## The Dies

OF THE:

## Postage Stamps of Portugal

# Reigns of Dona Maria II. and Dom Pedro V. 

BY

R. B. YARDLEY

WITH THIRTY PLATES OF ILLUSTRATIONS

Tondoll:
PRINTEL, HY TRLSIONH: AND HRAY, LIMITED, WFET SORWOOH. SE.

T
HE Proprictors of the Philatelic Ricoord, in which Journal this treatise on the Stamps of Portugal first appeared, desire to express their thanks to the anthor, Mr. R. B. Yardley, for his revision of the text for publication in handbook form.

They also congratulate him upon the results obtained from the photographs taken and enlarged by himself, which not only lring out the minute variations in the dies, but also add considerably to the value and attractiseness of the work.

Manchester,
Jantary, 1907.

## CORRIGENDA.

The footnote on page 4 does not real quite accurately: The followins additions will render the meaning clear:-

In line 3 of the footnote, after the word "was," anid "fifty-sis, i.f. four vertical columns of.'

In the bottom line of the footnote, after the worts " embossed stamps," aildi "printed after 1865 ."

# Notes on the Dies of the Postage Stamps of Portugal of the Reigns of Dona Maria II. and Dom Pedro V. 

IN the early days of philatelic literature it was recosnised that there were two distinct types of the 5 reis and the 25 reis of Dom Pedro, namely, those in which the hair of the embossed head of the sovereign was smooth and parted, and those in which it was curly. I need only refer to the handbooks and guides of M. Moens and Messrs. Bellars \& Davie of the year 1864.

In the Philatelist of December, 1867 (Vol. I., p. 195), a correspondent pointed out differences in the reprint of 1864 and the original of the 5 reis of Dona Maria. Again in Le Timbre Poste of February, 1870 (Vol. VIII., p. I2), M. Moens mentioned that he had discovered several types of the 5 reis of Dom Pedro with smooth hair and of the 25 reis blue with the hair curly, and in the Le Timbre Poste of the following month Dr. Legrand gave a detailed description of five varieties of the 5 reis; he also referred to the two varieties of the 25 reis with curly hair, one being the well-known variety with fine network and the other the variety, or rather group of varieties, in which the network is "coarse." The fine network is really the intersection of two series of curved white lines, in each of which the lines are separated by equal distance, while in the "coarse network" varieties the single lines of the "fine network" are replaced by double curved lines drawn very close to one another. It is now well known that there are really six varieties of the 25 reis with " coarse network," each printed from a distinct die, and although the differences in the several dies are small and not noticeable without close examination, yet they are such that they cannot have been caused by mere retouches of an original die. In his description of the five varieties of the 5 reis, Dr. Legrand gives the numbers of the pearls within the circle as $75,76,76,81$, and 89 respectively. It is evident that Dr. Legrand was under the erroneous impression that these several varieties or types existed in conjunction on one or more "plates," which was, in fact, the view generally held until a true description of the process actually employed for producing the embossed stamps was published by Dr. Anachoreta and subsequently amplified by Mr. J. N. Marsden in articles and papers to which I refer later.

The Rev. R. B. Earée wrote a very careful and well-thought-out paper entitled "The Stamps of Portuyal," published in the eleventh volume of the Stamp Collector's Magazine (1873, pp. 109, 122, etc.), in which he gives his own description of five varieties of the 5 reis of Dom Pedro with straight hair, and I may say that they do not altogether
accord with those of Dr. Legrand's list. The discrepancies I deal with later. Mr. Earée failed to distinguish the two dies of the 25 reis blue of Dom Pedro with the straight hair, but he claimed to have discovered two varieties of the 5 reis curly hair and also two varieties of the 25 reis rose of Dom Pedro, curly hair, and apparently he had not come across specimens of the two styles of network on the stamps of 25 reis of Dom Pedro with curly hair. The two types of the embossed 5 reis of Dom Luiz were also distinguished and described by Mr. Earée, The second edition of the Stamp Collcctor's Handbook (a878), by the late Mr. E. L. Pemberton, lists the two varieties of the 25 reis of Dom Pedro, straight hair, as well as the "five types" of the 5 reis straight hair and the varieties of the 25 reis blue, curly hair, with "fine net" and "coarse net." The " Remarks" on the issues of Dom Pedro contain the erroneous statement, " five dies side by side are repeated to make the sheet."

I will now refer to a most important publication which may be regarded as the source of official information as regards the history of and processes employed for the production of the early Portuguese stamps, viz., an article by Dr. Anachoreta, of Lisbon, on the first issue of Portugal, published in the Bulletin Official of June, 1895, of the Lausanne Philatelic Society. Dr. Anachoreta had at one time held a position in the Lisbon Mint, where all the postage stamps of Portugal were printed, and I believe that this article contained the first description of the process actually employed for the production of the embossed stamps. The next addition to our knowledge of the dies employed for the Portuguese stamps is to be found in a paper by Herr O. Wassermann, published in the Deutsche Briefmarken-Zeitung (April, i900), "Die typen der Marken von Portugal zu 25 Reis Emission r856 und 1857 ," in which he distinguished and illustrated six types of the 25 reis (blue and rose) of Dom Pedro, curly hair, for each of which a distinct die must have been used.

In the following month, Mr. M. P. Castle read before the Philatelic Society of London a most important paper entitied "Notes on the Stamps of Portugal." This paper, which is published in the tenth volume of the London Philatelist (see pages 173 and 199), marks a great advance in the study of the various types of the early stamps of this country and, further, contains a useful summary of Dr. Anachoreta's paper above referred to. Among other things, it cleared up several points relating to the dies used for the 5 reis of Dona Maria, as to which great confusion formerly existed, and proves beyond all question that two distinct dies were used for the issued stamps of this denomination, one of which was subsequently employed for the Reprints of 1864 . It further describes very clearly the differences in the several dies of the 25 reis of Dom Pedro, curly hair, as of Dom Luiz; and as Mr. Castle had been in correspondence with Herr O. Wassermann on the subject of the former, his explanations of these minatix and of the results of his examination, eye-aching as he truly terms it, are most material.

Mr . Castle's paper, which related only to the issues of 1853 to 1873, was followed by an exhaustive work by Mr. J. N. Marsden"The Adhesive Stamps of Portugal"-which runs through many numbers of the twelfth, thirteenth, and fourteenth volumes of the London Philatelist. M:. Marsden is justly recognised as the authority par
excellence on the stamps of Portugal and its Colonies, and this treatise of his must ever remain a leading work on the issues of Portugal from I853 down to 1903. It comprises the history of the postage stamps from their inception and incorporates all the earlier materials and information to which I have referred and also the results of Mr. Marsden's own researches.

It is unfortunate, however, that Mr. Marsden's paper is not illustrated, and although Mr. Castle's notes are accompanied by a page of illustrations of some of the early stamps of the country, they are only of the sizes of the oricinal stamps and therefore are not of much assistance. Moreover, so far as I am aware, no useful illustrations of the several types of the 5 reis of Dom Pedro, straight hair, have ever been published in any work or journal, and it is difficult for collectors to follow the verbal descriptions of the small differences which distinguish the several types of the early stamps without clear and enlarged illustrations. These have been provided in the case of the embossed stamps of Dom Luiz I. of 1870 and the following years, printed from the dies of Senhor Campos as an accompaniment to a paper by Mr. Robert Ehrenbach-"Notes on the Straight-Label Issues and of Portugal $(1870)$ "-which was read by him before the Philatelic Society on the inth April, igo2, and published in the London Philatelist of August, 1902 (Vol. XI., page 182). It is an interesting piece of original work, involving close examination and accurate measurement of numerous specimens. The object of this present paper is to provide collectors with clear and enlarged illustrations of the types of the earlier issues with a few explanatory notes. No claim is made for any originality in the following notes, which, except as to a few trifling remarks, are a restmé of the articles and papers to which I have already referred.

For a full appreciation of the nature of the several types of the various stamps of the group comprised in this paper, it is important to have a clear idea of the process by which they were produced, and I cannot do better than give the following quotation from Mr. Marsden's paper above referred to (vide London Philatelist, Vol. XII., page ior):-
"As stated by Dr. Anachoreta, the first engraver to the Mint, Senhor Francisco Borja Freire, was entrusted with the arrangements for the first issue, after the use of stamps for prepaying correspondence had been officially decided upon, and was sent on a special mission to England to study the question. The result was that two machines for printing and embossing stamps at the same time were ordered from Messrs. Dryden Brothers, Lambeth, the same firm that supplied the English Government with machines for producing the early English embossed postage stamps. These machines are still to be seen in the Lisbon Mint, and were used for printing all the relief issues of Portugal and the Colonies up to a comparatively recent period. Dr. Anachoreta states that the machine was worked by manual labour, which at so early a period was probable; I myself saw it in work in the year 1886 , and it was then being worked by steam power.
"At first the machines could only produce twenty-four stamps to the sheet, but subsequently-at what period is uncertain, but most probably for the I866 issue-they were altered so as to produce twentyeight stamps to the sheet, and the marks of the alteration are still to
be scen in the machines. When I saw the machines at work, the die, a movable one, descended and printed and embossed only one stamp at a time, the paper underneath having its position altered by a man who worked with a couple of small hand-levers, one for the vertical and the other for the horizontal movement. The sheet was thus moved to receive the impressions until complete-six horizontal rows of four stamps-when it was withdrawn and another blank sheet substituted. If the workman delayed to move the sheet between two descents of the die, the result was a double impression. This delay frequently occurred in the last stamp of the sheet, when a fresh sheet was being got ready to place in the machine. Double relief impressions, as Mr. Castle explains, occurred when two sheets were inadvertently placed in the machine at the same time, the lower one receiving the embossing only. This sheet put into the machine a second time would thus appear with two embossings.
"It is interesting to note that the colours employed for the first issue were the same as those in vogue in England at the time, but allotted to different values. A red stamp for official use was authorised, Senhor Freire probably hearing of the existence of the Id. V.R. in England, but the die was never prepared, and consequently no stamps were ever printed for this purpose."

During the last Christmas vacation I spent a few days at Lisbon, and thanks to Mr. Marsden's influence, I was permitted to visit the Mint in his company. This has enabled me to understand many things in connection with the later as well as the early issues of Portugal and its Colonies, but in these notes I will confine my remarks to the machines employed for the production of the embossed stamps. The attendant who conducted us over the various departments informed us that the Government acquired three of Messrs. Dryden's presses, and that from one or other of them, the whole of the embossed stamps, including even those of the Colonies, of the type of 1886 were printed. There is no question of plates or separate cliches for the cmbossed stamps; each stamp was printed one at a time from a single die, which descended vertically on the sheet. The sheets were placed in a tray, in the bottom of which was laid some strong cardboard, and the tray was worked into its successive positions under the die by two hand-levers, each advance being controlled by a pin which worked along a zigzalg slot in a brass plate attached to the press. The tray, when I saw it, contained a piece of cardboard on which were clearly visible, blind impressions corresponding to a sheet (or, if my recollection is correct, two sheets, i.e., four vertical columns, each of fourteen* stamps) of one

[^0]of the straight-label stamps of Dom Luiz. The attendant informed us that these blind impressions were made on the occasion of striking off some reprints. No such controlling apparatus could have been used in printing the Six Pence, Ten Pence, and One Shilling embossed stamps of the United Kingdom;* it is well known that the latter stamps are impressed very irregularly on the sheets-frequently overlapping one another, a condition which is hardly ever found in the embossed stamps of Portugal. I say "hardly ever," because I possess a vertical pair of the 25 reis of Dom Luiz of $1862-186_{4}$, in which the two stamps just touch one another. Further, doubly-printed impressions of some of the straight-label stamps of Dom Luiz and of the Colonial issues of 1886 are also known; but in the last-mentioned cases it is generally accepted that they were caused by the passing of the sheet, or a portion of it, twice under the die. Possibly this may be the explanation of my specimens of the 25 reis of Dom Luiz of 1862-186+; on the other hand, it may be that the controlling plate was temporarily removed from the press and the sheets moved by hand, as in the case of the embossed stamps of Great Britain.

