



The Production of the first Dutch Stamps at the Royal Mint in Utrecht, 1851-1863

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This article, first published in 1996 on the occasion of Pozeta '96 held in Alkmaar, was written to acquaint the collector with the 1852 issue. A remarkable highlight is the colorful history of the Royal Mint in the era of Netherlands stamp production.

After the constitutional reform of 1848, the first liberal government under Johan Rudolf Thorbecke (1798-1872) introduced a number of basic improvements. The post office had already been nationalized under the Batavian Republic, but the system operated rather poorly, and this was one of the reasons why so much mail was carried by private concerns. Service was unsatisfactory, and the government lost revenue. Minister P. Ph. van Bosse authored the Postal Act of April 12, 1850 which confirmed the state monopoly. He simplified the transport system and improved service. Among other things, it was decided to introduce stamps, which were already being used by 25 countries with Great Britain in the lead.

Mail delivery at that time was generally carried out by means of a system of post-payment. It was customary for the recipient of the letter to pay the postage due. Apart



Above, example of a rare "bridge pair" of the first Dutch postage stamps includes the unprinted area that separates two of the four blocks of 25 stamps that comprised a press sheet. Stamps are enlarged in reproduction.

Below, "Hunting Horn" postmark used in the paper of the first issue.



from a certain feeling of credit worthiness, it was felt that if the mail was delivered with post-payment it would insure that the letter would indeed be delivered to the correct address. A system of prepayment existed as well.

Before 1852 this payment was made in cash, but after January 1, 1852, one could use postage stamps. Initially the introduction of stamp-use was set for January 1, 1851, but as a result of various problems accompanying the transformation of the postal administration and actual stamp production, it was decided that the definitive date for introduction of postage stamps would be January 1, 1852.

The obligatory use of postage stamps was introduced years later on May 1, 1877. Therefore payment of postage in cash remained possible alongside the use of postage stamps. Mail to foreign countries had to be franked with stamps starting June 16, 1875 because the Netherlands had joined the Universal Postal Union which had been founded in 1874.

The complete change from post-payment to obligatory prepayment created a big stir

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in the country. Below are a few important articles from the Postal Act of April 12, 1850:

ART. 2 Postage is calculated according to distance and weight.

ART. 3 Postage according to distance is calculated as follows:

- for a distance of 30 Dutch miles (kilometers) or less 5 cents
- 30 to 100 miles inclusive 10 cents
- above 100 miles 15 cents

ART. 8 Postage can be paid at the post office of dispatch or can be left to the account of the addressee of the letter. This person is not obliged to accept the letter or pay its postage, as long as he refuses or gives back the letter immediately when the post office presents it to him, and before the letter has been opened by him or the seal has been broken.

Why was postage stamp production housed in the National Mint?

Although it would seem logical to house stamp production at the well-known (then and now) printers Johan Enschedé & Zn in Haarlem, who since 1814 were printing all the banknotes of the Netherlands Bank and other security paper, the Minister turned to the Mint Master. In a letter addressed to His Majesty the King, Minister van Bosse explained the motivation for his choice:

Production will take several months, but we have to make a decision now as to the site where the plant with the necessary supervision will be located. It would be desirable to locate this inside the building of the Mint and to charge the Mint Administration with the supervision. This affords the greatest possible guarantee against all kinds of abuses, and there is a room that is very appropriate without great expenditure and the functionaries of the Mint have the technical knowledge which is an advantage.

The same letter points out that in France stamp production is also under the supervision of the functionaries of the Mint.

Dr. Agniet Vrolijk, since 1840 Inspecteur Essayeur-Generaal with the “College of Generaal-Meesters” and appointed on January 1, 1851 as chairman of the Mint Administration, was charged in November 1850 with the preparation of this project and acquainting himself with the printing process technologies and administrative details required for the introduction of postage stamps in France, Prussia, Great Britain and Belgium. Thus, already at the first session of the Mint Administration, postage stamps were discussed, and it was proposed to charge the Mint Master H. A. Bake (later known as Van den Wall Bake), who had been in office since 1845, with their production under supervision of the Mint Administration. A contract in duplicate was made up in Utrecht on July 12, 1851 and registered in The Hague on July 25, 1851.



Dr. Agniet Vrolijk, Chairman of the Mint Administration, was charged with implementing production of the first Dutch postage stamps.

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Start-up problems of stamp production

Dr. Vrolijk carried out the preliminaries thoroughly and with confidence. His very detailed reports show his desire to present all production problems with clarity. This quality was complimented with a healthy business sense and, for that era, a particularly well developed sense of social welfare. He personally established all the necessary contacts with manufacturers and experts.

