

Alcohol was discussed, which, when applied to the back of the base, softens it so that the stamp can be removed together with the intact adhesive layer. In a letter *from Friedrich Kick to Pochet*, it is mentioned that the later undamaged removal is made easier if the stamp is not moistened for the purpose of sticking it on, but coated with a thin layer of rubber.

Kick also pointed out that the remaining print could be glued to a new paper using a shellac solution, the first base could be moistened and scraped off, and then the peeled stamp sheet could be glued over it again. As a protective measure, he recommended an asymmetrical design of the underprint. He overlooked the fact that in practice the peeled stamp sheet would usually have cashier marks and that there was therefore no particular danger in such a very difficult procedure.

The reference to alcohol as a solvent, however, prompted the State Printing Office to try again. The result of these experiments, carried out in March 1868, were two types of stamps (*Pecher's Fourth Experiment*), which were presented to the Ministry on March 26. As the printing office indicated, the aim was to "thwart" the removal of the stamps using alcohol by preparing the paper.

No further details are given. At the same time, the printing company described the order to make the year of issue visible on the stamp and to place the value in the underprint as entirely appropriate. When it recommends the latter measure in particular with the reasoning that "even if the proof image were to be used as a new stamp, the possibility of using it for a higher fee than the printed fee would be ruled out", this reminds us of *Kick's* reference to manipulation with shellac.

The fact that the printing works only took note of the above-mentioned instructions for future drafts of the design and layout, which are to be made after a final decision has been made on the method of producing stamps, gives an indication of how the various test stamps in the collections are to be dated and arranged. A further indication of this is provided by a comment *by Nejedly* on the printing works' report of March 26, 1868. This comment, dated April 14, 1868, reads: "The gelatine used to date for the stamps will be omitted in the next tests and a new, much better, composite adhesive will be used instead. Furthermore, the paper will be prepared using printing rollers and not by brushing. The preparation itself will not be done over the entire sheet, as indicated, but by leaving out quarres, which will make the stamp all the more likely to tear if it comes off. In the course of the next week, printing tests will be carried out using various colors." Accordingly, the test stamps made in March 1868, regarding which *Pecher*, as usual, refrained from giving any further details about their appearance, were those that had not yet been

colors and are not yet printed with the cross-wise preparation stripes and also do not have a year or the value in the underprint.

Two types of such stamps have actually survived. Both of these types differ noticeably from all previous attempts in that they were given an approximate appearance of real stamps, namely the ½ kr: stamps in use at the time. Both have the black stamp plate of this value in copper print on the top of the stamp; however, both lack the curved print of the value legend that has existed since 1866.

This stamp image was probably chosen because people wanted to get a clearer idea of the future design of the planned stamps.

Perhaps it also arose from the desire to prevent any criticism of the graphic design of the test stamps in future commission examinations. For the time being, all that mattered was the process followed during production and the design was of no importance; nevertheless, objections had already been raised regarding the design.

The difference between these two types of test stamps, which also had glassy transparent paper and straight-cut edges in common, was the printing on the underside. For one type, the natural printing plate corresponding to the ½ kr value was used. However, since this (brownish-gray colored) underprint is applied to the back of the stamp, it appears reversed: the main veins on the right of the normal ½ kr stamps are on the left here and vice versa. For the second type, an arabesque forms the main part of the print on the back. However, it does not fill the entire surface of the stamp square (except for the circle of the stamp shield); rather, narrow stripes are separated at the edges of the stamp in which the legend "Kk stamp stamp" is repeated on all four sides. The blue color chosen for this underprint plays a prominent role from now on in further tests and trials. The same tone had been struck earlier, namely when Prussian blue was used according to *Hausner's* idea and ultramarine according to *Nejedly's* idea (for the natural self-print), but at that time it had no impact. Even more important in these experimental stamps was the enclosing of the stamp image by frame strips. This was a new idea that meant a break with traditional ideas about the essential appearance of a stamp. When the stamps were created, the stamp sheets were given a square shape only for practical reasons, namely in order to be able to use perforation, and the natural self-print was also cut square as a result of this circumstance. In principle, however, the stamps were still the round stamp shields with the leaf appendix, the flap intended to accommodate the collection procedure. The square frame, however, makes the stamps more attractive.

the stamp now becomes a uniform square image. The lower part is included in it, although it retains its function as a writing field and this is expressed in the design. This new idea was subsequently taken up for stamp production and has essentially held up to the present day - for a very long time even in the original design with a legend bar. Only the difficulties arising from the polyglot situation in Austria, which suggested the greatest possible restriction of the texts to be added, led to the omission of these legends. It should also be noted here that the underprint produced for this blue test stamp - including the legend frame, but without the circular cutout for the stamp shield - was still used in the court and state printing works in 1873 for test impressions with the colors chosen for the stamps that year.

The test stamps with the $\frac{1}{2}$ kr design are followed by another type of stamp, which, according to the above-mentioned official information, is provided with the preparation between crosswise stripes in accordance with *Nejedly's* suggestions (*Pecher's* Fifth Test). The Court and State Printing Office submitted these stamps to the Ministry of Finance on May 9, 1868. They were therefore produced between April 14 and May 9, 1868. Their preparation is easily recognizable by the light stripes, i.e. those that remained unprepared and are already visible from the top of the stamp, which cross each other at an oblique angle at a distance of three lines, so that they enclose building fields. The shield design of the 3 kr value was chosen for the black print on the top. The underprint is made in blue, as in the previous test, and represents an ornament that essentially arises from the repeated crossing of two flat ellipses. The outer edge of this ornament was already used as a lace frame for the eagle stamps of the State Printing Office. The edges of the stamps are perforated, which further increases the similarity of these attempts to stamps. This was probably done with the intention of submitting these stamps for peritization.

The Ministry of Finance immediately sent these stamps to the Vienna University professor Dr. *Redtenbacher* and to the Prague Polytechnic for testing. *Redtenbacher*, who was also called in to the commissions regarding *Fichtner's* stamps but was quite passive, made things pretty easy for himself and after just four days presented some of the stamps he had removed with the brief comment that he thought they were successful and could be used in practice. The request sent to Prague was accompanied by an invitation not to restrict the use of water and alcohol to soften the adhesive, but also to try using acids. *Nejedly's* own tests showed that the acids dissolved the adhesive without attacking the print.

He complained in the file that the printing works had started new printing experiments "with colours" (i.e. other colours) and

still work on the perfection (22 May 1868). In Prague it was possible to remove the stamps almost undamaged if the backing paper was moistened from the back with weak alkaline solutions (carbonated ammonia, diluted ammonium hydroxide solution) or with acetic acid or ether. Because of the acetic acid, the use of litmus as the printing ink was recommended.

By the time this fourth Prague report arrived, the State Printing Office had produced new stamps, which it submitted on June 13, 1868, adding that the color of the negative print could be dissolved by alcohol, ether, and alkalis, but that its appearance could be changed by acids (*Pecher's Sixth Experiment*). For these stamps, which were produced in the second half of May and the first days of June 1868, the blue color was abandoned and the instructions that the printing office had received at the beginning of March regarding the visibility of the year and the value were already followed. For these stamps, the 3 kr design and the edge perforation were retained. The print of the stamp plate is no longer pure black, but black-brown. On the top there is a second print made in a very light brown color. It consists of the year 1869, which is placed in the round stamp plate, above the legend 3 kr, as well as four squares that fall into the four corners of the stamp. They are printed in full color and contain white cut-out letters: 3 and Kr. at the top, Ö and W at the bottom. The space apart from these square fields and the cut-out center circle is filled with a delicate guilloche pattern. The underprint on the back consists of the same pattern as the blue 3 kr test stamps and is in the same light brown color as the year, the guilloche pattern and the four corner squares. The fact that the latter actually represents an overprint, which is difficult to see when looking at intact stamps, can be seen by the fact that when a stamp is removed, only the ornamental underprint remains on the base, while the year, corner squares and guilloche patterns come off with the stamp sheet. By carefully erasing the latter, this brown overprint can then be removed. Since the underprint fills the entire stamp space except for the center circle, its ornaments coincide with the guilloche pattern and the corner squares. Therefore, only the year of the brown overprint is conspicuously visible; everything else is only noticed upon careful inspection.

Now these stamps were also sent to Prague for the (fifth and final) assessment (21 June 1868). The report of 19 July raised concerns about the removability when using absolute alcohol and about the easy solubility of the adhesive used with saliva.

It was not until 9 December 1868 that the printing company commented on this and explained that it had addressed this concern by using a resin ink instead of an oil ink to print the back of the stamps and by

The choice of a better type of glue was also taken into account. It is also suggested that the financial consultant Dr. *Nejedly* had written a letter requesting a statement on the use of ultramarine ink for the underprint, but that this letter had arrived too late.

As soon as the Prague report mentioned above was published, the Ministry of Finance urged the State Printing Office on July 26, 1868 to carry out all the necessary preparatory work, pointing out that the new stamps should be introduced using the decal process by January 1, 1869 at the latest. The Ministry was asked to submit drawings and a report on the dimensions of the stamps, as well as whether the stamps could be printed in letterpress (instead of copperplate) without compromising their artistic execution. The following guidelines were outlined with regard to the graphic design: "The upper and lower prints do not overlap in the drawing, but complement each other to form an overall image. The words Imperial Royal Stamps are to be woven into the decorations on the top side in a way that is difficult to imitate, using the smallest possible letters, while on the bottom side (the underprint) the value of the respective stamp type is to be repeated several times in thin letters, the latter because previous tests have shown that larger dots and thicker lines on the bottom side do not always transfer all of their color to the document paper. Only two, at most three different sizes are to be used for the stamps, the largest of which would be approximately the width of the current 1 fl stamp. The length of the stamps should, however, be increased at the top by the space for the year and at the bottom by another line of text. On the top side, the print is to be made with the requested ultramarine color, with the sole exception of the value, which can be produced with ordinary black printing ink.

Likewise, the greatest possible number of stamps compatible with mass production must be prepared."

These extremely detailed programmatic instructions characterize the new position of the Ministry of Finance on the production of stamps, which from now on will always be adhered to. Any important question was reserved for decision and the Court and State Printing Office was left only to make suggestions and carry out the instructions received.

Much of this program was just a recapitulation of principles that had already been established earlier. For example, the reduction of the numerous stamp formats to a small number, the use of cheaper letterpress printing, the mutual complementation of the upper and lower prints and the repeated repetition of the value legend using words. The extension of the stamp format had also been suggested by various designers. What was new, however, was the purpose of the upper and lower extensions: to enable the year of issue to be clearly displayed and to allow *two* lines of text to be written over it.

The previously mentioned

The new introduction of a very wide (Goliath) perforation, mentioned above, was probably considered because it was believed that such a perforation would make it easier to separate the stamps from the sheet and thus significantly reduce the need to handle the stamps a lot with your fingers - which is quite inconvenient for transfer stamps. At a meeting of the commission appointed to examine *Fichtner's* stamps (which only took place in April 1889), it was expressly stated that it was desirable that the individual stamps should be easier to separate from the sheet, and it was said that it was believed that this wish could be achieved by enlarging the holes bordering the individual stamps. This comment by the commission may have been beneficial to the introduction of the Goliath perforation, which was noticeable from August 1889 onwards.

An important innovation was the addition of the legend: Imperial Royal Stamps because of its assigned position on the top of the stamp. This made it possible for both subsequent works to arrange this legend and to produce it in such a special way that it was suitable for the fulfilment of a special task to be mentioned below.

This was related to news that had been received at the time about similar reform attempts in North America. The reference by the Vienna Polytechnic Institute to the (known through philatelic channels) The Court and State Printing Office had already received several suggestions for experimental stamps based on the transfer principle, particularly in relation to the quality and impregnation of the stamp paper and the consideration of creating an attractive appearance. However, as this did not succeed in achieving the model, the State Printing Office Director was understandably keen to find out more from the United States. As can be seen from correspondence still in the printing office's files, he used a personal acquaintance with the Austrian Consul General *Karl F. Loosey* in New York to obtain information about these experimental stamps. Through the mediation of the aforementioned, the State Printing Office received from the New York *American Bank Note Company* a collection of postage stamps, such as the company supplied to the individual United States, as well as samples of projected revenue stamps. *Loosey* accompanied this with the announcement (2 June 1888) that the Treasury had received 110 (in the files this became 120) different proposals for new postal and tax stamps, of which four were shortlisted as the best. He said it was likely that a system would be accepted that consisted of a combination of fixed and easily soluble printing inks. The rectangular stamps would have an image in the middle that was printed with the easily soluble inks. The official "cancellation" would be done by running a wet finger over the stuck-on stamp and thus the aforementioned

The stamp image is erased. The part printed with solid ink remains. Conversely, one could also print only the decorations over which the writing or overstriking should be with the soluble ink. If one tries to remove the writing or the cancellation stamp, the sensitive print becomes blurred. There is no mention of the decalcomania process here. In a later letter dated November 18, 1868, *Loosey* announced that the Treasury Department had recently adopted a system for stamps which was materially different from that of the *American Bank Note Company*. He promised to send him the samples promised to him by the inventor. However, the State Printing Office never received any. It seems that the decalcomania system was one of the four projects selected, but that it was not implemented, and that they were satisfied with the idea, mentioned only in passing by *Loosey*, of engraving the stamps with great artistic effort to make them more difficult to copy.

Although *Beck* did not achieve his original aim of obtaining information about decal stamps, he did take up the idea of printing with fixed and soluble colors. Experiments were carried out with litmus and ultramarine, which could easily be erased by brushing over the print with a mixture of spirit and tartaric acid.

Beck therefore applied (July 11, 1868) for such a second print to be placed on the top of the projected stamps. When the application was dealt with by the aforementioned programmatic decree of July 26, 1868, Z.23474, the application was interpreted to mean that in future the stamps would have to be cancelled using a brush and an acid mixture, which was described as impracticable.

However, as far as the printing on the stamp is concerned, it is sensitive to attempts to erase it by overwriting or obliterating it, and as early as 1865 ultramarine paint had been considered for this purpose, as it also gave way to etching agents in the form of oil paint.