The controlling apparatus attached to the Lisbon presses were originally constructed to produce sheets of twenty-four stamps in six horizontal rows of four, and subsequently the apparatus was altered so as to produce an additional row of four stamps on each pane. Complete panes of the original stamps of certain values of the period 1853-1866 are still in existence, $e$.g., the 5 reis of Dom Pedro, curly hair, and the 25 reis of Dom Luiz of $1862-186_{4}$, and in all of these there are only twenty-four stamps; but the reprints of $188 \mathbf{j}^{\mathbf{- 1}} 886$ of the same stamps, as well as of the other early embossed stamps, are always found in sheets of twenty-eight. There is another point in relation to the sheets of the early stamps to which I will refer. In examining blocks and strips of the stamps of the first two reigns and of Dom Luis prior to I866, one cannot fail to observe differences in the alignment and spacing of the stamps: in some cases it will be seen that all the stamps of each row are in practically one horizontal level, while in others the first and third stamps of the horizontal rows are raised about 2 mm . above the level of the second and fourth stamps. In some of the complete sheets which I have seen, the stamps in the several rows were all level, while in other sheets the first and third stamps in every row were raised above the second and fourth. These peculiarities point to the work of the respective controlling apparatus of the several printing presses. I may further mention that when the controlling apparatus was altered (in 1866 ?) $\dagger$ so as to allow the printing of twenty-eight stamps on the sheets, the alignment and also the horizontal spacing of the stamps were varied: it will be found that the stamps on the sheets of 1866 and subsequent years are in practically horizontal rows and at nearly equal distances from one another. More-

[^1]be seen in the machines. When I saw the machines at work, the die, a movable one, descended and printed and embossed only one stamp at a time, the paper underneath having its position altered by a man who worked with a couple of small hand-levers, one for the vertical and the other for the horizontal movement. The sheet was thus moved to receive the impressions until complete-six horizontal rows of four stamps-when it was withdrawn and another blank sheet substituted. If the workman delayed to move the sheet between two descents of the die, the result was a double impression. This delay frequently occurred in the last stamp of the sheet, when a fresh sheet was being got ready to place in the machine. Double relief impressions, as Mr. Castle explains, occurred when two sheets were inadvertently placed in the machine at the same time, the lower one receiving the embossing only. This sheet put into the machine a second time would thus appear with two embossings.
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[^3]over, the extreme width measured horizontally across the sheets between the external margin of the first and fourth stamps of each row was some seven or eight millimetres less in the sheets of 1866 and following years than in the sheets of the earlier years. This is apparent on comparing the original sheet of any of the early stamps with a sheet of the corresponding reprint of 1886 .

The first issue to the public took place on the rst July, I853, when stamps of the values of 5 reis and 25 reis were on sale at the principal post offices. The 100 reis ( 49,200 in number) was the next to appear, but the 50 reis was not issued until after the zoth July, 1853. Although the Queen died on the 15th November, 1853, no change was made in the postage stamps until early in 1855 . It would appear from the articles of Mr. Castle and Mr. Marsden that the issue of the stamps of Dom Pedro commenced with the 5 reis in January, 1855, but the stamps of Dona Maria remained current until May of that year.

Dr. Anachoreta, in an Appendix to his paper, gives the following table of the total numbers of the stamps of Dona Maria put in circulation. The dates refer to the deliveries of the stamps to the several post offices.

| Date. |  |  |  | 5 Reis. | ${ }^{25}$ Reis. | So Reis. | 100 Reis |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1853. | June ... |  |  | 128,400 | 243,600 | - | - |
| - | July ... | ... | $\ldots$ | 183,600 | 394,800 | 26.400 | 49.200 |
| $\because$ | August ... | ... |  |  | 204,000 | 150,000 |  |
| .. | October... | $\ldots$ | $\ldots$ | ${ }^{122,400}$ | 459,600 540,000 |  |  |
| .. | November | ... | ... | 144.000 | 228,000 | - |  |
|  | December | ... | ... | 143.495 | 311,736 | 341 | 125 |
| 1854. | January | ... |  |  |  |  |  |
| , | February | $\ldots$ | ... | 182,400 | 309.793 | 2,657 | 1,675 |
|  | Mapril ... | $\ldots$ | $\cdots$ | 118,800 165.600 | +18.000 |  | 20,370 |
| ", | Apriy $\ldots$ | $\ldots$ | $\ldots$ | 165.600 212.400 | 158,400 271.200 |  |  |
| - | June ... | ... | $\ldots$ | - | 438,000 | - | - |
| " | July ... | ... | ... | 192.000 | 210,000 |  |  |
|  | August ... | ... | ... | 108,000 | 348,000 | - | 16,783 |
|  | September | ... | $\ldots$ | 192,000 | 72,000 |  |  |
| " | October... | $\ldots$ | $\ldots$ | 72,000 | 576.000 | - |  |
|  | December | $\ldots$ | $\ldots$ | 277,200 309.000 |  |  |  |
| 1855 | January... | ... | ... | 246.000 | 388,800 |  |  |
|  | February | ... | ... | 216,000 | 192,000 | - | - |
|  | March ${ }_{\text {April }}$... | ... | $\ldots$ | 216,000 120.000 | 360,000 |  |  |
|  | April May |  |  | 120,000 168,000 | 240,000 552,000 | - | ${ }_{26,636}$ |
| Total <br> Less burnt in December, 1853 |  |  |  |  |  | 179.398 | 104,789 |
|  |  |  |  | 1,895 | 8,136 | 341 | 125 |
| Actually issued |  | ... | ... | 3,515,400 | 7,317,193 | 179,057 | 104,664 |

Dr. Anachoreta's paper does not contain full particulars of the numbers and dates of the printings. He mentions that the first printings began at the end of May, 1853, with the 25 reis, and that ${ }^{24}, 000$ of them were sent to the store-room on the rst June, 1853 ; further, that the printing was continued (daily ?) till the inth June,
when 15,600 of the 5 reis were printed off, and that 48,000 of the ${ }_{25}$ reis were printed on the 6th June, when it was decided that, instead of four men, eight men should for the future be employed at the press continuously (including Saints' Days). Dt. Anachoreta further states that the 5 reis and the 25 reis were printed on alternate days down to the 29th June, when some of the roo reis were struck off, and as already mentioned 49,200 of that value were distributed on the 2nd July. We also learn from Dr. Anachoreta that the die of the 50 reis was not ready until the I6th July, 185.3 , and that the printing of this value did not commence until the I8th July, and, further, that the first distribution of this value consisted of 26,400 stamps.

Dr. Anachoreta does not tell us how many separate printings there were of the 50 reis, but he says that none were printed after the 23 rd August, 1853 , the date on which the third delivery of paper was received. According to Dr. Anachoreta, there were three deliveries of paper, which were as follows:-

| 17th May, 1853 | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 20 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| July, | $\ldots$ | $\ldots$ |  |  |  |
| 23rd Aug., ", | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 26 |
| ... |  |  |  |  |  |

According to Dr. Anachoreta, each ream of paper would suffice for $\dagger^{8, g 60}$ stamps at ninety-six per sheet, so that the first consignment would correspond to 979,200 stamps, and he states that it was originally intended to employ fourteen reams for the 25 reis and the remaining six reams for the 5 reis. Subsequently it was decided to print off 290,000 of the 5 reis, 580,000 of the 25 reis, and 19,200 of the official stamp of 20 reis, but as the latter was never in fact printed, the appropriation of the sheets to the several values was evidently altered. Mr. Castle thought that the stamps were probably printed in sheets of ninetysix, i.c., in four panes of twenty-four; but from my inspection of one of the presses, I think that this was impossible, and that probably the sheets were cut up into four equal parts, on eacil of which twenty-four stamps were impressed. Dr. Anachoreta, in referring to the second delivery, says, "I believe that it was of the same quality as that used at the commencement of the printing. That paper was thick." He then goes on to say, " that which was received on the 23rd August (thirty reams of eighty quires of six leaves) was of another quality, finer than the former fifty-six* reams. Thus the stamps of 5 reis, 25 reis, and too reis were issued on two qualities of paper, the first thick and the second fine transparent, similar to that employed for the 5 reis of Dom Pedro with smooth hair. The 50 reis exists only on the first paper, not having been printed after the receipt of the secondt paper." I am not sure whether Dr. Anachoreta based his opinion as to the nature of the paper of the three deliveries on any official documents-it is rather unlikely that any official document would describe the nature of the paper minutely: he gives a reference (Correspondence reçu, Juillet, No. 9), to which I have not had access. It may be that his views as to the nature of the papers were founded on an examination of the stamps. It will be observed that he only states his belicf and does not make a

[^4]positive assertion that the second delivery was of the same quality as the first. Whatever may be the case, I possess a specimen of the 50 reis on paper which, in my opinion, is as thin as that of any stamps of the reign of Dona Maria which have come under my notice. I have shown the specimen to Mr. Castle and he agreed that it was of the same description as the thin papers of the other values. Possibly it may be only an accidental variety of one of the two first deliveries of paper.

There is one point which I think calls for some explanation, at least it has puzzled me; it is this, that while apparently one die of the 25 reis was able to print no less than $7,325,329$ stamps, there were certainly two distinct dies used for the production of the $3,517,295$ of the 5 reis of Dona Maria, and in the case of the 5 reis of Dom Pedro, "straight hair," no less than six, and possibly seven, distinct dies were used. It is true that we have no figures of the printings of the Dom Pedro 5 reis with the "straight hair," but it is stated to have been in use for little over fourteen months. At least, May, 1856 , is taken by Mr. Castle as approximately the date of the first issue of the 5 reis with "curly hair," and it is improbable that the "straight hair" type was used subsequently. At any rate, the 5 reis "straight hair," printed from any die, is scarce even in the used condition, and in the unused condition specimens printed from any of the dies, except one, are extremely rare; yet for the much more common "curly hair" type of the 5 reis, so far we know of only one variety, i.e., apparently only one die was used, although, in its numerous shades, it was current until September, 1862-a life of over six years. It should be borne in mind that there were two, or at most, three presses, so that it cannot have been that additional dies of the 5 reis of Dom Pedro, "straight hair," were required to keep different presses at work simultaneously. Similar remarks apply to the numerous dies of the 25 reis value of Dom Pedro and Dom Luiz. Dr. Anachoreta gives us no information as to the re-duplication of the die of the 5 reis of Dona Maria; in fact, he altogether disbelieved in the existence of a second die, and attributed the well-known peculiarities of the Reprint of 1864 to certain retouches to the original die of that value; but, as I think will be apparent from an inspection of the accompanying illustrations, none of the various dies, whether of Dona Maria or of Dom Pedro, can be due merely to retouches of the respective original dies, though possibly some of them may have been reproductions of the original dies. I imagine that in order to make a reproduction of these early dies of Portugal, all that was necessary was first to impress the original on softened steel : at this stage any of the raised parts of the design which were defective would be removed, and then the impression would be hardened and from it a new impression would be made on a suitable piece of softened steel. This would be similar to the original die, excepting that the surface of the steel would be plain and level at the places where the defective raised parts of the first impression had been removed. New lines would then be cut at these places so as to imitate or replace the lines on the original die, and subsequently the new die would be hardened and ready for the printing press. The printing process employed for this series of stamps was really an exaggerated surface printing. Intentionally I avoid the technical terms cameo and intaglio, as I have no information
as to whether the working dies were engraved directly or produced by pressure from a matrix, though I imagine that the former was the case. Naturally, the dies would have to be very hard to stand the great pressure required to produce the embossing. What calls for remark is not so much that one die (if there were only onet of the 25 reis of Dona Maria should be able to produce $7,325,329$ stamps, bunt that such a number of dies should be required for the 5 reis of Dom Pedro, "straight hair," because I gather that from one die "No. I) wo less than $6,659,920$ of the embossed 6 d . of Great Britain were struck off ("The Adhesive Stamps of the British Isles," Wright \& Creeke. p. 6r). It is true that six working dies were made for the rod., although the pintings of that value were much smaller than in the case of the 6d., but they extended over five years, and only four of the dies appear to have been used for the adhesive stamps (vide Wright \& Creekerpp. 62,63).

Unfortunately no one has published the official correspomdence and records of the reign of Dom Pedro, or, for that matter, of Dom Luiz, and therefore we can only rely on the evidence of the actual stamps and obliterations. It may be that while the dies of the 25 reis of Dona Maria and of the 5 reis of Dom Pedro, "curly hair," were made of hard steel or properly tempered steel, the other dies were of softer metal and consequently wore out more quickly. There certaimly are specimens of the 5 reis of Dom Pedro, "straight haja," which appear to have been printed from a much-worn die. Further, it is possible that duplicates of the two first mentioned dies were actually made (in the manner which I have already suggested) and subsequently used in the presses. As the original dies remained in good condition, there would be no necessity for retouching the re-duplicated dies (if any), and therefore it would be very difficult to distinguish stamps printed from the original dies from those printed from the duplicates. However, Dr. Anachoreta gives no indication of such duplication having ever been effected Mr. Marsden, in the London Philatcist, Vol. XII., at p. r37, after describing the 25 reis of Dom Pedro, "curly hair," with "coarse network," in blue or rose, which constitutes his issues IV. and V., writes as follows:-"I believe that of the issue under consideration and the previous one" only one die was engraved irs "carmeo," and that, as it met with some damage, every reproduction would show the damage, which was remedied by hand. This would explain the new variety whenever a new re-duplication was necessary. I do not consider this to have been the case with the 5 reis of Dona Maria and the 5 reis of Dom Pedro V., with straight hair, the types of which were all due to freshly made dies."

