some thoughts connected with the Post Office stamp about to be adopted by Government," a copy of which we give in Appendix C. ${ }^{1}$ There is no name or date attached to the document, nor is the writing known to us, but from the title it evidently belongs to the period between August and December, 1839 . We give a reproduction of it in this work, firstly because the contents are of an interesting nature, and secondly, in the hope that the publication of it may lead to the discovery of the author's name. It is possibly a copy of one of the suggestions sent in to the Treasury, made by order of Rowland Hill or Henry Cole and sent on to Perkins, Bacon \& Petch, or perhaps it was forwarded to the firm by the author himself.

## Result of the Treasury Competition.

The result of the competition for the prizes offered by the Treasury was not declared until December 26th, 1839 . We have had great difficulty in discovering the names of the recipients and other details connected with the contest. We searched numbers of newspapers of the period in vain, and liad almost given up in despair, when we came across a copy of the Treasury' Minute in the "Ineentors' Adtocate, and Journal of Industry" of January $\ddagger$ th, r $840 .{ }^{\text {a }}$ The Minute states that more than 2,600 communications were received, that the original prizes of $£ 200$ and $£_{100}$ were altered to four of $£ 100$ each and that they were awarded to: Messrs. Bogardus and Coffin (who acted together), Mr. Benjamin Cheverton, Mr. Henry Cole, and Mr. Charles Whiting. This is the first occasion for many years that the names of the wimers of the competition have been authoritatively stated. 1n Sir Henry Cole's autobiography ${ }^{3}$ the three last names are correctly given, but the author was wrong in his belief that the other recipient was Perkins, Bacon \& Co. This error has been repeated since then in numcrous philatelic works, some of which exceed Sir Henry Cole's statement and say definitely that Perkins, Bacon \& Co. zere awarded one of the prizes. As a matter of fact Perkins, Bacon $\&$ Petch never submitted any pro-

[^3]posals or suggestions for the competition, and this is clearly bome out by a letter ${ }^{1}$ they wrote to the Editor of the "Inventors' Advocate" on December 3rd, 1839, in which they said: " neither Mr. Perkins, nor our firm, nor anyone clse in any way related to or connected with him, have made any arrangement, nor even offered any plan whatever, for carrying out the peuny postage."

A number of the designs for postage stamps sent in for the Treasury competition have since found their way into philatelic collections, but actual copies of the proposals are known of very few of the competitors. Amongst the latter are, fortunately, those of three of the prize winners: Mr. Benjamin Cheverton, Mr. Henry Cole and Mr. Charles Fenton Whiting. A corrected rough draft copy of the Essay of the first named came into the hands of the late Earl of Crawford, K.T., in Igro. This was put together by him and published in the "London Philatelist" of December that year and a reprint of eight copies of the article was afterwards made in separate form. The particular stamp suggested by Mr. Cheverton was to have the design embossed, by a machine he had invented, on a narrow band of special watermarked paper, after an adhesive substance had been applied to the back. The stamps would thus lave been printed and sold in coils, in the same way as they are supplied to-day in several countries for use in slot machines. A copy of the Essay of Mr. Henry Cole was published in his autobiography ${ }^{2}$ and the form of adhesive stamp he proposed consisted of a "compound printed " design ${ }^{3}$ in red and blue on paper watermarked with the words "PostOffice." The specimens he submitted are now in the Royal Collection and were probably all manufactured by Mr. Charles F. Whiting. Mr. Cole, besides offering many suggestions for carrying out the scheme of Uniform Penny Postage, advocated the issue of a "Post Office Receipt, Price One Halfpenny " ; so that anyone could prove the posting of a letter to the person and address filled in on the form. This idea was afterwards adopted by the Post Office, and provision was made in the 8 th Section of the Act 10 and II Vic. Cap. 85, passed July 22nd, 1847 , for the issue of receipts for letters. It was not, however, until thirty years later, at the end of 1877 , that a "Certificate of Posting," bearing a Halfpenny embossed stamp, was provided by the Post Office and even then the sale of these "certificates" was confined to the larger towns. The demand for the receipt forms was so small that their sale was soon discontinued and another trial that was made with them in 188i, at Glasgow, met with the same fate. The copy of the "Receipt" submitted to the Lords of the Treasury by Mr. Cole is also in the Royal Collection.

His Majesty likewise possesses the actual essay sent in to the Lords of the Treasury by Mr. Charles Fenton Whiting, printer of Beaufort House, Strand, London. Mr. Whiting submitted his essay in printed form under a covering letter dated October 9 th, 1839 . With the essay he forwarded specimens of the form of stamps he proposed for use as stamped covers or envelopes, other specimens for stamping on paper sent in by the public and lastly specimens for adhesive stamps. With reference to

[^4]the last, le gives a copy of a letter he addressed to the Lords of the Treasury on June roth, 1839, when he submitted specimens of stamps "for collecting the Penny Postage." He makes the interesting statement in this letter that he first proposed to the Government the use of stamis for transmitting printed matter through the Pust Office in the year is 3u. The designs for stamped covers or envelopes and for stamping paper sent in by the public, which were submitted separately, have unfortunately disappeared, but those he suggested for adhesive stamps still remain attached to the margin of the essay. They consist of five specimens, all of which are compound printed in two colours, and vary in size according to the number of One Pemy stamps required on the slicet, whether $50,60,120,180$ or $2 \neq 0$. A sheet of plain white paper is also stitched up with the essay, in order to show " the largest sized sheet that can be printed at present on this principle," and attached to this in two of the comers are specimens of the small designs he suggested if 240 stamps were wanted on the sheet. At the end of the essay, two suggestions for cancellation of the stamps are affixed. One of these is a circular, engine-turned design, with the words "pOSt Office go Free." The hand-stamp, which made this mark, was provided with a series of fine points round the outside of the circular design and these made pricks in the paper, when it was applied. The other consists of the letters " V.R.," in a monogram, in script capitals, within a small central circle, round which is a black band, inscribed "caNcelled post paid," in sans-serif capitals. This is again enclosed in a circular band with an engine-turned device, surrounded by an outer circular line. The whole design is 27 mm . in diameter. Buth of these obliterations are occasionally found impressed upon some of the designs proposed by Mr. Whiting for stamped covers, or envelopes. Nothing is now known about the actual proposals submitted by the remaining prizewinners, Messrs. Bogardus and Coffin, but we are able to indicate from two quite different sources the probable nature of their suggestions. We find that Mr. James Bogardus obtained a patent on August 26th, 1839, for his "Improved means of applying labels, stamps or marks to letters and other such documents" and in the specification, dated February 26th, 18 fo, he gave the following description of his plan: " The object of my invention is to amnex a stamped or cngraved label to a letter or other document by means of the seal, thus avoiding the use of adhesive or gummed labels. The label, whether of paper or parchment, may be of any size or shape, and if it be required to affix one to a letter by means of a wafer, let the wafer cover a portion of the label, and the rest of the wafer will seal the letter; the same may be done with wax. But a better method is to cut or pierce a hole in the label, which hole being placed where the wafer or wax is placed to seal the letter, the act of sealing the letter affixes the label and this method may be applied to any document whaterer."

The Royal collection contains an Essay that was formerly in the possession of the late Judge F. A. Philbrick, K.C., who wrote on the back of it " Coffin F. 29.8.39." This design of Mr. F. Coffin, which was evidently submitted on August 29th, I839, consists of an engine-turned device in the form of a transverse oval and is printed in black, on thick, white, wove paper ajparently faced with silver, now tarnished. Above or below the design, according to the position in which it is held or placed, is a circular hole measuring 18 mm . in diameter and round the edges of this space is the remains of red sealing wax. It will be seen, from the description we have given of this Essay, that it was made as a sample of the kind of stamp proposed by Mr. Bogardus.

Rowland Hill and William Wyon, R.A.

An entry in the Journal of Rowland Hill, ${ }^{1}$ under the date December 4 th, 1839 , says " The C(hancellor) of the Ex(chequer) has authorized my applying to W'yon, Harsey and a third artist to be selected by the President of the Royal Academy for designs for the stamps," and a few days later, on December irth, he writes: "The C(hancellor) authorizes me to commence preparations for the stamps. Directed Mr. Wyon to commence a die of the Qucen's head." In the Treasury Minute of December 26th, 1839, ${ }^{2}$ four different forms of stamps were ordered to be prepared: "I Stamped covers. 2 Stamped envelopes. 3 Adhesive Stamps. \& Stamps to be struck on paper of any description." The die of the Qucen's head ordered from Mr. William Wyon, R.A., was intended for an embossed stamp, which was to be struck on letter-paper of any description sent in to the Stamp Office by the public. This idea was afterwards abandoned ${ }^{3}$, as it was thought it would give greater security if all the stamps were printed either on a specially watermarked paper or on "Dickinson" paper." The die cngraved by Mr. Wyon was later on used for embossing envelopes of "Dickinson " paper, which were first issued to the public on January 2gth, IS\&I. It is a curious fact, therefore, that the first postage stamp to be ordered was after all the last of the stamps to make its appearance. And here seems the place to mention a very early pen and ink sketch (Illustration 3) for the postage stamp made by Mr. Wyon for Rowland Hill. The design, which measures $19 \times 19 \frac{3}{4} \mathrm{~mm}$, is mounted on a card, on which, in the late Mr. Pearson Hill's writing, is "Original sketch for the Postage Stamp (by W'yon)," and this is all that can be said to be known of its history. The essay was exhibited by Mr. Pearson Hill at the first Philatelic Exhibition held in London in May, I890, and has since passed into the Royal Collection. An illustration of it appeared in " The Post Office of Fifty Y'ears ago " (by Pearson Hill) London (1887) p. 19, in " The Penny Postage Jubilee and Philatelic History" by Plil. (A. D. Blackburn), London, i891, p. 65, and on the cover of that volume, and on the titlepage of "Sir Rowland Hill. The Story of a Great Reform told by his daughter " (Mrs. E. C. Smyth), London, 1907, but in none of these three works are any particulars given of its history beyond the bald statement that it is a "Facsimile of the original sketch for the Postage Stamp." From the sketchy nature of the drawing, there can, we think, be no doubt that it was intended for an embossed stamp. We also believe, that it was the original sketch made by Mr. W. Wyon of the embossed form of stamp he advocated and that it was submitted to Rowland Hill in November or December, 1839.

[^5]4 That is paper with silk threads woven into the substance.

The firm of Periins, Bacos i\& Co., Limited.
Before we proceed to the dry mamufacturing details of plates, ink, paper, gum, etc., abstracted from the records ${ }^{1}$ of the firm of Perkins Bacon, whose hooks, in a more or less dusty and faded condition are a wailable for reference from its foundation in I819, we will give a short account of its history, followed by a description of the method invented by Mr. Perkins and employed by the firm for printing from engraved steel plates or " siderography " as it is called.

Jacob Perkins, who was born July 9 th, 1766 , was the inventor of a vaniety of ingenious contrivances, such as the "steam gun," the " mill and roller" system of transferring engravings and the " $D$ " roller copper-plate press, which is still used and considered superior to any other form of plate printing press for high quality of work. He was advised by Sir Charles Bagot, our Minister to the United States, to come over to England in 18x9, and compete for the contract for printing the Bank of England notes, about to be given out. He had perfected several important devices for the prevention of the forgery of Banknotes. His native State, Massachusetts, passed a law compelling Banks in that State to use the form of banknote he had invented and he therefore had great hopes of getting his notes adopted by the Bank of England.

He had associated himself with Gideon Fairman, an engraver, at Philadelphia, and they must have arrived in England about June, i8ig, for early in July letters were being addressed to Messrs. Perkins \& Fairman, London.

From letters of the period and other evidence it appears they bronght over twenty-six cases of machinery, including, no doubt, some appertaining to Perkins' other inventions.

They had arranged with two American friends, Marcus Bull and J. McCawley, to join them later, no doubt to work the machinery: Apparently Perkins' business in the United States was left in the hands of Agents, for Marcus Bull, writing from Hartford, Connecticut, June 7 th, I8ig, said he was leaving it " in such a situation that your Agents can manage it." It would seem from this, that the intention was to return to America after the Bank of England contract had been obtained. The expedition caused some comment in the States, for Marcus Bull, in the same letter went on to say " Mr. Bacon (evidently J. B. Bacon, mentioned later on) and myself wrote a small paragraph to the papers in such language as placed the expedition in its proper light without giving offence to any."

But the partners were not averse from trying to do business with other English Banks, for before leaving Liverpool for London they seem to have distributed specimens of banknotes among the local Banks, and after their arival in London their attention was given to the obtaining other business besides that of the Bank of England, which was the chief object of the expedition. It is said Sir Joseph Banks, who presided over the Royal Commission for preventing the forgery of Banknotes, had advised Perkins to set up business on his own account, but whether this was before or after the rejection of his " plan " by the Commission, is not clear.

[^6]

JACOB PERKINS.
From a Bust in the Possession of Messrs. Perkins, Bacon \& Co., Limited.

Perkins evidently lost no time in approaching the Commission, for on July zoth, IS19, the Secretary wrote from Sir Joseph Banks' residence, in Soho Square, where the sittings were held, that so long as sittings were held, the Commissioners would be very ready to consider any further specimens of a note produced by the Perkins' plan, but that there were no funds applicable to experiments, and for some time past they had authorized the completion of machinery upon a plan which had met their approbation, and which they did not feel impressed with the necessity of reconsidering by the communication received that day. Nevertheless, Perkins pressed his application in various quarters, approaching directly and indirectly several Members of Parliament, who were on the Commission, all of whom expressed high opinions of the merits of the plan. Evidently further time was given for submitting other specimens, for Sir Joseph Banks himself in Scptember expressed great interest in an "interesting experiment" of Perkins, and in November, on hearing that Perkins was ready, he summoned a meeting of the Commissioners to consider the "ingenious plans."

A Mr. J. C. Dyer, of Manchester, was at this time a fiiend and adviser of Perkins. IIe had advanced money on the patent (for neither Perkins nor Faiman seem to have had much capital) and interested himself very much in the success of the plan, and took the matter up with several influential persons. The time for submission of the final specimens was extended "sine die" by Sir Joseph Banks, as a number of the " best artists" (including Smirke) were engaged on the work, but none in Mr. Dyer's opinion superior to Colunel Fairman.

The estimate of the value of the Perkins' Patent was high. Mr. Dyer offered to sell his share of the profits for $£ 12,500$, and Captain Coffin (an American) offered $£ 25,000$ for half of what was expected to be received from the Bank of England, but Perkins was advised to refuse this.

By February 1820, it must have been pretty well known that Perkins' plan was rejected, for Dyer wrote that he fully believed that the Commissioners were predetermined against the plan, on account of its American origin, and suggested publishing all the documents with a statement of all the transactions with Mr. Bagot (later Sir Charles) in America, who induced Perkins to come over. This, with samples of other Banknotes, would it was thought make a handsome pamphlet, and produce a feeling in Perkins' favour everywhere else. Apparently Dyer disagreed with Perkins as to the propriety of waiting for the decision of the Bank of England before commencing upon work for other objects, and he specially recommended getting the revenue stamp and other Government work at once if possible, an unconscious prophecy fulfilled twenty years later, when the firm obtained the contract for printing the postage stamps.

By this time the firm was in rather low water, having presumably abstained from using the process for other customers while it was on offer to the Bank of England, a course which, in the circumstances, was perfectly correct, but pecuniarily disastrous, It has always been a tradition in the firm, supported by articles published in certain magazines of a later period, but not hitherto confirmed by any records or entries in the firm's books, that Jacob Perkins was awarded $£ 5,000$ as compensation for his services in submitting his plan and for its merits.

Mr. Dyer advised a " memorial to the Bank direct setting forth the reasonableness of Perkins' claims for a remuneration to the amount specified in the paper to Bagot."

In fact, the ground of the claim was that our Minister in the United States had invited Perkins to come over to compete, and as he incurred much expense in doing so, he claimed compensation, which, according to tradition, he got to the extent of £5,000.

His plan having been refused by the Bank of England, he was free to use it for other customers, and he did so.

It is curions that as early as October, ISig, Mr. W. Wyon, of the Mint, was engraving a Head for Perkins, and that Mr. Henry Corbould was also in touch with the business, discussing the name of the process, for which "Poikilipoligraphy" was suggested. Other friends were sympathetic, one asking whether the imitation of the lathe-work, so much talked of by Sir William Congreve, was done by hand on wood, or by acids, as he "wants to put down the misrepresentations of an officious person who says all that beautiful work can be imitated in a few hours. Were they not done by one of the first engravers at the Bank ?"

In connection with the above mentioned " lathe-work" it should be noted that in addition to Bul\} and McCawley, Perkins and Fairman, before leaving Philadelphia, had, on the ISth May, ISig, signed a three years agreement with the well-known Asa Spencer, the inventor of the geometrical lathe, for him to come to England and produce for them the white line machinc-engraving which was a feature of Perkins' Banknotes, a portion of one of the designs of which was afterwards used in the background of the One Penny postage stamp.

It is believed that Perkins had before this date been in communication with Charles Heath, then engraver to the King, for the latter had in 1818 presented to the Sucicty of Arts specimens of American Banknotes satid to be unforgeable, which no doubt had been sent ower by Perkins. It is certain that the two and Gideon Fairman were in close friendship, for on December 20th, x819, they entered into partnership under the style of Perkins, Fairman \& Heath, and a letter of Charles Heath, dated November i2th, refers to the amount of money he was to put into the business.

Mr. Perkins had previously obtained a patent for his "Enginc lathe for engraving surfaces, printing and coining presses etc.," and in Appendix $B$ will be found a copy of his specification, so far as the contents relate to his system of constructing engraved plates for printing purposes. In the same Appendix, following the Specification, are copies of two advertisements issued by the firm soon after they started business. It will be seen that 29, Austin Friars, in the City of London, was the first address of the firm, but in 1820 they removed to 69 , Fleet Street, where the firm continued operations until 1904, when the old building was pulled down. They then removed to their present premises at Southwark Bridge Buildings, London, S.E.

Mr. John Elliot Drinkwater, who later assumed the surname of " Bethune," advanced part of the capital furnished by Charles Heath, and after the latter's bankruptcy in 1821 , he and George Heath, afterwards Serjeant-at-Law, who also furnislied a certain amount of capital, became sleeping partners in the firm. Fairman ceased to be a partner about July, I822, and returned to America, and the name of the firm was then changed to Perkins and Heath.

Joshua Butters Bacon, who married Jacob Perkins' daughter, joined the firm in December, I821, and did much in the ensuing decades to increase the business and standing of the house, which in May, 1829, traded under the name of "Perkins $\mathbb{\&}$ Bacon." Nearly all the British and Colonial Banks issuing notes-and nearly every little private Bank then issued its own $£ 1$ notes, until Peel's Act in $18+4$ abolished


An Engraved Steel Die.


A Steel Rolier.
fi notes in England -became, at one time or another, customers of the firm. Even after he became paralysed J. B. Bacon was for some years daily wheeled in his chair into a ground floor room at 69, Fleet Street, known for long after as the "Conversation Room," as there customers and friends used to talk with the paralysed partner, whose mind retained its acuteness, though his body could not obey its commands.

In 183t, an engraver, Henry Phillipson Petch, who had entered the firm's service in August, 1823 , was taken into partnership, and the name of the firm was changed to Perkins, Bacon \& Petch. Jacob Perkins died July I3th, I849, and H. P. Petch carly in June, 1852. In the latter year a new partnership deed was arranged and the style of the firm became Perkins, Bacon \& Co., by which name it was known until 1887, when it was formed into a Limited Company, under the style it exists to-day: "Perkins, Bacon \& Co., Limited." Joshua Butters Bacon died in October, 1863. and his son, Jacob Perkins Bacon, who hatd been in the business since 1852, naturally became acting manager. On his retirement in I 888 Mr. James Dunbar Heath became Managing Director of the Company.

## The Perkins Process of Printing from Engraveil Plates.

We will now procced to describe the system of Jacob Perkins for printing from steel plates, which has always been the speciality of the firm. The die and roller transfer process, introduced into Banknote printing by Perkins, is theoretically the same as that used for many years in the calico printing trade.

A dic of soft steel, on which the orginal sketch of the stamp or other design was engraved reversed, was made so liard in a suitable furnace, that ordinary files or chisels would not even scratch it. ${ }^{1}$ A soft steel roller of a suitable size-for postage stamps about three inches in diameter and seven-eighths to one inch wide on the edge-is put in a machine called a transfer press, and rolled under great pressure backwards and forwards over the hardened die, until all the design on the die is transferred in a reversed form to the roller. That is to say, the sunk lines on the original die become standing up lines on the roller, and the standing up parts in the die are sunk on the roller. Now the roller is in its turn hardened and from it by a similar action in the transfer press, any number of reproductions of the design, exactly similar to the original die, can be produced, or "laid down" on a soft steel plate. The lines standing up on the roller become sunk in the plates, as they are on the original dic. When we say exactly the same as in the original die, we must qualify this by saying that a loss, infinitesimal it is true, but still a loss of strength and depth, takes phace on the transfer from die to roller and again from roller to plate, so that it is customary to engrave the original die slightly decper than it is intended the designs on the printing plate should be, to allow for this loss. After the steel plate has been hardened it is ready for printing impressions. The illustration given over-leaf of using the letter " $B$ " to represent a stamp or an engraving will perhaps demonstrate more clearly the process we have described:-

[^7]Evolltion of ax Exgraving Printed by Perkins' System.

ln engraving the die, it can readily be understood that the deeper and thicker a line is cut, the darker will be the colour of the print at that particular spot, as a deep line must necessarily hold more ink than a shallow line, and thus the feature peculiar to intaglio, i.c., the form of printing we are considering, is produced, viz., the half tone, hence the beauty attaching to well engraved plate piints, due to the gradations of colour ranging from very dark to very light, thus giving the full contrast necessary to reproduce the original picture.

The method of printing from the plate consists in mounting it on the bed of a hand printing press, which has a gas-jet fixed underneath the plate in order to warm it. The colour (or ink as it is called) is then rolled or dabbed over the whole of the plate. All the ink lying in the parts that stand up has then to be cleaned off with a rag, taking care however that the ink is left in the lines forming the design. The plate is finally cleaned and polished by the palm of the hand, after the application of a little whiting, a manipulation that required a good deal of practice and skill, and the sheet of paper to receive the impression, which has been previously damped, is laid smoothly on the plate. On the printer turning the whed of the press, the paper is pressed into the sunken lines by the elasticity of the matelial-usually a sort of felt or cloth, called the blanket-on the cylinder that makes the pressure, and the design on the plate is thus transferred to the paper, the design, so to speak, standing up on the surface of the paper. The presses were so constructed that after the plate had passed under the cylinder it returned automatically to the operator, who then removed the sheet of paper covered with the design, and at once procceded to ink the plate again for printing another sheet. The " D " roller copper-plate printing presses used by the firm for the postage stamps, were, as we have said, the invention of Jacob Perkins. They were supplied by Messrs. J. \&. J. Barrett (Exccutors of R. IV. Cope), of it. New North Street, Finsbury, London. The business was afterwards carried on by Mr. J. Hopkinson, and in $18+5$ the name was changed to Hepkinson $\mathbb{E}$ Cope. The presses supplied in 1840 cost $£ 70$ each.

The colours employed for printing the postage stamps, and the oil used as mucilage in mixing the colours, were obtained at first from various firms. In I 843 they were supplied by Mr. Bartlett Hooper (late D. W'oodhcuse), Chemist, \&c., of 43, King William Street, London, E.C. Later on they were provided by Perkins Bacon's own manufactory at New North Ruad, Hoxton, of which works Mr. J. H. Fisher was at one time the manager, and he was followed by Mr. G. A. Fisher.


The Printing Presses used for the Stamps.

Negotiations of Rowland Hill and Henry Cole with Perkins, Bacon \& Petch in December, 1839.

As we have already explained, the firm of Perkins, Bacon \& Petch was not amongst those who sent in designs or suggestions for the postage stamps at the invitation of the Treasury. As none of the specimens submitted were considered satisfactory, Rowland Hill and Henry Cole had to make further enquiries and endeavour to find someone who coukl produce an adhesive stamp of the kind required. We have seen that both these gentlemen had been in communication with the firm on the subject of furnishing a " dry stamp," so it is not surprising that not knowing where to turn for a suitable stamp, they should have determined to once more consult Perkins, Bacon \& Petch, and we see from a letter dated December 3rd, 1839, ${ }^{1}$ that Henry Cole had an interview with the firm on the day before. It appears from the "Report from the Select Committee on Postage Label Stamps" of $1852^{2}$, that the firm had been labouring under a misapprehension as to the nature of the stamp required, for Mr. Joshua Butters Bacon in his evidence, in answering the question "Being first-rate copper-plate engravers, you came in contact with this business first, when it was first introduced ? " replied: "I will tell you how; we were not among any of the 200 or 300 applicants for the prizes, and for the work of the Government. So far from favouritism towards us, we did not cven apply, and never had dreamt of having the work to do ; but after the whole of the plans had been investigated, and, from some cause or other, not being found to answer, then a gentlemen, Mr. Cole, came to us, and he said, 'Why did you not put in for this contract?' I answered ' We cannot put in, the probability is the Government want some cheap kind of thing that copper-plate cannot compete with, and your size is too large' I said, 'You want envelopes, and steel plates could not be made at the price the Government would give.' He said, 'Oh, you are quite deceived; an inch would do for us.' Then I replied, 'We can compete,' and we took a little time, when we promised to give him everything he wanted. We made drawings that were approved of, and from that hour to this, we have done everything that we pledged ourselves to do."

As a result of the interview with Henry Cole on December 2nd, 1839, Perkins, Bacon \& Petch wrote the letter already mentioned, giving amongst other particulars the cost at which they undertook to furnish stamps by the steel plate process of printing. An interview then took place with Rowland Hill on the thirteenth of the same month followed by a letter the next day ${ }^{3}$ giving more detailed particulars and offering to prepare an engraved die with the Queen's head for the sum of seventy-five guineas, which was to be credited back again if their plan was adopted. Two days later Rowland Hill writes to order the Postage Stamp to be engraved on the terms named subject to a sketch being submitted for approval, the Queen's head on which was to be drawn from the City medal and the whole stamp was to occupy ${ }_{4}^{3}$ ths. of an inch square. ${ }^{4}$

[^8]
## Henry Corbould's Draiwing of the Queex's Head for the Stamp.

On receipt of this letter Perkins, Bacon \& Petch commissioned Henry Corbould to make a drawing of the Queen's liead, of a suitable size for the stamp, from the obverse of the medal by W. Wyon (Illustration 2) struck to commemonate thie visit of Queen Victoria to the City of London on Lord Mayor's Day, 1837. ${ }^{1}$ The Cash book of Perkins, Bacon \& Petch for 1840 , under the date " March 12," contains the entry" P'd. H. Corbould (Queen's heads) \&rz. o. o." The phrase " Queen's heads" may have been inserted to signify that Corbould made more than one drawing or that the charge was for work done in comection with the postage stamps or " Queen's heads," as they were frequently called for many years.

The miniature used for the stamps, which was mo doubt in water-colours and a beautiful work of art, was in all probability destroyed sometime after the stamps were issued, in accordance with the terms of the first contract entered into between the Commissioners of Stamps and Taxes and Perkins, Bacon \& Petch. ${ }^{2}$

We add a short biography of Henry Corbould, taken from the "Dictionary of National Biography." Henry Corbould, painter, son of Richard Corbould, a landscape and miniature painter, was born in London on IIth August, 1787. He entered at an early age the schools of the Royal Academy, where he gained a silver medal for a study from the life, and while there obtained the friendship of Flaxman, Westmacott, Clantry; and West, to whom he sat as a model in some of his pictures. Corbould's first picture " A Study," was lang in the Academy in ISo7, when he resided at $7^{0}$, John Street, Fitzroy Square. In 1808 he exhibited "Coriolanus." For a considerable time he was principally engaged in designing for book illustrations. He was employed for about thirty years by the Trustees of the British Museum in making highly finished drawings from the Elgin and other marbles in that institution, which were afterwards published, and are now preserved in the department of prints and drawings. He also made drawings from a number of other collections and for an edition of Camden's "History of England." Corbould was seized with apoplexy' while riding from St. Leonard's to Hurst Green, Sussex, and expired at Robertsbridge in about ten hours after the attack, on December 9th, 184 , and was buried in Etchingham Church, Sussex. He left four sons.

## The First Experiments for the Bachgiround of the Stamp.

While Henry Corbould was preparing the sketeh of the Quecn's head, Perkins, Bacon \& Petch made a selection of varions engine-turned patterns they had in stock and sulmitted them to Henry Cole for samples of the background of the stamp and also to give him a rongh idea of the kind of stamp they proposed. Three of these (Illustrations $\downarrow, 5$ \& 6) are taken from specimens mounted in a volume left by Sir Henry Cole to the Art Library of the Victoria and Albert Musemm, South Kensington. The title-page of the volume reads: "A unique collection of the various kinds of essays

[^9]made in producing the postage stamps, $\mathbf{I} 839$, for Rowland Hill's penny postage. This collection was made by me, Henry Cole, when employed by the Treasury to assist in obtaining the stamps afterwards used and issued to the public ..... I839." These partieular essays, and two others (Illustrations $7 \& 8$ ) to be referred to later on, are wrongly headed in the volume "Experiments? by W. Wyon, R.A., before production of his stamp." All five were undoubtedly produced by Perkins, Bacon \& Petch, and we will now give a description of them. Illustration No. 4 is from a design in black, consisting of part of the central portion of Illustration $I^{1}$, with the head of Qucen Victoria, looking to the left, cut out of a piece of plain white paper and pasted over the centre. The whole design measures 3 I mm . wide and is 38 mm . liigh. Illustration 5 is from a design in black consisting of the centre of Illustration I , with narrow bands of new engine-turning added at the top and bottom, with a similiar head of Queen Victoria to Illustration 4, cut out of plain white paper and pasted over the centre. The whole design measures 22 mm . wide and 21 mm . high. Ithustration No. 6 is from a design in black consisting of an engine-turned pattern, 21 mm . wide and 20 mm . high, mounted on a piece of white paper. The central part of the design, before mounting, was cut away so that the vacent space represented the head of Qucen Victoria looking to the left. Surrounding this space, in circular form, is the inscription "pOSt office half ounce one penny" in painted sans-serif shaded capitals. It was first of all intended that the adhesive stamp, as well as the embossed one ordered from W . Wyon, should bear this wording ${ }^{2}$, but it was afterwards modified to "half oz one penny"s and then finally altered to "postage one penny." ${ }^{4}$

Before the end of the year I839 a sketch or print of some kind for the stamp was submitted by Perkins, Bacon \& Petch to Rowland Hill, as we find him on December 3 Ist making certain suggestions of alterations in the design to Mr. J. B. Bacon. ${ }^{5}$ He says: "The four corners to be taken away but only to a slight extent." We suppose that what was meant by that was, that the corners were to be reduced somewhat in size. He suggests that the length of the die should be increased one sixteenth of an inch, equally divided between the top and the bottom, and one sixteenth of an inch more to be taken at the bottom, so as to insert the words "Half oz One penny," in black letters on a plain ground, or " $\frac{1}{2}$ oz One Penny," in white letters. He adds other instructions, to which reference will be made later on, and concludes with a calculation as to the size of the plate to contain 240 stamps. We have no definite information we can give of the design that was submitted to Rowland Hill at this date, but we think that it was possibly a print with the background of the essay, illustration No. 6, with labels added at the top and bottom by hand. Our sole reason, however, for this opinion rests on the fact that the first die engraved for the postage stamp had this background

The entry "Experiments Queen's Head," under the date January ist, I 840 , ${ }^{6}$ in the Engraving Book of Perkins, Bacon \& Petch must, we think, refer to the essays

[^10]of December, 1839 , and also to the preparation of the first dic engraved for the One Penny stamp. The entry almost certainly cowers work that had been in progress for a good many days prior to the date when it was inserted in the book.

## Tife First Dif for the One Penny Stamp.

It will be seen that two dies had to be engraved for the postage stamp hefore a satisfactory result was attained. We have been umable to find a single letter or document amongst the records of Perkins, Bacon \& Co., which has any reference to the three essays we have described (Illustrations $+5 \mathcal{S} 6$ ), or to the first die of the stamp, previous to the time when the engraving of the die was completed. The stamps were urgently required, and no doubt verbal arrangements were at first made by the firm with all the parties concerned in their production. The only means we have, therefore, of tracing the various steps in the manufacture of the die is by an examination of the different proof impressions that are in existence, and by what we know of the methods that would be followed by the firm in its production.

The background first of all selected for the stamp was that of the last of the three essays we have described (Illustration 6). An impression of this was transferred from the stock roller on to a flat piece of steel and the exact size of the background required for the stamp and a space for the head were outlined on this die. An impression was then taken up on to another roller, the parts of the pattern outside the indicated marks were removed, the space for the head was cleared, and the background required for the stamp was then transferred to another flat piece of steel, which became the actual die of the stamp. The die was then handed, with the drawing made by Henry Corbould, to Charles Heath for the engraving of the Queen's head.

## The Exgrayer of the Queen's Head.

And here we must make a digression in order to see what further light we can throw upon the wesed question of who really engraved the head. Up to the year ISgo tradition and all philatelic writers had given Charles Heath the credit of the work. At the time of the first London Philatelic Exhibition held at Baker Street in May, ISgo, Perkins, Bacon \& Co., in response to an invitation from the Committee, prepared an cerhibit of valious proofs, etc., of British and carly Colonial stamps. Mr. J. D. Heath then took the opportunity of looking up some records and found that the fifty guineas for engraving the Queen's lead was actually paid to Frederick Heath! Thinking to be absolutely accurate in this matter he had the proof of the original One Pemny stamp shown by the firm, labelled "Engraved by Frederick Heath." It was upon this exidence that the late Mr. W. A. S. Westoby ${ }^{1}$ and the late Mr. Hastings E. Wright and Mr. A. B. Creeke, Junr. ${ }^{2}$ in their monographs. published, respectively, in 1891 and 1899 , assigned the work to Frederick Heath. We will now consider the fresh information we have collected from various sources, and we will begin with the ducuments of which we give copies in Appendix C. The first

[^11] Heath, saying that he is sending him the "new die." Mr. Bacon asks him "to have the Quecn engraved in the highest style of art practicable, consistent with transferring," to give his " personal attention to it " and to have it "ready as soon as may be." Six days later ${ }^{2}$ J. B. Bacon tells Rowland Hill that the dic is at Mr. Heath's house and on February 20th, ${ }^{3}$ Charles Heath returns the die to Perkins, Bacon $\&$ Petch. Then on February $26 \mathrm{th}^{4}$ Mr. Bacon writes in a letter to Mr. J. Ledingham, ${ }^{5}$ " Mr. Heath has had two interviews with Mr. Wyon in consequence of which he has the Plate and is at work to improve the likeness and I do not expect it back until to-morrow noon or night." Again, on March 2Ist, ${ }^{6}$ Mr. H. Petch, forwards to Charles Heath the die for the Two pence value, which he returns by April 6th. J. B. Bacon forwards the die again to Charles Heath on the latter date ${ }^{7}$ and no doubt received it back again a day or two later. We have also found an Estimate in J. B. Bacon's writing of what the dies and plates cost the firm, and at the head of this is "Original dies-zost-C. Heath $£ 52$ 10 o." A search in "The Times" newspaper was rewarded by the discovery of two notices of which we give copies in Appendix A. The first of these was published on January 17 th, $1840,{ }^{8}$ and the other on April 14 th, ${ }^{9}$ fcllowing, and both of them state that Charles Heath was the engraver of the adliesive stamps. His nane is also given by Henry Cole in an essay lhe wrote for the "London and Westminster Reviere" of March, I8.fo, in the article entitled, "The Qucen's Head," by James Hannay and W. H. Wills, that appeared in " Household Words" of February 2Ist, 1852, and also by Edward I. Pemberton in a letter published in "The Fhilatelist" of January, IS68.

On the other hand there is fairly strong evidence that Challes Heath's son, Frederick A. Meath, did the actual work. Mr. Algernon Graves writes in "Notes and Queries" of December 13th, ISS\&. "The comimission to engrave the first postage stamp was originally given to Charles Heath, but, as he feared his eyesight was not good enough for such fine work, he handed it over to liis son Frederick
About twenty years ago, Mr. D. T. White ${ }^{10}$ presented me with six impressions, printed direct from the copper-plates, ${ }^{11}$ these had been given to 1 im many years before, by Frederick Heath." Mr. Graves also obtained four other proof impressions, in September, I883, from the collection of a Mr. Elliott. The album of Mr. Graves, containing these ten impressions, was purchased by the late Earl of Crawford, K.T., in September, rgog. The impressions consisted of proofs, of the two engraved dies of the stamp, and one of the second die bears in pencil, "Engraved by Frederick Heath." Mr. F. J. Melville also mentions in one of his works ${ }^{12}$ that Mrs. Haywood, a granddaughter of Henry Corbould, and niece of Frederick Heath, possesses a proof impression, which has in pencil in the handwriting of Edward Henry Corbould, ${ }^{13}$ the

[^12]son of Henry Corbould: "Engraver's proof by Frederick Heath after drawing by Henry Corbould, F.S.A." The illustration shows that this likewise is a proof of the second die. In the notice of Charles Heath, in the "Dictionary of National Biography," it is stated that he "kept a large school of assistants working under his superintendence," which may be considered a further point in Frederick's favour, bearing in mind these two signed proofs. We also think that the wording of J. B. Bacon's letter of January I6th, ISfo ${ }^{1}$ to Charles Heath, is open to the construction that Mr. Bacon knew or conjectured that the work was not going to be done by Charles Heath's own hand, and it scems a peculiar incident, too, that Heath's Christian name was omitted in the contract made in April, $18 \nleftarrow 0$, for the supply of Postage Stamps. ${ }^{*}$ But perhaps the strongest cridence in Frederick Heath's favour, is contained in the two following letters. The first was written to him by Mr. J. P. Bacon on May, $5^{\text {th }}$, I870, ${ }^{3}$ to enquire whether he would undertake to engrave a head of the Queen for the Halfpenny Stamp, then about to be brought into use. In this letter Mr. Bacon said : "We shall shortly require a new Queen's head, slightly reduced from that you formerly engraved-for a $\frac{1}{2} d$. Piostagej Stamp." It is quite true that Frederick Heath did other work for Perkins, Bacon \& Co., in connection with British Colonial Stamps, but we think the reference in this letter to the head "formerly engraved" can only have been to that on the first One Penny postage stamp. In the second written to the Board of Inland Revenue, in May, 18 - $8+$ Perkins, Bacon \& Co. state that the artist who engraved the Queen's head on the postage stamp had recently died, and this reference can only have been to Frederick Heath, who passed away on April 26th, 1878.

To sum up. It is quite certain from the evidence we have adduced that the order for the engraving of the die was.entrusted to Charles Heath. We think that the actual cutting of the die was, however, performed by his son Frederick, but entirely under his supervision and direction, and we consider that both father and son are equally entitled to the credit of having achieved the remarkably beautiful piece of engraving.

Before resuming our narrative of the manufacture of the die, we will give a few details of each of these distinguished artists. The notice of the father is taken from the " Dictionary of National Biography," from which we have before quoted: Charles Heath ${ }^{\text {s born in }} 1785$, was the illegitimate son of James Heath, the engraver to the Royal Family: He received instruction in engraving from his father, and an etched head done by him at the age of six, is in the print room at the British Museum. His small plates for the numerous popular editions of English classics are executed with great taste and delicacy, and in some of his portraits he attained great excellence. In his larger plates he was less miformly successful. In May, i826, his collection of engravings was dispersed by auction, apparently from pecuniary difficulties. Heath, though not the originator, was the chief prometer of the well-known illustrated " Annuals," and kept a large school of assistants working under his superintendence. Among his prpils were the well-known engravers Doo and Watt. Heath died on November 18th, $18 \mathcal{4} 8$, in his sixty-fouth year, leaving a family, of whom one son became an engineer and another was brought up to his father's profession. In April. 1840, a second sale was held of his stock engravings executed since 1825 .

${ }^{5}$ His full name was Charles Theodosius Heath, but he seldom used his second Christia uname.

To this account we would add, as we have already mentioned, that Charles Heath was one of the founders of the firm of Perkins, Fairman \& Heath, in December, ISrg, ${ }^{1}$ but he ceased to be a member of the firm when lie became a bankrupt two years later.

Of his son Frederick, no notice appears in the " Dictionary " and rery few details are known of the latter's life. The only particulars we can furnish are, that his sezond Christian name was "-Augustus," that he was the eldest son, and was born in r8io, that besides engraving the Queen's head used for the first One Penny; Threehalfpence and Two Pence stamps of Great Britain, it will be seen further on in our work, that he engraved the Queen's head on the small Halfpennyy value of 1870 . He is also known to have engraved for Perkins, Bacon $\mathbb{\&}$ Co., the beautiful circular Five Shillings stamp of New South Wales, that was issucd in the colony in April, r861. ${ }^{2}$ But his principal work consisted in engrasing drawings for illustrating books, of which he must have executed very numerous examples, in addition to engraving sketches of a large size. From the account we have given of the engraving of the Queen's head for the stamps of 1840 , there can be no doubt that at this period he acted as one of the assistants employed by his father, and probably many of the plates that bear the name of "Chas. Heath," were actually the work of his buin. In an amouncement in "The Times" newspaper, of May 7 th, I 878 , his death is stated to have occurred, in his sixty-eighth year, on the twenty-sixth of the previous month, at 87 , Sussex Road, Holloway, where he had resided for many years.

## Continuation of the History of the First Die for the

One Peniy Stamp.
We can now continue our description of the manufacture of the die, which, it will be remembered, we left in Charles Heath's possession for the engraving of the head. After the face and head had been faintly outlined, and a certain amount of work had been done on the diadem and lair, some proofs were pulled in black on India paper, mounted on soft white card. (Illustration 13). The Royal Collection contains two such specimens. One of them is on India paper, which has become detached from the card, the other is impressed on a piece of card, large enough to show that the size of the die measured $5 \geq \times 55 \mathrm{~mm}$. The latter was once in the possession of Rowland Hill, and has in pencil, in his handwiting " hilf oz oxe pexiv" in small capitals, in a straight line directly below the design, and at the buttom of the card. "The face is of course unfinished. These stamps will be printed in sheets, each containing 240. On the margin of the shects will be an instruction to place the stamps above the address. The baek will be gummed." After the printing of these proofs the work was continued, and the engraving of the head was completed. The head did not entirely fill the space originally cleared for it and blank spaces remained around it. Some of these spaces were filled in with diagonal lines, but those in front of the diadem and forchead, and behind the chignon were left blank. Fresh proofs were then printed in black on white card, and on one of these in the Royal Collection

[^13]the blank portions have been filled in with Indian ink, and the background surrounding the head also received an application of the same ink, in order to darken those parts and so throw the head into more relief (Illustration $I_{4}$ ). The vacant spaces round the head on the die were then filled with engraved lines, and the background surrounding the head was gone over with a graver, some of the lines were deepened and others were added, in order to darken those parts, as suggested in the previous proof impression. Fresh proofs were then taken in black on India paper, mounted on soft white card (Illustration 15). The die then had the words "postage one pexir" engraved, at Perkins, Bacon \& Petch's establishment, in small sans-scrif capitals, in a straight line, at the bottom of the design, and new proofs were struck in black, on India paper, mounted on soft white card (Illustration 16). The die must have been completed some days before the middle of January, i840, in order to allow time for hardening, experiments to be made in transferring, and a new die to be prepared ; for, as we have already shewn, the new die was forwarded to Charles Heath on the sisteenth ${ }^{2}$ of that month. The inscription "postage one penny" for the stamp was not officially decided upon until January 30 th, $1 S_{4} 0$, as it was on this date that Rowland Hill writes in his " Journal ": " . . . . Agrced with the C(hancellor) of Ex(chequer) that the legend on the stamps should be ' Postage one penny;' and ' Postage two pence,' and issued instructions to the engravers accordingly . . . "

A copy of his letter to Perkins, Bacon \& Petch, referred to in the quotation, will be found in Appendix C. ${ }^{2}$ The inscription must, however, have been engraved on the first die previous to this date, and was no doubt done by instructions to see how the words looked before the final decision was made. The die was at once abandoned, as the background was considered to be too light, the Qucen's head was also too lightly engraved, and it was found that the die did not transfer sufficiently well. Presumably the Heaths did not take into consideration the fact that the die required to be engraved slightly decper than it was intended the design in the printing plate should be, in order to allow for the slight loss of strength and depth that necessarily occurs in the course of transferring. The steel die is still in the possession of Perkins, Bacon $\mathbb{\&}$ Co., Limited. As we have already said, it measures $52 \times 55 \mathrm{~mm}$., and an inspection shows that it is 13 mm . in thickness. Reprints have been made of the die at different periods as follows :-
(I) In black on white card.
(2) In black, yellow-green, ultramarine, rose-carmine, orange-red, on thin yellowish white wove paper.
The first were printed at a comparatively early date, and the second were taken in the autumn of 1909 . The reprints have small smudges of ink beneath the word "one" and the letters "nny" of "penny," due to rust marks on the die, and by this means can be told from original impressions.

The last reprints were printed on pieces of paper either singly, or with two impressions of the die close together, side by side, in the centre. In the latter case they were so carefully printed that from a superficial examination, one would conclude they lad been produced from a plate containing two impressions, transferred from the original die, instead of from the die itself. Owing to the thimess of the paper the "rust marks" do not shew very clearly on some of these specimens.

[^14]
## Experinental Die for the One Penny Stamp.

The first die for the postage stamps not turning out a success, a new die had to be prepared immediately. The background selceted for this was one Perkins \& Heath had used for the central band of a design for covering the reverse side of a specimen banknote they had submitted to the Bank of England in IS22, or thereabouts (Illustration I). This specimen was submitted to the Bank with the view of obtaining a contract for printing its notes. Impressions of both the front and back designs upon the note were given in the sixth and seventl editions of a pamphlet, "An Essay on the general principles and present practice of banking in England and Scotland," by Thomas Joplin, published in London in 1827 and 1838, respeetively. Our illustration is taken from one of the specimens given in a copy of the pamphlet. The whole design measures $190 \times 116 \mathrm{~mm}$. and the impression is in black on India paper, mounted on soft white card. The dark pattern of the central band of the banknote, which was used for the One Penny and Two Pence stamps, was originally cut on a roller with Perkins' engine-turning lathe, and this roller was probably one of those brought from America by Mr. Perkins. In order to obtain this pattern on a flat steel surface for copper-plate printing, an impression was transferred from the engraved roller to another roller, and on this the borders of curved, interlaced lines, which appear white in the print, were cut with the engine-turning lathe. The pattern was then transferred from the latter roller to a flat piece of steel, from which prints of it could then be taken. In a pattern of this kind the complications caused in the transferring of one containing a head, letters or figures, etc., as previously explained ${ }^{\mathbf{1}}$ does not arise, as there are no right or left alternate positions, each time it is transferred, to be considered.

For the postage stamp, the pattern on the first of these rollers was transferred to another roller, and on the latter narrower side borders of curved, interlaced lines and reticulations, more suitable to the size of the stamp, were cut with the engine-turning lathe. A space for the head was cleared on this roller, and a portion of the design outside the part required for the stamp was also removed. The portion intended for the stamp was then transferred to a flat piece of steel, which in this case was used as an experimental die. Mr. George Rushall, an engraver employed by the firm previous and subsequent to i8 40 , is believed to have had charge of the Perkins' engineturning lathe, and to be responsible for producing the background with the side borders actually used for the stamp.

This particular dark background was chosen because, as we have already mentioned, the background of the first die was found to be too light, and did not conscquently throw the head sufficiently into relief. After a lapse of thirteen years, Pcrkins, Bacon \& Co., early in 1853, made use of the same pattern for the background of the One Penny and Four Pence triangular postage stamps they printed for the Cape of Good Hope. ${ }^{2}$ Then in 1854 they used the same background for the One Penny and Six Pence postage stamps of Victoria, depicting the Qucen seated in the Coronation Chair, but the side borders of these stamps had a different pattern to those of the One Penny and Two Pence of Great Britain. The same background was also used for

[^15]an essay of similar design they prepared for a Two Pence postage stamp of New South Wales in $1854,{ }^{1}$ and again, for the Five Shillings postage stanin they printed in 1880 for the island of St. Vincent in the British West Indies. In the last four specimens we have mentioned, a portion of the actual backgromed with the or igimal white, curved interlaced lines that is shewn on our Illustration I was used, but the background was inverted, as compared with the position it occupics on the Great Bitain stamps. The St. Vincent stamp, being of larger dimensions than usual, the white side lines are the same as they appear on that illustration, but the width of the Victoria stamps being less, they only shew the first curve of the white lines which extends furthest on to the dark background at cither side. It is somewhat curious that no writer has previously noticed that the background of the colonial stamps we have specified is the same as that of the first postage stamps of Great Britain. After an interval of another thirty-four years the firm once more made use of the same background for new postage stamps for the Government of New Zealand in igrt.

Reference should also be made here to the Jife Policy stamps prepared by Perkins, Bacon \& Co. in 1853 for the Inland Revenue Authorities. Permission was given to the firm to make use of the Queen's head and background of the actual die engraved for the One Pemy postage stamp, for this serics of stamps. As collectors of fiscal stamps know, the Queen's head and background, cnclosed witl.in a circular band, with "life policy" in the upper curve, and the ratue in words in the lower curve, was placed in the centre of these large upight stamps. When new plates were required for some of the values in 1858 , and subsequent years, the retouched dic of i85t of the One Pemy postage stamp, to be described further on, was used. Mr. J. B. Bacon, in giving evidence before the Select Committee on Postage Latbel Stamps, in April, IS52, ${ }^{2}$ when spcaking of the background of the postage stamps, or of any similar pattern produced by the engine-turning lathe, said: "if we were asked which we would prefer, to reproduced that same die again, unless we had kept all the calculations and divisions upon all the wheels, or to make a thousand fresh ones, but not like that, we would prefer making a thousand; we could do it quicker ; it is self-acting machinery. We cannot dictate to the machine; we can cause it to make an oval, or a circular, or a straight line, but as to the particular pattern it is going to produce, we know nothing of it until it is done."

As soon as the backgromed of the experimental die we have described was finished, an impression of the First Die engraved for the stamp was transferred to a roller, and the whole of the design, with the exception of the Queen's head, was removed. An impression of the head was then transferred to the vacant space on the die, prepared with the dark background. The die was then sent to Charles Heath and, while in his charge, a series of fine lines were made from the tup of the crown to the foot of the bust. shewing that it was intended to reduce the width of the head and bust somewhat, when the new head came to be cngraved. The design measures $19 \times 20 \mathrm{~mm}$., and a proof impression of the die is known in black on India paper, mounted on soft, white card (Illustration 18). This experimental die was evidently made in order to see how the Quecn's head looked on the new background, and also as a guide for the

[^16]Heaths in engraving the new head. His Majesty the King now possesses the only known impression of this die, which the late Earl of Crawford, K.T., obtained from the collection of the late Mr. Jules Pauwels, of Torquay. According to the late Judge F. A. Philbriek, K.C., and the late Mr. W. A. S. Westohy, this proof impression was originally on a card with another proof, which, from the description given, was evidently an impression of the first die engraved for the stamp; and they state that these two proofs were disposed of at the sale of the effects of Charles I Heath, after his death in November, $18 \not$ \& $^{1}{ }^{1}$

We now give Mr. Pauwels" own account of these essays. ${ }^{2}$ He says: "Deux grandes raretés.-Deux essais anglais du I penny, restés inconnus, ont été découverts ces jours-ci ehez un des premiers marchands de tableatux de Londres, où ils figuraient depuis plusicurs années, cneadrés et mis sous verre. Ce marchand les tenait de feu Charles Heath, l'auteur de ces timbres, qui reçut 60 guinées pour prix de la gravure, selon ce que nous dit M. N. Rondot, dans le Magasin pittoresque. Ces deux mythes, éprouves de graveur, sont imprimés sur carton. L'un a le fond du timbre en usage, la tête un peu plus large et cercle antour des cheveux; puis un pointillement gravé au burin sur le eoin arrondit et retrécit les lignes depuis la couronne jusqu'à l'extrénité du buste. 11 n'y a pas d'inscription ; c'est comme si clles avaient été coupées. Le deuxième a l'effigie un peu changée, comme l'indique le pointillement. Il représente le type actucl, sans ligne blanche, mais avec fond différent d'une exécution superbe ; en bas, on lit sur une seule ligne : Postage one penny. Cés deux essais ont formé le type adopté : e'est le fond de l'un, l'effigie de l'autre." We have turned up the reference to M. Natalis Rondot's ${ }^{3}$ article and find that what he said was: " Le type des timbres de I penny et de 2 pence a été dessiné et gravé sur acier par Heath; la gravure a été payée 60 guinées." Mr. Pauwels' description of the two essays is quite accurate, with the exeeption of the statements that the one with " Postage one penny " has the same head as the issued stamps.

The late Mr. Edward L. Pemberton, writing in 1868, gives a similar account of the same two essays. "Aceording to him they had then " been for many years in the hands of a well-known picture dealer of London, who had them framed and glazed, being given to him by the late Mr. Charles Heath, who engraved them." Further on he adds: "This pair, which may be justly termed the King of Essays, is in the possession of a well-known amateur residing near Torquay, and is supposed to be unique."

The entry " Engraving Dies, Rollers, etc., Queen's Head," under the date January I5th, $1840,{ }^{5}$ in the Engraving Book of Perkins, Bacon \& Peteh, refers to work done in connection with the experimental die, and also to the preparation of the second die for the One Penny stamp. The work was no doubt spread over several days before it was completed on the date the entry was made. There is a further entry of "Engraving Rollers for the Qucen's Head," under the date February Sth, 1840, but we do not know what this can refer to.

[^17]The Secoxd Die for the One Pexny Stamp.
When the result of the experiment with the head of Die I and the background of Die 2 was considered satisfactory, a new flat die was prepared for an entirely new engraving of the Queen's head. For some reason or other, this was not transferred from the roller impression made for the experimental die, as it might casily have been, but was constructed in the following circuitous manner. The die was obtained by transfurring a piece of the nnused backgromed, left on the roller made for the experimental die, to a flat piece of steel. The space for the head, and the size of the background required were carefully outhined on this. An impression was then taken up on to another roller, the space for the head was cleared, and parts of the background round the portion required for the stamp were removed. The background was then transferred to another flat piece of steel, which became the actual die of the stamp. We can only surmise that this course was followed because Charles Heath suggested that the space cleared for the liead should be of a slightly different shape, and the whole background of rather larger dimensions. Both these alterations were, at any rate, carried out in the new die.

There was also a further modification due to a different part of the background on the roller having been used. The interlaced, curved lines and reticulations, forming the side borders, fall on slightly different portions of the backgromen to what they do on the experimental die. This can at once be seen by comparing the exact positions that the white dots of the background occupy within the curved lines, on impressions of the two dies. The design of the new die measures $19 \frac{1}{4} \times 20 \frac{1}{1} \mathrm{~mm}$. Proof impressions were struck of this state of the die, in black on India paper mounted on soft white card (Illustration I9).

The Royal Collection contains a rough engraver's rubbing on stout, white, wowe paper of another die, similar to our Illustration I9, except that it was laid down from a different part of the background on the roller to that used for the latter die, or for the background of the Experimental Die (Illustration 18). From certain marks on the print it looks as if this die was spoilt in hardening, and if this was so, it is sufficient to account for its never having been used. We do not know for what purpose this die was made, but it may have been wanted for making experiments with the labels to be placed at the top and bottom of the stamps, to be described further on.

After the background of the die (Illustration 19), was completed, five impressions of it were transferred from the roller, in a row, to a stecl plate, which had previously received five impressions of the first die engraved for the stamp, which were also arranged in a row. Fine vertical and horizontal lines were previously drawn on the plate for guidance in transferring the impressions, in order to keep them at equal distances apart, and any traces of these lines that happened to be left after the impressions had been transferred were cleaned off. Apparently it was intended to have a third row of designs below the second one, as four pairs of fine vertical lines, and a horizontal one were left on the plate at this spot, as proof impressions we have examined show. The two rows of designs were placed close together, and the experiment was made in order to compare the two different backgrounds, to see whether the darker one transferred more satisfactorily than the lighter one, also to see how the proposed stamps would look arranged in rows, and whether the distance allowed between them was sufficient. The plate on which these designs were laid down measured in $2 \times 227$
M) Len Pacan

Sthonth vue. acce then the plake lork hothen
bray saun me ion 3 Park
face ku wht rem obrand
$\angle$ plock tonedsian.


- Fi.thad over nok lsensfar bude nothy unle

This Letter is Endorsed " isfo-Charles Heath-FebY. 20th."
mm ., and impressions are known printed from it in blue on medium white wove paper (Illustration 17). ${ }^{1}$

This plate was probably also used for printing a number of impressions of the top row design - Die I-, but whether these were in colour or in black, we are unable to state. What we can affirm is, that impressions of Die I were used for pasting on sheets of paper, which had been previously ruled into small rectangles. A letter from Mr. J. B. Bicon, of February 15th, I8 fo, to Mr. Edwin Hill, a brother of Rowland Ilill, who had been appointed lnspector of Postage Stamps at Somerset Huuse on January 3ist, I8fo, ${ }^{2}$ shows a sheet of these labels was sent to him, in order that he might be able to gauge the size that the moulds for the watermarked paper for the stamps ought to be made. ${ }^{3}$ This sheet, or one like it, was submitted to Rowland Hill, ${ }^{4}$ and thirty-five impressions of Die I were afterwards sent to him on February 27 th, I $8 \not \mathrm{f}^{5},{ }^{5}$ at the request of Mr. Ledingham, so that a similar sheet could be prepared to show the Chancellor of the Exchequer "the position and distances which the stamps will occupy:" Impressions of Die I were also used fur testing a sample sheet of "crown" watermarked paper. ${ }^{6}$

The die, as we have before nuted, was sent on January 16th, 18 $40,{ }^{7}$ to Charles Heath, for the engraving of the Qucen's head. When the work was completed, a few impressions were printed in black on India paper mounted on soft white card. These have a white line round the back hair, and at the back of the neek, showing that the space cleared for the head was rather too large (Illustration 20). The white spaces were then filled in with lines imitating the background and further, similar, proof impressions were taken. His Majesty the King's specimen of this state is marked " Ist Proof" in pencil, in Mr. J. B. Bacon's landwriting (Illustration 27). The die was in this state when Charles Heath returned it to Perkins, Bacon \& Petch on February 20th, is fo. ${ }^{8}$ with the remark: "If that does not transfer well nothing will." We believe that Mr. J. B. Bacon gave onc or two Proof Impressions of this state of the die to Rowland Hill on the following day, as the Counting-House Diary of the firm, under the date Friday, February 21st, I 840 , contains the following entry, in Mr. Bacon's handwriting: "Finish the New Die with Postage, and check letters at top and One Penny at bottom and send Proof; take a sheet of impressions as they will come on the plate and sent Mr. Hill, as a guide to make the llould by. Print several stamps in different positions on the sheet reed. from Mr. Hill, and send him. Get sheets from Mr. Wise, imy [immediately] and send Estimate by Monday, to Mr. Hill directed to Comr of Stamps and Taxes." The correspondence in Appendix C. shows these instructions were carried out. Two impressions of this state of the die were also sent to Mr. Edwin Hill, on February 22nd, I840. ${ }^{\circ}$ On March 2nd, ${ }^{10}$ Perkins, Bacon \& Petch had the satisfaction of receiving a letter from Rowland Hill, in which he makes the interesting announcement: " The Chancellor of the Exchequer slowed me on Saturday an autograph letter from the Queen expressive of 'high appreciation' of the stamp." Sometime between February 20th and 26th, I 840 , the die was re-

[^18]turned to Charles Heath, and he had two interviews with Mr. Wyon, who was asked to make suggestions for an improvement of the likeness of the Quen. ${ }^{1}$ The result of Mr. Heath's visits so far as we have been able to discover, was ahmost nil. The only alterations we can detect are, that some of the lines ruming down the back of the Queen's neck were strengthened and prolonged, and the shading of the ear was slightly altered. The die was not returned to Perkins, Bacon \& Petch until March 3rd, or $f^{\text {th }}$ ISto. ${ }^{3}$ His Majesty the liing's specimen of this state of the die, printed, as usual, in black on India paper, mounted on soft white card, is marked " 2d Proof " in pencil, by Mr. J. B. Bacon. ${ }^{3}$

## Proofs and Sieetches of the Die sent to Rowland Hill.

While the die was at Mr. Heath's for the engraving of the Queen's head, Rowland Hill sent three notes to Perkins, Bacon \& Petch, on Jannary 22nd, 23 rd, and 24 th, isfo, asking them to let him have " anything, however unfinished, that would show what sort of a stamp the label will be when finished." On January 23rd, Perkins, Bacon \& Petch forwarded him an impression of the die, which we think could only have been a specimen of the background with the space cleared for the head (Illustration 19). This did not satisfy him, as he repeated his request the next day; and then we have an undated letter of the firm, which was probably sent on January 2 th, promising that a sketch should be forwarded to him the next morning. ${ }^{*}$ Whether any sketch or proof was sent to him on January 25 th, and, if so, what it was we cannot say. The reason Rowland Hill particularly wanted a sketch or proof of the stamp at this time, is made clear by an entry in lis "Journal " under the date January 25th, IS40: "Sent specimens as perfect as they could be obtained of the proposed stamps, with a letter to Col. Maberly ${ }^{\text {s inviting suggestions." }}$

The enclosures contained in this ketter were described by the late Mr. Maitland Burnett, J.P., in ISSI, ${ }^{6}$ when he was Honorary Secretary of the Philatelic Suciety, London, but the account of the proof of the adhesive stamp is, unfortunately, not very clear: What he wrote was: "Another enclosure in this letter is a proof, in a very unfinished state, of the well-known penny adhesive. The centre of the stamp only is there, without the top or bottom labels; but in Sir Rowland Hill's writing is what was intended should have been the inscription in the bottom label; viz. 'Half oz. Onc Penny." Now if the background of this proof was the same as that of the issued stamp, as is stated, it could not have had the head engraved, as the second die was not finished or returned by Charles Heath to Perkins, Bacon \& Petch, until nearly a month later, viz., on February 2oth, 18 fo. $^{7}$ If, on the other hand, the proof had the head engraved, it must have been an impression of the first die, which, we have seen, had a different background to the issued stamp. That is, it was a proof of our Illustra-

[^19]tions 19 or 15, and, as we have before said, we think it must have been the former that was sent to Rowland Ilill on January 23rd, isfo. That it could have been an impression of the experimental die is quite out of the question, as no proof of a tial die like that would, under any circumstances, have been sent to Rowland I lill.

## Colour Trials for the Stanips.

During the time that the second die was in Charles Heath's hands, Perkins, Bacon \& Petch also laid down several other flat dies, at different times, of the same background, which were made from the identical roller that produced the die given to him. (Illustration 19). Either some of these or the bottom row of five specimens of the same design on the plate we have already described (Illustration 17), were used for printing impressions in various colours on thick, spongy, white, wove paper.

The following are known :-
Purple-blue, deep blue, blue, light blue.
Dark brown, red-brown, umber-brown, liglit umber.
Brick-red, deep red, pale red.
Black.
These colour trials were submitted by the printers pasted on small sheets of thick paper in three rows, showing the gradations of colour, with one in black, placed by itself in the margin on the right side. The late Judge F. A. Philbrick, K.C., had one of these sheets in his collection, which was not quite complete, and from its appearance, he believed that it orginally had four or perhaps six specimens in each row. ${ }^{1}$ This sheet is now in the Postal Museum at Berlin. A letter to Henry Cole of March 3rd, $1840,{ }^{2}$ shews that these impressions in colour, were printed about that period.

## The Colours Selected for the Stamps.

We have found no new record of the exact date when Perkins, Bacon $\mathbb{E}$ Petch were authorized to print the One Penny in black ink, and the Two Pence in blue ink. In two of their letters to the Commissioners of Stamps and Taxes, of February 24th, and March 16th, 1840, ${ }^{3}$ they wrote: " Although we are willing to print in any practicable colour, we most strongly advise the penny stamp to be printed in black ink, as beyond all comparison superior to any other for steel plate engraving." The date must, therefore, have been subsequent to March I6th, and so it was, as Messrs. Wright and Creeke ${ }^{4}$ produce evidence to shew that Perkins, Bacon \& Petch received definite instructions as to the colours on March 1Sth, 1840. The information is contained in a letter of that date from Mr. H. L. Wickham, ${ }^{5}$ addressed to Rowland Hill, in which he gives the terms of the contract he had concluded with Perkins, Bacon \& Petch for the printing of the stamps, and among the terms mentioned were: "The Id. value to be Black. The 2 d . to be Blue."

[^20]The late Earl of Crawford, K.T., in an article he wrote in 1907, ${ }^{1}$ came to the conchusion that " black " was chosen as a provisional colour for the One Penny stamp, while experiments were being made to find a suitable red ink for that ralne. He was led to this belief because he thought a small plate containing three impressions of the One Penny stamp (Illustration 33), and another plate containing twelve impressions of the same value (Illustration 35), both of which he had prints of in shades of red, were respectively in existence at the beginning of January, and early in February, ISfo. In what way he arrived at these dates, it is quite impossible for us to say, but it will be seen later on that the Die of the One Penny stamp was not finally completed until February 22nd, I840, so that the plates of which his Lordship spoke could not have been made at the dates he mentioned. It will also be seen in the course of our history, that there is equally no foundation for the conclusion he came to that " black " was a provisional colour chosen for the One Penny stamp, or that any experiments were made with red inks from these two small plates, prior to the issue of the stamp in black in May, IS $\ddagger 0$.

## Trial Obliterations for the Stanips.

The colour trials we have spoken of, of the background of the stamps, were also used for experiments with cancelling marks and are found with two varieties of obliterations. One of these, struck in black, consists of the obliterating mark proposed by Mr. Charles F. Whiting, with the letters "V.R." in a monogram, in script capitals, in the centre, of which we have already given a description.? The other cancellation is that of the well known Maltese cross, which was afterwards used by the Post Office for obliterating the stamps. Like the former, it is struck in black, when found on these colour trials.

## Experiments for the Labels at the Top and Bottom of the One Pexiy Stamp.

During the same period, Perkins, Bacon $\mathbb{\&}$ Petch made use of several of the flat dies of the background (Illustration 19), we have referred to under "Colour trials for the stamps," for making experiments with labels for the top and foot of the One Penny' stamp, which were to contain the inscription. We have already pointed out, that it was not until January 30th, ISf0, ${ }^{3}$ that it was officially decided that the legend should consist of the words "Postage One Penny," although this form of the inscription had been inserted on the first die engraved for the stamp, previous to that date. Of the trials made for the labels, we have come across specimens of four varieties, and there may, of course, have been others. Two of these were made at the suggestion of Mr. Edwin Hill. Specimens were sent to him by Perkins, Bacon $\mathbb{\text { d }}$ Petch on February I7th, I $\$_{40}$, $^{4}$ and others, no doubt, were forwarded to Henry Cole, as we find them in the Album of Essays ${ }^{5}$ he left to the Art Library of the Victoria and Albert Muscum, South Fensington. One has the words "postage oxe pexis" at the bottom, in a straight line, in small sans-serif capitals, in black, precisely similar to the inscription on the first die engraved for the stamp, except that the words are enclosed within a frame formed of a plain line. The whole design measures $19 \frac{1}{4} \times 22 \mathrm{~mm}$.

```
1 London Philatelist. 1907 Vol. NVI, p. 24S.
2 Vide p. 6. }\mp@subsup{}{}{3}\mathrm{ Appendix C (21). }\mp@subsup{}{}{4}\mathrm{ Ibid. (23). }\mp@subsup{}{}{5}\mathrm{ l'ide p. It.
```

and is printed in black on white card. (Illustration 7.) The other has "postage" at the top in white sans-serif capitals, with a thin white line beneath, and at the bottom "one penny;" in similar capitals, with a thin white line above. In the four corners, in black sans-serif capitals, are the letters" A B "-"V R." This design measures $19 \frac{1}{4} \times 25 \mathrm{~mm}$. and is printed in black on white card. (Illustration S). These specimens were, no doubt, submitted placed close together, as the ink smudge at the right upper corner of (Illustration 7 ) and at the left upper corner of (Illustration 8) shews. Both designs were probably laid down on and were printed from the same plate. A third trial formerly in the collection of the late Earl of Crawford, K.T., has "postage" at the top and "ONe penny" at the bottom in white Roman capitals. The four corners were cut off in the shape of small square blocks, and pieces of white paper were pasted in their places, round which thin black lines were drawn by hand. These corner blocks contain the letters "BR"-"V R." inserted with pencil, in small sans-scrif capitals. This design measures $19 \frac{1}{4} \times 22 \frac{3}{4} \mathrm{~mm}$. and is printed in black on white paper. (Illustration 9). The card on which it is mounted bears at the back " Approved R. H. 2/2I/40" in Rowland Hill's handwriting. This essay has unfortunately disappeared since Lord Crawford's death, and we cannot trace in whose hands it now is. The last of the four trials is similar to the third, but the corner letters " $B R$ "-" $V R$ " are engraved in small Roman capitals, in the centre of star-like ornaments. This design measures $191 \times 22_{4}^{1} \mathrm{~mm}$. (Illustration 10 .) The meaning of the letters is not very clear, but a suggestion has been put forward that they stand for "Brittania Regni Victoria Regina." Mr. Lewis Evans, of the firm of Messrs. John Dickinson \& Company, Limited, formerly possessed two specimens ${ }^{1}$ of this essay printed in black on white paper, pasted close together on a small piece of stout paper, and we are indebted to him for the loan of the specimens, from which our illustration was reproduced. One other trial must at any rate have been made, which subsequently became the type adopted for the stamp. In this the words " postage "- "one penny" were in similar type to that used for the two last trials described, but the letters were made broader and more conspicuous. It was also decided to leave the four corner blocks plain for the time being.

The entry "Engraving Patterns for Queen's Head," in the Engraving Book of Perkins, Bacon \& Petch, under the date February 2 Ist, $1840,{ }^{2}$ refers to the experiments that were made for the labels at the top and bottom of the stamp. The work was, no doubt, spread over several days previous to the date of the entry on which day it was completed.

The Water-colour Sietches of the Stamps in the Royal Collection.

His Majesty the King possesses two rough water-colour sketches of the stamps, which were made for Rowland Hill, who gave them to Mr. Francis Thornhill Baring, (afterwards Lord Northbrook), who was Chancellor of the Exchequer in 1839-40. The sketches, each of which measures $21 \frac{1}{2} \times 2+\frac{1}{2} \mathrm{~mm}$. are on a small white card, the size of which is $62 \times+9 \mathrm{~mm}$. The one to the left is in black and that to the right is in blue. The black has "Id." and the blue " 2d." written in pencil on the Qucen's

[^21]head. The sketches were presented by the present Lord Northbrook, to King George, when Duke of York. (Illustration II). They have been described as being the original sketches made for the stamps, but this is a mistake. The fact that they have the word " postage" at the top, and crosses in the upper comers proves that they could not certainly have been made until after February 22nd, i8fo, as the entry from the Counting-House Diary of Messrs. Perkins, Bacon \& Pctch, of Febrnary 21st, we have already quoted,' and the diagram sent to the firm, by Rowland Hill, on the following day, ${ }^{2}$ shews that it was intended at that period, to have letters in the upper corners of the stamps. We do not know who suggested the addition of the crosses and the relegation of the letters to the lower corners, nor the exact date when it was decided to make this change ; but, as will be seen further on in our story, the crosses were not inserted on the engraved die, until some day between March, $4^{\text {th }}$ and ith, I840. In our opinion these sketches were purposely made in order to shew what effect the crosses would have on the appearance of the stamps, and we think that the end of Febrnary, i $8 \not 0$, was the date when they were executed.

## Continuation of the History of the Second Die for the One Penny Stamp.

The background above and below the Queen's head on the second die engraved by the Heaths, was found to extend too far in cach direction to admit of the engraving of the labels, so as to give the stamp a symmetrical appearance. A small portion of the background at the top and bottom, was then carcfully removed from the die and the inscription "postage "--" one penny," the corner blocks and a thin outer line down each side were engraved upon it. The whole design then measured $19 \frac{1}{4} \times 22 \frac{1}{2} \mathrm{~mm}$. The entry " Engraving Die for the Queen's Head, Penny Postage," in the Engraving Book of Perkins, Bacon \& Petch, under the date March fth, I8fo, ${ }^{3}$ refers to the engraving of the inscription, and the alterations we have described. It is possible that the die was again returned to Charles Heath, as His Majesty the King has a specimen of this state, printed in black on India paper mounted on soft, white card, which is marked "C. H. 3d." in pencil, in Mr. J. B. Bacon's writing. (Illustration 28). The die was once more sent to Charles Heath, and some small alterations were made: the shading of the Queen's ear was apparently slightly altered again, and probably some of the lines of the hair, ete., were strengthened. His Majesty the King's specimen of this state which, as usual, is printed in black on India paper mounted on soft, white card, bears " C.H. 4 th," in pencil, in Mr. J. B. Bacon's writing. ${ }^{4}$ The Heaths, having put the finishing touches to the Qucen's head, a white cross paté was engraved in each of the upper corner blocks. This addition must have been made between March $4^{\text {th }}$ and IIth, IS 40 , as the first plate was in process of manufacture at the latter date. ${ }^{5}$ The die was then hardened and ready for making plates. (Illustration 22). The flat piece of steel used for the die was abont 13 mm . in thickness and measured $75 \times 75 \mathrm{~mm}$., except that the width at the top was only 74 mm . Proof impressions are known of the finished state of the dic, in black on India paper mounted on soft, white card.

[^22]We have found the following entry, in Mr. J. B. Bacon's handwriting, at the end of the Counting-house Diary of the firm for 1840 .

```
" I Rowland Hill.
    2 Edwin Hill.
    3 Chairman of Comrs.
    4 J. E. D. Bethune.
    5 D. D. Heath.
    6 Mr. Wyon.
    7 W. J. Lewis.
    8 J. B. Bacon.
    9 C. Heath.
ro H. Cole."
```

We believe this to be a list of the persons to whom proof impressions of the finished die were presented. In addition to these names a proof was sent by Mr. J. B. Bacon to his cousin Mr. William Wheehwright, in a letter dated April I3th, I840, and one, the day before, to Mr. Marriott, who lent the medals for the drawing of the Queen's head by Henry Corbould.

## Recapitulation of the Various Kinown Stages of Engraying of the Second or Actual Die used for the Stamps.

1840. 

Jan. 15. Die completed ready for engraving the Queen's head. Appendix G. (Illustration 19).
,. I6. Die sent to Charles Heath. Appendix C (15).
Feb. 16? Proof impressions taken of the die. (Illustration 20).
,, 20. Die returned to Perkins, Bacon \& Petch by Charles Heath. Appendix C (2t).
,, 22. Two proof impressions of the die sent to Edwin Hill. Appendix C (26) (Illustration 27).
,20-26. Die returned to Heath. Appendix C (30).
Mar. 2. Letter from Rowland Hill to Perkins, Bacon \& Petch conveying the Queen's " high appreciation" of the stamp. Appendix C (33).
," 3 or 4. Die returned to Perkins, Bacon \& Petch by Heath. Appendix C (34).
" 4. Inscription "postage-one penny," added to the die. Appendix G. (Illustration 28).
, 4-II. Crosses paté added in the upper corners of the die. Appendix C (35) (Illustration 22).
,, 13. Proof impression of the die sent to Mr. H. L. Wickham. Appendix C (36).

## Impressions Taken fron the Die in ifyt.

At some period after a new die had been made at the end of 1854 , the numeral " I " and the words, " old original," were engraved on the die of 1840 in two lines below the stamp. The words are in sans-serif capitals and were engraved " direct" on the dic, so that they are "reversed" on the prints. On February ist, i87r, ${ }^{1}$ Mr. Ormond Hill ${ }^{2}$ wrote to Perkins, Bacon \& Co. to say that: "The Board [of Inland

[^23]Revenue] are desirous of having for the supply of the Postmaster-General, six proofs in black, and six in the proper colours, from each the $\frac{1}{2} \mathrm{~d}$. Postage die, the Id., the $1 \frac{1}{2} \mathrm{~d}$. and the 2d. I shall feel much obliged if you will have these taken ; and I shall be glad if you will at the same time, take a similar number of each for me to keep, and a few from each die in two or three other colors. I give instructions to the officer to give out the dies for this purpose." The impressions taken of the One Penny, "Original Die," by Perkins, Bacon \& Co. had the words " old original," and the numeral " I" on them, and they were printed on thin, hard, yellowish white, wove paper, in the following colours :-

Id:, black.
id., pale blue.
id., pale and also deep orange-vermilion.
id., sage-green.
Id., yellow and also orange-yellow.
Id., purple and also deep purple.

## The First Government Contract.

The Act establishing Uniform Penny Postage, which received the Royal assent on August Ijth, IS39, enacted: "That it shall be lawful for the Lords of the Treasury to order and direct the Commissioners of Stamps and Taxes from time to time to provide proper and sufficient Dies, or other implements for expressing and denoting the Rates or Duties which shall be directed by any' such Wrarrant as aforesaid, and to give any other orders, and make any other regulations relative thereto they may consider expedient." Also: "that the Rates or Duties which shall be expressed or denoted by any such Dies as aforesaid, shall be denominted and deemed to be Stamp Duties, and shall be under the care and management of the Commissioners of Stamps and Taxes for the time being." The Treasury minute of December 26th, $1839,{ }^{1}$ directed "that the Commissioners of Stamps and Taxes, and the Commissioners of Excise, ${ }^{2}$ should receive the official directions to take the necessary steps in conjunction with this board, and with the PostmasterGeneral, for the preparation of the stamps." Then we find Rowland Hill, in his "Journal," under the date January 3oth, ISfo, writes: "Settled with Mr. Wichham the general outline of a Treasury minute placing the management of the stamps under the Comrs. of Stamps." Then, in the Treasury minute of February 20th, ISfo, ${ }^{3}$ we read: "My Lords read that part of their minute of the 26th of December last, which has reference to the Stamps to be used in the collection of Postage. Together with their minute of the 28 th ulto." directing that the paper required for such Stamps should be procured by contract through the Commissioners of Excise. My Lords are of opinion that the preparations, for producing the several kinds of Stamps cnumerated in the minute of the 26 th of December, and the experiments connected therewith, have now so far advanced as to render it expedient to place the completion of the work under the immediate superintendence of the Commissioners of Stamps

[^24]and Taxes." This is followed by a number of instructions to the Commissioners, last named, regarding their duties and the measures they were to take.

It seems somewhat of an anomaly that postage stamps should have been placed under the charge of the Commissioners of Stamps and Taxes, which was a branch of the Inland Revenue Department, and not under the Post Office itself, for whose use they were created. It was doubtless due to the fact that the Commissioners liad had a long experience in providing embossed and other stamps, for the collection of various Inland Revenue taxes, and also to the view, taken by Parliament, that the public paid a stamp duty, by means of the postage stamps, just as they pay a stamp dute on agreements and other legal documents.

The Inland Revenue authorities have since their introduction in 1840 , been responsible for providing all the postage stamps used in the British Isles, down to April Ist, 19I4, since which date by Order in Council, of March 3oth, of that year, all the powers and duties of the Commissioners are exercised and performed by the Postmaster-General concurrently with the Commissioners of Inland Revenue.

As soon as the Die for the One Penny stamp was completed, Perkins, Bacon $\mathbb{\&}$ Petch, by Rowland Hill's direction, wrote on February 24th, I8fo, to the Commissioners of Stamps and Taxes. In this ietter they state, that the Die for the proposed adhesive stamp has been prepared, and they offer to print any quantity of One Penny and Two Penny stamps daily, that may be required, at sevenpence per thonsand, the paper to be furnished by the Commissioners, but nothing is said about gumming the stamps. The price was to include every expense of drawings, original dies, plates, printing, etc., and the whole of the work was to be done under the regulations and instructions of the Commissioners. After the first year they offer to contract at the rate of sixpence per thousand, and they strongly advise the One Pemny stamp to be printed in black ink. ${ }^{1}$ Perkins, Bacon \& Pctch, later on, had an interview with Mr. H. L. Wiekham, the Chairman of the Commissioners, who endeavoured to get them to lower the price they had quoted. They wrote to him on March inth, that it was impossible for them to reduce their quotation for the first year, but, if after that period the quantity of stamps wanted should prove to be 400,000 or more per day, they would be willing to fix the price at five pence per thousand. They further offered to give their personal bond of any amount, in case of their misconduct " and of four or five times the amount of such stamps, should any ever be improperly taken from the plates," and the Commissioners could have any number of their own officers on the premises as additional security. They state that the first plate of $24^{\circ}$ stamps would be ready for press that week.

They conclude by saying that no other house could dot he work equally well at seven shillings per thousand, let alone sevenpence, and that if they had thought the Government was willing to adopt letter-press, or compound-printing for the stamps, or they had been informed that their price was too high, they would not have proceeded further with the business. ${ }^{2}$ On March I3th, the firm sent Mr. H. L. Wickham a proof impression of the Die of the One Penny stamp ${ }^{3}$ and they had another interview with him on the following day, when the question of the gumming of the stamps seems to have been raised. The terms for a contract were practically settled at this interview ${ }^{4}$ and they were confirmed in a letter to Mr. Wickham on Mfonday, March I6th, I840, offering to print and gum the stamps at sevenpence halfpenny per

[^25]thousand for the first year and to then reduce the charge to fivepenny halfpenny per thousand, provided the quantity required amounted to 400,000 stamps, or upwards, per day. ${ }^{1}$ This offer was accepted by the Commissioners on March ISth, ${ }^{2}$ and two days later they wrote and authorized Perkins, Bacon \& Petch to prepare Dies or plates for expressing and denoting the Stamp Duty of One Pemy and Two Pence payable on the Postage of Letters. ${ }^{3}$ Articles of Agrecment were then drawn up embodying the terms of the contract, and these were signed on April 13th, I8.40. The Articles, inter alia, stated that the design approved for the One Pemny and Two Pence adhesive stamps, was " a fine steel plate engraving by Heath of Her Majesty's head reduced from Wyon's City Medal, with an engine-turned background by the said Messrs. Perkins, Bacon \& Petch, such stamps to be printed on sheets of the said paper, each sleet containing 240 impressions, the several impressions being exact facsimiles of one another, except that they are to be distinguished by certain combinations of the letters of the Alphabet." The stamps were to be printed "with proper ink of any practicable colour or colours that the said Commissioners shall direct," upon paper furnished by the Commissioners, and they were to be covered " at the back in a proper and sufficient manner for use with such gum or glutinous wash as the said Commissioners shall approve." The stamps were to be delivered " in a fit and proper condition for use in such quantities, and at such times as the said Commissioners shall appoint at the Head Office for Stamps and Taxes, or wheresoever else in London or Westminster they shall require, the first of such deliveries of any quantity not exceeding the rate aforesaid ( 300,000 per day) to be made on or before the 21st day of April, instant." All drawings, original dies, plates, machinery and fittings were to be provided by Perkins, Bacon \& Petch, and the printing, etc., of the stamps was to be done in rooms or offices used exclusively for the purposes. The dies and plates were to be " deposited in such place or places as the said Commissioners shall direct, and in a box or boxes or other inclosure provided by the said Commissioners, with two or more different locks, the key of one of which shall be kept by the said Joshua Butters Bacon and Henry Petch, and the key or keys of the other or others of the said locks shall be kept by such person or persons as the said Commissioners shall appoint in that behalf." The manufacture of the dies and plates and the printing of the stamps, etc., were also to be under the superintendence of an Officer or Officers appointed by the Commissioners. The price paid was to be sevenpence halfpenny per thousand and the contract was to remain in force for the term of one year from the day of the first delivery of stamps. *

## Later Contracts with the Government.

Nothing appears to have been clone when the first contract expired in April, 1841, and it was only in March, I843, that it was agreed that the price after the first year to the quarter ending April, r843, should be 7 d. instead of $7 \frac{1}{2} \mathrm{~d}$. per thousand stamps. ${ }^{5}$ A new Agrecment was then drawn up and this was signed and dated May 5 th, 1843 . The wording of the Agreement was very similar to the first, except for the following changes. The price was fixed at $6 \frac{1}{2} \mathrm{~d}$. per thousand stamps until the quantity of stamps, received in a quarter of a year amounted to $30,000,000$, when the price fell to $6 \frac{1}{4} \mathrm{~d}$., or if it reached $32,000,000$, or over, the price was further lowered

[^26]to 6 d . per thousand. It was agreed " that if any such gum or wash be required to be substituted in lien of that heretofore, and now used for the same purpose and the expense whereof, and of the application of the same shall exceed that of the gum or wash now used, then the additional expense so occasioned thereby shall be borne by the said Commissioners." And it was agreed lastly "that this agreement shall continue in force for the purposes aforesaid, so long as the Commissioners of Stamps and Taxes for the time being shall require the delivery of any such stamps, or until the same shall be determined by the said Joshua Butters Bacon and Henry Petch, or the survivor of them upon six months notice thercof, in writing to be given by them or him to the said Commissioners."

In May, $1851,{ }^{1}$ owing to an offer made by Messrs. Henry Archer and Robert Edward Branston to the Board of Inland Revenue, to supply the postage stamps at 5 d . per thousand, the price was reduced to this figure for five years, commencing July 5th, that year." In February, 1856, a statement appeared in "The Times" newspaper, that on the expiration of the contract then running, arrangements had already been made to substitute surface-printing for the stamps. Perkins, Bacon \&f Co. thereupon wrote to the Board of Inland Revenue, ${ }^{3}$ to evquire if this statement was correct and received a reply, ${ }^{4}$ that the Board had " not at present come to any determination upon it, as alleged in the article referred to." The letter of Perkins, Bacon $\& \mathbb{C} 0$. is interesting as it brings out the fact that in the printing and deliveries of the stamps during nearly sixteen years, only a single sheet had been found missing, and this they say " very probably was delivered by us but stuck to another sheet and was counted and destroyed as one sheet, when actually there were two together."

Previous to the termination of the contract of 1851, negotiations took place between the Board of Inland Revenue and Perkins, Bacon \& Co., ${ }^{5}$ with the result that a new agreement was drawn up and signed on July 28th, 1856.