When the Court and State Printing Office began to execute the orders it had received, it became apparent that if the stamp plate was to remain in black print on the top and some of the print on the glue side was to be visible through the transparent stamp paper, there was no other suitable space left for the arranged legend (Imperial. Royal stamps) on the top than to place it in a frame around the entire stamp image.

This frame also had to be printed in ultramarine blue because there was nothing else to be attached to the top except the frame and the black main image.

28 KAPITEL

THE PROJECTED EMISSION 1869

A. THE PRINTING PLATES

After receiving the programmatic directive, the Court and State Printing Office set about preparing the necessary printing plates with all its might, in view of the relatively imminent introduction date of the new stamps envisaged by the Ministry of Finance. The following diary-like entry has been preserved in the printing office's files: 1) July 27, 1868. Consultation with Professor *Jacoby* regarding the engraving of a bust of *His Majesty* and general cooperation in the whole matter.

2) July 29, 1868. Request to the Office of the Chief Chamberlain to arrange for *His Majesty* to attend a meeting with *Angerer* so that a sharp profile could be taken for further use by *Jacoby*.

3) July 30, 1868. *His Majesty* was photographed today in *Angerer's* studio (Johannesgasse) in the presence of *Jacoby*.

4) The designs of the ornaments for two different formats were assigned to J. *Laufberger* on the basis of the ministerial decree and further information from Factor *Pecher*. He will receive the two formats tomorrow (31 July) with the request to submit them as soon as possible. A. 19 on 12 \ddot{y} ; B. 16 on 12 \ddot{y} (corrected to 10 \ddot{y}).

[Note: the unusual symbol \ddot{y} means *Linie*, 12 of which make a *Zoll*; 12 *Zoll* make a *Fuss*. Ed]

5) July 31, 1868. Based on this format, the Schöglmühler factory was asked for what price it could produce paper according to fabric patterns dimensions 19-24½ and 16½-21.

6) Since type printing is to be used to produce the new stamps, the purchase of a second two-color machine is necessary, so ask *König und Bauer* whether he has one in stock and when he will be able to deliver it.

A note on an enclosed piece of paper, dated 30 July 1868 by

A. *Pecher* wrote:

Stamp marks.

To the *guilder* categories

19 \ddot{y} long; 12 \ddot{y}

wide, paper size for 200 pieces 24½-19", price 7 fl

13 kr. to the *kreuzer*

categories 16 \ddot{y} long; 12 (corrected

10 \ddot{y}) wide, paper size for 200 pieces 21 x 16½", price 5 fl 85 kr.

The fact that, as the quotation of 200 copies shows, they no longer wanted to use half sheets but whole sheets, was obviously related to the new (high-speed) printing press that was to be purchased.

From a report submitted to the Ministry of Finance on 4 April 1869 by the Court and State Printing Office, and in particular from a historical account of the attempts to produce irremovable stamps, it can be seen that the printing office was not even aware of the choice of the emperor's portrait for the stamp design, and that on 23 January 1868 it had received a direct suggestion from the Ministry of Finance that artificially designed heads were the most reliable way to protect the stamp images from imitations. Rather, it merely referred to the analogous case of the postage stamps issued in 1867.

According to this historical account, the original image was reduced to the appropriate format using photographs and the image was given to Professor *Jacoby* with the task of engrave it in copper with the utmost skill. *Louis Jacoby*, professor of copper engraving at the Academy of Fine Arts, completed the engraving on September 10, 1868. He also made the engraving for the two oval frames of this portrait (after *J. Laufberger's* drawings). The printing blocks for the square outer frame of the top and for the back of the stamp had been completed in the state printing works itself. The next step was to make galvanic copies and put together entire plates ("*clichés*") for letterpress printing, which were taken from the galvanic plates using stereotypes. It turned out that *Jacoby's engraving*, which produced excellent impressions in copperplate printing, produced poor images when it was reversed and used for book printing, which "did not meet the requirements of taste". *Jacoby* had to retouch the plates several times before he finally managed to produce "a reasonably satisfactory image". *Jacoby* received 300 fl for the engraving of the image and 100 fl for the framing and retouching. As the impressions of these plates show, the letterpress printing of the head was still quite unsatisfactory even after the improvements, while the copperplate prints are among the most successful portraits of the emperor.

The emperor's head is (heraldically) turned to the left and decorated with a laurel wreath (Imperator laureatus). It is the same size for both the larger guilder format and the smaller kreuzer format. The high oval frame is wider and richer in the former format than in the latter. In essence, however, the same ornamental ideas are repeated in both cases. An acanthus leaf protrudes far out at the top. The oval frame is also interrupted in the right and left middle by smaller leaf ornaments of this type. At the bottom, a rectangular panel [cartouche] decorated with analogous leaf ornaments adjoins the frame, which

the value legend had to be included. The head, then the frame surrounding it and the attached legend field were on one and the same printing plate and were therefore printed with the same color. However, from the preparatory stages, there are not only special impressions of the first engraved head in the court and state printing works - which is of course a given - but also those of the two frames *without* a head image. *Jacoby* must therefore have engraved these frames on pure plates and the connection of these -, with the engraving of the head must have been made later by soldering together galvanic plates.

On another plate was the design intended for the ultramarine blue frame of the top of the stamp. It was a stripe (one line wide for the Gulden category, slightly narrower for the Kreuzer category) that took up the outer edge of the stamp image. In the four corners, the stripes merged into a corner ornament. In these stripes, the legend (dark on light) at the top and bottom was the words KK Oest. Stämpel-Marke and on the two long sides the words Kaiser. Königl. oesterr. Stämpel-Marke. The frame legend for the Kreuzer categories only differed in that at the top and bottom there were only the words Stämpel-Marke and on the right-hand long side "oesterr." appeared in "öst.", while on the left long side "Kais. Königl." appeared abbreviated to "KK".

A third plate was intended for the ultramarine blue print, which was to be applied to the glue side. This blue print was to fit exactly into the space enclosed by the blue border frame, but in turn left space for the portrait, including the frame and attached cartouche. According to the original plan for the guilder category, the design of this underprint contained four squares with sides measuring 6 millimeters, one of which was placed in each of the four corners. The two lower squares were connected by a strip with the year 1869 in digits one line high. The rest of the underprint was filled with ornamented border strips and, within these, a rhombic design. In each of the four squares, a circular ring was drawn containing the value legend in letters ("One guilder", twice, thus eight times in all four squares). Within each circular ring, the value number was written in light letters.

The underprint of the Kreuzer category was planned to be simpler. The four corner squares were omitted because the letters in them would have been almost microscopically small if they had been designed in the same way. The year was to be visible in a smaller rectangular panel placed below the cartouche for the value legend. In addition, the background filled with arabesques was only to be raised by cut-out stripes running parallel to the edges. The stripe that ran next to the lower edge of the stamp was apparently intended to accommodate a legend.

These dispositions can be clearly seen from a representation of the stamp images in woodcut (black and white print) without value legends. Of these impressions, those for guilder amounts and calendars exist with and without a head portrait, while those for kreuzer amounts only have a head portrait. The heads were not newly cut in wood, but - as the occurrence of impressions without a head portrait attests - appropriately cut parts of the stereotype casts were embedded in the wood blocks or two letterpress prints were applied one after the other. According to an occasional comment in a file from 1876 ("First test engraving, *Teplar*, 15 fl"), this woodcut could be attributed to the one mentioned above. The price would be incredibly cheap for the rather good work, however. These woodcuts were of course only intended to illustrate how the stamps would look with the planned graphic design. These blocks could not be used for actual stamp printing because the design for the top and bottom were combined. Therefore, separate plates had to be produced.



Illustration of the planned emission in 1869

For the guilder categories, the three separate printing plates required for precision printing, with the 1 guilder legend, were actually produced in the manner shown, as existing impressions attest to this. For the kreuzer category, however, it seems that the original design of the project was never implemented, or all test prints were destroyed: the test prints that have become known for this category have a different (later) version of the blue frame on the top and the underprint.

B. THE BRAND PAPER

The choice of a suitable branded paper, which was extremely important for the transfer process to be used, encountered difficulties. The Schlöglmühler Arraialpapierfabrik offered tissue paper 19 x 24½ inches at 6 fl 65 kr. and 16½ x 21 inches at 5 fl per ream. However, their samples were of poorer quality than the samples sent out and had knots and impurities which hindered the intended use. New, better samples were therefore requested.

The sheet dimensions were determined more precisely (21½ x 28 inches [later 21 x 24½ inches] for the guilder and 18 x 24 inches [later 18 x 21½ inches] for the kreuzer). Since the printing was to take place in double sheets, the paper was to be produced in rolls two sheets wide and 250 to 300 feet long. The glue layer was to be applied directly to the roll paper and only then cut and satinized. The gluing, which was apparently kept a secret of the printing works, was to be carried out in the factory premises, but by organs of the court and state printing works. It was carried out in two reprints.

First, the paper was given a thin coat of gum solution (4 pounds of gum arabic, 1 pound of sugar, 18 pounds of water). Once this coat had dried, a second coat of glue solution (1 pound of glue to 4 pounds of water) was applied. In a document dated December 30, 1868, the latter recipe appears without mentioning any additives; another document dated April 1, 1869 already mentions the addition of glycerine, which was supposed to make the paper supple and remedy the main defect of the test stamps of the Court and State Printing Office, the brittleness and fragility of the paper. The documents also mention that special devices had to be made for gluing the paper in rolls.

No further details are mentioned. Only the purchase of six pairs of reels is evident from the records. Since a second sample of tissue paper sent in by the Imperial Paper Factory (on October 7, 1868) was satisfactory, 30 reams for guilder denominations and 150 reams for kreuzer denominations were ordered (November 11, 1868). The paper was to be delivered uncut in rolls, the length of which the factory could determine according to its facilities. The printing works also asked the paper factory whether, given the paper's thinness, it would still be possible to produce it with the prescribed watermark using the roller previously used for this purpose without creating brittle spots.

Should it be necessary to dispense with the watermark altogether, this should be communicated to the State Debt Directorate, which would be responsible for monitoring the production and acceptance of the stamped paper.

Negotiations about this arose between the Imperial and Royal Finance Ministry and the Joint Finance Ministry, to which the State Debt Directorate had been (temporarily) subordinate since the Compromise with Hungary. The latter directorate had difficulties. Its prominent supervisory commissioners also took a pompous stance against the bookbinders from the State Printing Office who had been sent to Schlöglmühle to carry out the gluing, claiming vague fears. The result was that the Imperial and Royal Finance Ministry refrained from applying the watermark and then from monitoring the production of the tissue paper altogether, since it now appeared to be a product that could be freely sold to anyone. However, the intervention of the secret depot (for the safekeeping, processing and accounting of the paper) remained in place for the time being.

C. THE TEST PRINTS

1. ON SCHLÖGLMÜHLER PAPER

Until then, the completion of the stamps was still planned for January 1, 1869. However, since the production of the first paper stocks and their gluing were continually delayed and did not begin until after December 9, the aforementioned date was tacitly dropped.

On December 14, the paper factory had finished 32 reams of the larger and 136 reams of the narrower paper. The bookbinders began gluing it under *Pecher's* direction. On January 5, 1869, the State Printing Office urged the production of the "newly glued"

speed

submission

Stamp paper by telegraph. At this point, attempts to produce stamps on the new paper in the manner outlined with the printing plates that had been completed in the meantime seem to have begun. However, problems also seem to have become apparent immediately. This is indicated by the telegraphic order of January 7th to apply *thinner glue* to 30 sheets as a test; then the order to send in 5 books of "well-cylindered" unsized paper on January 8th (which was to be glued in the institute itself - perhaps with the addition of glycerine); as well as the simultaneous suspension of further gluing work; finally, the recall of the three bookbinders' assistants who had been sent on January 11th, 1869. According to the test prints that have been preserved, only stamps of 1 fl. seem to have been printed on the "newly glued" Schlöglmühler tissue paper. They are designed exactly as described above, i.e. with a black header, frame and value legend, blue underprint and blue border. The latter has blue letters on a white background and appears even less successful than the other parts of the print. It seems that the poor graphic appearance of these prints was mainly attributed to the overly fine underprint ornaments (the *Laufberger* design). There are also test prints of the 1 fl stamp that were executed in the same way, in which only the four corners of the underprint remained unchanged. Instead of the diamond background and the side strips, light star-shaped ornaments are used, and instead of the edge strips, a meander design is used. The year 1869 stands out better against the now very dark ornaments of the cross strip. The ultramarine border of this and the previously described test prints is also recognizable by the fact that it has no recesses for the acanthus leaves of the head frame that protrude on both sides, but extends over these projections.

The printing of these stamps must be placed in the period from January 6th to February 4th, 1869. A report *from Beck* to the Ministry of Finance dates from the latter day and states the following: "Although the (from the Schlögl-

mill) were suitable for the purpose, the large-scale execution showed such serious defects due to the low transparency of the paper and the unfavourable choice of material that the product resulting from this production had to be abandoned for the intended purpose. Unfortunately, the new samples submitted by the Aerial paper factory since then have not yet produced a favourable result, because these too lacked transparency, the main requirement for the new stamp principle, and the preparation of the paper does not appear to be suitable for enabling the adhesive to be applied evenly, which means that, quite apart from the unevenness of the colour tone to be applied during printing, the greater or lesser transparency of the paper in individual places would have an even more unfavourable influence on the stamp production."

2. ON RÖDER'S PAPER

Instead of the now definitely abandoned tissue paper from Schlöglmühle, the Court and State Printing Office applied to purchase 170 reams of white vellum writing paper large median "Fein Pellure" 18 x 23 inches at 9 fl from the kk priv. Machine paper factory *Gustav Roeder et Comp.* in Marschendorf an der Aupa, Bohemia. They recognized the paper purchased from this company as a sample as a specialty, which should be given far greater preference than all similar products from other private factories, since the paper met the requirements due to its excellent transparency, the evenness of the material and the very careful satin finish.