I feel bound to say that I cannot understand how the several dies of the 25 reis of Dom Pedro, "curly hair" and "coarse networts." were produced by a mere re-duplication of an original die or matrix. Later on, I shall describe these several dies and their respective pecultarities, and I may mention that in some cases the letters of the words "CORREIO" and "REIS" differ not only in size and shape, but in their relative distance from one another; further, the "coarse network" seems to me to be taken in each case from one original pattern, but different portions seem to have been cut off that pattern by the frames of the several dies. Personally, I am inclined to the view that the

[^5]engraver maif movids of the frames and medallion and that he transferred these to the softened steel from which the new dies were made, and thededpplined the network, either by engine turning or by transfer of portiom offay pen and ink stock drawing of that network, which he subsenqumt cut ont-the numerals and letters being either added by panches or separately engraved. On the other hand, for reasons mentioned lbeilowr, I am disposed to regard the j reis, Die II., of Dona Maria ais a retouched reproduction of Die I.

Dr. Amarimeta tells us that the gum of the first printings of the 5 reis. 25 reis. and roo reis of Dona Maria was weak, and that subsequentur stronger gum was used. So far as I am aware, the gum emplored durime the reign of the Queen was alwavs brown or vellow; but dandime the reign of Dom Pedro an almost white gum was usually emplosed.

As remande reprints, we know that the four values of Dona Maria were reprimted in 1863 or $186+$ in order to supply certain stamp dealers who wisterd to have unused specimens of the stamps of the Queen. Mr. Maridem saws that they were printed and (at face value) sold at the Lisbrom Mint. to anyone who asked for them, and that the authorities did mat object to their being used for franking correspondence. These first reprimis were produced from the original dies; but for the 5 reis, Die II. only was emploved. Subject to a question as to certain reprints of the 5 rebs and 25 reis on stout paper, to which I refer below, all the reproutts of this first series were printed on thin white paper, and the gum wass strong and quite white-the paper and gum being, in fact, the sambe as wrere used for the contemporar: stamps of Dom Luiz.

The second set of reprints was made in I 8 Sjor i 886 , and a third set was struck offin ingo. These two later sets comprised practically the whole of the officially recognized stamps of Portugal and the Colonies which had then beem issued. They were struck on stout, intensely white paper which. in the ease of the stamps of Dona Maria and Dom Pedro, easily dietimgminhes them from the originals. Mr. Marsden says that probably none of the secoud or third reprints were gummed by the authorities, thousth specimens are frequently found with gum of private origin. I may say that II have seen specimens of which the gum so exactly resembled that of the contemporary stamps that I should not be surprisend iff a few sheets were actually gummed in the Mint. The perforatioms of the reprints of the later stamps of Portugal do not come within the scope of these notes.

Dr. Anachoreta states in his paper that he had not been able to fimd any official documents relating to the reprints. For some of the valures of the second and third reprints, entirely new dies were emplored; presumbly the originals had been lost or were worn out, or seriomsly damaged by rust. The impressions struck from these mew dies are, therefore, not reprints at all, but only official imitations- For the reigns of Dona Maria and Dom Pedro the followinsty are the mew dies:-Dona Maria, 5 reis and 25 reis; Dom Pedro, 5 reis, ${ }^{4 x}$ straight hair." There is some doubt whether certain impressions of Dona Maria oustont paper, printed from the original dies, are original Stamps or are reprints of the 1863-1864 series or of the 1885 -1886 series. Mr. Marsdem now inclines to the view that those of the 5 reis and 25 reis belong to the second set, but most writers consider that the new dies were
 Stamps，＂by Mr．E．D．Bacom，and an article，＂Réimpressions des timbres du Portugal et de ses colouies，＂published in Le Timbre Poste， of November， 1899 ，Vol．XINVII, p． 172 ）．I refer more particularly to a variety of the 100 reis umder the heading of that value．Besides the above－mentioned reprints，Mr．Marsden makes a very strong case for his opinion that the 25 reis of Dom Pedro，＂curly hair＂and＂coarse network，＂printed from Die III．，are reprints；at any rate，I have never seen or heard of ann obliterated specimen．I gather from Mr． Marsden＇s article in the tmelftho volume of the London Philatelist， p．136，that he thinks the were made in 1859 ，as inquiries had been made often in Lisbon in what wear forstamps of Dona Maria；but I see no reason why some of them shomld not also have been printed in 1863 or 1864，when the first set of reprints of Dona Maria were made．I may say that for some time I have suspected that the 5 reis of Dom Pedro，＂curly 拘解＂＂im the bistre－brown，which is so com－ mon in the mint condidiom，but is，I believe，unknown obliterated， belonged to the same cattegory：It is well known that M．Moens had a large stock of this variety in entire sheets，and the shade closely resembles that of the reprints of 1864 of the 5 reis of Dona Maria，and I have recemtly found that in some of his early catalogues，M．Moens lists reprimts not only of the stamps of Dona Maria，lunt also of the 5 reins of Don Pedro，＂curly hair．＂Thus，in his price list of February， $186 \bar{y}$ ，anmexed to Le Timbre Poste of that month after the headings＂E侀mie 亩 gawche de Don Pedro，cheveux lisses＂ ＂même types，chewemx bouclés＂occurs item＂1212．Ré－ impression， 5 reis bram moir．＂No date is given for the issue of this reprint，but of necessity it was prior to February，1867．Again，in M．Moens＇catalogue of $187=-1873$（ 4 th edition），I find at the end of the list of Portuguese stampes，umder the heading＂Timbres reimprimes，＂ ＂ 1869. Type 1856. C surr $\mathrm{B}^{\text {．}}$ ． $304 ; 5$ reis，brun jaune．＂

The date， 1869 ，is somewhat remarkable；it will be observed that the shade mentioned in the latter edition is brun jaune（yellow－brown）， while in the earlier price liist it is brtan noir（black－brown）．It is quite possible that M．Moens obtained two sets of the reprints of the 5 reis， curly hair，but I must point ont that all the blocks and sheets of the bistre－brown which have come under my notice，were printed with the stamps widely spaced，iser．．before the controlling apparatus was altered as I have above described，so that they were presumably printed before I866．So far as my experience goes，the same remark applies to the sheets and blocks of the 25 reis blae of Dom Pedro，＂curly hair，＂Die III．There is，of course，the poesibility that the date 1869 given in the $f^{\text {th }}$ edition of M．Moens $5^{\circ}$ catallogue was a clerical error．I shall return to the subject of the shardes of the $\bar{j}$ reis curly hair under that heading infra．

Further，it would mot surprise me if some of the sheets of the 25 reis rose of Dom Pedro stocked by M．Moens，were realiy reprints of 1864 ．At any ratte，we know that the 5 reis and 25 reis of Dom Luiz appeared in $1 \mathbb{8} 62$ ，and it is likely enough that M．Moens in subsequent years required unused stamps of those values of

Dom Pedro. It is possible, too, that some of M. Moens' sheets of the 50 reis and 100 reis of Dom Pedro were likewise reprints; but I will point out that those two values remained current until the Ifth April, 186 ${ }_{4}$, when the same values of Dom Luiz were first issued. This fact seems to have been overlooked by Mr. Castle and Mr. Marsden, as they both list all the values of the first serics of Dom Luiz under the year 1862; but in proof of my assertion, I need only refer to the contemporary records in the Stamp Collector's Magaziue and Le Timbre Poste of the years 1863 and 1864-as to the former, see Vol. I., p. 107, and Vol. II., p. 88; as to the latter, Vol. II., pp. 36 and $90-$ see also the Catalogues of Bellars \& Davie, Berger Levrault ( $186_{4}$ ), Moens ( $886 \not)^{4}$ ). So that in the case of the two higher values of Dom Pedro, M. Moens could have obtained supplies of the original stamps before they became obsolete. Unfortunately, as Dr. Anachoreta pointed out, the official records contain no reference to any of the early reprints.

In examining minor details of embossed stamps, such as the early issues of Portuguese, for indications of distinct dies, considerable allowance must be made for the extraordinary pressure applied to the paper and the great tension to which the embossed portions are subjected in the press; therefore slight variations in the thickness or length of any particular portions of the design are not alone sufficient evidence of the existence of different dies because they may be due to the stretching of the paper, delective printing, an overcharge of ink encroaching on the embossed part of the design, and in some cases filling up the hollowed-out portions of the die, which unless the die were carefully cleaned, would tend to harden and cake. On the other hand, differences in the number of the pearls or in the distances between or the alignment of corresponding letters or other parts of the design, and variations in the angles at which corresponding portions cross one another, are of a different class and should be regarded as crucial tests of the existence of different dies. Allowance also has to be made for the nature of the papers employed. I shall not refer particularly to the dies of the 50 reis and 100 reis of either reign. In the first place, I believe that all the authorities are agreed that only one die of each of those values was used for each sovereign, and that the same dies were used for the reprints. Having regard to the comparatively small printings of those values of Dona Maria, it is very unlikely that more than one die would be required, unless indeed an accident happened to one of them. At the same time, I guard myself from expressing any opinion on that question, as I have not yet examined the specimens of these values at all closely. There is one point which possibly may be of some use in our enquiries as to the mode of preparation of the several dies, namely, that on certain stamps the initials "F. B. Fi." of the engraver. Senhor Francisco Borja Freire on the base of the bust are raised, while in others they are sunk. Thie raised initials occur on all the stamps of Dona Maria, and also on the "straight hair" stamps of Dom Pedro and the to reis orange and 50 reis green first types of Dom Luiz, while the sunk initials are found on all the "curly hair" stamps of Dom Pedro and also on the dies of Dom Luiz, prior to 1866 , other than that of the 10 reis and 50 reis. As regalds the new dies specially created for the reprints of 1885 , $\mathbf{x 8 8 6}$, I have some
observations to make when I describe them in detail. It is obvious that the raised initials of the stamps of Dona Maria and of the "straight hair" of Dom Pedro can easily be accounted for by the engravers having punched the initials into the several working dies, but the explanation of the sunken initials on the "curly hair" stamps of Dom Pedro, etc., is not so obvious. Necessarily the initials must have been raised on the surface of the corresponding working dies, and there is nothing (on the stamps) to suggest that they were so raised on the dies by pressure of a punch in which the letters were excised. I have no technical knowledge of the processes of die-sinking, but the explanation which occurs to me of these sunken letters is that a matrix of the bust was first engraved (possibly from one of the dies used at the Mint for striking the coins in which the initials were sunk) and from this common matrix the several dies were prepared by adding the frames, arabesque or network ornamentation, and the inscriptions. It is an interesting fact that the busts on some of the coins of Dom Pedro bear a striking resemblance to those of the stamps, and in fact the bust on the early silver coin of roo reis of the King is identical in size as well as design, with that of the postage stamps. Further, Senhor Freire's coins of Dom Pedro, "straight hair," and of Dona Maria have his initials raised on the bust, while those of Dom Pedro with "curly hair" have the initials sunk.

For convenience, I will shortly state the facts relating to the official reprints and imitations of the stamps of Portugal so far as they are material to the issues of the first two reigns. They may be divided into two classes: (I) Those made by the Postal Authorities to meet the requirements of stamp dealers; the well-known reprints of Dona Maria on thin paper are examples. These are popularly ascribed to the years 1863 or 1864 , and Mi. B. T. K. Smith, in a letter to the Philatelic Record (Vol. XXVIII., pare 162), tells us that they were advertised for sale by English dealers as early as January ist, $186_{+}$; at any rate, the greater number of these creations were made before the alteration to the controllingapparatus connected to the presses, and in these notes I refer to them as the reprints of 1864 . To the same class would belong the blue 25 reis of Dom Pedro, "curly hair," Die III., and those shades of the 5 reis of the same sovereign, "curly hair," if as I have already suggested they are reprints. (2) The two sets of reprints and imitations of the stamps of Portugal and the Colonies printed on stout hard intensely white paper in the years 1885 -1886 and 1890 respectively. Mr. Marsden says that the first set was made to commemorate the meeting of the Postal Congress in Lisbon (London Philatelist, Vol. XII., p. 103). He further refers to the common impression that these two sets of reprints were made upon "challiy paper," which is not correct ; the paper used for all the values of each set, with the possible exception of certain stamps which were then actually current, was a stout hard intensely white paper, but it had not the mineral coating on one side characteristic of the true chalky paper which shows a dark mark if it be rubbed with a silver coin. These reprints in their primitive condition are distinguished by the intense whiteness as well as the thickness of the paper, and in many cases by their shades; but specimens which have been stained and otherwise tampered with are common, and are not so easily recognizable. However, they generally betray themselves by the presence of bogus gum.