The wording of this agreement followed the two previous ones of which we have given particulars, with certain alterations and additions. The price was further reduced to $4 \frac{1}{2} \mathrm{~d}$. per thousand stamps, the clause regarding the gum was retained, and various new stipulations were made concerning the rooms and offices in which the stamps were printed. A new clause relating to spoilage of paper was introduced to the effect that " if the total quantity of shects of paper spoiled in any quarter of a year shall exceed five per cent. of the quantity of sheets printed during the same period, the firm shall be charged with the cost of all the paper beyond such five per cent. which shall be wasted by reason of such spoiling." The agreement was to remain in force " for the term of five years to be computed from the fifth day of July, I856, and for so long after as the Commissioners of Inland Revenue, for the time being shall require the delivery of any such stamps, or until the same shall after the expiration of the said term of five years, be determined by the said firm upon six months notice thereof in writing to be given by them to the said Commissioners." The fullowing new clause was added near the end: "And it is hereby further agreed by the said firm that they will adopt any improvement in the manufacture or design of

[^27]the present stamps or the introduction of any other description of stamps which experience, or the progress of art may shew to be desirable, and which the Commissioners of Inland Revenue may approve and require, compensation being paid to them by the said Commissioners for any additional expense to which they shall be put by reason of their adopting any improvement which shall be so required, the amount of such compensation to be determined by the said Commissioners of the Treasury:"

On December 3rd, 1861, a new agreement was signed. In this a further reduction was made to 4 d . per thousand stamps, but the contract was to last ${ }^{1}$ for a period of " ten years, to be computed from the 5 th day of July, 186 I , and for so long after as the Commissioners of Inland Revenue for the time being shall require the delivery of any such stamps, or until the same shall after the expiration of the said term of ten years be determined by the said firm upon six months notice thereof, in writing to be given by them to the said Commissioners." The other clauses were practically the same as those in the previous agreement, but the following new clause was inserted: "Provided also that it shall be competent for the Commissioners, without such cause as aforesaid or for the firm, to terminate this contract upon giving to the other party six months notice thereof in writing, and upon payment or tender by the party so giving notice of the sum of $£ 1,000$, three months at least before the termination of such notice." This contract was modified in IS65, when the price was raised to $4 \frac{1}{2} d$. per 1,000 stamps, ${ }^{2}$ on condition that the sheets were twice gummed. A new contract for one year was signed in October, 1865, and the first delivery of sheets charged at $4 \frac{1}{2}$ d. per 1,000 stamps was made on the thirtieth of that month. A fresh contract was signed on April 12 th, $1867,{ }^{3}$ when it was determined to continue the double gumming of the sheets, and the price of $4 \frac{1}{2} \mathrm{~d}$. per $\mathrm{I}, 000$ stamps remained in force until the end of 1879 , when the printing of the One Penny stamps passed out of the hands of Perkins, Bacon \& Co.

## The "Small Crown" Watermarked Paper for the Stamps.

The Lords of the Treasury, in their minute of December 26th, I839, ${ }^{4}$ directed that the paper to be used for the adhesive stamps, etc., should be " peculiar in its watermark, or some other feature, but to be supplied to Government by competition," and in their minute of January 2Sth, I8 40 , they ordered that the paper should be procured by contract, through the Commissioners of Excise. ${ }^{5}$

Previous to these dates Rowland Hill and Henry Cole made enquiries about watermarked paper for the stamps, and Perkins, Bacon \& Petch furnished the latter with addresses of paper mould-makers, on December 1 qth, $1839 .{ }^{6}$ Communications on the same subject also passed between the firm and Mr. Stacey Wise of Rush Mills, Hardingstone, a village about two miles from Northampton, ${ }^{\text {, who was in the habit of }}$ providing them with part of the paper they used in their ordinary bank-note business.

[^28]Mr. John Prince, a wholesale stationer, of 27, Bread Street, Cheapside, London, on December 27th, 1839, sent Rowland Hill a sheet of hand-made bluish laid paper measuring $9 \frac{1}{2}$ by 15 inches. The laid lines on this sheet are horizontal and are crossed with vertical lines one inch apart. The sheet is watermarked in the centre, with the paper-maker's trade-mark, a shield with a posthorn in the centre, a erown above the shield, and the monogram " R T" in seript type below, the letters, no doubt, being the initials of "Robert Turner," a well-known paper-maker. This sheet, which was probably submitted as a sample of watermarking, is now in the Royal Collection.

On February 5th, 1840, Rowland Hill noted in his "Journal" that : "The advertisement for tenders for the supply of paper for covers, etc., ${ }^{1}$ appeared to-day," and three days later Mr. Edwin Hill sent Mr. J. B. Bacon for his opinion two samples of paper made by a Mr. Smith. ${ }^{2}$ Mr. Edwin Hill's letter also shews that he was then in possession of a sample of paper furnished by Perkins, Bacon \& Petch, ${ }^{3}$ which was doubtless made by Mr. Stacey Wise. On the tenth of the same month Mr. Wise wrote, ${ }^{4}$ that he was " engaged in making specimens of paper with a complex and beautiful watermark for the envelopes." Five days later, Mr. J. B. Bacon sent Mr. Edwin Hill a sheet of labels, with directions about the making of the moulds for the erown watermarked paper, and he says that the size of the paper required for the 240 stamps on the plate would be " at least 10 and $\frac{1}{8}$ by $18_{4}^{3}$ " inches. ${ }^{5}$ On the nineteenth of February, Perkins, Bacon \& Petch sent Mr. Wise a mould they had received from Mr. Edwin Hill, with instructions to make several specimen sheets of paper of various weights. ${ }^{6}$ Six days later Perkins, Bacon \& Petch wrote to Rowland Hill : "we have taken six impressions from the spoilt head, [the first die engraved for the One Penny stamp] upon the paper you gave us, and your brother [Mr. Edwin Hill], has cut off and taken two of them away. The watermark is so faint on this shect that it is all but impossible to see it, and of course does not injure the head. We therefore both agree that as far as the public seeing the watermark is concerned it is no better than none, but when wet it is easily distinguishable, as we proved to him and this he thought an argument in favour of a weak watermark, besides the advantage in the printing and in this we agree with him and nost decidedly recommend that it should not be very strong." ${ }^{2}$

On March ist, Mr. Wise wrote to Perkins, Bacon \& Petch, enelosing copy of a letter he had received from the Excise Office, to the effect that his tender for the paper for the covers, etc., had not been accepted, ${ }^{8}$ and, as is generally known, the contract for the supply of paper for this purpose was given to Mr. John Diekinson.

The following day Rowland Hill entered in his "Journal": "Diekinson paper will not do for labels, the great number of threads required makes it very expensive, and when cut up the threads would some of them draw out. The C[hancellor] of the Ex
${ }^{1}$ The " Mulready ' wrappers and envelopes.
${ }^{2}$ Appendix D $(3,4,5)$.
${ }^{3}$ Ibid (4).
${ }^{4}$ Ibid (6).
${ }^{5}$ Appendix C (22) and vide p. 25.
${ }^{6}$ Appendix D (7, 8).
${ }^{2}$ Appendix C (28).
${ }^{8}$ Appendix D (9).
[chequer] has therefore decided under my advice to employ the watermark paper for labels." The same day Mr. J. B. Bacon wrote to Mfr. Wise that Rowland Hill was in favour of giving him the order for the crown paper, but that possibly Mr. Wood, ${ }^{1}$ might be against it, and that an appointment wonld be fixed for Mr. Wise to see both these gentlemen. ${ }^{2}$ On Jfarch $4^{t h}$ the interview took place as related in Rowland Hill's " Journal": "Met Mr. John Wood and Mr. Stacy [sic] Wise at the Excise Off. [ice], and contracted with the latter for 200 reams of paper for labels at I4d. a pound. Dickinson's price for label paper was $2 s$. Hereafter, the contract is to be by public tender, but there is not time for it on the present occasion." The letter book of Perkins, Bacon \& Petch contains the copy of a letter from Mr. Wise to Rowland Hill, that was apparently written at their counting-house. No date is attached to this letter, but as it occupies a place in the book between letters dated February 8th and March $9^{t h}$, I8 40 , it must belong to this period. As the contract was made on March $4^{\text {th }}$, we think the letter was probably sent at the end of the previous month. The price quoted by Mr. Wise, for the first 500 reams of the crown watermarked paper, including the cost of the moulds, was $I / I_{ \pm}^{3}$ per $\mathrm{lb}{ }^{3}$ but as the initial contract was made for a much smaller quantity, ${ }^{4} \mathrm{Mr}$. Wise was successful in maintaining that he could not supply this amount under $1 / 2$ per lb .

Before procecding with the account of the manufacture of the paper by Mr. Wise, we must give particulars of an essay of watermarked paper that belongs to a date previous to March $4^{\text {thi, I }} 840$. This essay consists of a sheet of bluish wove handmade paper measuring $9 \frac{1}{2}$ by $15 \frac{1}{4}$ inches, watermarked with six small crowns, 10 mm . apart, in a straight line in the centre of the sheet lengthwise, but of a type rather larger in size than that of the small crowns eventually adopted. We think that this was one of the specimen sleets made by Mr. Wise, from the mould furnished by Mr. Edwin Hill, and which was sent to the former on February Igth, I8.0. ${ }^{5}$ It seems probable, too, that it was a sheet of the same trial make that Perkins, Bacon \& Petch used six days later for printing six impressions of the first engraved die of the One Penny stamp. ${ }^{6}$ The sheet from which our description is taken is in the Royal Collection.

We now return to March 4 th, 1840, the date on which, as we have seen, the contract for a supply of paper was made with Mr. Wise. As soon as this gentlemen obtained the order, he no donbt consulted with Perkins, Bacon \& Petch concerning the watermark of the paper, and we find the following entry in Mr. J. B. Bacon's handwriting at the end of the firm's comnting-house diary for 18 fo. No date is attached to the entry, but there can be little doubt that it refers to this period.

[^29]" Gave Mr. Wise a marked sheet of paper divided off as follows : -
12 squares across measuring $9_{2}^{\frac{1}{2}}$ inches.
\& 20 do. large ,, $188_{8}^{5}$
also a margin all round of $\frac{1}{2}$ an inch which makes-


It will be seen that the entry contains inaccuracies, but it is reproduced exactly in the form in which it appears in the diary.

On March 17th, Mr. J. B. Bacon wrote ${ }^{1}$ to Mr. Wise " It is quite time the sample sheet with the crowns made its appearance or you will be out in your contract," and Mr. J. P. Bacon sent him another letter ${ }^{2}$ on the following day in which he said: "From the time you are in getting this sheet ready, my father fears you will be behind time with the paper." The shect or shects must have arrived on the following morning, as we find Perkins, Bacon \& Petch wrote to Mr. Wise on March 19th, telling him that the watermark was not correct, and giving him directions of the way in which it was to be altered. ${ }^{3}$ They said: " The crowns must be lowered one eighth of an inch more, the 20 crowns equally divided up and down the plate: this will leave the eighth of an inch thus gained to be equally divided between the upper and lower margin. The cross that is io $9 /$ /oth wide, which is right Altogether, but the lines and outer edge of the paper is only three eighths of an inch on each side when they ought to be half an inch each thus taking from the two, a quarter of an inch. The space for crowns between the lines is $9 \mathbf{1 3} / \mathbf{1} 6$ th when it ought to be $99 / \mathbf{I 6}$, thus taking a quarter of an inch improperly in the centre from the margin." We have examined what we believe to be portions of a shect or sheets of this trial sample of paper. The quality of the paper is thin yellowish white wove with rows of crowns, the crowns being iomm. apart horizontally and 13 mm . vertically. The word " postage " at the sides is in Roman capitals i2 $\frac{1}{2} 112 m$. in height, that is of much larger type than in the paper used for the issued stamps, and the five marginal lines are wider apart. The crowns are also rather larger, and they correspond in size and shape with those on the essay sheet of bluish wove paper we have described. Some of this thin yellowish paper was nsed by Perkins, Bacon \& Petch in May, 1840, for certain printings taken from a plate containing three impressions of the One Penny dic, which they used for experimental purposes and to which reference will be made later on. The particulars of the paper are in fact taken from some of the actual pieces that were used for these printings, and they are the only specimens of the

[^30]paper we have come across. The moulds used for this paper and for the sample watermarked sheets ordered on February igth were returned to Mr. Edwin Hill on April 15th, 1840. ${ }^{1}$

After hearing from Perkins, Bacon \& Petch that the watermark in the paper was inaccurate, Mr. Wise had new moulds made and on April 2nd, 18 fo² wrote to these gentlemen as follows: " Will send you a sheet of the Stamp paper on Saturday morning if the officers will permit it, they have suggested whether it ought not to be sent to the Excise Office first-there are three of them altermately in attendance, and another is expected-they place themselves at the vat side, and mark down every sheet that is made and complain much of the heat, cold and damp-they say they must tell out every sheet themselves when it comes to the finishing Bench. I hope to send up 2 Rms. the early part of the week, but I am exceedingly annoyed with the conduct of the men who had agreed to do a certain quantity of work, say 5 Rms. per day: although the moulds are of less dimensions then they agreed to-they will only now do 4 Rms. per day. The Officers put the moulds under Government locks every meal time and night." The letter is interesting as shewing the great care and precautions the Excise Office took in the manufacture of the paper, to prevent any being illicitly made, and also demonstrates the trouble mannfacturers had with their employees over three quarters of a century ago.

On April 6th, i8fo, Perkins, Bacon \& Petch were advised that Mr. Stacey Wise would bring 2 reams of the "crown " paper to London on the following day, ${ }^{3}$ but if he did so, the Excise Office did not hand it over at once to the firm, as the latter stated in a letter to the Commissioners of Stamps ${ }^{4}$ on April 9th, that "if paper is received we shall be ready to commence printing on Monday next." However, a supply of the paper must have been delivered to Perkins, Bacon \& Petch on April roth, or the IIth, as the printing of the One Penny stamps actually commenced on the latter date and a sheet was then sent to Rowland Hill by Mr. J. B. Bacon, ${ }^{5}$ with the remark " you will see that the Crowns in the watermark come so admirably as to pay us for all the trouble in preparing them."

An entirely new fact that has come to light in our researches is that the supplies of the crown watermarked paper furnished under Mr. Wise's first contract, were made in triple sheets, that is every sheet lhad to be divided into three parts before it was used for printing the stamps. Perkins, Bacon $\mathbb{\&}$ Petch complained ${ }^{6}$ that it took "one person's time to cut the sheets," and the Excise Commissioners thercupon authorized Mr. Wise to introduce a watermarked "dot " at the top and bottom of each of the centre divisions, which he did. ${ }^{7}$ The firm were then ${ }^{8}$ able to "cut a hundred sheets at a time instead of doing them singly." The three divisions of the sheet when cut, each measured $10 \frac{1}{2}$ by $19 \frac{3}{4}$ inches. The small crown watermarks are 13 mm . apart horizontally and are spaced 15 mm . vertically, and are arranged in twenty rows of twelve, so that when the sheet was printed in proper register with the

```
1 Appendix D (17, 18). A Appendix C (47). }\mp@subsup{}{}{7}\textrm{Ibid}(17,18, 20, 23).
2 Ibid (15).
3 Ibid (I6).
```

${ }^{5}$ Ibid (50).
${ }^{6}$ Appendix D (17, 19).

[^31]plate each stamp received a crown watermark in the centre. The 240 crowns are enclosed within a frame formed of five straight, watermarked, parallel lines. The outer four of these lines are broken at certain intervals by the insertion of the word " postage" watermarked in Roman capitals 7 to 8 mm . in height. The word " postage" appears once in the centre at the top and bottom of the sheet and twice at each side. On the left side the words read upwards, on the right side downwards, and at the bottom the word is inverted. The paper was hand-made from wire wove moulds and the "bits" to form the watermarks were composed of cylindrical wire curved and bent by hand to the required patterns, and were then stitched on to the wire-work of the moulds with a finer description of wire. It was greyish white, with " deckle" edges on the four sides of the mill sheet, and like all hand-made paper varied a good deal in thickness. The ream consisted of 500 sheets.

The correspondence in Appendix $\mathrm{D}^{1}$ shews that there was a great deal of delay in supplying the paper in April and May, i8 80 , so much so that Perkins, Bacon $\&$ Petch were sometimes at a standstill with the printing of the stamps for want of it. Some of the paper, owing to the hurried manner in which it was made, was also defective and had to be rejected. ${ }^{2}$

On June 24 th, $18 \not \boldsymbol{f}^{\circ}{ }^{3}$ Perkins, Bacon \& Petch wrote to the Commissioners of Stamps \& Taxes, saying that there was only sufficient paper left of the initial contract to last five weeks and suggesting that a fresh supply should be ordered. The Secretary in his reply on July 6th, ${ }^{4}$ said " that the Board caused a representation to be made to the Treasury on the subject, and have received a reply from Mr. Gordon stating that the Commissioners of Excise have been instructed to enter into a further contract with Mr. Stacy [sic.] Wise on terms arranged by their Lordships," and this order was promptly carried out. But between these dates, viz., on June 26th, Perkins, Bacon \& Petch received three reams of experimental paper, watermarked small crown, that Rowland Hill had obtained from Mr. Stacey Wise. This paper was made from a new mould that was one third of the size of the moulds previously used and each ream weighed, respectively, $9 \mathrm{I}^{\prime} 3 \mathrm{lbs} ., 82^{\prime} 3 \mathrm{rd} \mathrm{lbs}$. and 8 lbs , that is equal to $28 \mathrm{lbs}, 261 \mathrm{bs}$ and 24 lbs , if it had been in triple reams. ${ }^{5}$ The three different weights of paper were all less than that of the paper supplied by Mr. Stacey Wise under the first contract, but exactly what the weight of the latter was we are unable to say, although Mr. Wise, ${ }^{6}$ when quoting a price in the first instance to Rowland Hill, based his calculations on a weight of " about 33 lb ." From an entry made by Mr. Edwin Hill in his "Diary" under the date March 9th, I8 80 ," it appears that the weight was $31 \frac{1}{2} \mathrm{lbs}$. per triple ream, but the wording of the note is somewhat obscure, as Mr. Hill speaks of a " First order " and " Present order." What he meant by the words "First order " we do not quite know, as we have seen that the initial contract with Mr. Wise was made on March 4 th, ${ }^{8}$ which was only five days before the date of the entry. The most likely explanation that occurs to us is that Mr. Hill

[^32]was referring to some proposals that had first of all been made with regard to the size and weight of the paper, but which were altered before the actual contract was concluded with Mr. Wise.

Rowland Hill held the idea that if the paper was made thinner, the stamps would adhere better when attached to letters, and he had this experimental lot of paper made in order to test and compare the adhesivencss of the gum on papers of different gravity. This is borne out by the entry in his "Journal," under the date June 27 th, i8fo, which reads: "Have had some experiments tried with a view of rendering the labels more readily adhesive ; with this view the paper will be made thimer and will be less sized." The correspondence in Appendix $D^{1}$ shews that none of the three lighter qualities of paper was suitable, owing chiefly to the gum shewing through the sheets and Mr. J. B. Bacon² expressed the opinion to Rowland Hill, "that thirty pounds $p$. ream or rolbs. p. ream of $2 f^{\circ}$ labels, and the strength of paper and sizing employed in the bulk of the paper now in use is that which will be found best calculated to secure all the objects which it is desirable to attain and we [Perkins, Bacon \& Petch] should recommend the new contract to be so made." In his reply on July 4th, ${ }^{3}$ Rowland Hill wrote: "The further supplies of paper will be of the weight you recommend, viz., io lbs. to the ream of sheets of the reduced size. With regard to the quantity of size it is desirable that you should communicate direct with Mr. Wise the contractor." There can be little doubt, therefore, that the weight inserted in the new contract made with Mr. Wise shortly after July 6th, 8840 , was ro lbs. per single ream. The late Earl of Crawford had in his collection a large block of the One Penny black stamps with gum consisting of nearly fifteen complete horizontal rows of a sheet printed from Plate 7 on the cxperimental $2 \not+\mathrm{lbs}$. per triple ream paper. ${ }^{4}$ In proof of this, the part sheet had in writing " 24 lbs " twice on the margin at each side, and further, each of these margins liad deckle edges.

It is evident, therefore, that this sheet was one of the twenty-five gummed sheets printed on the 24 lbs . paper. ${ }^{5}$ Another interesting feature of this sheet is the proof it furnishes that Plate 7 was used for printing on this experimental paper before any "Imprimatur" sheet of the plate had been registered at Somerset Housc, as it will be seen later on that the latter event did not take place until July 8th, i84o. Ten of the actual twenty-four specimens, in the case of the 24 lbs . and 26 lbs . varicties of paper, referred to in Rowland Hill's letter of July 4 th, ${ }^{6}$ are now in the collection of His Majesty the King. These twenty stamps are also printed from Plate 7, and each of them is obliterated with a trial cancellation composed of seven concentric circles round a small circle of solid colour, as given in our Illustration No. 36. One of the strips of ten stamps has " 24 lbs " written on the margin, and the other has " 26 ." The collection also contains six single obliterated specimens arranged in two rows on a piece of pajer. The stamps, in order to test the strength of the gum, are only partly stuck down and in the space between each vertical row is written, res-

[^33]pectively, " 24 lbs ," " 26 lbs." and " 28 lbs." The printing on the experimental crown paper was done on June 26 th and 29 th, $1840,{ }^{1}$ and only 423 sheets ${ }^{2}$ out of a total of 1697 sheets were printed, no doubt all from Plate 7.

We have found from one of Perkins, Bacon \& Petch's account books of 1840, that the total quantity of paper they received under Mr. Stacey Wise's first contract, consisted of 67,500 triple sheets, equal to 202,500 single sheets, when cut into three divisions.

This paper was used in printing the following stamps:-
168,556 Id. black.
6,ory rd. ," spoilt impressions.
23,891 2d. blue.
571 2d. ," spoilt impressions.
3.323 rd. black " V.R."
r4S rd. ., ", spoilt impressions.

## 202,500 shects.

Taking 500 sheets as an approximate calculation to the ream, 67,500 sheets is equal to 135 reams. As we have already mentioned, Rowland Hill stated in his "Journal," that the initial contract had been made for 200 reams, but it appears from the letters of Mr. Wise and Perkins, Bacon \& Petch, of May 2oth and June 24th, $1840,{ }^{3}$ respectively, that the actual quantity was only 133 reams, which is confirmed by the figures we have adduced.

The first delivery of stamps under Mr. Wise's second contract commenced on August 28 th, 1840.4 This paper, and all that subsequently supplied by Mr. Wise, was in single sheets. Just why the change to smaller sheets was made we do not know. Complaints were made by Perkins, Bacon \& Petch of the pressing and roughness of the paper, and also of the creasing of a large number of the sheets. ${ }^{5}$ There were, too, complaints on the score of unsoundness, spotting and size-staining. ${ }^{6}$ But what possibly had most weight and determined the change was the liability of the sheets to get creased and the trouble and time it took to cut them into three divisions.

In September and October, I840, there was an idea of once more experimenting with thinner paper, as the following extracts from Mr. Edwin Hill's "Diary " shews:- ?
"September 14 th, 1840 . Order for 216 sheets experimental paper from Excise."
"October 6th, 1840, Staccy Wise, Rush Mills, Northampton. Cr[edit] 216 sheets Crown watermarked paper thinner than that in use, for trial substance-9 lb. per ream, as per Wise's letter. N.B. Mr. Allen has this paper at present."
"October Sth, ISfo. Try the new paper for labels."
"October 13th, I $8_{4} 0$. New paper for labels to be tried when the new colour is decided."
"December 15th, 1840." Under this date a return is given of all the paper that had been received from Mr. Stacey Wise between August Sth and September 29th,

[^34]I8.f0, amounting to 450 reams or 225,000 single sheets ; and at the end of this return is added "N.B.-2I6 sheets of experimental paper have also been received, but they are quite independent of this account."

We have found no reference whatever to this experimental paper in the records of Perkins, Bacon \& Co., and cannot say whether it was sent to them from Somerset House for trial printing. We think the paper that was furnished by Mr. Stacey Wise under the second contract, the weight of which we have seen was io lbs. per ream, was probably found to be so satisfactory that this little lot of 9 lbs . per ream paper was never tested or used.

A serious complaint was made by Perkins, Bacon \& Petch to Mr. Edwin Hill in August, I841, about a supply of the paper furnished by Mr. Wise, under his third contract. The letters' show that this lot of paper was very irregular in substance and was too weakly sized. In consequence of these defects the gum penetrated through the paper and there was an average loss during eleven days of more than fourteen per cent; 2201 sheets being entirely spoilt during that period. A portion of the paper was thereupon resized by Mr. Wise, and appears to have then stood the gumming satisfactorily, but the total spoilage from August to November, I8fr, consisted of no less than $10,48 \mathrm{I}$ sheets. The matter was finally settled by Mr. Wise, the Commissioners of Stamps \& Taxes, and Perkins, Bacon \& Petch, each sharing one third of the loss incurred. ${ }^{2}$ Mr. J. B. Bacon recommended that future supplies of the paper should be made to weigh about I lb. per ream more, i.e., II Ib, and this suggestion appears to have been carried out in future contracts. ${ }^{3} \mathrm{Mr}$. Wise was given a new order and was told to submit eight sample reams of paper. This was printed and gummed by Perkins, Bacon \& Petch in February, 18 $\boldsymbol{4}^{2}$, and turned out to their satisfaction. ${ }^{4}$

Mr. Stacey Wise died on January Ist, 1842 , and from that date the business was continued by his widow, Mfrs. Elizabeth S. Wise.

In February, $18+3,{ }^{5}$ Perkins, Bacon \& Petch drew Mr. Edwin Hill's attention to the small stock of paper then on hand and no doubt a fresh order was given to Mrs. Wise, shortly after that date. On December I6th, ${ }^{6}$ of the same year, Mr. Edwin Hill wrote to Mr. J. B. Bacon to say that the moulds used for the paper seemed to be in bad repair as he had noticed " the imperfect appearance of some of the crown watermarks." Mr. Bacon in his reply ten days later" said that he had written to the Mill, and they advised that a new pair of moulds should be made before another order for paper was given. Mr. Bacon wrote again to Mr. Hill, the following day, ${ }^{8}$ to say he had received information from the mould-maker that he could not make a new pair of Crown watermarked moulds in less than six weeks from the time they were commenced. No further steps seem, however, to have been taken in the matter at this time, as in a letter to Mrs. Wise on February 2nd, I844, ${ }^{\text {, Mr. Bacon wrote: " Had }}$ you not better write a letter to the Commissioners of Excise through the Supervisor stating the necessity of a new set of moulds before any more Postage Paper is made," and on the fifteentl1 ${ }^{10}$ of the same month he wrote to her son: "Inform me by return of post what has been done about new Postage Moulds as it is now quite time they

```
1 Appendir D (50-6u).
5 lbid (03).
9 Ibid (67).
* Appendis I. }\mp@subsup{}{}{6}\mathrm{ Ibid (64).
3 Appendix D (57-70).
` Ibid (65)
4 Ibid (62).
8 Ibid (66).
```

were making, in fact I begin to be troubled for fear the paper will be wanted before it can be made." The cost of the moulds was, in each instance, included in the contract price of the paper and they were made for Mrs. Wise by Mr. Hayes. ${ }^{1}$

From February, 1844 , onwards, with the exception of a few odd letters, we have been unable to find the correspondence that took place between Perkins, Bacon \& Co. and Mrs. Wise. Separate letter-books appear to have been kept for taking copies of all letters to Rush Mills, and the letters from Mrs. Wise to the firm were also kept separate from the other correspondence they received. Although a thorough search has been made for these records no trace of them can now be found. We mnst, therefore, be content in doing the best we can to trace the further history of the watermarked paper from the comparatively few documents we lave discovered, and what is already known of the changes that took place in the manufacture of the paper.

We cannot say definitely whether new moulds were obtained for the watermarked paper in $18 \not+4$, but the correspondence we have reproduced on the subject leads us to think that a new pair of moulds was certainly made in February or March, of that year. If this was so the moulds could only have lasted about two years, as it is evident from a letter of Mr. J. B. Bacon to Mr. Edwin Hill, on January 17th, I8 $46,{ }^{2}$ that another set was then required. Mr. Hill made a suggestion that Mrs. Wise should get the moulds prepared, with the exception of the Crowns, and inferred that these could be added afterwards in the presence of a Revenue Office, but Mr. Bacon thought that Mr. Wood, the Chairman of the Commissioners of Excise, might take exception to this course being adopted. We have found that a new contract for 1500 reams of the crown paper was given to Mrs. Wise in February, $18 \not 46$, and we think it is highly probable that the new moulds were first used for the paper of this contract.

We have found no document relating to the Small Crown watermarked paper during the next six years, and we pass on to March 23 rd , 1852 , $^{3}$ on which day Mr. J. P. Bacon addressed a long letter to Mr. Ormond Hill in reply to a note he had received from him that morning. In this letter Mr. Bacon gave an account of the printing and gumming of a trial lot of 20 reams of thinner paper, which weighed only 9 to to the ream, instead of the usual weight of about II Ib. He reported that the paper printed well, but that there was a greater amount of spoilage in the process of gumming, owing to the paper curling inwards when wet with gum, causing it to stick to the trays in which the sheets were placed to dry and when removed the parts so stuck tore from the sheets. As regards the price of a thinner paper, which apparently Mr. Hill thought ought to be less, Mr. Bacon pointed out several reasons why a thin paper cost more to produce than one of a thicker quality.

Several of the officials responsible for the supply of stamps held the opinion that it would be advantageous to have the paper of thimer substance, and we find that in July, 1852, Mr. J. Ledingham, who was then at the General Post Office, raised the question again with Mr. J. P. Bacon. The latter wrote to him on the twenty-first of that month ${ }^{4}$ and said: "There is no insuperable objection to the idea of printing the stamps on thinner paper, but as the spoilage is increased by the thinness of the paper (the strength of material being equal) I have lately urged Mrs. Wise, who had fallen into a habit of making it thinner, to get it up to the original standard of $I I \frac{1}{2}$

[^35]to to the ream. I remember that Mr. Rowland Hill was at first desirous to have a very thin paper, but I thought that he had been led to abandon the point, though I never heard any reason assigned either way." From a letter of Perkins, Bacon \& Co., to Mr. Ormond Hill on September 3oth, $1852,{ }^{1}$ it is evident that a further trial lot of 273 reams of thinner paper was ubtained from Mrs. Wise, and that this was used for printing between August $7^{\text {th }}$ and September $7^{\text {th }}$ of that year. Perkins, Bacon \& Co. in their report on this paper said: "We did not observe any great objection to the general use of such thin paper arising from the increase of spoilage, while the party who pastes the half sheets together reports to us that he found the adhesiveness of sucl paper to be decidedly greater than usual. We are therefore of opinion that it would be quite safe to order a considerable quantity of sucli paper to be made, if it should be the opinion of the Honourable Commissioners that such a course is desirable." We do not know what the reference to pasting half sheets of the paper together means, without it refers to torn or spoilt sheets which were made up into the form of whole shects for the purpose of more easily counting the spoilage when it was delivered to Somerset Housc. ${ }^{2}$ On November IIth, 1852, ${ }^{3}$ Mr. Ormond Hill wrote to Mr. Bacon for a specimen of the stamps on the thinner paper, but for what intent this was wanted we do not know. We have found no copy of any letter sent in reply to this enquiry, so presume an answer was given to MIr. Hill at a personal interview.

We cannot produce any document to shew that the next lot and subsequent supplies of the paper ordered from Mrs. Wise were of the same thin variety as the 273 reams, but an cxamination of the "Imprimatur" shects shews that commencing with Plate 167 , registered April I8th, 1853, the paper was of a thinner quality than that hitherto used. The paper employed for printing in April, 1853, had probably been made at least five months previously, so it appears from this that a new contract for thinner paper was given to Mrrs. Wise in November, 1852.

From a letter written by Mr. J. P. Bacon to Mr. Ormond Hill on August 28th, 1853, ${ }^{4}$ it seems that new moulds for the crown paper were then once more being prepared, and that the contract for the paper then running with Mrs. Wise was nearly completed. There can be no doubt she received an order for a further supply of the paper shortly after that date.

This order was completed in April, 1854, as the following three letters of Mr. J. P. Bacon shew. On the twelfth of that month in a letter to Mrs. Wise, ${ }^{5}$ he said : "What have you done as to the Crown new order," on the twenty-second ${ }^{6}$ he wrote to Mr. Onnond Hill, in reply to his enquiry, to say he had no suggestions or observations to make at that time about the postage paper and on the twenty-fifth, ${ }^{7}$ he said in a letter to Mrs. Wisc," I am very glad you have got the order for Postage paper all right again."

On January 5th, $1855,^{8}$ a complaint was received from Mr. Ormond Hill that the paper was so weak and short in fibre it was difficult to perforate the sheets. Mr. J. P. Bacon wrote the same day ${ }^{9}$ to Mrs. Wise asking her to see to this, but as he

[^36]pointed out " the paper now in use is probably six months old, all you can do is to look to the present stock." On May 25 th, ${ }^{1}$ of the same year, he wrote to Mrs. Wise to say: "There are great complaints of the uncvenness of the Crown paper, some sheets being very thin and other very thick. Mr. Hill does not care how thin you make it provided it is even, but it is impossible to perforate such irregular substances as are from time to time turning up in this paper. This must be attended to."

The small crown watermarked paper continued to be made until the end of 1854 , when a change occurred in the watermark and a larger type of crown was substituted. Particulars of this alteration in the form of the watermark will be found in its place further on in our work. But before concluding our account of the paper watermarked with small crown there are one or two other points on which a few words seem desirable.

The late Mr. H. L'Estrange Ewen, ${ }^{2}$ in the Fifth and Sixth Editions of his "Catalogue," states that " In 1853, a taller and thinner lined 'Small Crown' watermark was introduced, and at the same time the paper became much thinner, a change probably duc to the introduction of perforation." An examination of stamps from the "Imprimatur " sheets, registered between the years 1850 and 1855 , fails to support the claim that a taller and thinner Small Crown was introduced in 1853. These specimens shew "crowns" of many shapes and sizes, and on the sheets registered in 1853 and after, the crowns vary just as much in pattern as on those registered previous to 1853 . This is just what one would expect, when it is remembered that the 240 crowns on each mould were separately formed by hand of twisted wire, and were stitched on to the wire-work of the mould with a finer wire. The stitching was very liable to become loose or broken, in which case the contour of the crowns was likely to be altered. The breaking of the stitching wire was much facilitated by the action upon it of the chemicals contained in the pulp from which the paper was manufactured, which corroded and destroyed the wire rapidly. Those causes rendered frequent repais to the moulds necessary, and such repairs often had the effect of permanently altering the original shape of the crowns. In addition to this, as we have shown, several pairs of moulds were required at different periods. We believe also that further moulds were made of which we have found no records, for, as we have scen, there is evidence to prove that the moulds became worn out after about two years service.

As early as December, $\mathbf{I} 843,{ }^{3}$ Mr. Edwin Hill wrote to Mr. J. B. Bacon to call his attention to "the imperfect appearance of some of the crown watermarks" due to the bad repair of the moulds then in use. It is not surprising, thercfore, that a large number of varieties are found in the shape of the "crowns," but all of these are so to speak accidental and so far as we know it was never intended to make any special change in the pattern of the watermark during the whole of the period of fourteen years the Small Crown paper was manufactured. Mr. Ewen's other statement that a thinner quality of paper was introduced in 1853, is in accordance with the remarks we have already made on this subject.

Some years ago Mr. A. H. Stamford, a Fellow of the Royal Philatelic Society, London, discovered a specimen of the One Penny stamp shewing two "Small Crowns,"

[^37]one of which was inverted. ${ }^{1}$ The late Mr. S. C. Skipton, a recognised authority on the line-engrated stamps of Great Britain, after an examination of the spectmen wrote : 2 " The colour is a rich deep plum, and the letters in the lower corners (SD) are not those of the earliest shape that were used nor are they the latest large size. The postmark is of the type introduced in I 844 . On examining the watermark, we think that it is double, one being inverted and very faint compared to the one in the normal position. The lower parts of the crown is [sic] common to both watermarks. On examining the stamp with benzine the normal watermark comes out very distinct, but there is no trace of the inverted one. On the evaporation of the benzine the second watermark again appears and is seen when the stamp is held to the light either dry or damped. Several to whom I have shewn it, simply asking them to look at the watermark without mentioning anything more, asked, after looking at it, if it was a double watermark. The puzzle is how this could have occurred in the process of papermaking." It is usual to press the sheets of paper in piles after they have been made, and we think the varicty in question may have been cansed by a sheet of paper being placed inverted in a pile of sheets just before the pile was pressed. The impression of the inverted crown would thus be a set-off from the sheet that was cither above or below the one from which the stamp came, and would consequently be an impressed instead of a true watermark, which would account for it not shewing under the action of benzine.

## The Guminng of the Stamps.

Perkins, Bacon $\mathcal{\&}$ Petch were not at all desirous at first of undertaking the gumming of the stamps, as is manifest from a letter they wrote to Mr. Rawsthorne on March I4th, I8 $40,{ }^{3}$ in which they said: " much against our own wish we have agreed to furnish the adhesive matter (and put it upon the back of the stamps)." On the same day they sent Rowland Hill an estimate of the supposed expenses of gumming, ${ }^{\text {a }}$ in which they shewed that the work would cost three farthings per thousand stamps. They offered to deduct one farthing per thousand from their charge, and to provide room on their premises for the Commissioners to do the gumming, or they would be willing to gum at the actual cost to themselves or take all risks for three farthings per thousand over and above the price at which they had offered to provide the stamps to the Government. The matter was finally arranged four days later, when the Commissioners of Stamps and Taxes agreed to pay them an extra halfpenny per thousand stamps to cover the cost of gumming. ${ }^{5}$

Some months before this-on October 9th, I839,-Mr. John Rawsthorne, of Manchester, wrote to Rowland Hill offering to furnish gum for the adhesive stamps. ${ }^{6}$ On December 2nd, ${ }^{7}$ of the same year, Mr. Ledingham, Rowland Hill's clerk, wrote to Mr. Rawsthorne to ask him to submit specimens of paper gummed with his preparation and also a sample of the gum itself. This he did on the following day, ${ }^{8}$

[^38]when he also offered to supply dry gum, like the sample sent, at $£ 45$ per ton. He appears to have written again to the Treasury ten days later, as Rowland Hill replied to a letter of that date on December 19th, $1839,{ }^{1}$ and said that he would probably avail himself of Mr. Rawsthorne's offer of assistance.

On February 6th, 9 th and 27 th, $1840,{ }^{2}$ Mr. Edwin Hill sent Mr. Rawsthorne samples of various papers which he asked him to gum. Included in these were five specimens which had been printed by Perkins, Bacon \& Petch. What design or designs were used for these printed specimens we cannot say, but possibly one, if not all of them, were printed from the designs on the small plate of which we give an Illustration under number 17. At any rate this plate was almost certainly in existence at the time these sheets of paper were printed.

As soon as it was decided that Perkins, Bacon \& Petch should do the gumming, they wrote to Mr. Rawsthorne on March Iftll, I $840,{ }^{3}$ to enquire at what price he was willing to supply them with gun like the sample he had sent to Rowland Hill, and whether he could furnish them with a few hundred weight in twenty days' time, etc. We have not found the letter of Mr. Rawsthorne in reply to this enquiry, but it is evident from Perkins, Bacon \& Petch's letter of Marcli Iztla' that he asked a higher price than he quoted to Mr. Leclingham in December, I839, and that he said a greater quantity of gum would be required to cover a given number of stamps than he had before stated. Perkins, Bacon \& Petch pointed out these differences to him, and they enclosed in their communication a letter they had obtained from Mr. Edwin Hill ${ }^{5}$ confirming these facts. They further said that Mr. Bacon hoped to be able to go to Manchester to see Mr. Rawsthorne in the course of a few days.

Mr. Bacon had an interview in Manchester on March 21st with Mr. Rawsthorne, and the result was that this gentleman offered ${ }^{6}$ to supply an improved solution of gum, similar to the sheets of paper gummed and sent to Mr. Edwin Hill, at 28:- per cwt. delivered in London, less $2 \frac{1}{2}$ per cent ; or dry gum, equal to the samples sent to Mr. Ledingham, at 48 - per cwit., less $2 \frac{1}{2}$ per cent, and half the carriage amounting to I 6 per cwt. Mr. Bacon ${ }^{7}$ agreed to accept one of these propositions and promised to let Mr. Rawsthorne know which it would be after his return to London. On March 2 th $^{8}$ Mr. Bacon wrote to Mr. Rawsthorne to say that having tested his samples he found that the improved gum solution was " much less" and the dry gum a " little less adhesive" than the samples of December, I839, and that he " must lave another mail to reflect upon what ought to be donc." Mr. Rawsthome replied the next day ${ }^{9}$ that the specimens of gummed paper given to Mr. Bacon were only to show the difference of colour and were not to be taken as samples of the adhesiveness, and he would warrant the improved gum to be stronger and superior to the other. The same day Perkins, Bacon \& Petch wrote to him ${ }^{10}$ that they would take his gum in the dry state, at the price quoted in his letter of March 2 Ist, provided it was similar in colour and adhesiveness to the sample sent by him to Mr. Ledingham on December 3 rd, 1839 ; it being understood that he would supply them with five hundred weight in fourteen days from that date, and any further quantity that they might require from time to time at one month's notice, and that he would furnish them on or before

| ${ }^{1}$ Appendix E (5). | ${ }^{5}$ Ibid (12). | ${ }^{8} \mathrm{Ibid}(15)$. |
| :--- | :--- | ---: |
| ${ }^{2}$ Ibid $(6,7$ 8). | ${ }^{6} \mathrm{Ibid}(13)$. | ${ }^{9} \mathrm{Ibid}(16)$. |
| ${ }^{3}$ Ibid (10). | ${ }^{7} \mathrm{Ibid}(14)$. | ${ }^{10} \mathrm{Ibid}(17)$. |

delivery of the first parcel of the article with the proper mode of rendering it into a solution fit for use. They also agreed to take from him all the quantity they required for one year, that being the term of the first contract they had made with the Government for printing the stamps, and they told him he could go on making one ton more. On April 7 th, ${ }^{1}$ they wrote again to saly that they had received and tried the gum, as well as the samples sent, and that they wished the ton then being made to be like the No. I sanple, " as that is lighter and better in every way than the others."

On April 22nd, ${ }^{2}$ the firm wrote to Mr. Rawsthone and said: " we have now been five days uccupied in gumming the stamps and the difficulties we have met with are beyond description ; some of them were natural to a new business in which we had never had any experience, and as far as the time required for drying goes, and the cockling after pressing we are better off than we expected to be ; but after various experiments we find :-
ist.-That three persons can only gum and dry 600 sheets in 12 hours, whereas we shall probably require five times that quantity.
2nd.-That unless the gum is laid on rather thick, it will not adhere to the letter, when wet and put upon it, and consequently that it will not go near so far as you supposed.
3rd.-That after perfectly gumming the slieets it frequently happens that the gum separates, and leaves large spots mpon the slreet, where the gum has not taken at all. We do not believe this is owing to any fault in the gum, but in the bleaching of the rag or sizing of the paper at the mill.
$f^{t h}$.-That the shects do cockle and thus trouble us, while drying, and before we get them into the glazed boards for pressing.
If you can assist us by any suggestions we shall be glad to hear from you, for at present the cost to us of gumming is ruinous. In the act of gumming we have tricd three plans, one was the placing the sheets under a tympan-another was to place them in prles and gum the top, and remove them as done-and the last is placing them singly upon a block a fraction smaller than the sheet and this is the best mode of the three."

Mr. Rawsthorne replied on April Ifth, but we have been unable to find lis letter. He wrote again on the following day ${ }^{3}$ to say he had dispatched a small barrel of solution and perhaps on trying it the firm would be able to get on more smoothly. If the solution became too thick or strong it could easily be reduced. On May 5th, ${ }^{4}$ le wrote again to enquire how the firm was progressing with the gumming and asked for a report about the solution he had sent, and he added a postscript to the effect that if the gum became too thick it should be warmed without adding any more water. Perkins, Bacon \& Petch wrote in reply on May Sth, ${ }^{5}$ and said they were getting on better with the gumming than at first, but that there were still difficulties. As regards the solution they said " its colour is good, but it does not adhere any better than that we are using, and not so well if weakened in the least." The account for the barrel of solution and the one ton of dry gum was forwarded by Mr. Rawsthorne on May 19th. ${ }^{6}$
${ }^{1}$ Appendix E (18).
${ }^{2}$ Ibid (19).

[^39]${ }^{5}$ Ibid (22).
${ }^{6}$ Ibid (23).

In July, i8fo, Mr. Charles Pressly sent on an anonymous communication to Perkins, Bacon $\&$ Petch, that had been addressed to the Commissioners of Stamps and Taxes, in which the writer asserted that the gum on the stamps was of very inferior quality, and he seems to have suggested that it should be replaced by the use of gum acacia. The firm replied on July 16 th, ${ }^{1}$ that the gum was of a good adhesive quality and had been approved of by Rowland Hill, and recommended by the Chairman of the Commissioners : that they could substitute gum acacia if wished, but the alteration would oblige them to charge an extra halfpemy per thousand stamps, or they would undertake to manufacture a gum as adhesive as gum acacia at an extra charge of one farthing per thousand stamps. We have found a letter of Mr. Edwin Hill, dated "Friday morning," which is endorsed " $18 \not 40$," ${ }^{2}$ and which, we think, was sent in reply to Perkins, Bacon \& Petch's letter of July 16th. In this he said: "I spoke to my brother [Rowland Hill] yesterday respecting the gum. He thinks it hardly necessary to increase the expense as the gum answers tolerably well," and he went on to say that his brother thought a little sugar might be mixed with the gum as at first, if the firm had discontinued its use as lee supposed " from the circumstance of a few of the sheets having adhered to each other." Mr. Edwin Hill added, that if the firm liked to try the effect of using sugar in various proportions, the waste sheets of stamps might be utilized and so the effect would be seen um the actual paper on which the stamps were printed.

On November 6th, $18 \not \boldsymbol{q}^{0,}{ }^{3} \mathrm{Mr}$. Rawsthorne wrote to Perkins, Bacon \& Petch to say it was six months since the ton of gum had been forwarded, and asking how soon it would be before they required further supplies. The firm wrote on the twentyfourth of the same month and asked him to forward 7 cwt . more of the gum and two casks were despatched to them on December Ist. *

On the twelfth of the last montl, ${ }^{5}$ Mfr. Edwin Hill wrote to Mr. J. B. Bacon to say that some of the stamps had been returned as unsaleable on account of a difference in the gum and that Mfr. Allen ${ }^{6}$ upon examination found that lie had more than a thousand shects in the same condition as the sample Mr. Hill sent, and he asked Mr. Bacon what he thought was best to be done with the stock they had. On the twentythird of the same month ${ }^{7}$ Mr. Pressly forwarded the firm a copy of a letter the Commissioners of Stamps and Taxes had received from Mr. T. Lawrence, the Assistant Secretary of the Post Office, which stated that complaints had been frequent of the want of adhesiveness of the One Penny stamps. The firm in their reply to Mr. Pressly on December 26th ${ }^{8}$ said that they had run out of the ordinary gum they used for the stamps and had "made a gum which adhered better than the other when first made, but which lost some of its adhesive quality by time. From this only 3223 that were printed, and of this number 1510 that were regummed, the remainder gave to the Post Office, and it must be those of which Mr. Lawrence complained, as all others

[^40]have been from the same original gumming and coming from the same source. We hase now a good supply and shall take care not to be short again."

On December 2Ist, ISfo, ${ }^{1}$ Rowland Hill wrote to Mr. Rawsthorne to say his attention had been drawn to a paragraph in a Leverpool paper, which stated that the gum on the postage stamp produced cancer on the tongue, and he asked him what the ingredients were of which the gum was composed, so that he could publicly announce them, in order to allay apprehension on the subject. If Mr. Rawstheme objected to the composition of the gum being made public, he asked him to say whether it contained anything which could affect the tonguc; or what would perhaps be better, would he addeess a letter to some of the London papers, stating that he was the manufacturer of the gum and that it did not contain anything of a deleterious nature. Wé are mable to give a copy of Mr. Rawsthorne's reply to Rowland Hill, but we reproduce a letter he wrote to Perkins, Bacom \& Petch on the subject. In this he said: " "Perhaps you may have seen an alsurd paragraph in the London newspapers 'that the adhesive stamps cause cancers! in the opinion of scientific men,' ete., cte. The 'John Bull' stated that it was extracted from the ' Liverpool Mercury.' I have written to Egerton Smith to ascertain if it originated in his paper ? previous to publishing a contradiction to allay any apprehensions from such a silly parapraph-the material from which it is made is caten daily in my own family in soups, milk, cte. I am sure 1 have no need to enter more into the matter as regards yourselves, you are quite aware that there is nothing deleterious in the gum when it leaves my store, in fact if cancers can be produced by licking a stick of sugar, toffy or taking molasses on bread, why then if one person could wet a few millions, at once, there might be some grounds for such a ridiculous charge. I have written Mr. Hill per this post." We are also able to reproduce the actual paragraph which appeared in the " Afanchester Courier " of November 28 th, 1840 , and the letter written to Mr. Rawsthorne regarding it, in reply to one from him. ${ }^{3}$

On January 20th, 18fr, ${ }^{4}$ Perkins, Bacon \& Petch wrote to Mr. Rawsthorne to draw his attention to an attack upon the gum, which had been published shortly before in the "Weekly Dispatch," and they asked him if he was willing that they should give in their answer a list of all the ingredients used in its composition. We have been unable to find Mfr. Rawsthorne's reply to this letter and camot say whether the matter was carried further.

Mr. Rawsthorne continucd to supply the gum for the stamps until the end of I $8_{45}$, although complaints were made by Perkins, Bacon \& Petch more than once about the quality of the article. The last lot was forwarded on November 5 th, $18+5$, by Mr. Peter Rawsthorne, manufacturing chemist, of Hendham Vale, Manchester, to whom his brother, Mr. Joln Rawsthorne, had transferred the order. A long correspondence took place in reference to this parcel, as part of it was found to be of inferior quality: A final settlement between the Rawsthorne brothers and Perkins, Bacon \& Petch took place on May 18th, i $\$ 46$.

After $18_{45}$ the firm obtained their gum elsewhere, until they manufactured it themselves, which they very soon did.

In January, 1855 , $^{5}$ the Commissioners of Inland Revenue wrote to Perkins, Bacon \& Co. to say that they did not approve of the "gum or glutinous wash " on the postage stamps and that they required the firm to provide a "more tenacious and

[^41]adhesive gum or wash-such as shall be approved of by the Commissioners." Perkins, Bacon $\mathbb{E}$ Co., in their reply a few days later, ${ }^{1}$ explained that the first gum used was recommended by Rowland Hill, that they had since given a fair trial to immense numbers of applications, and they thought they had obtained the best gum which could be precured from purely vegetable matter. That as they were now allowed to use animal substance, they had prepared a strong animal gum, which was an entirely different article, and they had been using this " since about the commencement of the present quarter," and they believed it to be "equal in its adhesive qualities to any other gum yet in use." They said that they were still making experiments, and had set on foot enquiries on the Continent, as well as elsewhere, to try and discover a still better article.

Between April and October of the same year, experiments were made with a French gum submitted by Mr. L. Winter, of Paris. A considerable correspondence, which we reproduce in Appendix E ${ }^{2}$ took place over those trials. The letters speak for themselves, and the matter is hardly of sufficient importance to need further comment here. It will suffice to say that the French gum turned out to be inferior to that Perkins, Bacon \& Co. were using for the stamps, and was, consequently not adopted.

Ten years later, in May, I865, ${ }^{3}$ another trial was made of a sample of French gum submitted by Mr. Charles Bouton, of Paris, to the General Post Office, London. Six sheets of stamps were gummed with the sample and sent to Mr. Omond Hill, but, although Mr. Bouton asserted the gum was the same as that then exclusively used for the French postage stamps, Perkins, Bacon \& Co. found it was no better than the French gum they lad experimented with in the year 1855.

In April, $1865,{ }^{4}$ the Sceretary of the Post Office suggested that the quantity of gum on the postage stamps should be increased, and Mr. Ormond Hill ${ }^{5}$ asked Mr. J. B. Bacon to make some experiments of this kind. The firm submitted four reams of sheets with different variations of gumming. ${ }^{6}$ In what way the first two reams differed from the normal gumming we camot say, but the third had middling thick gum once laid on the sheets and the fourth had the sheets twice gummed. Mr. Ormond Hill considered that the last experiment was the best, and he asked Mr. Bacon what the extra cost of this form of gumming would be. The firm replied that it was impossible to arrive at any satisfactory conclusion as to the cost after mily trying 500 shects of each sort, but that they believed that the charge they would be compdled to ask for twice gumming the shects would be one halfpenny per I,ooo stamps. Mr. Hill replied on May ISth, ${ }^{7}$ that he had been in communication with the Post Office authorities and it was wished that the firm should try the experiment on such a scale as would enable them to speak positively as to the cost. He asked them to do this as quickly as possible and to have every ream specially gummed, so marked that it could be readily distinguished when delivered; "as for obvious reasons we wish to be careful not to issue these reams until the question be settled." These instructions were carried out, and Perkins, Bacon \& Co. wrote to Mr. Hill, on May 26th, ${ }^{8}$ "Having now gummed ir,000 sleets by the double process we are in a better position to speak of the cost arising from this change of operation, if carried out."

[^42]They gave him some detailed particulars of the cost, and said that they would undertake to do the work at an extra charge of one halfpemy per I,ooo stamps. On June, I5th, ${ }^{1}$ the Buard of Inland Revenue wrote to Perkins, Bacon \& Co. to say that they accepted the offer of the firm to put two coats of gum upon each sheet of postage stamps for the extra charge the firm had named, and requested them to proceed with this plan without delay: They further said that their solicitor would prepare a contract to the abore effect for the execution of the firm. There was some delay in drafting the Contract, as Perkins, Bacon \& Co. wrote to Mr. Hill on August 26th, ${ }^{2}$ in reply to a letter from him, to say " in reference to the twice gumming of the postage stamps, we beg to state that we are still waiting for the Solicitor Department, having heard nothing whatever on the subject. We are ready to commence the operation at short notice." On September 2gth, ${ }^{3}$ Mr. J. P. Bacon wrote to Mr. E. H. Tilsley, the solicitor: " I return the draft contract, regarding which I have no remark to make, except that it will take three weeks from the time of our receising the final order to commence the double gumming before we shall be in a position to deliver such sheets to the Warchouse Keceper." The contract for the double gumming of the shects was made for one year, and on October 17th, I866, Mr. Ormond Hill wrote to Mr. J. P. Bacon to say: "The year during which it was agreed that you were to put a second coating of gum upon the One Penny and Two Pence postage labels will terminate on 23rd inst. But 1 write now to tell you that there is no intention on the part of the Board to discontinue this double gumming, and that a formal negotiation with your firm for the perpetuation of the Contract, will I expect be opened in a Iew days." The new Contract was not signed until April i2th, $1867 .{ }^{5}$ By this it was agreed that the double gumming of the sheets should be continued and that the price shoukl remain at $f_{2}^{\frac{1}{2} d}$. per 1,000 stamps. This agreement lasted so long as Perkins, Bacon \& Co. printed the stamps.

We will now add a few particulars of the composition of the different gums that were used by the firm for the stamps. It appears from Mr. Rawsthorne's letter of December 24 th, $1840,{ }^{6}$ that the principal ingredient in his gum was obtained from molasses, but what the other ingredients were we do not know. The gum varied a good deal in quality and colour from the first, as is proved by the One Penny black stamps, which are found with a thick brownish gum and with a thin yellowish gum.

As regards the gum used after 1845 , Mr. Elwin Hill, in his evidence before the Select Committee, on Postage Laloel stamps in 1852, stated: " Our gum is potato starch, slightly burnt or toasted," and Mr. J. B. Bacon, in his cvidence before the same Committee, said : " There is a great deal of nonsense in speaking about the injury to health in our gum ; our gum is composed of potato-starch, wheat-starch and gum."

Towards the ond of 1854, "animal substance was introduced in the gum and in reply to an encuriry in July; 1867 , about the composition of the gum, Perkins, Bacon

[^43]\& Co. wrote: " The gum used in the preparation of Postage Stamps (Id. and 2d.), is made of gelatine and potato starch called British gum.

To prepare the gelatine :-
Soak the best hide pieces (such as are used for the best Tub-sized papers) for twelve or fourteen hours in cold water: then clean them from fat, lime, and dirt : put them into a steam bath, adding water till they melt to a jelly. When the jelly (at nearly boiling heat) has evaporated till it shows on a saccharometer ten degrees, strain through a hair sieve. After standing a short time to settle pour off carefully, throwing the bottoms away and the jelly is fit for use.

To prepare the British gum :-
To 7 th of gum add $\frac{1}{4}$ of a gallon of boiling water, stir well about and add gradually from time to time $\frac{3}{4}$ of a gallon more until the whole is well mixed. Let it stand till next day.

To mix the two constituents together:-
Take 2 quarts of hot jelly and 3 quarts of liquid British gum, stir them well together when the saccharometer should stand at 50 to 51 (the temperature being 150 to $\mathbf{I} 60$ degrees).

It must be used hot on the same plan as glue in a glue pot."
After the hot gum had been applied by hand to the backs of the sheets of stamps with brushes, the sheets were put separately in trays, of which there were some hundreds, to dry. ${ }^{1}$ The sheets were then placed in piles between glazed boards and pressed in order to make them lie as flat as possible. The gumming was done on the top floor of the building used for the postage stamps in Whitefriars Street.

## The Plates for the One Peniy and Two Pence Stamps.

The Die for the One Penny stamp having been completed and the steel hardened, impressions from it were taken up on a roller of soft steel, which in its turn was hardened. When this was done an impression was transferred from the roller to another roller and from the latter an impression was laid down on a flat plate. His Majesty the King possesses a print taken from this plate on thin, hard, bluish wove paper. (Illustration 21). For what particular reason this plate was made we do not know, but it was evidently done for some experimental purpose. The design on the die laving been engraved in a negative form, the transferred impressions on the roller became positive, and a print taken from any one of them showed the design in a negative state ${ }^{2}$; just as it appears on our Illustration 2I, although, as we have explained, this illustration was taken from a print from a flat plate.

The rollers used for the postage stamps had from four to eight impressions ${ }^{3}$ of the die on each roller, but, as a rule, only one of these impressions was used in the making of a plate. The impressions were placed lengthways on the surface of the roller and were rolled into the plate from top to bottom, that is to say in a vertical direction as regards the design. The impressions were transferred from the roller one by one on to a flat piece of soft steel large enough to take 240 impressions, in twenty horizental rows of twelve, and this became the actual plate for printing the stamps.

[^44]As we have said, only one of the impressions on a roller was ustally used in laying down a plate, but during the first year or so it is possible that more than one roller impression was cmployed in a few instances. This, at any rate, seems to have been the course followed in the case of Plates $7,8,9$ and ro of the One Penny value. Menst of the stamps on these ferm plates were probluced from a defective roller impression, or impressions, and show a small flaw between the letters " 0 " and " $x$ " of the worl "owe," which appears white on the stamps. (Illustration 33). This flaw probably arese from a speck of dirt or metal getting on to the originat engraved die, or the surface of the roller, monoticed, at the time the roller used for these plates was made. From the fact that a certain number of the stamps do not show this particular flaw it appears as if more than one roller impression was used in the making of these plates. As the flaw is found on four plates it was probably on the die, as it indicates that more than one impression on the roller received it before it was removed. We are unable to give the exact date when the roller with the defective impression or impressions was constructed, as the Engraving Book of the firm contains no entries of the rollers for the plates for many years, but it was almost certainly made during the first half of the month of May, I8fo. ${ }^{1}$

A somewhat similar flaw, no doubt due to the same cause, appears on most of the stamps of Plates I and 2. This flaw is found in the cross in the left comer of the stamps, and the result is that the little ray directly beneath the long ray pointing to the left upper corner, is missing or defective.

The steel plates used in 1840 for the One Penny and Two Pence stamps were obtained from Mr. Richard Bayley, of Sheffiedd, with the exception of one lot purchased from Messes. William Hoole \& Co. of the same town. Those first supplied measured either i9 by $10 \frac{1}{2}$ inches or 21 by ig inches, both sizes being half an inch in thickness. After the receipt of the plates the edges had to be cut, the comers squared and the larger of the two sizes divided into two. This work was carried out by a smith and engineer, one David Davies of 42 Collingwood Street. London. On January 3Ist, i8fo, Mr. Buyley wrote: "I have endeavor'd to come as near the sizes given as 1 possilby could. Shoukd we be likely to have more of these large plates to make, I shall be able to be more exact. They require to be made from ingots of a peculiar shape, with which I was quite unprepar'd . . . ." On February 27th, he forwarded another lot of plates five-eightlis of an inch thick, made of " lmprow'd steel for engraving upon," like the last, and wrote: "I trust they will prove satisfactory being all full to the size both in length, breadth and thickness. I am sorry to send them with the ragged ends, but they are so strong that our shears had not sufficient power to pare them, so as to be straight on the edges." On March izth, he sent off four more of the large plates mosuming 2i by ig incles, and these are stated to have been nine-sixtecnths of an inch thick. He wrote: "The above, I will venture to say, are the largest sted plates erer sent out of Sheffick. They would have been sent off last werk, but we broke a shaft in rolling the last plate, which brought us to a standstill for a day or two. I find it to be quite imposible to roll these plates without round comers as you will see when you examine them, but you wanted a plate square at the comers and to be 19 inches in the narowest part, consequently I had no alternative but to exceed your dimensions as to longth, viz., 21 inches, so as to leave a square plate when the round corners are cut off." This appears to have been the last lot of the-

[^45]large sized plates, as the size of those subsequently forwarded was in each case $1 \frac{3}{8}$ by $20 \frac{1}{2}$ inches, the thickness being five-eighths of an inch. The cost of the last plates was $f 3$ each. When forwarding eight of these plates on June Ioth, I 8 \&o, Mr. Bayley wrote: " Having made a mold purposely for these plates, 1 shall be able to get them for you exactly to size, and of a superior quality." Later on plates were obtained from Mr. J. H. Winder, of Sheffield, and other firms and these were also five-eighths of an inch in thickness.

After the plates had been cut the exact shape required they had to be annealed or softened by the Perkins' method. ${ }^{1}$ This process took a week or more for its completion, as a number of plates were usually done at the same time. The plates were then ready to receive the impressions of the engreved die taken up on rollers, and when 2.40 of these had been transferred to each plate, the marginal inscriptions and the plate numbers had been added, and the letters had been inserted in the lower corners of the impressions, the plates were hardened, ${ }^{2}$ one by one, a process that took about a day to accomplish. About 1860, an improvement was effected by using Prussiate of Potash with the charcoal for the surface-hardening of the steel plates, and this has been superseded by the employment alone of Cyanide of P (otassium in a liquid form, which is the agent used at the present day:

The first book we have been able to find that gives particulars of the hardening of the dies and plates commences with October, 1863 , at which periorl, and for sometime after, Mr. Robert Grace had charge of this particular work. It is evident, from the numbering of the entries in this book, that it was a continuation of a previons record, but this has unfortunately been destroyed or lost.

From enquiries we have made of Mr. A. E. Fisher, the head of the department for hardening stecl plates now used by the firm, it appears that there must have been a good deal of difficulty in 18.40 in hardening plates of the size of those nsed for the postage stamps. The plates were not hardened thronghout, but only on the surface, and the method then employed, as we have said, was nothing like so perfect as that now adopted. As a consequence the surface hardening was often very unequal, and sometimes quickly wore off in patches. That some of the early plates were not hardened, at any rate when they were first made, is proved from the following entry in Rowland Hill's "Journal " under the date October 17th, i8 40 : "Sent for Bacon, to talk to him among other matters about the imperfect manner in which some of the labels have been printed, and the consequent diminisled security against forgery; he assures me that all the imperfections are attributable to the manner in which he was forced by the Stamp Office in the early stage of the business to push on the printing before there had been time to harden the plates. That he stated the objection to this course but was not listened to."

Mr. W. White was in charge of the transferring press fur making the plates in 18 fo, and he was succeeded by Mr. David Gill in January, I86t. Mr. Gill was then in charge until the completion of the contract at the end of $\mathbf{1 8 7 9}$. The plates were put into the press lengthways, and the impressions were transferred in horizontal rows, that is in vertical columns as regards the printed sheet: the first row on the plate being the last vertical column on the sheet. This was almost the invariable custom followed in transferring the impressions, but we think that a plate now and then amongst those made during the first few years was laid down the reverse way to that

[^46]we have described. This was, no doubt, done as an experiment by the transferer. Great care had to be exercised in trinsferring the impressions that the roller was not rocked too far in cither direction, as injury was likely to be caused in this way to the neighbouring impressions on the plate. When this occurred, as it sometimes did, the damaged impression was touched up by hand ; sometimes also, in the old transferring presses, the roller slipped a little from the correct position in which it had been put. In such a case the impression made on the plate would be out of its proper place. To obviate this difficulty, the transferring presses were afterwards fitted with a screw that held the roller fast when it was lowered on the plate and raised again. When the whole $24^{\circ}$ impressions lad been laid down and the marginal inscription ${ }^{1}$ and the plate number had been added, the "burr "" between the impressions, etc., was scraped away and any touching up that was thought necessary was done. On some plates certain of the specimens had the exterior lines of the corner squares containing the letters redrawn, ${ }^{3}$ while on other plates specimens had the exterior lines at the sides entircly redrawn. Examples of the former are found on Plates I, 2, 4 and 5, etc., of the One Penny, Original Die, and of the latter on Plates 52, 5t to 57 , inclusive, 76,77 and 88 , of the same dic, while in the case of Plate 90, Original Dic, practically every one of the $2 \not+0$ impressions had the side lines redrawn.

In the case of the first plate made, a proof sheet was printed in black on India paper mounted on soft white card and sent to Rowland Hill. Mr. J. B. Bacon's letter of April Ist, $18 \not \mathrm{f}_{0}$, ' states that the first plate was then ready, except for the insertion of the letters in the lower corners, and the marginal inscription round the four sides, and an entry in Rowland Hill's " Journal," dated April 2nd, IS fo, shows $^{\text {a }}$ that he then had this proof sheet:-"Mr. Baring . . . . . ' is much pleased' with the stamp for the covers . . . Showed a proof of a sheet of labels, without the letters however." This proof sheet was exlibited by the late Mr. Pearson Hill at the "Celebration by the Corporation of the City" of London of the Jubilce Anniversary of the Introduction of Inland Uniform Penny Postage at the Guildhall, London, 16th May, i8go," and also at the first London Philatelic Exhibition, which was opened on May 19th of that year. The sheet was afterwards presented by Mr. Pearson Hill to the General Post Office, London, in which building it now is. The sheet was photographed at the London Philatelic Exhibition in a very reduced size and copies of it were sold there with other photographs of interesting objects displayed.

Faint lines, sometimes called by collectors "hair lines," were made on the plates, as guides for the workmen in transferring the impressions from the roller, so that the labels should be placed in straight lines horizontally and vertically. These guide lines were cleaned off the plates, as far as possible, at the time the " burr " was removed, but when the impressions happened to overlap portions of the lines, the lines could not be touched. In such cases the lines became visible on the stamps, and specimens

[^47]

The Transferring Press brought into Use in isge.
of the early printed stamps shewing traces of the lines are by no means uncommon. The guide lines were only used on the earlier plates and were dispensed with after a ycar or so.

Between the years $18 \nmid 0$ and 1852, two improvements were made by Perkins, Bacon \& Petch to the transferring press, ${ }^{1}$ and, in February, $863^{2}$, a " ratchet " gauge, made by Messrs. Holtzapffel $\&$ Co., was devised and fixed to the press, by means of which the plate could be moved a uniform distance subsequent to the transfer of each roller impression. We give an illustration of the transfer press with the "ratchet" gauge. When this particular press was ordered by the firm in I867, the makers were given the following dimensions of the size it was to be: length of " bed " $28 \frac{1}{2}$ inches ; width of " bed " 16 inches; length between sides not less than 4 feet 6 inches. The press was delivered the following year and still bears the names of the makers, "D. Gilbert $\&$ Sons, Philadelphia " and the date "May, 1868." This press was in constant use down to IS80, when Perkins, Bacon \& Co. lost the contract for printing the stamps.

On making transfers previous to the adoption of the "ratchet " invention, it occasionally happened that when an impression had been rolled into the plate it was seen to overlap, touch, to be too near, or tou far from a neighbouring label. The faulty impression on the plate was then removed, as far as possible, by a burnisher. The plate was then put under the roller again and another impression, or "fresh entry," as it is called by the workman, was made in the correct position. ${ }^{3}$

We have examples of such varieties in the stamp lettered "TA" on Plate I 45 of the One Penny, Original Die, and the stamp lettered " $\mathrm{Q} L$ " on Plate 13 of the One Penny, Retouched Die, ${ }^{4}$ both of which show the upper part of the stamps struck twice. Another conspicuous varicty is the stamplettered "LK" on Plate 75 of the One Penny; Original Die, which has double crosses in both of the upper corners. Other examples of a less marked description are found in the variety of the One Penny, Original Dic, lettered " J $\mathrm{Cr}^{\prime}$ " on Plate $\mathrm{f}_{\mathrm{I}}$ and of the One Penny, Retouched Die, lettered "A D," both of which show traces of the crosses in the corner blocks containing the letters. The former of these varieties also shows traces of the letters of a second word " penxy." The latter variety was on Plate 27, a plate which gave an abnormal number of stamps, for Perkins, Bacon \& Co, Limited, possess a sheet printed in black which was taken after considerably more than a million impressions had been printed from the plate. The impression, which shows very few signs of wear, is on " proof paper," and has neither the plate number nor any marginal inscription. The total number of sheets printed from this plate was I,OII, 900 , and the plate was not even then anything like worn out.

1"Report from the Select Committee on lostage Label Stamps." London, 1852, p. 90. Mr. Edwin Hill in answer to Question 949, said: "Messrs. Bacon \& Petch constructed a press for transferring the impressions, so that the plates might be more uniform in size "; and Mr. J. B. Bacon in his evidence before the same Committee, stated, p. $15 \%$, that two improvements had been made in the transferring press : one several years previously and the other "six or eight months ago."
${ }^{2}$ Appendix C (249).
${ }^{8}$ A number of instances of " fresh entries" are also found amongst the early colonial stamps which were printed from plates prepared by the firm.
${ }^{4}$ That is of the Retouched die of 1854 a description of which will be given later on.

Sometimes one or more specimens on a plate, which were showing signs of wear, would be "re-entered," that is the roller would be applied a second time in order to repair the plate. Any" re-entering " that was necessary was done on another transfer jress and not on the large press that was used for making the " postage " plates. The reason for this was that the workman was able to see letter on the smaller press how to get the roller impression exactly over the impression to be "re-entered " on the plate, a piece of work which required the utmost nicety and precision. Sometimes, as we have said, the hardening of the plates was not uniform, and when this occurred the hardening was liahle to wear off the surface in patches sooner than it should have done. In this case the impressions of the stamps, where the hardening hatl worn off, would soon show greater signs of wear than those on other parts of the plate. When this happened, the worn impressions would be "re-entered " without softening the plate, and after this had been done the plate would often be left as it was: at other times it would be hardened a second time. In the case of " fresly entries," or " re-entries," which do not absolutely coincide with the first impressions, and of alterations which are made by hand to a design on a steel plate, the more the plates become worn so much the more risible do parts of the first impressions underneath the superimposed ones appear, and are signs revealed of the reasons for the alterations by hand that have taken place. It is also a curious fact that the hardening of plates has a tendency to promote the re-appearance of an old design that has been taken off by a burnisher. At the present day when a part or the whole of a design is removed from a plate and a new transfer or engraving by hand is inserted, the plate is sometimes " knocked up " from the back, behind the spot where the alteration has been made. But this process was not applicable to the One Penny and Two Pence stamp plates, inasmuch as they were too thick for any amount of "knocking up " to be of use.

Although line-engravers draw a sharp distinction between " fresh entries " and "re-entrics" made to a plate, philatelists have been in the habit of classing both raricties under the latter designation and, so far as we know, the first term has never received philatelic recognition ly any uriter. The difficulty philatelists labour under is, that it is impossible from an examination of specimens of varieties of this kind to determine whether they are the result of "fresh entries" or of "re-entries." As a matter of fact the former are far commoner than the latter, and among the whole of the colonial stamps of Perkins, Bacon $\&$ Co.'s printing we can call to mind but one instance of true "re-entries," riz., on Plate I of the Two Pence " diadem issue " of New South Wales, which plate was returned to London from the colony; and fourteen of the impressions were re-entered by Perkins, Bacon \& Co., in December, rS60, the plate being then returned to the colony: We shall give examples of "re-entries" found amongst the stamps of Great Britain, further on in our work.

The number of impressions printed from the plates varied very greatly, the length of life- of a plate depending principally upon the quality of the steel. Some plates wore out wery quickly and gawe comparatively a small number of sheets, while Plate 36 of the Retouched Die, in addition to Plate 27 , already mentioned. gave over one million, and several others approached a million.

[^48]

Holder and Loose Puxch for Striking tie Letters in the Corners of the Stamps.

The Letterng of the Plates for the One Penny and Two Pence Stamps.
From Mr. J. B. Bacon's letter of April Ist, IS $\neq 0,{ }^{1}$ already referted to, it appears that the firm had some intention of inserting the letters in the luwer corners of the stamps on the plates in a different method to that finally decided upeni, possibly by having each letter engraved by hand, as he writes: "On reflection we have determined to adopt punches made on purpose, for the private letters in each stamp and they are promised us on Friday next" [i.e. on April 3rd.] They were actually received the following day, as we have found a receipted account, dated "April fth, 18fo," of the maker, John Divis, of Percival Street, St. John Street, Clerkenwell, which reads: "cutting a set of letter punches ¿I Ios. od." We do not know from whom Rowland Hill got the idea of inserting letters on the stamps, or whether it was entirely his own, but as early as December 3 Ist, $1839,{ }^{2}$ he gave instructions to Mr. Bacon, that "certain letters to vary with each stamp [were] to be placed at the top behind the head," and on February 22nd, I8fo, ${ }^{3}$ he sent a diagram of the way the letters were to be arranged, in the top conners. Later on, as we know, it was decided to lave crosses pelé julaced in the upper corners and the letters transferred to the lower corners. The system adopted for the arrangement of the letters was as follows :-

$$
\begin{aligned}
& \text { The stamps in the first row were letttered A A, A B, , C, to A L. } \\
& \text { Those in the second } \\
& \text { ", ". " third }
\end{aligned}
$$

and so on, to the twentieth row, the stamps of which were lettered T $\Lambda, T \mathrm{~B}, \mathrm{~T} \mathrm{C}$, to T L. The introduction of the Icters and their combination was due to the sulpposition that they would constitute a further preventative against forgery of the stamps, as it was thought, that if a large number of forgeries were about with the same letters, they would immediately attract attention, while to make imitations with different letters would add largely to the cost and difficulty of so doing.

It was not by any means an easy matter for the workman to get the letters placed exactly in the centre of the comer blocks, at least for some years. Owing to this difficulty holders with fairly long handles were specially made in which the punches were fixed before use. The lower extremity of the head of each of these holders ended in a small square of the exact size of the lower corner blocks of the stamps. When the workman had got a punch fixed in the holder, he fitted the end with the letter on to one of the lower corner blucks of an impression on the plate, and then punched the letter by hitting the head of the punch with a hammer. We give illustrations, as near as possible in the exact sizes, of one of the actual holders used, and of one of the loose punches. The workman started operations by inserting, say a punch with the letter "A" in the holder, with which he punched every letter "A" required on the plate. The punch was then changed for one lettered " 13 " when the same routine was followed, and so on matil he finished the plate with a punch lettered "T." We have been unable to trace the date when the introduction of holders for the punches took place, but they overcame the tronble to a large extent of getting the letters properly centred, although letters still occasionally got misplaced through insufficient care displayed on the part of the workman. Futher on we shall give some particulars of the number of plates that were stamped with the same sct of punches.

[^49]After all the letters had been added to the plate, the " burr " round them was remored and the letters then frequcmly required touching up by hand. The touching up of the letters accounts for the differences of shape that are noticed in a particular letter on stamps from the same sheet. On Plate 79, of the One Penny, Original Dic, many of the letters were so badly punched that when the plate was printed from, the centre of the letters filled or smeared with the colour, and in some instances have become almost indecipherable. During the later years of the printing of the stamps, an employee, named Henry Gill, punched the letters and another, named Mure, was kept entirely employed in removing the "burr" and touching up the letters, etc. Occasionally, when deeply struck, the marks caused by the rim of the head of the punch can be seen round one or more of the letters in the corners. A good example of this is found on the stamp with four letters " I " on Plate 1 of the Threc-halfpence value.

## Mistafes made in Inserting the Letters.

Sometimes a letter, owing to its being either too faint or too much out of its proper pesition, was punched a second time ; some of these raricties being possibly due to the punch moving slightly after it received the first blow from the hammer. In the carlier plates quite a number of mistakes were made by the workman punching wrong letters, but these were in every case detected and corrected by having the right letter punched over the wrong one. In many of these instances signs of the first or wrong letter are clearly visible on the stamps, and we find many varieties such as :-

Original Die.

| Id. lettered | FI, double F. | Ptate |
| :---: | :---: | :---: |
| Id. | MF\% , M . | 1. |
| Id. | DG, ,, D. | 2. |
| Id. | KE, ., E. | 2 and 5. |
| Id. | PA. , P. | 2 and 4. |
| Id. | TL. .. T. | 2. |
| Id. | DD, ., D. | 4. |
| Id. | QA. Q over S. | 4. |
| Id. | HE, double H. | 5. |
| Id. | MK, ., M. | 6 |
| Id. | DC, ., D. | 9. |
| Id. | JE. , J. | II. |
| Id. | LA. ., L. | 19. |
| Id. | SJ, , S. | 20. |
| Id. | LL, left L over K . | 21. |
| Id. | ML, M over K. | 21. |
| Id. | OF, dutuble O. | 28. |
| Id. | LK, L over P. | 39. |
| Id. | EJ, double E. | 78. |

## Retouched Die.

$$
\text { rd. lettered PL, double P. Plates } 9 \text { and } 23 \text {. }
$$

The above list is nothing like exhaustive and is only intended to include examples of some of the more prominent errors.

On Plate to of the One Penny, Original Die, the letters " $R$ " of the eighteenth row have long tails. Apparently the letter " P " was inserted by mistake on all the twelve impressions and was then corrected by having a tail added by hand to each letter "P." This is borne out by the fact that the tails of the letters are different to those on the letters " R " in use in $\mathbf{1} 8 \neq$, and also that they vary considerably one from another.

Another mistake was sometimes made in punching the letter " $S$ " the wrong way up. On Plates 78 , Io5 and 107 of the One Penny, Original Die, every stamp in the "S" row, that is the last horizontal row but one on the sheet, had this letter inverted and the same fault occurred on most of the stamps in the " $S$ " row of Plate 5 of the One Penny, Retouched Die, and on stamps lettered " S " on some of the other plates. This mistake was of such a trivial mature that it was not thought worth while to correct it and probably there being no philatelists in those days, it was never noticed outside the premises of the printers. Specimens have been seen in recent years with inverted letters other than the letter "S." One of the One Penny red-brown, imperforate, lettered "GI," was illustrated in Stanley Gibbons Monthly Journal for December, 1906, with the letter " $G$ " inverted and we have also seen a specimen of the Two Pence, without white lines, with a letter "G" inverted. The Royal Collection also contains a specimen of the One Penny redbrown, imperforate, lettered "OH," with the letter " Il " sideways. These three specimens, and any other varicties of a like nature, have had the letters fraudulently altered, since the stamps were printed.

Perhaps the most curious error in the lettering was that which occurred on Plate 77 of the One Penny, Original Die. On the early sheets printed from this plate the first stamp in the sceond row, which should have been lettered "BA." had the letter "A" so defectively impressed that it has the appearance of having been entirely omitted. The "Imprimatur"1 sheet of this plate was registered at Somerset House on April Igth, 1847 , and impressions were printed from the plate for postal use in the ordinary way before the error was discovered. Illustration 25 is taken from a specimen of this error in the Royal Collection, a second copy is illustrated in the British Philatelist, ${ }^{2}$ and we have scen a third example. The specimen in the Royal Collection is postmarked "I7" within a diamond, and the third copy bears the number " 6 " or " 9 " within a diamond. These obliterations were used at the General Post Office, London. The postmark on the copy illustrated in the British Philatelist, is a Seottish one and the number appears to be " 74 " from a careful examination we have made of the actual specimen, but the first figure is too indistinct to be quite certain. If it really is " 74 " the stamp was used at Coldstream. We do not know who it was that made the discovery of the missing letter "A," but Mr. Edwin Hill wrote to Mr. J. B. Bacon on January 5th, $18,48,{ }^{3}$ and asked him to have the letter inserted on the plate and a fresh shect

[^50]registered. Mr. Hill added: "As no notice appears to have been taken of the missing letter it is not likely that inconvenience will arise from issuing those already printed and as they, lxing printed from a registered plate, are legal stamps their issute ned not be longer prevented. I have informed Mr. Allen, who is prepared to reecive them." The letter "A" was thereupon inserted and the plate was re-registered as " 77 B " on January 12 th, 18 \& 8 ; the letter " B " being placel before the numerals in the two left-hand comers of the plate, and after the numerals in the two comers of the right-hand side.
1)r. E. WV. Floyd of Manchester has shewn us two specimens, which prove the existence of another interesting variety, of a somewhat analogous description to the one on Plate 77. This occurred on Plate fo of the One Penny, Original Dic, the stamp being lettered "KB." The first specimen shews a clear "double entry" and the better " B " on this and also on the " kB " stamp of the lmprimatur shect, which corresponds in every particular, was punched so far to the left that it practically tonches the right frame-line of the corner square in the printed impressions. An alteration must have been subsequently made on the phate, because the other specimen which exhibits the same "double entry," has the letter " B" in the centre of the square and shews a new frame-line at the right side of the square. We have found no mention of any alteration or repair to Plate fo in the records of Messrs. Perkins, Bacon $\mathbb{E}$ Co., although it is obvious that one was effected.

## The Different Types of Lettering used for the Plates.

And this brings us to the question of the number of types of lettering, or "alphabets" as they are called, that are found in the different sets of punches employed. Messrs. Wright and Creeke ${ }^{1}$ state that commencing with Plate 132, of the One Penny; Original Die, first used in February, 1852, the " lettering in lawer angles is larger than previonsly, and of a different type." Up to the year I899, when their work appeared, philatelists had devoted very little attention to the corner lettering of the stamps, but since that period minute researches have been undertaken by a number of collectors into this particular point. Many of these students have been occupied fur years past making up the sheets of 240 specimens of each of the first eleven plates used for the One Penny black stamp, as well as other plates of the One Penny red and Two Pence bluc stamps. This work, which may certainly be described as one of the most arduous ever attempted by philatelists, is made possible clicily by comparing together pairs, strips, blocks and single stamps having the same lettering, and noting the differences in the position of the letters in the corner blocks. Two of these students, Mr. Julius Bornefeld² and Mr. H. S. Hodson, ${ }^{3}$ have published the results of their investigations and are in accord as regards the number of alphabets employed, down to the period when the letters were inserted in all the four corners of the stamps, at which time the letters were changed in type to sans-serif capitals. Shortly stated they are :-

Alphabet I in use from IS fo to 1852 .
Consists of small Roman capitals and is found on Plates I-I 3 I of the One Penny: Original Die, and on Plates I-f of the Two Pence. (Illustration 29).

[^51]func. in ormisuex. -

it bacuce
,
lines \&-o curer.

-1. Noxit lo mox

 frone





inverer 260,6


\[

$$
\begin{aligned}
& \text { * }
\end{aligned}
$$
\]

Alphabet 11 in use from 1852 to 1855 .
Consists of larger, broader and heavicr Roman capitals, and is found on Plates $132-204$ and Reserve ${ }^{1}$ Plates I-I + of the One Penny, Original Dic, on Plates I-2 $\mathrm{I}^{2}$ and Reserve Plates I , 16 of the One Penny, Retouched Die, and on Plate 5 of the Two Pence. (Illustration 30).

Alphabet III in use from 1855 to 1864 .
Consists of tall and slender Roman capitals and is Iomnd on Plates 22-6S (excepting Plates 50.5I) and Reserve Plates 17-20 of the One Penny, Retouched Die, and on Plate 6 of the Two Pence. (Illustration 31).

Alphabet IV in use from 1860 to $1864 .{ }^{3}$
Consists of abnormally large Roman capitals and is found on Plates 50 and $5^{1}$ of the One Penny, Retouched Dic. (Illustration 32).

All other authorities on this subject, we know, and our own examination of the stamps, corroborate the correctness of separating the types of lettering into four broad divisions. We have been able to trace very few references to the punches used Ior the letters, in the firm's account books and correspondence, but it is obvions, taking into consideration the quantity of plates that was prepared, that a number of sets of punches must have been required. It is not surprising therefore, that the Alphabets I, II, and Ill, especially the first, contain a number of minor varieties in the letters, although, in many instances it is practically impossible to determine which of these varieties are due to a different fount of type and which to subsequent touching up by hand. We have no intention, however, of giving an exhaustive account of all the sub-types of lettering, which would be out of place in a work of this kind, which is not intended specifieally for those only interested in the making up of sheets of the early stamps. We, therefore, pass on to consider the Marginal Inscription that was added to the plates.

The Marginal Inscription on the plates of the One Penny stamps.
Besides the addition of the letters the plates also received a marginal inscription and plate number. As in the case of the lettering, Rowland lill decided as early as December 3Ist, $\mathbf{1} 839$, "that "Certain instructions as to the position of the stamp when used [were] to be engraved ronnd the margin of the plate." On March 26th. 1840, ${ }^{5}$ he writes: " In the margin to the plates insert the following inseription-if possible once at each end and twice on each side of the plate. (On shect of penny labels) Price id. per label. I'- per row of 12 . £I per sheet. (On sheet oI 2d. labels) Priee 2d. per label. 2-per row of $12 . £^{2}$ per sheet. (On each kind following the price). Place the label above the address and towards the right hand side of the letter. In wetting the back be careful not to remove the cement.