First of all a graphic design was required. In a formal letter dated April 26, 1851 Minister van Bosse addresses the King:

...they have chosen, following England, and in nearly all countries the likeness of the sovereign or in the republics, such as in America and in France, another picture. May I be permitted through this letter to ask Your Majesty's permission to be allowed to place your portrait on the aforementioned stamps.... If this proposal were to obtain Your Majesty's permission, it would be my intention to charge the most capable engravers in this country with the execution.

The King gave his permission on April 30, 1851, and the famous Amsterdam master engraver Johann Wilhelm Kaiser was invited to make an engraving using a portrait modeled in clay of the reigning monarch, King William III, made by Nicolaas Pieneman.

During his research travels, Vrolijk had made contact with Jacob Wiener, originally from Venlo, but now working in Brussels. This engraver, equally well-known as a die maker, who had acquired experience with the production of the first Belgian stamps (of 1849), appeared prepared to provide the necessary knowledge to reproduce the engraving, the die and the fixed-axe cylinder, as well as the production of the ultimate printing plates. He also furnished the necessary steel plates for them. The transfer machine necessary to rock the die into the plate, stamp by stamp, was furnished by the English firm Perkins Bacon & Co. Under Wiener's guidance the first three printing plates of the 5¢, 10¢ and 15¢ values were made.



The original transfer press manufactured by the British firm Perkins Bacon & Co. was used to rock the die into the plate—stamp by stamp.

In this framework we have to mention that die cutters at the Mint, Johan Philip Menger and David van der Keller, after having been trained by Wiener by means of a “practice plate,” produced all the remaining plates required for the first issue. The final printing plates were 28cm long, 25.5cm wide, and 2cm thick. The engraving was rocked into the plate in blocks of 25 images, each separated by a “bridge” of approximately 0.8cm. This is the origin of the very rare “bridge pairs” of this issue.



Example of a rare “bridge pair” of the first Dutch postage stamps. Stamps are enlarged in this reproduction.

While the printing plates were being readied, negotiations were carried out with paper suppliers. The “Erven Dirk Blaauw” (of the “De oude Blaauw” paper mill) in Wormerveer were the only suppliers capable of meeting the exacting requirements. Thus they received the contract to provide....during the

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good season (dry season), the required reams of paper. The paper was to be supplied in half reams of 500 sheets each. The net weight of each half ream, dry and ready for shipment, was to be approximately 10 Dutch pounds (kilograms). The price per half ream was set at fl.7.

Manufacturing the stamp paper was complicated. First, two screen frames had to be made, each provided with twice a hundred watermarks (100 per sheet). These watermarks featured an image of a hunting horn (see page 1) and were added by hand. Most probably these horns were made from small sheets of copper. Located in the Museum for Communication (<http://www.muscom.nl/>) there are two drawings, one of the approved design and the other of a simpler, rejected design.

At the time, no one was aware of the fact that the selected watermark was to become a source of considerable aggravation for the paper manufacturer. At the location of the watermark there were often holes in the paper, and many thousands of sheets of stamp paper had to be rejected. This caused lost time, since production could only be carried out in the good (dry) season.

In the meantime, Vrolijk had received permission in April 1851 to purchase a printing press in London from the firm Hopkinson & Cope. The rooms previously used by the Reminting Commission for its meetings were modified to accommodate the new press. The printing plates were also produced in the National Mint building, probably in the workshop of the die makers. Fl. 11,000 was made available by the Minister for the purchase of printing presses, printing plates, etc., and the quoted price for the first delivery was fl.1.40 per thousand stamps.

The shortage of paper, the apprenticeship of the printer and the staff, and the learning curve associated with this whole new area caused Mint Master Bake to miss the contractual quantity of 300,000 stamps. Instead of the promised November 1, 1851 date, the stamps were delivered more than a month later on December 2. Similar problems with production of paper were the reason no stamps could be printed during the month of March 1852!

Stamps which were used on letters to prepay the postage had to be canceled to prevent re-use. The canceling was accomplished by a marker. The well-known die maker P. Mansvelt from The Hague initially produced the required cancelers. After 1865 the cancelers were also produced at the Mint. In any case, postmarks with day indication were in use well before 1852 along with manuscript postage marking. The Netherlands was the first country in postal history to use postal markings (three stuyver marking) to indicate the postage due on letters. The postal markings from the period prior to the use of postage stamps are the subject of a specialty collection area, known as eo-philately.

How were the first stamps made?