With these prefatory remarks, I proceed to describe the several dies of the values of 5 reis and 25 reis of Dona Maria.

## Dona Maria.

## The 5 Reis.

To Mr. Castle is due the credit of having first established beyond all doubt the existence of two distinct dies of this value, or at least, two distinct states of the die. Although the existence of two dies had been mooted for several years, many authorities, including, as we have seen, Dr. Anachoreta, firmly refused to admit the existence of a second die, their contention being that the alleged specimens of Die II. were due to the worn state of Die I., or defective printing. I imagine that considerable difficulty in dealing with this question arose through confusing defective impressions of Die I. with the impressions of Die II.

Mr. Castle, in his papers in the London Philatelist of 1901 (Vol. X., pp. 178-180) states that he himself had long had doubts as to the real existence of two dies, and had had some difficulty in ascertaining the differences between the two varieties. Formerly this dispute ranged round the following points, tabulated in Mr. Castle's paper:-(a) the points or dots of colour in the ear (referred to by Dr. Anachoreta as above quoted), and the coil of hair at the back of the head; $(b)$ the apparent formation of an "Adam's apple" in the throat, especially noticeable in the reprints of 1864 ; (c) the apparent difference in the shape of the back of the neck, especially between the pendent curl and the nape; (d) the distance between the outer circle of pearls and the top of the head; (e) the generally blurred woolly or indistinct appearance of the impression. What brought the controversy to a close was the discovery in Lisbon of a number of old documents to which stamps of this reign (including a considerable number of the 5 reis) had been affixed, and escaped obliteration. These found their way to Messrs. Stanley Gibbons, and were by them placed at Mr. Castle's disposal. Among these stamps were a number of specimens of both dies on thin paper. Mr. Castle at once saw the importance of being able to compare the impressions on similar paper, thus disposing of the objection that the two different varieties were due to the difference of the paper. I have several specimens of both varieties, which doubtless came from the same source, and though there are some specimens of Die I. on thin paper, which are quite as clearly printed as the bost impressions of that die on the commoner thick paper, a considerable number of the impressions of that die on the thin paper are blurred, and at first sight appear to be indistinguishable from the impressions of Die II.

With the aid of enlarged photographs of some of the specimens to which I have just alluded, and of the reprints of $186_{4}$, it is now easy to detect and describe the essential differences of the two dies. These photographs are respectively reproduced in Illustrations I. (early impression of Die I.), IA. (late defective impression of Die I.), II. (normal impression of Die II.), and III. (the reprint of I864), which accompany these notes. The differences as they appear to me are as follows:-

## DIE I.

## (Illustrations I. and Ia.)

r. The four short isolated lines of the arabesque, on the left and right of the medallion and respectively pointing towards the "C" and final " O " of " CORREEIO," and to the numeral " 5 " and the "S " of "REIS" are broken and bent in the middie, the arms being inclined to one another at angles of about 135 degrees.

Vide the little directing arrows of the illustrations.
2. The pendent curl closely follows the line of the head, then curves downward, then horizontally outwards towards the right, and finally bends downwards. In late impressions, only the upper part of this curl shows distinctly, but even in the most defective specimens, traces of the lower portions can be detected under the printing ink.
3. In most specimens, ten pearls of the diadem show below the top of the head.
4. In the small chaplet of pearls to the left of the plaited coils of hair at the back of the head, six pearls are distinctly visible.
5. The outer line of the frame on the right is of normal thickness.

## Die II.

(Original, Illustration II.)

## Reprint of 1864, Illustration III.

I. These corresponding lines are much longer than in Die I., and appear as curved unbroken lines.
2. The curl, although commencing in the same direction as Die I., stands out from the back of the head and ends abruptly without altering its course.
3. There are only nine pearls below the top of the head.
4. In the corresponding chaplet only five pearls are visible.
5. The outer line of the frame on the right heavy and thicker than in Die I.

Generally, but this depends to some extent on the printing and the nature of the ink, it may be said that in Die II. the bust is smaller, the neck somewhat narrower, and the profile less rounded than in early impressions of Die I. The "Adam's apple" is very pronounced in the reprints of 1864 , and less so, or scarcely perceptible, in the original stamps of Die II. The speck of colour in the ear is by no means constant and may be found in late specimens of Die I. On the whole, the state of Die II. was apparently always defective, the complexion of the Queen appearing very rough, and the coiled plaits of hair being defective. I certainly agree with Mr. Marsden that for practical purposes, No. I is the most reliable of all the above tests; in badly printed or heavily post-marked specimens, No. 3 may be found serviceable, but it requires the use of a good magnifying glass.

So far, I have dealt only with the differences in the two varieties, but one cannot help being struck with the many points which they have in common, e.g., the number of the pearls round the medallion, the dimensions, spacing, alignments and general shape of the letters and numeral, and (with the exception of the four small lines mentioned in test No. I) the general form of the arabesque ornaments and their relation to the letters and numeral of the inscription. These points of resemblance seem to me very striking. I am aware that Mr. Marsden thinks that the two dies were "freshly made" (London Philatelist, Vol. XII., page 137), and I feel some diffidence in expressing a different opinion; however, I will state, for what they are worth, the reasons why I am disposed to regard Die II. as a retouched reproduction or duplication of Die I. First, the general resemblance of the two types in all but one or two details, points to some common origin, or at least an indirect connection. Secondly, if Die II. had been "freshly engraved" by hand, that is without making use of Die I., it is reasonable to suppose that its earliest state would have been fine, and that impressions from it in that state would be known as clear as the best impressions of Die I. But I have never seen, or even heard of, any such impressions of Die II., and evidently Mr. Castle's experience was the same (London Philatelist, Vol. X., page 178); further, a comparison of Illustration IA., which reproduces an enlargement of a late impression of Die I., with Illustrations II. and III., reveals a remarkable fact, viz., that the defects of the inferior late impressions of Die I. are mostly reproduced in the stamps of Die II., notably in the plaited coils of the hair at the back of the head, and the breaks in the profile and the sharper curves and angles of the nose, the tendency to the formation of an "Adam's apple," and the flattening of the top of the head and the generally smaller size of the bust, all of which, so far as Die I. is concerned, can be explained by the wearing away of the level printing surface of the die, thus causing the colour to encroach on the head. If my surmise that Die II. was really a reproduction of Die I., manufactured some time after that die had been in use in the mode which I have suggested in my preliminary notes, is correct, it is obvious that all the defects of the late state of Die I. would reappear in the intermediate impression on soft steel as in the actual stamps. For the rest, the explanation requires only the following operations:-That the four small angular lines of Difference No. I, and the lower portions of the pendent curl, should be removed from the intermediate die, and that from the latter, after it had been hardened, the new working die (Die II.) should be struck. On this theory, the Differences Nos. 2, 3, and 4, would appear; the two latter, probably, in an exaggerated form, owing to the double transfer, and the new curved lines of Difference No. I would then be sunk.

There is, of course, a third possible explanation, viz., that Die II. was really the original Die I. retouched; but, if that be the case, one has to account for the complete substitution of the long thin curved lines for the small bent lines of Die I., without leaving the least trace of the latter. The latter were, of course, sunk in Die I., and we know that in the most defective impressions of that die they remain perfectly distinct (vide Illustration IA.); therefore, we infer that the incisions remained to the last and that if Die II. was only a retouch
of Die I., these incisions could have been got rid of only by cutting out the defective portions and replacing them by plugs on which the four new curved lines would have been sunk.

Again, if Die II. were merely a retouch of Die I., we should have to explain the complete disappearance of the lower turns of the pendent curl. It seems to me highly improbable that the Postal luthorities would take the trouble to fit in plugs for the purpose of removing the lower parts of the curl, and substitute the curved, comparatively umimportant, lines of Difference No. I, supra, for the corresponding original angular lines of the die, while they left untouched the more prominent defects of the profile, coil of plaited hair, etc. But even if this were the case, the die in its retouched condition would have received so much treatment as to justify our regarding it as practically a new die.

Of the issued stamps, those printed from Die I. occur on the thick paper and also on the thinner paper, always in a rich orange-brown colour: while the only specimens of Die II. which I possess or have seen are on the thinner paper, and in shades which vary from a rich orangebrown to deep yellowish-brown.

## The Reprints of the 5 Reis.

The reprints of $1864^{*}$ are well known; they were printed from Die II. in a deep bistre-brown on thin white paper, and have white shiny gum (zide Illustration III., and compare this with Illustration II.). The scarce impressions of Die II. in a somewhat similar shade, lout on stout white paper, to which I have already referred. present some difficulty. I know of one specimen which has a thick yellowish :am, apparently applied to the paper before it was severed from the sheet. As I have already said, Mr. Marsden inclines to the view that these varieties belong to the set of reprints of 1885 -1886 (vide London Philatclist, Vol. XII., pages 102 and 103). An unsevered horizontal pair of these stamps would conclusively show whether they were produced hefore or after 1866 , when the controlling apparatus attached to the printing presses were altered. The variety of the 100 reis on stout white paper referred to moder the heading of that value may have some bearing on this question.

For the reprints of I890, and possibly for those of 1885 , an entirely new die was used, an enlarged reproduction of which is shown in Illustration IV. Comparing this with Illustrations I., IA., II., and III., it will be seen that the most striking characteristics of the new dic are as follows: (1) Although the die is in perfect condition, it does not possess the sharpness or clearness of Die I., the contours of the hust are more rounded, the neck is thicker, and the features less defined. (2) The pendent curl has almost completely disappeared. In other respects the design is identical with Die II.-in particular is regatds the small curved lines of Difference No. i. Is in Dies I.

[^6]and II. there are 88 pearls, and although in most specimens the engraver's initials are missing from the bust, I possess a specimen in which traces of raised initials are distinctly visible, in the same position as the letters F. B. F. on stamps of Die I. and Die II.; and therefore I believe that this new die was a retouched reproduction of one of the earlier dies-presumably Die II., which, likely enough, the Postal Authorities considered too defective for the purpose of making reprints: in fact, I gather that Mr. Castle even thought that these reprints were clear impressions of Die II. (vidc London Philatelist, Vol. X., page I79), but the differences in the busts of the normal stamps of that die and of the reprints-as they appear in the enlarged Illustrations II., III., and IV.-are so conspicuous that I feel no doubt they are the work of distinct dies.

These reprints occur in two distinct shades, viz., a deep bistrebrown, distinctly deeper than the shade of the reprint of 1864 , and a chocolate-brown. I have found no evidence as to whether both of these shades belong to tho set of reprints of 1890 , or whether one belonged to the reprint of 1885 . They exist only on the intensely white stout paper.

## The 25 Reis.

I have examined numerous specimens of the stamps of this value, in all shades, and on thick as well as on thin paper, and so far, with the slight exception to which I afterwards refer, I have found no trace of the existence of more than one type. It may be that only one die was employed for this value; on the other hand it is possible that secondary dies were reproduced, with great care and accuracy, from the original first die while it was in good condition, so that they were exact replicas of the first. The exception to which I refer is this, that while many of the stamps, and also the reprints of 186 engraver quite distinctly on the bust, on the other hand some stamps, irrespective of shade or paper, show scarcely any or no trace of the initials, and I may say that the specimens which have the initials very clear show a tendency towards becoming defective in the coils of hair, the colour slightiy encroaching on the embossing at the back of the head. It may be said that thispoints rather to the original creation of more than one working die, each from a mother die, the initials being subsequently added to the working dies by punches, but there is nothing in Dr. Anachoreta"s paper to support this suggestion. On either hypothesis, it would be rery difficult to prove satisfactorily the existence of distinct dies merely from a study of the actual stamps. Some specimens, and particularly the reprints of 1864 , show signs of a thickening in the external lines of the frame, especially on the right; but this, I think, may be due to a slight tilting of the tray in which the paper was placed for printing, as in the case of the reprint of the roo reis of 186. But if the issued stamps lack variety of type and design, they afford a line range of shades, extending from a milky-blue to a deep, indigo. They are found on the thick as well as on the thinner paperthe pale shades apparently occur only on the thick paper, while the darker shades are found on both varieties of paper. An enlargement of a specimen of these stamps is shown in Illustration V. A brown
sum appears to have been always used for these stamps, but Dr. Anachoreta says that the gum first employed was so thin as to be useless.

## The Reprints of the 25 Reis.

The reprints of $1864^{*}$ are well known. They were printed from the original die, or one of the original dies, if there were more than one, in a deep dull blue on thin to medium paper, similar to that of the contemporaneous reprints of the 5 reis, 50 reis, and 100 reis, on all of which the gum is always white and shiny. They generally have heary lines of the frame on the right-hand side (vide Illustration VI.)