Mr. Bacon will please to supply a pencil slietch of the inscription." On March 3ist, "he writes:

[^52]" I shall be glad to see the sketch of the legend for the plates "and the following day" Mr. J. B. Bacon writes to him to say:" The sketch for the legend I shall have the honor of submitting to you this day, and which can be engraved on the plates in a week after approval." The Engraving Book of the firm, under the date of April 2nd, $188_{4},=2$ has the entry "Engraving die. Inscription for the Qucen's head plates," so the legend, as Rowland Hill called it, was transferred to the plates in the same way as the $2 \not+0$ impressions of the stamp. The inscription for this purpose was divided and transferred to three separate rollers. The first bore the words "price Id. Per Label. I'- l'er Row of 12. £I ,.,.,-Per Sheet"; the second "Place the labels Above the Address and towards the right hand side of the Letter " and the third had "In lretting the Back be careful not to remove the Cement." The entire length of the inscription was found to be too long to allow of its appearing twice on each side of the plate, as Rowland Hill suggested, so one insertion of it was made down the centre of each side, that on the left reading upwards and that on the right reading downwards.

The plate number was engraved by hand in Arabic numerals, at the four corners of the plate. (Illustration 23). The size of the numerals varies greatly and no rule seems to have been followed in this respect. A series of phates with comparatively large figures was frequently followed by a few plates with quite small mumerats, and these again were succeeded by other plates with larger figures. Plate + of the One Pemy black may be called a prominent variety of numbering, inasmuch as it has a fairly large script " 4 " instead of " 4 ". Additional lines and ormaments were subsequently added on the margins to shew the exact spots where to divide the sheets into halves, vertically and horizontally, and as guides for placing the sheets correctly on the perforating machines. These and other additions to the marginal inscriptions will he described under the dates at which they took place further on in our work.

## The length of time it took to maife a plate.

Before passing on to the printing of the stamps it may be of interest to reproduce here the contents of a letter written by Perkins, Bacon \& Co., to Mr. Ormond Hill, shewing the average time it took to manufacture a plate. The letter is dated February 17 th, $1864,{ }^{3}$ and we must premise the statement with the remark that the description refers to a plate with four letters in the corners of the stamps, an alteration, that it will be seen later on, was first of all made in the Two Pence stamps in the year 1858: "We find that the facts regarding the time taken in the mamufacture of a Iostage Plate are as follows:-

To transfer the 240 labels on to a Plate takes one day, and a very lard day's work it is. Perfect accuracy in the arrangement of the labels cambt, however, at present be secured if the roller is taken off the Plate during its manufacture and, therefore, it must be assumed as one day's work. Tu transfer the Legends and scrape the burr off the steel takes three full ordinary days, so that a Plate takes in the Transferring Room four days exclusive of the hardening and subsequent eleaning. To put in the letters at the four coners and retouch the work where it is injured by this process takes Mr. H. Gill four days good work also. The hardening and cleaning camot be reckoned at less than a day. It therefore takes nine days to make a Plate

[^53]from first to last, and the week is only five and a half days, so that to promise one complete plate a week is to lock up from all our other work two of our engravers for the greater part of the time. Still we undertake to do this from this time until a stock of twenty-two Plates with the new lettering, etc., is completed. There is no dilficulty in lettering as fast as the Plates are transferred and in fact Mr. H. Gill will have finisned Plate No. 85 before 86 is ready for him."

The Printing of the One Penny blaci stamps.
The Engraving Book of Perkins, Bacon \& Petch, shews that Plate I was finished on April Sth, I840, ${ }^{1}$ and this fact was notified on the following day ${ }^{2}$ to Mr. Charles Pressly, ${ }^{3}$ the Secretary of the Commissioners of Stamps and Taxes. On April roth ${ }^{4}$ Mr. Pressly, requested that the Plate should be submitted to the Commissioners on that day and we have no duubt that this was done. Perkins, Bacon \& Petch, judging from their letters of April 8th and gth, ${ }^{5}$ were under the impression that the Dies for the stamps had to be surrended to the Commissioners and received back again, but apparently this course was not adopted. In their letter of April gth to Mr. Pressly, the firm stated " if paper is received we shall be ready to commence printing on Monday next, [that would be April I3th], but it is proper to state that the first two or three days will be principally occupied in getting the bearings of the presses (they being new), and in settling in and ascertaining the proper pinch, etc., for the plates." A supply of the watermarked "crown" paper must have been handed to the firm on April Ioth, or the IIth, as Perkins, Bacon \& Petch's book containing the daily work done by their workmen ${ }^{7}$ shews that twelve sheets of stamps were printed from Plate I on the latter date by an employee named J. Graham. This trial printing on the Saturday was possibly made in order to satisfy a request received on that day from Rowland Hill, for a sheet of the One Penny stamps on the watermarked paper. ${ }^{8}$ Mr. J. B. Bacon's letter of April irth, ${ }^{9}$ shews that a sheet was sent to him on that day and at the time of forwarding it Mr. Bacon wrote: " The impression is not perfect, nor can I have one that is so, until we have been a day or two at work. I must beg its return to me by Monday at twelve o'clock as I have only yet tried four sheets of paper, all of which must return the Commissioners of Stamps at that time." No further sheets beyond the twelve mentioned were printed until April I 4 th, ${ }^{10}$ when fifteen were pulled, but on the following day to this, printing commenced in earnest, and for a time was continued day and night. The output from Plate I for the twentyfour hours on April 16 th, was 513 sheets, and this was raised to $70+$ sheets by May 29th, I8fo. ${ }^{11}$
$\begin{array}{lll}1 \text { Appendix G. } & { }^{3} \text { Later Sir Charles Pressly, KCB. } & { }^{5} \text { bibid. ( } 46,47 \text { ). } \\ { }^{2} \text { Appendix C }(47) . & { }^{4} \text { Appendix C }\left(4^{8}\right) . & { }^{6} \text { I'ide also Ippendix C ( } 15 \mathrm{I} \text { ). }\end{array}$
${ }^{7}$ This book is lettered " General Account of Postige Labels, 18 fo."
${ }^{8}$ Appendix C (49).
${ }^{9}$ 1bid. (50).
10 Rowland Hill writes in his "Journal," under the date April $\mathrm{q}_{\mathrm{t}}$ th, 18 q0: "W"ent to Clowes's and Perkins" to satisfy myself as to the day on which it will be safe to fix the introduction of stamps. Beginning to print to-day at both places." !Messrs. Clowes \& Sons were the printerb of the Mulready covers.]
${ }^{11}$ Vide pp. 76, 77.

## The " Imprinatur" Sheets.

When a plate was finished and before it was used for printing stamps for issue to the public a shect printed upon watermarked paper and in the colour selected for the value, was registered at Somerset House. This sheet, known as the "Imprimatur" copy, was endorsed with the date on which it was taken and an authorization that this particular plate might be used for printing stamps for postal use. The endorsement on the first sheet registered of Plate I of the One Penny value reads:- "The Impression on the other side of this paper of the die or plate intended to be used by the Commissioners of Stamps and Taxes in pursuance of the several powers and authorities vested in them for expressing and denoting the Stamp duty of one penny on the postage of Letters was taken in my presence and in the presence of a Commissioner the 15 th day of April, I 840 .

(Signed] CHA. PRESSLY,<br>Secy."

And below this was added :-

## " By the Commissioners.

Ordered that in pursuance and execution of the powers and authorities vested in the Commissioners of Stamps and Taxes, the Die or Plate, whereof impressions are on the other side of this paper, shall be used for impressing the stamp to denote the duties of Postage, dated this 27 th day of April, i 840.
(Signed) CHA. PRESSLY.
Secy."
The words "intended to be used" are written above the word "provided," which is struck out. On the second sheets registered of Plates I and 2 and on the sheets of subsequent plates, the word " provided " was used instead of the former phrase. The words "Commissioners of Inland Revenue" were substituted for Commissioners of Stamps and Taxes and other alterations in the wording were made, at later periods.

The collection of " Imprimatur" shects was kept at Somerset House until the year 1915, when it was transferred to the General Post Office. A few of the sheets are now missing from the books and twenty-one specimens have been cut from most of the sheets in the collection. These were given away at different periods, as follows:-12 in 1883 , 6 in 1886 , I in 1893 . I in 1897 and I in 1914.

The date of registration of a plate took place soon after it was made, but as time went on it became customary to keep a number of unused plates in stock, so that the registered date was frequently months, or years even, anterior to the use of the plate for printing impressions for postal use. In the case of Plates $\mathbf{1}, \mathbf{2}, \mathbf{5}$, and the "V.R." Plate, two separate sheets were registered on different dates.

Messrs. Wright and Creeke ${ }^{1}$ state that these four plates were registered previous to being hardened and then a second time after hardening. This is a natural supposition for them to have come to, but so far as we know there is no evidence to confirm it. We have been unable to find any particulars of the hardening of the early plates amongst the records of Perkins, Bacon $\&$ Co., ${ }^{2}$ but through the kindness of the Officials

[^54]pOSTAGE STAMPS.


at Somerset House we have been furnished with the following particulars of the first eleven plates, which have been extracted from an old "Day Book" kept in the Stamping Department :-

DESCRIPTION.

| No. I | Hardened |
| :---: | :---: |
| 2 | do |
| 3 | do |
| 4 | do |
| 5 | do |
| 6 | do |
| 7 | do |
| 8 | do |
| 9 | do |
| IO | do |
| II | do |

## Date of Completion. ${ }^{1}$

Abt. April r.
Abt. April 8.
May 8.
Nay 16.
June io.
June 16.
July 4. July 3 I.
Nuv. 6.
Dee. I.
IS.4.
Jan. 20.

It will be seen that in every instance the plate is stated to have been hardened, but some, or all of the plates, may not of course, have undergone this process until some time after the dates of their completion. Now the endorsenents on the two sheets of Plate I shew that they were registered, respectively, on April 15th, and $27 \mathrm{th}, 1840$, and those on the two sheets of Plate 2 bear the dates April 22nd and 27th, 1840. ${ }^{2}$ The firm's book containing the account of the number of sheets printed day by day proves that plate I was in constant use from April I6th to May 1gth, 1840, excepting April Igth and 26 th, May 3rd, 10 th and 17 th, which were Sundays, and Plate 2 was also in constant use from April 22nd to May 19th, 1840, with the exception of the Sundays named. There was, therefore, no interval for the hardening of these two plates, supposing they had not been hardened before they were first used, and it must lave been for some other cause that two slicets were registered of these plates. What the actual reason was we have been unable to discover, and we are quite at a loss to even suggest an explanation why two sheets each were registered not only of Plates I and 2, but also of Plate 5, and of the " V.R." plate.

## The Official Warrants for Printing the Stamps.

Whenever a supply of stamps was required from the printers a "Warrant," of which we give an illustration, was issued to them by the Commissioners of Stamps and Taxes. The warrant was accompanied with the exact number of sheets of watermarked paper for which it was made out. At the back of each warrant was printed " I acknowledge to have received the within stamps," and the Store-keeper, after he had received the whole of the printed sheets, added his signature and handed the warrant back, to the printers. The numbering of the warrants started afresh each year. The exact procedure, shewing the great care which was taken to prevent the theft or loss of any of the stamps, is very clearly explained by Perkins, Bacon \& Petch

[^55]in a letter they wrote to Lord Monteagle in January, IS H $^{2,1}$ when he was making some enquiries about the printing of bank-notes for the Bank of England. They said: "The Honourable the Commissioners of Stamps and Taxes, having notified the Honourable the Commissioners of Excise that a given quantity of paper for the postage labels is wanted, the latter (who keep the custody of the moulds), send them to the mill where the paper is made under the inspection of an offices of Excise, and when finished counted by him, sealed up and forwarded to the Commissioners of Stamps and Taxes, upon whose receipt for the paper, the manufacturer is settled with; from the Stamp Office warrants are made out in convenient quantities and the paper sent us for printing. A confidential clerk counts the paper and receipts the warrant, it is then counted out to the printers, who count it again themselves and return the printed work every night, this is then counted and delivered out to be gummed, the gummers counting it again, it is then comnted when brought back from them, and finally again counted, when if it proves correct the good impressions are packed in parcels of 500 sheets each, sealed and sent back to the stamp office by a responsible porter in a basket made for the purpose locked with Chubbs patent lock (the clerk at each place having one key), and the spoilt sheets follow at the completion of each warrant. All the business is conducted upon premises exclusively appropriated to it and separated from our other business, witl an officer of the Govermment always on the spot during work, and the plates when not at work are locked up in boxes, with two locks and keys, one of the latter being kept by him, and the other by our clerk and both being essential to open the box. The dies also as soon as made, as well as the plates produced by them, are lept in similar boxes and under similar custody, because we are nearly always at work; but if the case were otherwise, they could be kept in the Bank of England's strong room, or by the Govermment if thonght preferable. We consider this plan perfectly secure and we know it to be a great satring to Government." Further on they wrote :- "We may add as regards postage stamps . . . that we keep as perfect a ledger accomnt of the supply of paper for and proceeds of each plate and balance it as accurately as that for our cash or customers accomnts. The principal clerk in the Postage Department is a son of one of our firm."

## Tile date of Issue of the Stanps to the Public.

The date officially fixed for the prepayment of postage by means of stamps was Nay 6th, I8 fo, but the One Penny adhesive labels were placed on sale at the London Post Offices on the first of that montl. ${ }^{2}$ This fact is noted by Rowland Hill in his " Journal," from which we extract the following important statements:
"May r. Stamps issued to the public to-day (in London) for the first time. Great bustle at the Stamp Office."
" May 2. $£ 2,500$ worth of stamps sold yesterday."
" May 6. Stamps came into use to-day. Cole went to the Post Office, reports that about half the letters were stamped."

The Royal Collection also contains a most interesting letter-sheet postmarked " My. 5. 1840," attached to which is an mused specimen of the One Penny black stamp. The letter is addressed :

[^56]
# " Pald Penny Postage. <br> Miss Jones, 

Addington Sguare,
Camberivell.'
and the contents are as follows :-
"Brompton Place; 5 Mlay, I840.

## My Dear Floral Friend!

To make you stare I send you a Queen's head, the day before it is in Penny circulation. Tomorrow it will be obliterated by a Post Office stamp. What a pity that they should make Victoria gummy like an old woman without teetl! ! as 1 am!

I write this without spectacles, therefore will strain my ninety and one eyes no longer than in saying 1 hope you are all well at home!

Yours gratefully,
[Signed] JOHN ALEXANDER."
The ascription "Floral Friend," bearing in mind the locality where Miss Jones resided, is, we think, an allusion to the Flora Tea Gardens of Camberwell, which was a famous south London resort in the forties. The postage on the letter was, of course, paid in coin.

The Printing of the One Penny black stanps, continued.
We now resume our story of the printing of the One J'enny black stamps. Eleven plates in all were used for this issue, as follows:-

|  | Finished. | Registered at Somersct Housc. | Destroycd. |
| :---: | :---: | :---: | :---: |
| Plate I | April 8, I840 | 15.4 .40 | 11.12.41 |
| , 2 | 22, | $22.4 \cdot 40$ | 19.II.41 |
| , 3 | Nay 9. | $9.5 \cdot 40$ | -. 10.40 |
| , 4 | I6, | $19.5 \cdot 10$ | 9.1 .41 |
| , 5 | 23, | 1.6.40 | 12.11.4I |
| 6 | June 8, | 17.6 .40 | 9.154 |
| ," 7 | 19, | 8.7 .10 | 9.1.41 |
| 8 | July 3r, | 31.7 .40 | 8.9 .45 |
| 9 | Oct. 7 , | 9.11.40 | 7.10.43 |
| Io | Dec. 2, | 8.12.40 | 21.2 .43 |
| II | Jan. 19, 1841 | 27.1. | 15.1.42 |

The dates on which the plates were finished are taken from the Engraving Book ${ }^{1}$ of Perkins, Bacon \& Petch, those of registration from the Imprimatur sheets, the list of deliveries in Appendix 1, or in the case of Plates 9 and io from Mr. Edwin Hill's Diary," ${ }^{2}$ while those of destruction are extracted from Messrs. Wright and Creeke's work. ${ }^{3}$ There are no Registration Shects of Plates 4, 6, 7. 9. Io and in now in the Official Collection, and the book, in which the other shcets of black stamps are mounted, contains entries, which state that the dates of the sheets of these plates

[^57]are not known. There is, however, information at Sonerset House a bout these plates, which our readers may remember we have already reproduced. ${ }^{1}$ It will be seen that the dates of registration we give of l'lates $4,7,9$, Io and II differ from those of Messrs. Wright and Crecke, but these writers say as regards the dates they give ${ }^{2}$ : " there is some reason for donbting the accuracy of the dates officially given of their approval." The Imprimatur sheets of one or two of these plates were probably printed a day or two before they were actually delivered at Somerset House, as an interval of this kind occurred in the case of Plate I of the Two Pence, ${ }^{3}$ Plate 3 of the One l'enyy and the second sheet of the "V.R." plate. ${ }^{\text {s }}$

There is a reference to one of the early plates in an entry in Mr. Edwin Hill's "Diary," under the date August 3rd, I840, ${ }^{5}$ which says: "Additional Penny plate to be registered : I I plates in all." The plate of the One Penny alluded to by Mr. Hill could only have been Plate 8, the Imprimatur sheet of which was taken on July 31st, but may not have been delivered to Somerset House before Monday, August 3rd. The Editor of the British Philatclist, in his annotated note on the entry, makes up the eleven plates named by Mr. Hill, by counting Plates I, 2 and 5 twice over, because two Imprimatur sheets were registered of each of those plates. But this is not the true explanation, for what Mr. Hill really intended to convey was that " eleven plates in all" had then been made for the postage stamps: viz., eight for the One Penny, one for the One Penny "V.R.", and two for the Two Pence value. ${ }^{6}$

We can also add from calculations we have made from the entries in the firm's account book of the daily printing done, the dates when several of the plates were first used for printing stamps, and the names of the printers to whom the plates were first delivered. These are :-

Plates.
I.
2.
3.
+. ", 28, ,"
5. June 8, ,
$6 . \quad$, 15.
7. ${ }^{7} \quad, \quad 26$, ,
8. July 3I, .,
II. ${ }^{B}$

Dates.
April II, I8ұo.
,, 22, ,"
Nay 12, .,

Jan. 29, 18 - I.

## Printers.

J. Graham.

Mc:lurdic.
kingsmill.
Corbett.
Stewart.
W. Fisher.

Cockbill.
McMurdic.
Kingsmill.

The earliest dates of use of Plates 9 and to cannot be obtained from the account book, as it is impossible to determine them from the entries of the daily work done. There can be little doubt, however, that they were brought into use, in November and December, I840, respectively, at the dates when they were registered. Looking at the dates when Plates 7 and 9 were finished it is strange that these two plates should not have been registered earlier.
${ }^{1}$ Vide p. 69.
${ }^{2}$ Mlessrs. Wright and Creeke's work, p. 21.
${ }^{3}$ Appendix C (59).
${ }^{4}$ Ibid. (64).
${ }^{5}$ The British Philatelist, London. 1917. Vol. X, p. 50.
${ }^{6}$ Appendix G.
${ }^{7}$ Vide p. 42. It is possible that this plate was put to press even earlier than June 26 th since it was finished on the nineteenth of that month.
${ }^{8}$ lide p. 74.

## The Provisional Printing of One Penny black stamps.

The colour of the One Penny stamps was changed to red at the end of $18 \nvdash 0$, and the first printing in the new colour was made on December 3oth. The printing of the stamps in red was continued until the third week in January, when a provisional printing in black was ordered under the following circumstances. Under the date January 20th, ISfI, Rowland Hill records in his "Journal ": " Pressly called to say that owing to a sudden large demand for penny labels the stock of those printed in black ink was very nearly exhausted and to suggest that the red labels should be immediately issued and obliterated with the present red ink till the black ink obliteration is ready, to this I acceded, having indeed in the morning in reply to a note from Edwin ${ }^{1}$ advised his going to the P.O. to propose such an arrangment to Bokenham ${ }^{2}$ and adding that black obliterating ink could be immediately supplied for use in London. . . . . Pressly will write to-morrow morning to Col. Maberly propusing this arrangement and adding that unless it is at once acceded to they must again resort to the printing of the labels in black ink." Colonel Maberly for some reason did not agree to this course being adopted and Perkins, Bacon \& Petch were thereupon ordered to print 10,000 sheets in black ink. The following particulars, which are extracted from their book lettered "General Account of Postage Labels 1840," give a detailed account of this provisional printing.

| Printers. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ISfr. |  |  |  |  |  |
| Jan. 22 | 281 | 100 | 275 | 400 |  |
| ,. 23 | 319 | 400 | 350 | 400 |  |
| ,, 25 | 375 | 400 | 325 | 400 |  |
| ,. 26 |  | 100 |  | 375 |  |
| Feb. I | 355 | 400 | 290 | 400 | 337 |
| ," 2 | 385 | 400 | 350 | 400 | 363 |
| ,. 3 | 260 | 400 | 360 | 400 |  |
|  | 1,975 | 2. Soo | 1,950 | 2.775 | 700 |
| $=10,200$ sheets. |  |  |  |  |  |

These were delivered to the Commissioners of Stamps and Taxes on the following dates :- ${ }^{3}$


The remaining 182 sheets were spoilt in the printing and gumming.

[^58]The account book unfortunately does not give the numbers of the plates used for this provisional printing in black. Plates I, 2, 5, 8, 9. Io and II were in existence in January, 1841 , but all we can say for certain is that Plates $5^{1}$ and $1 I^{2}$ were used and that five out of the seven plates we have mentioned must have been used on February 1st and 2nd, 1841, as there were five presses at work on these two days. The first four printers, whose names we have given, had been at work continuously for a long time, whereas Kingsmill had not been engaged printing postage stamps between Jume 27 th, 1840 and January 29th, 1841. A plate was given to him on the latter date, when the book states, he printed stamps in red ink, as lie did on January 30 th and again for some weeks on and from February 3rd. 1841. That plate was, we think, undoubtedly No. II ; the Imprimatur sheet of which, as we have already pointed out, was only delivered to Somerset House on January 27th. Specimens in black from Plate II are known to be very scarce, which is not surprising secing that 700 sheets, including a certain amount of spoilage, were all that were printed from this plate in black, a very different figure to that of 10,000 sheets given by Messrs. Wright and Creeke. ${ }^{3}$

## The Total Number pristed of the One Pensy black stamps.

We will now consider the question of the total number of One Penny black stamps printed from the eleven plates. Messrs. Wright and Crecke give a list of a number of places to which shcets of stamps were sent, commencing with April 27th, 1840 , and they say " Up to and including the 6th May, the total distribution amounted to 22.993 sheets, sent to 5I4 offices." That the number of sheets given here is incorrect can be proved by the list of sheets delivered by Perkins, Bacon \& Petch to the Commissioners of Stamps and Taxes ${ }^{5}$ and also from the book lettered " General Account of Postage Labels isfo." The former shows that only ir,oo6 sheets of the One Penny had been delivered up to May 7 th, and the printing book proves that including the night work of May 5 th.,

S,SSr sheets had been printed from Plate I, and
5.430 ., ,, ,. ., 2.
14.311

And this total of I4.3II, it must be remembered, included several hundred ungummed slicets, many with wet gum, and also a large number of spoilt impressions. It will also be seen, when we come to deal with the deliveries of the Two Pence value, that Messrs. Wright and Crecke's figures are equally wrong. We cannot tell in what way they were led into making these mistakes, knowing how accurate their work generally is, but possibly the figures they quote refer to or include the deliveries of the Mulready covers and envelopes; or it may be that the dates quoted are those on which the Requisitions for stamps were received from the various places. The total number of One Penny black stamps delivered by Messrs. Perkins, Bacon \& Petch can be obtained from the invoices furnished to the Commissioners of Stamps and Taxes.

[^59]They are as follows ${ }^{1}$ :-


Up to October Ioth, $1840,6,478$ additional sheets had been printed at varions dates from the commencement of the printing in April. These were all spoilt impressions and were handed over, without charge, to the Commissioners for destruction. From October moth, 18 fo, to the end of the printing in black, in February 18 fi, there were 1975 spoilt sheets delivered to the Commissioners, ${ }^{2}$ thus making a total spoilage of 8453 sheets for the One Penny black stamp. We cannot say whether the same system was followed from the commencement of the printing of the stamps, but in later years the spoilt shects had a hole or holes of about half an inch in diameter punched through them before they were delivered to Somerset llouse. It was also customary to paste the parts of torn sheets together in the form of whole sheets, so that the spoilage could more casily be counted.

## Repairs to Plates i to il of the One Penny Stamps.

An entry in Perkins, Bacon \& Petch's Engraving Book ${ }^{3}$ under date May 26th, 1840, states that Plate I was then repaired. We have seen that this plate was finished on April Sth, and that printing from it started three days later. ${ }^{\text {a }}$ The demand for the stamps was so urgent and the plate wore so rapidly, that we believe it had not been hardened prior to the date of the repair. A number of the impressions appear to have been re-entered and others retouched, while certain of the conner letters were touched up by hand. The most marked recut letters are found on stamps "EJ," "IL," " JC " and "PJ". We give below a list of the sheets printed from the plate from the first day it was in use down to the end of June, I840.

[^60]
## Plate I.

## Day Nork.

| 1840. | Printer. | Sheets. | 1840. | Printer. | Sheets. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Apl. II | J. Graham. | . 12 | May 22 | J. Graham. | 300 |
| 14 | do. | 15 | 23 | do. | .. 84 |
| 15 | do. | 202 | 25 | do. | .. 366 |
| , | do. | $285{ }^{1}$ | 26 | du. | -. 370 |
| 16 | do. | 332 | 27 | do. | .. 370 |
| 17 | do. | 337 | 28 | do. | .. 360 |
| 20 | du. | 314 | 29 | do. | .. 350 |
| 21 | do. | $3+2$ | June I | do. | .. 276 |
| 22 | do. | 343 | 2 | do. | .. 315 |
| 23 | do. | 325 | 3 | do. | .. 359 |
| 24 | do. | 325 | 4 | do. | .. 366 |
| 27 | do. | 307 | 5 | do. | .. 370 |
| 28 | do. | $3+4$ | 6 | do. | .. 314 |
| 29 | do. | 343 | 8 | do. | -. 372 |
| 30 | do. | $3+2$ | 9 | do. | .. 378 |
| llay I | do. | 345 | Io | do. | - 375 |
| 4 | do. | .. 276 | 11 | do. | .. 375 |
| 5 | do. | . 192 | 12 | do. | .. 350 |
| 6 | do. | .- 289 | 15 | do. | .. 33I |
| 7 | do. | I 45 | 16 | do. | .- 369 |
| 8 | do. | - 297 | 17 | do. | 350 |
| 9 | do. | .. 249 | 18 | do. | .. 400 |
| II | do. | -. 306 | 19 | do. | 350 |
| 12 | do. | . 316 | 20 | do. | .. 300 |
|  | do. | .. $300 \%$ | 22 | do. | .. 369 |
| 13 | do. | 350 | 23 | do. | .. 381 |
| 14 | do. | 349 | 2. | do. | .. 350 |
| 15 | do. | .. 35 I | 25 | do. | - 380 |
| 18 | do. | -. 324 | 26 | do. | -. 370 |
| 19 | do. | -. 326 | 29 | do. | .. 312 |
| 20 | do. | .. 229 | 30 | do. | .. 360 |

Night Work.

| 1840. | Printer. |  | Sheets. | I840. | Printer. | Sheets. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Apl. 16 | Sution. |  | ISI | Apl. 22 | Sutton. | 28 I |
| 17 | do. | . | 250 | 23 | do. | 259 |
| 18 | do. |  | 104 | 24 | do. | 230 |
| 20 | do. |  | 151 | 25 | do. | 201 |
| 21 | do. | . | -301 | 27 | do. | - 230 |

[^61]Night Work.

| 1840. | Printer. | Sheets. | 1840. | Printer. |  | Sheets. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Apl. 28 | Sutton. | . 234 | May 27 | Willis. | . | 400 |
| 29 | do. | 266 | 28 | do. | . | 265 |
| 30 | do. | - 259 | 29 | do. |  | 354 |
| May | do. | 239 | 30 | do. |  | 331 |
| 2 | Kingsmill. | 200 | June 8 | do. | . | $35^{\circ}$ |
| f | do. | 295 | 9 | do. |  | 300 |
| 5 | do. | .. 219 | 10 | do. | . | 350 |
| 6 | do. | .. 314 | II | do. | . | 350 |
| 9 | do. | 181 | 12 | do. | . | - 350 |
| II | do. | .. 309 | 13 | do. | - | -. 350 |
| 12 | do. | 373 | 15 | do. | . | 350 |
| 13 | Willis. | 300 | 16 | du. | . | .. 310 |
| 14 | do. | $35^{\circ}$ | 17 | do. | . | .. 359 |
| 15 | do. | . 350 | 18 | do. | . | .. $3^{81}$ |
| I6 | do. | 350 | 19 | do. | . | - 350 |
| 18 | do. | $35^{\circ}$ | 22 | do. | . | - 350 |
| I9 | do. | - 300 | 23 | do. | . | .. 275 |
| 20 | du. | .. 300 | $2+$ | du. | . | . 205 |
| 21 | do. | - 300 | 25 | do. | $\cdots$ | - 225 |
| 25 | do. | . 350 | 26 | do. |  | . 395 |
| 26 | do. | .. 300 | 27 | do. | . | .. 275 |

In these three months Sunday fell on April 12, 19, 26, May 3, 10, 17, 24, 31, June 7, 14, 2I, 28.

It will be seen from the above that although the date of the repair to Plate I was entered in the Engraving Book under May 26th, 1840, it could not have been carried out on that date, as the plate was in use for printing all that day and night. We think the list shows that the actual date of the "repair " was May 23rd, when the plate was probably withdrawn from use after $\delta_{4}$ sheets had been printed. It was not used that night and the next day was a Sunday, when possibly if the work had not been completed on the Saturday, it was continued and finished.

Even after the "repair" had been effected it is obvious that the plate could not have been hardened for some considerable time, certainly not until after the end of June, as there was no interval in which it could have undergone that process.

There is evidence to show that the plate was again repaired at some subsequent date, although no entry of this repair appears in the Engraving Book. The evidence consists of specimens of the red stamp, lettered "TC," belonging to Plate $\mathbf{I}$, which shew that a re-entry of the impression on the plate with the letters "TC," must have been made at some time or other. As no specimen shewing traces of this re-entry is known of the black stamp, it appears that a repair to the plate was made after the printing of the stamps in black ceased. At the time it was made, possibly other re-entries were effected. Mr. Bertram McGowan has also found varieties of two other stamps, lettered "AK " and "RK," which he thinks are peculiar to this third state of Plate I. ${ }^{1}$ The second repair to the plate was almost certainly made previous to

[^62]March 23rd, i8fr, as it will be seen a few lines further on ${ }^{1}$ the use of the plate was discontinued on that date and it is most unlikely that the plate was ever again used. If Plate $I$ was, as we think, one of the plates used for the provisional printing of the black stamps in January and February; IS4r, the repair must have taken place between February 3rd² and March 23rd of that year.

Plate 3 wore out rapidly and was the first of the plates to be defaced in October, isfo. Plates $\downarrow, 6$ and 7 alsu had short "lives," as these three plates were defaced on January 9 th. ISfr, although none of these four plates was actually destroyed until January, I842. ${ }^{3}$

Plate 5 must have been repaired as a re-entry is known of the stamp lettered "PB," which is not on either of the "Imprimatur" sheets of this plate. Like the scoond repair to Plate $x$, no mention of the repair appears in the Engraving Book. As specimens of the "PB" stamp, with and withont the re-entry, are known in red, as well as black, the repair could only have taken place in January, 184r, and specimens shewing the re-entry in black, which are exceedingly rare, can, therefore, only belong to the provisional printing made in this colour in January and February, IStr. As specimens shewing the re-entry in the red stamps are also scarce, it appears that the use of Plate 5 must have been discontinued soon after the last date, although the plate was not actually destroyed until November i2th of that year. In connection with this subject we have a note taken a long while ago from some source that we cannot now call to mind, that on April 24 th, 884 , four presses were at work printing One Penny stamps and the Plates then in use were Nos. II, I2, I3 and I4, worked respectively by J. Graham, Kingsmill, WV. Fisher and McMurdie. We find. too, that the printing of the One Penny stamps ceased entirely from March 23 rd to April 23rd, IS4r, so it appears that Plates r, 2, 5, 8, 9 and io were not used after the first of these two dates. ${ }^{4}$ Our thanks are once again due to Dr. E. W. Floyd for particulars and the loan of specimens of the re-entered stamps on Plates I and 5 , we have described, and also for assistance on other points connected with the black stamps.

Mr. Bertram McGowan, in an article published in r9r $8,{ }^{5}$ gives reasons for thinking that there was a repair of Plate 5 made previous to the one we have described, and that Plates $6,8,9$ and ro were also repaired. He finds that certain stamps on Plates 5 and 6 shew the frame-lines at the sides were recut subsequent to the first use of these plates, and in the case of Plate 5 that these new lines were added previous to the re-entry of the stamp lettered "PB." There were thus three states of Plate 5 . As regards Plates 8.9 and to he has found specimens with the same lettering on each of these plates with and without the llaw between the letters "ON" of the word "one." We have not seen the specimens included in his list, but we are not convinced that the presence or absence of the flaw is sufficient to prove that the plates were repaired by re-entering these impressions. We think that the difference was either caused in the process of printing, the disappearance of the flaw being

[^63]accounted for by an extra application of ink and not such a careful wiping of the plates as usual, or that it was due to the wear of these particular impressions on the plates. Possibly both these causes, acting together, were contributing agents in the occasional disappearance of the flaw.

## Tie Great Demand for tie Stamps necessitated tieeir Printing piy Nigitt as well as by Day:

Before the stamps were brought into actual use for postal purposes, everyone connected with their production anticipated that there would be a much greater demand for the Mulready covers and envelopes than for the adhesive stamps. The public, however, whose taste and verdict on any innovation is proverbially difficult to gange, immediately recognised the greater convenience of the adhesive form of stamp and the demand for the labels far exceeded all expectation. Rowland Hill in his " Journal," under the date May 22nd, I8qo, says: "The demand for the labels is enormous, the printers supply more than half a million per day and even this is not enough. They are decidedly preferred to the covers and envelopes." In order to keep pace with this demand, the printing of the stamps had to be carried on continuously day and night from April I6th to June 27 th, 1840 , inclusive. On May 9th, I8fo, ${ }^{1}$ Perkins, Bacon \& Petch raised the question of night work with the Commissioners of Stamps and Taxes and the matter was settled by the Commissioners agreeing to pay three halfpence per thousand stamps above the contract price of seven pence halfipenny for all stamps printed at night during the time we have mentioned. This is the reason for the separate column, headed "Night Work" at the commencement of Appendix I. which shews the number of sheets printed at night for the period in question and for which the extra charge was made. Printing at night was also resorted to in May and June, I842, and again in April, May and June, I 84 , $^{2}$ but, as in both these instances, it was solely for the accommodation of the firm no extra charge was made. In the latter case, at any rate, Perkins, Bacon and Petch paid the Commissioners of Stamps and Taxes for the services of the extra officer on duty during the twenty-six nights the printing of the stamps was continued. ${ }^{3}$

## The One Penny Black " V.R." Stamp.

In addition to the stamps for issue to the public it was intended to have special labels for use in the Government Departments, and it was first proposed that these should be of a different colour to the ordinary stamps. ${ }^{4}$ It is clear from Rowland Hill's letter of March 26th, IS $40^{\circ}{ }^{5}$ that like the latter, the stamps for official purposes were to consist of two values-One Penny and Two Pence-a fact that is now brought to light for the first time. That preparations were made by lerkins, Bacon \& Petch to carry out Rowland Hill's instructions is proved by the book labelled " General Account of P'ostage Labels, i8fo," to which we have frequently referred. The pages of this book are ruled into a number of columns, four of which are headed " Work received

[^64]from Printer." Below this inscription, two of the columns are headed " Id." and " 2 d. ." respectively, with the word " Public " above and the other two columns have " id." and " 2d." respectively, with the word " Official" at the top. The last column intended for sheets printed of the Two Pence was never used, as the idea of employing special stamps for the Government Offices was abandoned before any plate of this value had been made.

It was decided that the Official stamps should be distinguished from those for the use of the public by having the letters " $V$ "ictoria] R[egina]" inserted in the upper corners in place of the crosses, the letter " $V$ " being in the left corner and the letter " $R$ " in the right-hand one. In Mr. J. B. Bacon's letter of April Ist., I8 fo." he states that the Plate for the One Penny Government stamps " is partly done and will be complete this week." On the gth ${ }^{2}$ of the same month he wrote "one [plate] for the public offices is nearly ready for press." The Engraving Book shows that the plate was finished on April Ifth ${ }^{3}$ and printing from it commenced the same day. when, as will be seen further on, ryt sheets were struck off. Perkins Bacon \& Petch, in default of instructions to the contrary, had the same marginal inscription placed on the "V.R." plate as that on the plates used for the One Penny stamps for issue to the public. No sooner was this done than Mr. Gates, at Perkins. Bacon \& Petch's, wrote to Rowland Hill on April I5th:5-"Mr. Edwin Hill has directed me to draw your attention to the price being marked round the border of the sheet, intended to be used by the Govermment Offices for adhesive stamps and to suggest that in place of the 'legend 'at present used, it should be denoted that these sheets are for the Govenment Offices, and not intended for sale. I find, upon enquiry of Mr. Petch, the legend can be removed in about six hours." On the following day Rowland Hill saw the firm and it may be assumed that when he learnt that the plate had been at press and a number of sheets were already printed from it, he abandoned the idea of altering the inscription. The numbering of the plate was, however, in a different form, for instead of a numeral it had at the four corners a Roman capital letter " A." (Illustration 24).

The plate for the "V R" stamps was made by removing the crosses in the two upper corners from a roller impression of the original engraved die of the One Pemy and then transferring 240 impressions from this roller to a plate. After this had been done, the letters were inserted, in the same way as those in the two lower comers, by means of hand-punches. The lines of some of the lower comer blocks of the stamps were retouched and others shew traces of double letters. The stamp lettered "OL" has no tail to the letter " R " and no serif to the foot of the downstroke, and that lettered." P J" has traces of the cross in the right upper corner. The last variety is probably due to extra pressure applied in transferring this particular impression to the plate. It is a well-known fact to engravers and printers that however carefully a portion of an engraving may be removed from a die, roller or
${ }^{2}$ Appendix C $(4+4)$.
${ }^{2}$ Ibicl ( +5 ) .
${ }^{3}$ Appendix G.
An officer of the Commissioners of Stamp and Taxes superintending the printing of the stamps on their behalf.
s"A History of the Adhesive Stamps of the Byiti:11 1..c:," by Hastings E. Wright and A. B. Crecke, Jun. London. 1899. p. 201.
plate there is always a tendency, especially after the hardening of the steel, for traces of the old design to reappear in some of the printed specimens. ${ }^{1}$

As we have said, the printing of the " $V R$ " stamps commenced on April Ifth, and we now give particulars of the total number of sheets printed :-

## Printers.



These were delivered to the Commissioners of Stamps and Taxes on the following dates:-2

| ISto. | April 15 | I |
| :---: | :---: | :---: |
|  | ,, 18 | I |
|  | , 30 | 13 |
|  | May 6 | 1,500 |
|  | , II | I |
|  | , 13 | 1,500 |
|  | , 15 | 250 |
|  | Aling. 25 | 57 |
| Alug. 25 |  | 3.323 |
|  |  | 148 |

Of the 3.323 good sheets, two were delivered to Mr. Pressly for "Imprimatur " impressions and were registered, respectively, on April i5th and May 9th, ISfo, one sheet was sent to Rowland Hill on April 18 th, thirteen ungummed sheets were delivered to Somerset House on April 30th, 18fo, for specimens ${ }^{3}$ to be sent to Pustmasters with the printed Circular of May 7 th, 1840, which also enclosed two specimens of the ordinary Two Pence stamps and 3,302 sheets were destroyed on Jannary 25th,

```
1 I'ide p. 60. 2 Appendix I. }\mp@subsup{}{}{3}\mathrm{ Appendix C (56,57).
    6
```

1843. ${ }^{1}$ This leaves a balance of five sheets unaccounted for. There were, therefore, 2 I sheets in all preserved out of the 3.323 , and of these two were retained in the Official Collection ; leaving thus 19 sheets, equal to 4.560 stamps. The I $4 \delta$ spoilt sheets were, no doubt, destroyed shortly after they were received at Somerset House on August 25 th, 1840 . The plate itself was not destroyed until March 6th, $1850{ }^{2}{ }^{2}$

The exact date when it was determined to abandon the idea of having separate stamps for the Government Offices and the deciding factor that led to this resolution are not known. It is certain, however, that none of the stamps were distributed to the Government departments and that their use for postal purposes was never authorised. A lew specimens that passed the post are known, but these are believed to have come trom the stamps that were distributed with the Post Office Circular of May 7 th, I I 40, and their passage through the post was unauthorised and irregular. The late Lord Crawford's Collection contained a used specimen on a letter-sheet sent from Lincoln to Grimsby, with the postmarks "Lincoln, My. 30. ISf6,"; " Louth, My. 31, 1846 "; and "Grimsby, My. 31, 1846 ," and we have seen one or two other obliterated copies that apparently passed through the post.

There is a well-executed forgery of the "V.R." stamp printed from a lineengraved die, which has the letters "PK" in the lower corners and a forged small crown watermark added to the paper. There is, too, a common, rough, lithographic forgery on vertically laid paper with the letters "I P." The usual attempt of forgers consists, however, in taking an ordinary One Penny black stamp, erasing the crosses from the upper comers and inserting the letters " V.R." in their places.

An imitation of the stamp, by permission of the authorities, was made by Messrs. Blades, East \& Blades in I 8 go, from a line-engraved die. This was printed in the centre of the Invitation Card sent out by the Corporation of the City of London for the Conversazione held by them at the Guildhall on May r6th, r8go, in celebration of the Jubilee of Uniform Inland Penny Postage. Besides the impressions found on the Invitation Card a few copies were taken of the die by itself. These are found printed on white card and also on stout white paper This imitation has the letters " JL " in the lower corners.

## The One Pexny Blue Colour Trial.

Since the early days of collecting there has existed a belief that the One Penny stamp was printed in blue ink, either as a trial or proof impression or in error for the usual black or red colour. The late Judge F. A. Philbrick, K.C., writing in $\mathrm{ISC}_{7}$, under the pseudonym "An Amateur," describes a specimen in blue that he had seen in a collection of Great Britain stamps. ${ }^{3}$ He called it " a government essay (or rather proof) hitherto uncatalogued and unknown," and added " The proof alluded to was the One Penny, letters in lower angles only, deep blue, and the specimen is, we believe, of almost unique rarity." Nothing was said as to whether the specimen was watermarked, but in a later article he wrote that the Proof was " on paper watermarked with the small crown. The tint of blue was somewhat dull.

[^65]This is of extreme rarity, as but one sheet was ever printed, and that by the authorities at the post-office. ${ }^{1 "}$ Again, in his well-known monograph on the stamps of Great Britain, published in 188I, in describing what is almost certainly the same specimen, he said" that it "was taken off in a dull blue tint from the first plate when it was completed, and ready to be printed from, and is on the paper employed for the issue, watermarked with a 'small crown.' Specimens from this sheet are of the highest degree of rarity." In none of these notices was any mention made of obliteration and, as the specimen is described as a proof, there can be little doult that it was unused.

Messrs. Wright $\&$ Crecke in their great work ${ }^{3}$ state in reference to the One Penny blue, that: "two varieties, in point of colour, are known, originating from two distinct scries of colour trials carried out in April and October, isfo. Specimens of the first are in the precise colour of the Twopence, having been struck after the selection of black and blue as the respective colours for the two values, but before it had been determined which should be assigned to the One Penny. Consequently, impressions of each value were struck in both colours: such impressions were for the time being merely Essays, but several of the impressions of the One Penny in blue were improperly used to frank letters, and examples postally cancelled are still extant." The reason given here of the origin of these essay's is quite inaccurate, for as will be seen further on, the first plate of the Two Pence value was not finished until some three weeks after the printing of the One Pemy in black had commenced. As regards their first variety of the One Penny blue, Messrs Wright \& Crecke give a copy of a letter from Mr. Ormond Hill to Mr. William Bokenham, dated April ist, I857. ${ }^{4}$ In reference to their second variety they furnish an extract from the letter of Mr . J. B. Bacon to Rowland Hill, of November ryth, $18.40,{ }^{5}$ and they add: "As in the case of the earlicr Essays, specimens of this later series were postally used and passed without detection."

We propose to deal with the latter variety first and to clear it out of the way, which is an easy matter. It will be seen further on in our work that the specimens referred to in this letter of Mr. Bacon's, were printed from a small plate of twelve impressions that was made and used for a number of experimental printings in i8 80 , for new colours for the One Penny and Two Pence stamps. Each of the twelve One Penny impressions on this plate had one of the upper corners erased and there were no letters inserted in the lower corner squares: vide Illustration 37 . It is cvident that Messrs. Wright and Creeke have confused these trial impressions, several of which were printed in bluc, with specimens taken from an ordinary plate of 240 impressions of the One Pemny stamp, with letters in the lower comers. We do not know what evidence they had for saying that specimens of these Essays "were postally used and passed without detection," but the statement is certainly wrong.

We will now consider the question of the specimens of the One Penny blue, which

[^66]are said to have been printed in April, ISfo. The only evidence there is on this point are the statements of the late Judge Philbrick, K.C. and Messrs. Wright and Creeke. We have been unable to trace the present whereabouts of the specimen described by the former, but the only genuine copy we have seen, that mentioned in Mr. Ormond Hill's letter, is of quite a different blue to that used for the first Two Pence stamps and moreower the paper of this specimen is blued at the back, proving that the ink was of an entirely different and later composition. It follows then from what we have said that the explanations given by these writers to account for the existence of a One P'enny blue stamp are all incorrect.

We are fortumately able to give the true history of the variety in question, from the records of Ilessrs. Perkins, Bacon \& Co., Limited. We have already referred to the large number of experiments that were carried out in 1840 to obtain new colours for the One Penny and Twopence stamps, a full description of which will be found further on in our work. After the most suitable colours had been selectel, Rowland Hill wrote to Mr. J. B. Bacon, on December $q$ th, I 8 fo, $^{1}{ }^{1}$ asking him to make an immediate trial, with the steel plates and crown paper, " of the two blue colours A.A. plain and B Prussian blue plain and of the red No. I6G." The letter of Mr. J. B. Bacon of December ${ }^{15}$ th, I8f0, ${ }^{3}$ states that four sheets of each of these three colours were sent to Rowland Hill on that date, and the latter's letters of December 17 th and 19 th ${ }^{4}$ show that some of the stamps were used for experimental purposes in order to test the colours and see if they were fugitive. At the time these sheets were printed there was no plate of the Two Pence at press, in fact, as will be seen when we come to deal with that value, no Two Pence stamps were printed between August 29th, 1840 , and February 27 th, 184 I . It was not thought worth while for a small trial printing of eight sheets to get out a Two Pence plate and go to the tronble of making it ready for printing purposes, and so all twelve sheets were printed from one of the One Penny plates then in use. In proof of this, the firm's Invoice Book of the quantites of stamps delivered, shews that these twelve sheets all had the face value of One Penny: It is true that the sheets were not included in the account of December, i8fo, but they are found in that of January, ISfi. ${ }^{5}$ No date is affixed to the entry, but as happened with some of the other deliveries of small lots of sheets, they were evidently overlooked at the time they were printed; for this can be the only explanation of the item of twelve sheets sent to Rowland Hill that appears in the January account.

Nothing more is heard of these colour trials until March, I857, when Mr. Ormond Hill received a specimen from Mr. Bokenham, that he had detected in its passage through the fost. Mr. Hill at once forwarded the stamp to Mr. J. P. Bacon for his opinion. ${ }^{6}$ Mr. Bacon's reply is contradictory:" He says: "it is deficient in the white line under the word postage and over two pence." which of course it was, as it was a One Penny stamp, and procceds: "We think it very possible, although we

[^67]have no distinct recellection of the fact, that it was taken to shew Mr. Rowland Hill the shade of blue color which we intended for the twopenny stamps, but printed from the one penny plate or die before the twopenny was prepared in order to save time, if this was not the case we cannot [account ?] for it." Then further on he adds: " while it looks unlike the real die there is one very remarkable thing about it which never could have occurred in our office, there are in the stamp two very distinct shades of blue the one very dark and the other very light and this would imply that it had been chemically doctored and yet if so the lettering has been very well done." Mr. Bacon asked Mr. Hill to procure him an impression on white paper of the obliteration number " 17 " on the stamp, but after recciving this he could unly add in a subscquent letter :" " that the heaviness, blackness and size of the impression made by it renders it very difficult to say what the tint of the blue was, before it was so disfigured: no part of the stamp being left perfect, except the lettering." Mr. Hill in returning the stamp to Mr. Bukenham wrote, " In regard to the impression of the Id. stamp in blue which you sent me some time since and which I now return, I feel sure that it is one from some experimental sheets taken I6 or i7 years ago. I enclose you an envelope bearing another such which came here addressed to one of my father's men and which passed safely through your department. The sender of this stamp has been questioned and says that he purchased a few such from the servant of the son of the late Mr. H. Goulburn and he destroyed those remaining unused. We know that Mr. Goulburn as Chancellor of the Exchequer had had some few sheets of these stamps and it appears probable that one or two sheets must have got into wrong hands. As the number must be very small we shall not take any further steps in the matter unless more such should be discovered in your Office." The explanation given by Mr. Hill is apparently quite correct, with the exception of the statement that Mr. Goulburn "had had some few sheets of these stamps." As we have seen, the sheets were forwarded to Rowland Hill at the Treasury in December, I840, at which time Mr. F. T. Baring was Chancellor of the Exchequer. Mr. H. Goulburn succeeded the latter gentleman in September, 184 r , and during his term of office specimens of these One I'my blue stamps appear to have been found at the Treasury, not a surprising fact under all the circumstances.

The original letter of Mr. Ormond Hill of April Ist, 1857 , now rests in the collection of His Majesty the King, together with the actual specimen of the One Penny stamp in blue, to which the letter refers. The specimen, which is on blued paper, watermarked small crown, has the letter " $G$ " in the right lower comer, the left lower corner being torn off. It is obliterated with the number " 17 " within a diamond, a cancelling mark that was employed at the General Post Office, London. We have made a careful examination of the stamp and in doing this we were fortunate enough to enlist the co-operation of Mr. L. Arthur Burd, an eminent authority on the linc-engraved stamps of Great Britain and a student, who for many years past has been engaged in making up complete sheets of 240 stamps each, of the plates of the One Penny and Two Pence stamps of Messrs. Perkins, Bacon \& Co's. printing. As the stamp has unfortunately lost one of the corner letters, it has been a very difficult matter to determine the number of the plate from which it was printed. The specimen has the flaw between the letter "ox " of "oxe," which as we have

[^68]already pointed out, is found on most of the stamps of Plates $7,8,9$ and 10 of the One f'emys, Original Dic. But owing to the mutilated condition of the specimen, netther Mr. Burd nor ourselves could be quite certain whether it was actually the same flaw or one occasioned by an accidental scratch or damage the stamp had received since it was printed. We had the specimen examined by two other collectors who reconstruct the sheets of the carly line-engraved stamps and after comparing it with the "Imprimatur" sheet of Plate 8, Mr. Burd and ourselves are convinced that it is the stamp lettered "O G" on that plate, and that the flaw between the letters "ON" is the usual one found on stamps printed from that plate. There can hardly be any doubt that Plate 8 was at press in December, 18 to, when these experimental sheets were printed and that the whole twelve sheets were taken off this plate.

Mr. J. P. Bacon in his letter returning the stamp to Mr. Ormond Hill drew attention to the fact that there were two distinct shades of blue in the specimen, one very dark and the other very light and this would imply that it had been chemically doctored. An inspection of the stamp corroborates this statement, and we think it is quite possible that it was actually one of the specimens treated by Rowland $H$ Iill to test the fugitiveness of the ink, to which reference has already been made. We have compared the stamp with specimens of the two blue colours "A A. plain " and "B. Prussian blue plain" in the Royal Collection, that were printed from the defaced plate of twelve One Penny stamps, and we believe that it originally came from one of the four sheets printed in the latter colour. Like the red shade selected for the One Pemny stamp, both of these blue colours stained the paper more or less blue.

Although we have made many enquiries of collectors and dealers we have not come across another specimen similar in colour to that of His Majesty the King. We think, however, that the unused specimen described by Judge Philbrick, K.C., was probably genuine, taking into consideration the date, 1867 , when he first saw it and the description of the colour he gave. We suspect that this very specimen is one in the "Ferrary Collection" with the letters " A K " in the lower corners; because in an interleaved copy of Judge Plilbrick's work on the stamps of Great Britain, ${ }^{1}$ which is full of notes and additions in his handwriting, he has written opposite the paragraph dealing with the One P'emny blue "Ferrary's copy is 'A K.'" It is just possible too that the second specimen, which we have seen was sent to Mr. W: Bukenham by MIr. Omond Hill, may still survive. We say this because Mr. T. Hugh Bryant, ${ }^{2}$ in an article in Stamp Collecting describes a specimen of the One Penny blue belonging to a friend of his, who is said to have received it from his grandfather, Mr. W. Bokenham. The story told by Mr. Bryant regarding the printing of this specimen is amusing to anyone who knows the real history of the One Pemy blue stamps, but this does not affect the genuineness or otherwise of the specimen. We have had some correspondence with Mr. Bryant, but he tells us that he has lost sight of his friend, who he thinks sold his collection some time ago.

The question as regards gemuine specimens of the One Penny blue is complicated by the fact that it is quite casy to change the colour of some of the red stamps to

[^69]certain shades of bluc. Mr. Burd, at our instigation has very kindly had a number of chemical experiments carried out by a friend of his, Mr. W. M. Hooton, M.A., M.Sc., F.I.C., on some hundreds of specimens of the One Penny red stamps. These experiments have been most useful, as they demonstrated: I , that the change from red to blue is one that is easily accomplished, and 2 they have proved that it is impossible to obtain a blue that corresponds in shade with the specimen in the Royal Collection. We have had quite a number of these pseudo-blue specimens sent to us by collectors, the shades of all of which can be matched by some of the changelings made by Mr. Hooton. Our grateful thanks are acknowledged to both of these gentlemen for the time and trouble they have given to this research and the assistance they have afforded us in our investigation into the history of the " One Pemny blue colour trial."

## The Two Pence Value.

The die for the Two Pence stamp was made by taking a roller impression from the die of the One Penny. The words "one penny," were removed from the roller and after this had been hardened, an impression was transferred to a flat piece of steel. On March 21st, J.8.40, ${ }^{1}$ Mr. H. Petch wrote to Charles Heath: "I send you herewith a Queen's head laid down for the 2 d . die-the background has been reentered and therefore will not require to be touched. I need not tell you that it is very material for us to get the die completed as early as possible." Mr. Petch said that the background had been "re-entered," but he evidently did not use this term in its strict sense, as the background could not have been re-entered by a second impression of the roller without touching and possibly injuring the head. What was really done was that the background was carefully gone over by an engraver and the lines were deepened. On comparing early die proofs of the two values together we find that the alterations made are chiefly noticeable in the white dots of the background, which appear in the interlaced curved lines at the sides of the stamps. These white dots are smaller in the Two Pence value and some of them, on the right hand side, have practically vanished. The Heaths appear to have decpened the lines of the head, more particularly the hair of the chignon, and the line at the back of the neek. The deepening of the lines of the crosses in the upper comers and the prolongation of some of the lines is also well marked. So far as we are aware these differences between the dies of the two values have never been noted or pointed out by any previous writer. On the other hand all the descriptions we have read state that the dies were identical, save for the change in the words of value. Mr. J. P. Bacon's letter of April ist, 1840, ${ }^{2}$ mentions that Mr. Heath had promised to return the die for the Two Pence on the following Friday, viz., April 3rd, and three days later Mr. Bacon writes to Charles Heath: "I have returned the Die by the bearer and hope to have it finished in the morning. On April 7 th, $18 \not \boldsymbol{q}^{\circ}{ }^{3}$ the words "two pence" were engraved on the die at Perkins, Bacon \& Petch's and on the following day ${ }^{4}$ the firm wrote to Mr. E. Hill to say that " both the penny and two penny stamp dies are now ready." Proof impressions are known of the finished state of the Two Pence die on India paper mounted on soft, white card. (Illustration 38).

The first plate for the Two Pence stamps was finished on May Ist. ${ }^{5}$ An entry in the "Day Book" kept at Somerset House, to which we have before referred, states

[^70]that the plate was " not hardened," and it is believed to have been used in this state until it was finally abandoned. The plate was similar in every way to those of the One Pemy value, except that the part of the marginal inscription relating to the price read: "Price 2d. Per Label. 2s. Per Roä' of 12. Ł2. Per Sheet." 1 The numbering of the plates of the Two Pence was also in Arabic numerals and commenced with the figure " $\mathbf{1}$."

The printing of the stamps (Illustration 39) began on May ist. ${ }^{2}$ and a sheet was registered at Somerset House the following day. This shect has disappeared long since from the collection of Imprimatur sheets. Although there is no record in Perkins, Bacon \& Co's. Engraving Book, the plate must have had at least one of the impressions re-entered, as specimens of the stamp lettered " D J" are known, which are in a normal state, while others, with the same lettering, shew distinct marks of a re-entry: As the former variety is much rarer than the latter, the repair to the plate probably: took place soon after the printing of the stamps commenced. It was possibly made on May 9th, or 16th, 1840, for on those two days the plate was not in continuous use. ${ }^{3}$

A second plate was finished on July 18 th, $1 \$_{40}$. Printing from this commenced three days later ${ }^{5}$ and a sheet was registered on July 3ist, but like that of Plate $I$ is no longer in the Official Collection. These two plates were the only ones used for the first Two Pence stamps, and Plate I was discarded as soon as the second plate was ready for use. The Somerset House "Day Book" states that Plate 2 was hardened. In Appendix $H$ we give particulars of the number of sheets printed from the two Plates. The total of these will be seen to be :-

| 16,962 | Plate I. |
| :---: | :---: |
| 10,600 | , 2. |
| 27.562 | eets. |

These were delivered to the Commissioners of Stamps and Taxes as follows ${ }^{6}$ :

| ISfo | May | . | . | I 1.501 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | June | . | . | 500 |  |
|  | July | . | . | 1,000 |  |
|  | " | . | . | 3.725 |  |
|  | Aug. | . | . | 7,165 |  |
|  | Sept. | - | . | 3.038 |  |
|  |  |  |  | 26,029 |  |
|  | Aug. 25 | . | . | 571 | spuilt impressions. |
|  | Sept. 10 | . | . | 62 | " " |
|  |  |  |  | 27.562 | sheets. |

Taking the average of the spoilage as 23 sheets per thousand, allows 390 spoilt sheets for Plate I and 243 for Plate 2. This brings out the total sliects for Plate I as 16.572 , equal to $3.977,280$ stamps, and of Plate $2,10.357$ sheets, equal to $2,485,680$ stamps. Messrs. Wright and Creeke state that both the plates were

[^71]destroyed on January 27 th, $1842 .{ }^{1}$ This may be the date officially recorded, but Perkins, Bacon \& Petch's letter of January 2Ist, ${ }^{\text {a }}$ of that year shows that they had already been defaced at the time they wrote.

As in the case of the One Penny black stamps, Messrs. Wright and Creeke are hopelessly wrong in the account they give of the distribution of the sheets of the Two Pence value from Somerset House. They mention a list of places to whel they state 286 sheets were despatched on April $30 t h, 18$ fo, 597 sheets on the following day, I,II5 on May 2nd, the total distribution up to and including May 6th, being put at 2,316 sheets. ${ }^{3}$ A reference to Appendix H. shows that the printing of the Two Pence stamps did not commence until May ist, when only 25 sheets werc printed. This was followed by 92 sheets on May 2 nd. But on and from May fih, with the exception of the 9th, 16th, 22nd and 23rd, the printing of this value was carried on day and night down to and including May 27th. Appendix 1. shows that including May 6th, only 619 sheets had then been delivered to the Commissioners of Stamps and Taxes. Of these, one sheet was taken for registration purposes on May 2nd, ${ }^{4}$ and 18 sheets, which are said to have heen imperfectly gummed, were delivered on May 5 th ${ }^{5}$. The latter were used by the Post Office as specimens for forwarding with the Circular sent out to Postmasters on May 7 th. As we said when dealing with the One Penny black stamps, we can only surmise that some, if not all of the figures quoted by Messrs. Wright \& Crecke refer to the despatch of the Two Pence Mulready covers and envelopes. From the particulars we have given it will be seen that the issue of the Two P'ence value to the public could only have been made in London on the 6th May, 1840, and that it must have been a week or so after that date before the issue of the stamps became general throughout the country.

As in the case of the eleven plates of the One Pemny black stamps, a number of students endeavour to reconstruct the entire sheets of the two plates used for the first Two Pence stamp. This is done, in the same way, by observing the different pusitions the letters occupy in the lower comer squares of the corresponding stamps on the two sheets. There are also some special guides discovered by collectors that are of material assistance. The stamps belonging to Plate I usually have the left side line of the left upper comer square very thin or defective and the letters " Tw " of " Two " joined at the top or very close together. (Illustration 39). The stamps of Plate 2 usually have the left side line of the left upper comer square well-marked and the letters "TW" of "TwO" separated. (Illustration 40). On Plate I the stamp lettered "PI" has the left lower corner square retouched, while the stamps lettered "N A " and "N B " on Plate 2 both show signs of a double letter " N."

## The Red Ini Used for Obliterating the Stamps.

When the introduction of Postage Stamps had been decided upon by the Treasury, the question of their obliteration in their passage through the post had to be considered. Rowland Hill consulted Perkins, Bacon \& Petch on the subject and

[^72]they promised to do their best to find a suitable ink for the purpose. On March ISth, I840, ${ }^{1}$ they wrote to Mr. Phillips ${ }^{2}$ and sent him six impressions marked "No. I" and six marked "No. 2 " of a red ink " which they think he cannot extract without taking away paper also. They are still endeavouring to get a different and lighter colonr. Mr. Taylor's ink they have taken out as well as all other black ink which they have attempted." We do not know the result of this experiment, but on April I8th, $1840,{ }^{3}$ we find the firm wrote to Rowland Hill and sent him " two small pots of red ink similar to that from which you tried specimens, the price of which would be five shillings and sixpence per pound." We are unable to say if this was the ink ultimately adopted, but a Post Office Circular dated April 25th, 1840, contains the following: "Directions for preparing the Red Stamping Composition :-
ilb. Printer's red ink.
I pint Linseed Oil.
Half-pint of the droppings of Sweet Oil.
To be well mixed."
Experiments were also made to obtain suitable hand-stamps for obliterating the stamps and those finally chosen bore the well-known design of a Maltese cross.

## The Substitution of Black for Red Ink for Obliterating the Stamps.

The stamps, as we have stated, were first used for postage on Mlay 6th, 1840 , but no sooner had they made their appearance than attempts were made by a number of individuals to clean off the red Maltese cross obliteration from used specimens of the One Penny value, with the view of using them again for paying postage. A letter of Perkins, Bacon \& Petch of May 14th, I8 40 , ${ }^{\text {a }}$ shows that Rowland Hill was even then thinking of making alterations in the printing of the stamps, as he asked them to send him a specimen printed in vegetable colour, which they did, adding however: " We do not recommend any vegetable colour for printing the labels as it is liable to many objections among which is the price of the article and we believe will furnish no seeurity for the purpose intended, which cannot be got in some other way." Fourteen days later, on May 2rst, Rowland Hill writes in his "Journal:" "Several more cases of stamps wholly unobliterated or very nearly so have come within my knowledge and all sorts of tricks are being played by the public who are exercising their ingenuity in devising contrivances for removing the obliterative stamp by chemical agents and other means. ${ }^{5}$ One contrivance is to wash over the stamp before the letter is posted with isinglass or something else which acts as a varnish and as the obliterating stamp falls on this varnish it is easily removed with soap and water. Tricks of this kind are quite sufficiently numerous to produce great anmoyance, but I doubt whether it is more than the exercise of a little ingenuity which will speedily be directed to other objects. I am making every effort, however,

[^73]with the aid of Phillips ${ }^{1}$ the chemist and others to prevent these frauds and I trust 1 shall succeed." On the following June roth, we find the entry: "Sent specimens of stamps obliterated with black oleaginous ink to all the parties who have succeeded in removing the red mark requesting them to attempt the removal of the black and then return the specimens." And on June 27th he adds: "All who have professed to be able to remove the red ink obliteration have been requested to try their hands on the black ink and have givenit up. I shall prepare a report on the subject of obliterations and propose to adopt a light colour for the penny stamps." Perkins, Bacon \& Petch prepared at least seven different kinds of black obliterating ink and the correspondence in Appendix C $(67-75,82-84)$ refers to the various trials that were made with these inks in June, July and August, 1840. Further on ${ }^{2}$ we shall give fuller particulars of these and the later experiments made and of the stamps used for this purpose.

On July 21st Rowland Hill writes in his " Journal." " Mr. Donovan, ${ }^{3}$ a chemist of Dublin, has succeeded in removing not only the red, but the black ink obliterating stamp; all others who have tried had given up the latter; we are therefore at sea again," and on the following day we find the entry: "Mr. Plillips and Dr. Clarke," of Aberdeen, who has volunteered his services, met at my office this morning to discuss with me the question of obliteration, requested Mr. Phillips to try some experiments suggested by Dr. Clarke." Rowland Hill received a further letter from Mr. Donovan dated July 24th, and this he forwarded to Mr. J. B. Bacon. Copies of this letter and of Mr. Bacon's reply are given in Appendix C ( $76-80$ ), as well as an extract from " The Times" newspaper, of August 3rd, 8840 , apparently referring to another chemist, and telling the story of his success in removing the obliteration from the stamps. Further experiments were tried with various inks by Rowland Hill and Perkins, Bacon \& Petch ${ }^{5}$ and about the middle of August an extract from a letter to the Lords of the Treasury ${ }^{6}$ was forwarded by Rowland Hill to Mr. J. B. Bacon. The writer of this suggested laving " the engraving in an ink of a colour that can easily be destroyed and the Post Office mark in a carbonic ink (black printers ink for instance.") At an interview that Mr. J. B. Bacon had with Rowland Hill on August 23 rd , ${ }^{7}$ it was decided to adopt this suggestion, as Mr. Bacon made the note : " The obliterating stamp is to be changed to black letterpress printers' ink and remain so for a long time." On August 25th, Rowland Hill states in his "Journal,' " Consulted Farraday ${ }^{8}$ on the obliteration. He approves of the course which I propose to adopt, namely to print the future stamps with an aqueous ink. To obliterate also with an aqueous ink as soon as the present stock of stamps is exhausted and in the meantime to obliterate with black printing ink. I requested his attention pat ticularly to the question of the safety of using during the transmission state the oleaginous

[^74]ink as a means of obliterating stanles printed with aquens ink. To me it appeared that there must be danger in using two inks differing so essentialiy one from the other, hut he is of opinion with Phillips that no agent can be found which will act on the oleaginous ink and leave the aqueous ink maffected." The end of August. Isfo, was therefore, the date when the black obliterating ink was substituted for the original red ink, and this is borne out by the actual specimens known and by a notice that "ppeared in "The Times" newspaper, of September 3rd, 18 fo, " which states that " Within the last few days all labelled letters passing through the Post-Office have been stamped in black ink instead of red." An ord specimen or two of the One l'emy black stamp is known with a black obliteration of an earlier date than August, ISfo. one described by Mr. Walter Morleys having been used on the previous ist of June, but any such specimens can only be looked upon as accidents or errors madr by post-office employees, like the blue, violet and other coloured obliterations, which are occasionally met with. The introduction of black letterpress printers' ink for cancellation purposes in place of red was confined to the London "Twopenny Pust" Offices, for letters for delivery in London or the suburbs.

Very few stamps used on letters from London to the country or in the provinces, are known obliterated in black previus to February: 18 41 , when the colour of the One Pemy stamp was changed to red and a new black obliterating ink was substituted. These latter specimens used in 1840 may be considered more of the nature of " freaks" than a proof of the authorized use of black ink at that period. This restriction in the use of the black ink in a 840 is confirmed by the notice sent out " To all Postmasters and Sub-Postmasters" by Colonel IV. L. Daberly, the Secretary of the Post Office, in February, I $8_{+1}$, ${ }^{4}$ which states: "It having been decided that in future all Postage Stamps are to be obliterated with Black Composition, instead of the Red, which hats been hitherto used, I forward you a supply of Black Composition for that purpose . . . You will immediately commence using the Black Composition, instead of the Red." And in a notice in the Royal Collection, which was sent out about the same time, by Mr. E. S. Lees, the Secretary of the General Pust Office, Edinburgh, with specimens of the new stamps and the new One Pemy covelope, it is stated: " It is intended hereafter to obliterate the Postage Stamps with Black Composition, a supply of which will be forwarded to you as soon as possible, but until you receive this supply you will continue to obliterate the Postage Stamp with the Red Compositioni, as heretofore." The use of black ink for obliterating purposes, therefore, only became general after the issue of the One Pemy red stamp in February, $18+1$.

## Expermexts for New Colours for the Stamps.

Concurrently with the trials we have described to obtain a suitable obliterating ink, numerous experiments were made by Perkins, Bacon \& Petch, in order to find colours of a more fugitive nature in which to print the stamps. Firon the number

[^75]of tints employed in the experiments the specimens that were produced were christened the "Rainbow Series " by collectors as early as the year 1863."

The experiments were started about the third week in May, r840, and a small plate containing three translers of the One Penny die, in a horizontal line, was made especially for the purpose. The roller impression used for this little plate Irad a flaw between the letters " $O$ " and " $N$ " of the word " one," which appears white in the prints, just as it does on stamps printed from Plates $7,8,9$ and to of the One Pemy value. ${ }^{2}$ The three impressions, to carmark them as for use for trial printings, had no letters inserted in the lower comers, and the left upper corner of each impression was removed from the plate, so that the right upper corner is missing in the printed impressions. (Illustration 33.) It has long been supposed that these imperfect prints were obtained by covering one corner of each impression on the plate with wax before they were taken, but this is quite a mistake and they were produced in the way we have described. This little plate of three stamps measured rro mm . in width, but we are unable to give the length. Impressions from it are known as follows:-
r.-On small crown watermarked paper.

Id., mauve-pink.
rd., lilac-brown.
id., blue-black.
2.-On small crown watermarked paper, dipped in Prussiate of Potash.
rd., bluc-black.
3.-On white, wove paper.
rd., deep blue.
4.-On white, wove paper, dipped in Prussiate of Potash.
rd., deep bluc.
The small crown watermarked paper of these impressions is not the same as that used for the actual stamps; the crowns are larger and are placed closer together. This paper came Irom a trial sheet or two that had been sent to Perkins, Bacon \& Petch in March, r840, and the size and positions of the crowns were altered in the paper supplied for the issued stamps. ${ }^{3}$ Our description of the impressions printed from the little plate of three stamps is taken from specimens now in the Royal Collection and the same remark applies to all the other specimens we describe further on of these experiments of 1840 .

We have no direct evidence we can produce of the actual date on which this little plate was made, but we believe that it was the first of the trial plates used in 1840. We say this because from June rst, of that year to the end of the experiments in the following December all the dated specimens we have seen of these trial printings, as well as those that can be identified by the documents to be referred to, were printed from the plate of twelve stamps to be described next, After the latter wasin existence, we camot conceive that another plate containing only three impressions would be made and the reason this little plate was abandoned, was, we think, because it was

[^76]found to be too small for the experiments then being carried out. Very few impressions, also, were printed from the little plate of three stamps and it could have been in use but a short time.

The plate with twelve impressions, arranged in three horizontal rows of four was certainly ready for use towards the end of May, ISto, as we have seen a sheet printed from it that bears the date " June rst." This sheet was also not one of those that were first printed from the plate, as it shews the flaw on the tenth stamp, we slaall describe a little further on, and which was not on the plate in its original state. An impression in black on soft, white card is known of this plate before the upper corner was removed from each of the stamps. (Illustration 34). If reference is made to the illustration, it will be seen that the last stamp in the top row has had a thick line drawn in pen and ink across the right upper corner. This was done to indicate that this corner was to be erased from each of the specimens on the plate and the alteration was made before the plate was used for printing any experimental impressions. (Illustration 35.) The size of the actual piece of steel to which these twelve impressions were transferred measured $225 \times 108 \mathrm{~mm}$. and the impressions were placed at the left side. The following specimens are known printed from this plate :-

On stont, rough, white, wove, paper.
Id., black.
rd., orange-red.
id., dark brown.
The same, but obliterated with a transverse oval hand-stamp in bluish black ink, round the interior of which is " national bank of ireland " and in the centre in two lines, " No., - -" - " --183."

Id., black.
rd., orange-red.
rd., dark brown.
Id., deep blue.
Very soon after this Plate of twelve stamps came into use it received a small aecidental cut or dent, which is found in the right lower conner square of No. ro stamp on each sheet and every impression subsequently printed from the plate shews this little mark or scratch. (Illustration 36).
(1) On white, wove paper dipped in Prussiate of Potash.

Id., lilac-pink. (A sheet of this bears in pencil "June rst, New Col., oil.")
Id., pale red-brown. (A sheet of this bears in pencil " 15 June.")
id., black.
Id., dull lilac.
(2) On white, wove paper.

Id., black.
Id., bright pink.
Id., lilac-rose.
Id., dull rose-pink.
rd., pale lilac-brown.
rd., deep lilac-brown.

Id., pale red-brown.
rd., deep red-brown.
Id., brown.
id., red.
Id., dull hilac.
Id., blue.
Id., deep blue.
Id., dark blue.
(3) On stout, rough, white, wove, paper.

Id., black.
This is only known with the land-stamp of the National Bank of Ireland, in red ink.
(4) On white, wove, " medium I6lbs." paper, gummed.

Id., pink.
id., pale red.
(5) On white, wove " 12 lbs . foolscap" paper, gummed.

Id., black.
Id., deep rose-red.
id., brown.
Specimens of the above pink and black stamps were sent to Professor R. Phillips on June $4^{\text {thl, }}$ I840, ${ }^{1}$ for testing purposes.

Then we have a sheet of paper folded in two. On the left-hand page are attached eight One Penny specimens in two rows, printed in shades of brownish pink, and below these are two specimens of One Penny in deep blue. The specimens are headed "All in oil" and are numbered " $I$ " to " 10 ." On the right-hand page, opposite the eight pink stamps, is written " different mixtures to produce different shades and in all cases the clearest prints have the strongest oil. All fugitive." Opposite the two One Penny blue, is " 2 shades of blue both fugitive and printed in oil.' Specimens Nos. 1, 2, 3, 9 and ro are on medium white, wove paper, and Nos. 4, 5, 6, 7 and 8 are on medium bluish laid paper. There is, unfortmately, no date on the sheet, but this series of experiments almost certainly belongs to June, 1840 .
(6) On medium white, wove paper.

Id., brownish pink (three shades).
rd., deep blue (two shades).
(7) On medium bluish laid paper.

Id., brownish pink (five shades).
We have next a similar sheet folded in two and bearing the date " rgth Augst., 1840." On the left-hand page are specimens of the One Penny printed in black on differently stained papers, arranged in two vertical columns of four, each numbered " I " to " 4." The vertical column to the right is headed "Varnished." Below the two rows is another specimen of One Penny black numbered at the top " 5 ." On the right-hand page is written: "No. I Ink. Composed of the usual black gronnd in oil with addition of Prussiate of Potash and blue and turpentine. Paper wetted in Prussiate of Potash and Carbonate of Potash. No. 2-same as No. I, except a little

[^77]more Potash in ink. No. 3-paper stained in Prussiate of Potash, logwood and cochineal, to aid the obliteration of head in an attempt to take out diurnal stamp. No. 4-same as Ňo. 3 lighter tint. 5. Lighter tint."
(S) On paper stained with Prussiate of Potash, logwood and cuchineal, giving a lilac-rose tinge to the paper.
id., black (three slades).
The other specimens of this date cannot be separated from some of the earlier printings in black, without ther bear some distinguishing mark.

## Trial Obliterations folxd on the Experinental Stamps.

Sheets and specimens of all these experimental stamps, printed from the little plate of three stamps as well as from the plate containing twelve impressions, were used for making trials with black obliterating inks of various compositions, followed in many cases by attempts to clean off the obliterations with creosote, chloride of lime, potash, turpentine, etc. Our illustration, No. 36 , is given as a sample sheet of the experiments we are now describing. This particular sheet is printed in deep blue, the colour of the then current Two Pence stamp. The two obliterations there shown consist of: (I) a design formed of seven concentric circles round a small circle of solid colour, which was applied by a wooden hand-stamp; (2) the wellknown Maltese cross obliteration, which was applied by a brass hand-stamp; both hand-stamps being lent to Perkins, Bacon \& Petch by Rowland Hill. ${ }^{1}$ The notes added in writing on the margins of the shcet: "No. I, June Ioth."; "No. I, June irth."; "No. 2. June iIth,"; "No. I and A. June roth;" and "B and A. Junc 1oth"; refer to five different obliterating inks composed by Perkins, Bacon \& Petch. ${ }^{2}$ The words "Present black \& C.W." at the top of the shect have been added in error and are corrected at the bottom in Mr. J. B. Bacon's handwriting to "Present blue \& C.W."; "C.W." standing for "Common wetting." Besides the five obliterating inks used on this sheet, Perkins, Bacon \& Petch tried one suggested by a Mr. Parsons, which was no good and also two others of their own composition. ${ }^{3}$

Besides the two obliterating hand-stamps named above and the National Bank of Freland hand-stamp, already described, Perkins, Bacon \& Petch made use of the following marks for obliterating purposes on these experimental stamps: 4. "No. 712 "; 5."A $8860 " ; 6$. " $3860 " ; 7$. "No. $71243 " ; 8$ and 9. "grindlay 'co" or "grind" in a straight line of thick Roman capitals. io "Sydney" in large script type. With the exception of the National Bank of Ireland hand-stamp, which is also found in red, all the other nine hand-stamps are only known impressed in black ink.

Trial Obliterations Fol nd on the then Current One Peniy and Two Pexce Sthips ind on the One Peniy "Y.R." Stamp.

Experiments with black obliterating inks were also made by Rowland Hill on the then current One Penny black and Two Pence blue stamps and on the One Pemny " V.R." stamp. The specimens used of the last no doubt came from the sheet sent to him on Aptil I8th, $\mathbf{1} 8$ to. ${ }^{4}$ The Royal collection contains cight specimens

of the "V.R." stamp thus treated: (I) A specimen, lettered "NL," cancelled with the wooden hand-stamp of seven concentric circles we have described and then an unsuccessful attempt made to clean off the obliteration ; (2 and 3) A vertical pair, lettered "GA-HA," the upper stamp of which was obliterated with the brass Maltese cross hand-stamp, we have before referred to, and the lower with the hand-stamp of seven concentric circles. The central portion of the pair was then cut out by an instrument which made wavy lines, and was laid on one side. An attempt was made to clean off the cancellation on the upper and lower parts, after which the thrce pieces were rejoined, in order to sce how far the experiment had been successful ; ( 1 to 7 ) What was originally a horizontal strip of four stamps, lettered "MD" to "MG." The first and third stamps were obliterated with the cancellation of seven concentric circles and the second and fourtlo stamps with the Maltese Cross cancellation. A horizontal strip, in width about one third of the height of the stamps, was cut off along the top by the same wavy cutting instrument as was used on the vertical pair described under Nos. 2, 3. The lower parts of the stamps were then separated and were sent by Rowland Hill to Mr. F. Ham, of Norwicl, to sec if he could clean off the obliterations. He returned them to Rowland Hill on June 16tlı, I8fo, after having made various experiments to remove the cancellations. The parts were then reunited to the strip that had been cut off and the four stamps were attached to Mr. Ham's letter. In this letter, ${ }^{1}$ he says inter alia: "Enclosed are the four stamps you sent me, you will perceive that the cancelling ink is not removed entircly from either of them, neither do I now think it possible to do so except when very slightly marked-without at the same time materially injuring the stamp itself." This statement is fully borne out by the appearance of the specimens, for the second stamp, from the drastic treatment to which it was subjected, has almost the whole of the design removed; (8) A specimen letter "OL," with "Removed five times" written in ink at the back, meaning that the stamp had been cancelled and the obliteration removed no less than five times. The "Tapling Collection" also contains two specimens of the "V.R." stamp, lettered "P D-P F," attached to a piece of paper on which Rowland Hill wrote: " I coat of varnish. Junc 23rd. Cleaned at $\frac{1}{2}$ p. 5." After the coat of varnish had been applicd, the stamps were sent to Perkins, Bacon \& Petch to be cancelled with their black obliterating ink, the hand-stamp of scven concentric circles being used on this occasion. Perkins, Bacon \& Petch applied an impression of the hand-stamp on each stamp and a further one on the paper below each of the stamps and Mr. J. B. Bacon wrote on the paper "Obliterated June 23rd at II o'clock." The stamps were then returned to Rowland Hill, who tried to remove the cancellation on each of the stamps at half-past five o'clock the same day, and, as the specimens show, he was to a large extent successful in so doing. At the back of the paper is written " Obliterated June 23, 18ұo."

## Continuation of the Experiments for New Colours for the Stayps.

Between August igth and 3rst, 18fo, the small plate of twelve One Penny stamps had the voided corners of the stamps retouched by an engraver. The reason of this we do not know, but we presume that it was done to give the stamps a more uniform and less ragged appearance, as it certainly had this effect. The small acci-

[^78]7
dental cut or dent, in the right lower comer square of No. ro stamp on the sheet, was left as it was. (Illustration 37). The fact of this retouching being possible shows that the plate had never been hardened, and, as it was only made for taking experimental prints, we do not suppose it ever underwent that process.

At the interview that Mr. J. B. Bacon had with Rowland Hill on August 23rd, IS 40 , it was decided that the firm should " produce several shades of Blue and Brown approaching a link ink for printing the Postage Stamps: ist in fugitive lnk printed with oil ; 2nd in fugitive Ink printed without oil ; 3rd in fugitive Ink printed with oil and dipped in Prussiate of Potash ; fthas last, but with Prussiate of Potash mixed with the colour and common wetting; 5 th in fugitive Ink printed without oil, dipped in Prossiate of Potash ; Gth in fugitive Ink printed without oil, with Prussiate of Potash mixed with the colour and common wetting." Creosote and turpentine were to be avoided. ${ }^{1}$ Hemry Cole also sent on August 2 ftll $^{2}$ two impressions, stamped side by side on a small piece of white paper, of an essay ${ }^{3}$ by Mr. C. F. Whiting for the One Penny embossed stamp for envelopes, struck in the pale pink colour that was afterwards adopted for the envelope stamps of this value and he asked Perkins, Bacon \& Petch to try this colour for the adhesive stamps. The colour was, however, quite unsuitable for stamps printed from line-engraved plates.

Twenty specimens were prepared and forwarded to Rowland Hill on August 3 rst mounted on a shect of paper. The top row of four specimens, printed in rose-pink, is lieaded "Fugitive ink printed without oil." The stamps are numbered " I" to " 4 " and at the right end of the row is " E . color." The remaining sixtecn specimens in shades of rose-red and red-brown, numbered " I " to " $\mathbf{I}$," are in four rows and are headed "Fugitive ink printed with oil." Of these there arc four of " A color " and two cach of colours " B " to " G ." Some have Prussiate of Potash in the paper, others magnesia or tartrate.

This sheet of specimens was followed by another on September ist, headed "Fugitive Inks," to which were attached sin specimens in bluc of different shades, numbered "I "to " 6 ," some of these being on "plain paper " and some with" Prussiate of Potash in the paper." In Rowland Hill's handwriting at the bottom of this shect is "Scpt. I, Mr. Bacon has abandoned the printing in this color." The specimens on both these sheets were printed from the retouched plate containing twelve impressions, as were all the subsequent experiments we describe. The Royal Collection, besides these two sheets, also contains two single specimens that were sent by Rowland IIll to the Chancellor of the Exchequer on September Ist. One of these in red-brown has on the margin in Rowland Hill's handwriting "For penny stamps" and below in pencil " $16 G$." The other, in deep blue, has on the margin "For twopenny stamps." Specimens were also sent by Perkins, Bacon \& Petch to Professor R. Phillips ${ }^{4}$ on August 28th and September Ist, with particulars of the compositions of the sixtecn different colours of the red stamps, and further specimens in blue marked " A.B. \& C." were forwarded to Rowland Hill on September ist. ${ }^{5}$

[^79]On September 3rd, Perkins, Bacon \& Petch forwarded to Rowland Hill specimens of sixteen different colours attached to a sheet of paper. At the foot of the sheet that was kept for reference by the firm, is written "The above are copies of Postage Stamps of 10 kinds all different from each other, sent to R. Hill, Esq., and R. Phillips, Esq., and also tried by ourselves, by Mr. Hill's orders ; the marks upon the sides of each being those upon the specimens sent for trial and the double marks Ar, etc., being the order in which we should class them (cverything considered) as to goodness. Sep. 3rd, I8.40, P.B. \& P." The first seven specimens on the shect are printed in shades of blue and the other nine specimens are in shades of rose-red and red-brown. Some are printed without oil, some are on plain paper, while others have Prussiate of Potash in the paper. The sheet was accompanied by a letter ${ }^{1}$ in which Perkins, Bacon \& Petch wrote: " When you and Mr. Phillips have decided which you consider the best for use-we should recommend that the two best blue and the two best red colours be tried to the extent of several sheets, upon the actual Postage paper and gummed in the usual way, and then obliterated with common black letterpress printers ink when we can tell you whetler it will make any and if any what difference in the cost, over those at present in use. If this plan is agreed upon it will be necessary to supply us with some paper for the experiments." On September 5th. Professor Phillips ${ }^{2}$ sent in his Report to Rowland Hill recommending No. 9 plain or No. 16G, red colour for the One Penny stamp, with a preference for the latter, and he suggested that no alteration need be made in the colour of the Two Pence value. On September 8th, Perkins, Bacon \& Petch ${ }^{3}$ wrote to Rowhand Hill that they could not engage to print the stamps in pink, in either of the selected colours, under an additional charge of one farthing per thousand stamps, but " if experiment shall justify the old price we will checrfully reduce it to that." Fresh printings were then made on two sheets of the small crown watermarked paper used for the current stamps. These shects were cut into sixteen picees, cight of which bore twelve stamps each, in No. 9 ink and the remaining eight had the same quantity in No. 16 ink. These were sent to Mr. Edwin Hill ${ }^{4}$ on September roth, and he forwarded 72 specimens of the former and 78 of the latter on to Mr. Ledingham. ${ }^{5}$ Mr. Hill suggested ${ }^{6}$ that the sheets should be gummed, but, judging from the correspondence, it seems doubtful if this was done.