Even before the application was approved, the printing works obtained three reams of this paper, bypassing the secret paper depot, in order to be able to begin the new tests on February 15, 1869. This was announced to the head of the supervisory service. At the same time, instructions were given to collect all previous printed or unprinted test papers and hand them over to the aforementioned head, mentioning that "the previous test prints either do not contain at all or at least contain very incompletely the image and color tone that should be given to them *according to the latest regulations* ." This passage explains two things: firstly, the fact that only an extremely small number of test prints (of the 1 fl denomination) on Schlöglmühler paper remain, and secondly, that at this time there were already new instructions, probably issued very quickly, regarding the stamp image.

These instructions mainly concerned the ultramarine blue frame of both drawings. This frame is now no longer printed with blue letters on a white background, but with white-spaced letters on a blue background. This makes the frame character more obvious and closes

The image of the brand is more pleasing. The ornament in the four corners of the frame is now designed differently. Recesses are provided for the leaf projections on both long sides. The orthography of the (otherwise unchanged)

Legends in the four bars of the frame from "Stämpel" to "Stempel", the latter spelling having already been in use in the Josephinian era and first appearing in the field of stamps in the margin in *Pecher's* fourth attempt (from March 1868). Here and in the Ministry of Finance's Ordinance Gazette there is evidence of when official use adopted this change in spelling. It is the same time in which the older spelling Gränze, Ärnste, Ältern, Änte, stäts, ächt and the like also came into use. Since this design of the margin begins with the use of *Röder* paper, it can be called *Rödersche* Leiste (frame) for short, whereas the first form of the same (dark writing on a light background) would be called Schlöglmühler Leiste (frame).

Numerous trial prints of various kinds were provided with this *Röder* frame - in some cases this frame even appears in red - and a considerable number of them can be found in collectors' hands. With one exception, which concerns a Kreuzer value (25 kr), all surviving trial prints belong to the 1 fl value.

It appears that large quantities were made and distributed to several people for testing, so that some could be left over.

The fact that they were preserved may be due to the fact that collectors' interest was already beginning to grow. The well-known collector and editor of the first stamp catalogue, *IB Moens* in Brussels, who even published his own stamp newspaper under the title "*Le timbre fiscal*", published an article (presumably written by Dr. *Magnus* [a pseudonym for *Legrاند*]) in the March issue of this newspaper for 1875 about the Austrian stamp issue of 1875, in which it is mentioned that stamp essays from the Vienna Court and State Printing Office have been circulating for some time and are very similar to the new series of stamps. It is expressly noted that some of them have a colored print on the underside of the stamps, which consist of a "*feuillelet pelure transparent*". What is interesting for the application of the proof printing process is the further remark that these stamps are reminiscent of the "*timbres de contrôle de Prusse et les essais dits sur baudruche*".

Another element of the original project that was now subject to changes was the stamp image on the top. But here the changes were not in the design, but in the printing ink. There are test stamps with Röder strips that have a particularly rich black. Others are printed with grey-black, red, orange-yellow or brown ink. Later, a grey and a brown ink were found to be the best for the stamp image and were considered for the intended stamp issue.

The last and most important element of the transfer stamps, the underprint to be applied to the glue layer, underwent the most radical changes during the tests carried out from February 15, 1869. With the guilder values, it soon became apparent that the fine value legends in the circular rings of the four corner squares were almost only legible to the naked eye from the front. The year also did not stand out enough against its surroundings to be properly noticeable. This became all the more apparent as at the same time a plan was made to retain the *blue* underprint previously intended for all stamps only for the kreuzer values, whereas for the guilder values, after experiments with orange-yellow, pale yellow and grey colors, a cherry red was finally chosen. This choice of a color difference between the guilder and kreuzer stamps, which cannot be dated more precisely, is a very important point. It was the first step on a new path that has not been abandoned since: the use of color differences to better distinguish between brand categories. Furthermore, the fine legends in the circular rings were now replaced by simple ornaments.

At the same time, the two lower corner squares were removed, but the year 1869 (divided into two halves, 18 and 69) was moved to the middle circles of the two upper squares, thus complying with the programmatic directive of July 1868 regarding the position of the year. The lower part of the stamp, the writing field, received other ornaments, in which a horizontal rectangular space was left out below the cartouche belonging to the upper print and containing the abbreviated value legend (1 fl). In this, the value designation was now also printed from behind - but independently of the described underprint with a special plate - partly in words (1 guilder). For this, a black color was initially chosen, later a red color. Both are referred to in the files as fuchsia. This redesign of the underprint took place *later* than the creation of the Röder bar; because this even appears on test prints together with the first original design of the underprint of the guilder values.

Before we discuss the redesign of the underprint of the *Kreuzer stamps*, we will recapitulate all the types of 1 fl test prints observed so far. They fall into three classes:

1. those on white, thick, non-transparent paper, which of course is only printed on the top side;
2. those on transparent paper, which is also only printed on the top side; and
3. those on transparent paper with top printing and back (bottom) printing.

In all three types, the edge band, if it occurs at all, is the new Röder band, which means that these prints were first made after the use of Schlöglmühler tissue paper had been abandoned. The edges are always cut.

1. Three test prints are known on thick, white paper:

a) Blue border; header and frame brownish; no background. b) Blue border; header and frame black-grey; inverse printed background in grey. c) No border; header and frame pink; inverse printed background in brown.

2. Two experiments are known on transparent paper without negative pressure.

Both have the blue border. On one, the header and frame are printed in reddish brown, on the other in vermilion.

3. Four experiments are known on transparent paper with negative pressure:

a) Border orange; header and frame black; underprint blue. b) Border reddish brown; header and frame black; underprint red. c) Border blue; header and frame red; underprint appears grey when viewed through, but is printed in blue. d) Border blue; header and frame very richly black; underprint cherry red.

A test print of the latter type was found in a collection, with the underprint apparently badly damaged as a result of attempts to remove it, on the top of which, below the head image, the year 1872 appears printed in black ink (in a very irregular manner, therefore probably done manually). The author and purpose of this overprint remain unknown. It should also be noted that the tests mentioned under 3 a) to d) show the older form of the underprint of the 1 fl stamps.

During the printing tests carried out after February 15, 1869, not only the underprint of the guilder stamps, but also that of the kreuzer stamps was completely redesigned. It must be noted, however, that no test stamps of the kreuzer category in the originally planned design are known and that it also seems quite uncertain whether such stamps were ever produced. The first design is only known from *Teplar's* woodcuts. It probably turned out that in the kreuzer category (as in the guilder category) the planned design of the underprint was much too fine and that it could not be easily executed in letterpress on the resinated, gummed and glued paper. The new underprint of the kreuzer category is framed by a strip with a meander ornament. Below this strip, in the two upper corners, are the numbers 18 and 69. Below, just above the strip, there is space for the fuchsia print. Above this light space there is a second strip and above it, as far as there is space, a primitive dot ornament.

Of the trial prints of the Kreuzer values, as mentioned above, only one has survived. It is identified as such by the cut edges. It contains a complete stamp image and a fragment of a second one. Both are for the value of 25 kr. The background of the complete stamp image is reddish; the fragments

As far as can be judged, it appears to be brown, which does not seem very possible from the point of view of printing.

Judging from observations from earlier and later times, such trial prints were probably made either as individual pieces or (if larger blocks were desired) with a number of individual printing blocks that were combined *ad hoc* into a form. The production of larger printing plates with a whole number of appoints was only started when it was believed that a new issue could be expected, in which case the impressions would no longer be called trial prints but test prints. In order to avoid the production of larger new plates, plates from the current issue were used for some trial prints.

3. THE TEST MARKS

In addition to the two types of test stamps of the 1 fl value on Schlöglmühler tissue paper and the test prints of this value and the 25 kr value mentioned above, a number of completely adjusted stamps, also with perforations, from this planned 1869 issue have been preserved. These are stamps of the values of 1 fl and 3 kr, then 1 kr announcement and 6 kr calendar. With the exception of the announcement stamps, which only appear in *one* version, these stamps can be found with various deviations in appearance. Before attempting to determine whether these variants were produced simultaneously or one after the other, they should first be listed:

1. *A guilder stamp.* The only things that are common are the general stamp image (with the third design of the underprint) and the blue Röder bar. Everything else varies. The print of the head portrait, including the frame and the value cartouche, is a brown that is sometimes redder and sometimes duller and has at least three different shades. The reverse underprint is sometimes lemon yellow, sometimes orange-red, sometimes cherry red, the latter colour looking pink on lighter pieces. The value printed on the reverse below the value cartouche is sometimes black, sometimes red fuchsia. Black fuchsia and orange-red background have so far only been found together. The perforation is sometimes the normal (12 and 12½), but sometimes the Goliath perforation occurs. The latter is the rule. The normal perforation is only found on one type, which has a light pink underprint, a bright blue Röder strip and a reddish-brown image print. It seems that other papers than *Röder* were used in the course of the experiments. The use of *light* paper is expressly stated for the stamps with lemon yellow underprint. The denomination seems to have been 25, judging by the largest sheet that has survived. It is worth emphasizing

Also, some stamps, when viewed from the back, are so transparent that the emperor's head is completely visible. Other stamps lack this transparency and are only slightly translucent at this point.

2. *Three Kreuzer stamps.* All have the normal perforation and red fuchsia print. The upper (image) print is sometimes reddish brown, sometimes black-brown, sometimes black-grey. The underprint is ultramarine blue (in all three colours of the image print); but also reddish yellow in the black-grey and black-brown.

3. *One Kreuzer announcement stamps.* No variants have been found among the few existing pieces. Their design is - apart from the legends in the value cartouche and the fuchsia print - completely the same as that of the Kreuzer stamps. The image print is dull brown, the Röder strip green, the underprint the same red-yellow that can be found on the aforementioned 3 kr stamps.

4. *Six Kreuzer calendar stamp.* The print of the header is sometimes lighter, sometimes darker brown, the rest of the print green.

It seems that, just as was originally the case with the guilder values, the intention was that the ultramarine blue of the border should complement the blue underprint to create a single-coloured overall image; and just as the same was maintained by the Ministry of Finance until the end with the kreuzer values despite the printers' different proposals - with regard to the announcement stamp, the plan was to print not only the border but also the background in ultramarine green, so that both would present an overall green image. The colour of the green calendar stamp was probably also ultramarine, since at that time and even later on, the use of the two ultramarine colours was seen as the most reliable way of protecting the stamp gradient.

Regarding the chronology of the above-mentioned sample stamps, the following Circumstances of importance:

Firstly, that the Court and State Printing Office, in a report dated 1 April 1869, sent the Ministry of Finance samples of the new stamps, including a historical account of the development of the invention, then a description of the procedures for production and finally a technical description of the

trademarks, declaring the problem solved and introducing these trademarks, although the negotiations on *Fichtner's* project were still pending;

Secondly, that the Ministry of Finance for its part ordered that the Printing works had to submit samples of their newly produced stamps to the commission meeting on April 7, 1869 to examine *Fichtner's* project;

Thirdly, that a special commission meeting was held on 14 April, at which the blue stamps performed better than the red ones in terms of the ability to erase the underprint ("since in the former case only the value printed on the back in red color"), as

However, the defects highlighted were the rolling of the stamp sheets and their fragility when crumpled;

Finally , *fourthly*, the printers produced new samples, which were examined on June 16, 1869, and were approved by the commission except for the fact that every fold in the stamp paper caused a break.

The report of the Court and State Printing Office dated April 1, 1869 and its appendices reveal some remarkable details. For example, it says that the paper must be made with the greatest care from the best rags so that it is as thin and transparent as possible on the one hand, but as strong and durable on the other. The impregnation for the purpose of pellucidity is done with a mixture of *balsam copaivae* and rosin. This mixture is applied with the printing press like a normal tone print. In order to weaken the effect of the head portrait as little as possible, the printing form is set up in such a way that the space intended for this image, including the oval frame, remains free from impregnation with the oily substance. This recess of an oval field was only achieved, as will be inserted here, in the course of the test work with the 1 fl stamps; because there are also some that still show impregnation extending over the entire sheet. The effect of the recess is particularly evident in stamps with a light yellow background, even though they are printed on weaker paper. The report goes on to say that after the impregnation applied to the top has dried, the ultramarine blue frame and the stamp image are printed in brown or grey. With this triple print, the production of the top is completed and the treatment of the underside is then carried out. A mixture of gum and sugar is spread on, and after this has dried, a mixture of glue and glycerine. After it has dried completely, the underprint is printed in red or blue on the glue layer using a printing press. Finally, using the last print (in a recessed white field on the back), the stamp amount is printed in letters "black with fuchsin". This means that "such stamps do not resist removal with pure alcohol, but show unmistakable traces of such an attempt".

This was intended to indicate the alcohol solubility of the aniline dyes. The information that the fuchsin print is black can also be found in the accompanying technical description. The stamps submitted to the Ministry of Finance on April 1st still had the black print. In contrast, the stamps submitted to the expert commission on April 7th must have already had the red fuchsin print, as this is expressly mentioned in the minutes of April 14th. This was the first time that aniline dyes appeared in Austrian stamping, the production of which was started with the founding of the Höchster Farbwerke in 1863. Fuchsin in particular was the subject of eager experiments at the time.

which concluded in 1871 with the invention of its preparation by the nitrobenzene process (Höchst).

Regarding the color of the stamp image on the top, the technical description mentioned above mentions brown for the Gulden stamps and gray for the Kreuzer stamps. In the ministerial file completed on July 5, 1869, there is a *second* draft of a technical description in which the printing of the head image on the Kreuzer stamps is also described as brown. Since the last design of the surviving test stamps actually had this color, it can be concluded that this change occurred in the last samples produced for the commission meeting on June 16.

It is a curious fact that in these descriptions, where the year is mentioned, it is stated that the circular ring contains the value in letters. In the report of the State Printing Office, next to this information, there are the pencilled notes "is wrong" and "is again wrong". The latter were probably only added after the expedition to the Ministry of Finance. At least they guarantee that the above information was an oversight and that there was no intermediate type of test stamp that already had the divided year 18 and 69, but still had text and no ornaments in the circular rings.

From the above-mentioned reports, the following interesting moments should be highlighted.

With regard to the Kreuzer categories, the Court and State Printing Office strongly advocated that the blue underprint drawn in the short way be replaced by a pale orange print. It emphasized that, despite numerous attempts, it had not been possible to achieve complete agreement in the color tone of the blue frame on the top and the underprint showing through the paper. It attributed this to the effect of the glue layer.