Mr. Marsden refers to a reprint of the original die on thick paper. I gather that he considers it analogous to the reprint of the 5 reis of Die II. above mentioned. I cannot be sure that I recognize the variety to which he refers, and will only say that I have seen a specimen printed from the original die, on stout paper, in a brighter b) we than the ordinary reprint of 1864 : this specimen, as it appeared to me, might well be an original, or it might equally be of a nature similar to that of the 5 reis on stout paper described on page 17 supra.

For the reprints of 1885 and 1890 , or at any rate of 1890 , an entireiy new die was employed (vide Illustration VII.), in which the bust closely resembles that of the new die used for the reprints of the 5 reis, but the most marked difference in this and the original type lies in the reticulation between the oval medallion and the outer frame. In the original (Illustration (.). the oval almost touches the outer.frame, leaving scarcely any space for the reticulation, while in the new die the distance is considerable, and much more of the reticulation appears. Further, the shapes of the "S" of"REIS" differ in the two dies. So far I have not discovered any trace of the engraver's initials on the bust of the new die. The colour of the reprints of 1890 (and ? 1885 ) is a light blue, and the papes is of the well-known intensely white stout description.

## The $5^{0}$ Reis.

Is these notes I do not propose to deal in detail with the values of $5^{0}$ reis and roo reis, and I have nothing to add as to the $5^{\circ}$ reis beyond recording the specimen, to which I have already referred, on thin paper. It is in the dark green shade and obliterated.

The foo Reis.
I have to mention a specimen of this value now in my possession which shows the thickening of the frame on the left-hand side. characteristic of the reprints of 1864 , but is printed on stout white paper somewhat similar to that of the reprints of 1885 and 1890 , perhaps, not so intensely white. It is well known that the latter were printed from the original die, and do not present the thickening of the frame on the left, thus proving that the latter feature of the reprints of

[^7]I $86+$ was due, not to any defect in the die, but to some accidental cause in the printing, such as the tilting of the tray of the press. The specimen in question may therefore have been produced along with the reprints of 1864 , or it may be that its history is analogous to the varieties on thick paper of Die II. of the 5 reis, and of the original type of the 25 reis of the Queen described by Mr. Marsden, and referred to above, supra pages $\mathrm{I}_{7}$ and 19 . It must not be overlooked that Dr. Anachoreta states that some of the issued Ioo reis stamps of Dona Maria show the thickening of the frame on the left side, as in the reprints of $\mathrm{T}^{86} 4$. I have not yet scen any such specimens.

## Dom Pedro V.

## A. Head with Straight Hair.

The 5 Reis.
Is the preliminary notes, I have referred to many early notices and articles relating to the different dies of this value, and the erroneous view that five dies side by side are repeated to make the sheet, and I will here only repeat that each sheet of this 5 reis (as of every other value of this reign and that of Dona Maria) consisted of $2+$ impressions, printed one at a time from one die, and arranged in six horizontal rows of four.

The most important question with regard to this value is how many different dies were employed; and I may say that one of the principal objects of these notes is to describe and illustrate the different dies. Strictly, I ought to say how many different types of die were employed, because, as in the case of the 25 reis of Dona Maria, it is possible that there were exact replicas of some of the dies. Five distinct types have long been recornised, viz.: one with 75 pearls (see Illustration VIII.) ; two with 76 pearls, one having the numeral " 5 " and the "RR" of "CORREIO" larger than the other (vide Illustrations IX. and X.) ; one with 8i pearls (Illustration XI. or XII.) ; and one with 89 pearls (Illustration XIlI. or XIV.) (See Dr. Legrand's article in L.c Timbre Poste of March. i870). It is obvious that these correspond to five independent dies, i.e., freshly engraved, though probably the bust in each case was a reproduction founded on one or more of the dies of the silver coins of ioo teis. Besides these five dies. some specialists have contended that there were two different dies, each having 80 pearls. M. Moens mentions five types in his catalogue of $1872-73$ (th edition), but in the last edition of his last catalogue (1892) he mentions six types. Mr. Castle says in his paper that after discussion with other collectors, he arrived at the conclusion that the alleged two varieties with 89 pearls were simply due to "yariations in the amount of ink used, or the pressure applied in the printing" (aide the London Philatclist, Vol. X., pages I80-18i). On the other hand, Mr. Marsden, in his paper in the twelfth volume of the London Philatelist, at page I33, states his positive belief that there was a sixth die, and he points out one difference between the two varieties with 89
pearis, viz.: that in one variety the axis of the small loop to the right* of the second "O" of "CORREIO" is vertical; in the other, the axis of the corresponding small loop slants outwards and downwards it an angle of 45 degrees. Mr. Marsden kindly lent me post-marked specimens of both the alleged varieties, and though I could easily distinguish the difference above mentioned, yet to the maked eye the general similarity of the two types was to me so striking that I was not altogether satisfied that the points of difference might not be due to the pressure in the printing, or other accidental cause; but having recently had the good fortune to secure unobliterated specimens of both the alleged varieties, my doubts as to their being produced from different dies vanished completely, as soon as I was able to compare the enlarged photographs of them, which revealed other points of difference. These photographs are reproduced in Illustrations XIII. and XIV. Following Mr. Marsden's notation, I call them respectively Die V. and Die VI. Unfortunately, these photographs were taken at different times, with the result that the enlargements are not to the same scale, but the points of difference are quite clear. The respective inclinations of the axis of the small loop to the right of the second "O" of "CORREIO" are obvious ; the other points are as follows:-
(a) The distances between the thin white vertical line of the frame and the curve of the arabesque in the lower portion of the stamp on the left (vide the little horizontal directing arrows of the Illustration). In Die $V$, this distance is much less than in Die VI.
(b) There is a vertical white flaw to the left of the " R " of "REIS" in Die V'. which does not occur in Die VI.
(c) The terminals of the small loops to the lcfl of the " C " of "CORREIO" are differently curved in the two dies.

I have examined several other specimens having 89 pearls, and so far as the obliterations would admit, I found that they had either all the characteristics of Illustration XIII.. or all those of Illustration XIV., so that one may say that these points are always associated luyether in the same combination, and therefore without doubt belong to two distinct dies, or at any rate, to two distinct states of we die-but, as in the case of the two dies of the Dona Maria, it seems (1) me impossible that one could have been produced from the other by simple re-touching. On the other hand, I should not be surprised if one of these dies were not in fact reproduced from a late state of the other, in the same manner as I have suggested that Die II. of the 5 reis of Dona Maria may be a reproduction of Die I., and in support of this I may aty that many of the stamps of Die V. and Die VI. have a small lollow or flaw in the extreme coloured line of the frame on the right, on a level with the nose of the Sovereign.

I will now mention certain peculiarities which I think point to the existence of two varieties with 8I pearls, and I will refer to the Illustrations XI. and XII. The former reproduces one of the thirty or forty

[^8]unused mint specimens which were found some five or six years ago. Comparing this with Illustration XII., one notices differences of a nature somewhat similar to those of Die V. and Die VI., of which the most striking is that the loop to the right of the second "O" of "CORREIO" is much larger and rounder in Illustration XII. than in Illustration XI. This is apparent in the stamps viewed by the naked eyc. Other points are as follows:-
(a) In Illustration NI., the terminal of the loop over the " 5 " is al some distance from the circle which encloses the pearls, while in Illustration XII. it almost touches the circle.
(b) In Illustration XI., the small loop over the " S " of "REIS" is at some distance from the circle, but in Illustration XII. it tonches the circle. Compare also the small loops under the second "O" of "CORREIO."
(c) The terminal of the small loop under "CO" of "CORREIO" in Illustration XI. is straight, and points to first " R " of "CORREIO," but in Illustration XII. it curves upwards, and at its extremity points to the first "O" of "CORREIO."
(i) The small isolated line to the right of the " $S$ " of "REIS" is more curved in Illustration XI. than in Illustration XII.
(e) In Illustration XII., the first " R " of "CORREIO" touches the circle, but in Illustration XI. they do not.
$(f)$ The shapes of the " $S$ " of "REIS" differ in the two Illustrations.

As far as $\overline{1}$ have been able to judge from a few other specimens, these variations seem to be associated together in the sams combinations, but it is not easy to obtain used copies which have escaped obliteration in the test positions, and therefore I somewhat hesitate to assert positively that the variations establish the existence of two distinct dies with 8 I pearls ; but if it should eventually b: proved to be the case, I should expect one of such dies to be a secondary reproduction of the wther. Provisionally, I refer to them as Die IV. and Die IVA., respectively.

In the preliminary notes, I referred to an article by the Rev. R. B. Earee on the Stamps of Portugal, published in the eleventh volume of the Stamp Collectors' Magazine at page 123, in which Mr. Earee mentions five types of the 5 reis of Dom Pedro, viz.: one with 89 pearls, one with 75 pearls, and three with 76 pearls-but he omits all mention of a type with 8 I pearls. He acknowledges that his list does not coincide with Dr. Legrand's list, given in the Stamp Collector's Magazine of April, $1870^{*}$; but Mr. Earee says that he had counted the pearls on each of the stamps carefully several times, although he admits. that he may have made a mistake.

Of the five types, as described by Mr. Earee, his "Type I." ( 89 pearls) can easily be identified with Mr. Marsden's Die V. or

[^9]Die VI.; and his "Type IV." is obviously Mr. Marsden"s Die I. Mr. Earée's Types II., III., and V., each with 76 pearls, are described as follows:-

> "Type II.-Lettering large, but not coarse; foot of second $R$ "in CORREIO almost touches circle; I lower than the "other letters; S of REIS almost touches spandrel ; " loops of spandrels very small; 76 pearls."
"Type III. - Lettering large, but very thin ; all letters of "CORREIO at some distance from circle; E higher "than the other letters; S of REIS not near spandrels; " loops of spandrel moderately large; 76 pearls."
"Type V.-Medium sized lettering, not touching circle; I " higher than the other letters, and rather crooked; loops of " spandrel very large ; 76 pearls."

One can easily recognize Mr. Marsden's Die III. in Mr. Earée's "Type II.," and probably his Die II. in Mr. Earée's " Type II I.," the " E " of "CORREIO" having short arms, and projecting above the level of the other letters; but the difficulty is to identify his "Type V.," the mediun sized letters not touching the circle, and large loops of spandrel-occur in Die I., Die IL., and Die IV. (including Die IVA.), all of which, except Die II., have a different number of pearls. On the whole, I am inclined to regard it as an early impression of Die II., Mr. liarees" Type III." being a later impression from the wom die-the state of the die in Illustration IX. I may say that I possess a postmarked specimen which has the "I" of "CORREIO" apparently higher than the other letters, but in other respects is identical with Dic II. On the other hand, the description of the loops as "very large" points rather to Die IV., or Die IVA. (81 pearls), in which alone the loops of the spandrel are strilingly large.

The characteristics of the seven dies illustrated in these notes may be summarised as follows:-

Dic $I$. 75 pearls. The lettering of "CORREIO" is small, and the "RR" do not touch the circle. The numeral is small and its llag curved. Illustration VIII.

Dic $I I .-76$ pearls. The lettering of "CORREIO" is small, the "RR" do not touch the circle. The numeral is small and its flag straight. The terminal of the smali loop immediately over the numeral extends well to the right of the numeral. The loops to the left of the " C " and to the right of the second " O " of "CORREIO" are medium. Illustration IX.

Die III.- 76 pearls. The lettering of "CORREIO" is large, and the second " $R$ " almost touches the circle. The numeral is very large and more nearly upright than in any of the other dies; its flag is straight, ind of nearly the same length as the terminal of the small loop immediately above it, which does not extend to the right of the flag. The loops to the left of the " C ," and to the right of the final " O " of "CORREIO" are very small. The " $S$ " of "REIS" touches the ababesque. Illustration N .

Die IV.-SI pearls. The lettering of "CORREIO" is medium, and the "RR" do not touch the circle. The numeral is small and the Hag slightly curved or rather bent, and the terminal of the small loop above it is longer than the flag and extends slightly to the right of it. The loops to the left of the " C ," and the right of the second " O " of " CORREIO," are large and oval. The " S " of "REIS" is distant from the arabesque. Illustration XI.

Dic Ila.-Si pearls. The lettering of "CORREIO" is medium, and the " R " touches the circle. The numeral is small and the flag straight. The loops to the left of the " C, ", and to the right of the second " $O$ " of "CORREIO," are very large and rounder than in Die IV. For other differences between Die IV. and this die and my reservation, see supra page 22. Illustration XII.

Die I.- 89 pearls. The lettering of "CORREIO" is large and coarse, and the second " R " touches the circle. The numeral is of medium size, the flag is curved, and the upright staff slopes at an angle of 60 degrees to the horizontal. The longer axis of the small loop to the right of the second " $O$ " of "CORREIO" is vertical, and in the left bottom conner the arabesque is very close to the vertical white line of the frame (eide arrow of Illustration). There is a white vertical flaw to the left of the "R" of "REIS." Generally, the stamps appear to be printed from a worn die. Illustration XIIĬ.