On September 17 th Rowland Hill forwarded his " First Report on the Obliteration of Postage Stamps " to the Chancellor of the Exchequer. In this he recommended that the One Penny stamp should be changed in colour to red, like the sample submitted marked "No. I6G." and that the Two Pence should be like the sample marked "No. 3 plain." Specimens of both these colours were among those on the shect submitted by Perkins, Bacon \& Petch on September 3rd.

On September 18 th, Mr. Edwin Hill wrote to Perkins, Bacon \& Petch ${ }^{7}$ for some of the "No. $\mathbf{I} 6$ " red ink in order to see if it was suitable for the cmbossed One Penny envelope stamps, with which experiments were then being made at Somerset House.

[^80]We do not know if trials were actually made in this colour, but if so, it was abandoned in favour of the pale pink ink in which the envelopes were eventually issued to the public.

Early in October ${ }^{1}$ four further sheets of the small crown watermarked paper were cut up into $4 \delta$ pieces and printed with the retouched plate of twelve specimens in "Nu. 16G" ink and gummed for Rowland Hill, and a similar number of pieces of the same paper were printed with impressions in blue ink, "No. 3 plain." The Royal Collection contains one of the sheets of the One Penny red which has the watermark sideways and the back gummed. The sheet of twelve stamps has been cut in half vertically and the left half is numbered "I" on the margin and the right half ". 2 ," in pen and ink. At the back of No. 2 is written: "Exposed by Mr. Phillips to the sun from Oct. 2I to Nov. 6," and at the back of No. I is: "Put by in these weeks by Mr. Phillips." There is also written on the margins of the face of No. I : "No. I6G" and in pencil " 2 rst Octr. ISfo" and in the handwriting of the late Mr. T. Peacock" at the top " Stamps exposed to action of light in laboratory at Som. Ho. (see back) T. Peacock." At the back of each half is also written: " Recd. of Mr. Ledingham Nov. $30,18+9$. E.H.[ill]." On putting the two halves together no appearance of fading can be detected.

## Change in the Design of the Two Pence Stamp.

On October 1 jth Rowland Hill sent for Mr. J. B. Bacon, and a discussion then took place regarding an alteration in the design of the Two Pence value. Something at the same time scems to lave been once more said about the colour ; as two days later, specimens of two slades of blue ink were forwarded by Mr. Bacon to Rowland Hill. ${ }^{3}$ On October 23rd ${ }^{4}$ Mr. Bacon sent Rowland Hill "One impression from the two penny die with the white line marked along the top as suggested, and also one with a corresponding white line both at the top and bottom for his decision." These two impressions were in black, placed side by side on a piece of white card, and each had the words of value barred out. The one to the left has a straight white line just under the word "postage" and that to the right has two similar lines, one just under " postage" and the other just above the obliterated words of value. These white lines were cut on the two roller impressions used to make the plate from which these prints were taken. (Illustration 12). The specimens from which our illustration was made were in the late Judge F. A. Philbrick's Collection and were afterwards in the possession of Herr Martin Schroeder, of Leipzig. They are illustrated in Herr A. Reinheimer's work " Kurzegefasste Beschreibung der EssaysSammlung von Martin Schroeder, Leipzig, zusammengestellt in den Jahren 18931902," Leipzig, 1903; and also in the English translation of the work, which was published at Leipzig in the following year.

After receiving the specimens Rowland Hill wrote on the same day to Mr. Bacon asking for prints of their trial impressions in blue ink and for the words "TwO PENCE " to be retained. so that he might be able to judge better the effect of the lines. ${ }^{5}$ Fresh

[^81]roller impressions were then made with similar lines and with the words of value left unobliterated. These were transferred to a small plate and prints in blue were sent to Rowland Hill on October 26th. ${ }^{1}$ (Illustration 41). The addition of the white lines was the revival of an old suggestion made for the One Penny stamp in February, $1840^{2}$, and, as will be seen further on, the pattern selected was that with the two white lines, which was certainly the best. It appears from a Treasury Minute of December Igth, $1840,{ }^{3}$ that the white lines were adopted " as it may be important hereafter, to have the means of distinguishing the new Twopenny labels from the old ones."

## Further Neiv Colour Trials for the Two Pence Value.

On October 28th, x8 40 , Rowland Hill wrote to Mr. Bacon that the intended new blue stamp, " No. 3 plain," was not sufficiently fugitive and he asked for further specimens to be forwarded to him. On the same day he also sent Mr. Bacon a note asking him to call the following morning. ${ }^{4}$ This Mr. Bacon did and he seems to have asked Rowland Hill about the specimens in two shades of blue ink that were sent to him on October 19th, ${ }^{6}$ as Rowland Hill wrote later on the same day to Mr. Bacon to say that neither of these shades were suitable. ${ }^{\circ}$ Mr. Bacon immediately wrote to Mr. J. H. Fisher, who managed the "colour" department of their business, and made various suggestions to him for further experiments with blue inks. ${ }^{7}$ The following day Mr. Bacon wrote to Rowland Hill that experiments were being made for the blue stamps and on November 2nd ${ }^{8}$ he sent him thirteen sheets of twelve stamps each of six new variations of blue inks numbered "A " to " $F$," printed on plain paper and a second sheet of each of these letters on paper dipped in Prussiate of Potash. The number thirteen was made up by a single sheet numbered " G," printed on plain paper. The specimen of the last sheet in the Royal Collection bears the date "Nov. 3rd, I840," so possibly this variety was not ready or sent to Rowland Hill until the day after the others were despatched. The colours were then tested in various ways by Rowland Hill and Perkins, Bacon \& Petch. ${ }^{9}$

On November 12th Rowland Hill asked for a further supply of the red stamps, "No. I6G," on common paper and forty sheets of twelve each of these were forwarded to him the next day. ${ }^{10}$

On November rith Rowland Hill wrote to Mr. Bacon to say that the last blue stamps submitted were not so fugitive as could be desired, and asked if any of them contained Prussian blue in the colour. To this Mr. Bacon replied that seven of the shades were printed with more or less of Prussian blue in them. ${ }^{11}$

[^82]On November ISth, Rowland Hill sent in his Second Report on the obliteration of Postage Stamps to the Chancellor of the Exchequer. In this he pointed out that the black obliterating ink would have to be changed, as it had been found possible to remove it in different ways. On this point he added: "Mr. Ledingham, my clerk, has improved upon this process [of cleaning the stamps] and is able to cleanse the present labiels when obliterated with black printing ink at the rate of about one per minute. This process consists simply of soaking the label for a short time in a strong solution of potash and then washing it with soap and water." As regards the new colour for the Two Pence, he said that the blue selected in the First Report must be discarded, as it was fomen to be not sufficiently fugitive, and he added: " I have therefore directed Messrs. Perkins \& Co. to prepare another blue ink. This has been done and the new ink is now undergoing a series of careful experiments."

In the intersiew that Mr. Bacon had with Rowland Hill on November $23 \mathrm{rd}^{1}$ he gave him a sheet of paper headed "Nov. 20, I 840 " which had fifteen new specimens of colours arranged in four rows. In the first row are four specimens in shades of dull blue or blue on medium bluish laid paper marked above, respectively, with the letters "w, y, z, x." The second row has five specimens in shades of green, similarly marked " I " to " 5 ." Of these Nos. I to 3 are on medium bluish laid paper and Nos. 4 and 5 are on a thinner white wove paper. In the third row are two specimens on white wove paper, the first of which is printed in crimson-red and headed "crimson," while the other is in red-brown, headed "No. 16G." The last row has four specimens, the two first being in shades of deep green on medium bluish laid paper, headed respectively " Green No. 50 " and " Green No. 5I," and the other two are in shades of blue, the first being on white wove paper, headed "New blue K" and the second on medium bluish laid paper, headed " New blue P." On the evening of November 23rd, ${ }^{2}$ Mr. Bacon wrote to Rowland Hill to tell him he had discovered since seeing him that the series of colours of November 2oth were of no use, and he enclosed in the letter sample sheets of twelve stamps of three new experiments marked respectively, "Nov. 23. A" "Nov. 23. B" and "Nov. 23. C." All three were printed in olive-green on medium, blnish laid paper. The paper of the first had been dipped in Prussiate of Potash, the second in Carbonate of Potash, while the third had only had the ordinary, or as it was called "common wetting." Besides these colours of Norember 20th and 23rd, the Royal Collection contains sheets of twelve stamps printed in drab on plain, medium, bluish laid paper, and in dull, pale purple on stout wove paper, dipped in Prussiate of Potash. Probably these two colours were found not to be sufficiently fugitive and were not submitted to Rowland Hill. The latter wrote to Mr. Bacon on November 24 th that the colour of the olivegreen stamps was objectionable and asked if he could prepare another blue sample of a more fugitive nature, if not he was ready to select the best of the blue experiments already submitted. ${ }^{3}$ Perkins, Bacon $\&$ Petch ${ }^{4}$ made one more attempt to obtain a more fugitive blue ink and they produced a new shade of a full deep blue colour on plain white wove paper, which they marked "AA."

On December $f^{t h}$, Rowland Hill wrote to Mr. Bacon and asked him to have a trial printing made with the ordinary steel plates then in use and on the small crown watermarked paper, of the two blue colours "AA. plain" and "B. Prussian blue

[^83]plain " ${ }^{1}$ and of the red "No. 16 G ." We have already shown that these three trial impressions were probably printed from Plate 8 of the One Penny value ${ }^{2}$ and four entire sheets of each of the three colours were sent to Rowland Hill on December 15th ${ }^{3}$. Some further correspondence took place about the composition of the inks ${ }^{s}$ and then on December Igth ${ }^{5}$ Rowland Hill wrote to Mr. Bacon to say that it was " finally decided to print the penny labels in the Red colour marked ' 16 G ' and the Twopenny labels in the blue colour marked 'AA.', atso that for the purpose of distinguishing the future from the present Twopenny labels the white lines are to be introduced above and below the head as in the specimen with which you favoured me some time ago," and, he added that instructions to this effect would be sent from the Stamp Office. A letter, marked "Private," was also forwarded to Mr. Bacon the same day from Mr. Edwin Hill, ${ }^{6}$ containing a similar notification, and on December 24 th, 18 fo $^{7}{ }^{7}$ the Commissioners of Stamps and Taxes wrote to the firm with instructions to make the changes, foreshadowed by the two Mr. Hills.

As in the case of the little plate with three stamps and that containing twelve stamps, we append a list of all the known varieties printed from the latter plate, after the comers of the stamps had been retouched. (Illustration 37.) Collectors who have specimens of these trial printings, can on comparing them with our Illustrations, Nos. 33.35 and 37 , readily determine to which of the three stages they belong.

Angust 3Ist, I840. On white wove paper.
id., rose-pink (two shades).
id., rose-red (four shades).
Id., red-brown (four shades).
On white wove paper dipped in Prussiate of Potash.
Id., rose-pink (two shades).
Id., rose-red (two shades).
id., red-brown (four shades).
The two specimens with "magnesia" or "tartrate" in the paper of this date cannot be separated from some of the other specimens without they are so marked.

Sept. Ist, i8fo. On white wove paper. id., full, deep blue (three shades).
On white wove paper dipped in Prussiate of Potash. Id., full, deep blue (three shades).
Three other shades of blue were also submitted to Rowland Hill on this date, marked " $\mathrm{A}, \mathrm{B}$ and C."

September 3rd, 1840. Another lot of sixteen One Penny in shades of rose-red, red-brown and full deep blue, some on plain paper and some on paper dipped in Prussiate of Potash, were submitted to Rowland IIIll. These also included :-

[^84]On white wove paper :
Id., dull, deep blue.
Id., blue.
Id., Prussian blue.
On white wove paper dipped in Prussiate of Potash :
id., dull deep blue.
id., blue.
The other shades of this date cannot be identified from those of August 3rst. without they bear the date September 3rd.

September roth, I840. Printed on small crown watermarked paper : 96 specimens in "No. 9 " ink and 96 in ink "No. 16 ."

Id., dull rose-red.
id., red-brown.
October 8th-12th, 1840. Printed on small crown watermarked paper and gummed : 468 specimens in ink, "No. 16G," and 504 specimens in blue ink, "No. 3." "No. 16G" ink was that finally selected for the One Penny stamp; "Blue No. 3" was selected for the Two Pence, but was afterwards abandoned owing to its being found not sufficiently fugitive. Most of the specimens of these two printings have the watermark sideways.
id., red-brown.
id., blue.
October 19th, 1840. Two new shades of blue were submitted to Rowland Hill, one of which was a dark blue.

November 2nd-3rd, i840. Seven new shades of blue, marked "A to G" were submitted to Rowland Hill, printed on white wove paper and the first six of these shades were also printed on the same paper dipped in Prussiate of Potash.

November 13th. 1840. A supply of 480 red-brown stamps, "No. 16G," on plain wove paper, was forwarded to Rowland Hill.

November 20th, i840. On medium, bluish, laid paper :
Id., dull blue (three shades).
id., bluc.
id., bright blue.
id., green (three shades).
id., deep bluish green.
id., decp green.
On white wove paper :
id., pale green.
id., green.
id., crimson-red.
The two other colours, red-brown "No. I6G," and the "new blue K," submitted at this date, cannot be separated from other printings, except when specially marked with this date.

November 23rd, 1840. On medium, bluish, laid paper:
id., olive-green.
Id., drab.

On medium, bluish, laid paper dipped in Prussiate of Potash :
Id., olive-green.
On stout wove paper dipped in Prussiate of Potash.
Id., dull, pale purple.
The olive-green stamp on medium, bluish, laid paper dipped in carbonate of Potash of this date cannot be separated from the stamp listed above on paper with ordinary wetting, without it is so marked.

End of November, 1840, Another shade of blue, marked " A A," printed on white wove paper, was submitted to Rowland Hili and this shade was finally selected as the new colour for the Two Pence stamp.

December 15th, 1840. Printed on small crown watermarked paper :
rd., red-brown ("No. 16G ')
Id., full deep blue (" A A")
Id., Prussian blue (" B No. 2 ')
Four entire sheets of 240 stamps each, were printed of each of these colours, trom probably Plate 8 of the One Penny value. They were the only specimens of all these experiments for new colours that were not printed from the small trial plates containing three or twelve impressions.

## Experiments for a New Blaci Obliterating Ini.

It will be remembered that at the end of August, 1840 , the ink used for cancelling the stamps in the London Post Offices, was changed from red to ordinary black printer's ink. In September, 1840, Mr. Thomas Walker, of 88, Gnildford Street, London, suggested a peculiar ink and method of obliterating the stamps. The handstamp he had made consisted of a circular design, 16 mm . in diameter, composed of a number of small points. This, when inked and applied to the stamp, pricked the paper and made a circular obliteration of black indented dots. The idea was ingenions but was not of practical use owing to the fear that if adopted damage might result to the letters or their cnclosures.

About the same period a Mr. Cooley suggested cancelling the stamps by punching a small circular hole, $3 \frac{1}{2} \mathrm{~mm}$. in diameter, in the right upper corner of each specimen in its passage through the post ; but the impracticability of this plan was even more apparent than that of the proposal of Mr. Walker. The method of cancelling by punching a hole has, however, since those days been resorted to by some countries in the case of stamps given away as specimens or presents and has also been used for obliterating telegraphic and fiscal stamps. In Western Australia, too, for some years, postage stamps for official use had a circular hole punched in them before they were supplied to the various Government Departments. In September, $1840^{1}$, a trial was made of some obliterating red ink manufactured by Mr. W. C. Jones, of 4. Carrier's Court, London Wall, which he claimed " no chemical art can obliterate by any possibility." The ink was composed of " Red Oxide of Iron, Carbonate of lead, and quickdrying copal varnish." Some of it was sent to Professor R. Phillips for testing purposes, but Mr. Hill states his report was unfavourable, and that he said the

[^85]" ink is not secure, and further, that it cannot be worked well, as the copal varnish dries up rapidly. The ink in use, therefore, would soon become unserviceable."

Under the date October 7th, 1840 , Rowland Hill writes in his " Journal ": "A Mr. Watson has succeeded in removing the black ink obliteration from the present black ink stamps. The removal is quite perfect and the process I am assured a very simple onc, to-morrow he is to show it to me; he thinks that he cannot remove the black obliteration from the new red stamps." On the following day he adds: "Mr. Watson exhibited his process before Phillips and myself; he succeeded with the present Id. and 2 d . labels even when they had been obliterated several days, but the new red stamp is a sccurity, that is to say the process affects the label itself before it removes the obliteration." Mr. Ledingham, as we have already seen, ${ }^{1}$ also discovered a mode of removing the black ink obliteration " at the rate of about one [stamp] per minute."

Further experiments were then tried to obtain another and better obliterating ink, Mr. Watson himself composed one, which, however, was not satisfactory, as it damaged the paper to such an extent as to cause it to fall to pieces. The Royal Collection contains a sheet of paper bearing: "Stamped with Watson's Ink, reduced with water, Oct. 21/40," written in the right upper corner and with a specimen of the One Penny black stamp affixed in the left upper corner. The stamp is obliterated with a Maltese cross in black and, apparently, an attempt has been made to clean off the cancellation. The sheet is covered with a number of other specimens of the Maltese Cross in black ink. Many of these specimens have deeply stained the paper a brown colour, while others have made large holes in the paper.

Perkins, Bacon \& Petch tried their hands once more and a number of experiments were made by them in conjunction with Rowland Hill. ${ }^{2}$ For these trials, specimens of the One Penny black and Two Pence blue stamps, then current, were made use of, as well as a number of specimens of the various printings that were taken from the small retouched plate of twelve stamps, we have lately described. Included in the latter were specimens of the selected red colour for the One Penny, "No. i6 G," and of the One Penny in blue, both printed on paper watermarked with Small Crown. Specimens of these are sometimes found obliterated with a varicty of the Maltese Cross cancellation, which lias a dot inserted in the inside white space directly opposite each of the four curves of the exterior line, where it bends inwards.

Some of these stamps were faced with "Copal varnish," or " varnish of size," before being obliterated and attempts made to clean off the canceliations, others, were obliterated and attemps made to clean them with soap and water, turpentine, potash, prussic or tartaric acid, etc. Experiments were made, besides, by Mr. Charles F. Whiting on parchment. The Royal Collection contains a fairly large sheet of this material with " Good printing ink. 6 Nov. ' 40 ," written in red ink at the foot and above this are a large number of obliterations made by four hand-stamps as follows: (I) A cancellation with the words " post office go free," proposed by Mr. Whiting in his essay sent in to the Treasury on October 9th, $1839 .{ }^{3}$; (2) The well known Maltese Cross cancellation used for similar experiments by Rowland Hill and Perkins, Bacon \& Petch; (3) A large circular design consisting of five concentric circles, round a circle of solid colour ; (4) A large oval mark consisting of fourteen thick

[^86]parallel bars. The same collection also contains a portion of a sheet of parchment ${ }^{1}$ with the words "Good printing ink. 6 Nov. 40," written at the foot in red ink in the same handwriting as that on the larger shect we have described. Above the writing are a number of Maltese Cross cancellations of a different variety to those on the larger sheet and different again to any form of this obliteration we know. The difference consists in the insertion of four dots in the centre of the white spaces at the four sides, between the exterior and the first inside lines of the design. At the left side of the parchment is written "Watson's ink 15 ' 12 'fo," in black and between the Maltese cross obliterations are a number of holes in the parchment of various sizes, which lave evidently been made by drops of Watson's ink, which as before stated, was found to be useless, as it destroyed the paper. On December I7th, $18 \not f_{0}$, Rowland Hill tells us in his "Journal," that the Chancellor of the Exchequer returned his report on the obliteration of the stamps and " the ink preferred by the P[ost] O. [ffice] is to be employed."

And here we arrive at the end of the long-drawn-out experiments that were made to obtain new colours and obliterating ink for the stamps between May and December, 1840. Our readers, we anticipate, will be as thankful as we are, to have reached the end of this portion of our story. We will only remark, in conclusion, that this is the first time a systematic attempt has been made to group these numerous experimental printings for new colours and new obliterating inks according to the different dates at which they were produced. It has been by no means an easy matter to do this, and it has only been made possible by the gracious permission of His Majesty to make use of his unique Collection of the numerous specimens he possesses of these experiments, and comparing them with the records of Perkins, Bacon $\&$ Petch, we have been able to unearth and, with the references we have found in Rowland Hill's "Journal."

## The Issue of the One Penny Red Stamps.

As early as the third week of August, I $8+0,{ }^{2}$ Rowland Hill stopped the printing of the One Penny black stamps, in order to keep the stock of this value as low as possible, in anticipation of a change in the colour. It is true that owing to the remonstrance of Mr. J. B. Bacon, he requested him two days later ${ }^{3}$ " to go on printing the labels as before until Mr. Hill has had an opportunity of conferring with Mr. Pressly," but the correspondence ${ }^{4}$ shows that between August and December $2 \neq$ th, $1840,{ }^{5}$ the date when Perkins, Bacon \& Petch were ordered to print the One Pemy in red ink, the Commissioners of Stamps and Taxes' constant solicitude was to have only just sufficient of the black adhesive stamps printed as would supply the current demands of the Post Office. As we have already stated the printing of the One Penny red stamp commenced on December 30th, $1840,{ }^{6}$ but was interrupted from January 22nd to February 3rd, $18 \neq 1$, by the provisional printing of about 10,000 sheets in black ink. This course was made necessary by the fact that the Post Office was unwilling on January 2rst to issue the red stamps owing to their supply of the new obliterating

[^87]ink not being then ready. ${ }^{1}$ The first delivery of the red stamps to the Commissioners of Stamps and Taxes took place on January 13 th $^{2}$ and on the twenty-first of that month they had a stock of 10,035 sheets in hand.

On February 3rd, I841, Rowland Hill wrote in his "Journal ": "Called at the Stamp Off[ice] and saw Messrs. Wickham \& Pressly. . . They have arranged with the P [ost] O[ffice] for bringing the new labels and envelopes into use on the Ioth inst." On February Irth, he adds: "Yesterday the new envelopes and labels came into use." The issue of the red stamps took place, therefore, on Febrnary 10 th, IS qr $^{\text {I }}$ but a few odd specimens are known with dates ranging from January 2oth of that year. Sheets of the stamps were no donbt distributed to the post offices in various parts of the British Isles some little time before their issue was authorized and a few of the stamps must have been sold before February Ioth, either inadvertently or their sale may have been due to the stock of the black stamps having become exhausted in certain towns. Mr. Walter Morley ${ }^{3}$ has stated that he had a specimen of the red stamp used on January Gth, I8 8 I, but Mr. H. S. Hodson, who examined this specimen tells us that the postmark was a forgery, which we can well believe in face of the official information we have given.

Mr. J. B. Bacon in the correspondence that took place over the experiments for the change of colour from black to red, set out in Appendix C, refers more than once to the selected shade as "pink," and the composition of the colour, ${ }^{4}$ which consisted of " Rose-pink, Prussiate of Potash, Cochineal, Carbonate of Potash, and oil," bears out this designation. The result after printing was, however, very different and the stamps, as issued can only be described as red-brown. In course of time the colour underwent all sorts of changes and a large number of shades are to be found.

Concurrently with the issue of the stamps, notices were sent out by the head Post Offices that the colour of the obliterating ink was to be changed from red to black and a supply of the latter ink was forwarded to all the post offices throughout the country: ${ }^{5}$

## The Issue of Two Pence Stamps with " White Lines" Added.

On January 6th, ISti, Mr. Bacon sent Mr. Edwin Hill some samples of the new Two Pence blue stamp. ${ }^{6}$ Seven days later the Commissioners of Stamps and Taxes received a letter from Colonel Maberly, the Secretary of the Post Office, requesting that eighteen sheets of the new stamps should be forwarded to him.? These were wanted for use as specimens to be sent ont with the Post Office circulars notifying the changes that were about to be made in the One Penny and Two Pence stamps. Perkins, Bacon \& Petch were requested to supply the eighteen sheets asked for by Colonel Maberly, but as the plate for the new stamps was not ready they laid down

[^88]a small plate of twelve stamps in three rows of four, without adding any letters in the lower corners of the impressions. (Illustration 47). Eighteen slieets of the small crown watermarked paper were then cut up and the pieces were printed with impressions from this little plate. The stamps were delivered to the Commissioners of Stamps and Taxes on January 15th, 1841, ${ }^{1}$ were then forwarded to the General Post Office and were distributed from that centre, attached to the Post Office circulars we have mentioned. These circulars, which also bore specimens of the One Penny red labels and two different sizes of the new One Penny embossed envelopes, ${ }^{2}$ were dated "January, I8_1." They were probably sent out shortly after the Post Office received the specimens of the Two Pence stamps. A few used copies are known of these impressions of the Two Pence, which appear to have been detached from the circulars and passed through the post, without attracting attention. Mr. C. F. Dendy Marshall has one in his collection, bearing the Maltese Cross cancellation in black, that was found by chance in a great quantity of used stamps he purchased and a nother specimen with the same obliteration, is illustrated in a London philatelic journal. ${ }^{3}$ Of course no stamps without the letters in the lower corners, were ever authorized for postal use.

The white lines added to the design were, as we have said, obtained by taking a roller impression of the original die of the Two Pence and cutting the two lines on the roller, which was then used for making the plate. Tlus method was followed throughout the life of the Two Pence stamp, until it was succeeded by the surface-printed design of Messrs. De La Rue \& Co., in December, 1880, and accounts for the varying thickness of the white lines found on the stamps of certain of the plates.

The Engraving Book of Perkins, Bacon \& Petch shews that the first plate of the Two Pence, with white lines, numbered " 3 ," was not finished until February 25th, r 8 r. ${ }^{4}$ Printing from it commenced two days later, when 400 sheets were struck off. The Imprimatur sheet was forwarded to Mr. Pressly on the latter of these two days, ${ }^{5}$ so that the date of approval " February 25th, 18.41," given in the Official Collection, now in the General Post Office, must be an error. The printing of the value was continued from March ist to the I 3 th, by which time a total of 5.000 shects had been printed. These were delivered to the Commissioners of Stamps and Taxes ${ }^{6}$ on Harch $9^{\text {th }}, 15$ th, 17 th, 19 th, 20th, 23 rd, and $24^{\text {th }}$, less 82 sheets spoilt in the printing. The next printing of Two Pence stamps did not take place until November, 1841, so that the demand for this value was not very large at that period. The dates of the first deliveries of the stamps show that the issue to the public could not well have taken place before the middle of March, IS.fI.?

Only two plates were used for the imperforate stamps we are now consideringPlates 3 (Illustration 48), and 4 -and the marginal inscriptions on each of these plates were the same as those inserted on Plates 1 and 2 of this value. ${ }^{8}$ The Engraving

[^89]Book shews that Plate + was finished on Nowember 29th, $1849{ }^{1}$ and the date of the Imprimatur sheet in the Official Collection is December 6th of that year. In nearly every case each stamp on Plate $\downarrow$ is a little lower than its left-hand neighbour. " Guide lines" occur on only one or two stamps. The comer letters are often blurred: "A " has the top filled in, " $J$ " has a round foot, " $O$ " is round, and " $P$ " has the loop more or less filled in. On Plate 3 there are numerous "Guide lines," the letters " $A$ " and " $P$ " are not blurred. " $J$ " has a square foot, and the " $O$ " is oval in shape.

## The Blueing of the Paper caused bl the New Colours of the Stamps.

Barely five days after the printing of the One Penny in red commenced, Mr. Edwin Hill wrote on January $4^{\text {th }}$ I $8_{4} \mathrm{I}$, to Perkins. Bacon $\mathbb{E}$ Petch to say that the printing of the One Penny red stamps was not satisfactory. Mr. J. B. Bacon in his reply on the following day; referred to the large number of experiments his firm had made to obtain suitable new colours for the stamps, and stated that these had been approved by Rowland Hill and Mr. Pressly, and the Commissioners of Stamps and Taxes had ordered them to proceed with the printing in the selected colours. That he could hold out no hope of improvement in the printing of the red stamps and that "if these will not answer then the colour must be changed or some other course adopted." He added further that, he did not believe " pressing would alter the appearance of the stamps in any other way except as to smoothness and pleasantness to the touch " and that trying to print the red stamps from copper-plates was out of the question on account of the great extra expense it would entail. ? The next day ${ }^{3}$ (January 6th,) Mr. Bacon sent Mr. Edwin Hill " two sheets each, taken by us promiscuously from the four plates now at Press upon the red stamps, which you will please return after examining with Mr. Pressly." We have been unable to find the letters of Mr. Edwin Hill sent to the firm in Jannary, i $8+1$, in fact the whole bundle of letters received in the year $1 \delta_{4} I$, with the exception of a few we have found included in the parcels of other years, is unfortunately missing from the records of the firm and in some way or other the letters have been either lostor destroyed.

It is apparent from Mr. J. B. Bacon's letter of February 4 th, I8fr, ${ }^{4}$ that Mr. Edwin Hill had written a few days earlier to draw his attention to the " bluish green appearance " of the paper of the new stamps. The cause of the blueing of the paper of these and other stamps printed by the firm has remained a mystery to collectors down to the present day. Until November, I88I, the staining of the paper was believed to be due to the gum acting upon the ink and this explanation was accepted by philatelists in this and other countries, so that the expression " bleute par la gomme" or " blued by the gum," was alway's used to describe stamps of this class. But at the date we have mentioned, the late Mr. Pearson Hill exhibited a sheet of the One Penny red stamps printed on "Dickinson" paper, at a meeting of the Philatelic Society, London. ${ }^{5}$ This sheet, notwithstanding that it had never been gummed, was

[^90]deeply blued, thus proving that the gum was not the canse of the discoloration of the paper. This fact is also borne out by the " Imprimatur " sheets of the red stamps, which down to the year 1857 , are all more or less blued, although they are invariably not gummed. Since November, 1881, numbers of other theories have been propounded and articles written to try and solve the puzzle.

Mr. Bacon's reply to Mr. Edwin Hill's letter is extremely interesting throughout and we make one or two quotations. He said: " it may be that the chemical properties of the new Pink colour, when coming in contact with the alum particularly when the paper is impregnated with a strong quantity of it, causes an action which terminates in the bluish green appearance to which your letter alludes." But to solve this doubt he said that he would have to make experiments with several parcels of the paper. Further on he adds: "That from repeated experiments we have proved that although the gum from its transparency tends to shero the green colour to the eye, it acts as a mere coating for it, and does not in any manner take up, or incorporate itself with it." We have found no further correspondence on this subject, but there is no doubt that Mr. Bacon's surmise of the cause of the blueing of the paper is in effect the true explanation.

We will now see what further light we can throw on the matter. We have atready given the composition of the red colour used for the One Penny stamps, ${ }^{1}$ but repeat it here: " Rose-pink, Prussiate of Potash, Cochineal, Carbonate of Potash and oil." The oil or mucilage was, we find, composed of "slightly burnt linseed oil with bees wax, soft soap and turpentine added:" 2 or $2 \frac{1}{2}$ gallons of this was sufficient to thin and mix $\frac{1}{2}$ cwt. of the stamp colour. ${ }^{2}$ The shects of paper were dipped in water and afterwards pressed in bulk to get rid of the water, so as to leave them in just a sufficiently damp condition for printing purposes. The sizing of the paper contained alum, in which there was, possibly a small percentage of iron, and Prussiate of Potash was introduced into the ink in order to make the colour fugitive. The damping of the paper set free the Prussiate of Potash and caused it to spread over the paper and the alum in the size was also a contributing agent. The sheets of paper would not always be in the same condition of dampness, for as the printer worked down his pile in a warm room, the last sheets would be drier and would consequently not get blued so deeply as the damper sheets. This accounts for some of the sheets shewing less blueing than others. Again, the lines of engraving of the Queen's head are finer than those of the rest of the design and consequently contained less ink and when drier sheets of paper than usual were used the variety known as "ivory head " was produced. The mixing of the ink, that was constantly required, must also have often varied, as is proved by the large number of shades of red that are known of these stamps and no doubt several experiments were made in changing the composition of the colour with a view to getting rid of the blue disfigurement. One such attempt appears to be referred to in a letter, dated December 8th, IS4r, from Mr. J. B. Bacon to Mr. D. D. Heath, who had then an interest in the firm. ${ }^{3}$ The quality of the size also varied greatly, as is shewn in Mr. Edwin Hill's evidence before the Select Com-

[^91]mittee on Postage Label Stamps of $1852,{ }^{1}$ where he said: "The size varies very much in the paper ; there is nothing varies so much as the size." The addition of the gum wetted the sheets once more and although, as we have shewn, it had nothing whatever to do with the direct blueing of the paper, its application and yellow colour affected the staining to this extent that it transformed the original blue discoloration into one of a greenish hue. The blueing of the paper continued in a more or less intense form until Perkins, Bacon $\mathbb{\&}$ Co. were successful in discovering a red colour sufficiently fugitive to avoid the introduction of Prussiate of Potash in its composition. The "Imprimatur" shects shew that this was in the year 1857. The impression of the One Penny taken from Plate 5I of the Retouched Die, registered on June 25 th, 1856 , is considerably blued, while with the change of colour to rose-red, which took place with the impression from Plate 52, registered on February inth, 1857, the paper has practically undergone no change and this is the case with every sheet of the same value registered subsequently. In a memorandum we have found, dated "June th, 1879." the colour of the One Penny stamp is stated to liave then been composed of "Drop rose-pink, palc vermilion, orange-red and the mucilage." The colour of the Two Pence of I $8+1$ also had Prussiate of Potash mixed with it, and we find the paper of the stamps blued in the same way as those of the One Penny value. The use of this ingredient in the ink of the Two Pence was continued in varying quantities right down to the period when Messrs. De La Rue $\mathbb{E}$ Co. took over the printing of this value, as in the memorandum of "June 4 th, 1879 ," recently referred to, ${ }^{3}$ the composition of the colour of the Two Pence stamps is given as "Chinese blue, Prussiate of Potash, Flake White, whiting and the mucilage." The colour of the Two Pence of 1840 , on the other hand, contained no Prussiate of Potash and, consequently, we do not find the paper discoloured in the same way as that of the One Penny red stamps. We think collectors will agree, from the evidence we have produced, that the old riddle of the blueing of the paper is now satisfactorily solved.

We have found nothing in Perkins, Bacon \& Co.'s records, or in the evidence given before the "Select Committee on Postage Label Stamps of 1852 ," to shew conclusively whether Perkins, Bacon $\mathcal{\&}$ Petch knew the actual cause of the blueing of the paper. But it is hard to believe that after all the experiments they had carried out to obtain new colours for the stamps, many of which were tried on paper dipped in Prussiate of Potash, which blued the paper, that they did not know it was due to the introduction of this ingredient in the ink. Their silence, if they knew, is readily explained by the fact that they were unable to abandon the use of Prussiate of Potash in the ink, or complaints would liave at once been made that the colours of the stamps were not fugitive.

There remains for us to deal with the variety of the One Penny black stamp that is often offered for sale as " on blued paper." Some of these stamps are found with the paper shewing a slight tinge of blue, but this is altogether of a different nature to the blucing of the paper of the stamps of 1841 . The colour of the ink had, in this instance, nothing whatever to do with the blueing and the cause consisted in something that occurred during the process of the manufacture of the paper.

[^92]In a letter to Mr. Edwin Hill of February 24th, 1843, ${ }^{1}$ Perkins, Bacon \& Petch in calling his attention to the small stock of the Postage paper then in hand, said: "Taken altogether the last paper ordered was decidedly the best we have yet had, but some of the sheets received lately turn blue in spots which is probably occasioned by imperfect washing after bleaching the rags and many sheets are thinner in the lower end than the rest-if this fault arises from the moulds which I do not believethe maker must correct it free of expense, but if the fault is in the vatman, then calling Mrs. Wise's attention to the fact will cure it." We think that whatever agent it was that caused the "blue spots," may occasionally have caused the blueing of a whole or a part of a sheet of the paper used for the One Pemny black stamps. The Royal Collection contains a specimen of the Two Pence of $18 \nleftarrow 0$, with the paper slightly blued in the same manner and no doubt due to the same cause. We consider these so-called varieties as of little or no importance, and we add a word of warning to collectors on purchasing specimens, as we have seen several copies that obviously had had the paper blued fraudulently, an addition quite easily made.

## The trial printings on " Diciinson" paper.

Under the date February 22nd, 184I, we find the following entry in Rowland Hill's "Journal ": "Wrote to Dickinson respecting a further supply of envelope paper and enquiring with a view to economize the cost of excise superintendence if he was now willing to manufacture the watermark paper for labels as well as the thread paper." Rowland Hill's idea was, that if an arrangement of this kind could be brought about, it would obviate the necessity and expense of the Excise Office keeping staffs at two mills in different parts of the country to supervise the manufacture of the paper. A copy of Rowland Hill's letter to Mr. John Dickinson will be found in Appendix D. ${ }^{2}$ The envelope to which he refers therein, was the One Penny with the stamp embossed in pink, which was issued on February roth, IS4J. ${ }^{3}$ A further reference to Rowland Hill's "Journal" tells us, under the date February $2 \not+$ th, " Dickinson replied that he conld not undertake the hand made paper but recommended for the labels his peculiar paper with very fine silken threads. I don't think this will do as I expect that in cutting it up they will draw out." A day or two after this Mr. Dickinson sent Rowland Hill a sample of paper he recommended for the adhesive stamps. Rowland Hill in his reply on February 27th," said: " The sample of Label paper just received appears to be very superior to any which I have before seen and I am glad to find that you can make so great a reduction in the price. Can you let me have two or three sheets steeped in gelatine in the way you described ?" On March 3rd, Rowland Hill's "Journal" announces: " Dickinson called with a specimen of thread paper for labels in which he has fixed the threads by steeping the paper in gelatine employing atmospheric pressure to force it into the pores. It is a very ingenious and successful arrangement, but I still consider his paper if employed for labels more open to imitation than that with the watermark."

On March 6th, ${ }^{5}$ Rowland Hill sent Mr. J. B. Bacon some of the new paper made by Mr. Dickinson, requesting that it should be printed with one of the trial plates

```
1 Appendix D (03). Appendix D (49).
2 Ibid (48). }\mp@subsup{}{}{5}\mathrm{ Ibid (50).
3}\mathrm{ Vide p. ros.
and asking Mr. Bacon to let him know his opinion as to the quality of the paper for the purpose of the adhesive stamps. He added: "The paper has been impregnated with gelatine (to fix the threads) under the receciver of an air pump which is the cause of its being sent in such small pieces." And in a postscript he wrote: "In order to try the paper fully please to gum it." Mr. Bacon' in a letter three day's later to Rowland Hill said: "I beg to acknowledge your favour of the 6 th instant, enclosing five small picces of paper which we have printed, three of them in pink, and two in blue ink, and gummed the backs of the whole of them, and which I have now the pleasure of returning hercin. The very small picces sent render it impossible to give any opinion which could be depended upon as to its printing or gumming qualities. but, with this very necessary reservation, I should say that as far as the imperfect experiment has been tried, the paper appears to stand the gum very well, but not to print quite as well as the paper now in use. We onght to have at least six or eight sheets of paper to enable me to give an opinion of any value." The five small pieces of paper referred to in this letter were printed from the trial plate containing twelve Two Pence stamps, with white lines added under " postage" and above the value and with the lower corner blocks without letters (Illustration 47 ), but before the plate was used the left upper comer of each impression was removed, in consequence of which the prints have the right upper comer of each stamp missing. (Illustration 50). The pieces of paper were so small that they would not take all the twelve stamps, but only two out of the three rows of four. \({ }^{2}\) For the three pieces printed in "pink," really red-brown the two upper rows of the plate were used, while for the two pieces in blue, the two lower rows of the plate were made use of. Specimens of both colours have the paper bhed. It will be seen, from what we have said, that there were only 24 stamps in all printed in red-brown and 16 in blue. Of these, the Royal Collection contains a sheet of eight stamps in each colour, which was formerly in the possession of Mr. Lewis Evans, a grandson of the late Mr. John Dickinson and one of the present Directors of the firm of John Dickinson \& Co., Limited. This gentleman kindly informs us that in 1840 , Mr. Dickinson, had five mills connected with paper manufacture in Hertfordshire, namely Apsley, Nash, Home Park, Croxley and Batchworth, and that the "Mulready" silk thread paper, and the other silk thread papers. were all made at Apsley Mill. Messrs. Wright \& Creeke \({ }^{3}\) state, erroneously, that the specinens of the Two Pence on "Dickinson " paper were printed from Plate 2 of that value.

Rowland Hill, in forwarding the trial specimens of the Two Pence to Mr. Dickinson on March 27 th, " cnclosed a copy of Mr. Bacon's letter, and said "Can you, withont much trouble, supply the six or cight sheets of paper which he desires to have ?" To this enquiry Mr. Dickinson replied on April 3rd, \({ }^{6}\) that he hoped to furnish a sample of the paper "in the conrse of the present week," and on the tenth \({ }^{6}\) of the same

\footnotetext{
\({ }^{1}\) Appendix D (51).
\({ }^{2}\) This is proved by the fact that the gum, which was applied to the back, has spread on to the edges of the face of the paper round each block of eight stamps.
s"A History of the Adhesive Stamps of the British lsles." By Hastings E. Wright and A. B. Creeke, Junr. London. 1899. p. 30.
- Appendix D (52).

51 bid (53).
\({ }^{6}\) Ibid (54).
}
month he wrote to Rowland Hill to say that he was sending him " I5 sheets of tub sized paper, which perhaps you will allow Messrs. Bacon \& Co. to try the printing of." On the 15th April, Rowland Hill forwarded cight sheets of the paper to Perkins, Bacon \& Petch to be printed and on May rst,' these were returned to him with a letter in which Mr. J. B. Bacon said: "I beg to acknowledge your favor of the 15th ulto., accompanied by copy of a letter from Alr. Dickinson and eight sheets paper which have been printed from the Penny Postage plate and are now returned you, six of them gummed and two not gummed. My opinion is that the Paper prints very well and better than that we generally use ; that the threads (though they may be seen through the heads by a close examination) will not be generally perceived by the eye, provided the paper is no thinner than the sheets sent us; and that the colour of the paper is very good. I have fears that it is not strong enough for the gumming process, but believe that a rather stronger pulp or rather stronger size in finishing would make it all that is required for the purpose wanted." The One Penny plate used for printing these cight sheets of "Dickinson" paper was Plate II. The colour is a full deep red, which blued the paper deeply. As mentioned before, \({ }^{2}\) the late Mr. Pearson Hill shewed one of the two sheets, which were not gummed, at a meeting of the Plilatelic Society, London, in November, 188i. Since that time, the sheet has been cut up and dispersed, a block of four stamps from it, with the corner plate No. " Ir," being in the Royal Collection. Specimens belonging to the first and last vertical rows of this sheet have no silk threads, so apparently these trial sheets of paper had only ten lines of threads ruming down them instead of twelve, as they should liave had. In spite of Mr. J. B. Bacon's generally favourable report on the sheets of " Dickinson " paper, it was decided to continue the use of the "crown " watermarked paper for the adhesive stamps.

Complaint of Badly Printed Stamps from Plate io of the One Penny.
On March 27th, \(1841,{ }^{3}\) Rowland Hill wrote to his brother Edwin to complain of " badly printed" specimens of the One Penny from Plate Io, and said: " 1 am decidedly of opinion that, unless arrangements can be made to guard against the possibility of stamps so badly printed being issued, it will be unsafe to continue the present course and that an entirely new kind of label must be adopted without delay. Please to communicate with Messrs Perkins \& Co. on the subject and let me know, in writing, their opinion and yours as to whether it is or is not possible to put an absolute stop to the issue of badly printed labels." There can be no doubt that, as a result of this communication, Plate io was withdrawn from use and with it also Plates i, 2, 5, 8 and 9. \({ }^{4}\)

On April Ist, \(184 \mathrm{r},{ }^{5}\) Mr. Ledingham wrote to Rowland Hill that " having made a further trial of the red stamps with the view of ascertaining whether they still retained their fugitive qualities, I beg to report that as far as I have tried them I find they still remain as fugitive as when printed. The last trial on stamps similar to the present was made on the 25 th Feb."
\({ }^{1}\) Appendix () \((53)\).
\({ }^{2}\) l'ide p. 110
\({ }^{3}\) Appendix C (Ify).
\({ }^{4}\) Vide p. 78.
\({ }^{5}\) Appendix C ( 150 ).

\section*{Plates Used for Ordinary Printing before the Registration of the " Imprinatur" Sheets.}

The old account book of Perkins, Bacon \& Petch \({ }^{1}\) to which we have more than once referred, records now and then the dates when now plates were given out to the printers, and we have compiled the following list of the One Penny plates from this source :-
\[
\begin{aligned}
& \text { Plate } 15 \text { first printed from July } 23 \text { rd, } 18 \nleftarrow r \text {. } \\
& \text {,. } 16^{2} \text {., ., ., ,. 26th, ., } \\
& \text {,. } 17 \text {., .. ., Sept. Sth, } \\
& \text {,. IS ., ., ., .. I6th. } \\
& \text {,. } 19 \text {., ., ., Oct. 26th, } \\
& \text {,, } 20 \text {., ., ,, Nov. 15th, } \\
& \text { " } 22 \text { ", ", Jan. 20th, ISt2. } \\
& \text {," } 23 \text {., ., ., ,. ., } \\
& \text { ". } 26 \text {." .. ., June 23rd, ., } \\
& \text {,. } 27 \text {,. .. ., Sept. 5th, .. } \\
& \text { " } 2 S \text {." .. .. .. Ifth, } \\
& \text { ". } 29 \text {., ., ., Nov. Ifth, } \\
& \text {,. } 30 \text {,. ., ,. Dec. 6th, ,. } \\
& \text {,. } 31 \text { "., ", Jan. 27th, } 1 S_{43} \text {. } \\
& \text { ". } 32 \text { ". ". Feb. 7th } \\
& \text {," } 33 \text {., ,, ., ., 2Ist, } \\
& \text { " } 35 \text { ". ., ., June 6th, } \\
& \text { " } 37 \text {., ., ., July 7th. } \\
& \text {., } 38 \text {., ., ., ., 26th. ., } \\
& \text {., } 39 \text {., ., Oct. 2nd. ., } \\
& \text {,. } 40 \text {., ., ., Nov. 17th, } \\
& \text { ". } 4 \text { I ., ". ., Dec., 4th, } \\
& \text {," } 42 \text {," ., Jan. 23rd, I84. } \\
& \text { ". } 43 \text { ". ". Feb., 6th. ., } \\
& \text {." } 44 \text {." .. .. .. 2gth, .. } \\
& \text { ". } 45 \text {.. .. ., Mar. 2nd, ., } \\
& \text { ". } 46 \text {., ." May } 4 \text { th, ., } \\
& \text { " } 48 \text {." ." .. June rgth, } \\
& \text { " } 49 \text {." ". ." Sept. 12th, ., } \\
& \text {.. } 50 \text {.. .. ., ., .. .. } \\
& \text {,. } 5 \mathrm{I} \text {., ., .. Dec. 2nd. } \\
& \text { " } 52 \text { ". ., ., Igth, .. } \\
& \text { " } 53 \text { ". " ," Jan. } 7^{\text {th. }} \text { I } 845 . \\
& \text { " } 55 \text {.. ". ., Feb. 7th, " } \\
& \text { " } 56 \text {., ", ., 24th, ., }
\end{aligned}
\]

\footnotetext{
\({ }^{1}\) This book is lettered " General Account of Postage Labels. 1840."
\({ }^{2}\) A note in the book states that Plate 10 was stopped on November 15 th, 1841 . The actual reason for this we do not know, but we suspect that it was on account of wear.
}

As in the case of Plates \(\mathbf{I}, 6\) and \(7^{1}\) of the One Penny and Plates \(I\) and \(2^{3}\) of the Two Pence, Plates 17. I8, 19, 35. 5 I and 56 were used for printing stamps before the Imprimatur sheets had been registered. Perkins, Bacon \& Petch's attention was drawn to this irregularity in October, \(1841,{ }^{3}\) and their explanation was that " the time for 'settling in' varies considerably, sometimes the plate is made to print well in a hour or two, and sometimes it takes the man a day to get all right, but as it is important the Commissioners' Proof should be the fair working state of the plate we ought by all means to be at work a day before such proof is taken." Mr. W. Gates, the Inland Revenuc Officer stationed at Perkins Bacon's to supervise the printing of the stamps, gave a similar explanation, and a suggestion was made that the new plates might be tested on the backs of spoilt sheets previous to the printing of the "Imprimatur" sheets. A further communication on this subject was sent by Mr. J. B. Bacon to Mr. Edwin Hill on November 13th, I8\&I, \({ }^{4}\) and may be consulted for some further interesting details.

We are unable to continue the list beyond Plate 56, as unfortunately the books that succeeded the one to which we have referred are of an entirely different size, the particulars of the day's work of each printer is entered under a new system and no mention is made of the numbers of the plates in use.

\section*{The Plates used for the One Penny and Tivo Pence Stamps issued in i8 8 r.}

The One Penny red imperforate stamp was in issue from 184 t to \(\mathbf{1 8 5 4}\), and during this period the Plates used for its production were Nos. I, 2, 5 and 8 to 169 inclusive, the latter, from enquiries we have made of collectors, being the last number known definitely to exist. It is probable, however, that imperforate specimens were also issued from Plates 170 to 175 . which had been put to press sometime before the Government conmenced perforating the sheets on January 28th, I854. Plates 176 and 177 were put to press on January 12th, 1854, but this date is so close to that when perforation was applied, that it seems improbable that any of the sheets from these two plates were issued imperforate. For the Two Pence blue imperforate stamp, with the white lines added, which was in issue during the same period ( 1841 to 1854 ), Plates 3 and + were used.

\section*{Repairs made to the One Penny Plates.}

Some of the plates of the One Penny value were repaired in various ways before they were finally abandoned as unfit for printing stamps. We have already described the repairs that were made to Plates I, 5,40 and \(77^{5}\) and a repair must also have been effected on Plate 30 , although once again we have found no record of it in Perkins Bacon's books. The stamp lettered "EB" on the Imprimatur sheet of this plate shews no signs of a re-entry, while other specimens of the same lettering from this plate are known which shew a distinct re-entry. This is conclusive evidence that the plate was repaired at some time between December 6th, 18 42 , and August 18th, 1843. the dates when it was put and taken from press. Further on it will be seen that Plates 155 and 176 were repaired, as were also several of the plates of the Retouched Die.

\footnotetext{
\({ }^{1}\) Vide pp. 42, 67,72. \({ }^{3}\) Appendix C (151). \({ }^{2}\) Vide p. 63, 64, 75, 78.
2 Vide p. 88. \({ }^{4}\) Appendix D (59).
}

The Addition of a Dot and a Vertical Line in the Upper and Lower Margins of the Plates.

We have not reproduced in Appendix G all the entries in the Engraving Book of Perkins, Bacon \(\mathbb{\&}\) Co., referring to the engraving of the numerous plates of the One Penny stamp, as we do not consider that any good purpose would be served by lengthening the list in this way. We have included all the particulars conceming the first fifty plates and, subsequently, copies of all entries which are of special significance and interest. The first of these occurs under the date November 25 th. IS 48 . " Making pin marks in 9 Postage Plates." Messrs. Wright and Crecke \({ }^{1}\) state that commencing with Plate 93. "a small dot was added in the margin at the top of the plate, above the inscription, and between the sixth and seventh stamps; and a vertical line was placed in a similar position at the bottom, to indicate the point for division into half sheets." Now Plate 93 was not registered until December 6th, I8 89 . and at the date of the entry in the Engraving Book the last plate registered was No. \(8_{7}\), on October IIth, \(1 S_{4} 8\). It is evident, thercfore, that the "pin mark" was added to nine plates previous to the making of Plate SS. It may be that the addition was made to the plates which were actually being used for printing in November, \(18 \notin S\), in which case the "pin marks" would not be on the Imprimatur shects of these plates. There is no doubt it was from the Official collection of these shects that Messrs. Wright and Creeke observed that the new marginal marks started with Plate 93. For the Two Pence value. Plate 4 , which was finished on November 29th, IS \(49 .{ }^{2}\) was the first to have the dot and vertical line added on the margins.

\section*{The Two Plates of the One Penny Numbered " 95 ."}

The Engraving Book \({ }^{-3}\) shows that Plate 95 was finished on Junc 2Ist, I8 49 . but this plate was afterwards spoilt either during the insertion of the lettering or in the hardening process. Plate 100 was finished on August 28 th of the same year, and on January 3rd, 1850 , this plate had the corner numbers altered to " 95 ." to replace the spoiled plate, and a new plate, numbered " 100 " was made and finished on February Ifth, following. On all future occasions whencver a plate was spoilt or rejected for any fault, the number was allowed to lapse and was not repeated.

\section*{Tife Addition of a Star-like Ornanent in the Right and Left Side Margins of the One Penny Plates.}

Under the dates December 13th and \(16 \mathrm{th}_{1}\), 1851, the Engraving Book's shews that a "star "was added to Plates II6, II8 to 125 and 127 to I3I. This entry refers to the star-like ornament, which was added at the centre of the right and left side margins of the plates, in order to shew the exact line where to divide the sheets horizontally into halves. The first Imprimatur shect to have this addition is that of Plate 132, so as in the case of the introduction of the marginal marks at the top and bottom of the plates in 1848 , a number of the plates, fourteen in this instance,

\footnotetext{
1" A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Crceke, Junr. London. 1899. p. 25.
\({ }^{2}\) Appendix G.
\({ }^{3}\) Ibid.
\({ }^{4}\) Ibid.
}
which had already been registered, subsequently had this addition made to them. It follows from what we have said that Messrs. Wright and Creeke \({ }^{1}\) are in error in stating that Plate \(I_{3} 2\) was the first to have the star-like ornaments; and also that stamps of Alphabet I, as well as Alphabet II, which started with Plate I \(32,{ }^{2}\) are to be found with the "stars."

Two types of the star ornaments are known : I a star with twelve points contained within a circle composed of a fine line and 2 , a star with twenty-four points and no outer circle. The latter was the latest type and every one of the Imprimatur

sleets of the One P'enny value, starting from Plate I32, has this form of the star. The first type can, therefore, only have existed on the fourteen plates we have mentioned, but we have no evidence, beyond the fact that Type 2 has not so far been found on stamps of Alphabet F , to shew whether it appeared on all or only on some of those plates. We think, however, that as the addition was made to the whole fourteen plates within a few consecutive days, all of them, probably had the star of the first type. If this was so, Type I only existed on shcets of stamps of Alphabet I, while all sheets of specimens with Alphabets II, III or IV are only found with Type 2.

\section*{The Defacement and Destruction of tife Plates.}

We have already made references \({ }^{3}\) to the defacement of some of the plates, but propuse now to speak in more detail on the subject. On November 13th, 1841, \({ }^{\text {a }}\) Mr. J. B. Bacon in the course of a long letter to Mr. Edwin Hill said: "In regard to defacing the worn out plates Mr. Pressly has directed me to address a letter to the Commissioners stating what I propose, which I will do carly in the next week." The next communication we have found on this matter is a letter from Perkins, Bacon \(\&\) Petch to Mr. Pressly, dated January 2 Ist, \(18+2 .{ }^{5}\) In this communication they stated that Plates I to 8 and II to If of the One Penny and Plates I and 2 of the Two Pence had been defaced and they added: "We are desirous of having these plates turned in a lathe so as to make them available again for other Postage label plates. By this means they will be perfectly turned off and become plain steel plates without engraving and it is also important to get rid of them, as both the Boxes in which your plates are kept, are now full, and we need room for new ones as they are from time to time made. We would respectfully suggest that impressions be taken in their present defaced state, of each plate, in order that they may be transmitted

\footnotetext{
1" A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Creeke, Junr. London. 1899. p. 25.
\({ }^{2}\) Vide p. 65.
\({ }^{3}\) Vide pp. 78, 89.
- Appendix D (59).
\({ }^{5}\) Appendix C (15f).
}
through you to the Honourable The Commissioners of Stamps and Tases, and that the plates above named be then given up to us to be turned off, either in the presence of your officer, here, or in such other way as it may please your Honourable Board to direct." lmpressions of the plates were evidently submitted by Perkins, Bacon \& Petch, as Mr. Edwin Hill \({ }^{1}\) wrote a week later to say that " No. 2," most probably of the One Pemy value, "is not as effectually defaced as the others, will you let it be done as they are and send me a second proof, returning the one enclosed at the same time, as soon as you can." The plates were defaced by means of a file with the end broken off and with this, irregular scratehes were made over the whole of the impressions.

As regards the destruction of the plates, Mr. Bacon suggested that the impressions might be turned off in a lathe, but at the time he wrote he probably had not consulted his engineer, as this object could not have been attained by means of a lathe, and it is known that the surfaces of the plates were ground off by stones. We do not know whether the same custom was followed from the first, but in later years the plates were sent to Mesirs. Dewsnaps \({ }^{2}\) to have the impressions removed. When the plates came back, they were annealed once more, in order to give an uniform temper to the surface, and after they had been filed and polished and the backs had been planed, so as to make them perfectly level, the plates were ready for use again.

Remoral of the Roons for printing the Stamps to another part of Perkins, Bacon \& Petch's premises.
In \(18+4\), the Commissioners of Excise made a contract with Perkins, Bacon \(\mathbb{\&}\) Petch to print the "Paper" and "Permit Labels" formerly done by the Board. This extra work necessitated alterations in their premises and in June of that year they asked the permission of the Commissioners of Stamps and Taxes to erect new rooms in another part of their building for the printing of the postage stamps. The Commissioners gave their consent to the propused change on condition that the new rooms were at least as large as the ones then being used and that they were wholly cut off from the rest of the premises. These stipulations Perkins, Bacon \& Petch undertook to carry out \({ }^{3}\) and the builder was instructed accordingly: By dint of working day and night, for twenty-six days a large stock of stamps was accumulated by the end of June and the printing was then stopped entirely until the new rooms were ready for occupation. This was not until the end of August and the printing of the stamps recommenced, after an interval of about two monthis, on September and, \(18+4 .{ }^{4}\) The stamps were from the first printed in a building facing Whitefriars Strect, at the back of 69 , Fleet Street, and it was this building that was enlarged in 1844.

\section*{The Printing Presses used for the Stamps.}

In February, \(18+5\). sis presses had been at work for some time printing the postage stamps, but the demand for the stamps was constantly increasing and Perkins, Bacon \& Petch then ordered another press from Messrs. Hopkinson \& Cope,
\({ }^{1}\) A ppendix C (155).
\({ }^{2}\) Appendix C \((355-363)\). In the "Post Office London Directory" of 1881 the firm is given as "William Dewsnap \(\mathcal{E}\) Co., metal grinders, 57 and 58 , St. John's Square, Clerkenwell, E.C."
\({ }^{3}\) Appendix C (161, 162).
\({ }^{4}\) Ibid (164).


Exterior of Messrs. Perkins, Bacon \& Co.'s Premises
69 . Fleet Street, e.c.


Exterior of Messrs. Perkins, Bacon \& Co.'s Premises
Whitefriars Street, e.c., where the Stamps were Printed.
which was erected on their premises during the month of the following April. \({ }^{1}\) By March, \(185^{2}\), the number of presses had increased to fourteen \({ }^{2}\) and in May of that year two more were ordered. \({ }^{3}\) By 866 the number had grown to eighteen \({ }^{3}\) and in November, 1862, twenty-two presses were at work. \({ }^{5}\) In 1870, thirty presses were required and in 1879 , the last year of the printing of the One Penny stamps by Perkins Bacon \& Co., there were thirty-eight presses in use. \({ }^{6}\)

\section*{Appontment of a new Revenue Officer to superintend the Printing of the Stamps.}

At the end of December, I 846 , Mr. Ormond Hill wrote to Perkins. Bacon \& Peteh to inform them that Mr . Hodgetts had been appointed supervisor of the printing of the postage stamps at their establishment in place of Mr. Ledingham, who lad acted in that capacity for several years. \({ }^{7}\) At the time when the printing of the One I'enny stamps ceased in December, 1879 as for many years before then two Revenue Officers were in constant attendance at the printing works. \({ }^{8}\)

\section*{The Invention of Mr. Henry Archer for perforating the stamps.} lis first two machines.

The next incident in the history of the stamps we have to deal with, is the introduction of perforation. Everybody at the present day is so accustomed to separate the stamps by tearing apart the little holes punched round the four sides, that we never stop to think of the great inconvenience the absence of this means of separation would cause us. And yet for nearly fourtcen years people had to resort to cutting or tearing the stamps in order to divide them one from another. The idea of separating the stamps by some mechanical means was conceived by Mr. Henry Archer, an lrishman, who invented a machine for that purpose. He first brought his invention to the notice of the Postmaster-General, the Marquis of Clanricarde, on Octuber Ist. \(18.47 .{ }^{9}\) who had the machine inspected by Messrs. W. Bokenham and R. Smith, then Presidents of Inland and London District Post Offices, respectively. In their Report \({ }^{10}\) they stated that "The machine appears to be a very clever and useful invention. We are thoroughly convinced that postage stamps separated by it, having jagged edges, will adhere to letters far better than those cut from the sheet by knives or scissors. We submit it is most desirable that the invention be recommended to the notice of the Commissioners of Stamps." Their suggestion was adopted and a copy of the Report was forwarded by the Postmaster-General to the Commissioners on October 22nd, I8 \(47 .{ }^{11}\) Mr. Archer wrote to Rowland Hill on the thirteenth of the

\footnotetext{
\({ }^{1}\) Appendix C (165, 166 ).
2 " Report from the Select Committee on Pustage Label Stamps." London. 1853. P. 73.
\({ }^{3}\) Appendix C (177).
\({ }^{4} 1\) bid (309).
\({ }^{5}\) Ibid ( 248,309 ).
6" The Postage and Telegraph Stamps of Great Britain." By F. A. Philbrick and II. A. S. Westoby. London. 1881. p. 59.
\({ }^{7}\) Appendix C (168).
\({ }^{8}\) Ibid (345).
\({ }^{8}\) Appendix J (I, 2).
\({ }^{10}\) Ibid (4).
\({ }^{11}\) Ibid (3).
}
same month, enclosing in the letter a portion of a shect of One Penny stamps that had passed through his machine \({ }^{1}\) and he also forwarded similar specimens to the Commissioners of Stamps and Taxes twelve days later. \({ }^{2}\)

The Commissioners submitted a Report on Mr. Archer's invention to the Treasury on December ISth, \(1847,{ }^{3}\) recommending its adoption and asking for their judgment on the matter. They also sent with the Report a specimen shewing the way in which the stamps could be "folled and carried," that they had received from Mr. Archer. The Treasury in their reply on January 7 th, ISf\&, said: " I am commanded to aequaint you that their Lordships approve of the circulation of the postage stamps in question."

Mr. Edwin Hill thereupon communicated with Perkins, Bacon \& Petch, with regard to the cost of working the machines, and on recciving their reply of January I2th, \({ }^{5}\) the Commissioners of Stamps and Taxes wrote to them five days later, \({ }^{6}\) authorising them " to reccive from Mr. Archer the machines when they are completed and to bring them into use without delay, under the general direction of Mr. Edwin Hill." They also wrote to Mr. Archer on the same day? and asked him to forward the machines to Perkins, Bacon \(\mathbb{E}\) Petch, so that an experiment might be made with them. Mr. Archer in his reply on the same date \({ }^{8}\) said: " I deem it right to observe that in my letter referred to I proposed to furnish but one machine, being fully persuaded that one would, upon trial, be found sufficient. As, however, the practical department of the Stamp Office is of opinion that two machines will be necessary, I have directed Nessrs. Smith and English, \({ }^{8}\) the eminent mechanical engineers, to construct them at my expense with all convenient speed, and to forward the same, when completed, to Messrs. Perkins \& Bacon, according to your directions." On receipt of this letter the Commissioners wrote three days later \({ }^{10}\) to Mr. Archer: " Having laid before the Board your letter of the I7th inst., I am directed to acquaint you that they concur in the course which you have taken, but that in order to ensure the completeness of the second machine for the purpose in view, it is desirable that you shall communicate with Mr. Edwin Hill, and also that the machinist employed should distinctly understand the precise purposes to which each machine is to be applicd."

In his evidence before the Select Committec of I852, Mr. Archer \({ }^{11}\) gave the following particulars about the two machines: "On the receipt of a letter from Mr.

\footnotetext{
1"A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Crecke, junr. London. 1899. p. 5.
\({ }^{2}\) Appendix J (5).
\({ }^{3}\) Ibid (6).
\({ }^{4}\) lbid (7).
\({ }^{5}\) Ibid (8).
\({ }^{6}\) Ibid (9).
\({ }^{7}\) Ibid (10).
\({ }^{8}\) Ibid (1I).
- In the " Post Office London Directory" of 1848 Messrs. Smith and English are given as
"Engineers and Millwrights" and their address " 69, Princes Street, Leicester Square." \({ }^{10}\) Appendix J (12).
\({ }^{11}\) " Report from the Select Committee on Postage Label Stamps." London. 1852. p.3.
}

Keogh \({ }^{1}\) I employed an eminent mechanical engineer to construct the machine, according to the plan submitted to the said Commissioners. When the first machine, however, was constructed, it was found upon trial that the piercing rollers (I then proposed to do it by piercing) so wore the table upon which the sheets were laid, it was considered that the wear and tear would be too costly for carrying out the plan with advantage to the public ; I was therefore compelled to abandon the plan of punching the sheets by rollers. I subsequently had another puncturing-machine constructed by other parties upon the fly-press principle ; but finding that the bed of this machine would likewise suffer from the puncturing tools, though in a far less degree than the table of the first machine, I was compelled to abandon this also."

There is no account of any trial of the second machinc before either the Somerset House or Post Office authorities. The private trials made by Mr. Archer and the maker, possibly took place, for the most part, on plain sheets of paper. It was soon seen that the machine was little or no improvement on the first and it seems to have been quickly abandoned. The statement made by Messrs. Philbrick and W'estoby that the two machines were used in conjunction, one to roulette the vertical rows and the other the horizontal ones, has no foundation in fact.

There is no evidence to shew that cither of these machines was ever sent to Perkins, Bacon \& Petch. Both of them made lines of short cuts in the intervals between the stamps, without any portion of the paper being actually removed from the sheets. This form of separation of stamps is known to philatelists under the term " rouletting," and has been adopted in many countries for stamps that have been issued at different periods. The specimens of the Onc Penny stamps sent by Mr. Archer to Rowland Hill came into the possession of his son and have since been distributed amongst collectors. They shew an irregular gange of II to 12 cuts in the space to two centimetres and were pronted from Plate 7 I . It is believed Mr. Archer purchased the sheets of stamps that were used for the experiments with these two machines and that they were few in number. The stamps sent to Rowland Hill, are the only specimens that can be identificd with certainty as having been rouletted by Mr. Archer's first machine. No specimens are now known rouletted by the second machine, which we think, probably had the same gauge and form of roulette as the first machinc, inasmuch as no fault was found with the latter on either of these points. We do not believe that there is any truth in the description given by Messrs. Philbrick \& Westoby \({ }^{3}\) of the differences in the "cuts" made by the two machines. The first of the specimens they describe was apparently done by a roulette used by some particular individual or firm and the second by Mr. Archer's first machine. Further, so far as we can discover, the General Post Office only possesses a vertical pair of One Pemny roulctted stamps and these are specimens of Mr. Archer's first machine.

There can be no doubt that none of the rouletted stamps was issued officially by the Post Office, although Mr. Archer or persons to whom he gave specimens may
\({ }^{1}\) The letter of the Commissioners of Stamps and Taxes on January 2oth, 1848 , a copy of which is given on the previous page.

2"The Postage and Telegraph Stamps of Great Britain." By F. A. Philbrick and W. A. S. Westoby. London. 188 I . p. 66.

\footnotetext{
\({ }^{3}\) Ibid same page
}
have nsed them on letters. We have never seen a properly dated, rouletted copy shewing the variety of roulette made by his machines, although we have examined several stamps bearing other forms of ronletting all of which emanated from private sources.

\section*{The so-Caled "Treasury Roulette."}

Specimens of the stamps are occasionally met with having wavy edges of a peculiar form. Stamps of this kind are said to have been found on letters of the Rt. Hon. W. E. Gladstonc, when he was Chancellor of the Exclicquer. and the instrmment that made the wary edges is sometimes called the "Treasury roulette." We can connect it with that department to this extent. The vertical pair, and strip of four, of the One Pemny "V. R." stamps with trial cancellations in the Royal Collection, of which we have given a description earlier in our work, \({ }^{1}\) had portions of the stamps detached by an instrument that made cuts of similar wavy lines to those found on the stamps we speak of. We know that the experiments with trial cancellations on the "V R." stamps were carried ont by Rowland Hill, and that at the time they took place he was at the Treasury. It appears, therefore, that this form of sererance of the stamps was resorted to in that department. But it is entirely incorrect to designate this cutting instrument a " ronlette," for it only severed the paper in a continnons wavy line and did not, like a trne " roulcte" "does, leave a series of cuts with little particles of paper between them. We have secn more than one variety of these wavy edges on specimens of the One Penny; the size of the curves of the wave not being always the same. More than one instrument of this kind must, therefore, have been in use at the Treasury or this mode of separation of the stamps must have been also employed by other partics.

Mr. L. Arthur Burd possesses two specimens of the One Penny, with somewhat similar wavy lines, but the curves of the wave are smaller and the crests of some of the curves have little pieces of paper projecting, so that the instrument that made the cuts on these stamps was a ronlette of a rough and very peculiar make. The two stamps, which bear London obliterations, are on envelopes postmarked, respectively, "Sp. 5. 1853" and "No. 9. 1853."' Nothing is known of the actual source from which the stamps came, but we think they could only have emanated from a business firm or individual.

\section*{Mr. Archer's third machine for perforating tue Stamps.}

We have given all the authentic details we have been able to collect about the first two machines made by Mr. Archer and we can now proceed with the account of his further efforts to produce a machine, which would perforate the sheets of stamps in a satisfactory manner.

On November 26 th, \(18{ }_{\neq} 8,{ }^{3} \mathrm{Mr}\). Archer wrote to the Commissioners of Stamps and Taxes to say that he had had two different machines made by different parties

\footnotetext{
\({ }^{1}\) Vide p. 83.
\({ }^{2}\) The latter specimen and another of the One Penny with the same variety of roulette are now in the Royal Collection. The last stamp also bears a London obliteration and the envelope it franked has a postmark dated "Ju. 15, 1853." All three specimens have the lettering of Alphabet II : Vide p. 65.
\({ }^{3}\) Appendix J (13).
}
to carry out the plan which he had proposed, but finding that neither of them realised his expectations, he had had a new machine made upon a totally different principle, which he was happy to say, had succeeded beyond his most sanguine expectations. And he added that he had taken out a patent to secure his invention. The Commissioners, in acknowledging his letter on December 6th, \({ }^{1}\) once more directed him to forward the machines (sic) to Perkins, Bacon \& Petch for trial and Mr. Archer, on the following day, \({ }^{2}\) wrote to say that he had directed the machine (sic) to be sent to the firm in question. From a letter written by Mr. Archer to Mr. Edwin Hill on August ist, r850, it appears that this machine was constructed by a Mr. Wilkinson \({ }^{3}\) and that it cost Mr. Archer £150. \({ }^{4}\)

We find that Mr. Archer patented his invention on November 23rd, 18 48 . In the Specification, which is dated May 23rd. I8 49 the illustrations shew that the machine was constructed to perforate two series of sheets of stamps placed side by side. A long, horizontal line of pins had twenty-six short vertical lines of pins attached to it, at equal distances apart, except that there was a wider space in the centre to allow for the margins of the sheets which lay next one another. The pins descended into corresponding holes drilled in a metal plate, so that if two sheets of stamps were placed, side by side, on the sliding frame of the machine and the handle turned, all the stamps in the first row of both sheets were perforated at the top and two sides. The sheets were then moved forward the exact distance between the rows by a mechanical arrangement, when a second descent of the pins perforated the bottom of the stamps in the first row and at the same time the top and two sides of the stamps in the sccond row, and so on down the sheets until the whole twenty rows of both sheets were perforated. This form of perforating machine is known to collectors by the name of "comb-machine" in contradistinction to other kinds of machines, which perforate a whole sheet of stamps at once, in which case they are christened " harrow machines" or to others, which only perforate a single line at a time, when they are designated "guillotine" machines. It will be seen from the description we have given of Mr. Archer's third machine that it was made on an entirely different principle to his first two machines, inasmuch as it perforated a series of holes round the edges of the stamps by removing little circular dises of paper, instead of making lines of short cuts between the stamps without removing any portion of the paper. The stamps in current use in this country are still perforated by comb-machines made on the same principle as Mr. Archer's third machine.

The exact date on which the machine arrived at Perkins, Bacon \& Petch's establishment is not known, but there seems no reason to doubt that it was in the early part of December, 1848. Mr. Archer, in his evidence before the Select Committee of \(\mathbf{1 8 5 2}\), stated that he believed the first trial took place at Perkins, Bacon \(\mathbb{\&}\) Petch's on December 6 th, \(1848,{ }^{5}\) but this appears to be too early a date, as we have seen he only wrote to the Commissioners of Stamps and Taxes on the seventh of that

\footnotetext{
\({ }^{1}\) Appendix J (14).
\({ }^{2}\) Ibid (15).
\({ }^{3}\) The "Post Office London Directory" of \(18 \not \subset 8\) gives "Joseph Wilkinson, Engineer and Machinist, 3 I . St. George's Road, Southwark," and it seems probable that he was the party referred to here.

4 "Report from the Select Committee on Postage Label Stamps." London. 1852. p. 114.
s" Report," p. io.
}
month, in answer to their letter of the previous day, to say that he had ordered the machine to be forwarded to Perkins, Bacon \& Petch's. He also stated in his evidence that the machine clogged when the sheets were put in, on the first day of trial, owing to the gum on the sheets being wet. \({ }^{1}\) Mr. J. B. Bacon, in his evidence, denied that improperly gummed sheets had been given to Mr. Archer. \({ }^{2}\) Mr. Edwin Hill, in his evidence before the same Committee, said \({ }^{3}\) he was present at the trial of the machine at Perkins, Bacon \& Petch's premises and "it effected the operation of perforation successfully, but the sheets could not be conveniently introduced into the machine ; it was a very slow operation and the provision for holding them in their places, so that the perforation might correspond with the impressions, was incomplete and insufficient." Mr. J. B. Bacon stated in his evidences that " the machine went away to another machinist, and then came again," so it is possible that the statement of Mfr. Hill refers to a trial that took place after the machine had been repaired and returned to Perkins, Bacon \(\mathbb{E}\) Petch's establishment.

However that may be, it appears that the machine left their premises for good in the spring of IS49, when it was sent by Mr. Archer either elsewhere first of all or direct to Mr. Joseph Addenbrooke, \({ }^{5}\) for repair. \({ }^{6}\) Mr. Addenbrooke, in his evidence before the Select Committee of 1852, said that the machine came into his possession in April, 1849. and that it was then in a very bad state. He thoroughly overhauled the machine and made several alterations and additions to it. The difficulty of the machine clogging with the gum appears to have been got over, but there were others due to the irregular size of the sheets of stamps. Before the suggestion of perforating the stamps arose, there was no object in having the impressions on the plates laid down with mathematical precision. Consequently the plates varied considerably in size and there were besides, differences in the length of the sheets, due to the wetting and contraction of the paper at the time the stamps were printed and again when the sheets were gummed. Perkins, Bacon \& Petch at once made alterations in their transferring press, which enabled them to make the plates more uniform, but there still remained the irregularity in the length of the sheets caused by the wetting and contraction. Mr. Edwin Hill was present at another trial of the machine in July, IS49, which was unsuccessful, owing to the latter reason, and he then stated that unless an adjusting arrangement for the different sized sheets could be fixed to the machine it could not be worked. \({ }^{7}\) Mr. Hill, himself, made several suggestions for altering the guiding apparatus on which the sheets were placed and gave an order to Mr. Addeubrooke to this eftect on September 3rd, IS \(49 .{ }^{8}\)

After these alterations had been carried out the machine was once more considered

\footnotetext{
1 "Report from the Select Committee on Postage Label Stamps." London. 1852 . p. 8.
\({ }^{2}\) Ibid p. 15 ?
\({ }^{3}\) lbid Pp. 55, 56.
- Ibid p. I57.
\({ }^{5}\) Messrs. Joseph Addenbrooke \& Co. are given as "Ornamental manufacturing stationers " in the "Post office London Directory" of i \(S_{50}\) and their address as joI, Hatton Garden."
\({ }^{6 " R e p o r t ~ f r o m ~ t h e ~ S e l e c t ~ C o m m i t t e e ~ o n ~ P o s t a g e ~ L a b e l ~ S t a m p s . " ~ L o n d o n . ~ I S 52 . ~}\) pp. 131-140.
\({ }^{2}\) Ibid pp. 133, 134 and Appendix J (16).
8 " Report," p. 134.
}
finished and it was forwarded to Somerset House on January 9th, I8jo. \({ }^{1}\) On May 7 th, following. Mr. Hill ordered a new set of piercing tools for the machine, with a new bottom plate to receive the perforating plate, and permanent slides for putting the tympans, or trays for holding the sheets, into the machine ; \({ }^{2}\) and on the 16 th of the same month the Board of Inland Revenue wrote to the Treasury to say that after several alterations the machine was fit for use and was then about to be brought into work in the department. \({ }^{3}\) It appears from the evidence given by Mr. Archer before the Select Committee of 1852, that Mr. Addenbrooke was engaged in repairing and altering the machine from April 14 th, 1849 to May 5 th, 1850 , and that his bill amounted to \(£ 750\). \({ }^{4}\)

A long correspondence took place during the years \(\mathbf{1 8 4 9 - 5 2}\) between Mr. Archer and the Treasury, the Post Office and the Board of Inland Revenue on the subject of the compensation to be paid for his invention of the perforating machine. The first offer made to him was one of \(£ 500\) in the month of September, I850, this was afterwards increased to \(£ 600\) in January 1851, and to \(£ 2,000\) in January, 1852. Alf three offers were dectined by Mr. Archer on the ground that they were wholly inadequate. In 1852, a Select Committee was appointed by the House of Commons " to inquire and report upon the present mode of Engraving, Printing and Gumming the Postage Label Stamps, and likewise whether and how the Perforating Machine invented by the Patentee could be applied to the same with advantage to the public. . . . " The Committee in their Report, dated May 2 Ist, 1852, to which we have already made many references, said " Your Committee have examined numerous witnesses upon the subjects submitted to their consideration, and are unanimously of opinion that the perforating of the Postage Stamps would be a great convenience and advantage to the public. Your Committee are further of opinion that it would be for the general benefit that the machine for perforating Postage Label Stamps, constructed by Mr. Archer, and his rights as patentee, should be purchased for the use of the public. They therefore recommend that a negotiation should be opened with Mr. Archer by the proper department of the Government for this purpose, and that if he be willing to part with his machine and his rights as a patentee, such a reasonable compensation (to be paid in the manner to be agreed upon) as the Government shall determine, shall be assigned to him, either by absolnte purchase or by a percentage on the amount of perforated stamps sold." Fresh negotiations were then entered into with Mr. Archer and the matter was finally disposed of in June, 1853, by the Treasury paying him the sum of \(f_{t}, 000\) in full settlement for the machine, his patent rights and all his expenses.

It has been our endeavour to trace in detail the successive stages through which the perforating machine of Mr. Archer passed, from its inception to the time when it was finally made fit for practical use, as we know of no work in which this has previously been done.

Mr. Archer stated in his evidence before the Committee that the machine was only worked at intervals at Somerset House. He mentioned, too, that about 5.000

\footnotetext{
1" Memorial" from Mr. Archer to the Treasury, dated May, i850: vide " A History of the Adhesive Stamps of the British Isles," by Hastings E. Wright and A. B. Creeke, Junr. London. 1899. p. 8. See also " Report," P. I44.

2 ". Report," p. 134 .
\({ }^{3}\) Appendix J (17).
-" Report," p. IIr.
}
sheets of stamps in all were perforated during these trials, and that they were passed through the machine at the rate of ten sheets at a time, i.e., five sheets one above the other in each wing. \({ }^{1}\) Only the One Penny value was used for these experiments.

Most of the perforated sheets were distributed to post-offices in the provinces, a number of them being sent to places in the west of England. We have seen a specimen of the One Pemy which was used in London on August 2nd, IS50, and another used at Leeds on September 7 th following, and specimens used at Dawlish. Devonport, Exeter, Exmonth, Honiton, Iminster, Plymouth and other towns, with dates ranging from October, I850 to January, 185I. Some of the perforated sheets were given to Mr. Archer for sale at the Houses of Parliament during the Session of 185r, but with this exception no others are said to have been issued in London. \({ }^{2}\) Members of Parliament, who purchased the perforated stamps, no doubt carried them to their homes and constituencies and made use of them there, so that the finding of specimens with the name of a town does not necessarily signify an issue of the stamps was made at that particular place. Mr. W. J. Linton, the stamp distributor at the House of Commons, certified \({ }^{3}\) that the perforated stamps "were lighly approved of by them [the Members] so much so, that the quantity sold was very considerably greater than in any previous year." These perforated stamps of I850-5I, as well as any specimens used prior to 1854 , when the Government commenced to perforate the stamps regularly with their own machines, are recognised by collectors as " Perforated by Archer." They were certainly perforated by his machine, but as a matter of fact, as we have seen the actual work was carried out by the Government at Somerset House. The pins of the machine were set so close together that there were sixteen of them in the space of two centimetres, and the same gauge was first of all adopted by the Government in 1854 . For this reason it was thought to be impossible to identify unused perforated specimens of \(1850-51\), or used copies off dated envelopes or letter-sheets, from those of 1854 , until Mr. H. S. Hodson in \(1906^{+}\)pointed out a way by which this can be done. It is known that down to 1852 the stamps bore the type of lettering in the lower conners named Alphabet I and that in this year a change in the lettering took place. \({ }^{5}\) All unused or used perforated specimens, therefore, that have the small type of lettering of Alphabet I, belong to the trials made with Mr. Archer's machine. This reasoning has been disputed, inasmnch as it is said that some sheets of an old printing with Alphabet I may have been found in 8554 . and perforated by the Govermment machines. But in our opinion, this is most improbable, as nothing like a year's supply of the One Penny stamps was kept at Somerset House in \(1850-5+\) and all the plates with lettering of Alphabet I had been defaced by November, 1852. It is true that specimens of the One Penny with lettering of Alphabet I are even fonnd perforated If, but the few copies known are all unnsed and probably belong to the same sheet. It is certainly an unaccountable variety; but the stamps may come from a parcel of waste or damaged sheets that were used to test one of the perforating machines when the new gauge of " 14 " was

\footnotetext{
1 " Report," pp. 13, 14.
\({ }^{2}\) Ibid pp. 12, 13.
\({ }^{3}\) Appendix J (I8).
". Archer's Perforation." By H. S. Hodson. Philatelic Record. London. 1906, Vol. XXVIII. Pp, 226-229.
\({ }^{5}\) lide pp. \(0_{4}, 65\).
}
introduced, as there is no evidence that the variety was issued in the ordinary way for postal use.

Some of the unused specimens perforated by Mr. Archer's machine shew gum on the face of the stamps round the edges of the holes, proving that the sheets of which these formed a part, were not gummed until after the perforation had been applied. Perforated specimens of the Two Pence have also been seen shewing the same peculiarity of gumming, but it is impossible to say definitely whether these stamps were perforated by Mr. Archer's machine.' As we have stated, the trials of the machine at Somerset House took place at intervals. In consequence of this and very possibly in order to test sheets printed from a number of plates, specimens of the perforated stamps are found belonging to Plates 90 and 92 to ior inclusive ; many more than we should expect to find for such a comparatively few sheets as were passed through the machine.

Besides the specimens of 1850-5I, copies of perforated stamps are found used in 1853 and early in January, 1854. We are able to give particulars of four such examples: the first is in the collection of Mr. W. Martello Gray and was posted at Harrogate, the envelope bearing the date September 3rd. 1853 ; the second used at Dublin on September 28th, of the same ycar, is in the Royal Collection; the third, consisting of a block of four stamps on a cover, with the date January 3rd, 1854, was the property of the late Mr. George Mackey; and the fourth was in the collection of Mr. L. Arthur Burd. The last is on part of a letter-sheet and is postmarked " Birmingham Jan. 15, 185I." From the fact that the stamp has the lettering of Alphabet II, the year date must be an error and there can be little doubt that it is a mistake for " 1854 ." There seems to have been a good deal of carelessness in using the handstamp of the Birmingham postmark in 1854 , as regards the year date, as we know of another envelope on which the postmark reads "Birmingham De. I8, 4185 ." We have examined numbers one, two and four and find that all three stamps liave the type of lettering of Alphabet II. We have not handled the third example, but Mr. Hodson tells us that these stamps likewise belong to Alphabet 11. \({ }^{2}\) All the experiments with Archer's machine must have been concluded long before the autumn of 1853, and we think that these four examples and any others of Alphabet II, that were used during the same period, probably come from trial sheets used for testing the Government machines.

Very few details are known of Mr. Archer's life beyond those brought out in his evidence before the Select Committce of 1852. In his examination before that body he said: \({ }^{3}\) " I was always actively employed in North Wales, I hope to the benefit of the country, till the last five years, and I have been unable to go down ever since." It appears that he was at one time managing director of the Festiniog Railway and after resigning that post he became promoter and secretary of the North Wales Railway Company. About a year after the latter engagement ended he came to London, where he said he was detained for four and a lalf years in perfecting the perforating machine and prosccuting his claims for compensation. During this

\footnotetext{
\({ }^{1}\) The British Philatelist. London. 1912. Vol. ', p. 52.
2"Archer's Perforation." By H. S. Hodson. Philatelic Record. London. 1906. Vol. NXVIII, p. 228.
a "Report from the Select Committec on Postage Label Stamps." London. IS52. p. 112.
}
last period he seems to have taken an interest in literature, but not with any view to profit. \({ }^{1}\)

It has been stated" "that the idea of applying perforation to stamps was suggested to him by observing the office window-blinds then in use, which consisted of a thin sheet of iron, having a number of small circular holes, in close proximity, punched out of the metal." Be this as it may, there is no doubt that he had no practical knowledge himself of machinery and was entirely dependent upon the machinists he employed to construct and alter his machines. He acknowledged he received great assistance from Mr. Edwin Hill, who took a personal interest in the matter and made several valuable suggestions for improving the working of the third machine and making it efficient for perforating the postage stamps. \({ }^{3}\)

In a Report by Mr. Edwin Hill to the Commissioners of Inland Revenue on the subject of the remuneration Mr. Archer was entitled to for his invention, Mr. Hill said :s " The question remaining is, what portion of the gain ought to be assigned to Mr. Archer as his reward for suggesting the plan ; herein regard must be had to the degree of probability there was of others making the same suggestion if Mr. Archer had not done so ; which probability seems considerable, inasmuch as the perforating process was well known, and this particular application of it was all that Mr. Archer suggested." And Mr. Henry Hensman, the Engineer to the Bank of England, in his evidence before the Select Committee of \(1852,{ }^{5}\) said : "I think Mr. Archer has gone to a great deal of trouble and expense on it, the perforating machine], but there have been parties who have invented piercing machines for perforating paper, who, if they had turned their attention to it, might have carried it out with less expense." These statements that Mr. Archer was not the inventor of perforation are also corroborated by himself in his evidence before the Committee, as in reply to a question about his third machine he said: " 1 contracted with a person in the habit of perforating for Dobbs' House," \({ }^{2}\) and in the Specification of his Patent he only claims that "The principal object of this invention is to enable persons when using postage stamps, tickets, or other small labels to separate one or more from a sheet without the employment of a cutting instrument." Who the actual inventor of perforation was we do not know, but his name is lost in oblivion.

A notice of Mr. Archer's death appeared in "The Times" of April Ist, I863, in the following words: " On the \(2 d\) March, at Pau, Henry Archer, Esq., the inventor of the machine for perforating postage label stamps."

\footnotetext{
1" Report from the Select Committee on Postage Label Stamps." London. 1852. p. 15.114
2"A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Creeke, Junr. London. 1899. p. 9.
\({ }^{3}\) " Report," pp. 6.75.
\({ }^{4}\) Ibid p. 68.
\({ }^{5}\) Ibid p. 18 I .
\({ }^{6}\) Ibid p. 110.
z This was, no doubt, Messrs. Henry Dobbs \& Co., who are described in the London Post Office Directory of \(18+9\), as "wholesale plain and ornamental stationers and pencil makers" of 134, Fleet Street and 13, Soho Square, London. We think it is probable that the firm made use of perforation for separating the counterfoils of cheques they supplied to bankers.
}

The Adoption of Perforation for the Stamps by the Government.
As soon as the purchase of Mr. Archer's machine and patent rights had been completed by the Treasnry in June, 1853, the Inland Revenue Authorities at Somerset House set to work to get other machines made. These they ordered from Messrs. David Napier \& Son, engineers of York Road and Vine Strect, Lambeth. A notice appeared in "The Times" of July ftls, 1853. \({ }^{1}\) to the effect " that the new perforated postage stamps, which have been so long delayed, will almost immediately be issued," but, as we shall see, this event did not take place until another six months had clapsed. The first machine constructed by Messrs. Napier \& Son, had a gauge of \(15 \frac{1}{2}\) holes horizontally and 15 vertically, in the space of two centmetres. It commenced working in October, \(\mathbf{1 8 5 3}\), but was solely employed for perforating the large " Draft " and " Reccipt" stamps, which were issued in that month. : We think it is probable that before October one of the machines ordered for the postage stamps was sufficiently advanced to be tried on a few sheets of the One Penny value, but there was no attempt to perforate a supply of sheets for the public until a sufficient number of machines was ready and all arrangements had been prepared to obviate a breakdown once a start was made.

These preparations were all completed by Jamary 1854, and on the twentyeighth of that month a trial took place on fifty sheets of the One Penny value, after which the perforation of the stamps was contimous. On the thirty-first of the same month the perforation of the Two Pence value commenced. As we have already said, the gauge of perforation of the first Government machines was the same as that of Mr. Archer's machine, viz: 16 holes in the space of two centimetres. (Illustrations 43. 49). As soon as a sufficient stock of perforated sheets had accumulated, the stamps were issued to the public. Specimens of the One Penny are known used in February, 1854, and of the Two Pence early in the following April.

After the perforation had proceeded for a few months, it was found that the sheets did not always hold sufficiently together, but sometimes broke into pieces, owing to the pins of the machines being placed rather too near one another. It was determined, therefore, towards the end of 1854 , to alter the spacing of the pins and the machines were fitted with new " pin " and " hole " plates, in which the pins were reduced to 14 in the space of two centimetres. (Illustrations \(+4,45,4^{6}\) and 52). Specimens of the One Penny perforated If are found used in January, 1855, and of the Two Pence two months later. The machines were not, however, all altered simultancously, but only as the " pin " and " hole " plates wore out, so that for about a year the sheets were perforated \(\mathbf{1} 6\) or \(1+\) concurrently.

The " If " gauge of perforation continued in use so long as Perkins, Bacon \& Co., printed any of the postage stamps and in fact for many years subsequently ; with one sole exception that at the end of 1857 a small number of sheets of the One Penny and Two Pence was perforated 16 . The reason for the return to this gauge, which probably only occurred on one machine, can be explained in this manner. A stock of " perforating plates," or "sets of punches," as they are called, was always kept in rescrve at Somerset House for replacing those in the machines as they wore

\footnotetext{
: Appendix J (ig).
2 "An Appendix to the Postage and Telegraph Stamps of Great Britain." By F. A. Phil. brick and W. A. S. Westoby. The Philatelic Record. London. 1883. Vol. V, p. 95.
}
out and in this stock one set remained with the gange of " 16 ". When new plates were wanted for one of the machines at the period stated, this set happened to be given out, probably without anyone noticing the difference in the gange.

The machines constructed by Messrs. Napier \& Son were vastly superior to that built for Mr. Archer, which was very imperfectly put together, and got out of order more than once when it was being tried at Somerset House. \({ }^{1}\) They were made to take one pile of slreets instead of two, side by side, as we have seen Mr. Archer's machine did, and were after a short time, driven by steam instead of hand-power.

In Vebruary, I 854 , Mr. Ormond Hill enquired of Perkins, Bacon \& Co., what their charge would be for assorting and arranging the sheets of stamps, according to the varying lengths of the slicets, into different parcels and divisions, previous to their delivery. The object of this was to save the sorting out of the sheets into different lengths at Somerset House, which was essential before they could be perforated. The firm replied \({ }^{2}\) that they proposed " either to keep an accurate and distinct account of the money which the operation costs for a period of six months and then charge at such rate, as we should prove it, to the satisfaction of the Commissioners to be, or we are willing to make such charge as after reasonable experience of the time and labour employed any gentleman deputed by the Commissioners themselves slall decide that it is worth; always bearing in mind, that we do not wish to make a profit by the operation, although we should like to avoid any loss." We have found no further correspondence on the subject and do not actually know whether the sorting of the sheets into different lengths was ever carried out by Perkins, Bacon \& Co., but our belief is that this operation was always performed at Somerset House.

The late Mr. John G. Hendy \({ }^{3}\) gives the following particulars of the mode of perforating the stamps in vogue in the year 1861. "The adhesive stamp sheets were perforated by machines constructed by Messrs. Napier \& Son, of Vine Street, Lambeth, at a cost of \(£ f 00\) each, five such machines being contimually in use at Somerset House, London. These machines, which were worked by steam, were capable of perforating about three thousand sheets, or scven hundred and twenty thousand single stamps each, per day. The sheets were placed accurately upon one another, in packs of five sheets each, and perforated by the descent of solid steel punching pins which fitted into holes in a steel plate, so that the circular bits of paper were cut out and driven through the plate into a box below. Each stroke of the machine perforated the pack of sheets along one row of stamps, twenty-one such strokes being required to complete each pack, which was moved by the machine successively into twenty-one different positions. The cost of perforation was estimated at six shillings and cightpence per thousand shects, or one-third of a penny per thousand stamps. About nine thousand sheets, or upwards of two millions of stamps, were perforated daily."

It will, we think, be useful also to reproduce here portions of an article on the machines, by the late Mr. W. A. S. Westoby, one of the oldest, expert writers on the stamps of Great Britain. He said :" "The great difficulty in perforating the sheets

\footnotetext{
1" Report from the Select Committee on Postage Label Stamps." London. 1852. pp. 75, 76.
\({ }^{2}\) Appendix J (20).
\({ }^{3}\) "The History of the Postmarks of the British Isles from 1840 to 1876 ." By the late John G. Hendy. London. 1909. p. 125.
\({ }^{4}\) The Philatelic Record. London. 1894. Vol. S゙VI, pp. 61, 62.
}
of the line-cngraved stamps arose from the slicets being of such unequal lengths, that each machine was furnished with as many as six or seven racks to accommodate the inequality in the length of the stamps. An adjustable rack was invented by Mr. Peacock, the late Inspector of the Stamping Department, to obviate the necessity of continually substituting one rack for another, and those who are curious in such things will find a description of the invention in the 'Engineer' 1 for 26th June, 1874. . . . . Mr. Peacock's invention, combined with anotlier providing for the continuous feed of the machine, enabled it to perforate 5500 sheets per dav, while it previously perforated only 3,200 . . . . . The punches and the plate in which they work require constant sharpening, as the edges of the punclies and those of the holes become blunt. As at present constructed, the holes in the bottom plate are tubular at the top only, the lower part being conical in order to allow the punched discs of paper to fall out more readily. When the tubular portion lias been ground away to sharpen the plate, it is no longer fit for usc. It may be added that the punches do not enter the sleets simultaneously, but the line of them is a little convex, so that those in the centre commence to pierce the sheets before those at the extremitics, thus obviating the shock which would result from about 400 punches descending simultancously. As a rule, or practice, the sheets are always put into the machine head first, so that the perforation of the sides extends below the bottom row. Exceptions, however, are to be found in which these perforations are in the top row, caused by the sheet having been put in bottom first." We may add to these accounts, that when the "continuous feed motion" of the machines was introduced in \(187+\) it necessitated the crown watermarked paper being made half an inch wider. \({ }^{2}\)

Specimens of both the One Penny, Original Die, and the Two Pence, Plate 4, on blued paper watermarked Small Crown, perforated I6, are found with the lines of perforation very much out of place : to such an extent in some cases that after separation of the stamps individual specimens are left without the word " postage,." while others have no value or have a considerable part of the right or left side cut off. In other instances one, two or more rows of a sliect missed the perforation entirely, so that on these particular sheets the stamps of certain of the rows were wholly imperforate while those in other rows were perforated. We have recently seen a curious used block of this kind of the Two Pence Plate f, watermarked Small Crown, perforated 16 . This consists of thirteen stamps lettered "MF, MG"; "ND to NH" ; and "OC to OH." The two first stamps are perforated at the top and sides, those in the sccond row lettered "ND to N H " are entirely imperforate, and those in the third row lettered " OC to OH " are perforated across the centre and at the sides below the horizontal line of perforation; the upper halves of the stamps being imperforate. Specimens of a similar nature are also known of the One Penny, Original Die, on blued paper watermarked Small Crown, perforated 16.

Also very occasionally a row of stamps on a sheet was perforated twice over, owing to the first perforation being either a little too high or too low. When this occurred the holes at the sides of the stamps in that particular row often disappeared entirely and fine saw-like edges took their place. Specimens of this kind are some-

\footnotetext{
\({ }^{1}\) We find the journal states that the apparatus was the joint contrivance of Mr. Thomas Peacock and Mr. J.S. Sworder, A.I.C.E., the Engineer attached to the Stamping Department.
\({ }^{2}\) Appendix D (97-102).
}
times offered to collectors, by persons who do not know their real origin, as having other forms of perforation known to philatelists as "pin," "scrrated," or "percé en scie."

Thronghout the whole of the period from the introduction of perforation to the termination of the printing of the line-engraved stamps by Perkins, Bacon \& Co., the machines were worked at Somerset House and the firm never had anything to do with the actual perforation of their stamps.

\section*{The Addition of a Cross, fetc., in the Upper and Lower Margins of the Plates.}

In order to facilitate the perforation of the stamps Perkins, Bacon \& Co., engraved a small cross above the " dot " at the centre of the top margin of each of the One Pemy phates and a similar cross, but inverted to the left \({ }^{2}\) of the vertical line at the centre of the bottom margin. Later on an alteration was made and the printed sheets shew the cross at the centre of the top margin above the "dot" with a vertical line at the left side and an inverted cross at the centre of the bottom margin with the vertical line at the right side. Messrs. Wright \& Creeke say that Plates 178 to 193 . \(^{2} 202\) to 204 , and r to 4 of Dic II, \({ }^{3}\) belong to the first of these two states and that Plates 194 to 201 and those from No. 5 of Die II onwards, conform to the latter state." We have no reason to donbt the accuracy of their description, but we are unable to confirm it. inasmuch as the whole of the top margins have been detached from the Imprimatur sheets of the plates mentioned. In the case of the Two Pence value, we have said that Plate \(4^{5}\) had the same marginal inscriptions as plates \(\mathrm{I}-3\). but on the introduction of perforation this plate had a cross and vertical line added on the top and bottom margins, similar to the state of the One Pemy last described. A fan-like ornament was added at the centre of each of the side margins to shew the currect spot where to divide the sheet into two equal parts of the value of one pound. At the same time the first portion of the marginal inscription, relating to the price, was altered to read " Price 2d. Per Label. 2s. Per Row of 12. £1 .,-,., Per Sheet." It will be seen, therefore, that Plate 4 is found in two states. All the subsequent plates made of the Two Pence value had the same marginal inscriptions as those of the last state of Plate 4 , and also the fan-like ornament on the side margins.

In March, 8855 , \(^{6}\) Mr. Ormond Hill wrute to Perkins, Bacon \& Co., to complain of the inaccurate way in which the " crosses" were engraved on the plates. He made suggestions to comnteract this in the future and sent Mr. Thomas Peacock to see them on the subject.

\footnotetext{
\({ }^{1}\) In the printed sheets the cross appears, of course, at the right side of the line.
\({ }_{2}^{2}\) To these should be added Reserve Plate 14 . The sheet of this plate and the sheets of Plates 178 to 183 were all registered on the same day: February 13 th, 1554.
\({ }^{3}\) To these should be added Reserve Plates 15 and 16 , which were registered on the same day as Plates 1 to \(q\) of Die II., viz., January 15th, 1855.
- "A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Creeke, Junr. London. 1899. pp. 31.39.
\({ }^{5}\) Vide p. 109.
- Appendix C (196).
}

Previous to insertion in the perforating machines the sheets were pinned on the tympan, frame, or rack, the pin going through the intersecting point of the lines of the cross on the top or bottom margins of the sheets accordiug to whichever way the sheet was placed on the frame.

\section*{The " Reserve" Plates.}

The story of the introduction of perforation for the stamps has covered a period of seven years, from 1847 to 185 t, and we must now revert to one or two incidents that took place prior to the last named year.

In September, 1851, \({ }^{1}\) the Board of Inland Revenue decided that a duplicate of the Die and a roller of the One Penny stamp and a number of spare plates of this value should be kept in their custody at Somerset House, in order " to provide against any contingency that might cause the stoppage or insufficiency of the supply of these stamps." Owing to delays from various causes, which are described in the correspondence given in Appendix \(C_{,}{ }^{2}\) the first three spare or reserve plates were not ready for registration at Somerset House until June 4th, 1852. These three plates were followed by others at various intervals, the last of the series being number 20 , registered on November 12th, 1855. Of these twenty plates, numbers 1-14 were made from the Original Die and numbers \(15-20\) from the Retouched Die and to distinguish them from the ordinary series of plates a Roman capital letter " \(R\) " standing for " Reserve," was engraved by hand at each corner of the plates in front of the numbers. (Illustration 44). On June 25 th, \(1852,{ }^{3}\) Mr. Ormond Hill wrote to Mr. J. B. Bacon to say that the iron box for the Reserve plates was then at Somerset House and he asked him to send someone there to see the plates put in and to let this representative of the firm bring with him the dic and ruller ; meaning no doubt the die and one of the rollers of the One Penny value.

\section*{Defective Impressions from Plate i22.}

In April, I852, Mr. Hodgetts, the Inland Revenue Officer at Perkins, Bacon \(\mathcal{E}\) Petch's, called attention to the stamps printed from Plate 122. Mr. Ormond Hill thereupon wrote \({ }^{4}\) to the firm and asked them to send a dozen or so of the sheets in question for examination, to put aside the whole of the recent work of the plate and not gum the sheets " until a decision has been come to in the matter and that no more impressions be taken from the plate in question No. 122."

We have found no further reference to this matter and cannot say what the exact nature of the complaint was, but we can only conjecture that the impressions shewed signs of wear. The plate was put to press on July 25th, 185I, the day on which the Imprimatur sheet was registered, and according to Messrs. Wright \&Creeke, \({ }^{5}\) 70,000 sheets were printed from it, which was above the average yield of the plates in use at that period. The plate was, no doubt, withdrawn on the receipt of Mr. Hill's letter and not used again, as it was defaced shortly afterwards on May 26th, 1852.

\footnotetext{
\({ }^{1}\) Appendix C (173). \({ }^{2}\) Ibid (174-177). \({ }^{3}\) Ibid (177a). \({ }^{4} 1\) bid (175a).
s "A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Creeke, Junr. London. 1899. p. 242.
}

\section*{Frauds by Patching Stamps.}

Rowland Hill's " Journal," under the date August IIth, 1852, contains the entry : "A gentleman in St. Paul's Church Yard has sent me some envelopes with apparently proper postage labels attached, but on a close examination each label is found to be made up of the clean portions of two labels which have passed through the office. They are united so skilfully that there is no doubt they would pass. My informant declines giving the name of the stationer from whom he obtained them and doubts whether the trial was done with any fraudulent intention, but I find on enquiry that of about 100,000 stamps which have been rery carefully examined in the Prost Office] since our suspicions were roused (July 28), two made up in this way have been detected. The letters which bore them were each charged with a postage of 2s. 6 d . with the view of their being refused-when they would be opened in the Deadletter Office; but the charge was paid without complaint-which looks suspicious."

On the twenty-third of the same month Mr. Edwin Hill wrote to Perkins, Bacon and Co., on the subject and enclosed a letter from Mr. Robert Smith, the head of the London District Post Office, that had been sent to Rowland Hill. In order to make frauds of this kind more difficult, if not impossible, Mr. Smith suggested that the same letters should be inserted in the upper as well as in the lower comers of the stamps and that they should be placed in diagonal positions. Mr. J. B. Bacon in his reply, on the following day, \({ }^{1}\) entirely approved of the proposal, but he pointed out that as the crosses in the upper corners of the stamps were on the original die, it would be necessary to remove these and the stamping in of the extra letters on the plates would "increase the time required in the preparation of every new plate by from \(2 \frac{1}{2}\) to 3 days, and in fact from the quantity of plates now sent would oblige us to employ an extra hand." He also made, what appears to have been an excellent suggestion, that the style of the obliterating hand-stamps should be changed to one in the form of a large letter " \(x\)," so that the top and bottom portions of the stamps should receive equal cancellation. Nothing further was done in the matter at this time, but, as will be seen further on, the suggestion of inserting letters in the upper corners of the stamps was adopted and carried out.

\section*{Complaints of the Printing of the Stanps.}

In September and October, \(1 \$_{52}\), several complaints of the printing of the stamps were made, particulars of which are given in the correspondence, \({ }^{2}\) but they are hardly of sufficient importance to call for further comment here. These particular complaints were doubtless due to the publicity drawn to the stamps by the Proceedings before the "Select Committee on Postage Label Stamps of 1852 " and to what Mr. J. B. Bacon in one of his letters, \({ }^{3}\) characterized as the malignity; then for some time past, displayed against his firm and some of the Govermment departments. The part of Mr. Bacon's letter of September IIth, " referring to an imitation of the stamp by what is known as the " anastatic process " will be treated in more detail later on in our work.
```