However, different shades of one and the same color would look unattractive in the overall picture and would invite criticism. The printing company also presented samples that already had the orange-yellow underprint.

Regarding the underprint color of the guilder values, a slip of paper made by *Pecher* on March 1, 1869, which is in the files of the printing works, shows that at that time it was still planned to use dark violet, which would turn into fiery crimson when the paper of the document was softened with alcohol. Stamps with this color have not survived. Regarding the blue border on the top, *Pecher* notes that its color (ultramarine) is very sensitive to acids and that if an attempt is made to remove the ink from an overwritten stamp with acids, this border would disappear at the same time.

In the above-mentioned report it is also mentioned that the complete apparatus for printing the new stamps has already been manufactured.

The printing plates for all stamp categories were already ready. The delay that had occurred and which caused the issue date of January 1, 1869, originally planned, to be tacitly dropped, was justified by the Court and State Printing Office by pointing out that the production of the titles for the unified national debt, which had taken place in the meantime - as a result of which the management of the national debt was again placed under the auspices of the Imperial and Royal Ministry of Finance - had taken up all of the institution's resources for a long time.

The dimensions of the stamp images were specified in the drafted technical description (more precisely than in the older act of July 1868) as 21½ x 12 lines for the Gulden category and 18 x 10 lines for the Kreuzer category.

A very important aspect of the manufacturing process described by the Court and State Printing Office must be highlighted here, namely the two-fold application of adhesive layers to the stamped paper. This was a new idea, the far-reaching significance of which was perhaps not yet recognized at the time. It was based on the fact that gum arabic and glue are not soluble in the same way. Gum dissolves more quickly when wetted than glue.

If, therefore, a layer of rubber was first applied to the stamp sheet, a layer of glue spread over it and only then the underprint was applied to this, and if then, as regularly happens when removing (in Viennese "Abkletzeln") the stamps, the moistening was done from above, that is, from the stamp, then when an attempt was made to remove the stamp, the rubber layer gave way first and the glue layer, together with the print applied to it, had to remain on the backing paper.

As already mentioned, the Institute itself felt compelled to point out, in view of the graphic nature of the sample stamps submitted, that the production of an image that fully satisfied the requirements of the artistic sense had to be dispensed with, "because the production of the stamps by means of copperplate printing was impossible due to the double moistening of the paper and because of the printing on the reverse".

It also places a large part of the blame for the fact that the typographic image loses much of its effect on the transparency of the paper, which in turn, as a major requirement of the new brands, must be pushed as far as possible.

There is a logical error here. Copperplate printing was, however, inapplicable as long as the first step in stamp production was to apply double gluing to the paper, which was done in rolls for reasons that are not entirely clear (perhaps because people were worried that the paper, once impregnated [resined], would not absorb the glue well). Glued paper becomes sticky when moistened, which must be quite intensive for copperplate printing, and hinders the printing manipulations. Just as the court

and the State Printing Office, however, abandoned the prior gluing - and this was already the case at the time the report of April 1, 1869 was written - there was no longer any reason to continue to use letterpress for the first printing of the top of the stamp. The *double* moistening, which the printing office emphasized as possibly necessary, was aimed at the head image on the one hand and the blue frame on the other. Both could easily have been produced using copperplate printing: the head image, for its part, would have practically required it.

As the test stamps show, the lineaments in the letterpress turned out so uneven and inadequate that the unsatisfactory production of the portrait in and of itself had to raise concerns about these stamps.

The Ministry of Finance could not ignore this consideration either. It is a strange coincidence that in the same decree of July 23, 1869, Z.23247, which, on the basis of the work of the commission on *Fichtner's* proposals, finally declared that the use of his production method should be abandoned, the stamps prepared by the Court and State Printing Office (up to and including the production of the complete plate apparatus) and submitted for application as not subject to any further concerns were also ruled out. It stated: "However, even the new stamps produced by the Imperial and Royal Directorate still suffer from such defects, despite the very significant progress that has been made, that they cannot be put into use with complete confidence. These include in particular the easy brittleness of the same when accidentally bent, the tearing when separated, the difficulty in removing the underprint when wet, the easy removal when dry after repeated use, the curling up and discoloration of the mark and, finally, the defective execution of the upper and lower print, which presents few obstacles to imitation.

With regard to the negative pressure, it is noted that the choice of colors can only be a matter of expediency, and that therefore *only* "ultramarine blue or green should be used. In view of the results obtained so far, there is no doubt that the objections raised can still be eliminated."

With this invitation to further experimental work, this first major Action: the planned emission in 1869 had failed in the experimental stage.

4. CONCLUSION

a) *The Goliath perforation.* The 1 fl sample stamps, which were produced in 1869, provide chronological clues regarding the Goliath perforation. The preparation of "the greatest possible serration of the stamps" was assigned to the Court and State Printing Office in the Finance Ministry's decree of 26 July 1868 as

one of the program points of the intended new stamp issue was outlined. The stamps of this type, which *Pecher* produced (as the seventh attempt) before February 4, 1869 on Schlöglmühler paper, still have the usual perforation. In contrast, the 1 fl stamps with orange underprint and black fuchsia produced before April 1, 1869 already have 9½ perforation. As long as there was a prospect that this issue would come to fruition, the Goliath perforation was treated as a special feature exclusively intended for this purpose and was not used in current stamp production. However, when the planned issue failed in July 1869, the perforators were put into general use. This is why the Goliath perforation from August 1869 can be found, starting with the stamps of the legend issue and then also in the stamps printed for Hungary and the military border.

b) The authors of the stamp images. The files do not provide any clear information on the question of who made the first engraving of the plates for the underside of the stamps and subsequently produced the drawings for the *Röder* strip and the modified underside of the guilder and kreuzer values, carried out the engravings for these, and finally carried out the change to the year on the calendar stamps, which is still to be mentioned. In a later file (from 1876), in which the costs of the preparatory work for the 1875 issue were quantified in a rather summary manner, there are two mentions of this ("58 pieces of drawings by Würbl 79 fl."; "Engraving to *Prendler, Benedict, Jacoby* 817 fl"), which could be linked here.

Since *Benedict's* and *Jacoby's* engravings are well known from other sources, *Prendler* would have been the engraver who was responsible for the ornamental work for the planned issue in 1869.

c) Coupon stamp projects. Two incidents from the time of the negotiations mentioned above should be briefly mentioned here.

In January 1868, the Viennese fashion manufacturer *Karl Schipper* Jr. submitted a project to the Ministry of Finance to protect against the repeated use of stamps, but this project was rejected because it would have required too complicated handling by the contributors. The same idea later resurfaced in a different form and was even used in practice in cheque forms. Each stamp was to have an extension to the right, left and bottom. The names of the months were to be printed on the left, the numbers from 1 to 31 in two columns on the right, and the years 1868 to 1872 below the stamp, one below the other. Before sticking the stamp on, enough of these three extensions were to be cut away so that only the relevant part of the date of issue remained in the bottom line of each of the extensions (for example, "February" on the left, "17" on the right, and "1870" below). Another notable feature of *Schipper's* project was the suggestion to prevent falsification of the value

to give each brand category a different color. Brands similar in shape to the *Schippers* had already been proposed by *Johann Pachhammer* (Gumpendorf) in 1861.

The year of the stamps to be changed annually should be pre-printed, as well as 31 lines for the day of the month. The name of the month should be inserted in the appropriate line and the rest of the stamp cut away.

d) An attempt to exchange. The second incident mentioned above was the attempt by an unnamed person in the files to produce three trial stamps from the Court and State Printing Office, which bore the value of 1 fl, for exchange at the Vienna Central Stamp Collection Office in July 1869. As such prints of this type, as mentioned above, reached as far as Brussels, there were probably quite a few of them in private hands in Vienna, which had probably been left over from the repeated commission negotiations and expert opinions. As the Court and State Printing Office explained, this did not endanger the balance in any way, because the new stamps to be introduced would under no circumstances be produced in the trial form, which had come into the possession of third parties. The relevant act of the State Printing Office is particularly remarkable because it contains an expedited order with the following content: "The stamps with the image of Mary are to be stuck on the fair copy." Now, experimental stamps of 1 fl that would have an image of the Virgin Mary have remained completely unknown so far. Even the assumption that it should be called "brand image" does not lead to a solution, because it would not have made any sense to speak of stamps with a brand image. Moreover, the file states quite clearly

"Image of Mary".

Another piece of evidence for the distribution of the test and sample stamps from this stage of the State Printing Office's work is - similar to the above-mentioned note in the Brussels stamp newspaper - an article in issue 4 of *A. Moschkau*'s "Magazine for Germany's stamp collectors" from October 1871, in which several such stamps with the dates 1869 and 1870 were listed, some of which could be precisely identified with the stamps in question here. Closer research by the State Printing Office revealed that even then (in Rudolfsheim, Schönbrunnerstrasse 2) a certain *ST Friedmann* was collecting and selling postage and stamps from all countries and that the distribution of the test prints was primarily due to him.

CHAPTER XXIX

THE RETURN TO COPPER PRINTING OF BRAND TOP

The first consequence that the Court and State Printing Office drew from the unfavourable outcome of its issuing project was to abandon its intention of producing the new stamps exclusively in letterpress printing. It now considered producing the top of the stamp entirely in copperplate printing, which, as mentioned, no longer seemed technically impossible since the method of applying the glue before all other procedures and while the paper rolls were still uncut had been abandoned. During the final negotiations of the expert commission (apparently in anticipation of an unfavourable final result), work began on having a new engraving made for the top of the stamp. For the portrait of the emperor, *Jacoby's* engraving, which had been designed from the outset for copperplate printing, was available. The frame of the stamp, including the cartouche for the value legend and the border frame, were, however, only produced for letterpress printing. Now the engraver *Josef Benedict* was to engrave the frame, including the "vignette" for the value designation and the square border, on a galvanic copper plate taken from *Jacoby's* original engraving, so that the entire top of the stamp could now be printed at once. This of course prevented the defects of letterpress printing in the head image, but at the same time made it impossible to print in different colors and use ultramarine for the frame. According to an advertisement from the printing works on July 27, 1869, i.e. four days after the rejection of *Fichtner's* projects and the test stamps from the state printing works, these engravings were already finished and the engraver had already received a fee of 336 fl for the work, which was carried out in three sizes (gulden, kreuzer, calendar). *Benedict* stuck exactly to the original drawings for the decorations. Therefore, the colored legend now appears again on a white background in the square border, as in the Schlöglmühl bar.

Benedict made three engravings: a larger one for the guilder values, a smaller one for the kreuzer values and a different design - because it resembles the green stamps of the planned 1869 issue - for the calendar stamps. Proofs of excellent purity and sharpness in three brown, two blue and two blackish copper printing inks exist for the first two engravings.

These impressions also contain the emperor's portrait, because *Benedict* made his engravings on plates with galvanic copies of *Jacoby's* engraving.

From a later document (from 1872) it can be seen that the aforementioned amount of 336 fl was made up in such a way that *Benedict* claimed and received 50 fl for each of the three "edge decorations" (guilder values, kreuzer values, calendar), and that he then engraved the legends on 31 electroplated plates (for the 12 guilder values, 16 kreuzer values, 2 announcement stamps and the calendar stamp), for which he was paid 31 x 6 fl, that is 186 fl. The document just cited further shows that the electroplating work of producing entire plates (deep plates) was then started and was also carried out for the 12 guilder values (at a cost of 30 fl for each plate) and for one of the kreuzer values, namely the 5 kr stamps (at a cost of 40 fl). However, printing plates were only produced for the 5 kr value, namely 3 pieces, each costing 12 fl. This work then suffered a long interruption.

Using the copper printing plates produced for the 5 kr value, the Court and State Printing Office carried out several further tests in the autumn months of 1869. There are no detailed records of this. The first document that contains a reference to this can be found in the printing office's files and is a letter from *Nejedly* to Hofrat *Beck* dated October 16, 1869, in which he informs him that the "yesterday's stamps", after they had dried a little in the office overnight, had countless cracks in the glue layer when simply bent, as is usual when counting the sheets, and that they peeled off very easily, which is why he did not consider it appropriate to write a report on them now.

Related to this is a document from the Ministry of Finance, dated November 9, 1869, but not exhibited until November 10. This important document deals mainly with the necessity of a new issue, which is now described as urgent, and contains the provisions issued for this purpose.

It is only mentioned in passing that the copper plates for the "new stamps next door" for 5 kr have been completed, and a few stamps are glued to the document, which show what new experiments were involved. These stamps, which were completed somewhat before October 15, 1869, introduce the series of experimental stamps with copper printing on the top of the stamp. *Benedict*'s new engraving was used for this. Since this top printing remains the same for all experimental stamps, the underside of the stamp became the sole field of experimentation for drawings and colors.

The underprint on the samples in question is sometimes *blue*, sometimes *green*. In view of the hints given to the printer when the planned issue was rejected in 1869, these two colors should be described as ultramarine blue and green. The color tone of the preserved pieces is, however, a little too dull for this assumption.

This - if one considers the test prints and the sample stamps of the projected Emission 1869 for the seventh and eighth attempt,

The 5 kr stamps, which can be described as *Pecher's Ninth Attempt*, have been preserved in so many variants that this was the most varied of all attempts. Presumably, the extensive apparatus of people, space and facilities activated for the planned 1869 issue was still available for this purpose. All stamps have the Goliath perforation.

With regard to the copper printing on the top, the only difference is that the stamps with green underprint are printed in brown, while the stamps with blue underprint are printed in black.

As far as the innovations perceptible in these experimental stamps can be judged, a distinction should be made between *older* and *later* attempts - or more precisely: *multiple* older attempts and *one* later attempt - in chronological order.

The *older* experiments were probably simultaneous with each other. This is to some extent even to be understood in the most literal sense. A larger sheet that has been preserved (with the denomination 25) gives the surprising impression that the three upper and the two lower rows of stamps have *different* underprints. It therefore seems that here, as was mentioned above as the custom for experimental prints, the individual printing blocks of the underprint were combined *ad hoc* in forms, whereby individual plates with different designs could of course be put together. These combined underprint forms then only had the consequence that the underprint of the different designs had to have the same color.