Die VI.-89 pearls. Similar to Die V. in most points, but the longer axis of the small loop to the right of the second " O " of "CORREIO" slopes at an angle of 45 degrees to the vertical; in the left bottom corner the arabesque is at a greater distance from the vertical white line of the frame, and there is no flaw to the left of the " R " of "REIS." Generally, the stamps are much clearer than those of Die V., and the die appears to have been in good condition. Illustration XIV.

Mr. Marsden says that the order of the severai dies is quite arbitrary, i.e., so far as the dates of their creation and use are concerned; he mentions that the only dated copy which he had come across was one of Die I., bearing the Lisbon post-mark of January. 1855. I possess a specimen of Die IVA., with the Lisbon post-mark of 19th June, 1855.

The papers employed for these stamps varies from very thin (pelure) to medium-the latter is in some cases rather coarse, but generally of a compact nature-and the gum appears to have been liberally applied, and is generally of a yellowish tone.

Most of these stamps are of a peculiar reddish lake-brown, that is, red-brown, to which, I think, a small quantity of carmine was added. This shade is not found in the stamps of Dona Maria, but it occurs in one or more of the printings of the 5 reis af Dom Pedro with raty hair. There was, however, one printing at least, in a pale brownish red. The only specimens known to me are of Die II., and are on pelure paper ; the impressions are very coarse and blotchy.

According to Mr. Castle, these stamps were superseded in $1 \$_{5} 6$ by the 5 reis with curly hair. It is to ise hoped that some day official information as to the manufacture of these dies, and the several
printings, will be published, as in the case of the stamps of Dona Maria. In the meantime, it must remain somewhat of a puzzle why so many dies were required for a stamp which was current only for some eighteen months, and is scarce even in the used condition. I call only imagine that these numerous dies were made of inferior or insufficiently hardened steel, or some other metal, and wore out very rapidy. Speaking generally, these stamps are not found in such strong relief as the majority of the stamps of Dona Maria, and it is possible that some cheaper process was employed in manufacturing the dies.

## The Reprint.

There is no suggestion of the reprinting of the 5 reis, straight hair, before the series of reprints of 1885 , for which series an entirely new die of this value was prepared (see Illustration XV.) ; presumably, all the original dies were either lost or in such bad condition as to be unfit for the press. The new die has 75 pearls, which are much smaller than those of the original dies, and the arabesque differs materiallyfrom that of any of the originals. The reprints are found only on the stout intensely white paper, and are in a deep yellowish brown, without any trace of the lake tint which occurs in the pigment of the original stamps.

The 25 Reis.
Two dies of this value have long been recognised. Although somewhat similar there can be no question that they were independently engraved. Enlarged photographs of specimens of the two types are reproduced in Illustrations XVI. and XVII. Following the order adopted by Mr. Castle and Mr. Marsden in their respective papers in Vols. X. and XII. of the London Philatelist, I have called these Die I. and Die II. respectively. It will be observed that the general design of each of the two dies follows closely that of the 25 reis of Dona Maria, but the medaliion is narrower, thus allowing more of the network to show at the sides. The most striking difficences in the two dies are as follows: (I) in Die I., the lettering of the word "CORREIO" is much larger than in Die II.; (2) in 1)ie I. the pearls do not touch the edge of the oval medallion and are guite separate from one another, while in Die II. the pearis tonch one mother, and also the edges of the medallion; (3) the slape of the head and its position relatively to the pearls differ in the two dies.

No official information throwing any light on the dates of the respectre issues of the stamps has been published. but Mr. Marsden has investigated the question by the examination of numerous specimens on the original envelopes, atud found that the dates of the pustmarks in the case of Die I. ranged from 23rd February, 1855 , to the I2th September, 1855, and while in the case of Die II. they ranged from the 6th September. 1855, to the ist December, 1855 , and he naturally concluded that Die I. was first put to press. It is, of course, pussible that Dic I. was used concurrently with Die It and also that
replicas of one or both of these dies were prepared and used, but I have not attempted to look for minute differences and flaws which would suggest a reduplication of the dies or either of them.

Presumably these dies were superseded carly in the year 1856 by the dies having the head with curly hair.

The shades of the stamps of the two dies vary but slightly-being mostly of a dull full blue, but a few specimens are somewhat brighter and lighter; the stamps are generally found on paper of medium thickness, but specimens of Die I. occur on a very thin or pelure paper.

Although these stamps are common in the used condition, unused specimens of Die II. are very scarce, in fact the few specimens which I have come across appeared to have been affixed to letters and escaped obliteration.

## The Reprint.

Reprintings of Die I. were made for the series of 1885 or 1890 in a bright blue on the well-known stout intensely white paper. No reimpressions of Die II. are known to me.

## The jo Reis and ioo Reis.

Appakently only one die of each value was used for the issues of these denominations for the reign of Dom Pedro V., though possibly there may have been exact replicas of one or both of the original dies, but no writer has yet indicated the existence of any variation or flaws in the stamps which would point to the reduplication of either of the dies. It may be mentioned, however, that Messrs. Bellars \& Davie, in their catalogue of 1864 , inadvertently listed the 50 reis and yoo reis with curly hair as well as with straight hair. This was, of course, a mistake, as no specimens with curly hair of the head of the sovereign are known in the two higher values. but there were probally several separate printings, because the alignment of stamps in blocks and pairs indicate the work of the two controlling apparatus of the presses ; morewer, specimens of each value are found on the medium paper as well as on the pelure paper, and with yellow thick gum and also with white shiny gum, and the shades of each value vary slightly. I have in the Preliminary Notes referred to the possibility that some of the specimens in mint condition may be reprints, but as these stamps remained current until $186{ }_{4}$, or at any rate 1863 , the probability is not so strong as in the cases of the 5 reis and 25 reis curiy hair.

## 13. Head with Curly Hark.

Is the absence of official information, we can only conjecture that the change in the style of the effigy of the sovereign was in some way connected with the contemporary alteration in the style of the coins. The change affected only the two lower values, and the new dies
were executed by Senor F. B. Freire, whose initials still appear at the base of the bust, but as I have already pointed out, now embossed instead of being incised.* According to Mr. Castle, both values from the new dies with curly hair first appeared in May, 1856, and Mr. Marsden adopted this date although he was inclined to think that the 25 reis, at any rate, appeared rather earlier. It is curious that while during the period February, $18{ }_{55}$, to May, 8856 , at least six dies of the 5 reis and two dies of the 25 reis were employed for the production of stamps of these walues with straight hair, yet from May, 1856, to the end of the reign (IIth November, IS61), and for some time afterwards, apparently only une die of the 5 reis, but at least seven dies of the 25 reis, were used. In the Preliminary Notes I have commented on the contrast in the respective lives of some of the dies and here I will only repeat my suggestion that possibly the original die of the 5 reis curly hair was of harder steel and better able to resist the wear and tear of the printing operation than the six or seven dies of the same value with straight lair, and further, that possibly from the original die of the 5 reis curly hair, duplicate dies, which were exact replicas of the original die, were produced in the manner I have referred to in my Preliminary Notes. It may be mentioned that the reprints of this 5 reis curly hair of $1885-1886$, or 1890 , were made from a die which, if it was not the original, was similar in all respects to the original, and was in perfect condition. (Vide Illustration XX.)

Illustration XVIII. reproduces an enlarged photograph of an impression in black on stout white paper, which I believe to be an essay of the 5 reis. It is embossed as in the case of the other stamps, but I can detect no trace of the engraver's initials on the bust; it will be seen that the design differs considerably from that of the issued stamps.

## The 5 Reis.

Als. the stamps with conly hair of this value being of the same type laide Illustration XIX.), I need here only refer to the shades, papers, gum, ctc., of the issued stamps and to the question of the existence of carly reprint on which I touched in the Preliminary Notes. As we have seen, the stamps of this type were probably first issued in May, 1856, and they remained current until 1862 , thus enjoying a life of about six years, and therefore, as we might expect, they are found in many shades. All writers are agreed that the earliest printings were in kake-brown (Mr. Marsden's "rich red-brown") of the immediately preceding 5 reis straight hair; Mr. Marsden gives the order of the shades as follows:-"The earliest was the rich red-brown, identical in colour with the 5 reis of the preceding issue; the colour gradually alssumed a yellow hue, and through yellow-brown passed to a yellowlistre, eventually finishing up in a deep bistre-brown" (vidc London Philutclisi, Vol. XII., page 135).

In writing on philatelic matters, one of the greatest difficulties is the naming and descriptions of colours and variations of shade,- -there is, minfortunately, no recognised or fixed nomenclature, and what is worse,

[^10]detinite names have been given in catalogues and reference lists to wellknown varieties of certain conntries which by no means harmonise; this is in a crreat measure due to the fact that the inks employed were frequently mixtures; further, in many cases different people use the same name in different senses, c.g. lilac, purple, violet, histre, sepia, cobalt, indigo, cte. However, numerous as the shades of the stamps now under consideration may be, we can fix on two extremes-one, the earliest shade, is, as we have seen, identical with that of nomal specimens of the 5 reis staight hair, the other is a very dark brown, in fact a black-brown, identical with that of some of the darkest shades of the 5 reis of Dom Luiz of 1862 . If I may venture to suggest a list of the shades of the 5 reis which are found obliterated, it would be as follows :-
(a) Lake-brown :

This is identical with shade of the ordinary specimens of the 5 reis straight hair, and is termed by Mr. Marsden "rich redbrown." The characteristic of the pigment is that it evidently. contaius some carmine or madder as an ingredient.
(b) Pale brownish red:

This is identical with the shade of the abnormal, badly printed specimens of the 5 reis straight hair described above.
(c) Deep red-brown:

This somewhat resembles (a) but it has no trace of lake-it approaches the burnt sienna of artists' paint boxes.
(d) Orange-brown:

This is a bright shade, somewhat similar to, but brighter than the orange-brown of the 5 reis of Dona Maria-in some specimens the orange predominates.
(c) Grey-brown :
(f) Black-brown:

The pigments of shades (c) and (f) were composite, and gradations exist but they all show traces of grey or black ingredients: stamps of these shades are probably intended by the "bran-noix" and possibly in some cases by the "sepia" of the catalogues. Similar mixtures were used ats pirments for some of the 5 reis of lrom Luiz. Some collectors describe these shades as chocolate, but I regard that term as somewhat anbiguous; moreover, it suggests the presence of a red or purple tinge which does not exist in mint specimens.
(g) Yellow-brown:

This is a light shade, and might with propriety be termed "raw siema." It must not be confused with the " bisticbrown" next described, which, although somewhat yellowish. is of a much deeper tone.
(h) Bistre-brown:

This is the colour of the well-known stamps, so common in the mint condition, to which I have referred in the Preliminary Notes as probably being reprints.

As regards shade (h), although "bistre" is one of the difficult ambiguous words, no harm can ensuc from its use in this connection because the stamps are well known and it is the term used by Mr. Castle and others for the same variety. Thus, in the tenth volume of the London Philaclist, at page 199, Mr. Castle writes:-"The bistre-brown, generally seen now-a-days unused, is probably the latest printing, of which, apparently, but few were issued, and the remainder stock was disposed of to collectors." Although this is a deep shade, it is easily distinguished from (c) and $(f)$ by the presence of a yellowish ingredient, and I am of opinion that it was the failure on the part of the compilers of the catalogues to recognize this yellow component which has led to the confusion in the classification of the stamps of the 5 teis curly hair. In the above list of shades, I have included only. those of stamps in mint condition. Intermediate tones and nondescript shades may be found in specimens which have been soaked in water, or through some other cause cannot with certainty be said to exhibit their original colour. These should be rejected until a mint specimen of these scarce abnormal shades is forthcoming.

Mr. Castle's experience evidently is in accordance with my own as to this shade being common in the unused condition. In the light of the references to reprints of the 5 reis, curly hair, quoted by myself and by Mr. B. T. K. Smith in the letter to which I refer below, I am not disposed to accept Mr. Castle's theory that these stamps are remainders: possibly if he had come across the references to the reprints he would have adopted my siew of them. It is clear that in all other ralues, on the deaths of Dona Maria and Dom Pedro, the Govermment used up the stock of stamps on hand before they issued stamps of the new reign, and there is no apparent reason why they should have made an exception in the case of the 5 reis of Dom Pedro, which, according to all the available evidence, remained current antil the summer of 1862.