1 Appendix C (17% )
2 Ibid (I79, ISO, ISI).
s Ibid (179).
4 Ibid (I79)

```

Fraud by Covering the Stamips with Gold-Beaters' Skin.
A curious fraud is mentioned in Rowland Hill's "Journal " under the date June 7 th, I853, and shews what petty devices people will resort to in order to try and save a few pence :-
" A man has devised a mode of so protecting postage stamps that the obliterating ink may be washed out, it consists in covering them with goldbeaters' skin. I fear this may cause us considerable trouble."
Rowland Hill's concern was unnecessary, as it was hardly worth anyone's while to take so much trouble in order, merely, to use a stamp a second tinse, added to which gold-beaters' skin is a costly article to purchasc.

\section*{Trial Printing of tie One Penny Stamps from Plates tiat were not Hardened.}

Early in the year 1854 a trial was made by Perkins, Bacon \& Co. to print the stamps from plates that had not been hardened, but it was soon found to be unsuccessful. The reasons for this trial and the abandonment of the project were given by the firm in a letter to Mr. Ormond Hill on March 6th of that year. As these particulars are of a very interesting description, we give them in their own words: \({ }^{1}\) "As it occasionally turns out that we lose entire postage plates, from the wear of one or two of the heads, which cannot be successfully re-entered in consequence of hardening, we have lately tried several plates without hardening hoping that the wear would justify such procceding, which would have been very desirable, if successful, as it would then be easy to re-enter any head which in the course of printing was found to need it. We have had but just enough experience to prove that although we gained the latter object, the plates do not, on an average, last more than half as long, and have therefore determined to abandon it, but as considerable time will be saved in re-engraving those plates over what would be required for entirely new ones, we propse immediately to re-engrave them, and then submit them to the usual hardening process and afterwards to prepare new plates, but as far as the purposes of Government go, these are in themselves the same as new plates." We have found no reply to this letter, but the Engraving Book \({ }^{2}\) of the firm contains two entries that Plates 155 and 176 were repaired, respectively, on April 27 th and May 23rd, 1854. There can be little doubt that Plate 176 was one of the plates referred to in Perkins, Bacon \& Co.'s letter, as it was first put to press on January \(12 \mathrm{th}_{1}\) of that year, and the repair almost certainly consisted of re-entering a number of the impressions on the plate. Plate 155, the repair of which was probably of a similar nature, was put to press, according to the records, as far back as November 3oth, I852, and could not therefore, we think, be one of the unhardened plates referred to. We have noticed before omissions in the Engraving Book of repairs that we know were made to some of the plates, and a strict account of all the repairs that took place was evidently not included in the book. It may be, therefore, that other plates besides the two mentioned were re-entered in March, April, or May, I854.

\footnotetext{
\({ }^{1}\) Appendix C (182)
\({ }^{2}\) Appendix \(G\).
}

The Making of a New Die for the One Peniy Stamps.
Oring to the wear of the Original Die of the One Penny stamp, which had been in constant use since 1840 , it was found that the plates made from it wore out much more rapidly than they did formerly, and in 1854 it became increasingly urgent that some action should be taken to stop this wear and tear. Perkins, Bacon \(\mathbb{\&}\) Co., therefore, wrote, on September 5th, \({ }^{1}\) of that year to the Commissioners of Inland Revenue to say that: "After the lapse of fourteen years during which we have had occasion to use the original flat die for the preparation of Postage Stamps, we find that it is desirable to prepare a new one in which the lines may be cut deeper than they are now, which will produce a stronger impression and enable us to print more labels from a Plate before it is wom out. We have had to go through a similar process lately in preparing plates for some of the Colonial Governments so that we have evidence before us to prove that the object we propose may be obtained withont in any way destroying the identity of the Queen's head. We therefore have to request the permission of your Honourable Board to prepare the new flat die referred to, under the direction of the Inspector of H.MI. Stamps." The Board of Inland Revenue granted permission on September 13the for the preparation of a new flat die and requested that a proof impression of the same with a similar impression of the Original Die should be submitted to them.

On September 25th, \({ }^{3}\) Perkins, Bacon \& Co. forwarded two impressions of the new die to the Board of Inland Revenue, who replied on October 3rd, \({ }^{4}\) that they were " decidedly of opinion that the Die in question is objectionable, the impression of it being so very unlike the stamps now in use. They therefore think that another effort should be made to produce a Die which would give an impression as nearly similar to the present one as possible." We are unable to furnish any further particulars concerning this rejected die and do not know in the least what it was like, as we have never met with any impression that was taken from it. On November 3 rd \({ }^{\text {s }}\) Perkins, Bacon \& Co. wrote to Mr. Ormond Hill and enclosed a letter, which they asked him to hand to Mr. Thomas Keogh, the Secretary of the Board of Inland Revenue. In the latter letter they said: "We have again prepared a Steel Die for the one penny Postage Stamps which we trust we have succeeded in making exactly like the original in every respect except that it is deeper cut and this can hardly be perceived by the eye, although when the impressions from it come to be worn the advantage will be most palpable. We have the honour of enclosing two impressions from the die as it now is and marked in pencil last die: one from the Original Die when first made and one from the original die as it now is after having produced more than 4000 engraved Steel stamps and \(200,000,000\) of impressions, but the die which we now propose to use will give thousands of millions of impressions. Should this die prove satisfactory: to your Honourable Board we should be glad to prepare plates from it as early as possible as they will doubtless wear much
```

1 Appendix C (183).
2 Ibid (I84).
3 Ibid (185).
4 Ibid (I86).
5 Ibid (187, 18S).

```
longer than those lately made." On November Irth 'Mr. Keogh wrote to Perkins, Bacon \& Co. to say " I am directed to state that the Board approve of the impression submitted, and 1 am to authorize you to proceed with the preparation of steel plates by transfers from the die from which this impression was taken."

Some further interesting particulars conceming the two dies are contained in a letter of Perkins, Bacon \& Co. of May I9th, \(1855,^{2}\) to Mr. Edward Barnard, who was then Agent-General for the Crown Colonies. The letter was written to explain the delay that had taken place in furnishing some plates for stamps on order for New South Wales, and the following are the paragraphs which are germane to our present subject: " When we undertook to supply our Home Government with postage stamps we did not anticipate anything like the demand, which began and continucd annually to increase, and therefore prepared ourselves with but one original die; but from that one dic we have had to prepare and produce over 50,000 engravings on steel. This die expericnced no visible deterioration for many years. But about two years since the plates from it showed signs of weakness, which continued gradually to increase until those that formerly produced 100,000 good impressions latterly gave only 20,000 to 30,000 . . . . . When we ascertained the origin of this falling off in the productiveness of our plates, and that it was not accidental, which at first we suspected it to be, we obtained permission to prepare another original die similar to the first, but from which we have now secured a sufficient number of flat dies to last for centuries, and these we could casily have done in the former instance, had we supposed it would prove necessary. The plates are now even better than they were at first. . . . . ."

The New Die was obtained by taking an impression from the Original Die on to a roller, from which it was then transferred to a flat piece of steel. The New Dic was then given to the well-known engraver, Mr. William Humphrys to retonch or deepen the lines of the Queen's Head. It appears from the letter of Perkins, Bacon and Co to Mr. Ormond Hill of November 3rd, \(1854,{ }^{3}\) that Mr. Humphrys must have had one or two interviews with that gentleman and received some hints from him on the work he had undertaken. The object it was desired to attain, as the correspondence we have produced shews, was to deepen the lines of the head, without in any way altering the purtrait of the Queen. In this Mr. Humphrys succeeded in a remarkable degree and hardly anyone, who was not told, would notice any difference in the appearance of the impressions from the two dies. But a minute evamination reveals a number of points of slight alterations in the hines of the head. The New Die has more shading on and around the cye and cye-lid; the nose is not quite so straight, and the line forming the nostril is curved instead of being straight ; the chin has an indentation under the lower lip and the hip is more heavily shaded; there are more lines of shading on the ear ; and the sccond jewel of the lowest row on the diadem has the shading beneath the right lower comer broken. There are other little variations, but the above are sufficient to enable any collector to divide his stamps into their respective dies. Most students have one particular point that they judge by and consider superior to the rest. We ourselves have always found the last of the tests we have given as the most satisfactory and strange to say this

\footnotetext{
\({ }^{1}\) Appendix C (189).
\({ }^{2}\) Ibid (200).
\({ }^{3}\) Ibid (187).
}
is often omitted altogether by writers in describing the differences between the two dies.

The "Dictionary of National Biography" tells us that William Humphrys was born at Dublin in r 794 . He went early to America and learnt engraving from George Murray, senior member of a well-known bank-note engraving firm at Philadelphia. In America, Humphrys engraved small plates for annuals and for illustrated editions of the works of Bryant, Longfellow and other poets, besides vignettes and details for bank-notes, his great technical skill in this last work forming an effective safeguard against forgery. "In I822 he returned to England, where he was afterwards employed to engrave the well-known head of the Queen on the postage stamps. \({ }^{2}\) He also engraved the head of Washington for the postage stamps of the United States." Humphrys was again in America between \(18_{43}\) and \(8_{45}\). He went to Genoa, late in IS64, in the hope of recovering from a stroke of paralysis, but he died there on the 2ist January, I865.

Humphrys did a good deal of work for Perkins, Bacon \& Co. in the way of engraving vignettes for bank-notes and other securities, and he also engraved several heads of Queen Victoria that were used for their colonial postage stamps, as well as the head of Columbus on the first issued stamps of Chili, which were printed by the firm. We find they gave him a cheque on December 22nd, 855 , for \(£ 22\) Irs. 6d. ( \(21 \frac{1}{2}\) guineas) and we have no doubt that this was the sum he received for the retouching work he did on the die of the One Penny stamp.

The New Die measured \(58 \frac{1}{2}\) by 73 mm . and the word "NEW" was engraved in Italic capitals "direct," above the right upper corner of the design, so that in the impressions of the Die, the letters of this word are found "reversed" above the left upper corner. Prints taken from the Die after it had been hardened shew faint surface cracks in the steel. (Illustration 26). Later on the numeral " 3 " was engraved " direct " upon the Die, below the design, and the prints taken subsequently from it shew this numeral "reversed." At least five secondary dies were taken from the New Die, so that if anything happened to the last, or it began to show signs of wear, it could be at once replaced by one of these secondary dies, and by this system of multiplying the dies one from another the identity of the stamp could be maintained as Perkins, Bacon \& Co. told Mr. Barnard, for centuries.

\section*{Proof Impressions of the New Die of the One Penny Stamp.}

We add a list of the impressions we have seen of the New or Re-touched Die, specimens of all of which are in the Royal Collection :-
1.-With the word "New" reversed above the impression. On India paper, mounted on soft, white card. Size of the die \(58 \frac{1}{2}\) by 73 mm .
(a) Before hardening :Id., black.
In addition to the ordinary specimen of this, there are the three following impressions on India paper, mounted on soft, white card :-
(i) With the word "vew" uninked and " 2nd State" written in pencil at the bottom.

Id., black.

\footnotetext{
\({ }^{1}\) This is not, of course, strictly accurate, as our work shows.
}
(ii) With the word "new" inked and " 3rd State" written in pencil at the bottom.

Id., black.
(iii) As last, but with " 5 th State" written in pencil at the bottom.
id., black.
It is difficult to say now why these impressions are labelled " 2 nd State," " 3 rd State " and " 5 th State," as an examination and comparison with the ordinary specimens do not shew the slightest difference in the lines of the head or in any other part of the design. It may be presumed from these pencil notes, that specimens with " ist State" and " fth State" must have also existed at the same period as these three impressions were made.
(b) After hardening ; shewing cracks on the surface of the dic. On India paper, mounted on soft, white card.

Id., black.
II.-With the word "NEW" reversed above the impression and the numeral " 3 " reversed below. All the specimens of Division II. shew rust marks on the die below the letters "penn" of "penNy" and have short, fine, horizontal lines opposite the centre of the right and left sides of the stamp. They also, of course, shew the cracks on the surface of the dic:-
(a) On thin white paper, mounted on soft, white card.
id., black.
(b) With the word "New" and " 3 " uninked. On white card. Impressions taken in February, I871. \({ }^{1}\)

Id., black.
Id., rose.
(c) On thin hard, yellowish white, wove paper. Impressions taken in February, 1871. \({ }^{\text {a }}\)

Id., black.
Id., Prussian blue.
Id., orange-vermilion.
id., pale sage-green.
id., emerald-green.
id., carmine and also deep carmine.
(d) On yellowish white wove paper watermarked with small star. Impressions taken in 1878.

Id., dull ultramarine.
Id., rose-red.
Id., purple.
The last is also found with "Specimen" written diagonally across it with pen and ink and showing the colour of the stamp has run, after an attempt has been made to see if the colour was fugitive.

\footnotetext{
1 Vide pp. 31.32. \({ }^{2}\) Ibid pp. 31.32.
}
III.-Secondary Dies. On India paper, momnted on soft, white card.
(a) With the numeral " 2 " reversed above the impression. Size of die 52 by 53 mm .

Id., black.
(6) With the numeral " 3 " reversed above the impression. Size of die 38 by 77 mm .
id., black.
(c) With the numeral " \(f\) " reversed above the impression. Size of dic 46 by 5 Imm . id., black.
(d) With the mumeral " 5 " reversed above the impression. Size of die 47 by 51 mm . Id., black.
(c) With the numeral " 6 " reversed above the impression. Size of dic \(4^{0}\) by 78 mm .

Id., black.

\section*{Reserte Plates I to 6 of the One Penny Value Used for Printing Stamps.}

As soon as the New Die was hardened Perkins, Bacon \& Co. proceeded to construct plates for printing the stamps. But before these could be got ready they found themselves so pressed for plates that they wrote on November 17th, 1854, \({ }^{1}\) to the Commissioners of Inland Revenue to ask them for the loan of eight of the Reserve plates stored at Somerset House. In their reply three days later, \({ }^{2}\) the Commissioners granted permission for six of the plates to be used, on condition that one new plate was completed every week mintil the Reserve was made good and the working stock was raised to twenty plates. This arrangement Perkins, Bacon \& Co. undertook to carry out. \({ }^{3}\) 'A further letter was sent by the Commissioners on November 25th, \({ }^{\text {a }}\) drawing the firm's attention to the Articles of Agreement of August 27 th, 1851 , and insisting that the stock of plates should rapidly be made good. The Reserve plates given out were those numbered i to 6 and they were all put to press on November 22nd, 1854 . Of these, Nos. I and 5 were withdrawn from use in March, the following year, and the others during the month of April.

\section*{The Plates made in \(1854-55\) from the New Die of the One Penny Value.}

The first plate made from the New Die was finished on December 7 th, \(185+{ }^{5}\) As we have already intimated more than once the last plate made from the Original Die was No. "204." With the introduction of the New Die it was determined to commence the numbering of the plates afresh, beginning with the numeral " \(\mathbf{r}\)," but an exception was made in the case of the Reserve plates, the numbering of which was carried on from the Original Die series. Plate 2 was finished on December 13th,

\footnotetext{
\({ }^{1}\) Appendix C (190). \({ }^{2}\) Ibid (191). \({ }^{3}\) Ibid. (192). \({ }^{1}\) Ibid (193). \({ }^{3}\) Appendix G.
}

Reserve plate 15, on the 19th, and Plate 3 on the \(2 g\) th of the same month. On January 5 th and ioth, Plate 4 and Reserve plate 16 were finished respectively, and all the six plates were registered at Somerset House on Jamary 15th, 1855 . Plates 5. 6 and 7 were finished, respectively, on January 18th, 26 th and 30 th, and these three plates were registered on February 1st. It appears from a letter of Mr. Ormond Hill of January 31st, 1855, \({ }^{1}\) that Plate 7 was originally intended to be Reserve plate 17. but owing to the pressing request of Perkins, Bacon \(\mathbb{\&}\) Co. the number was altered to " 7 ." The dates of the completion of Plates 8 to 24 and Reserve plates 17 to 20 will be found in Appendix G. For some reason or other, probably owing to uncertainty whether it was to be an ordinary working or a reserve plate, Plate if was finished "without legend" on April 4th, but the marginal inscription was added on May 7 th. Plates 23 and 24 were finished, respectively, on June 12 th and igtli, but on the 23rd of the same month these two plates had the numbers altered to "R17" and "Ri8", respectively, and two new plates numbered 23 and 24 were completed on July 17 th and 3oth, respectively. As in the case of the Original Die, we have not reproduced in Appendix G every entry in the Engraving Book of the plates made from the New Die, but only those which may be said to have some special interest or significance.

\section*{Varieties in the Corner Lettering, including the so-called "Gothic \(\mathrm{K}^{\circ}\) " on some of the Plates of 1855}

The stamp lettered " RE " on Plate 7 , which is one of the plates of Alphabet 11, \({ }^{2}\) has a very large "E," so much so that it is sometimes mistaken for a specimen of Alphabet IV. The abnormal size of the letter is almost certainly due to touching up by hand, after it was imperfectly punched on the plate.

Plates 23 to 31 inclusive, and Reserve Plates 17, 19 and 20, all of which were registered in 1855 and belong to Alphabet HII., have a peculiar, tall, thin letter " K " known to collectors as the "Gothic K." (Illustration 45). This type of letter is only found on these plates and it appears from this that the set of punches to which it belonged was used on these twelve plates and was then abandoned.

Messrs. Bornefeld \({ }^{3}\) and Hodson \({ }^{4}\) in their articles on the four different " Alphabets" employed for the stamps, believed that a new set of punches was used for each plate. This is very far from the actual fact, as this instance of the use of the " Gothic K " goes to prove. That the same set of punches was used for a number of plates is also borne out by a letter of Perkins, Bacon \& Co. to Mr. Ormond Hill on October 14 th, \(1856,{ }^{5}\) to which reference will be made further on. In this letter they calculated that a set of punches would stamp figures on sixteen hardened plates before they were worn out, and if this was so, the punches used for the letters would certainly stamp a much larger number of plates of suftened steel.

\footnotetext{
\({ }^{1}\) Appendix C (194).
2 lide p. 65.
\({ }^{3}\) The Stamp Collectors' Forthighty. London. 1gos. Vol. N1V. p. 4.5.
\({ }^{3}\) The Philatelic Circular. London. 1912-13. p. 223.
\({ }^{5}\) Appendix C (2I5).
}

\section*{Corrosiox of the Plates.}

In February, I855, Perkins, Bacon \& Co. found, for some unexplainable reason, that the plates were suffering from corrosion. They wrote to Mr. J. H. Fisher, the manager of their oil and colour works, to enquire whether he was making any alterations in the colour he was supplying for the stamps. His answer was that the ingredients of the colour were the same as they had ever been, but he was making the mucilage thicker in order to produce better impressions. That there was notling in the composition that could possibly effect the steel. and that the evil complained of was due to the alum in the paper, and this was greatly accelerated by continuing the use of the same set of blankets for the printing presses for so many days. He advised that the blankets should be changed two or three times a day and that the paper should be wetted with two ounces of soda added to a gallon of water. \({ }^{1}\) We have found no further correspondence about the trouble from corrosion, so presume that the remedies proposed by Mr. Fisher proved efficacious.

\section*{Trials made to Print the Stamps by Machinery:}

In the spring of 1855 Perkins, Bacon \(\mathbb{E}\) Co. purchased a Patent for printing the stamps by a new method of machinery instead of by hand. As soon as the machinery was ready, they wrote on April 2nd to Mr. Ormond Hill to ask permission of the Board of Inland Revenue to have it tested by printing an unregistered plate on paper different in appearance from that in actual use. They suggested that all the impressions taken from the plate should be kept in charge of, or destroyed by, the Revenue Officer, that a special officer should be appointed to superintend the trial and that they were quite ready to bear the expense of this. \({ }^{\text {a }}\) The Board of Inland Revenue replied three days later, giving their consent to the trial on the stipulations proposed by Perkins, Bacon \(\&\) Co. \({ }^{3}\) On February 15 th, 1856 , the Board wrote again to say that it appeared the experiments in question had been brought to a conclusion and that the officer's attendance amounted to \(67+\) hours, for which the charge was \(£ 33\) I4s. od. Perkins, Bacon \& Co. in their reply on February I8th, \({ }^{5}\) stated that they had paid the charge, but the experiments were by no means concluded. They added : " It is true, however, that the inventor after having made great progress has broken down in his attempt to perfect the machine, but as we have such a large sum upon the invention and a little additional time and expense will enable us to ascertain whether we cannot take it up where he has left it and thus bring it to perfection, we shall fcel greatly obliged if your Honourable Board will allow us to have an officer again in a few days and for a few days in order to test the improvements it is now undergoing. The expense of his attendance to be paid by us as before." To this request the Board of Inland Revenue granted their consent on February 23rd. \({ }^{6}\) Just four months later \({ }^{7}\) Perkins, Bacon \& Co. wrote to Mr. Ormond Hill : "We have now seven Postage stamp plates ready for registering \({ }^{8}\) and as two of them are of a new size adapted to printing by machine and the machine is now ready for what we hope will be a conclusive trial ; we shall feel greatly obliged if your Honourable

\footnotetext{
\({ }^{1}\) Appendix C (195).
\({ }^{4}\) Ibid (204)
\({ }^{6}\) Ibid (206).
\({ }^{2}\) Ibid (197).
\({ }^{5}\) Ibid (205).
\({ }^{2}\) Ibid (208).
\({ }^{3}\) Ibid (198).
\({ }^{8}\) These were plates Nos. 45 to 51 and they were registered on June 25 th, 1856 .
}

Board will appoint as carly a time as convenient for the registration in order that we may have it tested." This conchudes all the correspondence and evidence we have on the subject.

Messrs. Wright and Crecke' state: "impressions from [Plates] Nos. 16 and 17 were taken experimentally at a steam press on the 15th Mlay, I855 ; and from No. I8 on the ist June next " and in the Appendis: to their work: "Plates 16,17, I8 and 22 first used experimentally at steam presses." We do not know on what authority these statements are based, but if true, it is evident from the particulars we have given, that they do not embrace all the experiments that were made with the new machinery. In the first place, permission was asked and granted in April, 1855. for the use of an unregistered plate, but it is evident from the number of hours \((67+4)\) charged for the officer's attendance, that the first series of experiments must have been of a very protracted nature and they appear to have been spread over the period from April, 1855, to January, 1856. In February, 1856 a second series of experiments was started, which lasted on at any rate matil the end of the following June or into July. There is no evidence to show what plates were taken for this second series of trials, except that either one or two of the set of Plates Nos. +5 to 5 r, seen to have been used. What is certain is that all the experiments proved unsuccessful and Perkins, Bacon \& Co. had to abandon the project of having the stamps printed by machinery instead of by hand.

\section*{Irregularity in the Spacing of the lapressions on Plate ij of the One Penny Value.}

On May ISth, 1855 , \(^{3}\) Mr. Ormond Hill wrute to Perkins, Bacon \& Co to say that several rows of the impressions on Plate 13 were so irregularly laid down it was impossible to perforate the sheets printed from this plate " without considerably encroaching upon some of the stamps." He requested that printing from the plate should be immediately discontinued, that measures should be taken to prevent similar inaccuracies in any other plates and that the recently registered plates should be examined and if found to have the same faults they should not be put to press " until it has been decided whether or not the impressions from them can be received." In their reply four days later, \({ }^{4}\) Perkins, Bacon \& Co. said: Plate 13 was not then at press, but they had had some impressions taken from it. On examining these, they did not find any rows of the stamps which greatly varied in line, but that certainly " one head, viz., A G and B G in the second line from the top, which is very much out and could not be perforated or in any other way parted from the remainder without taking from the stamp itself and which consequently leaves the plate decidedly open to the objections mentioned in your letter. No more impressions shall be taken from that plate until after the defect has been remedied which we do not at present know that it can be. We have examined the rest of the plates which are not open to a similar complaint and have given strict charge to our engravers to avoid falling

\footnotetext{
1 "A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Creeke, Junr. London. I S99. p. \(3+\).
\({ }^{2}\) Ibid p. 244.
\({ }^{3}\) Appendix C (199).
\({ }^{4} 1\) bid (201).
}
into the like error again." We have no evidence to show whether the defect was corrected by re-entering the impressions lettered A G and B G. but we think that it probably was. If not, the plate could have been very little used, as it was only put to press on April 23rd. I855, and it must have been withdrawn from use some days before May igth, as Perkins, Bacon \& Co.'s letter shews that they had no sheets from this plate in their possession at the latter date.

\section*{Plates 5 and 6 of the Two Pexce Value.}

The Engraving Book of Perkins, Bacon \(\mathcal{E}\) Co. tells us that Plate 5 of the Two Pence was finished on May 25 th, \(1855 .{ }^{1}\) and the "Imprimatur" sheet was registered at Somerset House on June Sth of that year. The stamps of this plate can be identified by the type of lettering in the lower corners, which conforms to what is known as Alphabet \(\mathrm{II}^{2}\) and the plate is the only one of this value which has lettering of this kind.

From the same source we learn that Plate 6 was finished on September 3rd, IS56, \({ }^{3}\) but for some unknown reason, the "Imprimatur" sheet was not registered until February IIth, 1857 . The stamps of this plate can be identified by means of the white line under " postage" which is thimer than that on the stamps of Plates 3. 4 , or 5 , and by the letters in the lower corners, which are the type of Alphabet III. \({ }^{4}\) As we have explained before, \({ }^{5}\) the white lines on the Two Pence stamps were added by hand on the roller impressions used to make the plates, so that it is not surprising that these lines sometimes varied in width.

Both these plates were made from roller impressions taken from the Original Die of the Two Pence, as no new die had been made of this value at the dates when they were constructed.

\section*{The "Large Crown" Watermarked Paper for the Stamps.}

111 January, 1854 , it was decided to change the crown watermark of the stamps to one of a larger size and on the twenty-seventh of that month \({ }^{6}\) Mr. J. P. Bacon wote to Mrs. Wise and said: "l have shewn the new crowns to Mr. O. Hill, who thinks it will be well to put a few similar ones on a piece of note mould (as you have now done) of different thicknesses of metal including the eery thimnest. They should be placed very near together and then we can print a few for experiment. I should like this done quickly." On February Ifth, \({ }^{7}\) he wrote again to Mrs. Wise to say : " We have printed and gummed the experimental crowns, but being (from some une.xplained cause) on much thicker paper than the crowns presumably the Small Crowns] they do not shew well at all. I therefore wish half a dozen more made from the actual crown pulp and sent up finished as before. The sooner the better. Mlr. Hill thinks the crowns badly made, but that 1 suppose arises from the difficulty of cutting them by hand?" No specimens printed on this experimental large crown paper are now known. It is probable that only a very few were printed and that these were all

\footnotetext{
\({ }^{1}\) Appendix G.
\({ }^{2}\) Vide p. 65.
\({ }^{3}\) Appendix G.
- Vide p. 65.
}
\({ }^{5}\) Vide p. 109.
\({ }^{6}\) Appendix D (75).
\({ }^{7}\) Ibid (76).
destroyed. On April 12 th following Mr. J. P. Bacon said in a letter to Mrs. Wise : \({ }^{1}\) "I enclose two crowns for Mr. Hayes \({ }^{2}\) of which I like the plainest one best, but I am no judge as to their practicability." On May 15 th \(^{3}\) he wrote and told her " 1 have seen Mr. O. Hill and he does not sce any objection to the watermark for the Crowns being made out of the Mills provided he knows the name of the party doing the work, as a guarantee for his responsibility. Will you therefore ask Mr. Hayes to have the die made as soon as possible, and half a dozen impressions struck that I may shew him before you are finally committed." It is evident from Mr. Bacon's remarks in this letter that it was intended to have a die made for stamping the crowns out of metal, in place of using twisted wire as was done for the Small Crown watermarks. The next letter we have is dated August moth, \({ }^{4}\) and in this Mr. Bacon told Mrs. Wise : "I do not know what to say about the Crown watermark. If it will not come better than the specimens sent, I do not think it worth while to change. If you will send me up the drawing I will see if Saunders camot give us a better?" No satisfactory result was attained by consulting Mr. Saunders and Mr. Ormond Iill referred Mr. J. P. Bacon to Mr. Smith, of the firm of J. Smith \& Son, 8, Fountain Place, City Road, London, who made the moulds with anchor and cable watermarks in 1853 for the paper used for certain One Pemy fiscal stamps inscribed "Receipt " and "Draft." Mr. Bacon wrote to Mr. Smith on October 2Ist, I85t, \({ }^{5}\) saying: "I write on behalf of Mrs. E. S. Wise, of Rush Mill, Northampton (the manufacturer of the Postage label paper) to know if you will be willing to make a die for her which would be suitable for making a watermark similar to the enclosed. but better in shape, and if so what would be the cost. Or, if you prefer the other mode, at what rate you would supply her with a thousand crowns ready for sewing on the mould." On the 27 th \(^{6}\) of the same month he wrote to Mrs. Wise : "I have shewn the crowns to Mr. Hill, who did not like any of them, but referred me to Mr. Smith, the maker of the Anchor moulds, from whom I have got an estimate, and suspect I shall have to order a pair from him, though his price is double that of Mr. Hayes. I am very sorry it is so, but cannot

risk the order for the paper for the sake of getting Mr. H. [ayes] the moulds to make." A pair of moulds was evidently furnished by Messrs. J. Smith \& Son, as on November 15th, \({ }^{7}\) following, Mr. Bacon wrote to Mrs. Wise: " I send to-night by rail the new Postage moulds" and on December I \(^{2} \mathrm{th}^{8}\) be wrote again to her to say: " I have received the sheet of crowns, which certainly shews the watermark much plainer than the old one, though there may be two opinions as to the shape!"

\footnotetext{
\({ }^{1}\) Appendix D (77).
\({ }^{2}\) Mr. Hayes was the maker of the moulds employed by Mrs. Wise.
\({ }^{3}\) Appendix D (8o).
\({ }^{4}\) Ibid (81).
\({ }^{6}\) Ibid ( \(8_{2}\) ).
\({ }^{6}\) Ibid (83).
\({ }^{2}\) Ibid (84).
\({ }^{8}\) Ibid (85).
}

We must interrupt our narrative of the " Large Crown" paper here in order to insert a description of an essay of watermarked paper, which belongs to the year 1854 . This essay consists of a sheet of hand-made white wove paper, measuring \(S_{4}^{1}\) by 5 inches, watermarked in the centre with three liorizontal rows of six crowns each, enclosed within a frame formed of a plain watermarked line. Outside the frameline at the top is watermarked " John Wood " \({ }^{1}\) in script type and outside each of the four corners, placed diagonally, is a watermarked crown, with " pesisy" arched aboveand " postage" in a concave curve below, both words being in small sans-serif capitals. The crowns are somewhat of the same pattern as those adopted for the " Large Crown " watermarked paper, but they are of a more ornamental character. One of these essay sheets of paper is in the Royal Collection and two or three other similar specimens arc known. They all came from the late Mr. Thomas Peacock, \({ }^{2}\) who wrote on the envelope in which they were kept with samples of various watermarked papers used for postage and fiscal stamps: "Crown Id. Post. John Wood. Sheet for 18 labels. (very early)." Nothing else is known about this essay of watermark, but we believe the mould for it was made in the year \(185+\) by Messrs. J. Smith \(\mathcal{E}\) Son, the makers of the first moulds for the Large Crown paper. The fact that it has Mr. John Wood's name on the margin and a crown placed diagonally at each corner practically identifies them as the makers, inasmucli as the sheets of the anchor and cable paper of the fiscal stamps we have mentioned has "John Wood " in script type at the centre of each of the side margins and a reversed anchor and cable placed diagonally at each corner of the sheets. We also think that the mould was prepared for Mr. Ormond Hill, as an essay for the Large Crown watermark Messrs. J. Smith \& Son proposed for the stamps.

The manufacture of the Large Crown paper was continuous from December. 1854. but owing to there being a large stock of the Small Crown variety at Somerset House the new paper was not used for printing stamps for some months and even then the two papers were for a time in concurrent use. Postmarked specimens are known of the One Penny on Large Crown paper dated July I6th, I 855 . and of the Two Pence with date July 20th of the same year, \({ }^{3}\) although the first batch of One Penny Plates on the new paper was not registered until Nurember 12th, I855. Of these plates, which were all of the Retouched Die, Nos. 23, 25, 26 and Reserve Plates 17 , 18, I9 were printed on Large Crown paper, while No. 24 and Reserve Plate 20 were printed on Small Crown paper. After that date every plate registered was printed on Large Crown paper.

On October 1st, \(1855,{ }^{4}\) Mr. J. P. Bacon wrote to Messrs. J. Smith \& Son and said: "Some months since you supplied Mrs. Wise, of Rush Mills, with a pair of Crown watermarked paper moulds. The watermark has given satisfaction, but the workmanship of the moulds has turned out very bad indeed, having cost Mrs. Wise a great deal for repairs. I therefore wish to know (to prevent a similar trouble in future) at what price you will furnish the patent watermarks in order that I may judge as to the expediency of continuing the use of this watermark. In addition to the reasons stated above Mrs. Wise has the frames and deckles for two pair of crown

\footnotetext{
\({ }^{1}\) IVide p. 38. In 1854 he was Chairman of the Commissioners of Inland Revenue.
\({ }^{2}\) Vide p. 100.
= The British Philatelist. London. 190S. Vol. I, pp. 26, 34.
- Appendix D (89).
}
moulds on hand, which of course she cannot afford to throw away." A pair of these frames was sent to Messrs. J. S.nith \(\mathbb{\&}\) Son by Mrs. Wise and on the twenty-fifth of the same month \({ }^{1}\) Mr. Bacon, in another fetter to them, wrote: " In reply to your favour of this morning. I much prefer to leave the arrangement respecting the Crown moulds as it was understood to be, which can still be accomplished by your putting on the faces and sending them back to the Mill in their present state." After a long delay Mr. Bacon wrote to them again on February 13th, 1856: "In the month of October of fast year Mrs. Wise forwarded you a pair of frames for facing with the patent crown watermarks. They ought to have been delivered some weeks since, and I should be glad to know if they are in a state of forwardness so that they ean be absolutely delivered in a short time, as otherwise it is not necessary that they should be proceeded with at present. Your immediate and definite reply will oblige." We have not been able to find the answer to this letter, but we think there is no doubt that the two frames were completed by Messrs. J. Smith \& Son and were forwarded to Mrs. Wise very shortly after that date.

It will be noticed that Mr. Bacon in his letters speaks of " the patent crown watermarks." We have referred to the Specifications of Patents and we find that Ifessrs. William Brewer and John Smith took out a patent on February 12th, I8 49 . and that Messrs. John Smith and William Henry Smith registered a further patent on January 24 th, 1859 . In the tast Specification they stated-" We employ 'marking,' which we produce by cutting out by pressure rollers the required patterns, etc., in thin metal or other suitable materiat, which pattern is then attached to the surface of the rofler or mould." Under this system the Large Crowns used for the watermarks were stamped out of sheets of thin brass by a steel die, whereas the Smali Crowns, as we have seen, were each composed by hand of twisted wire. The new method was consequently a great improvement on the old, as the watermarks were much more uniform in shape. The marginal watermarks of the Large Crown paper consisted of similar parallef fines broken at intervafs by the insertion of the word "postage," as in the Small Crown paper. \({ }^{3}\) With the exception of the first pair of moulds for the Large Crown paper, which were constructed entirely by Messrs. J. Smith \& Son, the moulds were made by Mr. Hayes for Mrs. Wise and the "bits" for the Large Crown watermarke were the only parts supplied by Messrs. Smith \(\&\) Son.

Somewhere about the year I860 Mrs. Wise married Dr. John Fairctoth, \({ }^{4}\) who helped her in the management of the business untit his death on July 215 st . I879. His name never appeared in the title of the firm, but in December, 1862, the style of the firm was changed to Wise \(\mathcal{E}\) Co.

In 1861, it is generalfy believed, an alteration was made in the pattern of the " crowns " used for the watermark. This consisted of the omission of the two small vertical fines, representing fleurs de lis, which were placed in the two fower arches of the crown. We have found mo mention in the records we have had access to of the date when this change took place, but the tate Mfr. S. C. Skipton, writing in I899. \({ }^{\text {s }}\)

\footnotetext{
\({ }^{1}\) Appendix \(D(90)\).
\({ }^{2}\) Ibid (91).
\({ }^{3}\) Vide p. \({ }^{11}\).
\({ }^{4}\) In " A History of the Adhesive Stamps of the British Isles." By llastings E. Wright and A. B. Creeke, Junr., London. I899, his name is wrongly given as "Dr. Faircroft," ride pp. 12,262, and this mistake has been repeated in other works.
\({ }^{5}\) The Philatelic Journal of Great Britain. 1 S99. Vul. IX, p. 202.
}
states that he had a specimen of Plate \(S\) of the Two Pence, which showed the alteration in the watermark and as this plate was defaced on October 29th, I86r, the change presumably took place previously to that date. At the same time we consider that it is impossible to be quite certain from this single specimen that " 86 r " was the year in which the alteration of the watermark was made, as the Royal Collection contains the bottom portion of a sheet of the Large Crown paper, which has four horizontal rows of crowns, and on this No. 3 crown in the last row but one, and Nos. 3 .


IO, II and 12 in the last row are without the two small vertical lines, while all the remaining crowns have the lines. The mould from which this shcet of paper was made was evidently in bad repair and had the small vertical lines of the fleurs de lis broken off some of the crowns. The stamp Mr. Skipton described may have been printed on a sheet from this mould, or from another mould which had one or more of the crowns damaged in the same way, in which case it could not be considered as belonging to the period when the new form of watermark was regularly introduced. The matter is really of small importance, for if the change did not take place in 869 it certainly did so in the following year.

On August 3rd, 1866, \({ }^{1}\) Mr. Ormond Hill wrote to Mr. J. P. Bacon to say he wished " that in future a more systematic official check should be maintained upon the making of the crown moulds : and with this view that the crown bits for these moulds should be kept in the custody of the Board's Officers at Rush Mill to be given out by them when required for use by the moutd maker. Will you be good enongh to give directions.
rst.-That any crowns which are at Rush Mill other than those which are upon the moulds in the officers custody may be counted and delivered to the officers.
2nd.-That when any new crowns shall be ordered the maker of them, Mr. Smith I presume, be instructed to consign them to the Excise Officer in charge at Rush Mill, and to send me a memorandum on each occasion of the number so consigned.
I shall myself communicate with Mr. Smith on the subject as soon as I receive an answer from you ; but of course as he is employed to make the crowns for Mrs. Faircloth he should receive his instructions from her. If I am mistaken in communicating to you on this subject will you be good enough to forward this note [to] the proper person. We have found no copy of Mr. Bacon's reply to this letter, which was sent on August 6th, but on September \(28 \mathrm{th}^{2}{ }^{2}\) of the same year Mr. Hill wrote to him again to the following effect: "I learn from Mr. Smith, the mould maker, that your firm has instructed him to prepare 2,000 crowns for Rush Mill. I think you must have forgotten that in yours of August 6 th you undertook ' that none shall

\footnotetext{
\({ }^{1}\) Appendix D (92).
\({ }^{2}\) Ibid (93).
}
be ordered or made without first communicating with you,' i.e., me 'on the subject.' However as Mr. Smith has at once written to me no harm is done-I propose if you de not object to request Mr. Smith on this and all similar future occasions to deliver the crowns to me here. On receiving them I shall send him an acknowledgment to produce to you and at once forward them to the supervisor at Rush Mill and instruct him to inform the manager of the mill of their arrival. Please to let me know whether you agree to this arrangement." Once more we have been unable to find the copy of the reply sent to this letter.

On September 3rd, \(1868,{ }^{1}\) Mr. Edwin Hill wrote to Perkins, Bacon \& Co. to say that " the stock of crown watermark bits for making new moulds is nearly exhausted. Will you please have 2,000 new crowns ordered of Mr. W. H. Smith of Grantley Works, Park Lane, Peckham and direct him to deliver them to this office as soon as made." By this date it will be seen that the name of the firm supplying the crown bits had been changed from J. Smith \& Son to W'. H. Smith, and that the business had been removed from 8, Fountain Place, City Road, to the address given in Mr. Hill's letter. On September 18th, \({ }^{2}\) Mr. Smith wrote to Mr. Bacon and said " Your order of yesterday is at hand and will lose no time in preparing the 2,000 crown's watermark, then will forward the same to Mr. O. Hill, Inland Revenue, Somerset House": and on November 19th, 1868, \({ }^{3}\) Mr. O. Hill wrote to Perkins, Bacon \& Co. and said : " We received 2 ooo crown watermark bits from Mr. Smith on 23 Octuber last and forwarded them at once to the Officer at Rush Mill. On future similar occasions you shall be informed." This is the last letter we have found on the subject of the crown " bits," but between 1868 and 1880 , when the printing of the line-engraved stamps ceased, many further supplies of the " crowns" must have been required.

The moulds for the Large Crown watermarked paper were marked with large sans-serif capitals on the margins near the right upper corners and had the same letter or letters repeated, in inverted form, on the margins near the left lower conners. We do not know at what date this system of numbering the moulds was introduced. The earliest letter we have seen is " \(E\) " on stamps from Plates 50 and 94 of the One Penny Retouched Die. After the letter " \(Z\) " was reached the numbering was changed to " AA " and so onwards to " XX." which appears to have been the furthest lettering reached. The dates when the different moulds were in use can be roughly calculated from the Plate numbers of the stamps on which the " letters" are found, as the period when the plates were employed for printing can be ascertained from Messrs. Wright and Creeke's work. \({ }^{4}\) The only direct indication we have of the date of introduction of any particular mould is in the case of that lettered "AA." We have seen an entire sheet from this mould on which is written in ink, at the back "Sample Sheet, Novr. 7 th, 1870," followed by some illegible initials. It appears from this note, therefore, that the mould bearing the letters "AA" came into use at the end of the year named.

Two marked varieties are known of malformed crown watermarks of the 186 r type, due to damage to the two particular "bits " on the moulds that produced them,

\footnotetext{
\({ }^{1}\) Apprendix D (9.4).
\({ }^{2}\) Ibid (95).
\({ }^{3}\) Ibid (96).
" "A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Creeke, Junr. London. 1 Sy9. pp. 244-248.
}
both being found on the same sheet of paper. The first has the crown narrower than the normal shape, the horizontal line of the small cross at the top is longer and broader and there are only two instead of three horizontal lines at the bottom. The second is narrower and taller than usual and the space between the first and second lines at the bottom is considerably broader, while that between the second and third lines is normal. The two varicties have been found on the One Pemy carmine-rose

VAR. I.


Retouched Die, with Maltese crosses in the upper corners and on stamps from several plates between \(7^{2}\) and 96 and on the Two Pence, Plate 9. \({ }^{1}\) When the sheet of paper containing the varieties of watermark was printed in its correct position, the first variety is found under the stamp letter " MA " if with crosses, or "AM" MA
if without crosses, while the second variety is under the stamp lettered "NA" or "AN," according to which issue it belongs. If the paper was printed on the wrong NA
side, the two varieties of watermark would be under the stamps lettered " ML " or " LAI" and "NL" or "LN," respectively, and if the sheet was inverted, under ML NL
the stamps lettered "HL" or "LH" and " IL" or " LI " ; while if the sheet HL IL
was inverted and printed on the wrong side, the varieties would be under stamps lettered " HA " or " AH " and " A " or "Al," respectively:
HA

IA
Two other varieties of malformed crowns have also been met with \({ }^{2}\) : the first under specimens of the One Penny, Retouched Die, with Maltese crosses and lettering "TA" of Alphabets III and IV and the other under specimens of the same value


VAR. 3.

\footnotetext{
\({ }^{1}\) The British Philatelist. London. 1908-17. Vol. 1, p. S6; Vol. VI. p. 10 ; Vol. IX, p. 32 ; Vol. X. p. 7.
\({ }^{2}\) Ibid 1916, Vol. IS, pp. 69, 47.
}
lettered "JT" from Plates II6, II8, I34. The lutter is described as having " the TJ
lower part of the crown pushed all to one side, reminding one, in its appearance, of a balloon drifting before a strong wind with the car trying to lag behind." Considering the number of years the Large Crown paper was in use and the huge quantities that were made, it is somewhat surprising that so few varieties of damaged "crowns" have been found.

On May IIth, 1874, \({ }^{1}\) Mr. Ommond Hill wrote to Perkins Bacon \& Co. to say: "It is desirable for the convenience of the perforating that the margin of the sheets of Postage Stamps should be increased by a quarter of an inch on each side : but before commmuicating with Mrs. Faircloth on, the subject I wish to know whether such alteration will cause you inconvenience." In reply to this enquiry the firm wrote the following day \({ }^{2}\) and mentioned several ways in which the alteration in the size of the sheets of postage paper would affect them, but they added that " as we understand it may be highly desirable to make the change we shall be willing to try the effect of the alteration for a reasonable period without charge, if it is understood that objection will not be raised to the want of cleanness at the sides of the sheets," which might be caused by the paper being broader than the plate. Mr. Hill wrote again on July 28th, \({ }^{3}\) and said: "The width of the One Penny Postage label paper which will be required for the new feed motion of the perforating machines \({ }^{4}\) ] will be \(\mathrm{II}_{8}^{1}\) inches. I shall feel obiged by your informing me whether this will necessitate an additional charge and if so the amount of such charge." The firm replied the next day's saying: "We shall be willing to make the alteration in the One Penny Postage paper mentioned therein without charge, on the understanding that should we find it more expensive then we reckoned we shall be at liberty to re-open the subject." Mr. Hill answered this letter on July 3Ist. \(1874^{6}\) and asked the firm to convey his thanks to Mrs. Faircloth for her willingness "to make the required increase in the width of the side margins of the crown paper in the first place at any rate without extra charge" : and he added: "I shall feel much obliged if you will arrange for this alteration being made on the condition named in your said note of 29 th inst." The width of the sheets of the crown watermarked paper was thereupon increased to II \(\frac{1}{8}\) inches and the sheets continued this size for the remainder of the term that Perkins Bacon \& Co. held the contract for printing the stamps. The change in the size of the paper necessarily affected the minimum weight per ream under which it was supplied by contract and Mr. Ormond Hill wrote to Mr. J. P'. Bacon on July 5th, 1875. \({ }^{7}\) to say: " In regard to the weight which the reams of Id., I \(\frac{1}{2} \mathrm{~d}\). and 2d., Postage stamps should be when printed on the broad paper I find that adding to the stipulated minimum weight of the reams upon narrow paper (a) the amount due to the increase in the area of the paper and \((b)\) the amount due to the quantity of gum which the additional area should take, gives I81bs. Soz. as the minimum weight of a ream of the finished stamps, upon wide paper, when weighed without wrapper. If you agree to this will you be good enough to instruct your people accordingly." We have found no reply to this letter, so we conclude that the weight mentioned by Mr. Hill was accepted by the firm as being correct.

\footnotetext{
\({ }^{1}\) Appendix 1) (y7).
\({ }^{2}\) Ibid (98).
\({ }^{3}\) Ibid (99).
}
\({ }^{5}\) Appendix 1 ( 100 ).
- Ibid (rot).
\({ }^{3}\) Ibid (102).

As regards the price paid by the Government for the paper we have no particulars beyond the fact that in April, 1857, it was thirteen shillings per ream. \({ }^{1}\) The price may have varied to a small extent in different contracts and possibly a slight advance was allowed in the cost in 1874 or 1875 , on account of the width of the paper being increased in size.

After Perkins, Bacon \& Co. ceased to print the postage stamps in ISSo, Rush Mills were disposed of the following year to Messrs. Spalding \& Hodge, and some nine years later they were acquired by Sparre Patents Co., Limited. They have been out of use now for paper-making purposes for many years past.

Trial to Engrave, instead of Punch, the Letters in the Lower Corners of the One Penny Stamps.
In June, 1856, an experiment was made of engraving the letters in the lower comers of the stamps by hand, instead of inserting them, as had invariably been done, by means of punches. Plates \(5^{\circ}\) and 51 were treated in this manner and were completed on the eleventh of that month. \({ }^{2}\) The lettering was of a larger type than any used either before or later, and is known to philatelists as "Alphabet IV."3 it will be a surprise to collectors to learn that the corner letters on these two plates were engraved by hand, for no one has ever suggested such an explanation before. The fact that they were engraved in this way, accounts for the number of differences found in the shape of the letters on these plates. The experiment was not considered a success, owing, either to the time it took to engrave the letters, or to the size of the letters being thought too large, and it was never resorted to again.

The " Imprimatur" sheets of Plates 50 and 5 I were registered on June 25 th, 1856, and Messrs. Wright and Creeke \({ }^{4}\) state that these two plates were put to press, respectively, on the 27 th and 26 th of that month. This must be an error on their part, as the stamps are only known printed on pure white paper and in a carminerose shade, which did not come into use until 1858 , as the first plate registered in this colour was No. 6I on January of that year. We have found a statement, \({ }^{6}\) which gives the number of sheets produced from the plates at press on November 22nd, 1862, and at that date 197,200 had been printed from Plate 50 and 167,600 from Plate 51 . Judging from this statement and the colour the stamps are printed in, we think that the two plates could not have been put to press before the end of 1860 . That Plate 51 was in use in the eariy part of the next year is proved by a statement in the Engraving Book of Perkins, Bacon \& Co., which we shall refer to a little later on. The Plates were not withdrawn from use until April 2nd and March Ist, IS64, respectively, so probably the total number of sheets printed from each plate exceeded 300,000 .

An entry in the Engraving Book \({ }^{-6}\) shews that Plate 51 was repaired on April 26th, 186r. What the nature of the repair was we do not know, but we suspect it consisted of re-entering some of the impressions on the plate.
\({ }^{1}\) Appendix C (228).
\({ }^{2}\) Appendix G.
\({ }^{3}\) Vide p. 65.
4 " A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Creeke, Junr. London. IS9y. p. 245.
\({ }^{6}\) Appendix C \((248)\).
- Appendix G.

\section*{Proposal to Number the Rows of Stamps on the Shefets.}

In August, r856. \({ }^{1}\) Mr. Thomas Bartlett, or Bartleet, of Kidderminster, wrote to the Board of Inland Revenue suggesting that it would be a great convenience to the public if one side of the sheets of postage stamps was printed with the figures I to 20 alongside the rows, as it womld save the trouble of comnting in the case of remitting or purchasing specimens. The Board requested Perkins, Bacon \& Co. to carry out the suggestion \({ }^{2}\) and a letter of the firm to Mr. Ormond Hill of October rfth, 1856, \({ }^{3}\) shews that the experiment was tried on one of the hardened phates and gives some interesting particulars of the cost of the addition of the marginal numbers, which were stamped on the plate by punches. The plate in question was No. 52. The Engraving Book shews that this plate was finished on September 2th, r856, and that the marginal numbers were added to it on October 2nd, following. \({ }^{4}\) The Board of Inland Revenue finally decided on October 2 th \(^{\text {th }} \mathbf{1 8 5 6},{ }^{5}\) after consulting the Licensed Vendors of stamps, not to adopt the innovation. Plate 52 was not registered until February inth, 1857 , and the marginal numbers must have been removed from the plate before that date, as they do not appear on the "Imprimatur" sheet.

\section*{Plate fi of tiee One Penny Value Repaired.}

The Engraving Book states that Plate fi of the One Penny was repaired on March 2 nd, \(1857{ }^{6}\) We have no particulars of the nature of the repair, but, as in the case of other entries of this kind in the same book, we believe that it comsisted of re-entering some of the impressions on the plate.

\section*{The Fire at Perkins, Bacon \& Co.'s Printing Works.}

On the evening of March IIth, I857, a fire occurred in Perkins, Bacon \& Co.'s premises in Whitefriars Strect, where the postage stamps were printed. Such exaggerated statements of the damage caused by the fire were published in "The Times" of the following day, that the firm sent a letter \({ }^{7}\) to the Editor of the paper to say: "so far from all the Government plates and dies being destroyed, all the Postage Dies and Excise plates and nearly all the Postage plates are preserved uninjured, as also are all our private plates and there is no danger of the public being in any way inconvenienced by this calamity." Four days later, after they had made a more careful examination, they sent out a circular \({ }^{8}\) to their customers, in which they said: "Almost all the damage was in the Govermment Department of our business, but even there, not a Postage or Excise plate or die was lost or injured." It appears from the letters \({ }^{9}\) we have found, the number of sheets of paper, in various stages of printing that were destroyed was finally ascertained to consist of 12.4008 shects of the One Penny value and 4,687 sheets of the Two Pence. As regards the other damage done we have no record, either of its nature or extent, but the hasurance Companies refused to recognise the chaim of the Board of Inland Revenuc for \(£_{1} 67\)
```

1 Appendix C (2I2, 213).
2 Ibid (214).
3 Ibid (215).

```
4 Appendix G.
```

4 Appendix G.

* Appendix C (2IG).
* Appendix C (2IG).
* Appendir G

```
```

* Appendir G

```
```

a Appendix C (220).
${ }^{8}$ Ibid (220a).
${ }^{8}$ Ibid (223. 228)

5s. od. for the cost of the 128,695 sheets of watermarked paper destroyed. ${ }^{1}$ Perkins, Bacon \& Co. obtained the permission of the Board² to print the " Paper Labels," "Permits" and "Certificates," they supplied to the Inland Revenue department, at Messrs. Whitings', of Beaufort House, Strand, pending the repairs to their own premises.

In consequence of the fire Mr. Ormond Hill suggested to Perkins, Bacon \& Co., that they should get a number of fireproof safes in which the dies, plates and printed stamps could be kept. The firm after making a number of enquiries, wrote to Mr. Hill on May 13th, $1857 .{ }^{3}$ giving him particulars of the cost of the safes that would be required and they said: "From the foregoing, you will see that the expense of wrought iron safes would be very great, and as not only the room but the roof of the building are now to be fireproof, we do not ourselves see the necessity of such expenditure, for even supposing another fire to occur it would be almost impossible that it should extend beyond the floor in which it originated, and consequently would be very easily subdued." Whether any safes were eventually purchased we are unable to say:

It was this fire that was responsible for the erroneous statements made in the two standard works on the stamps of Great Britain'that the early records of Perkins, Bacon \& Co. had been destroyed. These were not kept in the building in Whitefriars Street, but were stored in the comnting-house department in 69 . Fleet Street, which was fortunately wholly uninjured by the disaster.

## Alterations to the Premises of Perkins, Bacon \& Co.

When the premises were rebuilt after the fire, accommodation was provided in the Printing Room reserved for the stamps, for thirty-one presses, although only eighteen were needed up to the year 1860 . In 1865 more space being required for gumming the shects, an addition of two stories was made to a portion of the building at a cost of $£_{5} 60$. By I870 the space provided in the Printing Room was exhausted and a new wing was added to the building at an expense of $£ 2.300$ (including the cost of an injunction in chancery obtained against the firm by a Chimney Sweep, who complained that the height of the new buildings obstructed his light). This alteration provided space for seven more printing presses, and was the last that was carried out. ${ }^{5}$

## Specimen of the Two Pence Value supposed to be Printed in Black Ink.

On April 3rd, 1857, Mr. Ormond Hill submitted to Perkins, Bacon \& Co., a specimen of the Two Pence value, which was supposed to be printed in black ink. It is evident from Mr. J. B. Bacon's reply on April 8th, ${ }^{6}$ that the stamp was originally printed in blue, but someone had carefully painted a coating of black ink round the Qucen's head, for what purpose as Mr. Bacon said, could not be divined. It is the first copy of a " faked " stamp that we know of and the harbinger of a host of bastard specimens that have plagued philatelists since the earliest days of stamp-collecting.

[^93]Decision to Insert Letters in all Four Corners of the Stamps.
In the latter half of $\mathbf{1 8 5 7}$, the suggestion made by Mr. Robert Smith five years before, ${ }^{1}$ of inserting letters in the upper corners of the stamps in place of the crosses, was once more raised. Messrs. Wright and Crecke ${ }^{2}$ state that a proposal of this kind was made by Mr. J. R. Bettesworth, the Postmaster of Amersham, on July Irth, 1857, who "forwarded in his letter a sheet of paper divided into spaces resembling the postage stamps, lettered to illustrate his suggestion, thus:-

and so on throughout the shect."
It was at once seen that if this plan was adopted a large number of the stamps on the sheet would have the same lettering, so it was determined, as originally suggested by Mr. Smith, to repeat in the upper corners, in reversed order, the two letters the stamps bore in the lower comers. By this means every one of the 2.40 stamps on the sheet had a different lettering.

On November 16th, 1857, the Postmaster-General asked the Board of Inland Revenue to have this alteration carried out on the stamps and the Board communicated with Perkins, Bacon \& Co. on the subject. On December 19th ${ }^{3}$ the firm sent Mr. Henry Gill, the workman who did the punching of the letters on the plates, to see Mr. Ormond Fill on the matter. It was subsequently determined, in addition to having letters inserted in the upper corners to have the plate number engraved at either side of each of the 240 impressions forming the printing plate. On January 2nd and 7th, 1858.4 Perkins, Bacon \& Co. wrote to Mr. Ormond Hill respecting the cost of these alterations and they subuitted an estimate. On learning that it was proposed to make use of the plates afteady made, they modified their estimate on January 19 th. ${ }^{5}$ and offered to sacrifice the "roller dies" they had

[^94]in stock for the sum of eighteen guineas and to make all the alterations for a " charge of one half per cent upon the amount of each future account for postage stamp printing matil the expiration of our contract." This offer the Board of Inland Revenue accepted. ${ }^{1}$

## Esshi of the One Pensy Value, With Letters in the Four Corners.

Messrs. Phitbrick $\mathbb{N}$ Westoby2 give particulars of an interesting essay of the One Penny with letters in the four corners, which they state was printed in 1858 . We have not seen a specimen of this, so give their description verbatim: "When in i858 it was under consideration to suppress the Maltese crosses in the upper angles, and substitute letters in their places, and also to insert the number of the plate on the face of each stamp, specimens were printed to show the effect of the proposed alteration. For this purpose a roller impression of Die l. of the One Penny (Heath's original head) was taken, from which the Maltese crosses were removed and an assumed plate number of three figures (123) was engraved in the reticulated framework, the figures being larger and thicker than those afterwards adopted. The corner blocks of the plate were filled in with Egyptian or block letters of a smaller size than those subsequently introduced. The impression was in the ordinary red colour, and was taken off on paper watermarked with 'large crown' inverted. This essay is of exceptional interest as an example of a stamp printed from Die 1., on ' large crown ' paper, and with letters in all the four angles."

## The New Die for the Two Pence Valle.

On March iSth, $1858,{ }^{3}$ Perkins, Bacon \& Co. wrote to Mr. Ormond Hill to say that as the dic of the Two Pence partook of the same weakness as the Original Die of the One Pemy, and as it had been decided to make alterations in the stamps, they thought it desirable in every way that a new die for the higher value should be prepared from the same original as that they were then using for the One Penny stamps. so that the two dies should be exactly alike. The Board of Inland Revenue gave their consent to this proposal and the Engraving Book ' of the firm shews that the New Die of the Two Pence was finished on April Sth of that year. The new die was made by removing the words "oxe pexiy " from a roller impression of the new die of that value and then taking a transfer from this on to a flat piece of steel on which the words " Two peace" were engraved by hand in the vacant space. The die, like the original one, had the crosses in the upper corners. (Illustration 51). The New Dic measured 56 by 67 mm . and the words " NEW DJE "- " J" were engraved, in two lines of Roman capitals, " direct "above the design, so that in the impressions of the die, the lettering is found " reversed." The number " 3 t" was also engraved " direct " below the design, so that in the prints taken from the die, the figures appear in a " reversed" form.

[^95]Proof Impressions of the New Die of the Two Pence Stamp.
The following impressions are known of the New Die, none of which shews the white lines under "postage" and above the value, which as before stated, were added on the roller impressions used to make the plates:-
1.-On thin white paper, mounted on soft, white card ; with "New dje" ——" J " and " $3+$." reversed.

2d., black.
II.-On white card; with "NEW DJE "--" J" and " 34 ," reversed uninked. Impressions taken in February, IS71. ${ }^{1}$

2d., black.
2d., deep blue.
2d., orange.
IlI.-On thin, hard, yellowish white wove paper ; with " New dje "--" J" and " 34 ", reversed, as fur Division 1. Impressions taken in February, 187I. ${ }^{2}$

2d., black.
2d., ultramarine.
2d., chrome-yelluw.
2d., pale sage-green.
zd., carmine-rose.
2d., brownish orange.
2d., deep lilac-rose.
IV.--Same as last, but printed on yellowish white wove paper, watermarked with small star. Impressions taken in 1878.

2d., mauve-pink.
2d., deep mauve-pink.
2d., dull rose-pink.
The Plates made from the New Die of the Two Pence in 1858 and 1859.

As soon as the New Die of the Two Pence was hardened, six impressions were taken from it on a roller. The crosses in the upper conners of these impressions were then removed and the Plate numbers $7,8,9$, IO, II and 12 were engraved in small figures at either side of each of the impressions, respectively. The Engraving Book ${ }^{3}$ notes that this roller was completed on April I3th 1858, and on May I8th following the first plate from the New Die, nmmbered " 7 ", was finished. The " lmprimatur" shect of this plate was registered on June IIth, I858. The numbering of the plates for the Two Pence was continned on from those made from the Original Die and not started afresh as in the case of the One Pemy value. Besides the alterations named, it was decided to change the type of the corner letters of the stamps, from koman capitals to sans-serif capitals. (Illustration 52). In I859. on June 25th, and November $2 q^{t h},{ }^{4}$ respectively, Plates 8 and 9 were finished and the " lmprimatur " sheets of these plates were registered, respectively, on July 7 th, I859, and March

[^96]Ifth, 186r. Why thite wats such a long interval before Plate 9 was registered. we are unable to say: There is no doubt about the date in the Engraving Book being correct, so possibly the date given for the registration of the "Imprimatur" sheet is an error for " I S60." Printing of the stamps from Plate 7 commenced on July Igtlh, 1858 , and during this month the General Post Office despatched the following "Circular to all Postmasters twho obliterate Postage Stamps."

## " Alteration in the Sistem of Lettering the Corners of Postage Labels.

" In order to prevent frauds, which have sometimes been attempted upon the Revenue, by the use of Postage Stamps, formed by joining together clean portions cut from labels, which have previously passed throngh the post, the letters which now appear at the lower corners of the Postage Labels will in future. be repeated at the upper comers ; transposed. however, so as to afford still greater security, thus :-

An illustration to represent a postage stamp. done from a wood-block. was printed here. which shewed the Queen's head on a background of horizontal lines. enclosed within an upright rectangular frame with the letters 'BA' in the upper corners. ' AB ' in the lower corners and the number ' I23' in small figures at cach side. This was evidently copied from the Essay of the One Penny we have already described. ${ }^{1}$

On the right and left-hand side of each Label, the number of the Plate from which it is printed will appear in small figures as shewn above.

If any Postage Label passing through your office, should appear to have been formed by pieces cut from separate stamps, you will be careful to ascertain whether the letters at the comers are arranged in the manner above described, and whether the number on each side of the Label is the same. Should any difference appear in these respects you will treat the letter in the manner laid down in the I joth Rule of Instructions to Postmasters.

Twopenny Labels with these alterations will shortly be issued. and the change will ultimately be extended to the Penny and other Labels.
[Signed] Rowland Hill.
July 2 the 1858 . Secretary."
The copy of this circular in the archives of the Gencral Post Office has written at the top: "Circulated 29th, July; 1858."

The number of sheets of Two Pence stamps printed in all from Plate 7 was to,000 and from Plate 8, 66,000. ${ }^{2}$

## Plate 65 of the One Pexily incorrectly laid dolia for perforation.

On February 13th. IS6i, ${ }^{3}$ Mr. Ormond Hill wrote to Perkins, Bacon \& Co. to say that " the impressions of the sheets printed from Plate 65 are found to be so much out of square that they cannot be perforated. The plate must therefore be rejected as unfit for use." Two days later he wrote to request that the plate should be "partially defaced without delay" in order to prevent its being brought into use again by mistake. This letter is endorsed on the back in pencil " to be filed at Fleet

$$
{ }^{1} \text { Ïde p. } 158 . \quad{ }^{2} \text { Appendix C }(2+7) . \quad{ }^{3} \text { Ibid }(2+3) . \quad \text { Ibid }(2+4) \text {. }
$$

St.," so no doubt the plate was defaced in this way. On February i Sth, ${ }^{1}$ Perkins, Bacon \& Co. wrote to Mr. Ormond Hill in reply to his communications about Plate 65 ; "that from some cause which we have been unable to ascertain, the upper row of stamps were laid down upon a slight angle, and having started wrong, he [Mr. White, the transferrer] continued the same error throughout ": they added that the plate had been taken from the Press and should be cancelled. On March Ifth. ${ }^{2}$ Mr. Ommond Hill wrote "I am happy to say that we have succeeded in perforating the sheets printed from Plate 65 sufficiently well for them to be issued. The operation gave us a great deal of trouble: but entailed the spoilage of only 375 sheets out of the 10,000 impressions from the plate which had to be dealt with." Mr. 1Iill may have made use of the number 10,000 as a "round " figure, as Messrs. Wright \& Crecke ${ }^{3}$ give the quantity of sheets printed from this plate as 10,600 .

## Reserve Plates 15, i6 and 17 of the One Penny <br> VALUE USED FOR PRINTING STAMPS.

Plate 68 of the One Penny, Retouched Die, registered on January i8th, I858, was the last to have the crosses in the upper corners of the stamps. Between this date and March Ist, I86 $\downarrow$, when the printing of the One Penny stamps with letters in the four corners commenced, the stock of plates on hand was gradually used up. In the spring of 1862 , when Perkins, Bacon \& Co. had not a sufficient number of plates ready of the four-lettered variety to commence the printing of these stamps they found themselves getting short of plates of the old two lettered kind. The consent of the Board of Inland Revenue was then obtained for the use of three of the Reserve Plates numbers 15, 16 and 17 , which had been made in $1854-55$. But before the first two of these could be used the perforating marks upon them had to be altered. We have already explained that these two plates had the first form adopted for the perforating marks engraved on the top and bottom margins, and that commencing with Plate 5 of the Retouched Die, registered on February Ist, I855, that plate, and all those subsequently made had perforating marks of a different kind. When Reserve Plates 15 and 16 came to be used for printing stamps in 1862 , it was therefore necessary to alter the old form of perforating marks and we learn from the Engraving Books that the alteration in the marks was made on April 5 th of that year. Reserve Plate 17, which was registered on November 12th, 1855. of course, needed no alteration. These three Reserve Plates were in use from April, I862, until March Ist, 1864 , and from the Statement ${ }^{6}$ of the number of sheets produced from the plates at press on November 22nd, 1862, we have before had occasion to refer to, the quantity of sheets printed from them up to that date was as follows :-

Reserve Plate I5 71,200

| ., | ". | 16 | 76.300 |
| :--- | :--- | :--- | :--- |
| ., | ., | 17 | 41,000 |

${ }^{1}$ Appendix C $(2+5)$.
2 Ibid ( 246 ).
3"A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Creeke, Junr. London. 1899 . p. 245 .

- Vide p. $13+$.
${ }^{5}$ Appendix G.
${ }^{6}$ Appendix $C(2+8)$.