Regarding the design of the underprint, *Pecher* pursued two ideas: partly he tried to compose it in a similar way to how *Fichtner* had done with one of his project stamps, from minimal *legends* covering the entire surface, but partly he went back to the idea of *natural self-printing*.

1. The legends used consist of the words "Five Kreuzer" repeated over and over again. One type *is set in minimal individual letters*; in two other types the legends are *etched*, one of which has normal antiqua capitals, the other slightly larger open (or double-lined, i.e. only indicating the outlines) letters of the same type. There are therefore three designs of the legend underprint. In an effort to make the underprint as large as possible, as the only sensitive component of the stamp print, *Pecher* surrounded the area filled with the legends (in which the space for the head and the value cartouche was left out, as on both test stamps of the planned 1869 issue) with a border made of fine lines, which was to be placed below the edge of the copper print. From this line edge of the underprint (as well as from the closer together or the further apart of the lines) it is easy to recognize whether it is etched or set. In the former case, the fine lines run horizontally at the upper and lower edges.

and vertically on the two side edges of the stamp, so that they run around the entire field in a square. For the edge of the set underprint, however, short lines were chosen, each of which is placed radially and always crosses the relevant part of the frame vertically. They are therefore horizontal on the two long sides, but vertical at the top and bottom. On the back of these stamps, apparently only *after* they were glued, the year 1870 was printed (inverse) in the lower part. The red-violet color, which is probably fuchsia, shows through well, so that the year is visible in legible form below the value cartouche in the writing field. There are both blue and green impressions of the underprint with the two small types of lettering (etched and set). The underprint with the larger open letters has only been found in blue and also has a different, much larger year.

2. The natural self-print, which is only available in blue, appears to have been made from a fairly coarsely veined piece of beech leaf. It contains the recess for the head and value cartouche, but fills the entire stamp space, so that it has no special line framing. Of the natural self-printed stamps, there are those with the smaller and the larger fuchsia year number.

The above-mentioned *later* attempt by *Pecher*, in which the experiences gained from the other test prints were evidently already utilized, had already abandoned the idea of adding fill legends and using green ink in the underprint, then adding a brown copper print. The copper print is black, the underprint blue. For the latter, a new natural print was made, which shows a beech leaf with finer veining. An important innovation compared to the attempts described as older is that the fuchsia print on the back is now divided into three parts. In the bottom left corner (as measured by the viewer) you can see the number 18 and in the right corner the number 70. Between them and a little higher, almost touching the value cartouche, is the legend 5 kr.

The two identical legends standing just above each other look a bit unsightly.

It should be noted here that stamps from *Pecher's* experiments mentioned above have also become known in philatelic circles. In the article from *Moens's* magazine cited above, stamps from the court and state printing office are listed with an underprint made up of text lines. It is mentioned that "*sur ces essais du 3 Kr on trouve fifteen Kreuzer*". Whether these two figures are not based on an oversight remains to be seen.

The design of *the*
The Ministry of Finance considered the transfer stamps sufficiently perfect to have already (in the aforementioned act of 9 November 1869) the real

The introduction of the same, albeit with the restriction to a single stamp category and with the further reservation that the ongoing experiments would be able to eliminate the remaining objections. The contradiction between this more favorable view and Nejedly's letter of October 16, 1869, which declined to report on it, may possibly be explained by the assumption that on October 15 he had older stamps (with legend underprint or coarsely veined natural self-printing) in front of him, while he later received stamps with the new leaf veining.

The act of November 9, 1869 states that the State Printing Office, since the plates for the 5 kr denomination had already been completed, had promised to produce the required quantity of this one stamp category by the end of 1869. However, because the production of the copper plates (for the transfer process) for the other categories would take another six to nine months and the introduction of new stamps was urgent "in order to make the excessive reuse of already used stamps as difficult as possible and as soon as possible," a mixed new issue was planned, in which the 5 kr denomination would be produced on a trial basis using the new transfer process, while the *existing* designs and plates would continue to be used for the other denominations. The only difference was that the two colors, ultramarine green and blue, would be used and the year 1870 would also be made visible. The Court and State Printing Office appears to have received instructions on this matter beforehand. On November 9, it had already presented a sheet of 100 stamps of 50 kr in the form of the 1866 Kreuzer issue, which were printed in ultramarine in such a way that the natural print was now green instead of brown and that the year 1870 was added to the previous value legend and both were printed in blue. With the decree of November 9, 1869, Z.37107, the printing works were instructed to immediately begin work on the first supply of the new issue and to announce its completion for the purpose of publication.

The year 1870 would also be included on the guilder stamps (but without a value legend). A proof of each stamp category was to be submitted for preliminary approval. This was already the reservation of the formal *imprimatur*, which was then always used.

The choice of the decal process for the 5 kr value was, as mentioned above, tied to the condition that the ongoing tests would succeed in eliminating the remaining problems, and a special announcement was expected about this. The report on this order was not submitted by the Court and State Printing Office until December 27, 1869. The interim period was filled with new work and tests, which also involved a new expert, Dr. *Eduard Schwarz*.

(Privatdozent of analytical chemistry and assistant to the university professor Dr.

Josef Redtenbacher) . The failure of the planned issue in 1869, for which the director of the Court and State Printing Office had campaigned with great enthusiasm, seems to have put him off the whole thing somewhat.

While he had previously declared every new design of the test stamps to be a viable solution to the problem and recommended it for acceptance, he now began to be somewhat skeptical of *Pecher's experiments*, which he was initially allowed to continue. It was difficult to ignore the fact that *Pecher* , despite all his zeal and ingenuity with regard to graphic information tools, did not possess the theoretical knowledge of chemistry that was indispensable for the final, practical design of the decal stamps, which had been brought to a certain level of perfection. In his work, one could perceive more a feeling for and grasping for the most varied information tools than a purposeful, step-by-step progress in dealing with the deficiencies that emerged. Since at that time (perhaps apart from *Worring*, who was no longer working on the stamps at that stage) no one in the State Printing Office had the necessary specialist knowledge and the employees of this institution, who were fully occupied with practical work, had no opportunity to delve into questions of this kind, repeated attempts were made to involve the scientific capacities of the time in solving the relevant questions by means of inquiries. This did not really succeed either because the learned commissions lacked both insight into the postulates of the public interest and the necessary enthusiasm for the matter. So in the end there was nothing left to do but to interest suitable experts from outside the institution in solving the questions that had arisen and to bring them to the institution to cooperate by means of a temporary aggregation. *Beck* made the first attempt to do this when, on *Redtenbacher's* recommendation, he approached the private lecturer *Schwarz* with an invitation (November 12, 1869) to help solve the questions concerning the decal stamps. Since *Schwarz* was happy to accept the request, *Beck* reported this to the Ministry of Finance, adding that he had promised the aforementioned person that he would obtain an appropriate fee for him after solving the problem. The Ministry of Finance recognized the expediency of this step, pointing out that the previous (commission-based) use of experts had proved unfortunate because they were not sufficiently familiar with the aspects relevant to financial administration and could not devote the necessary time and effort to this work. From the standpoint of experience, however, the Ministry of Finance insisted on a preliminary agreement on the amount of remuneration (November 26, 1869).

In the meantime, *Schwarz* had been informed in the state printing works about the details of the methods that had been developed so far, about all the results that had already been achieved and about all the questions that were still pending. A department with the necessary assistants and equipment was made available to him and he was soon able to produce samples of stamps. In a committee meeting of the people involved in the printing works, he pointed out that the last test stamps produced by *Pecher* had been found to be defective in gluing (instead of which he had found an improved one after just three weeks); furthermore, the previously practiced manipulation of the resin coating, which, despite the gluing method he had improved, was affecting the success of the stamps; and finally, the red printing ink, which was supposed to protect against alcohol but was not sensitive enough. A new printing ink had to be combined that was sensitive to acids, including vinegar, and also to alkalis, but should mainly behave well when removed by water. He himself could therefore not yet recommend the samples he had produced so far and hoped to be able to present better results in a few weeks.

When *Beck* made the necessary inquiries regarding the fee, *Schwarz* stated that he was interested in the matter and that he did not intend to make any demands in the event of failure, but that if a favorable result was achieved he would leave the question of the fee to the discretion of the ministry. This had hardly been reported when *Schwarz* appeared in the department of Section Councillor *Fierlinger* and indicated that he hoped to receive substantial compensation. Since *Schwarz* was due to travel abroad on a scholarship from the education administration and the finance ministry had specifically arranged for this assignment to be postponed, it now insisted on clarification of the situation. *Schwarz* then presented the printing works with a list of his demands, which were financially graded according to the alternatives: failure - the usability of his inventions recognized by experts - acceptance of the same for the 5 kr brand application to other brand categories, and which also contained additional conditions regarding the competence to decide on the suitability of the inventions, regarding the secrecy of his methods and regarding the inventor's employment for several years in the application of his process. *Beck* persuaded the proponent to give the latter conditions a form that was acceptable to the financial administration. In doing so, however, the proponent increased the financial conditions considerably. The irritation resulting from these events manifested itself in the fact that *Schwarz*'s use of the state institution's facilities was suspended by the management. *Schwarz* turned to the Ministry of Finance and insisted on direct negotiations with the Minister of Finance, while also verbally declaring that he wanted to go back to his original propositions. Despite these events, *Beck* felt compelled, in the interest of the matter, to

to recommend the purchase of the invention, which could possibly be completed, by emphasizing that the samples recently presented by *Schwarz*, as far as could be seen from a cursory inspection, had shown a significant improvement in terms of the transparency of the sizing.

Serious voices had been raised in the Ministry of Finance against a permanent commitment by Dr. *Schwarz* without a fixed remuneration, and pointed out that such things usually lead to excessive, unsatisfactory demands and even involve the Treasury in litigation. The result was that the Ministry of Finance paid Dr. *Schwarz* a fee for his efforts to date and informed him that there was no longer any obstacle to him starting his study trip, especially since the adoption of the decal process for the 5 kr stamps had already been abandoned. The Ministry pointed out, not without reason, that it was not acceptable for Dr. *Schwarz*, who had been called upon to cooperate, had been informed of everything that had been achieved so far and had been supported in his experiments in the printing works, to now take sides with the state, to regard the results, which were already largely available, as his property and to offer them for sale.

It is not possible to say what Dr. *Schwarz*'s improvements consisted of, but according to the records he had made test stamps at least twice, but on both occasions he only demonstrated them and did not hand them over. They did not come to light in any other way either.

The above-mentioned agreement on the transfer process for the 5 kr stamps is as follows. In accordance with the reservation made by the Ministry of Finance in the decree of November 9, 1869, Z.37107, *Pecher* had again tried to improve the stamps. On December 24, 1869, he was able to present new samples, which were discussed by an internal commission in the presence of *Nejedly* in the Court and State Printing Office (*Pecher's Tenth Attempt*).

These stamps also had the new 5 kr overprint (copperplate) in an unmistakably blackish color. The gray-blue underprint represented a leaf vein. In this, three fields were left out in the writing field area, namely a horizontal rectangle in the middle, but a little deeper, to the right and left in both lower corners, there was a small circular field. In the rectangle was the value designation 5 kr, in the two circles the numbers 18 and 70. These three designations were printed in the same gray-blue color as the natural self-print, because only a single underprint plate was used. The choice of this color was probably due to the criticism that *Schwarz* received of the "red"

This obviously refers to the reddish-violet colour with which the year 1870, or the value 5 kr and the divided year were printed on the last stamps above the glue layer. If one looks at the new *Pecher* stamps correctly,

Thus, below the white legend 5 kr in the copper print cartridge, the same value appears again in grey-blue, slightly larger letters, which looks even less pleasing than the similar arrangement on the previous stamps. From later documents it can be deduced that this grey-blue colour had a special role to play. This colour consisted of a mixture of ultramarine blue and fuchsin. *Pecher's* idea here was clearly to achieve the purpose that had previously been pursued by making one print with ultramarine and a second with fuchsin - namely to achieve protection against acids as a "cleaning agent" and against alcohol as a solvent - with a single print, thus with considerable cost savings. This grey-blue print was applied over the glue layer, like the red fuchsin print before.

The tests with these new brands showed improvements over older samples, as acetic acid and alcohol had a noticeable effect on the color. On the other hand, the printing ink was applied too thickly; furthermore, the stamp sheets curled up; then the glue layer proved to be brittle; and finally, the underprint (this time called reverse printing) on the adhesive side was very easily smudged. The commission therefore considered carrying out new tests with a stronger type of paper, using a new adhesive consisting of glue with the addition of linseed oil and alum, and seeking protection against smudging by either placing the printed image *under* the glue layer again or by covering it with a second layer of adhesive. One thing was already clear, however, that there could be no question of an immediate application of this method and of issuing the 5 kr stamps according to this principle at the same time as the other stamps on the date envisaged for this (15 January 1870). The concerns associated with issuing transfer stamps while they were still wet prevented this. This situation was not concealed from the ministerial draftsman *Nejedly*, who was involved in the commission's examination. At the same time he learned that *Beck*, who had probably foreseen this result, had already made the necessary arrangements to ensure that the 5 kr stamps could be printed in the same way as the other categories, using the old plates.

Three days after this commission (on December 27, 1869), the Court and State Printing Office, citing the decree of November 9, which had ordered it to begin stockpiling for the new issue, announced that a three-month supply of stamps would be ready by January 15, 1870. The intention to produce the 5 kr stamp category for this issue using the new method (with the proof image on the back of the stamps) had to be abandoned because the test stamps did not yet fully meet the requirements. The 5 kr stamps would therefore also have to be produced using the old plates and they would also have to be ready by January 15, 1870.