On a small steel plate an engraving of the effigy of King William III without value indication is made in mirror image. After this the small plate is hardened. The gravure is copied four times (three in reserve) onto a steel cylinder. The steel cylinder is hardened, and the designs are copied onto small soft steel plates—one for each value. These designs are completely identical to the original engraving. After adding the value indication, these small plates are used to make steel cylinders. The type is transferred as a positive on the cylinder and hardened, which in turn is used by the transfer machine to produce a negative design on the printing plate.

The transfer machine ensures that (a) the designs are neatly arranged in rows on the plate, and (b) the design is transferred under high pressure by rocking onto the still-soft steel plate. This process is repeated 100 times. The designs are checked and where necessary retouched. Next the plate is heated and quenched in a solution of hardening salts. Finally the plate is polished, and it can then be used to print sheets of stamps. (see the schematic of this process).

Developments in the shop of the Royal Mint – printing plates and print runs of the first issue 1852.

Many collectors are unaware that for each value several printing plates were made and used. When the first plates were worn, they were replaced with new ones. Sometimes the old plates were shaved,

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The Production of the First Dutch Stamps / Continued

polished and again impressed with 100 designs by the transfer machine mentioned earlier. Apart from wear, sometimes other causes rendered a plate unusable. In this way plate IV of the 10 cent value came to an early end because of the alum solution added to the paper to prevent penetration of the printing ink and penetration of the gum from the backside. The alum solution caused such a detrimental effect by etching on the plate that it was no longer possible to obtain clear printings.

This printing process, also known as *en taille douce*, is done by hand and is characterized by many small flaws. These small flaws and irregularities are corrected by means of retouches. These retouches along with the small scratches on the printing plate give each stamp its own character. They are the basis for plate reconstructions.

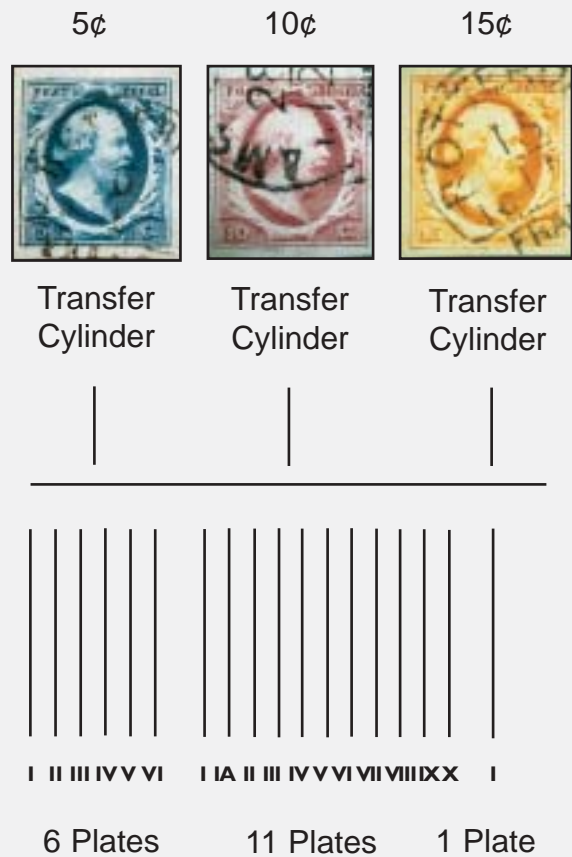
In all, including plate IA to be discussed later, 18 printing plates were produced:

- six for the 5¢ (blue) value*
- eleven for the 10¢ (red) value*
- one for the 15¢ (orange) value.*

Apart from their own characteristics, copies from the different plates have color differences. In those days no color mixing equipment was available and mixing was done “by eye.” Thus you have copies of the 5 cent value printed from plate III in four different shades, very dark blue (almost black), dark blue, blue and light blue. The paper also was subject to quite a bit of variation during the 12-year life of this issue. In the beginning the stamps were printed on a good quality thin, hard paper. Later on it appears that less attention was paid to paper quality. Slowly the paper became thicker only to change in 1863 into a thin, porous blotting paper. This paper was so porous that the watermark was often visible as a hole which caused a lot of paper to be rejected.

Between October 1851 and December 1863, a total of 40,301,600 stamps were printed of this issue. The famous philatelist P. W. Waller (the first chairman of the Foundation Dutch Postal Museum) determined the actual quantities sold by means of archival data.

Schmatic Overview of the Plate Production



Schematic presents (from left to right) the plates used for 5¢, 10¢ and 15¢ denominations of the first Dutch postage stamps.