There is a peculiarly interesting feature comected with the use of Reserve Plates is and 16 , inasmuch as the stamps printed from them are the only instances of those found with Alphabet $11,{ }^{1}$ printed in rose-red or carmine-red on pure white paper. This remark does not apply to Reserve Plate 17. as the stamps on this plate have the lettering of $\mathrm{Al}_{\mathrm{p}}$ habet III. (Illustration 44).

## The first Plates made of the One Penny witif letters IN THE FOUR CORNERS.

As regards the One Pemy with letters in the four corners and with the plate numbers added to the stamps, we have seen that it was decided to make use of the plates already on hand, ${ }^{2}$ before proceeding to carry out the alterations in this value. The number of Two Pence stamps required, compared with that of the One Penny, was a mere bagatelle and it was quite easy to make changes of this kind in that value. But for the One Penny it was necessary to get up a stock of some twenty plates, so that once the change was effected a continuance of the supply of the same varicty of stamp would be assured.

The Engraving Book ${ }^{3}$ shews that as early as April 9th, 1858 , the first roller for the One Penny with seven impressions, numbered 69 to 75 was finished. Nothing further was done, however, until December, 1860, when on the tenth of that month Plate 69 was completed. In January, February, May and September, 186i, Plates 70 to 78 . inclusive, were completed, No. 2 roller with impressions numbered 76 to $\mathrm{Si}_{\mathrm{I}}$, having been engraved on April 29th of that year. Of these plates, numbers 71 to 74 were registered on March 14th, 1861, Plates 76 and 78 not until February 7 th, 1863 , when Plates 79 to 81 were also registered. These were followed by Plates 82 to 86 on March Ist, i864, after which the making and registration of the plates was proceeded with rapidly.

## No "Imprimatur" sheets registered of Plates 69 70, 75 and 77 of the One Penny value.

Plates 69. 70, 75, and 77 were never registered. Messis. Wright and Creeke state that the first of these was not registered " on account of imperfections" that Plate 70 was "rejected on account of a flaw in the steel" and that Plates 75 and 77 were " incorrectly laid down for perforation."

In his letter to Perkins, Bacon \& Co. of February 15th, $186 \mathrm{I},{ }^{5}$ Mr. Ormond Hill said " I am sorry to say that in new plate No. 69 the rows of stamps are so far oblique that we cannot perforate the impressions from it. I have to request therefore that this plate may be condemned like plate 65 " and lie asked that the two plates should be " partially defaced without delay" to prevent them being used again by mistake. In their reply three days later, ${ }^{6}$ Perkins, Bacon $\mathbb{E}$ Co. gave the same reason for the

[^97]fault in laying down Plate 69 , as they did for Plate $65^{1}$ and they added " Both have been taken from the Press and shall be cancelled." Plate 69 was, therefore, no doubt, defaced at Perkins, Bacon \& Co.'s premises by a file at the same time as Plate 65 .

The late Mr. W. A. S. Westoby writing in Octuber, ${ }^{2}$ I 88 I , made a curious misstatement about Plate 6g. He said " Plate No. 69 was furnished with the letters in the upper angles, but not with the numbers on the stamps, and was never printed from." The entry in the Engraving Book of the roller used for the plate distinctly contradicts Mr. Westoby's assertion, for it proves that the impressions on the plate did bear the number " 69 ."

The only reference to Plate 70 we have found is in Mr. Ormond Hill's letter of February I5th, 1861, ${ }^{3}$ where he said " The heads in Plate 70 are by no means accurately placed: but the inaccuracy is not so great but that we can manage to perforate impressions from it." Later on the plate must have been found defective and it was condemned.

As regards Plates 75 and 77 , the only new information we have found of these is contained in a letter of Mr. Ormond Hill to Perkins, Bacon \& Co., dated February 7th, $1863 .{ }^{4}$ in which he wrote: "I am very sorry to be under the necessity of rejecting the two Postage plates on accomnt of the irregularity of the placing of the heads." No mention is made in the letter of the numbers of the plates, but the reference can only be to Plates 75 and 77 , impressions from which were no doubt submitted at the same time as those of Plates 76 and 78 to SI, which were all registered on the same day as Mri. Hill condemned Plates 75 and 77.

Mr. Hill also said in his letter: "I am glad to hear that you have discovered the cause of the defects and are taking prompt measures to prevent their recurrence," and the further contents of the letter shew that Perkins, Bacon \& Co. were making enquiries about the exact dimensions the sheets of stamps should measure, with the view of having a " ratchet " gauge made by Messis. Holtzapffel \& Co., for attachment to the transferring press. ${ }^{5}$

Of Plates 69,70 and 75 no authentic examples are known, but of Plate 77 , four BA
unused and two used specimens exist. One of the unused, lettered AB, is in the Royal CA
Collection ; the second, lettered AC , which came from the same sheet as the former, was purchased and sold by Messis. Chas. Nissen \& Co., Limited ; ${ }^{6}$ the third, Jettered AB
BA is in the "Tapling Collection" at the British Muscum ; and the fourth, which was formerly in the collection of the late Mr. William Hughes-Hughes, is in the LL
"Ferrary Collection." Of the used copies one is lettered LL and is obliterated with -the number " 80 " in a circle, with lines surromending the circle outside, which was one of the cancellations used in the "E.C.", London Head Office between 1856 and

```
1 Vide p. 161.
* Alfred Smith & Co.'s Monthly Circular. October, 1881. p.75.
{ } ^ { 3 } \text { Appendix C (244).}
4 Ibid (2+9).
{ } ^ { 5 } \text { Vide p. 59.}
6 The Brilish Philatelist. London. 19Iy. Vul. N11. p. 59.
```

1874. ${ }^{1}$ The specimen in question was sold at the " Daily Telegraph stamp auction in aid of the Belgian Relief Fund," held in London on September 28th. 1915. The other specimen. used with a copy of the Four Pence Plate I (really Plate 3), with small letters in the corners, was submitted to the Expert Committee of the Royal Philatelic Society: Lundon in 1920. Both stamps still remain on a portion of the envelope or letter-sheet they franked and are obliterated with the number " 15 " surrounded by heary bars, which was also a cancellation mark used in the London

## IP

Head Office. ${ }^{2}$ The One Pemy value is lettered PI. Both the used specimens, which eame from lower rows of the sheet than the unused copies, are very badly centred as regards the perforation and in this respect confirm the reason given for the rejection of the plate. The existence of the six specimens proves that a shect or more must have been printed and perforated, no doubt as a trial, after which the plate was condemned as unfit for use. These trial stamps may then have been mixed in with the ordinary stock and put into circulation in the usual way, or they may have been put on one side and, perhaps after an interval, used by some official or other individual who came across them. The correspondence we have reproduced, shews that trial sheets were also printed and perforated of the three other rejected plates, numbers 69,70 and 75, and it is possible that specimens may yet be found of these : in fact, as regards Plate 70 , Messrs. Philbrick \& Westoby ${ }^{3}$ state, on what authority we know not, that impressions were "struck off for registration; but owing to a defect the plate was defaced before it was put to press, and the few specimens struck off were not issued to the public, and were either kept in the office or distributed amongst amateurs." In the late Judge Philbriek's interleaved copy of his work on the "Postage and Telegraph Stamps of Great Britain," to which we have before referred, ${ }^{4}$ we find the following note in his handwriting about Plate 70: "Plate rejected flaw in steel. I have seen proof from it though, top lelt stamp. Coll. Stainforth." ${ }^{5}$ In I89I, ${ }^{6}$ Judge Philbrick is said to have seen two used perforated specimens of Plate 70, and in November, 1898 , another supposed copy was the subject of an action for the recovery of the stamp at the County Court of Sheerness. ${ }^{7}$

[^98]${ }^{6}$ Alfred Smith \& Co.'s Monthly Circular. October. I891. p. 75.
${ }^{2}$ Ibid December, ISg8. p. 106.

The late Mr. H. L.' Estrange Ewen, ${ }^{1}$ mentions that " copies of Nos. 70 and 77 are known, evidently from proof sheets, as they are watermarked 'Large Crown' of 1855 ." We can say nothing about Plate 70 , as we have never seen a specimen, but as regards the six copies we describe of Plate 77, we have examined every one of them and they all have the " Large Crown " watermark of 186 r .

The so-called interted corver letter " $S$ " on the
One Pexyy value.

## AS

The stamp lettered SA on Plate 8I is mentioned in some works and catalogues as having the upper " $S$ " inverted. Curiously enough we have seen a specimen of the same lettered stamp from Plate So, which at first sight appeared to have the upper "S" inverted. Mr. L. Arthur Burd and ourselves have made a prolonged examination of these stamps and we have come to the conclusion that the so-called variety with inverted " $S$ " does not really exist. The inverted appearance of the letter is due in our opinion to different inkings of the plate, as we have seen two specimens of the "A S-S A " stamp from Plate So, one lreavily inked, on which the upper " $S$ " appears inverted, the other clearly printed, on which the letter seems normal. We have also examined the stamp of this lettering on the Imprimatur sheet of Plate 81 and we camnot admit that the appearance of the upper letter " $S$ " affords any real proof that it is inverted. For the letter to be inverted it must be remembered that the punch must have been inserted in the holder ${ }^{2}$ in a wrong position, and if this had been done every letter " $S$ " on the plate would have been inverted and not a single one only. We have recently been shewn specimens from Plates ion, II8, I23, I40, I47, I50 and I65, which were thought to have the letter " $S$ " inverted, but we think that the inverted appearance of the letter on all of these can be accounted for by either overinking or defective punching of the letter.

## The date of issue of the One Penny stamps with letters in the four corners.

On February 22nd, ISG4, ${ }^{3}$ Mr. Ommond Hill wrote to Perkins, Bacon \& Co. to say that it had " been decided to discontinue the issue of the present two corner lettered One Penny Postage labels and to commence that of the four corner lettered stamps as soon as the latter kind can be produced at a sufficient rate to meet the demand, and considering the desirableness of gradually replacing our large stock with the new sort: in the meantime I have to request that as soon as there are fourteen of the new four-lettered plates ready they may be put to press and worked simultaneously with as many of the old kind as may be necessary to maintain the regular supply, that afterwards each new plate be registered and put to press as soon as completed, an old one being withdrawn on each such occasion, and that as soon as eighteen new plates be at work all of the old kind be withdrawn." In conformity with these instructions Perkins, Bacon \& Co., commenced printing with

[^99]fourteen of the four-lettered plates on March Ist, IS64, and by the end of the month this number lad been increased to eighteen. The stamps are believed to have been first issued to the public on April Ist, that year, (Illustration $\mathrm{f}^{6}$ ) and during that month four more plates were registered and put to press.

## The so-called Proof of tie One Penny of 1863.

The late Judge Philbrick, k.C., in an article written in ISGS" on the "Proofs and Essays of Great Britain," said: "In I863. a trial sheet of the One Penny, letters in the four angles, was printed off, an example from which we have. It is finely printed in very red carmine, and lettered AAAA in the four angles. There is nothing to distinguish it as a proof, and except from the source from which it came into our collection, we should hardly have supposed it to be such." No mention is unfortunately made of the plate number, but we think, there can be no doult that the specimen came from one of the sheets printed at the time the "Imprimatur" sheets were taken of the plates registered in 1863 , and was not therefore a proof in the true philatelic sense of that word, as any surplus sheets printed on those occasions were usually perforated and put into the ordinary stock of stamps. Any specimen of the One Penny with letters in the four corners used prior to Mareli ist, i864, must have the same origin.

## The Plate Number at the corners of each sheet exclosed Within <br> a circle and the "Currext Number" added on tile top and bOTTON MARGINS.

Commencing with Plate 98 of the One Penny value. which was finished on Marels 2nd, 1865 . ${ }^{2}$ the plate number at each corner of the sheet was enclosed within a small circle and what was termed the "official or current number," on this plate " Io6." was added above the interval between the first and second stamps of the top row and repeated under the interval between the last two stamps of the bottom row (Illustration 52 of the Two Pence value).

Messrs. Philbrick \& Westoby ${ }^{3}$ state that "The reason of this alteration was, that between the dates of the registration of Plates Nos. 97 and 98 Messrs. Perkins, Bacon \& Co. were employed by the Inland Revenue Department to print certain fiscal stamps comected with the Registration of Deeds in Ireland, and the plates for these stamps were entered in the plate-ledger kept by the department along with those of the postage stamps. For the future the account was kept in double columns, the number in the first column representing the consecutive number of the plates, whether for postage or fiscal purposes; that in the second, the number of the plate of each particular species of stamp, this latter being that which is of any interest for our purpose, inasmuch as it corresponds with the numbers inserted in the framework of the stamps themselves."

The first plate of the Two Pence to have the corner numbers enclosed within small circles and the "current" number added was Plate 12, which was finished on

[^100]September I4th, 1867. ${ }^{1}$ the "current" number on this plate being " 123 ." Messrs. Wright and Creeke ${ }^{2}$ state that Plates 7,8 and 9 of the Two Pence also had the numbers enclosed in circles, but this is an error on their part. The plan of enclosing the corner plate numbers in circles and adding the current numbers was continued on all the subsequent plates of the One Penny and Two Pence values made by Perkins, Bacon \& Co.

The so-called Reprint of the One Penny black.
Messrs. Philbrick \& Westoby ${ }^{3}$ and Messrs. Wright \& Creeke state that in $186_{4}$ an application was made to the Board of Inland Revenue for specimens of the One Penny black, for some of the younger members of the Royal Family who had commenced to form a collection of postage stamps. As no spare copies of this variety were then available, a few impressions were printed in black on the " large crown" watermarked paper, from one of the plates of the Retouched Die of the One Penny with crosses in the upper conners. Plate 66, which had been withdrawn Irom use on March I7th, 186.f, and sent to Somerset House was selected for this purpose, and according to Messrs. Wright \& Creeke only four sheets were printed, all of which had the watermark inverted. A writer in the Stamp Collectors' Fortnightly states that five sheets were printed, "that one sheet was handed to the Prince of Wales, one to the Duke of Connaught, one to Princess Clementine the daughter of the King of Belgium, and one to the Emperor of Germany. The fifth sheet was kept at Somerset House." We believe that there is little or no truth in this list of the recipients of the sheets.

We have found no mention in Perkins, Bacon \& Co.'s books or in their correspondence of $186+$ of any special printing in black of the One Penny value, but we have come-across a letter of Mr. Ormond Hill of September Ist, $1865 .{ }^{6}$ in which he said: "Will you kindly have a proof, in black, taken for me from the accompanying plate. Please send me all impressions which may be taken as I am not authorised to let any go elsewhere. Please not to take trouble to get a perfect impression as that is of no consequence. Please return the plate by bearer." We think that this letter can only have reference to the so-called reprint of the One Penny black and that this was made in September, I865, and not in the year IS64, as has formerly been believed.

Nothing is said in the letter about taking impressions from the plate in the colour of the One Penny then in use (carmine-rose), but so many instructions were conveyed verbally between the Inland Revenue and Perkins Bacon \& Co. that we do not attach much importance to this omission. What is certain is, since specimens are known, that at the time the impressions were taken from llate 66 in black, a few were struck off from this plate in carmine-rose, and like those in black were left imper-

[^101]forate. The watermark, however, on the carmine-rose impressions is found in its normal position. The specimens in the latter colour are true reprints, minus the perforation, but those in black are fancy impressions, inasmuch as they are printed from a plate of the Retonched Die and are on paper watermarked with large crown.

## Experiment made of Coating the Sheets of Paper before they were used for Printing.

In October, $1865,{ }^{1}$ an experiment was tried of putting a preparation upon the surface of the paper before the stamps were printed. The trial was made on the application of a Mr. Russell, who had convinced the Post Office that it was " quite possible and tolerably easy to remove the obliterating mark from [the] stamps repeatedly, so as to make one stamp pass again and again." In order to make this impossible, Mr. Russell proposed that the sheets should be covered with a certain preparation of his before they were printed, but what the exact nature of this coating consisted of we are unable to say. The suggestion was apparently found to be uscless, owing no doubt, to the fact that the sheets had to be wetted before they were printed or to the coating on them affecting the colour of the stamps.

An experiment was also made later on in the same month ${ }^{2}$ with the view of having the sheets gummed on both sides, but, as in the former instance it was found unsuecessful.

## Machine for Danping and Affixing Postage Stamps Invented by Messrs. Gill \& Bird.

In April, I866, ${ }^{3}$ Mr. Ormond Hill wrote to Perkins, Bacon \& Co. to say that he had received an application from Messrs. Gill \& Bird of Ipswich for some gummed sheets of plain paper perforated in the same manner as those of the One Penny stamps " to enable them to experiment with a machine for damping and affixing Postage Stamps, which they say they have contrived and patented." A number of sheets of this kind were forwarded to them on May IIth, I866. ${ }^{4}$ but we have no further particulars as to the out-come of their experiment.

## Names of Firms, \&ic., Printed on the Stamps.

In 1859, permission was granted to the Oxford Union Society to overprint the initials of the society on the face of the One Penny stamps. The overprint, which was applied in red, consists of the letters " O.U.S." between two wavy lines. The letters are usually found reading upwards, but specimens are known on which they read in an inverted direction. In 1869, the Society was informed that the overprinting of the name could only be allowed at the back of the stamps, and a change was made to conform with these instructions.

Meanwhile in 1867 permission was granted to a few large business firms to have their names printed at the back of the stamps. The printing in each instance was done by Perkins, Bacon $\& C$ Co. from a stereotyped form containing the name repeated

```
1 Appendix C (253. 254).
2 I bid (255).
3 Ibid (256, 257).
4 Ibid (258).
```

240 times, for which they made a charge of $£ 5$. A further eharge of $5 /$ per hundred sheets was made for printing the name and this was afterwards raised to 10 - for any quantity up to 200 shects and for every 100 sheets over that number 5 - had to be paid. ${ }^{1}$ The first firm to lhave its name printed at the baek of the stamps was Mfessrs. J. \& C. Boyd \& Co. in February, 1867, ${ }^{2}$ Messrs. W. H. Smith \& Son, followed in $A^{\text {April }}{ }^{3}$ and Messrs. Copestake, Mfoore $\&$ Crampton in November, ${ }^{\text {s }}$ of that year. These were followed by the Oxford Union Society in January, $1870,{ }^{5}$ and by the Great Eastern Railway Company in October, 1873. ${ }^{\text {. }}$ The object in having the names printed on the stamps was to prevent pilfering, as the stamps could not then be exchanged for money at any post office without exeiting suspicion. The plan was afterwards abandoned in favour of one patented by Messrs. J. Sloper \& Co., Limited, of London, by which names or initials are perforated on the stamps. This system is still in vogue and in the case of the One Penny stamp, when intended for use solely for receipt purposes, it is permissible for names or initials to be printed on its face.

## Proof sheets of One Penvy and Two Pexce stamps for the Paris Exhibition of 1867.

On March 28 th, $1867,{ }^{7}$ Alr. Ormond Hill wrote to Mr. J. P. Baeon to say that " The Board has deeided to supply to the General Post Office for Exhibition at Paris a proof sheet of each variety of Postage stamp. Will you have the goodness therefore to have a proof taken upon plate paper of the newest id. plate and the newest 2d. plate and send them to me for the purpose named. I send instructions to Mr. Peacock on the matter." On April 15 st, $^{8}$ Mr. Hill acknowledged the receipt of four proof sheets, viz., one in blue and one in black from Plate 9 of the Two Pence and one in red and one in black from Plate 103 of the One Penny. These proof sheets were printed on suft, white eard, which shows the beanty of the engraving, perfectly, and they were left imperforate. It is evident from the coneluding paragraph of Mr. Hill's second letter: " 1 will endeavour to prevent the twopenny black proof from being sent forward for exhibition," that Mfr. Bacon had pointed out that this value had never been issued in black and he suggested that the black proofs should not, therefore, be exhibited.

Mr. Pearson Hill, who was at that time, Under Secretary of the Post Office, was instrumental in arranging the Post Office exhibit for the Paris Exhibition, and under his superintendence, the exhibit became a representative one of the machines, apparatus and material used in the postal service of Great Britain. Amongst the objects displayed, in a large glass frame, were a number of specimens of the adhesive and embossed envelope stamps, and copies of the "Mulready" wrappers. ${ }^{\text {" }}$ The adhesive stamps included blocks of twenty of the One Pemny black, One Penny rose and Two Pence blue, imperforate, whieh had been cut from the proof sheets Mr. Ormond Hill received on April 1st. No mention is made in the philatelic joumals of the day, of any examples being on view of the Two Pence black, so Mr. Bacon's advice not to exhibit this particular proof was accordingly followed.

```
    1 Appendix C (279). }\mp@subsup{}{}{4}\mathrm{ Ibid (270). }\mp@subsup{}{}{7}\mathrm{ Ibid (260).
    2 Ibid (259). }\mp@subsup{}{}{5}\mathrm{ Ibid (279). }8\mathrm{ Ibid (261).
    3 Ibid (263). }\mp@subsup{}{}{6}\mathrm{ Ibid (305).
    ' Le Timbrophile. Paris. 1867. Vol. III, p, 26&. Le Timbre-Poste. Brussels. I867.
Vol. V. p.60. The Stamp-Collector's Magazine. 1867. Vol. V, p. 105.
```


## Experiments for a New blue colour for the Two Pence stamp.

On April 18th, I867, ${ }^{1}$ Mr. Ormond Hill wrote to Perkins, Bacon \& Co. to say that the General Post Office complained about the non-fugitive character of the ink used for the Two Pence value, that specimens of the stamps had been sent to him from which the obliterating marks had been effectually removed and that the Post Office authorities requested that a more fugitive ink should, if possible, be used for the future. Mr. Hill suggested that Perkins, Bacon \& Co. should endeavour to obtain a more fugitive blue ink and when successful that they should send him specimens to submit to the officers of the General Post Office.

A number of trials with different blue inks were carried out by Perkins, Bacon \& Co., and for these experiments they made a flat die from the roller impression of the One Penny value, with Plate number " 75 ." This particular roller impression was doubtless chosen, as the plate made from it had been condemned as unfit for use, ${ }^{2}$ and no stamps bearing this number lad been printed for issue to the public. The die measured 52 by 62 mm . and before any prints were taken a portion of the right upper comer was erased from the design, so that the left upper corner is missing in the printed impressions (Illustration +2 ). The Royal Collections contains the folluwing specimens taken from this die :-

On thin hard, yellowish white wove paper.
Id., bright blue.
Id., Prussian blue.
The first has in pencil at the foot: "Ink as heretofore used. 3 June, 67 " (Illustration 42 ).
On deep blue, diagonally laid paper.
Id., red.

Examples in new blue inks were submitted to Mr. Ormond Hill in May, 1867, some of which he forwarded to the Post Office. On June 5th, he received a reply from Mrr. Pearson Hill, ${ }^{3}$ who said that he did not consider the new colour was sufficiently fugitive and he fully explained the tests to which he had put one of the specimens. On receipt of this letter Mr. Ormond Hill wrote to Mr. J. P. Bacon, ${ }^{\text {a }}$ telling lim that the Post Office did not consider the last specimens he had received from him were fugitive enough, that the " dark ones" first sent had not been forwarded to the Post Office, that he found the latter were " not fugitive to Benzole " (sic) and he sent him a specimen he had operated upon.

At the end of June, two specimens of a new blue ink were sent to Mr. Ormond Hill. On the twenty-fifth of that month he wrote:5 " The ink of the two experimental blue impressions last sent to me appears to be sufficiently fugitive," but he added that a trial would have to be made on a larger scale and he suggested that a dozen or twenty sheets of the Two Pence stamps should be printed in this ink and sent to him. On the 23rd July a specimen in another blue ink was sent to Mr. Hill and three days later he wrote to say " "I am a fraid the blue ink, a specimen impression of which you sent me on 23rd inst, is quite a failure. It is scarcely moved or affected by any treatment with benzole." (sic).

| 1 Appendix C (262). | ${ }^{3}$ Appendix $\mathrm{C}(20.1)$. | ${ }^{5} \mathrm{Ibid}(206)$. |
| :--- | :--- | :--- |
| 2 lide p. 163. | 4 Ibid (265). | ${ }^{6} \mathrm{Ibid}(267)$. |

Early in September, 1867 , two sheets of stamps on the Crown watermarked paper in another blue colour, or very probably in the same blue ink as the two specimens submitted at the end of June, were sent to Mfr. Ormond Hill. He pronounced ${ }^{1}$ the colour " fairly fugitive," but said the tint should be lighter. He offered to send specimens of this ink to the Post Office authorities if Mr. Bacon would send him some printed from the "experimental plate," and he asked for some impressions "in ultramarine with a very small addition of Chinese blue," Specimens of another blue colour seem to have been sent to him a few days later, as on September ryth, ${ }^{2}$ he wrote to Mr. J. P. Bacon and said "I have tried the blue color specimens of which you sent me a few days ago, and I find that after careful drying the ink is scarcely fugitive at all."

On October 29th, ${ }^{3}$ Mr. Bacon gave Mr. Ormond Hill specimens of two blue inks, which the latter sent on to the General Post Office. He received no reply until February, i868, on the eighth of which month ${ }^{4}$ he wrote to Mr. Bacon to say that the Post Office authorities considered both inks " much too fast, i.e., too permanent. They are, however, an improvement upon the old me and one of them- the brightest -looks much better. Do you think there is any chance of your getting a suitable blue of more fugitive qualities? If not I will consider the experiments at an end and will report as much to the Board. Would the brighter of the two inks to which I have been referring give you much more trouble in working than the present ink, or be otherwise objectionable ? If not and in case of your failing to get a better ink I should be inclined to recommend the adoption of this one." Mr. Bacon in his reply on Febrinary Ioth, ${ }^{5}$ said: "In reference to the more fugitive blue ink for Postage stamps, I do not see my way to any better result than you are in possession of. With regard to the brightest of the two specimens last sent, it owed its qualities to the use of ultramarine, and we know by experience that it is more expensive than other color and also that it greatly diminishes the duration of the plates, but we should not raise any difficulty on either of those heads, as the quantity of blue stamps is small, if you feel that it is likely to give reasonable satisfaction. We could not tell the increase of expense without an experiment on a larger scale than any we have yet tried but as to the wear of the plates, I feel sure we should not get half as many good impressions from a plate as we do now." This letter has written in red ink, at the top, in Mr. Ormond Hill's handwriting, " more fugitive " and at the bottom " ansd ir.2.68." Mr. Ormond Hill's letter of February itth ${ }^{6}$ reads: "Could you make the $2 d$. Postage more fugitive in green or purple? I see you have printed colonial stamps in both these colors." We have found no reply to this enquiry of Mr. Hill, but in Parliamentary phrase, the answer was doubtless in the negative.

The decision come to concerning these protracted experiments appears to have narrowed itself down to the introduction of a certain amount of ultramarine into the colour of the ink.

Besides the specimens we have described of the experimental die, with " 75 " at either side, the Royal Coflection contains the following impressions belonging to this series of trials to obtain a more fugitive blue colour for the Two Pence stamp:-

```
1 Appendix C (268).
4 Ibid (271).
2 Ibid (260).
3 Ibid (271).
{ } _ { 5 } ^ { 5 } \text { Ibid (272).}
6 Ibid (273).
```

I.-The enclosures contained in Mr. Pearson Hill's letter of June thh, 186\%. $^{1}$ consisting of :-
I.-A specimen of the experimental die, with " 75 " at either side, printed in dark blue on thin, hard yelluwish white, wove paper. This example has been obliterated with a postal cancellation in black and below the impression is a circular postmark with "IV-London-3 Ju.-67." At the right side, in the handwriting of Mr. Pearson Hill, is "obliterated and washed repeatedly with benzine, and with soap and water."
2.-A postmarked specimen of the One Penny carmine-rose, with letters in the four corners, on piece of an envelope, with a circular postmark beside the stamp bearing " London. W.-W4. -My. 27-67." The stamp has been slightly washed once with benzine and the colour and design is so altered that it is impossible to decipher the plate number at either side.
3--A specimen of the Nine Pence "De La Rue" stamp, Plate 2 , issued January 15th, I862, overprinted "specimen " in black and below this word, in Mr. Pearson Hill's handwriting, is "washed once with benzine." The result is that the colour of this part of the stamp has almost disappeared.
II.- The specimen sent to Mr. Ormond Hill on July 23rd, 1867, and referred to in his letter of July 26th, $1867 .{ }^{2}$ This consists of an impression of the central vertical strip of the design Illustration No. I, printed in bright blue. The lower part of this is obliterated with five circular postmarks of the same pattern, containing a crown in the centre, "London" arched above and "26.7.67" in a line below, beneath which is the letter " $Q$." On the margin at the foot, written in biack ink. is "weak oil only," and below this written in red ink, in Mr. Ormond Hill's handwriting, is "Recd. 23.7.67." An attempt has been made to clean off the upper three postmarks, but the result was not very successful.
111. I.-A specimen of the experimental die, with the number " 75 " at either side, printed in bright blue on thin, hard yellowish white, wove paper. This example has been obliterated with a postal cancellation in black and then washed with some preparation to test its fugitiveness.
2.- Attached to the lower part of the paper on which No. I is printed, is a specimen of the Two Shillings "De La Rue" stamp, Plate $\mathbf{I}$, issued July ist, I867, overprinted " specimes." in black. The stamp has been obliterated with the same postal cancellation in black and then washed with a similar preparation. The result is that the colour of the Two Shillings value appears to be the most fugitive of the two.

[^102]Plates io, it and iz of the Two Pence Value.
No mention is made of Plates io and II of the Two Pence value in Perkins, Bacon \& Co.'s Engraving Book and there can, therefore, be no doubt that neither of them was ever finished. We have found no new particulars concerning these plates and the reasons given by Messrs. Wright \& Creeke1, viz., that they "were irregularly laid down, and were defaced on the 23rd June, 1868 , without having been registered," are doubtless correct.

Plate 12 of this value, with the current No. 123, was finished on September Ifth, 1867," but the " Imprimatur" impression was not registered at Somerset House until January ist, i 868.

Repars to Plates of the One Penvy and Two Pexce Stamps.
Under January and February, I868, the Engraving Book ${ }^{3}$ contains entries of repairs to no less than eight plates of the Onc Pemny and Two Pence stamps. In each case the repair consisted of re-entering a certain number of the impressions, as given in the following list :-

I868.
Feb. 5 Repairing 13 labels in id. postage plate No. 72

| Jan 31 | , | 67 | , | Id. | " | . | , | 73 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Feb. 25 | " | 3 | " | Id. | , | . | " | So |
| Jan. 31 | " | 49 | " | Id. | , | " | " | SI |
| Feb. 4 | " | 87 | " | Id. | " | , | " | 85 |
| ,, 25 | , | 3 | , | Id. | , | - | , | 90 |
| - 22 | " | 28 | " | Id. | " | : | , | 100 |
| Jan. 3 I | " | 49 | " | 2 d . | " | , |  | 9 |

The reason for repairing this batch of plates was duc to the stock in hand having got very low at the commencement of 1868 , which is not surprising, as no plates of the One Penny value had been registered between April $\ddagger$ th, I866, and March 23 rd, 1868. Plates 108 to III were registered on the latter date. Plates 112 to 116 on May I2th and Plates II7, II8, on June 9th, I868, and every one of these eleven plates was put to press on the day it was registered, shewing the urgent need that then existed for new plates. This is also confirmed by Mr. Ormond Hill's message to Mr. J. P. Bacon on April 2nd, 1868, " in which he asked hime " to take steps to prepare plates faster." Old plates could be repaired in much less time than new ones could be constructed and hence it was determined to repair cight of the plates that were at press in January and February, i868.

[^103]
## Plate ilj of the One Penny vade condemned, but AFTERWARDS ACCEPTED.

In a letter written by Mr. Ormond Hill on Narch 25th, I868, ${ }^{1}$ addressed to Mr. Fisher. one of the employees of Perkins, Bacon \& Co., he said: " I am sorry that I camnot pass Plate No. II3: but the inaccuracy in it is greater than can be permitted." Mr. J. P.'. Bacon in his reply on April 2nd. ${ }^{2}$ said that the plate was only "the 2 fth $^{\text {th }}$ part of an inch untrue when measured crossways and I have no hope and certainly never contracted to make plates regularly that shall be nearer mathematical accuracy than that. If the irregularity is divided over the whole plate, which I donbt, it will amount to a deviation of a footh of an inch in each row- an inappreciable quantity, while, if as I believe, a lucal error, it would not effect the perforation of the one row enongh to be noticed." And then he made the interesting statement that "The die itself is not exactly true and thercfore the error, as it effects perforation, is more apparent than real." Further on he said "there is an actual waste of time between the completion of the transferring of a plate and the knowledge of its acceptance or rejection, as it is impossible now to risk further progress on a plate until it is known to be accepted." From the last statement it is clear that a custom had grown up of submitting the actual plates to Somerset House as soon as the 240 impressions had been laid down and previous to the insertion of the letters in the four comers of the impressions, etc.

On the 3 rd , April, ${ }^{3}$ Mr. Hill sent two letters to the firm. In the first he said he had intended calling to see Mr. J. P. Bacon that day, but had been prevented and that he would do so the following day, if possible. In the second he wrote : "Plate No. If examined to-day is not quite correctly laid down: but as the total inaccuracy does not exceed I/32 of an inch I will agree to accept it. A greater amount of inaccuracy could not be passed."

On the 23 rd Aprii, ${ }^{4}$ Mr. Hill wrote to Mr. Bacon: "Another careful examination has been made of Plate No. 113-the one which we declined to accept on account of want of accuracy. The result is that it appears not quite so much out of square as was believed and that we will accept it, expressing a hope at the same time that all future plates may be more accurate."

## No "Imprimatle" sheets registered of Plates 126 and i28 of the One Penny value.

Messrs. Philbrick \& Westoby say that " Plates Nos. 126 and 128 were never put to press, the former in consequence of defective lettering, the latter as being out of square." 5 Messrs. Wright and Creeke ${ }^{6}$ state that "Plate 126 was never made, as the roller was defective; and plate 128 was rejected as being not rectangular." These two accounts, as regards Plate 126, are contradictory and we are unable to say
${ }^{1}$ Appendix C (274).
${ }^{2}$ Ibid (275).
${ }^{3}$ Ibid (276, 277).
${ }^{4}$ Ibid ( 278 ).
5 "An Appendix to the Postage and Telegraph Stamps of Great Britain." By F. A. Philbrick and W. A. S. Westoby. The Philatelic Record. London. I883. Vol. V. p. 96.

6" A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Creeke, Junr. London. 1899. pp. 39. 246.
whether either explanation, or which of them is correct. We have found no reference whatever to either of these plates in Perkins, Bacon \& Co.'s records, but as there are no entries of the plates in the Engraving Book ${ }^{1}$ of the firm, it is certain that neither of them was ever finished.

It is not at all an uncommon occurrence for a collector or dealer to claim that he has discovered a specimen of Plate 126, but as neither the plate of this number nor that of 128 was ever completed, it is impossible that any perforated specimens can have been issued or can be found of these two plates.

Plate 128 was the last of the One Pemny plates to be rejected, as specimens are found of every plate from 129 to 225 , which was the last used up to the end of 1879 . when the contract of Perkins, Bacon \& Co., for the supply of stamps of this value expired.

## Plates i3. If and is of the Two Pence value.

On October 3rd, $1867,{ }^{2}$ Perkins, Bacon \& Co. made a new roller-" No. 2 containing Nos. 13 to 18 inclusive "-for the Two Pence stamps. Plate 13 of this value, with the current No. 152, was finished on March 5th, 1869; Plate It, current No. 170, on June 7th, 1870, and Plate 15, current No. 227, on May 25th, 1875. ${ }^{3}$ The three plates were registered, respectively, on March 31st, 1869, Apil 24th, I87I, and September 3rd, 1875. We are unable to explain the long intervals that took place between the dates of completion and registration of Plates 14 and 15 . The stamps printed from these three plates have the white lines under "posfage" and above the words of value, thimer than those printed from Plates $7,8,9$ and 12 (Illustration 52). As we have before explained, the white lines were added by hand to the roller impressions and so were liable to vary in width. ${ }^{\text {a }}$ Probably the three other impression on the roller numbered 16 , I7 and I8 had lines of similar width, as they would be made by the same workman at the same time as those on the impressions numbered 13. 14 and 15 .

Imperforate specimens printed for trial purposes, either on a special paper or in other colours, are known of Plates 13 and 15. These will be referred to again later on.

Plate 15 was the last made for the Two Pence stamps and this plate was in use up to the conclusion of the contract of Perkins, Bacon \& Co. for this value in 1880.

## Laperforate varieties of the One Penny witil letters IN THE FOUR CORNERS.

Used specimens are known of a number of the plates employed for this stamp, that were issued in an imperforate condition. These examples are due to carelessness in passing the sheets through the perforating machines, a sheet now and then being overlooked. One of the best known instances of this kind occurred at Cardiff, where

[^104]an innperforate sheet of Plate II6 was issued at the Post Office early in IS7o. This particular varicty was first lescribed in the April number of Le Timbre-Poste for that ycar, where tle notice reads: "Le I penny actuel a été délivré non dentelé par le burean de poste de Cardiff, qui en avait trouvé mue fenille dans cet état parmi celles piquées qui lui avaient été envoyces." A reference to this notice will also be found in the number of the Stamp-Collector's Magasine of May, I870. ${ }^{2}$ Strange to sty both Messrs. Philbrick \& Westoby ${ }^{3}$ and Messrs. Wight \& Creeke erroneously give the date of issue of this variety as " 1873 ." Used imperforate specimens are said to exist also of Plates 90,92 , IOO, IO2, IO3. IO7, IOS, IIf, II7, 120, I2I, I3G, $148,158,162$ and 171 . To these we can add 86 , the Royal Collection containing a satisfactory, imperforate used copy of this plate on an entire envelope, which bears the postmarks " North Shields. Oc. I, 6f " " London Oc. 3. 6f." We have also seen another imperforate, used specimen of this plate on part of an envelope beaning the postmark " Newcastle on Tyne, Sp. 28, 64."

Inperforate specimens are also known of Plates 146 and IgI, with trial cancellations and of some of the plates imperforate copies are found printed in different colours to the issued stamps or on a different substance to the " large crown" watermarked paper. These latter varicties, as in the case of the Two Pence value, will be dealt witl further on in our work.

## The last Plate used for the One Peniy stanips.

The last roller made for the One Penny stamps was No. 25 , on September igth, I878, containing seven transfers, Nos. 226 to 232 inclusive. ${ }^{5}$ The last four plates were numbers 225 , with current No. 268, 226, current No. 269, 227, current No. 270 and 228, current No. 271. These plates were finished, respectively, on November $29 t h, 1878$. February I9th, and 26th; and Marel fth $^{\text {2 }}$ I $879 .{ }^{6}$ Plate 225 was registered on December 3Ist, 1878 , but the three other plates were never registered or put to press. Plate 225 , the last plate used was only put to press on October 27th, 1879, and the printing of the One Pemy stanps ceased before December 3rd, of that year. ${ }^{7}$ Comparatively few sheets were, therefore, printed from this plate and specimens are scarce.

The late Mr. H. L'Estrange Enen ${ }^{8}$ says in one of lis catalogues that "entire sheets of plates 226,227 and 228 exist with surcharge "Cyprus,'" but this is entirely a mistake on lis part.

[^105]
# Reserve Roller of the One Penny, Three-halfpence, and Two <br> Pence stamps for Somerset House. 

On January 23rd, $1871{ }^{1}$ Mr. Ormond Ilill wrote to Mr. Bacon to say that he should like to have a reserve roller made of "a Id. and 2 d . one, soft and unnumbered. For it appears that the roller we have here [Somerset Honse], as a resel ve, bears heads of the old kind-two letters only." Mr. Bacon, in his reply on the following day, ${ }^{2}$ said his firm would be happy to prepare such a roller, and this was made and sent to Somerset House, although no entry of it appears in the Engraving Book. As will be seen further on, at the time it was made it was determined to include an impression of the Three-halfpence die and the roller bore five impressions of the One P'enny dic. one of the Three-halfpence and one of the Two Pence dic.

Trials on paper chemically prepared by Dr. Perkins.
Messrs. Philbrick \& Westoby ${ }^{3}$ state that: "Early in 187I, the Post Office authorities, desiring to see whether the paper could not be so prepared as to prevent the stamps printed thereon from being tampered with, caused sheets of the paper then in current use to undergo a peculiar preparation, which stained them a green hue, more or less intense, the hand-made paper issued to Perkins, Bacun \& Co. not showing it so much as the wove paper on which De La Rue \& Co. printed. We believe that the trials then made embraced those of ingredients to mix with the ink, and which were intended to conduce to the result in view; namely, an immediate detection if any acid or detergent were applied to the stamp."

The Royal Collection contains several specimens of stamps of different values printed on these prepared papers and amongst them a copy of the Three Pence rose, Plate 5, watermarked " Spray of Rose," of Messrs. De La Rue \& Co.'s printing. The specimen is imperforate and comes from the right, lower corner of a slecet. On the margin is written in Mr. Pearson Hill's handwriting: " Printed on chemically prepared paper for Dr. Perkins plan of chemical obliteration : (about I870)."

Strange to say we have not found a single reference of any kind in the records of Perkins, Bacon \& Co., either to Dr. Perkins, or to the trial of his prepared paper. But we know from specimens that are in existence that the paper of the line-engraved stamps of the firm was subjected to the same test as the paper employed for the surface-printed stamps of Messrs. De La Rue \& Co.'s production. Of the One Penny and Two Pence, which are the only values that we are concerned with here, we know of the following varieties on the chemically prepared "Large Crown " watermarked paper, all of which were gummed :-

${ }^{1}$ Appendix C (296).
${ }^{2}$ Ibid (297).
3 "The Postage and Telegraph Stamps of Great Britain." By F. A. Philbrick and W. A. S. Westoby. London. 1881. p. 303.

## Proof Sheets printed for the AnNulal liternational Eximbition at Solth Kexsington in is7z.

On Febrnary 5th, 1872, ${ }^{1}$ Perkins, Bacon $\&$ Co. wrote to the Board of Inland Revenue to say that they proposed to exhibit specimens of their work at the Annual International Exhibition of that year at South Kensington. They asked the permission of the Board to print and exhibit a sheet each of the Halfpenny, One Penny, Threc-halfpence and Two Pence stamps in their respective colours and a sheet in black of the One Penny value from Plate 36 , which was one of the plates kept in reserve at Somerset House, and from which more than a million sheets had been taken. They further said that they would prefer to print all the five shects on " proof paper" rather than on the regular watermarked paper. In their reply on February I5th ${ }^{2}$ the Board granted their permission for this to be done, subject to the Proofs being returned to them at the close of the Exhibition or to the amount of the duty thereon being paid if any of the sheets were not accounted for.

Having received the pemission of the Board, Perkins, Bacon \& Co. proceeded to print the sheets for the Exhibition, but as regards the one in black of the One Penny of Plate 36, Mr. J. P. Bacon wrote to Mr. Ormond Hill on February 16th. ${ }^{3}$ to ask to be allowed to substitute Plate $27^{4}$ instead of that number. The reason he gave for this was that " on examination 1 find that rather less than a million impressions were taken from that plate, but that No. 27 had printed more than that number." We think Mr. Bacon was in error regarding his estimate of the quantity of sheets printed from Plate 36 , as Messrs. Wright \& Creeke, ${ }^{5}$ give the total number taken from that plate as 1,004900 . They state that Plate 27 yielded $1,011,900$.

On October 3 ISt, I8 $72,{ }^{6}$ the firm wrote once more to the Board of Inland Revenue to say that the four sheets of stamps printed on "proof paper" in the respective colours of the different values had been "returned to the Foreman of the Postage Stamp Department for the purpose of delivery in the usual manner," and they asked the permission of the Board to keep the sheet of the One Penny printed in black as " it is so great a curiosity as to be well worthy of preservation." They added that they would " be willing to pay the ralue of a sheet of One Pemny stamps if it should be thought necessary:" The Board, in their reply on November 12th, " said that they were pleased to grant the request. but that the value of a sheet of One Penny stamps should be paid " in order to balance the accounts of the Storekeeper General." On the following day it is evident that Perkins, Bacon \& Co. paid the face value of the shect, as the letter of November I2th has written up the side " Recd. Novr. I3. 1872, f1.--- W: Rea pro Rer. Genl."

This sheet is still in the possession of Perkins, Bacon \& Co., and has been shewn at more than one of the Philatelic Exhibitions held in London. It is printed on "proof paper," which is a kind of soft card, and although it bears no marginal

[^106]inscription or plate number, we have convinced ourselves by a reference to the " Imprimatur " shect of Plate 27 , that it was printed from that plate.

As regards the four other sheets printed in the colours of the issued stamps, we have never seen any single specimens or blocks of these, nor do we know the numbers of the plates from which they were taken. We believe this is the first time that any reference has been made to these proof sheets in a philatelic work, and further that the existence of the sheets has previonsly been entirely unknown to cullectors. No doubt all four sheets were destroyed by the authorities at Somerset House.

## Alteration in the Crosses on the top and botton margins of the Plate.

On February 19th, 1875 . $^{1}$ Mr. Omond Hill wrote to Perkins, Bacon \& Co. to ask them to lave the crosses cut decper and broader on the top and bottom margins of one of the One Pemny plates, as an experiment in order to " decide a question which lias been raised in connection with perfuration." And he added: "When the engraving is decpened 1 shall be glad if you will have the sheets, printed from the plate, kept together, and sent in, say a ream or more at a time, with a reminder of the fact that they are from this special plate. I shall then be able to decide almost immediately as to whether I shall ask you to be good enough to deepen the pinning marks of the other plates or not." We have found no further reference to this slight alteration and cannot say what was actually done in the matter, but the bottom margins of the Imprimatur sheets, registered subsequently to Febrnary igth, 1875 , do not shew that any change was made in the "marks." Unfortunately the top margins of these sheets have long since disappeared.

## Forgeries of the One Penny Stamp.

Various attempts to imitate the One Penny stamp were made at different periods, but none of these could be considered in the least degree dangerous and the forgeries were detected as soon as they appeared on letters in the post. The first instance of the kind occurred in September, 1840, barely four months after the stamps came into use. The following extracts from Sir Rowland Hill's "Juurnal" contain all the information we lave concerning this forgery:-
" Sept. 3. i840. Letters from the office inform me that a forged label has been detected in the London Office, the letter was stopped and forwarded to the Stamp Office. The forgery is thought to be a wood engraving and is described as being coarsely executed. Wrote to E.[dwin] H. [ill] for further particulars."
" Sept. 5. E.[dwin] H. [ill] confirms the previous account as to the forged stamp. It was un a letter from a Register Office of a disreputable kind. The people of the Stamp Office have caused several letters to be addressed to this place, in order to see if other forged stamps are used in reply, and have taken other steps with a view to detection, but hitherto without avail."
"Scpt. I4. At the Stamp Office I saw the forged label. It is a miserable thing and could not possibly deceive any except the most stupid and ignorant."

[^107]For the next two attempts at imitation of the stamps we have also to turn to Sir Rowland Hill's " Journal ":
"Mar. 2, 18.f. Wiatson called with an electrotype cast from the label. He had no impression from it and I do not think it would give an impression, still, it was very extraordinary to see that the mere thickness of the ink should suffice at feast to transfer the general features of the plate."
" Mar. _. Last night Smith ${ }^{1}$ stated in a note to Cole ${ }^{2}$ that another forged label had appeared in the P. [ost] O.[ffice] and had been forwarded to the Stamp Off[ice]. It appears from enquiries made this morning at the latter office that it resembles the stamp detected in Sept. last, but though marked "one penny' it is printed in blue ink and on a disty brown paper. It appears to be rather a joke than a forgery, but as the stamp was detached from the letter in the P. [ost] O. [ffice] there are no means of tracing the offender."

In the "Life of Sir Rowland Hill," under the date 18 fo, ${ }^{3}$ we read: " only two attempts, [at forging the stamps], so far as 1 know, ever having been made, and both of a very bungling character, though in one the author was cunning enongh to escape personal detection. In the other, which occurred in Ireland, the offender was convicted and punished; the detection occurred through the fact that a young man had written to his sweetlieart under one of the forged stamps, and enclosed another for her use in reply." A reference to this attempt at forgery is apparently found in the "Report from the Select Committee on Postage Label Stamps" of I852," in which it is said the culprit was a schoolmaster in Ireland. It is not at all clear to us if this ease is one of those we have already described from Sir Rowland Hill's " Journal" or whether it is another case altogether.

The next instance of forgery of which we have any record occurred in April, 1843. Particulars of this are contained in a notice in The Times ${ }^{5}$ newspaper, that was reproduced from the Wolverhampton Chronicle:-
" A forged imitation postage pemy stamp was detected by the Postmaster of Mommouth on Sunday week on a letter which had been posted at liis office. The party who had used it was traced, and a representation of the circumstance made to the higher authorities."

Under the date " I852 " Sir Rowland Hill wrote in his "Journal" :- "Several attempts have recently been made to imitate our postage labels by trausfer from the genuine stamp. I have scen none that are at all successful except one by Bokenham, ${ }^{6}$ obtained by a very simple and ingenious method. He himself is alarmed on the subject ; but I think there is little danger, inasmuch as a gemine stamp will produce but a single imitation, and the genuine stamp itself is somewhat injured by the process. I have, however, called the attention of the Stamp Office to the subject, and we keep a good watch in the Inland Office. Fortunately, the spurious stamp if suspected is easily proved to be spurious on examination."

[^108]" Shewed the P.[ost] M.[aster] G.[eneral] Bokenhan's imitation of the postage labels (June 3rd). He views the matter as I do." "Aug. r6, 1852 . Field ${ }^{1}$ came with Blott of the Inland Office to report progress (28th July). He has found a man who shews penny labels which he professes to have forged and has advertised for a partner who can find $£ 150$ to carry on the trade (I have seen the advertisement which of course conceals the fraudulent intention.) He professes to have made machinery for printing the labels from a transfer from genuine stamps upon zinc plates (he pretends that the process is a secret-but I believe it to be what is called 'the anastatic process') He says, however, that having had reason to apprehend detection he has broken up his machinery and hence the necessity for capital to make more. Field believes the story ; but I have some doubts whether it is not a falsification to get the $£ 150$. On Peacock's² advise I sent Field and Blott to the Stamp Office solicitor."

With reference to the imitation of the stamp by the anastatic process, Mr. J. B. Bacon in a long letter to Mr. Edwin Hill on September Irth, 1852, ${ }^{3}$ remarked :" Every few weeks we are informed that the anastatic people profess that they can imitate the Postage Label and our other work : we have repeatedly applied to them at the Polytechnic, and they would not shew their skill there, at their printing office, and they will not attempt it there. We have urged Mr. Appel to attempt some of our general work offering to pay him any price, which was not very exorbitant whether he succeeded or not. He was quite willing to undertake it, but must get the approbation of his partner Mr. Glyn first, we waited several days and on calling again were told, that he had not yet seen Mr. Glyn, after many more days delay, we called again, and were told that Mr. Glyn had not given him an answer, that it was of no use calling again, as Mr. G. had left London for a considerable period and nothing therefore could be done. I am yet perfectly sceptical as to the power of Appel and Glyn or any other anastatic printer to imitate our Penny Postage Label." And then Mr. Bacon added, that, if necessary, they could make an alteration in the preparation of the ink, which would " defy the anastatic process to imitate [the stamps]." "

Mr. W. V. Morten in a letter to Stanley Gibbons Monthly Journal in May, 1912, ${ }^{5}$ says " I have a pamphlet on Anti-anastatic paper by Messrs. Glynn and Appel in which they state : -
" By desire of a Committee of the House of Commons last year " (query 185i) " some postage stamps were reproduced by the Anastatic process with such fidelity, that they passed as genuine through the G.P.O., and each member of the Committee received an envelope which had been franked by this fictitious stamp."

Mr. Morten added " query 185 I " as to the year meant, but we think the reference is to the "Select Committee on Postage Label Stamps" appointed by the House of Commons on March I6th, 1852 . If this suppusition is correct, the pamphlet by Messrs. Glynn and Appel must have been published during the year 1853 . We have never seen or heard of a specimen of these imitations of Messrs. Glynn and Appel.

[^109]nor are they referred to in the "Report of the Committee " of 1852. The Anastatic process of printing is mentioned more than once in the " Report," but nothing further is heard of it in connection with the postage stamps and the claim of Messrs. Glymn and Appel to successfully imitate the stamps may be pronounced a failure, for no change whatever was thought necessary to be made in their production.

## Official Imitation of the One Pexiy stamp.

Messrs. Philbrick and Westoby give the following particulars in their work ${ }^{1}$ of an imitation of the One Penny stamp that was made by an order of the Board of Inland Revenue:-" From time to time the authorities have been afflicted with scares, which sometimes took the form of fears that the stamps were or might be forged; at others, that they were being tampered with by removing the effacing marks. One of these periodical seizures appears to have occurred in or about 1860 . and the authorities became anxious to know by experiment how far the forgery of a stamp that would pass muster was practicable by ordinary means. For this purpose an imitation was ordered to be made by an expert and skilful engraver, who was furnished with everything requisite to enable him to produce a fac-simile of the one penny stamp. The imitation was purposely left incomplete in one angle; but the impressions taken from the die exhibit differences so palpable that the least practised eye could not be deceived by them for a moment. The result appears to have reassured the authorities, and, moreover, shewed the wisdom of employing a portrait as the principal feature of the design. It further evidenced the propricty not only of retaining the then existing safeguards, but mather of adding to them by the introduction of others, . . . . . Proofs of the imitation stamp in the colour of the one penny were taken from the die on plate paper, and mounted on card, and are to be found in Official collections."

The imitation stamp described by Messrs. Philbrick $\&$ Westoby was made in November, 1856, as the letters we are able to reproduce on the subject shew. Mr. Ormond Hill in that month asked Perkins, Bacon $\&$ Co. to supply him with some of the ink they used for the One Pemy stamps and on the 13 th. ${ }^{2}$ of the same month they wrote to him to say that they could not let him have any ink as "we do not feel called upon to assist in the forgery of a Postage stamp, even supposing (which is not the case) that we had no other reasons for declining to supply our ink. If the demand of the imitator, however, that he wishes to show his production in the same ink as the genuine stamp, is sincere, we are quite ready, by having authority; to send you one or more stamps printed with ordinary ink either on India or plain paper, cither of which he can also employ in producing his imitations."

On November 22nd. ${ }^{3}$ Mr. Ormond Hill sent Mr. J. B. Bacon an impression of the imitation of the One Penny stamp for his inspection and three days later the latter wrote Mr. Hill a long and interesting letter in which he said": "I thank you for a sight of the imitation of the pemy postage stamp, although I had it for too short a time for a thorough examination as it was left by your messenger for half an

[^110]hour just before I arrived, when I did so I was met by a gentleman on business which left me but a few moments for inspection. I consider, however, although I can easily detect it from several points of dissimilarity that it is very well done and would deccive any ordinary person who was not prepared for it. We shall feel greatly obliged, however, if at the completion of the experiments you or your Honourable Board will allow us a longer time for examining it and if you will let us know the facts of the case as it may be useful to the Govermment and certainly would be to us to know them : for instance it would be very desirable to ascertain what is the standing and profession of the person who produced the imitation whether he did it alone, or had much assistance and how long it took assuming it to be done by one man and as he was employed by Government he will of course inform them by what process it was done. We belicve it to have been by hand, but at present our glance has been a rapid one and our engine-turner has not seen it at all. It should be borne in mind that the whole stamp is but about an inch in size and when those portions are taken away which are requisite for the lettering it is considerably under that and half what is left is occupied by her Majesty's head and although there is some security in that still there must be many artists in London who could by time and skill make a tolerable imitation of it. Wic, therefore, have but a very little space to give the most difficult part of the security which the stamp contains and 1 have a strong impression that if all the facts connected with it a re ascertained they would go to show the security of the real stamp against any actual forger. Besides this to do less than a dozen conld not be worth the while of any imitator indeed to make it profitable they should be half sheets or sheets. I much question if the party who has done the present one can do as many as a dozen free from such inequalities as would be ruinous to their circulation. This much we do not fear to say and to prove if necessary that the adhesive Postage penny and twopenny stamp possesses more security than any other of an equal size engraved or surface printed stamp now known."

We have found no further correspondence relating to this official imitation of the One Penny stamp and, as we have never seen a specimen, we are unable to add any further particulars to those given by Messrs. Philbrick \& Westoby concerning it.

We have now completed the listory of the One Penny and Two Pence stamps produced by the firm of Perkins, Bacon \& Co. for forty years-from 18 to to 1880 and pass on to consider the two other values supplied by the firm, viz., the Threehalfpence and the Halfpenny.

## The Turee-halfpence Value.

In i860, certain alterations were proposed in the postal rates which would have required a stamp of the value of Three-halfpence for the postage on newspapers, but the suggested modifications in the rates were not, at that time, sanctioned by Parlia ment. In contemplation of these changes a supply of Three-halfpence stamps was prepared by Perkins, Bacon \& Co., the history of which we will proceed to give.

## Essays for the Tiree-halfpence Stamp.

On February ifth, is6o, ${ }^{1} \mathrm{Mr}$. Ormond Hill wrote to Perkins, Bacon \& Co. to say that a stamp of Three-halfpence was required "without delay"; that it was "desired that this stamp should be of the same size as the Id. and the 2d. and be

[^111]printed 240 upon a sheet as they are; but that it should be made quite distinct in appearance by difference in form or color or both"; he added : " you are already trying some experiments with a view to finding a color for this stamp. I enclose a specimen of a tint which I should like you to aim at. But please also to suggest any others which you think suitable," and he concluded by saying he should like Mr. Bacon to confer with him "as to the steps necessary for the preparation of the dies and plates." The specimen for colour sent in the letter has disappeared and there is no means now of ascertaining what the tint was Mr. Hill suggested.

Mr. Bacon, no doubt, had an interview with Mr. Hill and the latter wrote to him on February ${ }^{15}$ th, ${ }^{1}$ to say: " In the Specimen $\mathrm{I}_{2}^{1}$ d. stamps which you are going to prepare will you please to put letters in all four corners. I mean of course by printing them in the required color and gumming them on-as if this be not done the specimen will probably be referred back from the General Post Office and a correspondence entered into on the subject." The Engraving Book of Perkins, Bacon \& Co., under the date February 16 th, $1860,{ }^{2}$ contains an entry for "Drawings Pastage labels Three-halfpence." Only two survivors of these designs, or of those of February 23rd, to be mentioned later, are now known. One of them is in the Royal Collection and the other is in the Postal Musemm at Berlin. The first consists of an ordinary One Penny rose-red "Perkins Bacon" stamp, with crosses in the upper corners. The words " postage "- " one penny" have been covered with lake water-colour and the words "three "-" half"-_" pence"-" postage" have been painted in Roman capitals, in flake-white, at the four sides: "three" reading upwards at the left, " half " at the top, " pence "reading downwardsat the right and " postage" at the bottom. The essay is mounted on a small white card and the white lettering of the new inscription has partly rubbed off. (Illustration 66). The other consists of a similar One Penny rose-red stamp, with the crosses in the upper comers removed, the letters "B-A " inserted in their places and the letters " A-B" in the two lower corners. The words "postage one penny" have been blotted out and at the top. in white Roman capitals, arranged in an arch, is the word "postage" and at the bottom of the design is " three-ilalfpence," in white Roman capitals, in two lines. (Illustration 67 ). This essay was originally described in the Stamp-Collector's Magazine of May, I870, ${ }^{3}$ where it is stated that it was then "in an official collection."

Whether either of these was the design submitted by Mr. Ormond Hill to the Post Office we camnot say, but on February 2oth, r860, ${ }^{4}$ he sent a note to Mr. J. P. Bacon to inform him that "The Post Office people are not satisfied with our design for the $I_{2}^{1} d$ label, so we must do something else. Can you step across here now ? If not, will you come in good time to-morrow morning. And will you please make quite certain as to the practicability of altering the engine turning around the present head." Fresh drawings were submitted on February $23 \mathrm{rd},{ }^{5}$ and then a suggestion was made cither by Mr. Hill or Mr. Bacon to put a triangular, curvilinear band in the form of a heart round the Queen's head. A design of this pattern was drawn up

[^112]on March Sth, ${ }^{1}$ and sent to Mr. Hill. The following day ${ }^{2}$ he wrote to Mr. Bacon : "This is very nearly what I desire. I agree with you that the word "Postage" should be a little higher-its centre should be level with the centre of "Half Pence." I prefer these words "Half Pence" as they now stand, i.e., without a hyphen or more space. Either the white band should be rather wider or the letters rather smaller so as to shew the white a little more distinctly above and below the letters. A little color should be introduced between the white band and the neck where they intersect." A fresh design was made on March Ioth, ${ }^{3}$ and this was approved by Mr. Hill two days later. (Illustration 68.) This essay consisted of an impression of the One Penny stamp, with crosses in the upper corners, and with the lower corners blank printed from the Retouched Die of that value in mauve-pink. The crosses in the upper corners and the words " postage "-" one penny" have been painted over. The letters "B-A "-" A-B" have been painted in mave-pink in the four corners and a triangular, curvilinear band in the form of a heart has been painted round the Qucen's head in flake-white. This band was afterwards painted in mauve-pink with the words "postage"--"three "-" halfpence" in small sans-serif capitals. The white band, owing to some unknown cause, has in places turned black. The essay, which is in the Royal Collection, is mounted on a small white card, at the foot of which is " approved 12. 3. 60. O. H." in Mr. Ormond Hill's handwriting. (Illustration 68). As regards the colour, selected for the stamp, Mr. Hill wrote to Mr. Bacon on February 22nd, $1860^{4}$. "Can you produce a good fugitive color of this tint. I have a notion that you can. If so I think it would be the best. Perhaps you could let me have a design in this in addition to the others which you promised." The enclosure contained in this letter consisted of a portion of an ornamental design printed in mauve-pink, with the paper deeply blued by the ink, corresponding closely with the colour used for the essay last described and for the stamps of this value printed later on in 1860 .

On March 9 th, r860, ${ }^{5}$ the Commissioners of Inland Revenue authorized Perkins, Bacon $\mathbb{E} C o . "$ to prepare a plate for printing postage labels to denote the duty of threehalfpence " and requested them "to apply to Mr. Ormond Hill for particulars."

## The Die for the Three-halfpence stamp.

The design, having been approved by Mr. Hill, the die was engraved and completed on March 17th. ${ }^{6}$ The die was made by taking a roller impression from the Retonched Die of the One Penny valuc. The crosses in the upper corners and the words " postage "-" one penny " were removed from this impression and a space was cleared to form the curved heart-shaped band. A transfer was then taken on to a flat piece of stecl on which the words " postage-timee-malfpence" were engraved by hand, in small sans-serif capitals and the spaces from which the words " postage-one penny" had been removed, were filled up with a background, also engraved by hand. The die measured $45^{\frac{1}{2}}$ by 61 mm . As soom as the die was completed an impression was taken in mauve-pink on white card, which has since become deeply blued. On this being submitted to Mr. Hill, it was determined to have the

[^113]${ }^{3}$ Appendix G.
-Appendix C (238).

[^114]white spaces on the band between the words "postage-Three-halfpexce" filled in with it pattern of fine scroll work. The specimen, from which this description is taken, is in the Royal Collection, and the suggested scroll ornaments have been inserted in pencil. (Illustration 69 ). The scroll ornaments were then engraved on the die itself, which, after being hardened, was ready for making plates. (Illustration 70.)

Proof Impressions of the Die of the Tilree-halfpence stamp.
The Royal Collection contains the following proof specimens taken from the die at various periods:-
I. On thin, white paper, mounted on soft, white card.

I $\frac{1}{2}$ d., black.
$1 \frac{1}{2} \mathrm{~d}$., rose-réd.
II. On soft. yellowish white, wove paper.
a. With numbers in pencil.
"I " $\quad \frac{1}{2} \mathrm{~d}$., pale yellow-green.
" 2 " $\quad 1 \frac{1}{2} \mathrm{~d}$., yellow-green.
" 3 " I $\frac{1}{2}$ d., dark blue-green.
" I \& 3 " $1 \frac{1}{2} \mathrm{~d}$., deep green.
b. All four signed in ink "J.O.P. 13.5•70."
$I_{\frac{1}{2}}^{1} \mathrm{~d}$., pale rose-red.
I $\frac{1}{2} \mathrm{~d}$., chrome-yellow.
I $\frac{1}{2} \mathrm{~d}$., orange-yellow.
$I_{2} \frac{1}{d}$., orange-red.
These eight proof impressions and the four next, given under Division III., were taken as colour-trials for the Halfpenny value in May, 1870.
III.-On blue, wove paper. Similar to Division II.a.

> " I" I ${ }^{\frac{1}{2} d ., ~ p a l e ~ y e l l o w-g r e e n . ~}$
> " 2 " I ${ }_{2}^{\frac{1}{2}} \mathrm{~d}$., yellow-green.
> " 3 " $\quad \frac{1}{2} \mathrm{~d}$., dark blue-green.
> " $1 \& 3$ " $1 \frac{1}{2} \mathrm{~d}$; deep green.
W. With the number " 35 " reversed below the design.
a. On thin, white paper, mounted on soft, white card.

I $\frac{1}{2} \mathrm{~d}$., black.
b. On thin, hard, yellowish white wove paper. Impressions taken in February, $1871{ }^{1}$

I $\frac{1}{2} \mathrm{~d} .$, black.
I $\frac{1}{2}$ d., deep ultramarine.
I $\frac{1}{2}$ d., chrome-yellow.
I $\frac{1}{2} \mathrm{~d} .$, pale sage-green.
I $\frac{1}{2} \mathrm{~d}$., carmine-rose.
I $\frac{1}{2} d .$, deep lilac-rose.
I $\frac{1}{2} d .$, pale purple.

[^115]c. On yellowish white wove paper watermarked with small star. Impressions taken in 1878.
$\mathrm{I}_{2}^{1} \mathrm{~d}$. . deep yellow-green.
$\mathrm{I}_{\frac{1}{d} \mathrm{~d} .,}$ dull rose.
$\mathrm{I}_{\frac{1}{2}}^{1} \mathrm{~d}$. , decp mauve.

These three last are also found with "Specimen" written in black ink, while other copies shew traces of the colours laving been tested to see whether they were fugitive.

## The first plate for the Three-halfpence stanip.

As soon as the Die for the Threc-halfpence stamp was completed on March 17th or 18 th, 1860 , Perkins, Bacon \& Co. proceeded to make a plate. This was finished by March 22nd ${ }^{1}$ and corresponded in size with the plates of the One Penny and Two Pence values, with the stamps arranged in twenty horizontal rows of twelve. The marginal inscription, except for the alteration in the price, was also the same. The "perforation marks" and lines for the division of the sheet at the top and bottom, and the star-like ornament of Type II. pattern, placed at either side, for the latter purpose, were copied from those on the sheets of the One Pemny stamps current in 1860. The Plate number, an Arabic numeral " 1 ," was engraved at the four corners.

The letters in the four corners of the stamps consisted of sans-serif capitals and their arrangement corresponded with that on the plates of the Two Pence constructed in 1858 and 1859. A curious error occurred on the lettering of the plate, the third stamp in the sixteenth row having "OP" instead of "CP" (Illustration 71). This

$$
\mathrm{PC} \quad \mathrm{PC}
$$

error seemingly remained unnoticed, and even if noted, was never corrected during the entire period the plate was in use. The discovery of the mistake was first made by Mr. Davis, a collector in the United States, and was described in the American Journal of Philately in r894.* A suggestion has been made by another collector, Mr. H. G. Elwell, ${ }^{3}$ that the error was due to the workman having punched an inverted letter " C ," in that particular corner square, thus " 0 " and that he then struck a second impression of the letter in its right position, directly over the first, thus forming a letter " $O$," We do not think that this theory is correct, as an examination of the letter " $O$ " on the crror shews, in our opinion, that it more resembles the other letters " O " on the sheet than it does the letters " C ," as the interior space of the letter seems to us smaller and more oval in shape than that of the letters "C." We do not know the date when the holders ${ }^{4}$ for the letter-punches were introduced, but if they were in use in 1860 such a mistake as Mr. Elwell suggests could hardly have occurred ; for if the letter " C " had been put in a holder in an inverted position every letter " C " on the plate would have been inverted, without the mistake had been discovered, and further the workman woukd not have started punching the letter "C" on the sixteenth row of the plate. What we think occurred was that the workman when punching the whole of the letters "C" required on the plate, omitted to strike the

[^116]letter in that particular square and that when he came to use the " $O$ " punch for the " O" horizontal row of stamps, his attention was called to the vacant space on the impression below the " CO " stamp and he struck a letter " O " in it, thinking either OC
that the little difference between this letter and the letter "C" would never be observed or that the letter would be touched up and altered when the "burr" caused by the punching of the letters was removed from the plate. There is also, of course, the further possibility that when touching up the letters the workman accidentally altered the letter "C " to an " O."

Tile stamps printed in is6o from the plate of the Three-halfpence.
Immediately the plate was finished it was put to press on the " large crown" watermarked paper of 1855 and the Imprimatur sheet was registered the same dayMarch 22nd, I 860 . This sheet shews the paper deeply blued by the mauve-pink colour, which had been selected for the stamp. This colour was the same as Perkins, Bacon \& Co. had used for the One Shilling stamp of New Brunswick they printed in 1851, the colour of which was entered in their invoice book as "pink." ${ }^{1}$ This colour blued the "crown" watermarked paper of the Three-halfpence stamps very unevently, some sheets being decply stained while others remained almost white. The number of sheets printed in all amounted to 10,000 and with the exception of the "Imprimatur" sheet they were gummed and perforated it at Somerset House. After remaining in stock for some years the Board of Inland Revenue, on May 17th, 1867, ordered their destruction and Messrs. Wright and Creeke ${ }^{2}$ give the following account of their disposal :-

> I sheet for the "Imprimatur" of Plate $\mathbf{I}$, in 1860 .
> I ". "P". Paris Exhibition of $1867 .^{3}$
> I, 036 sheets distributed to Postmasters, Collectors, $\& \mathrm{c}$. "
> 8,962 " destroyed in 1867.

10,000 sheets.

The Issue of Three-halfpence stamps in 1870 .
In the year 1870, a reduction was made in the rate of Postage on Inland Newspapers, printed matter, and Patterns or Samples, to take effect on and from the Ist of October, and it was determined to issue stamps of the value of Three-halfpence on that ${ }^{\circ}$ date. In readiness for the issue, Mr. George Evett, the Warehouse Keeper of the Inland Revenue, at Somerset House, wrote to Perkins, Bacon \& Co. on May 27th, I870, ${ }^{5}$ and enclosed a Warrant for printing 5,000 sheets of Three-halfpence stamps,

[^117]with a notification that the paper would be handed to their porter when he called for it, " but in the meantime if you wisl to begin the work, the paper you have on hand for One Penny stamps can be used." Further Warrants were subsequently forwarded to Perkins, Bacon \& Co., so that by October ist, i870, when the Three-halfpence value was first issued to the public, a good supply of the stamps was assured.

## The Colour of the Three-halfpence stamps of i87o.

We have found no document relating to the colour selected for the stamps of I870, which was entirely different to that of the stamps printed in I860. The colour chosen was "lake-red," and this was continucd througloout the issue, which terminated in I 880, when Perkins, Bacon \& Co.'s contract for the supply of the stamps ceased. In the course of these ten years, the colour varied a good deal in shade and frequently approached very closely to that of the One Pemy value. On February I7th, $1872^{1}$ Mr. Ormond Hill wrote to Mr. J. P. Bacon to enquire why the Threehalfpence stamps were "printed in a colour so different from the manve tint originally selected and whether there would be any difficulty in reverting to the original color if it were desired"; and he added: "The present color seems much too near to that of the Id. stamps." We have found no reply to this letter, so conclude Mr. Hill's enquiry was answered at a private interview.

## The Plates used for the Three-halfpencee stamps.

Plate I, from which the stamps of I860 were printed, was used for the " lakered " stamps from 1870 to 1874 . On September 26th, $1871,{ }^{2}$ a new roller, containing four transfers, numbered 2, 3, 4 and 5, was fimished. This was hardened on October 9 th, and on January 18 th, $1872,{ }^{3}$ a new plate, numbered " 3 ," wfth the current number " 193," was completed. No mention is made of Plate 2 in Perkins, Bacun \& Co.'s Engraving Book, so the plate could never have becn finished and Messrs. Wright and Creeke's statement that it was " rejected in consequence of the impressions being inaccurately spaced " is doubtless correct. Plate 3 had the same marginal inscriptions and markings as Plate $I$, but the number at the four corners was enclosed within a small circle, the current number was added, and each of the 2.40 impressions on the plate had the number " 3 " engraved in the reticulated border at either side of the stamps, just above the lettered blocks in the lower corners. Although the plate was finished, as we have said, on January I8th, I872, it was not hardened until March 18th of that year and was not registered until April I3th, 187+, according to the date on the " Imprimatur" sheet. The delay in hardening the plate might be due to its being kept until some other dies or plates were ready for hardening, as it was usual to harden several pieces together, ${ }^{5}$ but we are at a loss to know why the plate should not have been registered until over two years later. The

[^118]error in the corner lettering of the " CP " impression found on Plate I does not PC
of course, appear on Plate 3. (Illustration 72). The latter plate was the last made for this value and was still in use in ISSo, in which year the contract of Perkins. Bacon $\&$ Co. came to an end.

## The Watermark and Perforation of the Three-halfpence stamps.

The stamps issued were printed on the "Large Crown" watermarked paper of i86I and were perforated if at Somerset House, but a few specimens of each plate escaped perforation, as imperforate pairs are known of both Plates $x$ and 3. As in the ease of the One Penny and Two Pence valucs ${ }^{1}$ a trial printing was made about 1870 on Dr. Perkins' chemically prepared "Large Crown" watermarked paper. These stamps which were printed from Plate I, were gummed, but were left mperforate.

## CONTRACT FOR PRINTING THE ThREE-HALfPENCE STAMPS.

No specific contract was entered into between the Buard of Inland Revenue and Perkins, Bacon \& Co. for the printing of the Three-halfpence value, but the stamps were produced by mutual agreement on the same terms as the One Penny and Two Pence values. ${ }^{\text {a }}$

## The Halfpenny value.

In IS70 the postage on " Inland Newspapers " and on "Inland Printed Matter and Patterns ur Samples not exceeding 20z. in weight," was reduced to One Halfpenny. The new rates came into force on October ist of that year and preparations were commenced in the previous April to provide stamps of that value.

## Essays and Contract for the Halfpeniy stamp.

On April 2oth, IS70, ${ }^{3}$ Mr. Ormond Hill wrote to Mr. J. P. Bacon to say: " I omitted to mention to you that the P[ost] Office] authorities would preter a dessgn for the $\frac{1}{2} d$. stamp in which part of the head and ground should be cut away to leare a white tablet in which ' $\frac{1}{2} \mathrm{~d}$.' should appear as I have written it. I do not mean that no other design would be received." On the following day ${ }^{\text {s }}$ he sent Mr. Bacon a further note to the effect: "If you really think it could be done in time I think it would be best for you [to] contemplate the engraving of a reduced head for the $\frac{1}{2} \mathrm{~d}$. stamp and to have your designs prepared accordingly: Hoping that my apparent changeableness will not have put you to inconvenience." On the twenty-ninth ${ }^{5}$ of the same month the Board of Inland Revenue wrote to Perkins, Bacon $\mathbb{N}$ Co. inviting them to tender for a supply of Halfpenny stamps and specifying various stipulations that were to be observed such as: " The size of this stamp from top to bottom must not be more than twe thirds of that of the penny postage stamp, the width remaining the same; and in essential particulars the stamp must be similar to the postage stamps which you now prepare, the Qucen's head being the essential feature in it. The color of the stamp which must be fugitive, should be green, but

[^119]it must not be dark, nor the ground so heavy as that of the penny stamp. It will be open to you to include the making of the paper or not in your tender. The paper must be as thin and solt as possible. It must be made under the same regulations as the paper now used for other adhesive stamps. The sheets should contan $f$ fo stamps each, so as to be of $£ \mathrm{I}$ value. The paper must contain a watermark, a portion of which must appear on each stamp. It is estimated that about four millions of the stamps will be required every week; and it is thought that a stock sufficient for twenty-five weeks, viz., one hundred millions should be supplied in the first instance, not later than the 2 fth September next."

Perkins, Bacon \& Co.'s Engraving Book ${ }^{-1}$ shews that between Aptil $22 n d$ and May $2 n d$, ten sketches were prepared for a Halfpenny stamp, and in a letter to the Board of Inland Revenue on the latter date, ${ }^{2}$ the firm said: " I. We shall be happy to prepare such stamps engraved from either of the ten designs enclosed herewith and printed in a light green ink which shall be fugitive, for the same price including all cost of plates printing and double gumming, as we are now paid for the One Penny and Two Penny stamps, i.e., four pence halfpenny per rooo stamps. Wैe are aware that these stamps are smaller than the One Penny and will be printed foo on the sheet and that therefore it would seem reasonable to offer to prepare them at at lower rate, but we shall have all the first cost of engraving the plates and adapting our machinery and premises to the larger plates, the first cost of the One Pemy labels having been defrayed out of a ligher price which was then paid us and morcuver we find that the cost of a fugitive green ink will be considerably more than that of the colors we are now using."
"Should neither of the designs now submitted prove exactly such as may be approved of, we are ready to execute any other design which may be provided for us compatible with our style of engraving and to defray the expense of its preparation. It must, however, be understood that if such new design shonld involve an unreasonable delay we could not undertake to deliver as many as one hundred millions of the new stamps by the date specified, but we would do our utmost to provide as many as possible."
" 2. We shall be happy also to provide paper similar in substance and texture to that now used for the One Penny stamps with an appropriate watermark for the sum of three halfpence per looo labels including the cost of moulds or sixpence per rooo for the stamps complete, paper inclusive."

On the following day, ${ }^{3}$ Mr. T. Sargent, the Secretary of the Board of Inland Revenue, in his reply to Perkins, Bacon \& Co., said: " 1 am directed to acquaint you that the Board have accepted your tender to supply such stamps [ $\left[\frac{1}{2} \mathrm{~d}\right.$.] and paper in the mamer therein mentioned for Six-pence per I,Ooo stamps ; and instructions will be given to their [the Board's] Solicitor to prepare the necessary Contract for your execution. I have now to request that you will with the utmost possible despatch forward to the Board a finished design for this Stamp, the Queen's head to be similar to that in the Id. postage labels - but reduced to proper size-and the words ' Postage' and 'One Halfpenny' to be at the side."

[^120]The Contract embodying this Agreement was signed on May 18th. 1870. ${ }^{1}$ In this it was further stipulated that the weight of the paper was not to exceed twelve pounds four ounces per ream and that before the end of that year the firm should make a flat die, one roller die with not less than seven impressions, and two complete plates of the stamp, for the rescrve stock of dies and plates kept at Somerset House. The Agreement remained in force and unaltered down to the year 1880 when Perkins, Bacon \& Co. lost the contract for the supply of Halfpenny stamps to the Govermment.

The Engraving Book² shews that in addition to the ten drawings for the Halfpenny stamp, which we have seen were subuitted to the Board of Inland Revenue on May 2nd, three further sketches were completed by May 5 th, four more five days later and two additional ones by May 13th, making nineteen drawings in all prepared for this value. Of these essays the Royal Collection contains six specimens: I. Mounted on a white card inscribed " A. Design submitted for $\frac{1}{2} d$. stamp. The head to be re-engraved. Shell work suggested in the + corners as shown in B." The essay is in black and the design consists of an engine-turned background of the same pattern as the issued stamp of this value, but inverted, with a separately cngraved head of Queen Victoria, looking to the left, cut out and pasted on in the centre. At the sides, labels of solid colour are pasted on and these are inscribed in white sansserif capitals " postage " to left reading upwards and " halfpeniy " to right reading downwards. Square white blocks are pasted on at the four corners and these are "EA"
lettered AE by hand in black sans-serif capitals. The Queen's head on this and the two next essays is the same as that Perkins, Bacon \& Co. used for the One Penny, Two Pence and Three Pence stamps of New South Wales issued in 1856 . (Illustration 53.) 2 Mounted on a white card inscribed "B. Drawing to shew the effect of the light back ground in green color. Also to shew the corners suggested to be used in A." This essay is the same as the last described, except that it is printed in yellowgreen, has the background inverted, and ornaments of a shell pattern inserted by hand in flake-white, at the four interior corners. Kound the head was subsequently added an octagon in pencil. (Illustration 5ł.) 3. Mounted on a white card inscribed "C. Drawing to shew the effect of the present background to Id. stamp in green colour." This essay is printed in deep yellow-green. The background consists of the same pattern as that of the One Penny stamp, with a similar head of Queen Victoria to the previous essays pasted on in the centre. At the right side, as in those essays, a label is pasted on, inscribed "halfpenisy" and in the right lower corner, a square white block containing the letter "E." (Illustration 55.) +. This essay; which is in black, bears the numeral " 3 " in the left upper corner and a former owner into whose possession it came has written " Nessrs. Perkins, $\mathbb{\&}$ Co." at the bottom. The design was made by cutting out a proof impression of the head of Queen Victoria that was used for the first issuc of Qucensland and other colonial stamps printed by Perkins, Bacon \& Co. The portion of the head and background cut out has a curved form at the top and bottom with straight sides. This was pasted on to a piece of stout white wove paper and around it, leaving a white line, was added a background in ink. On this background ornaments of a scroll-like nature were painted. At cither side of the background, labels, similar to those of the first two essays, were

[^121]pasted on and the four corners contain similar white squares and letters, but the "AE."
latter are reversed, thus: EA (Illustration 56.) 5. Printed in black and mounted on a white card. The background is the same as in the first cssay, but in the centre is pasted on a smaller head of Qucen Victoria drawn by hand in pencil, in a white circle. The labels, pasted on at the sides, have the words "postage"" halfpenny " in smaller sans-scrif capitals. Square white blocks are pasted on, "EA"
in the four corners and contain the letters AE inserted by hand in pencil and ornaments of a shell pattern are inserted by hand in flake-white in the interior corners. On this essay being submitted, it was evidently suggested that the value should be altered to read " $\frac{1}{2}$ "" at either side as it will be seen this alteration has been made by hand in pencil. (Illustration 57.) 6. Printed in black and momnted on a white card. This essay is similar to the last, except that the background is inverted, the shell ornaments do not appear and new labels are added at the sides with " $\frac{1}{2}$ " in white. At the bottom of the card Mr. William Henry Stephenson, who was then Chairman of the Board of Inland Revenue, has written "W.H.S. 13/5/70" in black ink. (Illustration 58.) A reference to this approved drawing of the stamp is contained in a letter of Perkins, Bacon \& Co. to Mr. Frederick Heath of the same date. ${ }^{1}$

The background used for the Halfpenny stamp.
In the letter in which the Board of Inland Revenue asked Perkins, Bacon \& Co. to tender for a supply of Halfpenny stamps. "they said that the "ground" of the stamp must not be "so heavy as that of the Penny" value. A new background had therefore to be selected for the stamp by Perkins, Bacon $\mathbb{\&}$ Co. and it seems to have at once occurred to them that the exact reverse of the pattern used for the One Pemny. Three-halfpence and Two Pence values would be a suitable one for the Halfpenny stamp. Our readers will recollect that the background of the three higher values was obtained by transferring the pattern from a roller the firm had in stock to another roller from which the dic for the One Penny stamp was made. ${ }^{3}$

For the background of the Halfpenny stamp it was only necessary to transfer the pattern from the flat steel die that had originally been made from the stock roller, to another roller on which the portion of the background required for the stamp was separated from the rest, a circular space was cleared in the centre for the Queen's head, and shell pattern ornaments were engraved in the four corners. This small portion of the pattern was then transferred to a flat piece of steel and became the die used for the stamp. It seems strange that not a single collector or student of the stamps of Great Britain has ever noticed before that the background of the Halfpenny stamp is the exact reverse of that of the three other values produced by Perkins, Bacon \& Co. (Illustration 60 shews the background of the One Penny, Three-halfpence and Two Pence values and Illustration 6I the background of the Halfpenny stamp.)

[^122]The engrating of the Queen's head for the Halfpeniy stamp.
As soon as Perkins, Bacon © Co's tender was accepted for a supply of llalfpenny stamps they wrote to Mr. Frederick Heath on May 5th, 1870, ${ }^{1}$ to say: " We shall shortly require a new Qucen's head, slightly reduced from that jou formerly engraved -for a $\frac{1}{2} d$. P. [ostage] stamp. Would you be willing to undertake this commission and to do it in a reasonable time? If so will you commence with one at your early convenience." We think Mr. Heath must have had an interview with the firm on the receipt of this letter as he wrote to them on May 7 th ${ }^{2}$ : " According to promise just a line to say that I undertake the engraving of the Queen's head to save you all further suspense in the matter, although I have not at present effected the arangement I desire with regard to the Plate I have in hand. I exject to be in the City to-morrow evening with the reduction." Mr. Heath no doubt called at Perkins, Bacon \& Co.'s on May Sth, and we believe the drawing he left with them is the one now in the Royal Collection of which we give an Illustration under No. 62. On May 13 th ${ }^{3}$ the firm wrote to him: "We have at last got our Drawing finally agreed upon and marked by one of the Commissioners. It is to be the reduced head in a circle of white, and we shall be able to send you the die ready for work to-morrow (Saturday) afternoon. We think you will be able to make a more satisfactory engraving as it is now resolved on, than was at first arranged, but of course the reduction in size is a disadvantage. You will not be surprised when we say that time has become now more pressing than before, but we trust you will do your best." In a letter of May $26 \mathrm{th},{ }^{4}$ to the firm Mr. Heath said the engraving of the dic was " going on well, hope to shew you something on Saturday or Monday next." He must have finished his work a few days later, as the side labels and corner blocks were added at Perkins, Bacon \& Co.'s and the whole die was completed by May 3 rst. ${ }^{5}$ The amount paid Mr. Heath for the engraving of the head was $£ 36 \quad 155$. od. ${ }^{6}$

We give two Illustrations of the die after the engraving of the head: one before the head was strengthened by Mr. Heath (No. 63) and the other after the die was finally finished and hardened (No. 64 ). The die measured $62 \times 60 \mathrm{~mm}$.