XXX. CHAPTER

PROJECTS OF THIS TIME

A. THE HUNGARIAN STATE PRINTING OFFICE

One episode must be mentioned briefly here, because it was of importance for later events in the history of stamps in Austria. In the first months of 1870, Hofrat *Beck* learned that the director of the Hungarian State Printing Office, *Bauer*, and his assistant, *Harrer*, who had received training in the production of stamps in the Court and State Printing Office during the second half of 1869, were planning to set up stamp production in the newly established Hungarian office using the transfer process, in order to be fully up to the task. This does not seem to have suited the director of the Court and State Printing Office, because this would have easily deprived his office of priority and thus the fruits of its long-standing efforts. From *Bauer's* letters that have been preserved, it is clear that *Beck* had refused an oral request for more detailed information about the production process of the samples that had been completed at that time (*Pecher's* ninth attempt), and had claimed that they had not even progressed beyond the experimental stage. *Pecher* himself, with whom *Bauer* had become friends during his visits to the Court and State Printing Offices, does not seem to have been reluctant to share his ideas with the latter, so that *Bauer* was in a position to recommend to his government that the method, which was *Pecher's* intellectual property, be adopted and to request payment for it.

According to another letter from *Bauer*, a commission meeting was held in Hungary in May 1870, which had three projects on its agenda: one by *Hausner* from Krapina - whose project *Bauer* wanted to "ring to death" in his presentation; then *Pecher's* method; and finally an extension of *Pecher's* method devised by *Bauer* and *Harrer*. According to *Bauer's* suggestions, this extension was to consist of using no leaf veins for the underprint, but rather a design drawing, for the printing of which colors mixed with fuchsia (blue for guilder values, green for kreuzer values) were to be used; furthermore, the upper side outside the stamp image was to be provided with a light violet tone print that was sensitive to caustic agents. *Pecher's* method was recognized as successful. *Bauer* had already asked *Pecher* to formulate his requirements. When *Beck* learned of this, he used the already established practice of direct correspondence with the Hungarian finance minister.

Ministry to object to the realization of Bauer's and *Harrer's* intentions (24 May 1870).

As understandable as this step of zealous concern for the reputation of the institution may seem, it was hardly justified. Right at the beginning of the negotiations on the stamps for Hungary, the Imperial and Royal Ministry of Finance had given the Hungarian Ministry full information on the production of the stamps, including the secret impregnation with prussiate, with a view to the possible production of the stamps by the University Printing Office in Ofen, and had also informed them of the status of attempts to produce the stamps according to a new principle. The underlying intention was evidently to enable the Hungarian financial administration to have the stamps produced with the greatest possible perfection.

In view of this invitation, there is no doubt that the Austrian government would have disclosed all details of the experiments without further ado if requested and that holding back would not have been in its interest.

There is also a letter *from Harrer* dated June 13, 1870, according to which the choice of production method in Hungary was still undecided because a member of the commission (Professor Dr. *Nendtvich*) had not yet submitted his opinion. *Harrer* also sent *Pecher* test stamps with the sensitive violet tone print on the top. He noted that a design print would be better because the sensitivity would increase enormously, since the color could be applied in a more concentrated state. It cannot be said whether *Worring*, who had previously advocated replacing natural printing with a design print, was motivated by the same consideration.

The knowledge acquired by *Bauer* and *Harrer* in the Court and State Printing Office was discussed again later, when *Harrer* came forward in September 1871 with the proposal to print the stamps with variable (or rather sensitive) colors that he had allegedly invented himself, in order to make them more difficult to reuse. The Hungarian government wanted the Court and State Printing Office's technical report on this, after Professor *Nendtvich* had already given a positive report. The chemist at the Court and State Printing Office, where such experiments had been carried out many times in those years, easily managed to remove ink overprints from the Hungarian test stamps without leaving a trace. In its report, which was thus negative, the printing office did not fail to point out that it had been planning to use sensitive colors for some time and that this idea had been communicated to them by the Court and State Printing Office when *Bauer* and *Harrer* were in Vienna. What is remarkable about these experimental stamps *by Harrer*, printed in brown-violet, is that they are made on the thinnest floret paper. This paper was probably used for the intended production of the stamps.

according to the transfer principle. Since this principle was not subsequently applied in Hungary, the floret paper was then used for the previous design of the stamps and the Hungarian stamps on *papier pelure* known to collectors are thus the only reminiscence of the change in the manufacturing process that was not implemented.

B. MIELINGS PROJECTS

It seems that the idea of using the transfer process to produce stamps was in the air during these years. After the original emergence of this idea in Austria and in a North American project, it has now become clear that experiments of this kind were also being carried out in the Netherlands by the director of the Dutch national printing works in The Hague, *CW*.

Mieling. He must have received news of the similar Austrian efforts, probably from the Austrian ambassador *Baron Langenau*, with whom he was personally acquainted. Through the latter, he offered the Austrian government an invention of his own in December 1869, whereby he selflessly declined any other remuneration than an honor and even offered to come to Vienna at his own expense to demonstrate his process. The Court and State Printing Office, which was approached for its opinion, found that *Mieling's* experiments were not yet completely perfect; however, it would have liked to have heard more about the manufacturing process, since the independently implemented ideas of third parties could certainly provide valuable information.

First of all, she expressed her wish to receive a larger number of test stamps. She also entered into direct correspondence with *Mieling*. She does not seem to have wanted him to appear in person in Vienna, as she repeatedly asked him to postpone his trip. However, *Mieling* did appear in Vienna in the last days of March 1870 to witness the attempts to replace the stamps with his test stamps and those of the State Printing Office. He had also sent prepared paper on which the State Printing Office was to print stamps.

At the same time, he openly shared his experiences and recipes. He made the paper by preparing two solutions, rosin dissolved in alcohol and Venetian turpentine dissolved in turpentine oil; both were then mixed and spread on one side of the paper. After this coating had dried, the glue layer was to be applied. *Mieling* gave the following recipe for this: dissolve fish glue in water by boiling it, add a little glycerine and white rock candy and let it boil again briefly while stirring vigorously. Furthermore, based on his experience, he recommended rubbing the colors with thick varnish and printing on dry paper.

and to let the prints dry for at least eight days, lying flat between soft paper. The print should extend to the outermost corners of the stamps. He wanted to use salt water to prevent them from curling up.

In a report to the Ministry of Finance, the State Printing Office acknowledged the excellent gluing of *Mieling's* stamps, but attributed this to the use of fish glue, which was too expensive for practical use. It also emphasized that it had succeeded in removing the test stamps intact using acetic acid and alcohol mixed with glycerine. It therefore gave preference to its own stamps, which not only implemented the idea of transfers but also the idea of using chemically sensitive colors that changed noticeably when the means of erasing writing or obliteration were used. *Mieling* was awarded the Franz Joseph Order. He corresponded with Hofrat *Beck* until September 1870, to whom he also informed him of a project to produce postage stamps using the transfer principle. The latter, in turn, sent him the last two tests carried out in the State Printing Office using the transfer process for assessment. After that, the correspondence seems to have died down.

All of *Mieling's* stamps have the Dutch coat of arms as their image, held by two lions, with a banner underneath with the motto "*Je maintiendrai*". They also all have edge perforations (except for the last-mentioned stamp project, which has cut edges). Four types of stamps can be distinguished, just as four types are mentioned in the files, but without further description. The first type does not show any value indication, while the second and the other types have the value indication 50 CS printed on top. The third type differs from the second in that it has a second row of inner, but sparsely spaced perforations. The first type has the underside printed in black, blue and carmine; the second in black, blue and reddish brown; the third in black and reddish brown. The fourth type is printed only in carmine red, but is characterized by a particularly fine and supple, yet strong, pile paper, the like of which was never available to the court and state printing office.

C. PECHER'S ELEVENTH ATTEMPT

Of the last two stamp trials from the Court and State Printing Office mentioned above, which were sent to *Mieling*, one was the already mentioned tenth *Pecher* trial of December 24, 1869 with the blue natural print and the inscriptions 5 kr, 18 and 70 in the same color in the blank fields. The second of the stamp trials sent to *Mieling* came about in the following way.

Half a year after the last minute decision had been made to issue the 5 kr stamps with proof printing, *Pecher* came up with new test stamps (*Pecher's Eleventh Attempt*). On May 30, 1870, a committee meeting was held on the subject under the chairmanship of *Beck*. The result was that the matter was postponed again, since progress had been made, but the point had not yet been reached that would make it permissible to recommend the actual use of the production process to the Ministry of Finance. The defects were: the printing on the underside was easy to smudge, an unpleasant taste when the stamps were moistened with the tongue, and uneven behavior when removed depending on the type of backing paper and the duration of the moistening. *Pecher* stated that a new production process was in the works; he had also been assured of English glue, which had greater advantages. He would soon be able to present new samples.

This has since not happened, especially since the State Printing Office soon switched to a different direction of experimentation.

What these last test stamps produced using the transfer method looked like is not indicated in the file on the commission hearing of May 30, 1870. However, since of all the test stamps produced using the transfer method in official hands and in collections, only one type remains, and this is the last in this series due to its design and the year 1871 on it, so its identification can be made with certainty. There are four types of these stamps, distinguished by the colors used. The designs are the same on all of them. Two of these types have a red underprint, one bright red, the other pale red. The third type has it green, and the fourth gray-blue. It is formed by a leaf vein that is slightly larger than the upper print and its rectangular frame, and therefore protrudes a little on all sides. Four small rectangular areas are cut out in the underprint. The two upper ones are upright, the two lower ones are lying down. In the finished stamp, they can be seen exactly in the four corners of the upper frame. At the top - since these are 5 kr stamps - there is the number 5 on both sides; in the two lower squares is the divided year 18 and 71. The copper print on the upper side of the stamp, which is in various (always dark) colors, namely blue, green, red and black, is very strange because of its design. What we have here is a (made using *Jacoby's* engraving of the emperor's portrait)

Redesign of the *Benedictine* overprint. The head image, which was previously placed in the upper part of the stamp, has now been moved lower so that it occupies almost the middle of the entire stamp image. One can clearly see that the elements

Benedict's engraving, namely the oval frame with the cartouche as well as the square border frame have been retained and only changed as far as necessary. The most important innovation is that at the top of the oval frame the ornamental acanthus leaf has been replaced by a wider decorated cartouche, which contains the value 5 kr in light lettering on a dark background and appears as an independent image element. Since the two words of the upper marginal legend were previously widely separated by the protruding ornamental leaf, the removal of this leaf now created an unmotivated gap, which has remained despite its conspicuousness, since only the lower two lines were added here. Pushing the head image down also made it necessary to change the disposition of the two side legends and add the border lines. This patchwork is clearly visible.

There is another special feature worth mentioning about finished stamps. They have a perforation running across the width of the stamp between the head image and the new upper cartouche, that is, punctures (made by means of a wheel) that are one behind the other in a straight line. Such perforations are sometimes used in stamping as a substitute for perforation. It seems that the idea was to separate the upper part of the stamp with the new cartouche from the main part of the stamp like a coupon. Something similar can be observed with the German Reich exchange stamps.

The school fee stamps, which have already been abolished, were also designed for this purpose.

No information could be found in the files about the purpose of this redesign of the *Benedict bar* for the 5 kr stamp and what was planned at the time. However, that this engraving dates from 1870 is evident from other experiments carried out by the State Printing Office in January 1871, which were designed to test the indelibility of various over-stamping (obliteration) inks. For these experiments, impressions of this new stamp image with the coupon cartridge were used, which were produced in copperplate printing, partly with soot ink, but partly with a chemically sensitive brown ink newly invented by *Pecher*. These experiments, like other previous ones, proved the superiority of obliteration with printer's ink over all other methods of cancellation.

The Ministry of Finance therefore also rejected two projects that had arisen from *Beck*'s own initiative (one of which involved the obliteration of the relief and the other of which involved punching the stamps with the letters KK \ddot{Y} FNZ \ddot{Y} MST formed from rows of small holes) as less suitable.

For the sake of completeness, it should be noted that the above-mentioned 5 kr- stamps were also used in attempts to obliterate the stamps, which were originally prepared for the printing of the planned issue in 1869. drawing (with Röder strip) and with the one just mentioned by *Pecher*

These stamps also had a blue guilloche pattern covering the entire surface (including the header), which was very similar to the one used on the two test stamps of May 1868 (*Pecher's* sixth test).

D. KRACKOWIZER'S PROPOSALS

The first attempt to bring in an external expert to temporarily assist in the experiments with the decal process was unsuccessful due to the described behavior of the lecturer Dr. *Schwarz*.

Nevertheless, this remained the only viable option at that time, when the idea of employing a chemist on a permanent basis at the institute had not even been considered. So, when the possibility of bringing in an industrious expert to work with him appeared a second time, Hofrat *Beck* did not fail to pave the way for him and to obtain the necessary funds from the Ministry of Finance. This time it was the "consulting chemist" *Ludwig Krackowizer*, who had to give up his actual profession as a pharmacist due to a lack of funds and, as a first sample of his projects, presented the printers with stamps on which a black cross appeared when moistened. The matter, however, came to nothing, as it soon became apparent that the person in question was mainly concerned with the exploitation of alleged inventions, such as an indelible ink for branding, the manufacture of paper from wood pulp ("lignin") and the obtaining of advances, while on the subject of stamps, which was the sole concern of the Court and State Printing Office, he only put forward a few vague allusions and ideas that had long been under consideration.

He suggested making a circular perforation around the stamp plate. Then he proposed that instead of perforating holes, circular holes should be made using a "cutting iron" of his own design, which would also go through the document paper. Finally, he suggested perforating the stamps crosswise (diagonally) on the inside. For printing the stamps, he suggested using a water-based ink he had invented, which changes color from blue to brown when moistened and then runs. He was even less precise about his last suggestion, namely coating the glued stamps from the top with a chemical liquid, which would strengthen the adhesive to such an extent that the stamp would definitely tear if anyone tried to remove it. The tenor of these proposals, partly demonstrated on 2 kr- stamps of the 1870 issue and partly on ordinary paper sheets, was such a disappointment for the State Printing Office - which had called for cooperation on new paths to further promote the previously

had in mind the results achieved that it refrained from further negotiations with *Krackowizer* and allocated the funds already granted to another, more promising attempt of a similar nature, which will be mentioned in a later section.