In the Preliminary Notes I stated (supra page if) my belief that no specimens of this shade are known obliterated. This, of course, goes somewhat further than Mr . Castle's view that "but a few were issued "; but I can say that, although I have diligently sought for obliterated specimens, I have never succeeded in obtaining a satisfactory copy. I have already stated that specimens of the warms rellowish brown ( $g$ ) might be possibly mistaken for them, especiatlyif the stamps had been soaked in water, but the two shades are essentially different, ( $g$ ) being redder and warmer. Possibly Mr. Castle took some of the latter to be specimens of the former. It is also quite possible that some of these "bistre-brown" stamps were passed through the post during the reign of Dom Luiz. Mr. Marsden tells us that the Postal Authorities sold the reprints at the Mint to anyone who applied for them at face value, and took no objection to the user of reprints for franking purposes (vide London Philatelist, Vol. XII., page Io3); but as these particular stamps were retailed by M. Moens at a price considerably above their face value, it is unlikely that many would be so used, and the fact that I have never been able to discover a single satisfactory cops in the used condition, is fair evidence that ther were never in xenc:a! ure. However. this view seems to have been a source of difficulty to some of my
readers, and I am glad that Mr. B. T. K. Smith, in an interesting letter published in the July number of this volume (supra page 162), has opened a discussion on this question. In his letter, Mr. Smith gives two quotations bearing on the subject which had escaped my notice.

He points out that M. Pauwels, in his notes in Le Timbre Poste of November, 1867 , on the second edition of Berger-Levrault's catalogue. states distinctly that the 5 reis, and 25 reis of Dom Pedro, had been reprinted " La première serie n'est pas la seule réimprimée; les 5 et 25 reis de don Pedro, cheveux bouclés, le sont aussi " ; and he also quotes from a series of articles on reprints, published in the Stump Collector's Magazine of 1868 and 1869 , the following statement, under the heading "Portugal":-"The 5 reis brown (curled hair) is the only one of the " second series (Don Pedro) linown to have been reprinted. This is far " from common, but being printed in a very dark brown, almost black. " it is easity distinguishable from the originals" (see S.C.M., Vol. VII., page ${ }^{6}$ ).

In the Preliminary Notes, I quoted two references from catalogues of M. Moens, as to reprints of the 5 reis Dom Pedro, curly hair, one in his catalogue which was published in monthly parts in 1867 , "Réimpression, 5 reis, brun noir" ; the other in the fourth edition of his priced catalogue (1872-3), "Timbres réimprimés, 1869 . Type 1856 C. sur B. $3^{\circ}+: 5$ reis, brun jaune." Mr. Smith raises two questions(I) whether there were two reprints? (2) and if so, what are they like?

Mr. Smith seems to think I intended to glide over these questions, but as they are difficult, I postponed their fuller consideration to this part of these present notes, and it is fortumate that I did so, as now I have the advantagre of Mr. Smith's criticism and the two quotations given by him. Again, Mr. Smith considers that my contention that stamps in what I have called "bistre-brown" are not known obliterated, may be a stumbling block, because stamps so described are quoted in the catalogues of Messrs. Stanley Gibbons, as well as of M. Moens. both used and unused, and at substantially the same prices as those of other shades. Messrs. Stanley Gibbons' catalogue for 1906-7 lists the following varicties of the 5 reis of 1856 :-

| No. |  |  | Unused.s. d. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 16. | red-brown ... | $\ldots$ | 35 | 0 | $\ldots$ | $+$ | 0 |
| 17. | vellow-brown | $\ldots$ | 50 | 0 | ... | 3 | 0 |
| 18. | bistre-brown | $\ldots$ | fn | 0 | $\ldots$ | 3 | 0 |
| 19. | sepia | $\ldots$ | 5 | 0 |  | 3 |  |

I may say that the stamps which I call "bistre-brown," are in Messrs. Stanley Gibbons stock books, placed together with unused specimens of the grey-brown (my shade $c$ ) under thr heading of No. 19, that is, "sepia," and not of No. 18. Here we have an instance of the confusion arising from the use of such terms as "sepia," "bistre-brown," etc. The price of the unused specimens of their No. 19, viz., 5 s., alone would suggest that Messrs. Stanley Gibbons used the word "sepia" for a shade which most writers call bistre or bistre-brown. But then it may be said that Messrs. Stanley Gibbons price these stamps obliterated at 35 . od., which is also the price of two
of the other shades. When I looked at the obliterated specimens of No. 19 in their stock books, I found specimens of the grey-brown shade, and dull specimens of what I term warm yellowish brown (i.c., shades ( $\varepsilon$ ) and (g) of my list), but none of the true bistre-brown; while under No. 18 I found other specimens of my shade ( $g$ ), used only, and a specimen of my shade (b), (pale brownish red).

On referring to M . Moens' catalogue of $1872-3$, one finds the following list of the issued 5 reis, curly hair:-

| No. |  |  | Unusecl. <br> frs. |  | Uused. <br> frs. |
| :---: | :--- | :---: | :---: | :---: | :---: |
| 16. brun-rouge | $\ldots$ | 2.50 | $\ldots$ | 0.40 |  |
| I7. | brun-jaune | $\ldots$ | 2.50 | $\ldots$ | 0.30 |
| I8. | bistre palle | $\ldots$ | - | $\ldots$ | 0.75 |
| I9. brun-noir... | $\ldots$ | 1.00 | $\ldots$ | 0.40 |  |

Is regards the reprint, the reference is as follows :-

$$
\text { No. } 304.5 \text { reis, brun jaune ... ... } 0.75 \text {. }
$$

winich is similar to his No. 17, except that the words "brun" and " jaune" are not joined by a hyphen.
M. Moens' catalogue of February, 1867, gives only two shades, "brun-jaune" and "brun foncé," the reprint being described as "brun-noir"; the edition of $186+$ (English translation) gives two shades, viz., "red-brown" and chocolate-brown," but does not mention any reprints, and the last edition of his catalogue (1892) gives the following shades :-

| No. |  | Unused. <br> frs. |  | Used. <br> frs. |  |
| :---: | :--- | :---: | :---: | :---: | :---: |
| 22. | brun-rouge | $\ldots$ | - | $\ldots$ | 1.00 |
| 23. | brun jaunâtre | $\ldots$ | - | $\ldots$ | .60 |
| 24. | bistre pâle | $\ldots$ | - | $\ldots$ | - |
| 25. | bistre-noir | $\ldots$ | - | $\ldots$ | - |
| 26. | bistre-brun | $\ldots$ | 2.50 | $\ldots$ | - |

No. 26 is the only item which is priced unused, and it is not priced used, and therefore probably indicates the "bistre-brown" reprints. I think that Nos. 22, 23, and 25 can be identified as the rich red-brown, orange-brown, and chocolate-browns of the list I have above suggested, but No. 24 "bistre pâle" is too vague, and would probably cover any shade not clearly attributable to the other more definite descriptions; moreover, the French employ the term" "bistre" for a shade not usually termed bistre in Englishi. Is regards reprints, the same edition lists the early ("I86 ") reprint: of Dona Maria, and also the later reprints of the same reign under the following heading:-" 1885 ? Nouveaul tirage des timbres 1853 , sur B mat satine "; but in the case of Dom Pedro, the only reprints of the varieties with curly hair are given under the following heading:"1885? Même effigie à cheveus bouclés, type 1856-7, C sur B! mat satiné

5 reis brun 25 .
$\therefore 5$, bleu.
25 ", rose."

It is clear that the reprints of $1885-1886$ on intensely white paper are here intended, and there is no mention of any earlier reprints of Dom Pedro. It will be observed, however, that a "bistre-brun" has been added to the list of issued stamps, and that it is priced at fes. 2.50. unused only, and that none of the other shades are priced mused.

I fully recognise that for any collector who relies implicitly on catalogue descriptions, as if they were final logical classifications, my statement that the so-called "bistre-brown" does not exist in the used condition may be a stumbling-block, but, having regard to the ambiguity in such terms as sepia, bistre, etc., and the somewhat loose way in which these and similar terms are used, and the fact that the shades of the actual stamps are really numerous with many gradations, and the impossibility of accurately arranging the stamps under only four headings, the explanation is simple, so far as the catalogue of Messrs. Stanley Gibbons is concerned. The difficulty could be entirely avoided by a slight revision of their list, and in particular by the rejection of the word "sepia." I do not assert that "sepia" is an erroneous description of the "bistre-brown" reprints, because there are pale shades of sepia which approach the particular tint of the bistrebrown reprints; but on the other hand, some shades of sepia are almost black, and therefore the term is very inconvenient, especially in the case of a stamp which exists in so many different shades, or I may say, colouts.

As regards M. Moens' catalogue of $1872-3$, it may be that he intended to mark a distinction between the "brun-jaune" (with a hyphen) of the issued stamps, and the "brom jaune" of the reprints: I imagine that by the latter term M. Moens meant the shade of the so-called "bistre-brown" specimens, which he held in large quantities, and I suggest that, having forgotten their true origin, he subsequently listed them in his catalogue of 1892 as issued postage stamps under the description " bistre brun," and priced them unused at fcs. 2.50.

Returning now to the questions raised by Mr. Smith:-Do reprints exist in more than one shade ?-the statement quoted by Mr. Smith from the article on reprints in the sixth and seventh volume of the Stamp Collector's Magazine, and the record in M. Moens' catalogue of February; 1867 , strongly farour the conclusion that there was a reprint of the 5 reis curly hair in the black-brown or "brun noir." It can scarcely be said that the common unused variety, the "bistre-brown," is intended by the terms "very dark brown," or "brun noir," which, however, might aptly describe the deeper shades of the black-brown and grey-brown varieties. Now it so happens that although in mint condition the black-brown and grey-brown stamps are scarcer than the histre-hrown, they are by no means rare, while all the other shades of the 5 reis are really rare unused, especially in mint condition, and therefore I think it is quite possible that reprints were struck in the dark shade. Therefore, in answer to Mr. Smith's question, I reply that there was certainly one series of early repoints of the 5 reis curly hair, vz., in the bistre-brown, and that it is probable that there was another series printed in black-brown or grer-brown, and practically indistinguishable from the issued stamps in those shades. It will be, of course. understood that these early reprints have no connection with the official reprints of I 885 , 1886 , or $\mathbf{1 8 9 0}$, on intensely white paper. We know
that the bistre-brown reprints were made before the controlling apparatus attached to the presses was altered (in 1865), and the whole case for the existence of reprints in the dark shade is based on quotations from M. Moens' catalogue of 1867, and the Stamp Collector's Magazine of 1869; and I may add that I have never seen a pair or block of these black-brown or grey-brown stamps in which the impressions were arranged otherwise than in accordance with the original controlling apparatus.

As regards paper, I have the red-brown on medium paper as well as on the pelure paper. Mr. Castle had apparently met with this shade only on the thin paper. The other shades of the issued stamps also occur on both varieties of paper. The gum on the stamps of the earlier shades is generally yellowish, or even yellow; but on the later impressions, including the bistre-brown reprints, it is whitish and shiny.

## The Reprints.

I have already dealt with the question of early reprints of these values. and I will only say that for the series of reprints of 1885,1886 , and I89o, on the intensely stout white paper, the original die for one of the original dies, if more than one existed) was employed. I have a specimen in a deep grey-brown. Mr. Marsden describes the reprint as bistre-brown; probably both shades exist, as in the case of the late reprints of the 5 reis of Dona Maria. An enlargement of one of my own specimens is reproduced in Illustration XX.

## The 25 Reis.

The dies of this value with the curly hair may conveniently be divided into two classes-one consisting of only a single die or a single type, having the well-known fine network; the other comprising six dies, each having the so-called coarse network.

Mr. Castle and Mr. Marsden are agreed that the die with the fine network was the first used, and that the issue took place early in 1856 , Mr. Castle suggesting the month of May, and Mr. Marsden a somewhat earlier date. An enlargement is reproduced in Illustration XXI. Although the stamp is quite common in the used condition. it is very scarce unused.

In the second class, I have included the six dies identified and described by Mr. Castle in his paper in the tenth volume of the I.ondon lhilatelist, and have adopted his notation; this, I think, is the more convenient course, although it is clear from the results of Mr. Marsden's further investigations that Mr. Castle's numbers of the dies by no means correspond to the chronological order of the issue of the stamps. Although these six dies are grouped together in one division, mainly. of course, on the ground of their general resmblance. I have in the Preliminary Notes sriven my reasons for my viow that they, or the
majority of them, are not direct reproductions from one original matrix or die, but rather independent creations made up from separate pieces or moulds, c.g., the bust, the network, the frame, the letters and numerals, etc., and that the differences in the six dies are mainly due to this, that in combining these several parts to make the dies, different parts of the network contained in the mould were cut off by the outer frames. Mr. Castle also refers to the existence of small flaws, especially in the outer lines of the frames. I can confirm this, but the printing is generally so heavy that it is not easy to detect them. Two small Haws are, however, usually conspicuous in the outer line of the frame of the stamps of Die II., one in the middle of semi-circular arc in the top left comer, and the other in the semi-circular arc of the top right corner.

The first issues were in blue, but the later ones in rose, and while some dies were used in both colours, others apparently were used only with one colour.