## Proof Impressions of the Die of the Halfpenny stamp.

I. On India paper, mounted on suft, white card, before the engraving of the head was strengthened.
$\frac{1}{2} \mathrm{~d}$. , black.
II. On India paper, mounted on soft, white card, after the engraving of the head was strengthened and the die was hardened.
$\frac{1}{2} d$. black.
$\frac{1}{2} \mathrm{~d}$., rose.
${ }^{1}$ Appendix C (286).
${ }^{2}$ Ibid (287).
${ }^{3}$ Ibid (290).
${ }^{4}$ Ibid (293).
${ }^{5}$ Appendix $G$.
${ }^{6}$ Appendix C (295).
III. On soft, white card.
$\frac{1}{2} \mathrm{~d} .$, black.
$\frac{1}{2} \mathrm{~d} .$, rose.
$\frac{1}{3} \mathrm{~d} .$, emerald-green.
$\frac{1}{2} \mathrm{~d} .$, brownish1 orange.
IV. On thin, hard, yellowish white wove paper. Impressions taken in February, I871. ${ }^{1}$
$\frac{1}{2} \mathrm{~d}$., dull lilac-rose.
$\frac{1}{2} \mathrm{~d}$., bright ultramarine.
$\frac{1}{2} \mathrm{~d}$., umber.
$\frac{1}{2} \mathrm{~d}$., brownish orange.
$\frac{1}{2} \mathrm{~d}$., clırome-ycllow.
$\frac{1}{2} \mathrm{~d} .$, pale sage-green.
V. On yellowish white wove paper watermarked with small star. Impressions taken in 1878.
$\frac{1}{2}$ d., rose-lake.
$\frac{1}{2} d .$, purple.
The first of these is also found with " Specimen" written across the stamp in black ink.

The plates for the Halfpenny stamps.
On May IIth, 1870, ${ }^{2}$ Mr. Ommond Hill wrote to Mr. J. P. Bacon and sent him " a strip of iron scratched to indicate what should be the cross measurements of the engraving of the halfpenny plates" and on the other side of the letter he drew a diagran of the top row of twenty Halfpenny stamps as they were to be engraved on the plate with the space to be left between each stamp. Below the diagram he wrote : " A twentieth part of the distance from the one arrow' point to the other will be exactly the distance which the centre of one stamp should be from the centre of the next." On the following day ${ }^{3}$ he wrote: "How soon do you think that you could let me have such a trial sheet of the Halfpenny stamps as we spoke of ? I mean a sheet of the proper paper made in regular work pulled upon a plate either partially engraved or with the boundary lines only marked upon it and afterwards double gummed." The Somerset House officials were doubtless busy at this time in making preparations for new perforating plates for the machines to be used for perforating the Halfpenny stamps and Mr. Hill sent the first of these letters to Mr. Bacon in order that the laying down of the stamps on the plates should correspond exactly with the perforating plates that were being prepared. His request in the second letter for a sheet of the watermarked paper to be sent to him double gummed was prompted, no doubt, with a view of testing the new perforating plates on the paper as it would appear when the stamps were actually delivered at Somerset House.

We have seen that the Die of the Halfpenny stamp was not ready until May 315t. 1870. Perkins, Bacon \& Co.'s book of the dies and plates hardened by the firm

[^123]shews that the lardening of the Halfpenny die was completed on June zrd, and their Engraving Book ${ }^{1}$ states that the first roller of this value with four transfers, numbered " I" to " 4 ," was finished on the same day. On June roth, " the marginal inscription for the plates or " legend," as it was called, was engraved and this was hardened the following day. The Hardening Book shews that this inscription was transferred partly to one roller and partly to another, and that both these rollers were hardened on June Ifth. The wording of the inscription was slightly altered from that on the One P'miny, Threc-halfpence and Two Pence plates and read: " price $\frac{1}{2} d$. Por Label I - Per Row of $2+$. fir.-- Per Sheet. Place the labels above and at the right hand side of the Address. In Wetting the Back be eareful not to remove the Coment." The mumber of the plate was inserted in Arabic numerals within small circles, at the four comers (Illustration 65), and the " Current Number " was added. The latter appears on the shect, above the seventh stamp of the top row and below the seventh stamp from the right lower corner of the lowest row. A fan-like ornament was engraved on the top and bottom margins, pointing in each instance to the space between the twelfth and thirteenth stamps in the first and last rows of the plate and was intended to shew the centre line where the sheet could be divided into two equal portions. The perforating marks consisted of a plain cross engraved at either side of the plate, which pointed to the space between the tenth and eleventh rows of stamps and by the side of the cross a horizontal line was engraved, which appears below the cross on the left side margin of the sheet and above the cross on the right side margin. With the making of Plate 6 a second cross line was added to the cross at either side, and this was contimued on all the subsequent plates.

The plates of the Halfpenny stamps were at first of the same thickness as those of the three other values, viz., five-eighths of an inclh, ${ }^{3}$ but owing to their largersize and greater weight, thimer plates were afterwards used which were only three-sisteenths of an inch in thickness. The plates had to be screwed down on the loose bed of the transferring press and the holes of the four corner screws were afterwards filled up with steel rivets.

Each plate contained $q$ do impressions in twenty horizontal rows of twenty-four, and after these had been laid down. check-letters consisting of small sans-serif capitals were punched by hand in the four corners of each impression. The lettering ran
AA BA XA AT BT XT
from $A A ; A B$; to $A X$ for the first row, down to $T A ; T B$; to TX for the last row: (Illustration 65.) Specimens of the stamps are sometimes put forward as having the US
letter " $S$ " inverted, one of these being the stamp lettered SU on Plate 5, which is said to have the lower " $S$ " in this position. We believe that the inverted appearance of the letter on all such specimens can be accounted for in the same way as we have described for similar tarieties of the One Penny value with letters in the four corners, viz. by either overinking or defective punching of the letter. ${ }^{4}$

On June 20th, ${ }^{5}$ number 2 roller, containing seven transfers numbered " 5 " to

[^124]" 10 " and one unnumbered for making dies, was finished and on the same date Plate I, with the current number " I7I," was also completed. This plate was approved and put to press the same day. No mention is made of Plate 2 in the Engraving Book, nor was any " Imprimatur " sheet of the plate ever registered. There is no doubt that the plate was never completed and the reason given by Messrs. Wright and Creeke, ${ }^{1}$ that it was " found to be imperfect after 232 roller impressions had been made on it " is, we believe, correct. Plate 3. with the current number " 173 ." was finished on June 27th, ${ }^{2}$ and was registered and put to press the following day. The Hardening Book shews that Plates I and 3 were never hardened. This was probably due to there being no facility for hardeming these plates at the time they were finished. The plates of the Halfpenny stamp were larger than any Perkins, Bacon \& Co. had used before and would consequently require a new hardening box of sheet iron in which they could be placed for the process. This had to be ordered and, we think, was not ready at the dates when these two plates were completed. A great deal of delay had taken place in getting the design of the stamp finally approved and the die engraved. Perkins, Bacon \& Co., too, were under contract to the Government to deliver one hundred million Halfpenny stamps before September 24 th, $1870,{ }^{3}$ a huge mmber to furnish in three months in addition to the quantities required of the three other values. It was therefore, determined to proceed with the printing of the stamps from Plates I and 3, immediately they were finished, and without waiting to have them hardened. The fact that these two plates were put to press without being hardened accounts for the comparatively small number of stamps printed from them. Plate I only furnished 121,500 shects and Plate 3 192,500, whereas some of the subsequent plates, which were hardened, yielded over half a million sheets each.

Plate 4 with the current number " 174 ," was finished on July 2nd, ${ }^{4}$ and the Hardening Book shews that this and all the subsequent plates used for the Halfpenny stamps were hardened. Under this date the book contains an entry "Experimental $\frac{1}{2} \mathrm{~d}$. postage plate," an indication that before any of the Halfpenny plates were hardened a trial was made, probably with a plate of plain steel, to see whether the new hardening box fully answered its purpose.

We give the dates when Plates 5 to 21 were finished, ${ }^{5}$ with the exception of Plates $7,16,17$ and I 8 , which for one cause or another were never completed. The reasons given by Messrs. Wright and Creeke ${ }^{6}$ for the imperfect state of these four plates are : "Plate 7 , owing to the roller being defective, was never commenced "; "Plate I6 was never completed, as the roller broke after making Ig8 impressions; the rollers of plates 17 and 18 both cracked after sixteen impressions had been made." These explanations are probably fairly accurate, but we should point out in the case of Plate 7 that it could not have been the roller itself that was defective, as we have already seen that this roller bore impressions for Plates 5 to 10 , as well as an un-

[^125]numbered one, and we know that Plates 5, 6, 8, 9 and 10 were made from it. Probably the impression numbered " 7 " on the roller was defective in some way and could not be used for making a plate. As regards Plates 16,17 and 18 , the roller used for these plates had eight impressions numbered if to is on it. ${ }^{1}$ If it broke while Plate 16 was being made it must have been mended and again repaired after it cracked while being used for Plate $\mathbf{1} 7$. The wonder is that after these two accidents an attempt was made to lay down Plate is with this roller and we are therefore a little sceptical whether this was done.

A comparison of the dates taken from the Engraving Book ${ }^{2}$ of the completion of Plates 9 to 20, with the dates of registration of these plates shew considerable intervals for which we are unable to account.

The last rolter made for the Halfpenny stamps was finished on January 6th, 1877, and this contained eight transfers numbered i9 to 26 . The last plate used for printing the stamps was Plate 20 , with the current number " $2+9$." which was finished on October 7 th, 1878 . Plate 2I, with the current number " 272 ," was completed on December Ioth, $1879 .{ }^{3}$ but this plate was never registered or put to press. Messrs. Wright and Creeke state that Plate 22 was completed, but it does not appear in the Engraving Book and we think that it was left in an unfinished state and not proceeded with on account of Perkins, Bacon \& Co. receiving notice from the Board of lnland Revenue in February, IS80, ${ }^{5}$ that they had lost the contract for supplying the Halfpenny, Three-halfpence and Two Pence stamps.

At the time the contract for the Halfpenny stamps was made in May, I87o, one of the stipulations was that Perkins, Bacon \& Co. should deliver to Somerset llouse before the end of the year a Reserve flat die, a roller die, with not less than seven impressions, and two complete plates. ${ }^{6}$ The Engraving Book' ${ }^{-2}$ shews that a second die of the Halfpemy was made on December 20th, 1870, and that a Reserve roller, with eight unnumbered impressions, had previously been made on September 15th. The Hardening Book states that this die was hardened on December 22nd, but naturally no mention is made in this book of the Reserve roller, as this was delivered to Somerset House in the soft state, so that if the roller was ever required for use the eight impressions on it could have numbers inserted before it was hardened. The Hardening Book also contains the entry under the date December 19th: " Halfpemy postage plate No. 178 for Reserve at Somerset House." Now the plate with this current number was Plate 9. The Engraving Book ${ }^{8}$ states that this plate was finished on August I3th, I870, so that it had been made four months before it was hardenect. The plate was registered on December 23rd, of the same year and it is stated was put to press on October 9th, I87I. As this was intended for a Reserve plate it was probally only given out by the Somerset House authorities on an emergency in October, IS7I, when possibly a large mumber of Halfpenny stamps was required. After the

[^126]supply of Halfpenny stamps was increased to the required quantity by printing from this and the other plates in use, Plate 9 was returned to the Reserve stock at Somerset House, and was probably not used again. Specimens of Plate 9 are by far the rarest of any of the Halfpenny plates and the particulars we have given about the plate readily accounts for this fact. Plate 9 was the only Reserve plate that was furnished to Somerset House.

## The Colour of the Halfpenny stamps.

A new fact elicited in our researches on the Halfpenny value is that it was originally intended to have the stamp printed in a light green colour. ${ }^{1}$ Before the contract for the supply of the stamps had been given to Perkins, Bacon \& Co. the firm was making experiments to obtain a fugitive green ink suitable for the purpose. A sample of such ink was submitted to Mr. Ormond Hill at the end of April, IS70, and he wrote to Mr. J. P. Bacon on the thirtieth of that month ${ }^{2}$ to say that he found it " very fairly fugitive."

For the colour-trials for the Halfpenny value, Perkins, Bacon \& Co. had prints taken from the original flat die of the engine-turned background selected for the stamp, and the Royal Collection contains the following specimens of these trials (Illustration 6I) :-
I. On soft, white wove paper.

Pale yellow-green, marked in pencil "No. r."
Yellow-green ." ., "No. 2." Dark blue-green ,, ," "No. 3." Chrome-yellow. Orange-yelluw. Orange-red.
II. On blue, wove paper.

Dark blue-green, marked in pencil "No. 3."
Deep green ", " 1 \& 3."
Some of the specimens exhibit signs that the colours have been tested in order to see whether they were fugitive.

The prints shew that the width of the band of background was 25 mm ., but, as all the specimens have been torn across at one end, it is impossible to say what the length of the band was. The greatest length shewing on any of the specimens is $9^{\circ} \mathrm{mm}$.

Further experiments to find a suitable green colour were made at Perkins, Bacon \& Co.'s manufactory in the New North Road, Hoxton. On May 25th, ${ }^{3}$ Mr. G. Arnold, one of the principal men employed there, sent Mr. J. P. Bacon specimens printed in three different shades of green from a small trial plate containing six impressions in three horizontal rows of an incomplete design of the New South Wales One Pemny, Two Pence, and Three Pence "diadem" stamps of 1856 . which were produced by the firm. The three little sheets of impressions were numbered in pencil " $I$," " 2 ,"

[^127]" 3 ." respectively, and the specimens in the top rows of the sheets shew signs of having been tested to see how far the colours were fugitive. No. I is in blue-green on white laid paper. No. 2 in yellow-green on white wove paper and No. 3 in blucgreen, of a paler tint than No. I, on white laid paper. (Illustration 59.) This letter and the specimens are now in the Royal Collection.

As the die of the Halfpemny stamp was not ready at the time these experiments were carried out and in order to shew the Board of Inland Revenue exactly how the actual stamp would appear in the green colonrs, Perkins, Bacon \& Co. obtained permission to have prints struck from the die of the Three-halfpence value. W'e have already given particulars of the twelve varieties taken for this purpose, when listing the proof impressions known of the die of the Three-halfpence stamp,' so no good cause would be served in repeating them here.

The experiments proved that although one at least of the green inks was fugitive at the time it was used, it did not remain permanently so and on May 24 th, $1870,{ }^{2}$ Perkins, Bacon \& Co. wrote to the Board of Inland Revenue to inform them of this unwelcome news, and at the same time they snbinitted prints from the Threc-lialfpence die in two other colours. We cannot say for certain what these colours were, but judging from the specimens we know of the colour-trials, we think they were "pale rose-red" and one of the shades of "ycllow" or " orange." The Board in their reply of the same day ${ }^{3}$ asked Perkins, Bacon \& Co. to forward them " the approved design for the halfpenny adhesive Newspaper Stamp" as "Mr. Sargent wishes to see it at once with reference to your representation as to the green colour not being fugitive and with reference to your letter of this morning." The drawing referred to was then in Mr. Frederick Heath's hands, but Perkins, Bacon \& Co. obtained it from him on May 26th ' and no doubt forwarded it at once to Mr. Sargent. We have found no further correspondence on the subject of the colour of the Halfpenny value, so the matter was probably settled at an interview when it was decided that the stamp should be printed in lake-rose. The colour varied a great deal during the ten years the stamps were in use and was sometimes practically the same in appearance as that of the One Penny value. In the memorandum dated "June 4 th, $\mathbf{1 8 7 9}$," to which we have before alluded, ${ }^{5}$ the composition of the colour of the Halfpenny stamp is given as "Rose-pink, Flake white, Drop rose-lake, and mucilage."

## The Watermarked Paper used for the Halfpenny stamps.

Our readers will have noticed from the particulars we gave of the contract made with Perkins, Bacon \& Co. for the supply of Halfpenny stamps that the price of sixpence per thousand stamps was to include a special watermarked paper to be furnished by the firm. ${ }^{6}$ As soon as the contract was concluded Perkins, Bacon $\mathbb{\&}$ Co. set about obtaining a suitable watermarked paper from Messrs. Wise \& Co. This paper was of similar quality and made under the same restrictions as the Large
${ }^{1}$ ride p. 186.
${ }^{2}$ Appendix C (291).
${ }^{3}$ lbid (292).
${ }^{4}$ 1bid (293).
${ }^{5}$ I'ide p. 112 and Appendix C (330), where a comparison can be made with the colour of the One Penny valuc.
${ }^{6}$ I'ide p. 191 and Appendix $F(2)$.

Crown watermarked paper used for the three higher values, but the watermark. according to the terms of the contract, was of a distinctive character. The stamps being of such a small size and as many as 480 to the sheet, it was đifficult to arrange for a separate watermark for each individual specimen. It was, therefore, finally determined that the watermark should consist of the word "halfpenny" in script type and that this should cover three stamps. An entire sheet of the watermarked paper consequently contained this word repeated 160 times, and arranged in twenty horizontal rows with eight repetitions each. The side margins of the sheet were watermarked at the centre with the words " Postage Stamps" in script type, at the left side, reading upwards and at the right side reading downwards. The " halfpenny " bits were stamped ont of sheets of thin brass by a steel die and were then stitched on to the wire-work of the moulds with fine wire. As ahready stated. ' it was stipulated in the contract that the weight of the paper should not exceed twelve pounds four ounces per ream. During the ten years in which the Halfpemy stamps were in use sereral monlds were used for making the paper. These were numbered on the margins in Arabic numerals and not by letters, as in the case of those used for the Large Crown watermarked paper. The highest number we have seen on a sheet is " 8."

The Gumming and Perforation of the Halfpenny stamps.
The gum used on the sheets of stamps was of precisely the same quality as that employed for the three higher values and according to the stipulations of the contract two coatings were applied, as in the case of those values. ${ }^{2}$

The sheets were perforated at Somerset House by comb-machines with a guage of 14 like the other values. It will be seen from the description we have given of the perforation marks on the plates ${ }^{3}$ that the shects of Halfpenny stamps were placed in the perforating machines with the stamps sideways and not like the three higher values with the stamps in their correct positions, or, sometimes, inverted when the sheets happened to be passed through the machines the wrong way up. The last row of Halfpenny stamps perforated on a sheet-which was either the first or last vertical row on the sheet in its correct position-according to whichever end of the sheet was first passed through the machine, was left imperforate along the bottom. Each sheet therefore, had the margin imperforate, either at the left side of the stamps in the first vertical row or at the right side of the stamps in the last vertical row.

In August, 1876. ${ }^{4}$ a complaint was made by the Inland Revenue Department to Perkins, Bacon \& Co. that the double pinning mark was not observable at one end of the sheets of Halfpenny stamps, which had then been recently received, and the firm was asked to instruct their printers to take more care in inking the plates.

As in the case of the three other values, sheets occasionally missed the perforation and specimens are known of Plates $I, 4,5,6,8$ and $I_{4}$, which were issued in an imperforate condition. In some instances only certain specimens on the sheets were imperforate, according to the following notice in one of the early philatelic journals ${ }^{5}$ :

[^128]" We have just seen in a collection a pair of halfpenny English, evincing a most singular freak of the perforating machine. Part of a sheet was purelhased from a post office ; and in the midst of this, were the two in question, which had totally escaped perforation, either above, below, or at the sides!" This error was probably the result of one or two rows of perforation having been accidentally missed on this particular sheet. The other sheets perforated along with it must also have had the same peculiarity:

## Experiments for Lighter and more Fugitive Colours for the stamps.

In May, rS78, ${ }^{1}$ the Board of Inland Revenue wrote to Perkins, Bacon \& Co. to say that they had received a Report from the Controller of the Circulation Department of the General Post Office, respecting the ink in which the Halfpenny, One Penny, Three-halfpence and Two Pence stamps were printed. The Controller stated that: "It has long been rumoured that the obliterating marks can be taken out of Postage Stamps, and recently I have seen various experiments and have experimented myself on different stamps and am able therefore to say that by the use of a certain fluid, which it is not desirable to mention, the obliteration can be perfectly removed with very little trouble. In the ease of the halfpenny. penny, three halfpenny and twopenny stamps this can be done without leaving any marks of the operation behind. With all other stamps this is not so, indeed the same fluid that removes the obliterating ink destroys the ground colours of the other stamps as well. The reason of this is that the former named stamps are printed in fast colours while the latter are printed in fugitive colours. Having tested this matter I am not prepared to say that frauds on the Revenue by these means are but few, because the process is so simple, and the removal of the obliteration so effectual that stamps so treated would pass unnoticed to almost any extent. This, however, for the reason before stated, is only true of the halfpenny, penny, three halfpenny and twopenny stamps. This being so. I think no time should be lost in applying a remedy, and this will be found in having the stamps of low values made precisely in the same way as those of higher value, both as regards the mode of manufacture and the printing in fugitive colours." The Board of Inland Revenue added that "having caused experiments to be made in their Laboratory with a view to test the accuracy of this representation, have satisfied themselves that the facts are as has been reported " and they asked whether Perkins, Bacon \& Co. could supply stamps of the same description as those provided by Messrs. De La Rue \& Co. and, if so, at what price.

Perkins, Bacon \& Co. in their reply to the Board ${ }^{2}$ said that they would be happy to quote a price for stamps prepared in the manner desired, but before doing so they asked permission to urge reasons why, if they remedied the defect complained of, it was not desirable to change from "line-engraving " to " surface-printing." The chief reasons they advanced were that in the general opinion of artists line-engraving " as a style " was superior to surface-printing, that there was much more security against forgery in the former than in the latter system and that it was more important to observe the last point in stamps of low values than it was in those of higher denominations. As regards the fugitiveness of the colours of the stamps they wrote

[^129]" we find that our attention has hitherto been turned in a wrong direction in seeking to make our ink fugitive and we believe we have found the means of giving the quality required. As, however, it takes some weeks to test the question fairly we are not yet in a position to submit specimens." They then dealt with the complaints that the colour of the One Penny stamps rubled off in handling the sheets, that the colours of the stamps were too dark to shew the impression of the date stamp distinctly, if it was used as an obliterating mark, that the surface of the stamps was not smooth and glossy like that of the higher values, and that the thickness of the gum on the sheets was objectionable. They concluded by leaving the matter in the hands of the Board of Inland Revenue, requesting that the suggestions they had made might be considered and that time should be allowed them "to make and test a series of experiments with the view of carrying out the changes proposed before considering further the question of a change of system from line-engraving to surfaceprinting."

The Board of Inland Revenue in their reply on May $29 t h$, 1878 , ${ }^{1}$ said they were " prepared to allow a reasonable time for making experiments with a view to the proposed changes," that they were ready to admit the superiority of line-engraving to surface-printing per se, but they drew attention to " the coarse blurred appearance of the Pemny Postage stamp, compared with the clear, clean printing of the Inland Revenue stamp of the same value." They added that they were " not aware of any objection to the tint being varied : but they will communicate with the Post Office on the subject," and as regards the gum they compared the quality of that on the line-engraved stamps to that used for the Inland Revenue stamps.

On receipt of this letter Perkins, Bacon \& Co. at once set to work to find new coluurs of paler tints for the stamps. On June Ifth, they submitted to Mr. William Henry Cousins, the Controller of Stamps and Stores at Somerset House, sheets of the Halfpenny, One Penny and Two Pence in fugitive colours and much lighter in tone, which they proposed for adoption in place of the colours then being used for those values. ${ }^{2}$ No descriptions are given of the new tints, but judging from the specimens of colour-trials, which are known to belong to this period, we believe that the Halfpenny was printed in light purple, from Plate r 4 , the One Penny in deep mauve-pink from Plate igI and the Two Pence in ultramarine from Plate I5. All the three trials were on the respective watermarked papers then in use for those values. and the sheets were, of course, imperforate. On the following day a letter was sent to Perkins, Bacon \& Co. by the Board of Inland Revenue, apparently in ignorance that colour-trials of the stamps had been submitted. ${ }^{3}$ On June 18tl1, ${ }^{4}$ Mr. Cousins returned the three sheets of colour-trials to Perkins, Bacon \& Co. stating that the colour came off on handling the sheets. He suggested that the sheets should undergo a process of rolling and that when this had been done, they shonld be forwarded to the Secretary of the Board of Inland Revenue, with the addition of specimens in other colours. On July ifth ${ }^{5}$ the Board of Inland Revenue wrote to ask for specimens of the new colours proposed for the stamps. Perkins, Bacon \& Co. replicd on July

[^130]13th, ${ }^{1}$ that owing to their Postage Stamp Department being closed for the Annual Holiday; they could not then forward the specimens they had prepared, but we find they did so three days later. ${ }^{2}$ In this letter they forwarded sheets of the One Pemny and Two Pence, ${ }^{3}$ which we believe were in the same colours as those of these values they had submitted to Mr. Cousins on June Ifth. They said they thought the colours would be "found to contain the qualities of fugitiveness to the action of benzole and lightness of shade sufficient to exhibit a clear impression of the obliterating stamp. We regret, however, to state that we have not up to the present time succeeded in producing a color which possesses the quality of fastness so as not to rub off, and to bear rolling. The fact is that the quality in the ink which renders it fugitive to benzole keeps it moist and prevents its bearing pressure." On July 3 rst ${ }^{4}$ Perkins, Bacon \& Co. forwarded two further sheets of the One Penny and Two Pence values to the Board of Inland Revenue, which they said were " printed in the same colours as the previous specimens, but with an ingredient added which sets the colors so far that they will not rub off on a dry hand." On August 7 th ${ }^{5}$ they forwarded to the Board a sheet each of the Halfpenny, One Penny and Two Pence values and a further sheet of the One Penny denomination showing " the full strength of the color. which is much more brilliant, but which we imagine is too strong to shew the obliterating stamp well." All four sheets they added had been rolled. We believe that these specimens were in much the same colours as those previously sent, but that the Halfpenny sheet, printed in maure-pink, was from Plate 19 instead of Plate I4, and the two One Penny sheets in mauve-pink, from Plate 212 instead of Plate IgI, as the specimens known printed from these two plates shew signs that the sheets had been rolled.

On November 2nd, ${ }^{6}$ the Board of Inland Revenue wrote to Perkins, Bacon \& Co. saying that they had "received a communication from the Post Office requesting that his Lordship ' may be informed whether it is to be understood that [the specimens submitted in July and August] are to be considered in all respects the best which your firm can produce." A long reply to this enquiry was sent by Perkins, Bacon \& Co. to the Board on the eighth of the same month, ${ }^{8}$ accompanied by six specimens of Colonial postage stamps printed by the firm and three sheets of One Penny specimens. As regards the latter they wrote " that since the delivery of our Specimens in August last we had reason to suspect that the color which we had submitted contained arsenic in sufficient quantities to be dangerous. We therefore had a careful analysis made and finding that the color was not safe to use, we procured other specimens of the same kind of color and now submit three shades of different degrees of strength. all of which are free from arsenic. They shew a somewhat brighter color and are quite as fugitive as the others."

[^131]With these specimens this series of experimental colour-tials was brought to a conclusion and it will perhaps be uscful if we append in the form of a list the varicties of the trials that are known to collectors : specimens of all of which are found in the Royal Collection :

Watermarked "halfpenny." Imperforate.


Watermarked Large Crown of i86r. Imperforate. Id., deep mauve-pink. Plate 191.
id., ", ", ,, with trial cancellation.
Id., mauve-pink. „, 212.
2d., ultramarine. $\quad$, 15 .
2d., pale ultramarinc.
Specimens in the " mauve-pink" colour have often become more or less sulphuretted since they were printed.

The impressions on " small star" watermarked paper printed from the dies of the Halfpenny, One Pemy " Retouched," Three-halfpence and Two Pence, already listed under the Proof Impressions of the Dies of those values, ${ }^{1}$ also belong to the same period of colour-trials. In proof of this the Royal Collection contains specimens on the "small star" paper of the Three-halfpence die in deep yellow-green with " $25 / \mathrm{II}$ " in pencil on the margin and in dull rose with " $27 / \mathrm{II}$," similarly written. And of the Two Pence die in mauve-pink with the marginal date " $11 / \mathrm{ro} / 7 \mathrm{~S}^{\prime \prime}$ " and in dull rose-pink with " $20 / 11 / 78$," added in the same way.

The Collection also contains an imperforate block of six specimens from Plate 214 in rose-red, the colour of the issued stamps, printed on thick yellowish, vertically laid card, which we think was probably taken during this period, but for what purpose we do not know.

## Notices to Terminate the Contracts for printing the Stamps.

On December 23rd, 1878 , ${ }^{2}$ the Board of Inland Revenue wrote to P'erkins, Bacon \& Co. to say that the several specimens forwarded by them were " not satisfactory to the Post Office Authorities " and that "the Board have had therefore no alternative but to order notices to be served upon you determining the present arrangements." Two notices were enclosed in the letter ; the first determining the contract for the supply of One Pemny, Three-halfpence, and Two Pence stamps at the expiration of six months and the other determining the supply of Halfpenny stamps and of the paper used for this value at the expiration of twelve months. Perkins, Bacon \& Co. in their reply on December 30th, ${ }^{3}$ said: "We need not express our great regret at the receipt of these notices after so long a period of service which we had thought until a recent date, had been satisfactorily rendered. As no indication is given as to the nature of the objections entertained by the Postmaster-General we are of course

[^132]unable to endeavour to remove them, but we take the opportmity of this letter to enclose sjecimens of other colors which we have recently discovered which are fugitive and free from poisonous ingredients. As, however, our Specimens of stamps in lineengraving in fugitive colors are not satisfactory to the Post Office Authorities we will now prepare specimens of Surface-printed stamps as directed by the Honourable Commissioners on 6th May last, and trust we shall not be considered obtrusive if we submit them for consideration at the earliest period." The enclosures in the letter consisted of four stamps printed, respectively, in pink, green, blue and yellow. We are unable to indicate exactly what these specimens were, but wo. think they were probably impressions taken from the die of the Threc-halfpence value on small star watermarked paper, two prints of which we recently described as bearing dates at the end of November.

## Essays for Surface-printed Stamps.

The Engrawing Book of Perkins, Bacon \& Co. shews that as early as June, 1878, the firn had commenced experiments for surface-printed stamps, as we find the following entry under the twenty-ninth of that month ${ }^{1}$ : "Finishing specimen Id. postage stamps + on pl[ate] for surface printing." The next entry with the date Janary fth, I879, reads: "Engraving four preliminary dics (postage)" and on the twenty-fourth of the same month there is the entry: "Engraving dies, cte., various Postage stamps." Then on February 15th, we have: "Drawing 2 sheets of Postage stamps specimens 'copper-plate and surface.'" These two sheets were forwarded on the same day to the Board of Inland Revenue in a letter, ${ }^{2}$ in which Perkins, Bacon \& Co. said: "We now beg to submit Specimens of [surface-printed] stamps in several forms together with one or two Heads, all cut in relief, and shewing different colors which when printed for use would be fugitive for the purposes intended. We have not felt at liberty to imitate the Queen's Head at present in use, and we have not had sufficient time to unite the gencral design with the Head on one Dic, and consequently the effect produced is rather that of Drawings than of finished stamps (though each of the parts is actually printed), but we trust that we shew enough to prove that we are able to produce the stamps in this class of work, if allowed to do so. We should be happy to supply such stamps as might be approved for about the same price as we are now recciving for the One Penmy Postage Stamps. We take the opportunity at the same time to submit some specimens of stamps on the 'Copper Plate System' prepared on lighter machine-grounds and with different general designs, on the chance of their being preferred to the Surface-printed style. They do not fairly represent the work of the Queen's Head as they are cut out from other stamps and are pasted upon the Drawings, but if any of these were adopted the Head would of course be made to look uniform with the rest of the stamp."

The Royal Collection contains the actual two sheets of desigus submitted in the letter, or duplicates of them, and they will be fomnd Illustrated under the numbers 73 to 96 . The designs are mounted on two sheets of white cardboard, cach of which measures $1 I_{8}^{5}$ by $6 \frac{1}{2}$ inches. As explained in the letter, the heads of all (but No. Si) are printed separately to the frames and the two parts have afterwards been pasted together. Of the surface-printed all are in dull pink, except Nos. 74 and 75 ; No. 74

[^133]being in yellow-green and No. 75 in deep ultramarine. Of the copper-plate designs, Nos. 85.93 and $9 f$ are in bright pink; Nos. $86,88,92$, and 95 are in mauve; Nos. 87.91 and 96 are in pale ultramarine ; No. 89 is in sage-green and No. 90 is in orangeyellow.

Of the designs on the two cards, other specimens exist as follow's:-
No. SI is known printed in black in a block of four on thin white wove pajer, gummed, and also in dull pink in a block of four on similar gummed paper, and with two impressions of the Qucen's head in a circle, Illustration No. 82 , printed at the left side of the sheet.

A die proof of No. 82 is known, printed in black on India paper.
A die proof of No. 85 is known printed in green on thin white wove paper, shewing in the centre a vacant space for the insertion of an engraving of the Qucen's liead.

Specimens of other designs prepared at the same date as the foregoing, but not known to have been submitted to the Board of Inland Revenue :-

A dic proof similar to design No. 83 , but with the head on a background of solid colour, Illustration No. III. This is printed in dark blue on white card and shews the size of the die was 5 I by 65 mm .

Two other surface-printed designs made up in the same way as those submitted on February 15 th, 1879 , i.e., by pasting the head and frame together, in each case. Illustration No. 97 has the licad on a backgromnd of diamond shaped dots and is printed in mauve-pink. Illustration No. 98 is printed in dull rose.

The different types of the Qucu's head found on the designs.
For the surface-printed and line-engraved designs we have described seven different types of the Queen's head were used as follows:-

Type 1 for designs Illustrations Nos. 76, 77, 81, 84.

$$
\begin{array}{llllll}
" & 2 & " & " & " & \text { Nos. } 78,82 \\
" & 3 & " & " & ", & \text { Nos. 73, 74, 75, 79, 80, 83, 98, int. } \\
" & 4 & " & " & " & \text { Nos. 85, 86, 87, 88, 89, 90. } \\
" & 5 & " & " & " & \text { Nos. 91, 92, 94. 95. } \\
" & 6 & " & " & " & \text { Nos. } 93.96 . \\
" & 7 & " & " & \text { No. } 97 .
\end{array}
$$

Type 1.-The design Illustration No. 81, was engraved on wood and printed from clectrotypes; Illustration No. $8+$ is a head cut out of a print of this design and Illustration Nos. 76 and 77 have prints of the same head cut out and pasted in the centre of new frames.

Type 2.-Illustration No. 82, was also engraved on wood and printed from electrotypes, and Illustration No. $7^{8}$ has the head cut out and pasted in the centre of a frame design. This head was copied from that on the Four Pence and Two Shillings stamps of South Australia, the plates for which were made and sent to the colony by Perkins, Bacon \& Co. in November, 1866.

Type 3.-This head was engraved on steel by Mr. William Kidgway of Acton, the artist who also produced the head for the designs we subsequently describe for surfaceprinted stamps of One Penny and later on for those of the Halfpenny, Three-halfpence and Two Pence values. It appears that in January, 1879. Perkins, Bacon \& Co, asked Mr. Charles Henry Jeens, a very skilful linc-engraver who had done a
good deal of work for them at odd periods, if he could recommend anyone who could engrave a head of the Queen on steel suitable for surface-printing. He suggested that the firm should apply to Mr. J. Joubert, the engraver Messrs. De La Race \& Co. had employed for many years for their surface-printed stamps. This they did, but Mr. Joubert was then in Paris and unable to madertake the commission, which they then placed in the hands of Mr. Ridgway. ${ }^{1}$ Like Type 2 the head was copied from that on the Four Pence and Two Shillings stamps of South Australia of 1866.

Type 4.-This head was cut out of prints taken from the first Die engraved by the Heaths for the One Pemny stamp in I84o. (Illustration I6.)

Type 5.-We do not know who engraved this head, but it was evidently copied from that on the same Sonth Australian stamps as Types 2 and 3 .

Type 6. -This head was cut out of prints taken from the Retonched Die of the One Penny stamp of 1854 . (Illustration 26), which was, of comrse, in current use in 1879.

Type 7.-We cannot say who engraved this head, which like Types 2, 3 and 5 was copied from the South Australian stamps of 1866.

## Texder for the Supply of One Penny Stamps by Surface-printing.

On April 3rd, 1879 , the Board of Inland Revenuc wrote to Perkins, Bacon \& Co. to enquire whether they wished to tender for the supply of One Penny stanips by surface-printing. In their reply ${ }^{2}$ the firm stated their desire to do so, but asked that the date of delivery of tenders should be extended a fortnight beyond May ist, the day that had been fixed. This request was evidently acceded to, as we shall sce further on that the tender of the firm was not delivered until May 17 th.

Meanwhile on May Sth, ${ }^{3}$ the Board of Inland Revenue wrote to Perkins, Bacon \& Co. to say they had decided that any new postage stamps should not come into use before the end of the year and they enquired whether the firm was wilhing to supply their One Penny stamps until December 3rst, 1879 . They also stated that " a change in the Three-halfpence and Two Pence postage stamps is not immediately contemplated, so that they will contime to be required eren after the expiration of the present year." In their reply on the following day, " Perkins, Bacon \& Co. intimated their willingness to continue to provide the stamps as requested.

The tender of the firm for the supply of One Penny stamps by surface-printing was sent in to the Board of Inland Revenue on May 17th, 1879. ${ }^{5}$ and read as follows: " In reply to your favour of the 3rd ult., inviting us to tender for printing One Penny Postage Stamps prepared by Surface-printing which shall be fugitive to the hydrocarbons and not solvent in water. We have now the honor to enclose herewith two specimens in each of four colors, printed from a trial plate and gummed (on paper furnished to us at Somerset House) and two other prints of the same colors as Specimens of color only. We also enclose impressions in four colors of a new Queen's
${ }^{1}$ Appendix C (324a)
${ }^{2}$ Ibid (326).
${ }^{3}$ Ibid (327).
${ }^{4}$ Ibid (328).
${ }^{5}$ Ibid (329).

Head with six different surrounding devices and a gummed sheet printed in pink and shewing all six designs, placed one above the other. The printing and rolling of the large specimens are not as perfect as we could wish, the work being new to us, but we feel quite prepared to undertake the delivery of such stamps as shall be approved by your Honourable Board if our Tender should be accepted. We should be prepared to furnish such quantities of thesc stamps or such modifications of them as may be mutually arranged, for the sum of Twopence-halfpenny (2 $2 \frac{1}{2} d$ ) per $\mathrm{I}, 000$ labels."

The first set of specimens referred to in the Tender included, we believe, shcets of a design of which we illustrate, under No. IIO, a die proof impression printed in dull pink on white, wove paper. This die was engraved on Febrwary 27th, and a plate made from it was finished on March 20th. ${ }^{1}$ The plate contained 240 impressions, in twenty horizontal rows of twelve and each of these bore the Plate number " 1 ," at either side, and had letters inserted in the four corners corresponding with those of the stamps on the sheets of the One Pemny line-engraved value. The Royal Collection contains an entire shect printed from this plate in bright ultramarinc on white wove paper, watermarked "Towgood's Superfine." The shect is imperforate and without gum and no doubt one in the same colour was submitted in the Tender, but what the other colours were we do not know. The head on this essay is similar to Type 3 of the designs submitted in February, 1879. ${ }^{2}$ but it had been re-engraved by Mr. Ridgway. The Queen's ear is made more prominent, the waves of the hair above the ear are different, there are no fine slanting white lines in the four divisions of the band of the diadem and the horizontal lines of the background surromending the head are thicker. There is a die proof of the head only in the Royal Collection printed in mauve-pink on thin white paper, but this has the background of horizontal lines finer than on the die impression Illustrated under No. IIo; these lines were, therefore, deepened before the Irame was added round the head and the die was used for making the plate. This design, with slight modifications of rounded corners and a star ornament in place of the plate number " I " at either side, was adopted in I881 for the postcards of the island of Grenada, printed by Perkins, Bacon \& Co.

The second set of specimens submitted with the Tender consisted of the six designs we Illustrate under the Nos. 99-Iot. The Engraving Book shews that three of the dies of these essays were completed on May Gth, and those of the remaining three, two days later. The plate was finished on May 13th, ${ }^{3}$ and contained thirtysix impressions, as described in the Tender and shewn under our Illustrations Nos. 99-rot. The head on these designs was copied from that on the One Penny and other stamps of Ceylon produced by Perkins, Bacon \& Co. in 1855-57, and the letter " $W$ " in the four corners represents the initial of the Clnistian name of Mr. Ridgway, the engraver of the dies. ${ }^{4}$ Beyond the gummed sheet mentioned in the Tender, as being printed in "pink," we do not know what the other colours were that were subnitted.

[^134]The following specimens of these designs are knowen in collections :-
Die proofs of the Queen's Head alone, shewing the size of the die was 60 by 65 mm .

On white card. In lilac.
On white wove paper. In bright pink.
Die proof of Illustration No. 99, but without the letters " 16 " in the four corners ; printed on white wove paper.
id., yellow-brown.
The same as the last, but with the colour surrounding the design removed.
Printed on white wove paper.
id., pale red-brown.
Printed in sheets of thirty-six impressions. On white wove paper, imperforate and without gum.

Id., black: six designs.
rd., mauve-pink: six designs.
Id., pale blue:
rd., vermilion :
On yellowish white wove paper watermarked with small star ; imperforate and without gum.

Id., yellow-green : six designs.
Impressions taken from this plate after five other designs had been added to it will be described further on in our work.

A plate containing 120 impressions in ten horizontal rows of twelve was made of the design Illustration No. 1oo, but the stamps on this plate had the four comer blocks left without letters. No mention occurs of this plate in the Engraving Book, so we do not know the exact date when it was constructed, but we think that it was probably made towards the latter end of May or early in June, 1879 . Sheets are known printed from this plate on soft, yellowish white, wore, gummed paper; imperforate.

Id., purple-black.
Id., dull rose.
id., red-brown.
On thick, white, wove paper without gum ; imperforate.
Id., purple-black.
The surface-printed essays we have described, and those of the same mode of printing subsequently submitted by Perkins, Bacon \& Co. to the Board of Inland Revenue, of which plates were made, were printed from steel plates and not by the more usual method of electrotyping.

## Contract for the supply of One Penny Stamps, by surfacePRINTING GIVEN TO ANOTHER FIRM.

On June 27th, 1879, the Board of Inland Revenue wrote to Perkins, Bacon \& Co. to inform them of the result of the competition for the new contract for the supply of One Penny stamps. In this letter they said: " " With reference to the Tender for

[^135]supply of Surface-printed Penny Postage stamps submitted by your firm on the 1 yth ultimo, I am directed by the Board of Inland Revenue to acquaint you that the specimens furnished by you, and by the several other firms from whom Tenders had been invited, were subjected to careful examination by the practical and Chemical Officers of this Department, whose reports have been fully and carefully considered by the Board, and have likewise been submitted to the Postmaster-General for his opinion, before any conclusion was come to on the subject. The decision which has been arrived at is that the Tender of Messrs. T. De La Rue \& Co. on this occasion is that which, while fulfilling all the conditions of the proposed Contract, affords the best security to the Revenue."

Thus it was finally determined to substitute surface-printing for the One Penny postage stamps, in place of line-engraving by which process, we have seen, they were produced for the first forty years they were is use. The decision to change the mode of printing the stamps has ever since been deplored by collectors, and all lovers of artistic productions, for the beauty and character of line-engraving over the cheaper and inferior process of surface-printing cannot be gainsaid.

## Experiments for change of colours of the Halfpenny, Three-halfpence and Two Pence values.

A second letter was sent on June 27 th, 1879, ${ }^{1}$ by the Board of Inland Revenue to Perkins, Bacon \& Co. to inform them " that there is no immediate intention on the part of the Board to take out of your hands the manufacture of the $\frac{1}{2} \mathrm{~d} ., \mathrm{I}_{2}^{1} \mathrm{~d}$, and 2 d . stamps provided that all lead or other poisonous ingredients be eliminated from the colours used in their manufacture, with a view to carrying out which condition it is understood you are now making experiments. After Christmas next, it will be necessary to review the scale of charges for these stamps, and perhaps some of the designs may be then reconsidered."

In their reply on June 30 th, ${ }^{2}$ Perkins, Bacon \& Co. asked whether they were at liberty to alter the colours hitherto used for the Halfpemy, Three-halfpence and Two Pence values, " so as to make them more fugitive and also to use gum similar to that used on the specimens which were submitted to the Honourable Commissioners in the recent competition."

On July 12 th, ${ }^{3}$ the Board of Inland Revenue in their reply to this enquiry said: " the Board find that it is the wish of the Postmaster-General that a change should be made, and that the opportunity should be taken to adopt for the $\frac{1}{2} d$. Stamps, which are now printed by your firm, and the $2 \frac{1}{2} d$. Stamps, which are printed by Messrs. De La Rue \& Co., the colours recommended by the International Bureaufor Foreign Stamps of those denominations, vigt. light green for the $\frac{1}{2} \mathrm{~d}$. stamp and light blue for the $2 \frac{1}{2} d$. stamp. The Postmaster-General further suggests that the present colour of the $2 \frac{1}{2}$ d. stamp should be adopted for the 2 d . stamp, and that as regards the I $\frac{1}{2}$ d. stamp the colour should be the same as that, vigt. light red, which has been proposed for the new Id. stamp. I enclose specimens of the colours thus proposed for the $\frac{1}{2} \mathrm{~d}$. $1 \frac{1}{2} \mathrm{~d}$. and 2 d . stamps and request that specimens of the stamps printed

[^136]in those colours may be forwarded for inspection." On the margin of the letter is written: " Pattern of green for $\frac{1}{2} d$. stamp, and of maroon for 2d. stamp enclosed. Specimen of colour red $1 \frac{1}{2} d$. stamp will be furnished when ready:"

On July Ifth. ${ }^{1}$ Perkins, Bacon \& Co. in their acknowledgment of this letter, said: "We will take immediate measures to procure and submit specimens of the colors directed for future use in the preparation of Postage Stamps of the denominations of $\frac{1}{2} \mathrm{~d}$. and 2 d . respectively: We presume that we are now to discontinue our experiments with a view to the substitution of colors free from lead in place of those hitherto supplied. We beg to be allowed to remind you that no reply has been given to our enquiry whether we may substitute such a gum as we proposed for the Id. stamps in competition for that now in use and to which the Postmaster-General objects." The Board replied on July 17 th, ${ }^{2}$ " that the new colours for the $\frac{1}{2} \mathrm{~d}$., $\mathrm{I} \frac{1}{2} \mathrm{~d}$. and 2 d. Postage Stamps must be free from lead. Yon will be permitted to use in the manufacture of those stamps, the gum which was adopted in the case of the specimen stamps submitted by you in the late competition." Perkins, Bacon \& Co. wrote again on the following days to point out that what they desired to know was " whether pending the preparation of the specimens of color ordered for the $\frac{1}{2} \mathrm{~d}$. and 2 d . Postage Stamps, which will take some little time, we are to continue our experiments upon the existing colurs so as to supply such as are absolutely free from lead in the interval. We quite understand that the new colors are to be free from lead." To this letter the Board replied on July 22nd, " that it is apprehended there will be no great delay" in your submitting to them new colors for the Postage Stamps of $\frac{1}{2} \mathrm{~d}$., $\mathrm{I} \frac{1}{2} \mathrm{~d}$. and 2 d ., which must of course be frce from lead."

On October 20th, $1879,{ }^{5}$ Mr. Thomas Arthur Colls, who was head of one of the Branches of the Controller of Stamps and Stores Department at Somerset House, wrote to Perkins, Bacon \& Co. to say "I shall be glad if you will execute the warrant you have outstanding for 2d. Postage at once in the present blue color ; " and he added that he had that day "sent on an order for $45^{\circ}$ reams more of crown paper for which I will send you a warrant to print." From the wording of this letter it appears that a warrant for Two Pence stamps had been held up pending the experiments for a new color for this value, but as no decision had been come to about this and as the stock of Two Pence stamps was no doubt getting low, Mr. Colls ordered the warrant to be executed in the nsual blue colour employed for this value.

On October 31st, ${ }^{6}$ the Board of Inland Revenue wrote to Perkins, Bacon \& Co. and forwarded them specimens of the new One Penny surface-printed stamps prepared by Nessrs. De La Rue \& Co. and requested them to forward at once samples of the Three-laalfpence postage stamp printed in the same colour. The Board also enclosed in their letter samples of the Two Pence-halfpenny stamp of Messrs. De La Rue $\mathbb{\&}$ Co. printed in a blue colour, which they stated was to be adopted for the Two Pence stamp and they asked that samples of the latter in this colour should be furnished with the least possible delay. The One Penmy and Two Pence-halfpenny
${ }^{1}$ Appendix C (335).
${ }^{2}$ Ibid (336).
${ }^{3}$ Ibid (33\%).

- Ibid (33§).
${ }^{5}$ Ibid (339).
${ }^{6}$ Ibid (340).
stamps, of which specimens were sent in this letter had neither of them been issued to the public at that dite, as the former did not come into use until January Ist, i880. and the latter until a month later. A mistake was made in this letter in sending samples of the Two Pence-halfpenny stamp in blue instead of the then current colour of that value, ${ }^{1}$ the official description of which was "maroon," and on November 7 th, $1879,{ }^{2}$ Mr. Colls wrote to Perkins, Bacon \& Co. to say that if they required specimens of the Two Pence-halfpenny stamp then in use he would send them some. He wrote again on the following day ${ }^{3}$ to cnquire when the specimens of color of the new Two Pence stamp would be ready and he added " The matter is very pressing and it is desirable to urge it forward as I am anxious to increase the stocks of $\frac{1}{2} d$. and 2 d . stamps."

Mr. J. P. Bacon replied to Mr. Colls letter on November roth, ${ }^{4}$ and said he was unable to say when his firm would be able to submit specimens of the new colors for the stamps. He pointed out that they had waited for montlis for samples of color " and then after having got a specimen sheet of blue for the Two Pence stamps, which we copied and in every way satisfactory, we are informed that this is a mistake and that we are to matel the old $2 \frac{1}{2} d$ color. Now as the color of the new One Penny stamp is a shade of reddish brown, and the old $2 \frac{1}{2} d i s$ also a shade of a similar color, we doubt our ability to produce two colors sufficiently distinct from one another to answer the requests of the Honourable Commissioners. We have a sheet of One Penny printed in a reddish brown color (the officer has no instructions to allow us to print one from the $1 \frac{1}{2} d$ Plate) which is simply waiting for age now, and we will shew you the best we can do to match the $2 \frac{1}{2} \mathrm{~d}$ color as soon as we can prepare it." We believe that the sheet of Two Pence blue stamps referred to in this letter was printed in ultramarine similar to the specimens submitted in $1875 .{ }^{5}$

The exact date, or dates, on which the specinens of new colours for the Halfpenny, Three-halfpence and Two Pence stamps were sulmitted to the Board of Inland Revenue is unknown to us. But samples of the Halfpenny value printed in green were delivered to Mr. Bell, at Somerset House, certainly before October Ist, 1879. ${ }^{6}$ and colour-trials for the two other values were subinitted between November roth and December 20th, the same year. ${ }^{7}$ From specimens existing in collections, those submitted of the Halfpenny were printed in a light blue-green colour from Plate 20 on paper watermarked "halipenny," imperforate; while those of the Two Pence were printed in a maroon colour from Plate 15, on large crown watermarked paper, imperforate. Specimens of the latter are also known in bright purple printed from Plate 15 on large crown watermarked paper, imperforate, which, we believe, belong to this series of colour-trials, but it is doubtful if any samples in this colour were submitted to the Board of Inland Revenue. The specimens sent in for the proposed change of colour of the Three-halfpence value were probably those referred to in Perkins, Bacon \& Co.'s letter of November Ioth, which are described as printed from a plate of the One Penny in a reddish brown colour. We do not know of any specimens surviving of these One Penny impressions and consequently cannot say from what plate of that value they were printed.

1 Appendix C $(3+t)$.
${ }^{2}$ Ibid (3+2).
${ }^{8}$ Ibid $(3+3)$.
$t$ Ibịd $(3+4)$.
${ }^{5}$ Vide pp. 203, 204.
${ }^{6}$ Appendix C (3t1).
${ }^{3}$ Ibid ( $3+t, 3+7$ ).

## Decision to substitute Surface-printed stamps for the Halfpensy, Three-halfpence and Two Pence Vilues.

On December 20th, I 879 . $^{1}$ the Board of Inland Revenue wrote to Perkins, Bacon \& Co. to say " that the specimens of the new $\frac{1}{2} d .$, I $\frac{1}{2} d$. and $2 d$. P'ostage Stamps recently furnished by you have been submitted to the Postmaster-General, and are not considered by his Lordship to be satisfactory, an opinion in which the Board feel bound to express their concurrence. Lord John Manners thinks it essential that the three stamps in question should be in every respect equal to the new $1 d$. stamp which has received approval ; and I am, in these circumstances, to call upon you forthwith to state whether you are prepared to furnish surface-printed stamps of $\frac{1}{2} \mathrm{~d}$., $I \frac{1}{2} \mathrm{~d}$. and 2 d . of the style of the new Id. stamp, and if so, how soon, and at what prices :-the halfpenny stamp to be of the same size as the pemy one."

In their reply on December 27th, ${ }^{2}$ Perkins, Bacon \& Co. stated that they were " prepared to furnish surface-printed stamps of the denominations required at the price of $2 \frac{3}{8} d$ per 1000 stamps" and "could undertake to deliver the new stamps in two months from the approval of [their] designs."

The Board of Inland Revenue wrote again on January 7th, $1880,{ }^{3}$ and said: " The conclusion at which the Board have now arrived in this matter is to invite designs for the surface-printed postage stamps of $\frac{1}{2} \mathrm{~d}$., $\mathrm{I} \frac{1}{2} \mathrm{~d}$. and 2 d ., simultaneously from yoursches and from Messrs. T. De La Rue \& Co. with a view to their being submitted to the Postmaster-General. The designs should be accompanied by specimens of the fugitive printing inks intended to be employed with a tender as to the rates at which they can be produced and must be forwarded to this office within one month from the date of this letter."

Later on in the same month, in reply to an enquiry by Perkins, Bacon \& Cu. as to the length of time the line-engraved Halfpemy stamp was likely to be required, Mr. T. A. Colls wrote to Mr. Bacon on the twenty-fourth ${ }^{4}$ inst., and said: "I have spoken to Mr. Cousins about the $\frac{1}{2} \mathrm{~d}$. and his reply is that he thinks the present class of stamps will be required for the next three months. But I did not understand that he gave any pledge on the subject."

## Tender for Surface-printed Stamps of Halfpenili; Threehalfpence and Two Pence values.

Perkins, Bacon \& Co. forwarded their Tender for surface-printed stamps to the Board of Inland Revenue on February 7th, I88o. ${ }^{6}$ In this they said: "We have the honor to submit herewith designs for Surface-printed Postage Stamps of the denominations of $\frac{1}{2} \mathrm{~d}$., $1 \frac{1}{2} \mathrm{~d}$., and 2 d . There are two designs of $\frac{1}{2} \mathrm{~d}$., two of $1 \frac{1}{2} \mathrm{~d}$. and four of 2 d ., but if the design adopted for any one denomination should be considered more suitable for another it could easily be changed, or any modification which might be suggested could be made. The colors used are those which we were instructed to prepare for copper-plate stamps some time since, but which we were not able to match in that style of engraving, but as there is some resemblance between the

```
' Appendix C (347). }\mp@subsup{}{}{4}\mathrm{ Ibid (350).
2 Ibid (348). }\mp@subsup{}{}{5}\mathrm{ Ibid (351).
3 Ibid (349).
```

color of the $1 \frac{1}{2} d$. and that for 2 d ., we enclose in another envelope impressions of a browner shade for $\mathrm{I} \frac{1}{2} \mathrm{~d}$. stamp and two shades of a more pink colour for the 2 d . We were only able to finish the engraving of the last of these designs two days since, and have been much hindered as to the colors by the prevalent dark days and consequently they are barely dry and may not prove so fugitive as they may be made, but if our designs are approved we do not doubt being able to meet the other requiremens should time prove them to be defective. We enclose two specimens of each of the colors suggested in order to shew their fugitiveness, but may remark that the same colors would prove more fugitive if printed in sheets, than when printed siugly from a dic. The price at which we are prepared to furnish these stamps is the same that we named in our letter of 27 th December last, i.e., $2 \frac{3}{8} \mathrm{~d}$. per 1ooo labels."

## Designs for Surface-printed Stamps of Halfpenny, <br> Three-halfpence and Two Pence values.

The Engraving Book ${ }^{1}$ of the firm shews that drawings for Halfpenny, Thrcehalfpence and Two Pence stamps were made on December 2.thl, 1879. That on January 5th, 1880, a transfer was taken of a Postage Die head for alteration. This was the die of the Qucen's head engraved by Mr. Ridgway which had been prepared and used for the six surface-printed designs of One Pemy submitted to the Board of Inland Revenue on May 17th, 1879. (Illustrations 99-I0.f.) The principal alteration on the head consisted of the removal of a few of the vertical lines of shading from the band of the diadem and the decpening of several of the lines of the face and hair. On January $13^{\text {th }}$, 1880 , a postage roller was prepared with six transfers for Halfpemy, Threc-halfpence and Two Pence stamps, which we believe were the frames of the designs we Illustrate under the Nos. 105, 106, 107, II2, II3 and rif. Between January igth and February 2nd, eight dies of different designs were engraved, two of which were for Halfpenny stamps, two for Threc-halfpence and four for Two Pence stamps. (Illustrations 105, 106, Io7, IOS, IO9, II2, II 3, IIf). The letter "W" in the four corners of these essays was the initial of the Christian name of the engraver Mr. Ridgway. ${ }^{2}$

The Royal Collection contains the actual card of designs, or a duplicate of it, that was submitted to the Board of Inland Revenue in the Tender of February 7th 1880. There are cight designs pasted on the card in a straight line across the centre, all of which are die proof impressions, and in the left lower corner of the card in two lines is written "Specimens of Surface Printed postage stamps-Perkins, Bacon \& Co." The designs are placed in the following order :-

|  | pale blue-green. | (Illustration | 105). |
| :---: | :---: | :---: | :---: |
| ${ }_{2}^{1} \mathrm{~d}$., | ,. , ,. | 1 | 112). |
| ${ }_{2}^{1} \frac{1}{2} \mathrm{~d}$., | palc red-brown | ( , | 107). |
| I $\frac{1}{2} \mathrm{~d}$., | ," ., ., | ( , | 113). |
| 2d., | maroon. | ( ${ }^{\text {, }}$ | 108). |
| 2 d , | ,, | ( ", | II4). |
| 2d., | " | ( ", | 109). |
| 2d., | " | ( , | 106). |

[^137]Specimens of these essays in various stages are frequently found in collections of Grcat Britain stamps and we add a list of the varieties that are known to us:-

Die proofs of the Queen's head alone, after the die had been retouched by the removal of a few of the rertical lines of shading from the band of the diadem and several of the lines of the face and hair had been decpened. Printed on white wove paper.

> In ycllow-green.
> In mauve-pink.

Die proofs on white wove paper.
$\frac{1}{2} \mathrm{~d}$., pale blue-green. (Illustration 105).
$\frac{1}{2} \mathrm{~d}$., yellow-grcen. ( ,, ,, )
$\frac{1}{2} \mathrm{~d}$., pale lilac. ( , , . )
$\frac{1}{2}$ d., yellow-green. ( ., II2)
$\frac{1}{2} \mathrm{~d}$., pale lilac. ( " .. )
I $\frac{1}{2} d$., pale red-brown. ( ". 107).
I $\frac{1}{2} \mathrm{~d} .$, deep
$\mathrm{I} \frac{1}{2} \mathrm{~d}$.. pale
.,
..
(
I $\frac{1}{2} \mathrm{~d}$., deep ., ". ( ", ..
2d., maroon. ( .. 106).
2d., " ( ," IOB).
2d.. .. ( .. Iog).
2d., .. ( ., IIf).
Dic proofs of the Halfpenny, Three-halfpence and Two Pence (Illustrations IO7, IO8, II2), are also found printed together on small pieces of stout, white, wove, surfaced paper, the Halfpenny being to right, the Two Pence to left and the Three-halfpence placed sideways above the other two.

$$
\begin{aligned}
& \frac{1}{2} \mathrm{~d} ., ~ I \frac{1}{2} \mathrm{~d} ., \\
& \frac{1}{2} \mathrm{~d} ., \text { bright rose. } \\
& \frac{1}{2} \mathrm{~d} ., \text {, } 2 \mathrm{~d} ., \text { yellow-grcen. } \\
& \frac{1}{2} \mathrm{~d} . \\
& \frac{1}{2} \mathrm{~d} ., \\
& \text { 2d., maroon. }
\end{aligned}
$$

The Halfpenny, Three-halfpence and Two Pence designs, (Illustrations ro5Iog), are found printed in shects in a vertical line at the left side of the designs of the One Penny (Illustrations 99-104).
On white, wove, gummed paper. Imperforate.

$$
\frac{1}{2} \mathrm{~d} ., \text { Id., } \mathrm{I} \frac{1}{2} \mathrm{~d} ., 2 \mathrm{~d} ., \text { rose-red : eleven designs. }
$$

$\frac{1}{2} \mathrm{~d} .$, Id., $\frac{1}{2} \mathrm{~d}$., 2d., brown :
$\frac{1}{2} \mathrm{~d} .$, Id., I $\frac{1}{2} \mathrm{~d} ., 2 \mathrm{~d}$., cmerald-green : ""
$\frac{1}{2} d .$, Id., I $\frac{1}{2} d ., 2 d .$, ultramarine: ,"
$\frac{1}{2} \mathrm{~d} ., \mathrm{Id} ., \mathrm{I} \frac{1}{2} \mathrm{~d} ., 2 \mathrm{~d}$., dull blue : ,,
$\frac{1}{2} \mathrm{~d} .$, Id., $\mathrm{I} \frac{1}{2} \mathrm{~d}$., 2 d ., dark blue: ,"
$\frac{1}{2} \mathrm{~d} .$, Id., $\mathrm{I} \frac{1}{2} \mathrm{~d} ., 2 \mathrm{~d}$., violet :
On white, wove, gummed paper. Perforated 12.
$\frac{1}{2} \mathrm{~d} .$, Id., $I \frac{1}{2} \mathrm{~d} ., 2 \mathrm{~d}$., greyish black : eleven designs.
$\frac{1}{2} \mathrm{~d} .$, Id., I $\frac{1}{2} \mathrm{~d} ., 2 \mathrm{~d}$., rose-red :

On white, wove, gummed paper. Perforated $122_{4}^{3}$.
$\frac{1}{2} d .$, Id., $\frac{1}{2} \mathrm{~d} ., 2 \mathrm{~d} .$, violet: eleven designs.
The Half-penny, Three-halfpence and Two Pence designs (Illustrations inz, II3. II4), were arranged on a plate in four horizontal rows of si.. stamps each as illustrated. Sheets are known printed from this plate as follows :-

On white, wove, gummed paper. Imperforate.
$\frac{1}{2} \mathrm{~d} ., \mathrm{I}_{2}^{1} \mathrm{~d} .$,
$\frac{1}{2} \mathrm{~d} . \mathrm{d} .$, black.
$\frac{1}{2} \mathrm{~d} \mathrm{~d} .$,
$2 \mathrm{~d} .$, decp bluc.

On white, wove, gummed paper. Perforated $12{ }^{3}$.
$\frac{1}{2} \mathrm{~d} ., ~ I \frac{1}{2} \mathrm{~d} .$, 2d., pale maroon.
$\frac{1}{2} \mathrm{~d}$., $\mathrm{I}_{2}^{1} \mathrm{~d}$., 2d., decp
$\frac{1}{2} \mathrm{~d}$., $\mathrm{I} \frac{1}{2} \mathrm{~d}$., 2d., brown.
$\frac{1}{2} \mathrm{~d}$., $\frac{1}{2} \mathrm{~d}$., 2 d ., bright ultranarine.
${ }_{2}^{1} \mathrm{~d}$., $I_{2}^{1} \mathrm{~d}$., 2d., dark blue.
$\frac{1}{2} \mathrm{~d}$., $\mathrm{I} \frac{1}{2} \mathrm{~d}$., 2d., emerald-green.
$\frac{1}{2} \mathrm{~d} ., I_{2}^{\frac{1}{2}} \mathrm{~d}$., 2d., bright rose.
$\frac{1}{2} \mathrm{~d} ., ~ I \frac{1}{2} \mathrm{~d} ., 2 \mathrm{~d}$., pale violet.
$\frac{1}{2} \mathrm{~d}$., $\frac{1}{2} \mathrm{~d}$., 2 d ., decp

## Contract for Surface-printed Stamps of Halfpenny, Threehalfpence and Two Pexce given to another firm.

On February 19th, $1880,{ }^{1}$ the Secretary of the Board of Inland Revente wrote to Perkins, Bacon \& Co. to say that the Board had accepted the Tender of Messrs. De La Rue \& Co. for the supply of Halfpenny, Three-halfpence and Two Pence stamps, as their colours were fomed to be more fugitive than those submitted by Perkins, Bacon \& Co. and the price they quoted was lower. He added: "In announcing to you this decision, I should not give effect to the wishes of the Board if I failed to convey to you their sense of the faithful services your Firm has rendered to this Department in past years, and their appreciation of the endeavours you have made to meet the increasing requirements of the Public service in this Department." In acknowledging the receipt of the Buard's letter on February $2 \mathrm{f}^{\text {th, }}{ }^{2}$ Perkins, Bacon \& Co. thanked the Honourabie Commissioners for the expressions of appreciation of their services contained in the foregoing paragraph.

The printing of the line-engraved stamps of Halfpemny, Three-halfpence and Two Pence continned for some months longer, as the new surface-printed stamps of Messrs. De La Rue \& Co. of the first two of these values were not ready for issue to the public until October I4th, I880, while that of the Two Pence was not issued until December 8th, of that year.

[^138]
## Application by Perkins, Bacon \& Co. to retain a steel die of the Queen's head l'sed for the One Pexily Stanp.

On April roth, $1880,{ }^{1}$ Perkins, Bacon $\mathbb{N}$ Co. wrote to the Board of Inland Revenue to say: "We have received instructions from Mr. Robertson to destroy the dies and rollers used in the preparation of the One Penny Postage Stamps (the steel plates having alrcady been defaced), ${ }^{2}$ but before duing so we wish to ask the permission of the Honourable Commissioners to retain a stecl impression of the profile of Her Majesty which was the foundation of the Postage Stamp. We could erase from the die all the writing and engine-turned background, so as to make it useless for the production of a postage stamp, but the profile itself, is a fine work of art and might be utilised in our business for other purposes, and it appears a great pity that it should be destroyed." In their reply on May Ifth, ${ }^{3}$ the Board said that they did not feel at liberty to grant the request of Perkins, Bacon \& Co. to retain a stecl impression of the Qucen's head used for the One Penny stamp and they added " You appear to be under a misapprehension in supposing that it has been decided to destroy the original dic, as the Board understand that the Controller of their Stamping Department has merely requested you to send the dies, $\mathcal{\&}$.., to this Office in order that arrangements might be made as to their disposal."

In acknowledging the Board's letter on the following day; 'Perkins, Bacon is Co. said: " If it is only intended that they [the dies] or any part of them should be deposited in one of the safes of the Honourable Commissioners under two locks, the keys of one of which shall be in our possession, as has hitherto been the case with the reserve Dies and Plates, we can of course have no objection to such a course, but if it is intended that the custody of them shall be absolutely given up, we could not consent, as they are our property." In replying to this letter on June fth, ${ }^{3}$ the Secretary of the Board wrote: " Having submitted to the Board of Inland Revenue your further letter of the 15 th ultimo, I am directed to acquaint you that they will not object to the Dies, \&c., which were formerly used in the preparation of the Pemny Postage Stamps being deposited in the custody of the Controller of stamping under two locks, the keys of one lock to be in your possession as has been the case with regard to the reserve dies and plates."

## Destrlction of Halfpensy; Three-halfpence asd Two Pexce Plates.

On October 19th, I880, ${ }^{6}$ Mr. G. B. Robertson wrote to Perkins, Bacon \& Co. to ask them to " make arrangements for the defacement of the Pustage dies, rollers and plates at Messrs. Dewsnaps" and on the following day ${ }^{7}$ he wrote to Mr. J. P.

[^139]Bacon to say: "I will arrange to send Mr. Lloyd at io o'c. on Friday next to remove those plates, etc., which are to be brought here i.e., to Somerset House] and on Tuesday next at io o'c. an officer shall be sent to Fleet Street to remove those that are to be destroyed on the premises of Messrs. Dewsnap. I have also arranged for the Officer of the Cancel Office to attend at Messrs. Dewsnap's at iI o'c. on Tuesday next." Messrs. Perkins, Bacon \& Co. replied to Mr. Robertson's letters on October 2oth, ${ }^{1}$ and said that the dates he mentioned should "be attended to " and on the same day, ${ }^{2}$ they wrote to Messrs. Dewsnap \& Co. ${ }^{3}$ to ask them to make arrangements to cancel some plates for them on Tuesday the 26th inst. On October 22nd, ${ }^{4}$ Mr. Robertson wrote to Mr. J. P. Bacon and said: " The Postage dies which were brought here to-day can be locked in the Reserve Safe anytime between Io and 4 o'c. you like to send Mr. Gill with the key"; and on the twenty-sixth ${ }^{5}$ of the same month Perkins, Bacon \& Co. wrote to Messrs. Dewsnap \& Co. "In reply to your enquiry we write to say that we wish the plates you have turned off this morning to be finished as has been your usual custom when dealing with our plates."

Messrs. Wright \& Creeke give the plates destroyed on October 26th, I880, as ${ }^{6}$ :-

```
    \frac{1}{2}d., Plates 8, I2, I3, If, I5, I9, 20, 2I, 22.
I\frac{1}{2}d., |, I, 3.
2d., ., It, I5.
```


## Exquiry by Perinis, Bacon \& Co. regarding a new contract.

The last communication we reproduce in the voluminous correspondence given under Appendix C, is a letter from Perkins, Bacon \& Co. of Marcl1 5th, I889, ${ }^{7}$ to Sir Algernon West, who was then Chairman of the Board of Inland Revenue. This letter was to the following effect: "It having come to our knowledge that there is at possibility of the present Contract for Postage Stamps and other Stationery being renewed without public competition, we ask permission as Contractors who for a period of forty years supplied the Government with Postage Stamps to urge on your Honourable Board the desirability of inviting Tenders for the articles in question from Firms willing to supply the same that full advantage may be taken of the most improved and economical methods of production." We have been unable to find any reply to this communication, but it is a well-known fact that no public competition for the supply of postage stamps was held on the expiry of the contract made with Messrs. De La Rue $\mathbb{\&} C 0$. in 1879 , and that a new contract was given by the Board of Inland Revenuc to that firm.
${ }^{1}$ Appendix C (360).
${ }^{2}$ Ibid (361).
${ }^{3}$ IVide p. 120.
${ }^{4}$ Appendix C (362).
${ }^{5}$ Ibid (363).
6"A History of the Adhesive Stamps of the British Isles.' By Hastings E. Wright and A. B. Creeke, Junr. London. 1899. pp. $24^{\circ} .24^{8}$.
${ }^{7}$ Appendix C (364).

## Destruction of the Reserte Stock of Dies, Rollers and Plates kept at Somerset House.

On June 20th, 1904, the key of the safe containing the reserve stock of dies and plates, at Somerset House, was handed over to the Authoritics there by Perkins, Bacon \& Co. in the presence of Mr. J. Dunbar Heath and Mr. Gr. J. C. Taylor, who represented the firm. This was done in order that the stock of dies and plates then remaining on hand might be destroyed. The contents of the safe at that time consisted of the following items :-

Two $\frac{1}{2} \mathrm{~d}$. flat dies.
Three Id., ,, ,, (one the old original die and Nos. 2, and 3.)
One $1 \frac{1}{2} d$., die. No. 35 .
One 2d. ,, ,, No. I.
One soft roller containing $\delta$ impressions of $\frac{1}{2} d$. die.
One ., .. ., 5 ., Id. ., one of $\frac{1}{2}$ d. die and one of 2 d . die.
26 plates in all ; 25 being Id. plates and one being a $\frac{1}{2} \mathrm{~d}$. plate.
For the numbers on the One Penny and Three-halfpence dies reference may be made to our lists of proof impressions of the dies, ${ }^{1}$ while the number "I" on that of the Two Pence scems to point to this being the original die of that valuc. We have already described the making of the two rollers ${ }^{2}$ and as regards the plates; those of the One Penny, no doubt, included the twenty with the letter " $R$ " at the four corners ${ }^{3}$ and Plates 226, 227, 228, ${ }^{4}$ but what the numbers of the other two plates were we do not know: The plate of the Halfpenny was the one numbered " 9." ${ }^{\text {. }}$

## Total numbers issued of the Halfpeniy; One Peniy, Tureehalfpence and Two Pence Stamps.

We have found a Memorandum ${ }^{6}$ of the quantities of Onc Penny and Two Pence stamps printed and delivered down to January 5 th, $18+3$. which shews at total of 291 , 093,360. Another memorandum, ${ }^{7}$ for the period from January ISth, is +3 . to January 5 th, is 46 , gives the numbers of sheets delivered, the prices received, and the numbers delivered from quarter to quarter. We have also come across a further Statement ${ }^{8}$ of the stamps delivered after the first year down to January 5 th. I 849 .

[^140]This gives particulars of the numbers of sheets of watermarked paper received, the numbers of sheets of good stamps delivered, the dates when the quarters' deliveries ceased, the time taken over each quarter, the yearly quantities, the quarterly average and the quantities Mr. Allen, the Storekeeper at Somerset House, had on hand when each quarter's delivery commenced. This table was made out for the authorities at Somerset House in the spring of $18+9$, when Perkins, Bacon \& Petch applicd to them for leave to stop the printing of the stamps for six weeks ; in order, probably to make some repairs or alterations to the room in which the printing was done.

Lastly in the " Life of Sir Rowland Hill " we have the numbers, furnished to him by the Board of Inland Revenue, of the stamps issued from the 27 th April, $18 \not+0$, to the 3Ist December, 1879. ${ }^{1}$

| I, $600,276,320$ | . |  |  | . |
| :---: | :---: | :---: | :---: | :---: |
| 20,699, 858,040 |  | . | . |  |
| 42,638, 160 |  | . |  |  |
| 338,540,280 |  | . |  | . |

A goodly number for one firm to produce!

[^141]
## REFERENCE LIST

With the Dates of Issue of the different Varieties of the Stamps. ${ }^{1}$

> One Penny and Two Pence.
> May 6th, 18 40.

Watermark Small Crown. Imperforate. (Illustration 23).
Alphabet I.
Plate I. State I. Finished April Sth, i8q0. Put to press April rith, I8q0. Nearly every stamp shews a flaw in the cross in the left corner, the little ray; directly beneath the long ray pointing to the left upper corner, being missing or defective. The comer lines are thick and heary and the corner letters are heary:

Id., black.
Varieties.
(a) Worn impressions.
(b) Retouched letter corners.
(c) Double letters.
(d) Re-entries.

Plate 1. State 2. Plate repaired May 23rd (?), r8fo. Put to press May 25th (?), IS40. Many impressions were re-entered, and the corner letters of some were recut, etc. Id., black.
Varieties.
(a) Blued paper.
(b) W*orn impressions.
(c) Retouched letter corners.
(d) Recut letters.
(e) Double letters.
(f) Re-entries.
(g) Side lines recut.

Plate 2. Finished April 22nd, IS40. Put to press April 22nd, ISfo. Most of the stamps shew the same ray-flaw as those of Plate $r$. The lower corner lines are very thin and several impressions in the " $P$ " row have these lines re-drawn. The "S " row shows well marked guide lines at the top. The letter " $D$ " is claracteristic and larger than on the other plates.

> rd., black.
> Varieties.
(a) Blued paper.
(b) Worn impressions.
(c) Retonched letter comers.
(d) Double letters.
(e) Re-entries.

[^142]Plate 3. Finished May 9th, I8 40 . Put to press May r2th, I840. The impressions are usually dull and often greyish, appearing worn. The corner letters " II " and " P " are characteristic, being smaller than those on any of the other plates. As a rule the corner letters are small, very thin and irregular in slape. The top corner lines are usually firm, whilst the bottom lines are very fine.

## id., black.

Varieties.
(a) Blued paper.
(b) Worn impressions.
(c) Double letters.

Plate 4. Finished May 16th, 1840. Put to press May 28th, I840. There is nothing very characteristic about this plate, except that the small dots of colour in the comer squares or on the edges of the stamps that are found to some extent on all the first eleven plates are more numerous on Plate 4 than on any of the other plates. The corner letters are usually thick and heary. The horizontal "L" row has this letter sloping, but not the vertical " $L$ " row.
id., black.
Varictics.
(a) Blued paper.
(b) Worn impressions.
(c) Retouched letter corners.
(d) Double letters.
(e) Re-entries.

Plate 5. State I. Finished May 23rd, 1840. Put to press June Sth, I8, fo. In the earliest state the right side of the right upper corner square with cross, is intact, but later the line is broken or absent.

Plate 5. State 2. Several stamps shew the side lines recut and the comer letters very faint.

Plate 5. State 3. The plate was again repaired in January, I84I, and put to press the same month, one or possibly more of the impressions being re-entered.

> Id., black.
> I'arieties.
(a) Blued paper.
(b) Worn impressions.
(c) Retouched letter corners.
(d) Recut letters.
(e) Double letters.
(f) Side lines recut, second and third States of plate only.
(g) Re-entry. Stamp lettered "P B"; third State of plate only.

Plate 6. Finished June Sth, I840. Put to press June 15th, I84o. There is nothing very characteristic about this plate.

Plate 6. State 2. Several stamps shew the side lines recut and the corner letters very faint.

Id., black.<br>Varicties.

(a) Blued paper.
(b) Worn impressions.
(c) Retonched letter corners.
(d) Double letters.
(c) Re-entries.
(f) Side lines recut. Second State of plate only.

Plate 7. Finished June 19th, $18 \not \subset 0$. Put to press June 26th, I $8+0$. The stamps of the first eight horizontal rows shew a white flaw between the letters " $O$ " and " $N$ " of "oxe." The early printings are very like Plate $\mathbf{I}$, State I , and often have a worn appearance. The only characteristic corner letter is "E," which is taller than that found on any of the other plates with the "ON " flaw.
id., black.

## Varieties.

(a) Worn impressions.
(b) Retouched letter corners.
(c) Double letters.
(d) Re-entries.

A trial printing took place in June, is $\psi_{0}$, from this plate on three varieties of thinner Small Crown watermarked paper, but impressions on these papers can only be distinguished from the ordinary when they are marked with the weight of the paper " 2 flbs." " 26 lbs .", or " 2 slbs.", on the margin of the sheet of stamps, or in some other way; or bear a trial obliteration of seven concentric circles round a small circle of solid colour.

Plate 8. Finished July 3ist, ISto. Put to press July 3Ist, IS\&o. Nearly every stamp of the first fifteen horizontal rows shews the " $0 N^{\prime \prime}$ flaw found on Plate 7. A number of the stamps shew a guide line in the right, upper corner square.

> Id., black.
> V'arieties.
(a) Retouched letter corners.
(i) Double letters.
(c) Re-entries.

Eight sheets of trial impressions were printed from this plate in blue in December, i8fo, and some of the specimens were passed through the post in Mareh. 185\%.

Plate 9. Finished Octuber 7 th, i Iffo. P'ut to press November 9th (?), ISfo. All the stamps shew the "ON" flaw of Plates 7 and 8 . The corner letters are often badly shaped. There are more double comer letters than on any other plate, but most of them are not very marked examples.
rd., black.
J'arieties.
(a) Retouched letter corners.
(b) Donble letters.
(c) Re-entries.

Plate 10. Finished December 2nd, $\mathbf{1} 8 \nleftarrow 0$. Put to press December 8 th (?), 18 80. Nearly every stamp shews the "ON" flaw of Plates 7,8 and 9 . Several of the corner letters are quite characteristic. The " J " is square-fonted like that of Plate Ir, but the "ON" flaw does not occur on the latter plate. The " R " has a long tail. Many of the other letters are easily distinguishable, such as "H, I, P, Q, " and "T," which are like those of Plate II, but they have the "ON" flaw.

$$
\begin{aligned}
& \text { rd., black. } \\
& \text { I'arieties. }
\end{aligned}
$$

(a) Retouched letter corners.
(b) Double letters.
(c) Re-entries.

Plate II. Finished January rgth, I84I. Put to press January 29th (?). IS4I. Nearly all the corner letters are characteristic and easily recognised. Many of them are like those of Plate I , but none of the stamps has the "ON " flaw of that plate.

Id., black.

## I'arieties.

(a) Retouched letter corners.
(b) Double letters.
(c) Re-entries.

## Tiife so-called Reprint. September, 1865.

Printed from Plate 66 of the Retouched Die on paper watermarked with the Large Crown of 1861. The watermark is inverted and the specimens are imperforate. (Illustration 26).

Id., black.
THE "V.R." STAMP.

Watermark Small Crown. Imperforate. (Illustration 24).
Specimens of the One Penny with the letters "V R" in the upper corners were prepared for official use in the Government Departments, but although a number of the stamps were printed, it was decided to abandon the projected issue of special stamps for these purposes. The llate was finislied on $A_{p}$ ril Iqth, isfo, and put to press the same day.

Id., black.
J'arietics.
(a) Retouched letter corners.
(b) The stamp lettered "O L" has no tail to the letter " $R$ " and no serif to the foot of the downstroke of that letter.
(c) The stamp lettered " P J" has traces of the cross in the right upper corner.
(d) Double letters.

Specimens of these stamps were afterwards used by Rowland Hill with trial cancellations, in order to see whether the obliterations could be removed by the use of acids, etc.

May 6th (?), I8fo. Watermark Small Crown. Imperforate.

Alphabet I. "
Plate I. State I. Finished May ist, i8fo, and put to press the same day. The stamps usuatly have the left side line of the left upper corner square very thin or defective and the letters "TW" of "two" joined at the top or rery close together. (Illustration 39).

Plate 1. State 2. The plate was repaired in Mlay (?), I8fo, and put to press the same month, one or possibly more of the impressions being re-entered.

2d., pale blue.
2d., bluc.
2d., deep blue.
2d., steel blue.
rarieties.
(a) Retouched letter corners.
(i) Double letters.
(c) Re-entries.

Plate 2. Finished July I8th, I8fo. Put to press July 2Ist, I840. The stamps usually have the left side of the left upper corner square well-marked and the letters " TW" of " TWO " separated. (Illustration fo). 2d., blue. 2d., deep blue.

## I arieties.

(a) Blued paper.
(b) Double letters.
(c) Re-entries.

February roth, ISfi.
Watermark Small Crown. Imperforate. Blued paper. (Illustrations 23, 29). Alphabet I .
Plate I. State 2. As for the One Penny black of 18 fo.
Plate I. State 3. The phate was again repaired in February (?), IS.4I, and put to press the same month, one (lettered "T C") or more of the impressions being re-entered.

> Id., red-brown.

## Yarieties.

(a) Worn impressions.
(b) Retouched letter comers.
(c) Recut letters.
(d) Double letters.
(e) Re-entries.
(f) Side lines recut.

Plate 2. As for the One Penny black of 18 fo.
Id., red-brown.
I'aricties.
(a) Worn impressions.
(b) Retouched letter corners.
(c) Double letters.
(d) Re-entries.

Plate 5. States 2 and 3. As for the One Penny black of 1840.
id., red-brown.
Varieties.
(a) Worn impressions.
(b) Retouched letter corners.
(c) Recut letters.
(d) Double letters.
(e) Side lines recut.
(f) Re-entry: Stamp lettered " P B "; third State of Plate only.

Plate 8. As for the One Penny black of 1840.
id., red-brown.
Varieties.
(a) Retouched letter corners.
(b) Double letters.
(c) Re-entries.

Plate 9. As for the One Penny black of $18 \not 8$. id., red-brown.

I'arieties.
(a) Retouched letter corners.
(b) Double letters.
(c) Re-entries.

Plate io. As for the One Penny black of i8fo. id., red-brown.

I'arieties.
(a) Retouched letter comers.
(b) Double letters.
(c) Re-entries.

Plate II. As for the One Penny black of 1840 . id., red-brown.
larieties.
(a) Retouched letter corners.
(b) Double letters.
(c) Re-entries.

A trial printing on eight sheets of "Dickinson " paper was made from this plate at the end of April, $1 \mathcal{S}_{4} \mathrm{I}$, in a full deep red colour, but no One Penny stamps on this kind of paper were ever issued for use.

Plates 12 to I3I were also used for this issue. Of these, Plates 30,40 and 77 were repaired, the two first in laving one or more of the impressions re-entered and the last in having the letter " A " inserted in the left lower corner of the last impression in the second row, which in the plate as originally put to press had the letter " B" in the right corner and no letter in the left corner. In the printed impressions of the Plate in its first state, it is the right lower corner which has the letter missing. (Illustration 25).

Id., red-brown.
id., red.
Id., deep red.
id., orange-red.

## Varieties.

(a) Worn impressions.
(b) Double letters.
(c) Wrong letter corrected.
(d) Letter "B" in left corner and no letter in the right comer. Plate $7 \%$.
(c) Letter " S" inverted.
(f) Lines round corner squares redrawn.
(g) Right or left, or both side-lines of stamps redrawn.
(h) Re-entries.
(i) White paper.
(j) White paper. Worn impressions.

In $1847-48 \mathrm{Mr}$. Henry Archer rouletted a certain number of stamps with two machines he had invented, but, which, after a number of trials, were found to be useless for this purpose. He submitted specimens of these rouletted stamps, which have a gange of II to I2 cuts in the space of two centimetres, to various Government Departments, but no rouletted stamps were ever issued for use officially by the Post Office.

Specimens bearing other gauges and forms of rouletting are known, but all of these are of an unofficial character.

In is $f 8-5 \mathrm{I}$, a number of trials were made with a third machine of Mr. Henry Archer, which perforated the stamps with a gauge of 16 . Nany of these experimental trials were carried out at Somerset House and the sheets of perforated stamps were issued by the Post Office in London and various provincial towns in 1850-51. Specimens of these trials of perforation can be identified by the lettering in the lower comers, which is that of Alphabet I, and when attached to letter-sheets or envelopes by postmarks bearing dates in the years $1850-51$.

March, ISłI.
Watermark Small Crown. Imperforate. Blued paper. (Illusiration $\ddagger 8$ ).
Alphabet I.
 The stamps shew numerous "Guide lines," the corner letters are not blurred : the
letter " J " has a square foot and the letter " O " is oval in shape. All used specimens with Naltese Cross obliteration belong to this plate.