E. LAURENZ KOSCHIER AND THE INVENTION OF POSTAGE STAMPS

Finally, the appearance of another designer must be mentioned here. In April 1866, the vice-state accountant *Laurenz Koschier* from Zagreb approached the Ministry of Finance with the offer to disclose, in return for a suitable reward, the "artificial manipulation" by which the stamps should be made so that once they were stuck on, they could not be removed again without being completely destroyed. He stated that he had been studying the various accounting systems since his early youth and had come to the conclusion that a "loose and defective"

Control could be remedied most safely and completely everywhere if it were converted into material control. In 1835 he had already drawn up a reform project for letter mail manipulation and accounting based on the principle of material control and presented it to the Court Chamber; however, it was put on hold for him. What he adds next is as unclear as it is quite strange: "This project would (!) have as its object the use of postage stamps to designate and account for letter postage, and since I was convinced that by applying it a very large reduction in manipulation work and overhead costs could be achieved and, in addition to many other advantages, complete control could be established in the accounting of money, and therefore had to be implemented sooner or later, I published it abroad, where it was well received and was implemented. This reform project has found general recognition abroad because of its simplicity, expediency and complete control and was declared, according to a correspondence article from London dated August 21, 1848, printed in the Wiener Zeitung of September 5, 1848, to be one of the most important reforms of the century."

You can hardly believe your eyes when you read this. The common opinion that it would be wrong to say that *Rowland Hill* or, as others claim, the Scottish pharmacist *James Chalmers* in Arbroath (or Dundee) invented the stamps; this invention was rather made and published by the deputy state accountant in Agram *Koschier* in 1835, then it was used and generally accepted. It is just a pity that he does not specify when and where he claims to have published it abroad. A quotation of this kind would have been more important than the London correspondence he cites.

in the "Wiener Zeitung". This correspondence only contains figures about the upturn in letter traffic since December 5, 1839, the day on which the penny postage was introduced. There is not a word about *Laurenz Koschier* in it. On the other hand, in his petition of April 13, 1866, *Koschier* did not fail to mention the name *Rowland Hill* in the following context: "In London, *Rowland Hill*, who only brought my project up for discussion according to a superficial report and implemented it inadequately, was granted a reward of 20,000 L. St. (200,000 fl. Austrian francs) by the English Parliament in the session of June 10, 1864, according to the publication of the Tagespost of June 14, 1864 (supplement to the Wiener Zeitung)." *Koschier* further states that in 1848, at the request of the Ministry of Finance, he documented his letter post reform project with practical forms and that in 1849 he had "implemented it with the sole exception of the most important point of the artificial design (sic!) of the stamps". The relevant documents from 1835 and 1848 have been missing since 1870. It is therefore impossible to say whether the intellectual link between the postal introductions of 1849 and *Koschier's* project is more real than that between his 1835 project and the English stamps.

Koschier's offer of April 1866 was made the subject of a request to him to explain himself in more detail. *Koschier* gave an evasive answer to the core of the matter, saying that the production of appropriate paper was necessary first. He discussed the demands attached to it in more detail, namely the transfer of the paper supply for the production of stamps to him and a paper manufacturer who would enter into a partnership with him for ten years, as well as the granting of a ten-year pension to him and his family. The Ministry of Finance did not take these vague hints any further and rejected his offer.

At the end of 1868, *Koschier* again presented his offer and his demand for 10 percent of the resulting additional income for a few years, this time to the Reich Finance Minister, who informed both sides of the trade and finance ministries. Finally, in June 1869, *Koschier* sent the Finance Ministry an intervention, supported by stamp samples, in which he described himself as the original designer of the introduction of postage and stamp stamps instead of the previous loose and costly control, and stated that he had finally come up with the invention of preparing the postage and stamp stamps in such a way that they could no longer be removed from letters and documents and reused. He had submitted an application to this effect six months ago. Fourteen days after the application was submitted, a letter containing a total of stylized copies of his application was received.

A corresponding article with the news made the rounds in the public newspapers that the State Printing Office was involved in the production

such brands and that they would come into use from January 1, 1869. After this argument, one would expect the accusation of plagiarism to have occurred and is surprised when *Koschier* concludes that his project is in any case the cheaper and more appropriate one.

Nevertheless, the hidden hint seems to have persuaded the Ministry of Finance to take the case more seriously than *Koschier's* project stamps, which consisted of impressions of an official seal on translucent paper, seem to deserve. The Court and State Printing Office was commissioned to carry out a careful and exhaustive examination of these stamps in the laboratory of university professor *Redtenbacher*. *Worring* and *Pecher* went to *Redtenbacher* for this purpose. The latter briefly summarized the negative result in the report: "Mr. *Koschier's* proposal and the test object are so far behind the achievements that have already been made on this subject that they do not deserve any special attention." Something must have happened to *Koschier* around the same time. Although he had signed his application as an active official on June 1, 1869, the file was filed without resolution on July 7 with the reason that *Koschier's* place of residence could not be determined.

A not uninteresting addition to these documented data can be found in a philatelic publication. The Imperial Higher Regional Court Judge *Viktor Suppantshitsch* in Graz mentions in his "Principles of Stamp Science and Stamp Collecting" (Leipzig, JJ Weber, 1908) that in August 1858 the Leipzig Postal Directorate had to respond to the Saxon government about the claim made by the Vice State Accountant *Laurenz Koschier* in Vienna that he was the inventor of postage stamps. The report of the Leipzig Directorate on August 6, 1858 stated that, according to the documents submitted by *Koschier*, there could be no doubt that he had already proposed to the Austrian government in 1836 the abolition of postage franking with cash and the *introduction of franking stamps* instead.

Koschier is also said to have had a conversation with an Englishman named *Galvay* in Ljubljana in 1836, through which *Koschier* believes he gave the impetus to *Hill's* letter post reform.

It is a real pity that the relevant files have been lost. Although it is hardly probable that *Rowland Hin* or *Chalmers* ever heard of *Koschier*, it is not altogether impossible that the idea of the Marches, which he first conceived, might have been carried far away like a winged seed carried by the wind, before it could germinate and take real root. When the time for progress begins to be ripe, the ideas of such progress spread like a contagion from their place of origin in the most remarkable and often enigmatic manner.

CHAPTER XXXI

THE EMISSION 1870

When the Ministry of Finance received the notice from the Court and State Printing Office on December 27, 1869, that it had to reach an agreement on the special design of the 5 kr stamps for technical reasons, it proceeded to announce the new issue that had already been decided. With the announcement of January 7, 1870, Z.42641 ex 1869, RGBI No.3, V.BI No.3, the new stamps were put into obsolescence from March 1, 1870. The 28 categories (16 Kreuzer values, 12 Gulden values) that had existed since the stamp regulation of 1864 were explicitly listed. The attached description states that the "tone print" on the new stamps, which includes the black printed stamp mark and represents the skeleton of a tree leaf, appears in pale green. All stamps must contain the year of issue (1870) in light blue in the lower part. When the announcement then goes on to say that the amount of the fee is printed in letters in the same colour on the lower edge of the stamp image *under* 1 fl in a semicircle, this contains several inaccuracies. Not all stamps under 1 fl have the value legend: the 1 kr stamp with its square image was missing this in the 1870 issue, just as it had been since 1866. This legend is also *below* and not on the lower edge of the stamp image. Finally, as mentioned elsewhere, all legends are still far from a semicircle.

At the same time as the new stamps were put into use, the old ones were put out of use. Anyone who had them could still use them until the end of March, as they were not put out of use until March 31, 1870. During March, stamps from both issues could therefore be used side by side on one and the same document. This period was followed by a two-month exchange period. At the end of June 1870, the older stamps became invalid. As far as the Kreuzer categories were concerned, this applied to the stamps from the partial issue of 1866 and the 1 kr denomination that had existed since 1864. As far as guilder denominations were concerned, however, this de-validation affected all stamps of the still existing classes printed since the introduction of the Austrian currency in 1858, including the three new denominations of 2 fl, 50 kr, 7 fl and 15 fl that were created during the regulation in 1864.

The technical implementation of the new issue required, as with regard to the Value overprint for the Kreuzer categories (with round stamp plate) by the Addition of the year had to be a change and also in the Guldenmarken the year should be printed, initially

the production of the relevant printing plates. Depending on the completion of these plates, the Court and State Printing Office submitted successive test impressions of the individual stamp classes to the Ministry of Finance for approval from November 19, 1869 until the first days of February 1870 and, after receiving them back, immediately began producing a trimestral supply. The entire first printing took place within the months of December 1869 and January 1870.

The first test prints of guilder stamps that were submitted concerned the denominations of 2 fl and 10 fl. When this template was completed, the ministry issued an order to have the year on the *remaining* guilder stamps printed with longer, but not "wider" digits. As a result, the year 1870 was printed in considerably larger font on the guilder stamps from 2 fl 50 kr.

The stamps for 2 and 10 fl were kept, since the order was for the "remaining" Gulden values, the small year number. For the 10 fl value, however, it must have subsequently become necessary to produce new printing plates and the year number was then also printed in larger type. It is not possible to say when this happened and when this phenomenon, which is well known to collectors, can be dated. However, since the 10 fl stamps with a small year number are not exactly rarer, printing with the original plates, on which the year number 1870 was the same size as in both Kreuzer categories, must have continued for a considerable time.

The 2 fl value kept the smaller year number unchanged. Strangely enough, the same smaller year number was also used for the 1 fl stamp. The proof of this value was presented at the same time as the 2 fl 50 kr stamp, and then also the 5 kr stamp (after the transfer process was dropped) on December 29, 1869. The 1 fl stamps had the small year number, and the 2 fl 50 kr stamps had the large year number. Both were approved without any comment. The printers had probably chosen the smaller letters for the 1 fl stamp in order to run the series of stamps with small year numbers uninterruptedly up to the 2 fl stamp. When the matter was dealt with, however, the 5 kr stamp, revived in this version, probably attracted the majority of attention, so that the Ministry of Finance did not even realize that its instructions regarding the size of the year number on the 1 fl stamp had been ignored.

A closer look at the stamps from the 1870 issue reveals a fact that is completely silent in the records: namely, that a *completely new natural self-printing method* was now being used. While in all the regenerations, type changes and additions to the stock of the 1858 issue and even in the stamp regulation of 1864, the design of the natural self-printing method remained the same as it had been since 1854, the need now seems to have arisen to undertake a radical renovation here too. The use of copper matrices

The change to the stereotype process naturally results in much more vigorous wear and tear than the removal of electroformed copies. The only indication from which it could be concluded that this change to the natural printing process was made with the knowledge of the Ministry of Finance is the remark in the introductory regulation (dated 7 January 1870, RGBI No.3) that the tone print represents the skeleton of a *tree leaf*. The cardinal regulation of 28 March 1854, RGBI No.70, had only stated in general terms that the stamps had a coloured field with a design by natural printing. It was not stated that it was a leaf vein or what kind of plant it came from. If a tree leaf is now mentioned directly, this must have had a new factual background. The plates for all categories of the 1870 issue appear to have been taken from different parts of one and the same sheet and, as in *Pecher's* three previous attempts, it was probably a beech leaf. What is striking about the new natural print is that the veining is now much less fine than the older one. Furthermore, the cutouts for the stamp plates were made smaller than before, apparently so that no white spots would be visible even if the copper and letterpress printing were shifted relative to each other. This process, which improves the graphic appearance of the top, has the effect that when looking at the back, a dark ring can be seen around the stamp plate, especially with thinner paper and stronger natural prints. This is particularly the case with the 1 kr stamps, where the cutout is much smaller than the stamp image.

Those stamps which have the same design of the stamp plate also have the same natural self-print.

Curiously, there are *two types* of natural prints in the 2 kr, 3 kr, 4 kr and 7 kr denominations, which have the same design on the stamp plate, and indeed in all four of these denominations. One variant, designated **a**, has a thicker vein in the lower left corner; the second type, designated **b**, however, has a thicker vein in the lower right corner.

The stamps of the 1870 issue resemble the first stamps in Convention coinage in appearance due to the fact that the natural self-print is again colored green. However, this green is now, as the introductory regulations called it, always pale green and even in the strongest green pieces does not yet reach the intensity of the coloring of the first issue. The dye used now should.

Ultramarine green and ultramarine blue should also be used for value and annate printing.

Ultramarine green, which is rarely used and therefore little known, is by no means a mixture of ultramarine blue with any yellow component, but a genuine green colour from which ultramarine blue can be obtained by heating.

According to the recipe found in a document from the State Printing Office in 1874, ultramarine green consisted of an intimate mixture of aluminium silicate, calcined Glauber's salt, calcined soda, sodium sulphide, sulphur and charcoal, which was then treated with heat.

In the order of November 9, 1869, regarding the start of the preparatory work for the new issue, the State Printing Office was instructed to use the colors ultramarine green and blue. In the "Sample Book for Stamps" already mentioned several times, it is also expressly stated for the 1870 issue that the underprint was made in ultramarine green and the top print with the year in ultramarine blue. Likewise, in a document of the State Printing Office, in response to an apparently malicious anonymous report that the new stamps were made with poisonous colors and that cases of illness had already occurred, it is mentioned that the only colors used, ultramarine green and blue, bound with linseed oil varnish, are absolutely non-poisonous and, moreover, only appear on the top and not on the bottom of the stamps, which some people wet with their tongues.

In view of this state of the files, it is striking that the existing stamp stocks of this issue do not show uniform coloring of the natural print and the additional print, but rather a large number of color variations can be observed in both. One can put together whole scales of such gradations and transitions. If one then picks out fairly distant members of these series and compares them, very striking differences - not just gradual, but also in essence - emerge. The natural print has gray-green, yellow-green and vivid leaf-green colors. The additional print varies from a dull gray-blue to bright ultramarine to a steel blue and then to a clear blue-green. There is no question of a regular coincidence in the sense that a variant of the natural print always occurs together with a specific associated variant of the additional print. Because of the large number of possible combinations, it would be difficult to put together series of the individual colors or even the individual pairings. Some things are actually difficult to distinguish and identify if you were to judge by their appearance alone. However, you can definitely identify some of the brands as being special if you use chemical reactions.