Reproductions of the stamps printed from the several dies, in both colours when they exist, are reproduced in Illustrations XXII. to XXIX.

Mr. Marsden examined a considerable number of envelopes and covers bearing the stamps in question, with the following results:-

Blue.

| D | Earliest date | Latest date. |
| :---: | :---: | :---: |
| IV. | 7 th August, 1856. | 16th December, 1857. |
| I. | 26th September, 1857 | 15 th January, 1858. |
| II. | 27th January, 1858 | I6th March, 1858. |

Rose.

| Die. | Earliest date. |  |  |  |
| :--- | :--- | :---: | :--- | :--- |
| Latest date. |  |  |  |  |
| VI. | $\ldots$ | 9th April, I858 | $\ldots$ | 21st May, I859. |
| II. | $\ldots$ | 3Ist January, I 859 | $\ldots$ | 24th December, I859. |
| V. | $\ldots$ | I2th January, I860 | $\ldots$ | 28th July, I86I. |
| III. | $\ldots$ | I7th January, I 861 | $\ldots$ | 24th August, I862. |

Specimens of Die III. exist in blue; in fact, they are quite common in the mint condition, and even whole panes, blocks, and pairs are still obtainable, yet not a single obliterated copy has heen seen by Mr. Castle or Mr. Marsden: and the latter sentleman, in his paper in the twelfth volume of the London Philatclist, urges very strong reasons for regarding all the specimens of Die III. in bluc as reprints. One point in particular is significant, viz., that for the stamps in rose, Die III. was the last to be employed, the stamps being in use nine months after the death of Dom Pedro. I gather that Mr. Castle thinks that there were two printings of Die III, in bluc, one after and the other before the die had received some slight injuries to the numerals and "I" of " REIS," but although he, too, had not seen an obliterated copy of either printing, he was still inclined to regard one printing as a remainder and the other as a reprint. So far as my experience goes, I have never seen an obliterated specimen, and I unreservedly accept Mr. Marsden's conclusion that these stamps of Die III. in blue are reprints, and I see no reason why there should not have been more
than one printing. In the Preliminary Notes I have suggested that some of the 25 reis, and even some of the 50 reis and roo reis of Dom l'edro held by M. Moens may have been reprints too. I have already pointed out that the shects of the 25 reis blue, Die III., were printed from the presses before the controlling apparatus was altered in 1865 . U'sed impressions of Dies I. and II. in blue are comparatively scarce, especially of Die II., but in the unused condition specimens of Die I. are rare, while of Die II., I know of only one unused specimen which is in my own collection. and is reproduced in the Illustration XXIIİ.; unfortunately, it is damaged. It was not represented unused in the collections of Mr. Castle or of the late Mr. Ehrenbach. Specimens of Die IV., unused, are fairly common. In the rose-coloured stamps, only impressions of Die VI. seem to be scarce.

As regards the differences in the several dies, they are most conspicuous in the parts of the network cut off (i.) by the frame, and the: value label under the space between the numeral " 25 " and the " R " of "REIS"; and (ii.) by the oval medallion and the value label above the numeral " 25 " (vide the small arrows of the illustrations).

Die I.-The interlacing of the network in the lower position is characteristic, and in clearly printed specimens this die cannot be confused with any other.

Dic II.-In the lower position, it is somewhat like Die IV., but the insertion of the double threads of the networl: in the upper position clearly distinguishes this die from Die IV.

Dic III.-This can casily be recognised by the network cut off in the lower position, which appears as cross hatching or trellis work.

Die IV.-See Die II. supra.
Die $V$.-Here the portion of the network cut off in the lower position is characteristic.

Dic VI.- In the lower and upper positions, the network is somewhat like Die IV., but there is a marked difference in the distance between the " C " and first " O " of "CORREIO" in the two dies, it being much greater in Die VI. than in Die IV. Further, the upper part of the "S" of "REIS" is much rounder and somewhat smaller than in Dies II. and IV. Differences in the insertion of the donble threads of the network above the " $S$ " of "REIS" may also be noticed.

## The Reprints.

1 have already dealt with the early reprint of Die III. in blue. For the series of $1885-6$ and 1890 the die with the fine network was omployed, and printed in rose as well as in bluc.

> SYNOPSIS.

## Dona Maria.

July, 1853.
Thick papcr.

| 5 | reis, Die I.; orange-brown, slight shades. |
| ---: | :--- |
| 25 | pale blue. |
| 25 | bright blue. |
| 25 | dull Prussian blue. |
| 25 | dall |
| 25 | darli blue. |
| 50 | $"$ |
| 50 | dark yellowish green. |
| 100 | dark blue-green. |
| 100 | pale lilac. |
| 100 | deep lilac. |

Thin paper (pelure).
5 reis, Die I.; orange-brown, slight shades.

| 5 | $"$ Die II.; yellow-brown. |  |
| ---: | :--- | :--- |
| 5 | $"$, | orange-brown. |
| 25 | oright blue. |  |
| 25 |  | blark blue. |
| $50^{*} "$, |  | dark blue-green. |
| 100 |  |  |

Varieties.
Double impressions. Thici paper.
25 reis, pale blue.
50 " green.
These varieties are mentioned by Mr. Marsden in the twelfth volume of the London Philatelist, at page rot.

> REPRINTS.
> $1863-1864$.

On thin paper.
5 reis, Die II.; bistre-brown.

| 25 | original die $;$ | dark blue. |  |
| ---: | :---: | :---: | :--- |
| 50 | $"$ | $"$ | bright green. |
| 100 | $"$ | , | lilac. |

[^11]1885 and 1890.
On intensely white stout paper.


Stamps generally regarded as Reprints, but whose origin has not yet been definitely ascertained.

On stout white paper.
5 reis, Die II.; red-brown.
25 " original die ; blue.
100 ", ", lilac.

## Dom Pedro V.

A. Hifad of the Sovereign with Straight Hair.
1855.

Thin (pelure) and medium papors.

5 reis, seven distinct dies; lake-brown.
5 ," one only of the above
seven dies, namely,
No. II.;
25 " Die I.;
25 " Die II.;
50 "
50 ,
100 "
100 "
pale brownish-red (thin paper only). dark blue; slight shades (? February). dull blue: shades (? September). yellowish green. bluish green.
pale lilac.
dull lilac.

Reprints.

## 1885 and 1890.

On intensely white stout paper.
5 reis, new die; dark brown; black-brown.
25 ", Die I.; bright blue.
50 " orisinal dic ; yellow-sreen.
roo ", pale lilac.
b. Head with Curly Hair.

On medium and thin papers.
lake-brown (May, 1856 ).
pale brownish red. deep red-brown.
orange-brown.
grey-brown; black-brown. yellow-brown.
$2_{25} "$ Type I. (with fine network), one die; bright blue (? May, 1856 ). Type II. (with coarse network), six dies:
Die I., Die II., \& Die IV.;
bright blue; slight shades (? August, 1856 ).
Die II., Die III., Die V., \& Die VI.; rose (? April, 1858 ).

## Reprints.

Prior to 1866. On thin paper.
5 reis, original die;
bistre-brown. (?)
5
25

$$
1885,1890
$$

On intensely white, stout paper.
5 reis, original die;
bistre-brown.
25 " Type I. (fine networl), original die ; bright blue.
25 ", ", ", rose.

llLUSIRATION L.


Die I. (Original).

Ihlust ation Ia.


Die I (Original).
(Late Impression from Worn Die).

Illus RATION II.


Die II. (Original).

Ildug't ation III.


Reprint, 1864 (Die II.)

LlLU rRATION IV.


Reprint, 1886 (New Die).



Reprint, i864.


Reprint, i886 (New Die).

ILLUS RATION VIII.


1) ie I. (75 l'earls).

Straight Hair.

ILLU TRATION IX.


Die II. (76: Pearls).
(The numeral " 5 " and the "RR" of "CORREIO" small). StraightHair.

D) Ie III. ( 76 Pearls $)$.

The numeral " 5 " and "RR" of "CORRFBLO" large).
Straight Hair.


Straight Hair.

TILTG RATION XII.

|LINS R.AIION XIII.



Dif. Vi. (Xg) Pearls).
Straight Hair.


Reprint, 8886 (New Die).
Straight Hair.


## Die I.

Straight Hair.


## Die II.

Straight Hair.

Illt rRation XVIII.


Essay.

## Curly Hair.

Ilj istration XIX.


Original.
Curly Hair.


Reprint, 1886.

## Curly Hair.



Fine Network.
Curly Hair.

Ill stration XXII.




Dif II. (Blue).
Curly Hair.


Curly Hair.

\% Die IV. (Blue).
(" $\mathrm{CO}^{\prime}$ of "CORREIO" close).
Curly Hair.


4
Die II. (Rose).

Ilistration XXVII.

\& Die III. (Rose).




[^0]:    - Since these notes appeared in the Philatelic Record, I have received a letter from Mr. Marsden challenging the accuracy of my statement that the number of blind impressions on the cardboard in the tray was fourteen, and suggesting that it might give rise to an erroneous view as to the size of the panes of the embossed stamps printed after 1865 . My recollection may be at fault, but it accords with a note which $I$ made at the time of my visit to the Mint, and I may say that the number of the blind impressions certainly arrested my attention. But even if it be a fact that there were more than 28 blind impressions on the cardboard, I am not satisfied that any question thereby necessarily arises as to the size of the panes, because I imagine that the piece of cardboard had been used for many printings and was shifted from time to time along the tray-certainly there was nothing in the arrangement of the blind impressions to suggest the printing of sheets of two panes with a margin between them, and I have never heard of or seen a pane of the embossed stamps arranged otherwise than in seven rows of four stamps, which is, more-

[^1]:    over, the plan of the old harrow perforating machines gauging $22 \frac{1}{2}$ and $33 \frac{1}{2}$ respectively. Further, I understood that the controlling apparatus was not constructed to print more than 28 stamps on a sheet unless the sheet was removed from its position and shifted by hand. I am much obliged to Mr. Marden for kindly calling my attention to this ambiguity.
    "Vide "A History of the Adhesive Stamps of the British Isles," Wright \& Creeke. Philatelic Society (page 57).
    $\dagger$ Mr. Marsden informs me that the alteration was probably made in 1865.

[^2]:    * Since these notes appeared in the Philatelic Kecord, I have received a letter from Mr. Marsden challenging the accuracy of my statement that the number of blind impressions on the cardboard in the tray was fourteen, and suggesting that it might give rise to an erroneous view as to the size of the panes of the embossed stamps printed after 1865. My recollection may be at fault, but it accords with a note which I made at the time of my visit to the Mint, and I may say that the number of the blind impressions certainly arrested my attention. But even if it be a fact that there were more than 28 blind impressions on the cardboard, I am not satisfied that any question thereby necessarily arises as to the size of the panes, because I imagine that the piece of cardboard had been used for many printings and was shifted from time to time along the tray-certainly there was nothing in the arrangement of the blind impressions to suggest the printing of sheets of two panes with a margin between them, and I have never heard of or seen a pane of the embossed stamps arranged otherwise than in seven rows of four stamps, which is, more-

[^3]:    over, the plan of the old harrow perforating machines gauging $12 \frac{t}{2}$ and $13 \frac{1}{2}$ respectively. Further, I understood that the controlling apparatus was not constructed to print more than 28 stamps on a sleeet unless the sheet was removed from its position and shifted by hand. I am much obliged to Mr. Marden for hindly calling my attention to this ambiguity.

    * Vide "A History of the Adhesive Stamps of the British Isles." Wright \& Creeke. Philatelic Society (page 57).
    $\dagger$ Mr. Marsden informs me that the alteration was probably made in 1865.

[^4]:    - ? forty-six.
    $\dagger$ By this I assume that the finer paper of the third delivery is intended.

[^5]:    * i.e.. his issues IV. and V.

[^6]:    - It should be remembered that my reference to these early reprints as " the reprints of ${ }^{1} 8 \sigma_{4} "$ is, as stated above (page 13 ), purely conventional and for sake of brevity. They are sometimes described as of 1803 and sometimes of 1854 , and it is unite possible that there were more printings than one, some earlier that ish3.

[^7]:    - See footnote on page 17 supra.

[^8]:    *Mr. Marsten says " to the left of the second ' O' of 'CORREIO"' ; this must be is clerical error

[^9]:    * This was contaned in a short notice of Dr, Iesrand's original paper in Le Timber lousle, of March, i8jo

[^10]:    * "lhis is, of course, reversed in the printed stamps.

[^11]:    * This is listed on the evidence of the specimen mentioned at page 8 supra; it is. however, possibly an accidental variety of the first (thicker) paper, and not a primting on the second (thaner) pajer supplied in Augnst, 8853 . I may mention that i have recently acquired a seco kf specimen on equally ihin paper.