Plate 4. Finished November 29th, I849, and put to press December 6th (?), I849. In nearly every case each stamp is a little lower than its left hand neighbour and " Guide lines " occur on only onc or two stamps. The corner lettersare often blurred: "A" las the top filled in; " $J$ " has a round foot; " $O$ " is round and " $P$ " has the loop more or less filled in.

2d., pale blue.
2d., blue.
Varietics.
(a) Double letters (Plate 3 only).
(b) Re-entries. (Both plates).
(c) Paper not blued ( " )

February ?, IS52.
Watermark Small Crown. Imperforate. Blued paper. (Illustration 30).
Alphabet II.
Plates 132 to 169 and possibly 170 to 175 .
Id., red.
Varicties.
(a) Retouched corners.
(b) Double letters.
(c) Re-entries.
(d) White paper.

$$
\text { February, } 1854
$$

Watermark Small Crown. Perforated I6. Blued paper. (Illustration 43).
Alphabet II.
Plates 155, 157, and various plates from 160 to 204, and Reserve Plates I to 6. Of these, Plates 155 and 176 were repaired, respectively, on April 27 th, and May $23 \mathrm{rd}, 185+$, by having one or more of the impressions re-entered on each of them.
rd., red.

## Varicties.

(a) Error of perforation-one, two or more rows of perforation missed on a sheet-shewing stamps imperforate and perforated " se tenant."
(b) Worn impressions.
(c) Double letters.
(d) Re-entrics.

Specimens are known used on letter-sheets and envelopes in 1853 and January, I854. It is believed that these come from sheets used by the Government in testing the perforating machines before the actual perforation of the stamps started on January 28th, 1854.

March, I854.
Watermark Small Crown. Perfurated 16. Blued paper.
Alphabet I. Plate f. (Illustration 49).
2d., blue.
Varictics.
(a) Error of pelforation-one, two or more rows of perforation missed on a sheet-shewing stamps imperforate and perforated " se tenant."
(b) Re-entrics.

Alphabet II. Plate 5. (June ?, I855). 2d., blue.
Varietics.
(a) Double letters.
(b) Re-entries.

January, 1855.
Watemark Small Crown. Perforated It. Blued paper.
Alphabet II.
Plates. As for the One Penny perforated 16.
id., red.
Varicties.
(a) Worn impressions.
(b) Double letters.
(c) Re-entries.

A few unused specimens are known of the One Pemny Alphabet I, on blued paper, perforated It, printed in a dull brownish red colour. but there is nothing to prove that this variety was issued in the ordinary way for postal use.

March, 1855.
Watermark Small Crown. Perforated I4. Blued paper.
Alplabet 1. Plate 4 . 2d., bluc.
Variclics.
(a) Re-entries.

Alphabet 11. Plate 5. (June, 1855). 2d., blue. Varieties.
(a) Double letters.
(b) Re-entries.

February, 1855.
Retonched Die. Watermark Small Ciown. Perforated I4. Blued paper. Alphabet II. Plates 1 to 2 I .

Id., red.
Varieties.
(a) Letter " S " inverted, Plate 5.
(b) Double letters.

March, 1855.
Retouched Die. Watermark Small Crown. Perforated i6. Blued paper.
Alphabet II. Plates I to 2 I.
Id., red.
Varicties.
(a) Letter " S " inverted. Plate 5.
(b) Double letters.

$$
\text { End of } 1855
$$

Retouched Die. Watermark Small Crown. Perforated i4. Blued paper (Illustration 31).

Alphabet III. Plate 23.
Id., deep red.
Varieties.
(a) With " Gothic " letter " K ". (Illustration 45).

July, I855.
Retouched Die. Watermark Large Crown. Perforated If. Blued paper.
Alphabet II. Plates 1 to 21 . Id., red. Varictics.
(a) Letter " S " inverted. Plate 5.
(b) Double letters.

Original Die. Alphabet II. Plate 5. 2d., blue.
Varicties.
(a) White paper.
(b) Double letters.
(c) Re-entrics.
(d) Imperforate. ${ }^{1}$

August, I855.
Retonched Die. Watermark Large Crown. Perforated I6. Blued paper.
Alphabet II. Plates I to 21.
Id., red.

[^143]
## Varictics.

(a) Letter " S" inverted. Plate 5.
(b) Double letters.

Original Die. Alplabet II. Plate 5.
2d., blue.
Varictics.
(a) Double letters.
(b) Re-entries.

August ?, IS55.
Retouched Dic. Watermark Large Crown. Perforated It. Blued paper. (Illustration 31).

Alplabet 111 .
Plates 22 to 49. Of these, Plate +I was repaired un March 2nd, 1857 , by having one or more of the impressions re-entered. Id., red.
Varicties.
(a) Imperforate.
(b) With " Guthic " letter " K." (Illustration +5).
(c) Double letters.
(d) Re-entries.

$$
\text { April, } 1857 .
$$

Retouched Dic. Watermark Large Crown. Perforated If. White paper.
(Illustrations 3I, +H).
Alplabet 111 .
Various plates between 27 and 68, and Reserve Plate I7. Id., rose-red.
Id., camine-rose.
Varictics.
(a) Imperforate.
(b) With "Gothic" letter " K.." (Illustration +5).
(c) Double letters.
(d) Re-entries.
(c) Watermark Large Crown of 1861 .
(f) Defective Large Crown watermarks.

One or two shects of Reprints were taken from Plate 66 in September, 1865 , at the same time as the so-called Reprints in black were made. They are printed in a deep carmine-rose on the Large Crown watermark paper of IS61 and are imperforate.

July; 1857.
Original Die. Watermark Large Crown. Perforated If. White paper.
Alphabet III. Plate 6.
2d., blue.
Varictics.
(a) Re-entries.

January, 1858.
Retouched Die. Watermark Large Crown. Perforated 16. White paper.
(Illustration 31).
Alphabet 111.
Plates 27,37 and others from 43 to 59 . Id., carmine-rose.

Varieties.
(a) With " Gothic " letter " K." (Illustration 45).
(b) Re-entries.

February, 1858.
Original Die. Watermark Large Crown. Perforated I6. White paper.
Alphabet III. Plate 6.
2d., blue.
Varietics.
(a) Re-entries.

January ?, I86I.
Retouched Die. Watermark Large Crown. Perforated It. White paper.
(Illustralion 32).
Alphabet IV.
With the corner letters engraved by hand on the plates instead of being inserted with punclies.

Plates 50 and 51. Of these, Plate 51 was repaired on April 26th, ISGI, by having one or more of the impressions re-entered.

Id., carmine-ruse.
Varielies.
(a) Re-entries.
(b) Defective Large Crown watermarks.

May ?, I862.
Retouched Die. Watermark Large Crown. Perforated If. White paper. Alphabet II. Reserve Plates 15 and 16 . Id., carmine-rose.

## Varictics.

(a) Double letters.
(b) Defective Large Crown watermarks.

August, I858.
Retouched Die. Sans-serif letters in the four corners, and the phate number on each stamp. (Illustration 52).
Watermark Large Crown. Perforated I4. White paper.
Plates 7, 8, 9 and 12 to 15 . Of these Plate 9 was repaired on Janluary, 3Ist, ISU8, when 49 of the impressions were re-entered. 2d., blue.

## Varictics.

(a) Blued paper.
(b) Re-entries.
(c) Defective Large Crown watermarks.

$$
\text { April. } 186+
$$

Retonched Die. San-scrif letters in the four comers, and the plate number on each stamp. (Illustration 46 ).

Watemark Large Crown. Perforated It. White paper.
Plates 71 to 74,76 to 125127 and 129 to 225 . Of these the following plates were repaired :-

IS68.
Feb. 5. Plate 72 13 impressions re-entered.
Jan. 3I. ,, 73. 67 ,, .,
Feb. 25. ", So. 3 ,"
Jan. 3I. ,, SI. 49 ,. ,"
Feb. 4. .. 85. 87 ., .,
". 25. ." 90. 3 ." "
., 22. ", 100. 28 ., .,
Id., carmine-rose.

## Varieties.

(a) Imperforate. Plates 86, 90, 92, 100, 102, 103, 107, 108, IIt, II6, II7, I20, I2I, I36, I4S, 15 S, I62, I7I. Specimens of Plates I 46 , I9I are also known with trial cancellations.
(b) Re-entries.
(c) Defective Large Crown watermarks.

Three-halfpence.
October ist, I8jo.
Watermark Large Crown. Perforated It. White paper.
Plate I, without the plate number on the stamps (Illustration 71) and Plate 3 with the plate number on each stamp. (Illustration 72).

$$
\text { I } \frac{1}{2} \mathrm{~d} . \text {, rose-red. }
$$

Jaricties.
(a) Error in the corner lettering "OP-PC" for "CP-PC" on Plate I .
(Illustration 71).
(b) Imperforate. Plate's I and 3 .

A supply of this stamp was printed in March and April, I860, from Plate I, in manve-pink on paper watermarked Large Crown, the colour staining the paper blue. The stamps were perforated if. They were prepared for a contemplated alteration in the postal rates, which did not take place at that time and were, consequently, never issued for postal use. Nearly the whole of the sheets that were printed were destroyed in the year 1867. The error in the corner lettering, mentioned above, is found on these manve-pink stamps.

One Halfpenny.
Octuber 1st, 1870.
Watermarked with the words "half penny " extending over the width of three stamps. Perforated I4. White paper. (Illustration 65). Plates I. 3 to 6,8 to 15 . 19 and 20.
$\frac{1}{2} \mathrm{~d} .$, lake-rose.

## Varicties.

(a) Imperforate. Plates $\mathrm{I}, 4,5,6,8$, I 4.
(b) Error of perforation-one, two or more rows of perforation missed on a sheet-shewing stamps imperforate and perforated " se tenant."

- Ict establishing l'niform Penny Postase. The-p. 2
Actdenbrooke, Joseph- Pp. 126, 127
Hexander, John-p. 71
Allen, Thomas-P1), $43,51,64,2 \geq 1$
"Alphabets," The four-ppl, 64, 65, $1+3$
Alterations to the premises of Perkins, Bacon \& Co.-11 1 . 120, $1^{156}$
". Anastatic process "> of printing, The-pp. $136,181,182$
Appel, ———p. 181, 182
Archer, Henry-111) $35,121-130$
trnold, G.-p. I99
Bacon, Jacob Perkins-P1, 11, 18, 39, 45, 40 , $54,84,85,86,140,147,1+8,149,150$, $1.53,169,170,171,173,174,177,178$, 184, 159, 190, 195, 199, -13, 214, 219
Bacon, Joshua Butters 113. 3, 4, 8, 10, 11, $13,15,17,18,22,25,26,30,31,3+35$, $37,38,39,40,42,4+, 45,4 \overline{7}, 49,51,53$, $54,57,58,59,61,63,67,83,84,87,91$, $96,97,95,100,101,102,103,107,108$, IIO, III, 113, 114, 115, 117, II9, I20, 120, 135, $130,156,181,152$
Bagot, Sir Charles-pp. 8, 9
Bank of England-pp. 8, 1, 10, 21, 70, 130
Banks, Sir Joseph-1 1', 8, 9
Baring, Francis lhornhill. (Chancellor of the Exchequer).-1p. 7, $25,29,37,58,85$. 98, 99, 107
Barnard, Edward-1p1. I39, 1 to
Barrctt, J. and J-p. 1-
Bartlett, Thomas-1' 155
Bayley, Richard-p1). 56, 57
Bell, --- -p. 213
Bellars \& Davie-p. 93
Berlin Postal Muscum-pp, 27, 18 +
Bethune J. E. D.-plp. 10, 31
Bettesworth, J. R.-1). 157
Blackburn, A. D.-p. 7
Blades, East iE Blades-1). 8:
Blott, ———ll 18 I
Blueing of the paper of the stamps, Thepp. 110-113, 188
Board (or Commissioners) of Inland Revenue -pp. 52, 54, 127, 130, 131, 132, 135, 138, $1+2,1+t, 155,156,157,155,161,107$, $178,185,185,190,191,193,193,198$, 200, 201, 202, 203, 204, 205, 206, 207, 208, 210, 211, 212, 213, 21, 215, 217, 2I8, 219, 221
Bogardus, James-pp. 4, 6
Bokenham, Willian-pp. 73, 83, 84, 85, 86, 121, 180, 1 SI
Bornefeld, Julius-pp. 64, 65, $1+3$
Bouton, Charles-p. 53
Boyd di Co., J. \& C.-p. I6
Branston, Robert LEdward-p 35
Brewer, Willian and Smith, John-p. I 49
Brown, Mlount-p. $16+$
Bryant, William Cullen-p. Ifo
Bryant, T. Hugli-p. S6
Bull, Marcus-pp), 8, 10
Burd, L. Arthur-pp. $85,86,5 \%, 92,124,129$, 165
Burnett, Maitland-p. 26
Camden's " Hislory of England "-p. It
Cape of Good Hope " triangular" stamps al 1853-57-p. 21
Ceydon stamps of $1855-57-$ p. $20 n$
Chantry, Sir Francis Legatt-p. If

Cheverton, Benjamin-pp. t. 5
Chili, The first issued stamps of-p. Ifo
Clanricarde, Marquis of-pl 121
Clarke, Dr.-p. 91
Clowes \& Sons-p. 67
Colfin, Capt.-p. 9
Coffin, F.-pp. +, 6
Cole, k.C.B., Sir Henry-pp. 3, + 5, 13, 14. $15,17,27,28,31,30,70,180$
Colls, Thomas Arthur-pp. 212, 213, 214
Colour trials for the Id. and id. stamps in 18 , $0-$ pp. $27,82-87,92-96,97-100$, $101-$ 105, in 1878-pP. 202-205, in 1879p. 213

Colour trials for the 2d. stamp in $150-\mathrm{p} p$. 1-0-172, in $1878-11^{3} .202-205$, in $1879-$ P1). 211-213
Colour trials for the $1 \frac{1}{2} \mathrm{~d}$. stamp in is $60-\mathrm{pH}$. 184, 185 in 1879-pp. 211-213
Colour trials for the $\frac{1}{2} d$. stamps in $1870-1$. 199, in 1878-1p1. 202-205, in 18-9-pp 211-213
Commissioners of Excise-11p. 32, 36, 37, 38, +0, $41,43,+4,45,70,113,120$
Commissioners of Stamps if laxes-1p. 32, $33,34,35,36,40,41,44,48,51,6,7,69$, $70,73,74,75,79,89,103,107,108,109$. 110, $120,121,122,123,124,125$
Congreve Bart., Sir William-pl]. 5, 10
Contract for stamps, 1 irst Government-pp. 32-34
Contracts for stamps, Later-pp. 3.f-36, 190, 191, 192
Contracts, Notices to terminate-p. 205
Cooley, - - p. 105
Copestake, Moore \& Crampton-11. 109
Corbould, Edward Hemy-p. 17
Corbould, IIenry-pp. io, 1f, 16, 18, 31
Corbould, Richard-p. If
Corner letters of stamps inverted-pp. 63 , 165,196
Corner squares of stamps redrawn-p. $5^{8}$
Corrosion of the Plates-p. Ift
Cousins, William Henry-pp. 203, 204, $21+$
Crawford, k.T., The late Earl of-plp. 5, 17, $23,28,29,+3$, 82
Cross, etc., added in the upper and lower margins of the plates-p. $13+$
"Current Number" added in thec upper and lower margins of the plates-pp. 166 , 189,196
Davies, David-p. $5^{6}$
Davis, ——p. ${ }^{187}$
Davis, John-1). 6 I
Infacement and destrnction of the plates, ctc.-1p. $-8,89,119,218,=20$
De La Rue it Co., Thomas-pp. rog, inz, $172,17 \%, 202,208,211,212,21+217$, 211
Dewsmap \& Co., William-pp. 120, 218, 219
INickinson, John-Pए. 37, 38, 113, 114, 115
Dickinson © Co., Limited, John-plp. 29, II 4
Dickinson" paper-pp. 7, 37, 110, 113-155
Dobbs © Co., Henry-p. 130
I onovan, M.-p. 91
I) uo, George Thomas-p. is

Dot and rertical line in margins of the plates -P., ${ }^{118}$
" Draft " stamp of $1853-111$. 131, I 47
Wrinkwater, J. E. See Bethune, J. E. 1).
Deer, J. C.-p. 9

Elliott, ———p. 17
Elwell, H. G.-p. 187
Evans, Lewis-pp. 29, IIt
Evett, Coorge-p. iss
Ewen, H. L'1Estrange-pp. 47, 165,176
Faircloth, Dr. John-p. it9
Faircloth, Mrs.-1. 153
Fairman, Gidcon-pp. 8, 9, 10
Faraday, Michacl-p. 9i
Ferrary Collection-pp. 86, 163
Field, - p. 181
Fire at Perkins, Bacon \& Co's Printing Works-pp. S, 155
Firm of Perkins, Bacon \& Co., Limited-pp. 8-11
Fisher, A. E.-p. 57
Fisher, G. A.-p. 12
Fisher, J. It.-pp. 12, 101, If
Flaxman. John~-p.. 14
Floyd, Dr. IE. II:-pp. 64, 78
Forgeries of the One Penny stamp-pp. If9. 182
Fraud by covering the stamps with foldBeaters' skin-p. 137
Frauds by Patching stamps-pp. 136, 160
"Freshl entries"-11). 59,60
Gardiner, --p. 17
Gates, W.-pp. 80, 117
George V., II.M. king and the Royal Collec-tion-pp. 19, 23, 24, 25, 26, 29, 30, 37, $38,4^{2}, 55,63,70,85,80,91,92,96,94$, 100, 102, 106, 107, 113, 114, It5, 124, 129, 140, $448,150,163,170,171,172$, $176,177,181,186,192,194,194,200$, 205, 206, 209, 215
Gilbert \& Sons, 1).-p. 59
(iill, 1)avit-pp. 57, 219
Gill, llenry-pp. 62, 67, 157
(iill \& Birrl-p. 168
Gladstone, Kt. IIon. W. E.-p. 124
Giynn, ———p. 18i, 182
Gordon, --p. HI $^{1}$
Coulburn, H.-p. 85
Grace, Robert,-10. 57
Graves, Algernon-ll. 17
Gray, W. Martello-p. 129
Great Britain "Life Policy" stamps of 1853 -1, 22
Great Eastern Railway Co.-p. I6
Girenada lost Cards of 1881 -p. 209
"(iuide lines"-pp. 58, 1 но
Guilethall Celebration of the Jubilee of I'niform Penny lostage of May, isgo1p. 58,82
Gumming of the stamps-pp. $4^{8-55,201}$
Halfpenny stamp:-
Essay's and Contract-pp. 190-193
Background-p. 193
Colour trials- p. 190
Die-p. 194
Prools of same-pp. 19.4, 205
Plates 1-22-pp. 195-199, 201, 205, 213, 219,220
Watermarked paper-p, 200
Gum-P. 201 Perforation-p. 201
11am, F.-p. 97
Hannay, James-p. 17
Hardening of Dies and Plates-pp. 11, 57, 6u, 88, 197
Harvey, Sir Gcorge-p. 7
Hayes, - —pl. 45, 147, 149
Haywood, Mrs.-p. 17

Heath, Charles Theodosius-pp. 10, 16, 17 ,
$18,19,20,22,23,24,25,26,27,30,31,87$
Heath, D. D.—ןp. 3i, 1 If
11eath, Frederick Augustus-pp. 16, 17, 18, 19. 193, 194, 200
lleath, George p. to
Heath, James-p. IS
Heath, James Dunbar-pp, II, 16, 220
llendy, John G.-p. 132
Inensman, Hery-p. 130
Hill, Edwin-p1. 25, 2S, 31, 37, 38, 40, 41, 43, $44,45,17,49,51,54,13,3,4,71,72,73$. So, $87,19,100,103,108,110,111,113$, 115, I17, 119, 120, 122, 125, 120, 127, 130, 136, 151, 179, 181
11ill, Ormond-pp. 35, 45, 46, 5.3, 54, 83, 84, $85,80,121,132,134,135,137,138,139$, $143,14,145,146,147,148,150,151$, 153, $155,156,157,158,160,16 \mathrm{~F}, 162$, $163,105,167,168,169,170,171,172$, 173, 174, 177, 178, 159, 182, 183, 18, $185,1 \times 9,190,195,199$
Hill, Pearson-pp. 7, $5^{8,110, ~ 115, ~ 160,170, ~}$ 172, 177
Hill, K.C.B., Sir Rowland-pp, 2, 3, 4, 7, 13. $15,19,25,26,27,29,30,31,32,33,3^{10}$, $37,3^{8}, 4^{0}, 4^{1}, 4^{2}, 43,4^{6}, 4^{5}, 4^{1}, 5^{1}, 52$, $53,57,58,61,67,70,73,74,80,81,83$, $84,85,89,90,91,96,97,48,99,100$, 101, 102, 103, 10.4, 105, 100, 107, 108, 110, 113, 114, 115, 121, 123, 121, 136, 137. 160, 179, 1 尔, 181, 221

Hodgetts, ———pl. 121, 135
1 Lodson, 1F. S.-pp, 64, 65, 105, $128,129,143$
llolland, George 11.-p. IG.
Holtzapffel \& Co.-pp. 50, 103
1 Toole it Co., William-p. 56
Hooper, Bartlett-p. 12
llooton, W. ML.-p. 8 ,
Hopkinson, J.-p. 12
llopkinson \& Cope-pp. 12, 120
llughes-Hughes, William-p. 163
Humphrys, Wilfiam-pp. 139, 1 to
"Imprimatur" sheets, The-pp. 42, 46, 47. $63,68,71,72,74,78,81,56,88,109,1111$, 111, 112, 110, 117, 118, 135, 146, 154. $159,160,161,162,163,173,174,170$, 188, 189, 197, 198
"Ivory head "varicty-p. 111
Jeens, Charles Henry-p. 207
Jones, Miss-p. 71
Jones, WV. C.-p. 105
Joplin, Thomas-p. 21
Joubert, J.-p. 208
Keogh, Thomas-pp. 123, 13\%, I 30
Large Crown watermarked paper- P1P. 146 (3-154 Lawrence, T.-p. 51
Ledingham, John-pp. 17, 25, 45, 48, 49, 90, $1(4), 102,1(f), 115,121$
Lees, E. S.-p. 92
Lettering of the Plates, The-pp. $6 \mathrm{f}, 196$
Lewis, W. J.-p. 31
Linton, W. J.-p. I2 8
Lloyd, H.-p. 219
London Philatelic Exhibition of May, 1890 pp. 7, 16, 58
Longfellow, Henry Wadsworth-p. Ifn
Maberly; Col. Willianm Leader-pp. 26, 73, 92, 108
Mc.Cawley, J.—pp. 8, w
Mc.Gowan, Bertram-pp. 77. 78

Mackey, Gcorge-p. 129

Manners，Lord John－pp．204， 214
Marginal lnscription on the Plates，The－pp． 05，66，80，88，109，134，187．189， 196
Marriott．——pp．14． 31
Marshall，C．F．Dendy－pp．109， 164
Melville，Fred J．－p． 17
Mistakes made in the lettering of the plates－ pl．62 64，185
Morley，Walter－pp．92，Ius
Morten．IV：V．－p．181
＂Mulready＂wrappers and envelopes－pp． 37，07，59，114， 169
Mure，－－p． 62
Murray：George－p． 140
Names of Firms printed on the stamps－p 168
Napier ix Son，David－pp．131， 132
New Brunswick One Shilling stamp of 1851 － p． 188
New South Wales Essay of 1854 －p． 22
New South Wales Five Shillings stamp of 1861－p． 19
New South Wales＂diadem issue＂of 1856 pp．60，192， 199
New Zealand stamps of 1914－p．22
Nissen \＆Co．，Linuted，Chas．－p． 103
Northbrook，Lord PP．29， 30
Number of provisional printing of Id．black stamps－p． 73
Number of id．blaek stamps．Total－pp．74．75
Number of 1 d ．＂V＇R．＂stamp－p．St
Number of 2d．stamp．Plate 1．－p． 8 S
Number of 2 d ．stamp．Plate $2 .-\mathrm{p}$ ． 88
Numbers of $\frac{1}{2} d .1 d ., 1 \frac{1}{2} d$ ．and 2 d ．stamps issued from 1840 to $1879-$ p．221
Numbering of the Plates，The－pp．66，so， $88,1+2,159,166,187,189,196$
Obliterating Ink for the stamps，Red－pp． 89－90
Obliterating Jnk for the stamps，Black－pp． $90-92,105-107$
Olliterations for the stamps．Trial－pp．23， 96， 97
Official Imitation of the One Penny stamp－ pp．182， 183
One Penny stamp ：－ Drawing of the Queen＇s head－p． 14 Essays for the background－1）．It First Die－pp．16－20
Engraver of the Queen＇s head－pp．16－19 Proufs of the First Die－pp．19，20， 24 Reprints of the First Dic－p． 20 Experimental Die－pp．21－23 Proof of same－p． $2=2$
Second（sn－ealled＂Original＂）Bie－pp． $24-31$
Proufs of same－pp．24，25，26，2s，30， 31 Colour trials of same－p． 27 Label Fssays of same－pp．2R， 29 Water－colour sketches of satme－p． 20 lssue of the black stamps，The－p．－
 74，115，117， 119
Proof of Plate 1．－P． 50
Plate 1 repaired－pp．75－78， 117
Plates 1－131．－p． 64
＂V゙．R．＂Plate－pp．© Plate 2．－Pp．58，62，68，69，71，72．74． $78,115,117,119$
The＂Ray＂flaw on Plates I and 2－p． 56 Plate 3．－pp．6w，71．72， 7 S ， 110 ，．4．－pp．58，62，69，71，72，78，119

Plate $\begin{gathered}5-p p, \\ 78,115,62,68,69,71,72,74 .\end{gathered}$
． 5 repaired．－p． 78
．．6．－pp．62，60，71，72，78，117，119
，， 6 repaired．－p．is
．． $7 .-\mathrm{pp} .4_{2}, 64,7 \mathrm{I}, 72,78,117,119$
．．S．－pp．69．71．72．74．－8．86， 103. 105． $115.117,119$
Colour trial of Plate $S$ in blue－pp．$S_{2}-S_{-}$， 10．3． 105
Plate 9．－pp．62，60，71，72，74，$-8,115,117$
，10．－pp．63，60．71，72，74，7S， 115 ， 117
The＂ox＂flaw on Plates $7,8,9$ ．10－pp． 56，78，85， 93
Plate It．－pp．62，69．71，72，74，7S，115． 117， 119
Blueing of the paper of the black stamps，
The－pp．112－113
Issue of the red stamps．The－p． 107
Blueing of the paper of the red stamps，
The－pp．110－112
Trial on＂Dickinson＂paper－p． 115
Plates 12－14—pp．78，IIy
，12－175－p． 117
，．15－18－pp．116， 117
$\therefore$ Iy－20－Pp．62，116，117
，$\quad 21$－p． 62
$\therefore \quad 22-23-\mathrm{p} .116$
．．26－27－p． 116
．．2S－pp．62， 116
． $29-33-$ p． 116
．－ 30 repaired－p． 117
．．35．37， $3^{8-p p . ~ 116, ~ 117 ~}$
－． 39 －pp．62，116
$\therefore$ fo－p． 116
$\because$ fo repaired－pp．64， 117
－．41－pp．59，II6
－$f^{2-f 6-\text { P．} 116}$
．．$\quad$ SS－51－pp．116， 117
－． $52-\mathrm{pr} .58,116$
－．53－p．IIG
－54－57－pp．58，116， 117
．．71－p． 123
．，75－p． 59
－76－p． 58
－77－pp．58，63，117
$\therefore \quad 77$ B．－p． 64
－ 78 －pp．62，63
．－79－p． 62
．－85－86－p． 67
$\because 5_{i}-\mathrm{p} .11 \mathrm{~s}$
．．88－pp． 58.118
．－90－pp．58， 129
．．92－101－p． 120
［．93． $95,100-\mathrm{p}$ ． 118
．．105． 107 －p． 63
－．116，115－125，127－131－p． 118
．，122－p． 135
．－132－pp． 118 ，IIの
．．132－204－p． 65
．1 $\quad 145-1$ 1． 59
＂．155．176 sepaired－pp 117， 137
－．17 1 ，1ララ－p． 117
．， $1 / \mathrm{s}-204-\mathrm{pp} .13+1.12$
Reserve Plates 1－14－pp．65，134， 135. It 2
Retouched Die－pp．138－140
Proonfs ul same－PD．Ifo－142， 205
Plates 1－4－pp．134，142， $1+3$
．． $1-21-\mathrm{p} .65$
．，5－pp． $6_{3},{ }^{1} 43$
．，5－225－pp．134，161

Plates 6, 7, S-p. 143
.1. 9 -pp. 63. $1+3$
$\therefore \quad 10-12-\mathrm{p} .143$
.. 13-pp. $59.1+3.145$
.1 $1+15-$ p. $1+3$
.. 10 (1) 18 -pp. $1+3.145$
(, 19-21-p. I 43
. 22 -pp. $143,1+5$
-22-19-p. 65
,. 23-pp. (13, 113
The " Cothic $k=$ "varicty-pp. 143.178
Plates 23-3I-p. 143
.. 24 -p. 143
,. 27 -pp. $59,60,178$
.. 36-pp. 6о, 178
,. f 1 repaired-p. 155

1. 15-5I-pp. 14. I45
$\because \quad 50,5 \mathrm{I}$-pp. 65 , II2, 54
., 51 repaired-p. 154
.. 52-pp. 112, 155
.. 52-68-p. 65
,1) 61-p. 154
., $65-$ p. 160
I. 60 -p. 167
I. $68-\mathrm{p}$.161

Essay with four letters in the corners and with plate number-p. 158
Issue of the stamps with letters in the four corners-p. 165
So-called proof of 1863 -p. If 60
Plates 69, 70,-pp. 102-165
. $09-86-\mathrm{p}$. 162
$\therefore$ 72. 73 repaired-p. 173
,. 75-pp. 162, 103. 170, 172

- 77-pp. 162-165
., 80. 81-p. 11.5
,. 80, 81, 85 repaired-p. 173
$\because 86,90-$ p. 176
", go repaired-p. 173
$\therefore \quad 92-\mathrm{p} .176$
.. 97, 98-p. 166
, 100-p. $17^{6 n}$
., 100 repaised-p. 173
. 101-p. 165
., 102-p. 176
., 103-pp. ェ69, 176
$\therefore$ 107.108-p. 176
,. 108-118-p.173
. $113-\mathrm{p} .171$
(.) 114.117 p. 174
,. 118 -p. 165
. 120-p. 176
$\therefore \quad 121$-pp. 176, 177
.. 123-p. 165
$\because$ 126. 128 -p. 174
.. 129-225-p. 175
(, 136 - p. 176
.. 1 10, 1+7-p. 105

1. $140-\mathrm{p} \cdot 15^{6}$
,. 1.8-P. 176
$\therefore$ 150-p. 145
$\therefore$ 158, 162-p. 150
. 165 -p. 165
.. 171-p. ² $^{\text {5 }}$
$\therefore$ 101-pp. 176. 205
-. 212-1. 205
", 225-228-pp. 176, 220
Reserve Plates 15-20-pp. 65, 134, 135. 143. 101

Oxford Uniom Socicty-pp. 168. 16y
" Paper" and " I'ermit Labels" and "Certi-ficates."-pp. 120, 156
Paris Exhibition of 1867 , Proofs of stamps for the-pp. 169, 188

Parsons, -- -p. of
Pauwels, Jules-p. 23
Peacock. Thomas-pp. 100, 133, 134. 1.18, 109. 181

Pemberton, Edward Loines-pp. 17. 23
Perfuration of the stamps-pp. 121-135, 185, I90, 201
Perkins, Dr--1P. I77: 190
Perkins, Jacoh-pp. 5' 8, 9, 10, 11, 12, 21
Perkins and Bacon-p. 10
Perkins and Heath-p. io
Perkins, Bacon it Co.-p. if
Perkins, Bacon di Co., Limited-p. II
Perkins, Bacon \& Petch-p. s
Perkins, Fairman \& Heath—p. 10
'erkins' Process of printing-pp. 11-12
Jetch, Henry Phillipson-pp. If, I7. 34,35.87
Phil. See Blackburn. A.D.
Philbrick, K.C., Judge F. A.-pp. 6, 27, 82. 84, S6, 100, 104, 166
Philbrick, K.C., Judge F. A. and Westoby, W. A. S. "The Postage and Telegraph Stamps of Great Britain."-pp. S, 23 27, $83,121,123,131,158,164,166,167,174$. $17{ }^{176,177,182}$
Phillips, Professor R.-pp. yo, 91, 02. 95, 198, 99, 100, 105. 106
Pressly, K.C.B., Sir Charles-pp. 51. $67,73$. 81, 107, 108, 109. 110, I19
Prince. John-p. 37
Jrinting presses used for the stamps, Thepp. 12, 120, 156
Prizes offered by the Treasury-pp. 3. 4-0
Proposal to number the rows of stamps on the sheets--p. I 55
Provisional printing of ad. black stamps-p.7.3
Queensland, First issue stamps of - p. 192
" Rainbow Series " of colour trials-p. 93-105
Rawsthorne, John-pp. 48, 49, 50, 51, 52. 54, 90
Rawsthorne, Peter-p. 52
"Receipt "stamp of 1853-Pp. 131, 147
"Re-entries" -pp. 6o, 64, 75, 77, 78, 88
Reference List of the stamps with the dates of issue-pp. 222-235
Registration of Deeds in Ireland, Stamps for -p. 166
Reinheimer, A.-p. 100
keprint of 1d. black stamp, So-called-p. 167
Reprint of id. carmine-rose stamp-p. 107
Ridgway, William-pp. 207, 208, 209, 215
Robertson, George B.-pp. 218, 219
Rondot, Natalis-p. 23
Royal Collection. See George V., H.M. King
Rushall, George-p. 21
Kussell, - P. I 68
St. Vincent Five Shillings stamp of $1880-$ p. 22
Sargent, T.-pp. tor, zon
Simnders, -- - p. $1+7$
Schroeder, Martin-p. 100
Select Committee on Pestage Label Stamps of 1852, Report from the-pp. 13. 22, 35, 54. 59, 112, 121, 122, 125, 126, 127, 128, 120, 130, 132, 136, 180, 181, 182
Side lines of stamips redrawn- P. $5^{8}$
Skipton, S. C. - pp. $4^{8,14^{\circ}, 15^{\circ}}$
Sloper dico. limited, J.-p. Ita
Small Crown watemarked paper-pp. $3^{60}-4^{8}$
Smith, -- - P. 37
Smith, Egertom-p. 52
Smith, Robert--pp. 73. I21, 136, 157, 180
Smith, William llemy-pp. If4, 150, 151
Smith \& English—p. 122

Smith \& Son, John-pp. 147, 148, 149,151
Smith \& Sun. W. H.-p. I6o
Smirke, R. A., R.-p. 9
smyth, Mrs. E. C.-pp. 2, 7
South Australia Four Pence and Two Shillings stamps of i866-pp. 207, 208
South Kiensington Anmal International Exhibition of $1872-\mathrm{p} . \mathrm{I}_{7} 8$
Spalding it lodge-p. 15.
Sparre Patents Co., Limited-p. I5t
Spencer, Asa-p. 10
Stainforth, Rev. Francis John-p. 164
Stamford, A. 1H.-p. 47
Stamps printed from Plates not hardenedpp. 57, 69, 77, 88, 137, 197
Stamp printers, Names ol-pp. 67, 72, 73, $7^{6}$, 77. $7^{8,81}$

Star-like ornaments in the margins of the plates, The-p. IIS
Stephenson, William Menry -p. 193
Surface-printed stamps, Essay's for-pp. 206210, 215-217
Sworder, J. S.-p. 133
Tapling Collection-pp. 97, 163
Taylor,———p. 90
Taylor, C. J. C. $-\mathrm{p}, 220$
Three-halfpence stamp :Essays and Colour-pp. $183-18_{5}$ Die-p. 185
Proofs of same-pp. 186,200, 205
Plate 1.-pp. 62, 187, 189, 219
Stamps printed in i860-p. I8S
Issue in $1870-\mathrm{p}$. IS8
Colour of stamps of $1870-\mathrm{p} .189$
Plates 2-3-pp. 189. 219
Watermarked paper-pl. 188, 190
Perforation-pp. 18S, 190
Contract-p. 190
Tilsley, E. H.-p. 54
Time taken to make a plate, The-p. 66
Translerring Press, The-pp. 57, 59, 60
"Treasury Foulette," The so-called-p. 124
Trial to coat the sheets of paper before printing-p. 168
Trial to lingrave instead of Punch the letters in the lower corners of the One Penny stamps-p. 154
Trial to print the stamps by machineryP. 14

Turner, Robert-p. 37
Two Pence stamp:-
Die-p. $8_{7}$
Proof of same-p. $8_{7}$
Issue of the stamps, The-p. S9
Plate 1.-pp. 72, S7, 117, 119
Plate I repaired-p. 88
Plates $\mathbf{1 - t}-\mathrm{p}$. $6_{t}$
Plate 2-p1). S8, 117, 119
Plate 2 stamps on blued paper-p. 113
" White lines "added to the designpp. 100-101
Issue of stamps with " white lines," The -p. 108

Blucing of the paper of the stamps, The-p. II 2
Plate 3.-pp. 109, 110,117
Plate + -pp. 109, 110, 117, 118
Plate 4. Second State-p. 134
Trial on " Dickinson " paper-p. IIt
Plates 5, 6-pp. 65, i46
Retouched Die-p. If ${ }^{8}$
Proofs of same-pp. 159, 205
Plates 7, S, 9-pp. 159, 160, 167, 169
Plate 9 repaired-p. 173
Plates 10, 11, 12-pp. 66, 173
Plate 13-pp. 175, 177
Plate 14 -pp. 175. 219
Plate 15-pp. 175, 205, 213. 219
Two Pence " black "-p. 156
United States, Stamps with head of W'ashington of the-p. Ifo

Victoria, Queen-p. 25
Victoria stamps of 1854 -p. 21
Victoria and Albert Museum-pp. ti. 28
"V.R." stamp, The Id. black-pp. 43, 6S, $69,72,79-82,46,97,124$

Walker, Thomas-p. 105
Warrants, The Official-p. Og
Watson, --. -p. 106
Watson, -- -p. iso
Watt, James Henry-p. Is
West, Sir Algernon-p. 219
West, Benjamin-p. 14
Western Australia Official stamps-p. 105
Westmacott, Sir Richard-p. If
Westoby, W. A. S.-pp. 16, 132, 163
Wheelwright, William-j. 31
White, D. T.-p. 17
White, W.-pp. 57, 161
Whiting, Charles Fenton-pp. 3. 4. 5, 6, 2S, 106
Whiting, Messrs.-p. I 56
Wickham, Henry Lewis-pp. 27. 31, 32. 33. 108

Wilkinson,-———.-p. 125
Wills, W. TI.-p. 17
Winder, J. H.-p. 57
Winter, L.-p. 53
Wise, Stacey-pp. 25, 36, 37, 38, 39, 40, $4^{1}$, $12,43,4$
Wise, Mrs. Elizabeth S.-pp. 44. 45. 46. 47 . $^{\circ}$ $113,146,47,148,49$
W'ise \& Co.-pp. 149,200
Wood, John-pp 38, 45. 148
Wright, Hastings E. and Creeke, Jumr., A. B. " A History of the Adhesive Stamps of the British Isles."-pp. 8, 16, 27, 38, 6. $68,71,72,74,80,82,83,84,89,92,101$, 108, 114, 118, 119. 122, 130, 134, 135. $145,149,151,154,157,161,162,167$ 173, 177, 176, 178, 188, 189, 197, 198, 218, 219
Wyon, R. A., William-pp. 7. 10, 14, 15. 17. 26, 3I, $3+$

## BAT11:

Printed by Wiltian Lewis \& Son, Ltio, Llerald Press, Norith Gate.


[^0]:    1" The Postage and Telegraph Stamps of Creat Britain." By Frederick A. Philbrick and William A. S. Westoby. London. 1881. "A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Creeke, Junr. London. ISy9.

[^1]:    ${ }^{1}$ Rowland Hill's daughter says : "This earliest stamp was a far finer and more artistic piece of workmanship than any of its successors, and has only to be compared with the later specimens . . . . to see how sadly we have fallen behind some other nations and our own older methods, at any rate in the art of engraving, or at least of engraving as applied to the postage stamp." Vide "Sir Rowland Hill. The Story of a Great Reform. Told by his Daughter" [Mrs. E. C. Smyth]. London: T. Fisher Unwin, 1907, page 199.
    ${ }^{2}$ Atterwards Sir Rowland Hill, K.C.B., etc. He was born at Kidderminster, December 3rd, I 795, was appointed Secretary to the Postmaster-General, December 9th, I8 46 , and was Secretary to the Post Office from April 22nd, 1854 , until Narch 12 th, $186_{4}$, when he resigned. He died at Hampstead, August 27 th, 1879 .

[^2]:    ${ }^{1}$ Appendix A (1).
    ${ }^{2}$ Afterwards Sir Henry Cole, K.C.B. He was born at Bath, July 15th, 1808 . Sometime after he left the Treasury in $181_{2}$, he was elected a member of the Executive Committee of the Great Exhibition of 185 : : he was Secretary of the Department of Science and Art from 1859 to 1873, and took a prominent part in the establishment of the South Kensington Museum. He retired from the public service in April, 1873, and died in London, April 181h, 1882.
    ${ }^{3}$ Appendix C ( $)$ ).
    *"Fifty Years of Public Work of Sir Henry Coie, K.C.B." London, 1884. Vol. II, p. 109.
    ${ }^{5}$ Appentix C (1).
    ${ }^{6}$ This gentlemen, whose original name was John Elliot Drinkwater, had an interest in the firm of Perkins Bacon. He died August 12th, 1851.
    ${ }^{2}$ Appendix C $(2-9)$.
    ${ }^{8}$ That is a stamp that does not require the paper to be wetted before it is printed

[^3]:    ${ }^{1}$ Appendix C (10).
    ${ }^{2}$ Appendix A (3).
    3"Fifty Years of Public Work of Sir Henry Cole, K.C.B." London: 1884. Vol. I, p. 62.

[^4]:    ${ }^{1}$ Appendix A (2).
    $2^{2}$ Fifty Years of Public Work of Sir Henry Cole, K.C.B." London: 1884. Vol. I1, pp. 109-142.
    ${ }^{3}$ That is one printed in two colours by the machine invented by Sir William Congreve, Bart., whose widow Mr. Whiting had married. The stamps used for Patent Medicines have been printed at Somerset House on this principle for a great many years past.

[^5]:    ${ }^{1}$ The Journals, three in number, covering the period from September, 7 th, 1839 , to March 29th, 1843, were presented by Rowland Hill's son, Mr. Pearson Hill, to the General Post Office, London, and are now in the Record Room of that institution. The latter was for many years in the Secretary's Department of the General Post Office. He died December 13th, 1898.
    ${ }^{2}$ Appendix A (3).
    ${ }^{3}$ The privilege was granted in October, 1855, when the Board of Inland Revenue issued a notice, that they were prepared, under certain regulations, to stamp "paper sent in by the public for covers or envelopes of letters."

[^6]:    ${ }^{1}$ In both the well-known standard works on the stamps of Great Britain, there is an erroncous statement to the effect that the early records of the firm had been destroyed by fire: ride : "/ The Postage and Telegraph Stamps of Great Britain," by F. A. Philbrick and W. A. S. Westoby, London, 1881, p. 83 , and "A History of the Adhesive Stamps of the British Isles," by Hastings E. Wright and A. B. Creeke, jun., London, 1899, p. 21. A fire did actually occur on Marels IIth, 1857 , and will be referred to in its proper place, but this was fortunately in a different part of the premises, away from the counting-house department, where the books and other records of the firm were kept.

[^7]:    ${ }^{1}$ For a full description of the Perkins methods for softening and re-hardening steel dies, cylinders and plates, wide Appendix B (1).

[^8]:    ${ }^{1}$ Appendix C (it).
    2 " Report from the Select Committee on Postage Label Stamps." London, IS52, p. 162.
    ${ }^{3}$ Appendix C (12).
    ${ }^{4}$ Ibid. (13).

[^9]:    ${ }^{1}$ It appears that other medals were used for the sketch or sketches as well as the one named. and that specimens of all of these were lent to Perkius, Bacon \& Petch by a Mr. Marriott: vide letter of April 12 th, 18 , 0 . Appendix C (51). The City medal, to commemorate the visit of Quecn Victoria, was struck in gold, silver and bronze. The reverse has a representation of the Guildhall. and below this is the inscription: " in honour of her majesty's visit to the corporation of london, gru nov.: 1837."
    ${ }^{2}$ Appendix F (1).

[^10]:    ${ }^{1}$ For particulars of the origin of this design (Illitstration I ), vide p .21 .
    ${ }^{2}$ Fide also Essay by W. Wyon (Illustration 3).
    ${ }^{3}$ Appendix C (14) and Rowland Hill's note on unfinished proof impression of the first die: vide p. 19.
    ${ }^{3}$ Appendix C (21).
    ${ }^{5}$ Ibid. (It).
    ${ }^{6}$ Appendix G.

[^11]:    1. I'enny Postage Jubilee. $\Lambda$ descriptive catalogue of all the postage stamps of the United Kingiom of Great Britain and lreland, issued during fifty years," by W. A. S. Westoby, London, isyi, p. I.
    ${ }^{2}$ "A History' of the Adhesive Stamps of the British lsles," by Hastings E. W"right and A. B. Creeke, jun. London, 1899, p. is.
[^12]:    ${ }^{1}$ Appendix C (15). ${ }^{2}$ Ibid. (16). ${ }^{3}$ ibid. (24). ${ }^{1}$ bid. (30).
    ${ }^{5}$ Mr. John Ledingham was appointed clerk to Rowland Hill in the latter part of September, 1839. He had previously acted in that capacity to Mr. Gardiner, who was Secretary to the Commissions of Post Office Enquiry. Mr. Ledingham, some years later, was engaged at the General Post Office with Rowland Hill.
    ${ }^{6}$ Appendix C (41). ${ }^{7}$ Ibid. (45). ${ }^{8}$ Appendix A (4). ${ }^{9}$ Ibid. (5).
    ${ }^{10}$ Mr. D. T. White was a printseller in Maddox Street, Regent Street. He died in 1868.
    ${ }^{11}$ This should, of course, be steel plates.
    12 " Chats on Postage Stamps." By Fred. J. Melville. London, 1911, pp. 173-175.
    ${ }^{13}$ Edward Henry Corbouid's first wife was Fanny Jemima, daughter of Charles Heath.

[^13]:    ${ }^{1}$ Vide p. 10.
    2 "The Postage Stamps .... of New South Wrales." By A. F. Basset Hull. London, 1911. p. 164.

[^14]:    ${ }^{1}$ Appendix C $(15)$. $\quad 2$ Ibid. (21).

[^15]:    ${ }^{1}$ Vide p. $1 \mathbf{r}$.
    ${ }^{2}$ The same background was used for the triangular One Shilling of the same colony in 1857, but strange to say the background of the Six Pence value is of a different pattern.

[^16]:    1 "The Postage Stamps . . . . of New South Wales." By A. F. Basset Hull. London. 1911, p. 201.

    2 "Report from the Select Committee on Postage Label Stamps." London. 1852, pp. 169, 170.

[^17]:    1 " The Postage and Telegraph Stamps of Great Britain." By F. A. Phalbrick and W. A. S. Westoby. London. 188i, p. 289 .
    ${ }^{2}$ "Le Timbre-Poste." Brusscls. December, 1867. p. 95.
    3 " Le Magasin Pittoresque." Paris. July, 1863. p. 223.
    " "The Philatelist." January, 1868. pp. 15, I6.
    ${ }^{5}$ Appendix G.

[^18]:    1 The illustration does not show the guide lines on the plate below the second row of designs.
    ${ }^{2}$ His appointment was confirmed by the Treasury minute of February. 20th, 1840, vide Appendix A $(6)$. He became Supervisor of Stamping Department, August zoth, 1848 , called "Comptroller," April 13th, 1863, was superannuated May 7th, 1872 , and died November uth. 1876, in his eighty-third year.
    ${ }^{3}$ Appendix C (22).
    ${ }^{5}$ Ibid. (30-32).
    ${ }^{7}$ Ibid. (I5).
    ${ }^{9}$ Appendix C (26).
    ${ }^{4}$ Ibid. (29). ${ }^{5}$ Ibid. (28). ${ }^{8}$ Ibid. (24). ${ }^{10}$ Ibid. (33).

[^19]:    ${ }^{1}$ Appendix C (30).
    ${ }^{2}$ Ibid (34).
    ${ }^{3}$ The second state of the dic is not illustrated, as the differences between this and the first state are so minute that it was thought a reproduction would serve no useful purpose.
    ${ }^{4}$ Appendix C (16-20).
    ${ }^{5}$ Colonel William Leader Maberly was Secretary of the Post Office from September 29th, 1836, to April 21st, 1854.

    6" The Philatelic Record." London, 1881. Vol. III. p. I92.
    ${ }^{2}$ Appendix C (24).

[^20]:    1 "The Postage and Telegraph Stamps of Great Britain." By F. A. Philbrick and W. A. S. Westoby. Loudon. 1881. p. 288.
    ${ }^{2}$ Appendix C (34). The account for 1,600 prints for the Review, mentioned in this letter, was for some illustrations for the article by Henry Cole, that appeared in the "London and Westminster Review " of March, I8 $\quad$ o.
    ${ }^{3}$ Appendix C (27-37).
    4. A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Creeke. Jun. London. 1899. p. xxi.
    ${ }^{5}$ Mr. Henry Lewis Wickham was chairman of the Commissioners of Stamps and Taxes.

[^21]:    ${ }^{1}$ One of these specimens has since passed into the Royal Collection. The other still remains in Mr. Evans' possession.
    ${ }^{2}$ Appendix G.

[^22]:    ${ }^{1}$ IVide p. $25 . \quad{ }^{2}$ Appendix C (25). ${ }^{3}$ Appendix G.
    4 We have thonght it useless to illustrate the fourth state of the die, for the same reasons as we gave for not illustrating the second state.
    ${ }^{5}$ Appendix C (35).

[^23]:    1 Appendix C (z48).
    ${ }^{2}$ Mr. Ormond Hill was the son of Mr. Edwin Hill. He was appointed Assistant Superintendent of Postage Stamps in May, $1_{\mathcal{4}} \mathrm{I}$, became Assistant Supervisor of the Stamping Department in August, 1854 (called) Deputy Coutroller in April, 1863, was appointed Comptroller on May 7 th, 1872 , and left the service on March 1oth, 1876.

[^24]:    ${ }^{1}$ Appendix A (3).
    2 These two departments were afterwards merged under the title " Board of Intand Revenue."
    ${ }^{3}$ Appendix A (0).

    - We have not been successful in finding a copy of this Minute.

[^25]:    ${ }^{1}$ Appendix C (27). ${ }^{2}$ Ibid (35). ${ }^{3}$ Ibid (36). Ibid (37) and Appendix E (10).

[^26]:    ${ }^{1}$ Appendix C (37). ${ }^{2}$ Vide p. 27. ${ }^{3}$ Appendix C $(39,40) . \quad{ }^{3}$ Appendix $F(1)$.
    ${ }^{5}$ Appendix C (157, 158 ).

[^27]:    ${ }^{1}$ Appendix C (171, 172).
    ${ }^{2}$ Anyonc desiring further particulars concerning Messrs. Archer and Branston's offers to print the stamps will find a full account of the negotiations between them and the Board of Inland Revenue in the " Report from the Select Committee on Postage Label Stamps.' London, 1852, pp. 20-5t; 188-220.
    ${ }^{3}$ Appendix C (202). $\quad{ }^{4}$ Ibid (203). ${ }^{5}$ Ibid (207, 209, 210211 ).

[^28]:    ${ }^{1}$ Appendix C (308).
    ${ }^{2}$ Appendix E (55).
    ${ }^{3}$ We have been unable to find the actual contracts of 1865 and 1867 , but a Draft copy of the former was sent to Perkins, Bacon id Co., on September $29 t h, 1865$ (Appendix E (57) and the date of signature of the latter is mentioned in the Contract for the Halfpenny stamps : vide Appendix F (2).
    ${ }^{4}$ Appendix A (3). ${ }^{5}$ Ibid (6). ${ }^{6}$ Appendix D (1). ${ }^{?}$ Ibid (2).

[^29]:    ${ }^{1}$ Mr. John Wood, the Chairman of the Commissioners of Excise; erroneously described as the Chairman of the Commissioners of Stamps and Taxes in " A History of the Adhesive Stanps of the British Isles." By Hastings E. Wright and A. B. Creeke, Jun. London. 18g9 p. 12.
    ${ }^{2}$ Appendix D (IO).
    ${ }^{3}$ Ibid (II).

    - The actual quantity was 133 reams, ride p. 43.
    ${ }^{5}$ Appendix D (7. S).
    ${ }^{6}$ Appendix C (28)

[^30]:    ${ }^{2}$ Appendix D (12). ${ }^{2}$ Ibid (13). ${ }^{3}$ Ibid (14).

[^31]:    ${ }^{7}$ Ibid (17, 18, 20, 23).
    ${ }^{8}$ Ibid (19).

[^32]:    ${ }^{1}$ Appendix D (20-35) and Appendix C (52).
    ${ }^{2}$ Ibid (25, 26, 28, 29).
    ${ }^{3}$ Ibid (36).
    ${ }^{4}$ Ibid (47).
    ${ }^{5}$ Ibid $(37,38,39)$.
    ${ }^{6}$ Ibid (II).
    "" The British Philatelist," London, 1917. Vol. X. p. 41.
    ${ }^{8}$ Vide p. $3^{8}$.

[^33]:    ${ }^{1}$ Appendix D ( $40-40$ ).
    ${ }^{2}$ Ibid (40).
    ${ }^{3}$ Ibid ( +1 ).

    - Since this was written the block of stamps has been cut up and a portion of it, consisting of eighteen specimens in three rows, lettered "HG" to "HL," "I G" to "I L" and "J G" to "J L," with " 2 flbs." written on the right-hand margin of the sheet, is now in the Royal Collection.
    ${ }^{5}$ Appendix D (40).
    ${ }^{6}$ Ibid (41).

[^34]:    ${ }^{1}$ Appendix D (37). $\quad{ }^{3}$ Ibid (32,36). $\quad{ }^{5}$ Appendix D (20, 23. 25, 26).
    ${ }^{2}$ Ibid. (37, 40) ${ }^{4}$ Appendix I. ${ }^{8} \operatorname{Ibid}(28,29)$.
    ${ }^{7}$ "The British Philatelist." London, 1917. 18. Vcl. X, pp. 68, 82. nI.

[^35]:    ${ }^{1}$ Appendix $\mathrm{D}(77,80,83)$.
    ${ }^{3}$ Ibid (70).
    ${ }^{2}$ Ibid (69).
    ${ }^{4}$ Ibid (71).

[^36]:    ${ }^{1}$ Appendix D (72).
    ${ }^{2}$ Vide further on under the heading "The total number printed of the One Penny black stamp."
    ${ }^{3}$ Appendix D (73). ${ }^{5}$ Ibid (77). ${ }^{7}$ Ibid (79). ${ }^{9}$ Ibid (87).
    ${ }^{8}$ Ibid (74). ${ }^{8}$ Ibid (78). ${ }^{8}$ Ibid (86).

[^37]:    ${ }^{1}$ A ppendix D (88).
    :"Standard priced-catalogue of the Stamps and Postmarks of the United Kingdom." By H. L'Estrange Ewen. Norwood, London, S.E. No. 5, October, 1896, p. 10 ; No. 6, 1898, p. 17.
    ${ }^{3}$ Appendix $D(64)$.

[^38]:    1." The London Philatelist." 1899. Vol. V'III, p. 11.

    2 " The Philatelic Journal of Great Britain." London, IS99. Vol. IN, p. to.
    ${ }^{3}$ Appendix E (10).
    ${ }^{4}$ Ibid ( 9 ).
    ${ }^{5}$ Vide p. 33.
    ${ }^{6}$ Appendix E (1, 2).
    ${ }^{7}$ Ibid (3).
    ${ }^{8}$ Ibid (4).

[^39]:    ${ }^{3}$ Ibid (20).

[^40]:    ${ }^{1}$ Appendix E (2f).
    ${ }^{2}$ Ibid (25).
    ${ }^{3}$ Ibid (26).
    4 Ibid (27, 28).
    ${ }^{5}$ Ibid (29).
    ${ }^{6} \mathrm{Mr}$. Thomas Allen was the storekeeper at Somerset House, who received the sheets of postage stamps from the printers.
    ${ }^{7}$ Appendix E (31).
    ${ }^{8}$ Ibid (33).

[^41]:    ${ }^{1}$ Appendix $\mathrm{E}(30) . \quad{ }^{2}$ Ibid (32). ${ }^{3}$ Ibid (34). ${ }^{3}$ Ibid (35). ${ }^{5}$ Ibid (36).

[^42]:    ${ }^{1}$ Appendix E (37).
    ${ }^{1}$ Ibid ( ${ }^{6} 6$ ).
    7 Ibid (53).
    ${ }^{2}$ Ibid $(38-45)$.
    ${ }^{5}$ Ibid (47).
    ${ }^{8}$ Ibid (5t).
    ${ }^{3}$ Ibid (48-52).
    ${ }^{6}$ Ibid (50-52).

[^43]:    Appendix E: (55).
    ${ }^{2}$ Ibid (50).
    ${ }^{3}$ Ibid (5ĭ).
    ${ }^{4}$ Ibid (58).
    ${ }^{5}$ ride p. $3^{\text {r. }}$

    - Appendir E (32)

    7" Report from the Select Committee on Postage Label Stamps." London. 1852, p. 85 .
    ${ }^{8}$ thid. p. 165

    * Appendix E (3 )

[^44]:    ${ }^{1}$ Appendix D (98).
    ${ }^{2}$ Vide p. 12.
    ${ }^{3}$ Appendix G.

[^45]:    'Vide further on unter the heading ' Experiments for new colours for the stamps."

[^46]:    ${ }^{1}$ Appendix B (I). ${ }^{2}$ Ibid.

[^47]:    ${ }^{1}$ I'ide p. 65
    ${ }^{2}$ That is the rough edges caused by the turning up of the steel when the impressions are transfered from the roller to the plate or in the punching of the corner letters of the stamps.
    ${ }^{3}$ An addition of this kind might be necessary in consequence of damage cansed to the lines of the eonner squares in the removal of the "bur" between the impressions, or it might be due to injury caused in the insertion of the letters, after the plate had left the Transferring Room.

    - Appendix C $(t+1)$.

[^48]:    1" The Postage Stamps. . of New south Wales." By A. F. Basset Hull. London, 1911. P. 1 - 0.

[^49]:    ${ }^{1}$ Appendix C (44). ${ }^{2}$ Ibid (14). ${ }^{3}$ Ibid (25).

[^50]:    ${ }^{1}$ The special meaning attached to this word will be explained later on.
    ${ }^{2}$ The British Philatelist, London, 1909. Vol. I, p. 89.
    ${ }^{3}$ Appendix C (169).

[^51]:    1"A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Creeke, Junr. London. 1899. Page $2 \not \downarrow^{2}$.
    ${ }^{2}$ The Stamp Collectors' Fortnightly, London. 1go8. Vol XIV, p. ${ }^{14 .}$
    ${ }^{3}$ The Philatelic Circular, London. 1912-13, pp. 223, 235, 249, 274.

[^52]:    ${ }^{1}$ The special meaning attached to this word will be explained later.
    ${ }^{2}$ Both Mr. Bornefeld and Mr. Itodson give Plate 20 as the last found with letters of Alphabet II, but we have convinced ourselves that the change to letters known as Alphabet III, unly took place on Plate 22.
    ${ }^{3}$ Our reasons for giving these dates will be found later on in our work
    4 Appendix C ( I 4 ).
    ${ }^{5}$ Ibid ( +2 ).
    ${ }^{8}$ Ibid. (43).

[^53]:    ${ }^{1}$ Appendix $C(4 t)$ a Appendix $G$. Appendix C (250).

[^54]:    B"A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A B. Creeke, Junr. London, 1899 , pp. 19, 21, 201, $240,260$.

    2 Vide p. 57.

[^55]:    ${ }^{1}$ These dates should be compared with those we give further on from Perkins, Bacon \& Petch's Engraving Book, vide p. 71.
    ${ }^{2}$ These four dates are confirmed as correct by the entries of the deliveries of the sheets given in Appendix 1.

[^56]:    ${ }^{1}$ Appendix C (i53).
    ${ }^{2}$ It will be seen further on that there was no supply of the Two Pence value available at that date.

[^57]:    ${ }^{1}$ Appendix G.
    ${ }^{2}$ The British Philatelist, London. 1917. Vol. X, pp. 83, 90.
    3 "A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Creeke, jun., London. 1899 P. 240.

[^58]:    ${ }^{1}$ Edwin Hill.
    ${ }^{2}$ Mr. William Bokenham was one of the "Superintending Presidents" at the General Post Office in 1840 . The other was Mr. Robert Smith.
    ${ }^{3}$ Appendix 1.

[^59]:    ${ }^{1}$ liide p. 78.
    2 Plate if was not fimished until January 19th, isf1, vide p. 71, and could not, therefore, have been used for any other printing in black except the provisional printing.
    ${ }^{3}$ " A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Creeke, Jun., London, I899, p. 22.

    - Ibid pp. 16, 17.
    ${ }^{5}$ Appendix I.

[^60]:    ${ }^{1}$ Appendix 1.
    ${ }^{2}$ Ibid.
    ${ }^{3}$ Appendix G.
    4 Vide p. 67.

[^61]:    ${ }^{1}$ We think that these 285 sheets must have been printed at night.
    2 We think that this is an error of date and that this entry and the following three should read May I 3, 14,15,16. The first page of the Account Book was turned over on May 12th and the totals were carried forward to the next page with the same date, and this may have contributed to such an error.

[^62]:    ${ }^{1}$ The British Phtatelist. London, 1919. Vol. XII, p. 15.

[^63]:    ' l'ide also under the heading "Complaint of badly printed stamps from Plate 10 of the One Penny "; further on in our work.
    ${ }^{2}$ l'ide p. 73.
    ${ }^{3}$ Appendix C ( 154 ).
    ${ }^{4}$ l'ide under the heading "Complaint of badly printed stamps from Plate to of the One Penny"; further on in our work
    ${ }^{5}$ The British Philatelist. London. 1918-20. Voi. XI, p. 63 ; Vol. XII, p. 85.

[^64]:    ${ }^{1}$ Appendix C (62,63).
    ${ }^{2}$ Ibid ( $160-162$ ).
    ${ }^{3}$ Ibid (163).
    ${ }^{4}$ Appendix A (6).
    ${ }^{5}$ Appendix C (42).

[^65]:    1"A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Creeke, Jun. London. 1899. p. 202.
    ${ }^{2}$ Ibid p. 20 .

    - The Stamp Collector's Magazine, 1867 . Vol. V, p. 67.
    - The Stamp Collector's Magazine, 1868. Vol. VI, pp. 133, 134.

[^66]:    ${ }^{1}$ This is, of course, wrong, as no stamps, or proofs of them, were ever printed at the Post Office.

    2 "The Postage and Telegraph Stamps of Great Britain." By F. A. Philbrick and W. A. S. Westoby. London. 1881. p. 293.
    ${ }^{3}$ "A History of the Adhesive Stamps of the British Isles." By Ihastings E. Wright and A. B. Creeke, Jun. London. 1899 . pp.22, 23.
    ${ }^{4}$ Appendix C (226).
    ${ }^{5}$ Ibid (131).

[^67]:    ${ }^{1}$ Appendix C ( 135 ).
    2 The meaning of this word here is that the two colours selected were from samples printed on ordinary plain paper wetted in the usual manner, in contra-distinction tu other samples submitted, which had the paper dipped in a solution of Prussiate of Potash.
    ${ }^{3}$ Appendix C (136).

    * Ibid (137. 139).
    ${ }^{5}$ Appendix 1.
    © Appendix ( (222)
    7 Ibid $(224)$.

[^68]:    ${ }^{1}$ Appendix C (225). $\quad 2$ Ibid (226).

[^69]:    ${ }^{1}$ This volume is now in the collection of Philatelic Literature bequeathed by the late Earl of Crawford, K.T., to the British Museum.
    ${ }^{2}$ Stamp Collecting. London. 1914. Vol. I, p. 386.

[^70]:    ${ }^{1}$ Appendix C (4). ${ }^{2}$ Ibid (4t). ${ }^{3}$ Appendix $G \quad{ }^{4}$ Appendix C ( 46 ). ${ }^{5}$ Appendix $G$.

[^71]:    ${ }^{1}$ Vide p. 65.
    ${ }^{3}$ Ibid.
    ${ }^{5}$ Appendix $H$.

    - Appendix I.

[^72]:    1"A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and d. B. Creeke, Jun. London. ISun. p. 47.
    ${ }^{2}$ Appendix C (154).
    ${ }^{3}$ Messis. Wright and Creeke's work, pp. 45, 40.
    ${ }^{4}$ Appendix C $(58,59)$.
    ${ }_{5}^{5}$ Ibid ( 00,61 ).

[^73]:    ${ }^{1}$ Appendix C (38).
    ${ }^{2}$ The Chemist, Professor Richard Phillips, F.R.S.
    ${ }^{3}$ Appendix C $(5 t, 55)$.
    ${ }^{1} 1$ bid ( 65 ).
    ${ }^{5}$ Mr. John Rawsthorne, of Manchester, who supplied the gum for the stamps, in writing to Perkins, Bacon \& Petch on May 19th, 1840 , said, "there might be some improvement in the obliteration, it can be discharged in two minutes. . . . . I enclose a label I have just discharged and the part of the letter (Liverpool) Irom which it was torn."-Vide Appendix E (23).

[^74]:    ${ }_{1}$ Professor R. Phillips, F.R.S.
    ${ }^{2}$ lide P. 96.
    ${ }^{a}$ The Royal Collection contains several stamps cleaned by Mr. Donovan, and amongst other cleaned specimens of the One Penny black in the collection is one that passed through the Post no less than three times.
    ${ }^{4}$ Dr. Clarke, Professor of Chemistry at the Aberdeen University.
    ${ }^{5}$ Appendix C (81-84).
    ${ }^{6}$ Ibid (85).
    ${ }^{7}$ Ibid (86, 87).
    ${ }^{8}$ Michael Faraday, Professor of Chemistry at the Royal Institution.

[^75]:    ${ }^{1}$ Mr. L. Arthur Burd tells us that he possesses two copies used on August 31st, is 40 , which is the earliest date we know. One of these specimens has since passed into the Royal Collection.
    ${ }^{2}$ Appendix C (95).
    3" Walter Morley's Price List for Specialists of the id. black 18 fo Postage Stamp of Gecat Britain." Catford, S.E. July, 1910.
    ." A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Creeke, Iun. London. isog. Pp. 30,31
    ${ }^{5}$ Appendix $C(1+8)$.

[^76]:    1" The Standard Guide to Pustage Stamp Colleting." By Bellars and Davie. Lomdon. 1864. Athough bearing the date " 186 t $_{\text {." }}$ this work must have been published at the end of 1863, as it is reviewed in The Stamp Collector's Magazine of January Ist. IS64.
    ${ }^{2}$ Tride p. 56.
    ${ }^{3}$ Vide p. 39.

[^77]:    ${ }^{1}$ Appendix C (66).

[^78]:    ${ }^{1}$ Appendix C (69a).

[^79]:    ${ }^{1}$ Appendix C $(86,97)$.
    ${ }^{2}$ Ibid (88).
    ${ }^{3}$ This essay was similar in design to the One Penny envelope stamp 1ssued in February, 18 ${ }^{4}$, but had the inseription " postage one penny" in letters of considerably larger size.

    - Appendix C (91-93, 97, 98).
    ${ }^{6}$ Ibid (94).

[^80]:    ${ }^{1}$ Appendix C (96).
    ${ }^{2}$. Ibid (99)
    ${ }^{3}$ Ibid (100).
    ${ }^{4}$ Ibid (IOI).
    ${ }^{6}$ The British Philatelist. London. 1917. Vol. X, p. 67.
    ${ }^{6}$ Appendix C (102).
    ${ }^{7}$ Ibid (103).

[^81]:    ${ }^{1}$ Appendix C. (105-109).
    ${ }^{2}$ Mr. Thomas Peacock was one of the Inspectors of the Stamping Department at Somerset House.
    ${ }^{3}$ Appendix C (IIO, 111).

    - Ibid (112).
    ${ }^{5}$ Ibid (113).

[^82]:    ${ }^{1}$ Appendix C (II.4).
    ${ }^{2}$ Vide p. 29 and Illustration S.
    3"A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Creeke, Junr. London, 1899. p. 49.

    - Appendix C (II5, 116).
    ${ }^{5}$ Ibid (III).
    ${ }^{6}$ Ibid (117).
    ${ }^{7}$ Ibid (118).
    ${ }^{8}$ Ibid ( 120 ).
    ${ }^{9}$ Ibid (121-123).
    ${ }^{10}$ Ibid (128, 129).
    ${ }^{11}$ Ibid (130, 131).

[^83]:    ${ }^{1}$ Ibid (132, 133). ${ }^{2}$ Appendix C (133). ${ }^{3}$ Ibid (134). 1 bid (135).

[^84]:    ${ }^{1}$ This colour was amongst those submitted on November 2nd, 18 fo.
    ${ }^{2}$ Vide pp. $8_{\mathcal{4}-86}$.
    ${ }^{3}$ Appendix C (I36).
    ${ }^{4}$ Ibid (137, 138).
    ${ }^{5}$ Ibid ( 139 ).
    ${ }^{6}$ Ibid ( I 40 ).
    ${ }^{7}$ Ibid ( $\mathrm{I}^{2}$ ).

[^85]:    ${ }^{1}$ The British Philatelist. London. 1917. Vol. X, pp. 67, 68.

[^86]:    ${ }^{1}$ l'ide p. 102. ${ }^{2}$ Appendix C (117-127). ${ }^{3}$ I'ide p. 6.

[^87]:    ${ }^{1}$ An illustration of this is given in The British Philatelist. 1919. Vol. XII, p. 31.
    ${ }^{2}$ Appendix C (87).
    ${ }^{3}$ Ibid (89).

    - Ibid ( $\mathrm{IO}_{4}, 14 \mathrm{I}, 143$ ).
    ${ }^{5}$ Tbid ( ${ }^{142}$ ).
    ${ }^{6}$ Vide P. 73.

[^88]:    ${ }^{1}$ Vide p. 73.
    ${ }^{2}$ Appendix I.
    3 "W. Morley's Price List for Specialists of the 1 d. red $18{ }_{f} 1$ Postage Stamp of Great Britain, issued January Gth, $18_{f} 1$." London, October, 1911 .
    ${ }^{4}$ Appendix C (98).
    ${ }^{6}$ I'ide p. 92.
    ${ }^{6}$ Appendix C ( 146 ).
    7" A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Creeke, Junr. London, $18 y 9$. P. 49.

[^89]:    ${ }^{1}$ Appendix I
    ${ }^{2}$ The envelopes were overprinted with the word " SPECIMEN " in red ink
    ${ }^{3}$ The Philatelic Journal of Great Britain. 1911. Vol. XXI, p. 168.
    ${ }^{4}$ Appendix G.
    ${ }^{6}$ Appendix 1.
    ${ }^{6}$ Ibid.
    ${ }^{7}$ Mr. C. F. Dendy Marshall has a specimen that was used on March 17th, 18f1, which is the earliest date of use known.
    ${ }^{8}$ Vide p. 88.

[^90]:    ${ }^{1}$ Appendix G.
    ${ }^{2}$ Appendix C (145).
    ${ }^{3}$ Ibid (146).
    ${ }^{4}$ lbid (147).
    ${ }^{5}$ The Philatclic Record. London. iSSi. Vol. III, p. 194.

[^91]:    ${ }^{1}$ Vide p. 108 and Appendix C (98).
    ${ }^{2}$ Appendix C (330).
    ${ }^{3}$ Ibid (152).

[^92]:    1 " Report from the Select Committee on Postage Label Stamps." London. I852, p. 85 .
    ${ }^{2}$ Appendix C (330).
    ${ }^{3}$ Ibid (330).

[^93]:    ${ }^{1}$ Appendix C (22S).
    ${ }^{2}$ lbid (221).
    ${ }^{4}$ Vide p. 8.
    ${ }^{5}$ Appendix C (30y) and vide p. 121
    ${ }^{6}$ Appendix C (227).

[^94]:    ${ }^{1}$ Vide p. 136.
    2"A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Crecke, Junr. London. I $899 . \quad$ pp. 3-5.
    ${ }^{3}$ Appendis C (230)
    ${ }^{4}$ Ibid (231. 232).
    ${ }^{5}$ Ibid (233).

[^95]:    ${ }^{1}$ Appendix C ( $241,242,247$ ).
    2 "The Pustage and Telegraph Stamps of Great Britain." By F. A. Philbrick and W. A. S. Westoby. London. 1881. pp. 291, 292,
    ${ }^{3}$ Appendix C (234).
    ${ }^{4}$ Appendix G.

[^96]:    ${ }^{1}$ Vide pp. 31, 32. 2 Ibid. ${ }^{3}$ Appendix G. $\$$ Ibid.

[^97]:    ${ }^{1}$ I'ide p. 65.
    ${ }^{2}$ Vide p. 157.
    ${ }^{3}$ Appendix G.
    4"A History of the Adhesive Stamps of the British lsles." By Hastings E. Wright and A. B. Creeke, Junr. London. IS99. pp. 38, 39, 245.
    ${ }^{5}$ Appendix C (244).
    ${ }^{6}$ Ibid ( $2+5$ ).

[^98]:    1"The Cancellation Marks of London and District." By Geo. H. Holland. Gibbons Stamp W'eekly. December 1 Sth, 1909 . Vol. X, p. 591

    2 " Some Notes on British Postmarks since 18ұo." By C. F. Dendy Marshall, B.A. Gibbons Stamp IVeekly. July 3oth. 1910. p. IIf.
    ${ }^{3}$ "An Appendix to the Postage and Telegraph Stamps of Great Britain." By F. A. Philbrick and W. A. S. Westoby. The Philatelic Record. London. 1883. Vol. V, p. 95.
    ${ }^{4}$ Vide p. 86.
    ${ }^{5}$ The Rev. Francis John Stainforth was the Pcrpetual Cnrate of All Hallows, Staining, in the City of London, of which church the tower only is now left standing. He was one of the pioneers of stamp-collecting and it was principally from his collection that the first edition of Slount Brown's "Cataloguc ", was compiled in IS62. He died in September, I 866, and his collection was dispersed some eighteen months previous to his decease. The specimen of the One Penny Plate 70, which the Rev. Stainforth is said to have obtaincd in the year 1858, passed into the collection of Judge Philbrick fuide Alfred Smith \& Co.'s Monthly Circular. October. 188 r . p. 75), and then in 1882 to the late Herr Philipp La Rénotière von Ferrary when the latter purchased the entire collection of Judge Philbrick.

[^99]:    1" Standard Price Catalogue of the Stamps and Postmarks of the United Fingdom." By H. L.'Estrange Ewen. Norwood, London, S.E. No. 5. October, 1896. p. 13: No. 6. 1898 , p. 22.
    ${ }^{2}$ Vide p. 61.
    ${ }^{3}$ Appendix C (251).

[^100]:    ${ }^{1}$ The Stamp-Collector's Magazine. 1 Srs. Vol. VI, P. 1.33.
    ${ }^{2}$ Appendix $G$.
    3"An Appendix to the Pustage anil Telegraph Stamps of Great Britain." By F. A. Philbrick and W. A. S. Westuby. The Philatelic Record. 1883. Vol. V, p. 81.

[^101]:    ${ }^{1}$ Appendix G.
    2"A History of the Adhesive Stamps of the British Isles." By Hastings F.. Wright and A. B. Creeke, Junt. Londun. 1899 . p. 54 .
    ${ }^{3}$ "The Postage and Telegraph Stamps of cireat Pritain." By F. A. Philbrick and IV. A. S. Westoby. London. 1881. p. 82.
    ${ }^{4}$ Messrs. Wright and Creeke's W'ork. p. 37.
    ${ }^{5}$ The Stamp Collectors' Fortnightly. London. December ifth, 1895, Vol. 11, p. 65.

    - Appendix C (252).

[^102]:    ${ }^{1}$ Appendix C (264). $\quad$ Ibid (267).

[^103]:    1"A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Creeke, Junr. London. 1899. pp. 54, 248.
    ${ }_{2}^{2}$ Appendix G.
    ${ }^{3}$ Ibid.

    - Appendix C (275).

[^104]:    ${ }^{1}$ Appendix G.
    ${ }^{2}$ Ibid.
    ${ }^{3}$ Ibid
    ${ }^{4}$ Vide pp. 109.146.

[^105]:    ${ }^{1}$ Le Timbre-Poste. Brussels. 1870 . Vol. VIll. p. 27.
    ${ }^{2}$ The Stamp-Collector's Magazme. 1870 . Vol. VIll. p. It.
    ${ }^{3}$ The Postage and Telegraph Stamps of Great Britain." By F. A. Philbrick and W. A. S. Westoby. London. 1881. p. 77.
    4." A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Creeke, Junr. Londan. ISy9. p. 39.
    ${ }^{5}$ Appendix G.
    ${ }^{6}$ Ibid.
    ${ }^{2}$ Appendix $\mathrm{C}(3+5)$.
    8"Standard Priced Catalogue of the Stamps and Postmarks of the United Kingdom," No. 6. By H. L'Estrange Ewen, N゙nrwond. 1898. p. 22.

[^106]:    ${ }^{1}$ Appendix C (299).
    ${ }^{2}$ Ibid (300).
    ${ }^{3}$ Ibid (301).
    "This was one of the plates, which, as already mentioned (p.1 +3 ), had the " Gothic $\mathcal{K}$."
    5 ". A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Creeke, Junr. London. IS99. p. 244 .

    - Appendix C (303).
    ${ }^{7}$ Ibid (304).

[^107]:    ${ }^{1}$ Appendix C (306).

[^108]:    ${ }^{1}$ Mr. Robert Smith, one of the " Superintending Presidents at the General Post Office."
    ${ }^{2}$ Sir Henry Cole, K.C.B.
    ${ }^{3}$ " The Life of Sir Rowland Hill, K.C.B., . . ." By Sir Rowland Hill and his nephew, George Birkbeck Hill, D.C.L. Two vols. London. IS80. Vol. I, p. 399.

    4 "Report." p. 99.
    "Appendix C (159).
    ${ }^{6}$ Mr. William Bokenham, then President of the Inland Post Office.

[^109]:    1 A celebrated Police Officer.
    ${ }^{2}$ Mr. Thomas Peacock, one of the Inspectors of the Stamping Department at Somerset House.
    ${ }^{3}$ Appendix C (179).

    - See also Mr. Bacon's evidence before the Select Committee on Postage Label Stamps of 1852. "Report of the Committee," p. 163.
    ${ }^{5}$ Stanley Gibbons Monthly Journal. London, 1912. Vol. 20. P. 167.

[^110]:    1" The Pustage and Telegraph Stamps of Great Britain." By F. A. Philbrick and W. A. S. Westoby. London. 1881. p. 294.
    ${ }^{2}$ Appendix C $(217)$.
    ${ }^{3}$ Ibid. (218).
    ${ }^{3}$ Ibid (219).

[^111]:    ${ }^{1}$ Appendix C (235)

[^112]:    ${ }^{1}$ Appendix C. (236).
    ${ }^{2}$ Appendix G.
    ${ }^{3}$ The Stamp Collector's Magazine. 1870. Vol. VIII, p. 7t.
    ${ }^{4}$ Appendix C (237).
    ${ }^{5}$ Appendix $G$.

[^113]:    ${ }^{1}$ Appendix G.
    ${ }^{2}$ Appendix C (239).

[^114]:    ${ }^{5}$ Ibid. (240).

    - Appendix G.

[^115]:    ${ }^{1}$ Vide pp. 31, 32.

[^116]:    ${ }^{1}$ Appendix G.
    ${ }^{2}$ The American Journal of Philately. New York. 1894. Second series. Vol. Vil, p. $62+$.
    ${ }^{3}$ The British Philatelist. 1914. Vol. VII, p. 86.
    ${ }^{4}$ Vide p. 6 I.

[^117]:    1.. 'The Pence 'Issucs of New Brunswick and Nova Scotia." By E. D. Bacon. The London Philatelist. 1915. Vol. XXIV, p. 32.

    2 "A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Creeke, Junr. London. 1899. p. 44.
    ${ }^{3}$ Of this shect only a block of twenty stamps was actually shewn at the Exhibition. Vide Le Timbrophile Paris. 1867. Vol. IlI, p. 264, and Le Timbre-Poste Brussels. 1867. Vol. V, p. 60 .
    "Most of these were overprinted "specimen."
    ${ }^{5}$ Appendix C (294).

[^118]:    ${ }^{1}$ Appendix C (302).
    ${ }^{2}$ Appendix G.
    ${ }^{3}$ Ibid.
    " A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Creeke, Junr. London. 1899. p. 43.
    ${ }^{5}$ Vide p. 57.

[^119]:    ${ }^{1}$ I'ide p. $177 .{ }^{2}$ Appendix C (308). ${ }^{3}$ Ibid (280). 'Ibid (281). ${ }^{3}$ Ibid (282).

[^120]:    ${ }^{1}$ Appendix G.
    ${ }^{2}$ Appendix C (284).
    ${ }^{3}$ Ibid (285).

[^121]:    ${ }^{1}$ Appendix $F(2) . \quad{ }^{2}$ Appendix $G$.

[^122]:    ${ }^{1}$ Appendix C (290).
    ${ }^{2}$ Ibid (282).
    ${ }^{3}$ Vide pp. 21, 24 .

[^123]:    ${ }^{1}$ Vide pp. 31, $3{ }^{2}$.
    ${ }^{2}$ Appendix C (288).
    ${ }^{3}$ Ibid (289).

[^124]:    ${ }^{1}$ Appendix G.
    ${ }^{2}$ Ibid.
    ${ }^{3}$ Vide p. 57.
    ${ }^{4}$ Vide p. 165.
    ${ }^{5}$ Appendix G.

[^125]:    1 "A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Creeke, Junr. London. 1899 . pp. $14,240$.
    ${ }^{2}$ A ppendix G.
    ${ }^{3}$ l'ide p. 191, and Appendix F (2).

    * Appendix G.
    ${ }^{5}$ Ibid.
    6"A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Creeke, Junr. London. I899. pp. 14, 15. $24^{\circ}$.

[^126]:    ${ }^{1}$ Appendix (i.
    ${ }^{2}$ Ibid.
    ${ }^{3}$ Ibid
    4. A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B. Creeke, Junt. London. ISg9. pp. 15. $24^{\circ}$.
    ${ }^{5}$ Appendix C. (352).
    ${ }^{6}$ l'ide p. 192 and Appendix F (2).
    ${ }^{3}$ Appendix G.
    ${ }^{8}$ Ibid.

[^127]:    ${ }^{1}$ Vide p. 190 and Appendix $\mathbf{F}$ (z).
    ${ }^{2}$ Appendix C (283).
    ${ }^{3}$ Ibid (292a).

[^128]:    ${ }^{1}$ Vide p. 192 and Appendix F (2).
    ${ }^{2}$ Vide p. 191 and Appendix F (2).
    ${ }^{3}$ Vide p. 196.
    ${ }^{4}$ Appendix C (307).
    ${ }^{5}$ The Philatelist. 1872. Vol. VI. p. 169.

[^129]:    1 Appendix C (310).
    ${ }^{2}$ Ibid (311).

[^130]:    ${ }^{1}$ Appendix C (312).
    ${ }^{2}$ Ibid (313).
    ${ }^{3}$ Ibid (3r4).
    ${ }^{4}$ Ibid (315).
    ${ }_{5}^{5}$ Ibid (316).

[^131]:    ${ }^{1}$ Appendix C (35\%).
    ${ }^{2}$ Ibid (318).
    ${ }^{3}$ Ibid (3+1).
    ${ }^{4}$ Ibid (319).
    ${ }^{5}$ Ibid ( 320 ).
    ${ }^{6}$ Ibid (321).
    © Lord John Manners, who was Postmaster-General from March fih 1874 , to May 1 fth, 1880, and again from June 2yth 1885 , to lebruary 10 th, 1580.
    ${ }^{8}$ Appendix C (32z).

[^132]:    ${ }^{1}$ Vide pp. 195, 141, 187, 159,
    ${ }^{2}$ Appendix C (323).
    ${ }^{3}$ Ibid (324),

[^133]:    ${ }^{1}$ Appendix G.
    Appendix C (325).

[^134]:    ${ }^{1}$ Appendix $G$.
    ${ }^{2}$ Vide P. 207.
    ${ }^{3}$ Appendix G.

    - Vide p. 207.

[^135]:    ${ }^{1}$ Appendix C (331).

[^136]:    ${ }^{1}$ Appendix C (332).
    ${ }^{2}$ Ibid (333).
    ${ }^{3}$ Ibid (334).

[^137]:    ${ }^{1}$ Appendis G.
    ${ }^{2}$ Vide pp. 207, 20y.

[^138]:    ${ }^{1}$ Appendix C (352).
    ${ }_{2}$ Ibid (353).

[^139]:    ${ }^{1}$ Appendix C $(35 t)$.
    *These were defaced on April 8th, ISSo ; Eide "A History of the Adhesive Stamps of the British Isles." By Hastings E. Wright and A. B: Creeke, Junr. London, ISg9. pp. 247, 2.4 S.
    ${ }^{3}$ Appendix C (355).
    ${ }^{3}$ Ibid (356).
    ${ }^{5}$ Ibid (357).
    ${ }^{6}$ Ibid (358).
    ${ }^{7}$ Ibid (359).

[^140]:    1 IVide pp. 1.f, 142, iS6.
    2 Vide pp. 19S, 177.
    ${ }^{3}$ Vide p. 135.

    - I'ide p. 176.
    ${ }^{5}$ Vide p. igs.
    ${ }^{6}$ Appendix C (156).
    7 Ibid (167).
    ${ }^{8}$ Ibid (170).

[^141]:    1 "The Life of Sir Rowland Hill, K.C.B.," By Sir Rowland Hill and his nephew George Birkbeck Hill, D.C.L. 2 vols. London. 1880. Vol. I. p. 408.

[^142]:    1 This list is drawn up on the plan the author has adopted for the arrangement of the stamps in the Royal Collection.

[^143]:    1 "The B'ritish Philatelist," London, 1915. Vol. VII., p. 93.