	<u>printed</u>	<u>sold</u>	<u>remainder</u>
5¢, 6 plates	20,875,000	19,445,881	1,429,182
10¢, 10 plates	17,044,100	15,876,612	1,167,488
15¢, 1 plate	2,382,500	2,126,289	256,211

The remainders were sold in the course of 1864 prior to and after the introduction of the second issue in May of that year.

Not many of these 40,301,600 stamps have been saved. Philatelists generally believe that approximately 3% of the total printing has been saved, which means that 1,209,048 copies are still available. That is to say “ripe and green” copies; many copies are damaged and therefore not really collectable. Leaving out the rare plate IA of the 10 cent, this translates to 71,120 copies per plate. But we

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should not lose sight of the fact that some plates were in use for a short time only. Plate III of the 5¢, plate V of the 10¢, and the only plate of the 15¢ were in use for a long time, thus more copies are known than, for example, plate II of the 5¢ and plate IX of the 10¢.

Thanks to the fact that envelopes were not yet in general use, the written letters were folded into envelopes. For this reason many complete letters have been saved which carry the franking indications. Such entires enable the philatelist to check correct and incorrect frankings, and they give insight into the postal routes and the accompanying rates of the period.

Security problems with paper and ink.

Although there is in the archives a single mention of “forged postage stamps,” no such forged or fake stamp has ever been found. The detailed engraving would have made forgery very difficult. Probably the effort was not worth it. In contrast with the nonexistence of forged stamps, the practice of washing stamps to remove the cancellation in order to use the stamps a second time was common. The well-known Rotterdam lithographer Joseph Vürtheim soon put a stop to this practice by a simple addition to the cancelling ink in use up to that time.

The addition consisted of a mixture of incinerated animal bones that are rich in phosphorus, and this phosphorus allowed the ink to penetrate deeper into the paper. From mid-1852 onwards it was no longer possible to remove the cancellations from postage stamps.

In this framework it is amusing to report that the postal service noticed that pale stamps often came from Gouderak in the province of South Holland. An investigation showed that the stamps were hanging in the window of a shopkeeper ready for sale. They had all been cut from the sheet and with a needle they had been threaded onto a bit of thread for ready removal for sale. Daylight as well as gas light had paled the color of the stamps. The shopkeeper was able to prove his innocence and went free of the

charges of forgery. After this the original beautiful deep blue color was replaced by a lighter blue. Recently discovered archival material indicates that it was recommended to keep the colors on the light side. The dark blue color made it difficult to distinguish between used and unused stamps. Sadly, the beautiful color of the first printing never came back. It is worth mentioning that in 1852 a decision of the council of ministers permitted a certain J. Nievergeld from The Hague to pick up two stamps of 5 cents each at the Main Post Office. Initially it was suspected that he had washed stamps and re-used them. A special commission was convened to judge this case of suspected re-use. The commission was not able to come to a conclusion, and the suspect was given the benefit of the doubt.

At that time a lot of attention was being paid to protection of security paper. The Netherlands Bank was especially concerned about forgery of its banknotes. From 1850 on, they were consulting with the aforementioned lithographer and editor Vürtheim, who had developed a process of coating security paper prior to printing with a compound that made copying just about impossible. For a long time it was thought that this compound had also been used on a small quantity of stamp paper. It was suspected that Vürtheim’s process was used on 100 sheets of the paper for printing the famous plate IA of the 10¢ value. This plate IA was utilized by Jacob Wiener’s apprentices (Menger and van der Keller) as a practice plate to learn the art of rocking in the engraving and retouching the engraving on the plate. Later this plate was used by mistake to print stamps. Today about 150 copies from this plate have surfaced, and they are among the most sought after rarities of the first issue.

The Vürtheim compound has never been demonstrated to exist in the paper of these stamps. It has, however, been demonstrated in the paper that was used to print the banknotes of the Netherlands Bank. An improved version of Vürtheim’s protection process has been detected in the paper on which the famous Mercury Head had been printed, which until a short while ago was considered a forerunner proof of the very first stamp. This compound mixture was

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used only from the end of 1852 to the beginning of 1853, and further archival research determined that this engraving has to be seen in the framework of trials for new banknotes and related reproduction methods, and thus has nothing



Mercury Head engraving was until recently considered a forerunner of the first Dutch postage stamps.

to do with the history of the development of the first issue. Much later, in 1866, when stamp production was located at Johan Enschedé & Zu in Haarlem, this famous protection process was applied to the second issue (Haarlem printing).

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