The two ultramarine colours were, as has been mentioned repeatedly, chosen as printing inks mainly because of their sensitivity to acids. In reality, however, not all stamps issued in 1870 react to acids. In some cases the natural print remains unchanged, in others the overprint remains unchanged, and sometimes both resist the effects of acids. Since the colours found to be acid-resistant in this way are attacked by strong alkalis (lyes, caustic potash, caustic soda),

This leads to the assumption that Prussian blue was used for this purpose - naturally mixed with a yellow component for the natural self-print. If, for example, one letter of the value overprint is moistened with a drop of acid and a second with a little alkali, at least one of the two will fade. The alkali, which is a relatively slow factor (especially when applied to the dry fiber), must be given some time to take effect. It has the most lasting effect when it dries. After a few attempts, you can recognize the stamps printed using Prussian blue by looking at them. The overprint can be distinguished quite reliably by the fact that all stamps printed with ultramarine lack the distinct green tint. With regard to the natural self-print, chemical testing shows that the aforementioned vivid leaf-green coloring is due to Prussian blue.

One would almost be tempted to connect the use of Prussian blue, which can be seen on dated pieces since the second half of 1872, with an incident of the same period, namely with the so-called Viennese counterfeits discovered at that time. From exchange material and a few cases that had been stopped, the printing works found that year that unused ½ kr stamps had been redesigned to 36 kr and similar 15 kr stamps to 75 kr.

The former was particularly common because 36 kr was a very common fee in court proceedings, which made it much easier to sell the counterfeit products. According to the findings of the State Printing Office, the falsification was carried out by "cleaning up" the value legend (½ kr. or 15 kr.) in both the stamp plate and the additional print, whereupon the plate was whitewashed with lead white and the new legend drawn into it with ink; the curved value legend was also drawn manually with blue watercolor. The "cleaning up" of the black value legend on the stamp plate was certainly an erasure. The additional print legend could perhaps also have been removed chemically. Of course, the leaf veins in the wetted areas also disappeared. However, they could easily be replaced with a drawing. The transition to Prussian blue was a good protection against such manipulation. The alkalis, which were now the only effective ones, left much more noticeable traces after their use than the acids, especially since the impregnation of the stamp paper, which still exists according to the regulations, seems to have been carried out to a very inadequate extent, because a blue reaction to acids is hardly achievable with stamps of this issue. This lack of reaction could also be related to the great thinness of the stamp papers now used. A thin paper, all other things being equal, contains less prussiate of *potassium hydroxide* than a thicker one and easily gives it off completely when moistened before copperplate printing.

It cannot be said with any certainty whether the Court and State Printing Office was actually guided by the above considerations when using Prussian blue instead of ultramarine inks. This is contradicted by the observation that one can find stamps where Prussian blue was used for the natural self-printing, but ultramarine for the value imprinting. However, this arrangement was inappropriate from the point of view of the stability of the print. The natural self-printing now withstood the ink etching without change; the value legend, on the other hand, could easily be removed with acids and a new legend could be recorded without exposing oneself to the dangers of erasing and writing on an etched background.

In view of this, it would be reasonable to assume that the printing works deviated from the use of the prescribed ultramarine colors purely for graphic reasons, such as the fact that the colors are easier to use in printing or because the printed image is clearer and more beautiful. The people directly involved in the production of stamps are primarily graphic artists and ensure that the prints look clear and pleasing. They all too easily subordinate other, less important considerations to this purpose and arbitrarily modify the composition of the colors and the like, not caring that this could thwart important intentions.

The fact that the Prussian blue overprint dates from the later period of issue in 1870 explains several peculiarities that can be observed in this case. For example, the 10 fl denomination with a small year is only known with an ultramarine blue overprint; when the greenish blue overprint was introduced, the larger year, which can be found in both colours, already existed. Furthermore, the 6 fl, 12 fl and 15 fl denominations have so far only been found with an ultramarine overprint. With regard to the first two denominations, this agrees with an identification document dated December 15, 1872, in which it appears that these two denominations have not been purchased since 1870, i.e. since they were first printed. It seems that no such purchase took place after that.

The following are notable incidents that occurred during the period of validity of the 1870 issue.

A. THE REGENERATION OF THE 4 KR VALUE

During the existence of the 1870 issue, the last regeneration of a stamp value occurred, namely the value of 4 kr. This fact was traced back to an act of the Court and State Printing Office from December 1875, which, as should be mentioned here in anticipation, after the 1870 issue and thus the first group of Austrian stamps (with the designs of *Leander Ruß*) had been repealed, ordered the destruction of

of all the copper plates of this brand design that had now become permanently superfluous. From the list enclosed with this document it can be seen that plates and plate components were filed down and melted down from the brand regulation of 1864 onwards.

Among other things, individual plates and combinations of these to form incomplete plates for the values of 2 kr and 4 kr are listed there. The former indicated that this value was regenerated in December 1865. Since the 4 kr value appears in exactly the same way (with individual plates and smaller pieces), it was assumed that this had also been regenerated.

This regeneration, the actual occurrence of which could be clearly recognized from the stamp material of the collections, did not occur at the same time for both of the values mentioned. For the 4 kr value, throughout the entire partial issue of 1866, only retained the different designs that had been created in 1858 by engraving the legends in whole plates one by one. These designs also extended into the 1870 issue. The regeneration of this value only took place in the further course of the 1870 issue.

This can be seen in the greater detail of the drawing, although the difference is not as great as would have been expected, which seems to indicate that the original engraving had also suffered somewhat over time. Nevertheless, a clear hatching can now be seen between the rather pointed number 4 and the (heraldic) putto head on the right, and the eagle below the value legend can be seen sharply and clearly. The cross on the crown extends almost to the letter K of this legend, a little in front of the main vertical line of this letter. Once you have memorized this position of the cross as an identifying mark, you can find it again in the new type of 2 kr value regenerated towards the end of 1865, and this identifying mark can also be applied in this way to the 2 kr stamps of the 1866 issue. If one separates the 4 kr stamps of the 1870 issue into those of the older (consisting of different designs) and those of the newer uniform type and examines them with regard to the natural printing, of which, as mentioned above, there are two types (**a** and **b**) (the former of which has a stronger vein in the lower corner to the left and the latter to the right of the viewer's hand), it turns out that the regenerated 4 kr stamps all have the underprint **b**. The older type, on the other hand, has both this underprint and - less frequently - the underprint **a**. It follows from this that the change in the underprint certainly occurred earlier than the regeneration of the copper printing plate.

If we then further investigate the correlation between the two types of Copper print of the 4 kr value and the different color nuances of the value legend and annate imprint, it follows that the older Copper print never has the Prussian blue overprint, whereas the

Regenerated copperplate printing occurs with both the ultramarine blue and the Prussian blue copperplate printing. The above can be summarized in the sentence: the older copperplate printing has both veins, the younger copperplate printing has both printing colors.

The 4 kr denomination completes the series of regenerations: 6 kr in January 1863, 5 kr in March 1863, 12 kr in April 1864 and 2 kr in December 1865. No approximate date can be given for the 4 kr denomination. The adapted plates continued to be used for the 25 kr and 60 kr denominations until the end of the 1870 issue and until it was replaced by the completely different issue in 1875.

B. THE RELIGION QUESTION

The failure of the planned issue in 1869 was largely due to the gluing and the inadequacies caused by the animal glue (rolling, brittleness, flaking, etc.). The Court and State Printing Office therefore paid increased attention to this issue.

In April 1870 she entrusted the professor of chemistry at the Vienna Veterinary Institute Dr. *J. Moser* to carry out tests on a suitable adhesive for the transfer-printed stamps. These tests did not produce much better results than before, which *Moser* attributed to the varnish used to make the paper of the test stamps transparent. At the same time, two companies approached the State Institute with offers to supply cheaper adhesives: the *Visser* brothers in Cologne with "artificial gum arabic" and *Heimann & Titz* in Mülheim am Rhein with fruit gum. *Worring* carried out extensive comparative tests with these preparations, then with dextrin and with the adhesives previously used. The result was that it was decided to stick with the previous process for all postage and stamp stamps produced by the printing works. According to this process, gum arabic mixed with dextrin gum (from *Caironis* rubber factory in Perchtoldsdorf) was used for the closing flaps of the envelopes. Gum could not be used for letter, newspaper and stamp stamps because the stamps easily caked together in damp storage areas due to the hygroscopic properties of this adhesive. For stamp stamps in particular, the very best adhesive had to be used because the adhesive question was also a question of legal certainty because important parts of the legal document could be written on the stamp and therefore its reliable adhesion had to be guaranteed. Bone glue was therefore continued.

In 1871, the factor *Pecher* came forward with the request to have a Glue composed of casein and gelatin, which is colorless and odorless,

It was proposed that the glue should be delivered at a price considerably lower (18 fl. per hundredweight) than the Cologne glue (54 fl.) because it had no hygroscopic properties and did not cause the stamps to break or warp. The Ministry rejected this offer because of the lower adhesive power of the preparation, without taking part in the larger-scale tests suggested by the State Printing Office.

Immediately afterwards, *Pecher* presented another offer in which he offered to supply a ready-to-use glue jelly purified with a harmless alkali. The glue layer now had the advantage of being colorless and odorless as well as flexible. Tests showed that the price for a hundred glued sheets was somewhat higher than when using *Bodenstein's* bone glue.

This offer was also rejected by the Ministry of Finance because of the unfavourable results of the gluing tests. At the same time, it was noted that this would have happened even if the tests had turned out differently, because Section 12 of the instructions for the Court and State Printing Office does not allow an employee of the same to act as a supplier to the office.

C. PROFESSOR HUSNIK'S TEMPORARY ASSIGNMENT

In 1872, there was a change in the personalities who had at times exercised leading influence at the Court and State Printing Office, especially with regard to the stamp issue. *Worring* retired. It now became clear how difficult it would be to replace this man. It turned out to be necessary not only to bring in a solid replacement, which was found in the printer *Raimund Lauter*, who joined as a factor and was soon appointed senior factor, but also to create an organizational innovation by setting up a "technical inspectorate" and promoting the previous senior factor *Franz Wöhlert* to inspector. All activities relating to the stamp issue and its overall supervision were now in *Wöhlert's* hands. With his expertise and calm prudence, he proved himself well suited to the new task. However, just as little as he had previously participated in the efforts to create something new in this area, it was now just as little for him to come up with creative ideas. The idea of transfer stamps actually faded into the background, although *Beck* repeatedly stressed that it would be kept under review and continued to be pursued. This was probably also due to the fact that

Pecher, who was only employed on a temporary basis, could not play as prominent a role in the new situation as he had previously, when he had been particularly called upon by *Beck* to carry out this work and had been strongly supported in it.

However, *Beck* was not satisfied with the measures mentioned above to keep the state institution up to the task, but he also undertook

also took steps to recruit another person, the renowned expert *Johannes Broer* from the Donndorf-Naumann printing works in Frankfurt am Main, as a technical consultant for the Court and State Printing Office. He was prompted to do this by the fact that he had had to turn down a request from the Japanese government to produce banknotes and stamps for the government because the State Printing Office did not have the necessary equipment to undertake this work and there was no prospect of receiving the necessary funds from the Ministry of Finance.

This order was then taken over by *Donndorf*, who built his own factory building to carry it out and made a fortune in the process, in addition to reimbursing his expenses. *Beck* learned that these and other very successful banknotes from the *Donndorf* establishment were the work of *Broer* and contacted him on a special trip to Frankfurt. However, the Ministry of Finance did not agree to employ *Broer* (who was later employed in the State Note Studio under the Joint Ministry of Finance), particularly because the Court and State Printing Office had already been assigned a specialist in questions of chemistry and the nature of stamps and value stamps in the person of *Jakob Husnik*, a professor at the Realgymnasium in Tabor.

At that time, the problem of the day, which many inventors were struggling with, was the task of making the photographic plate suitable for being converted into a printing plate suitable for *graphic* reproduction by purely mechanical means without the intervention of an artist's hand. It was recognized that for this purpose the photographic image had to be broken down into small elements. This task was first perfectly realized in the field of planographic printing in *collotype*, where the natural wrinkled grain of gelatine provided a favorable random solution that could hardly be surpassed. *Husnik's* name is also associated with this method of collotype printing, invented by Dr. *Josef Albert* in Munich. He had made exactly the same invention and must have had such an undoubted autonomy that *Albert* found it expedient to "put him out of action" by buying his idea for 2000 fl.

The graphic arts industry also required adaptations of the photographic image for the other two processes, intaglio and relief printing. In the first respect, the factor *Paul Pretsch* (the "old *Pretsch*"), an unworldly, trusting man who had returned to the state printing office tired and lacking energy after bad experiences in England, experimented at the court and state printing office. His invention of photogalvanography, made in the early 1850s, resulted in printing plates with snake-shaped grain suitable for intaglio printing (with the help of electroplating), and with some modifications devised by him and others, is still widely used as a recognized suitable method of reproduction. *Husnik*, on the other hand, strove to

his improvements to the phototype printing, which he had devised in the meantime, were not allowed to be used to develop the process in a different direction, namely for typographic reproduction (high-pressure printing). At this stage, *Beck* became aware of *Husnik*. In 1868, *Husnik* had suggested to the Reich Ministry of Finance that paper money should be produced using photolithography to protect it from imitations. The Court and State Printing Office was against this because this process did not meet the conditions for the necessary mass production. Barely 400 suitable impressions could be expected from one printed image and the stone would therefore have to be constantly renewed, which would not achieve the required equality and complete agreement of all copies. *Beck* took this negotiation as an opportunity to write to *Husnik*. *Beck* learned that

Husnik was working on a modification of the *Woodbury* process, in which the resulting photographic chrome gelatin relief was pressed into lead.

Husnik later abandoned this pressing process to create a printing plate and used the gelatin relief directly as a printing plate after a special hardening process. This method then became known as glue type.

Husnik came even closer to the goal with another idea, namely: to break down the photographic image into suitable printing elements by mechanically scratching a regular pattern onto a metal plate and then treating it after the photographic layer had been applied so that the shadows corresponded to deeper areas and the bright parts of the image to shallower areas. When *Beck* asked him to look into the question of how this method could be applied to paper money in order to make it more difficult to imitate, *Husnik* initially modified his plan so that the grain of the plate should be achieved in a more complicated way that would create insurmountable obstacles to imitation. To prevent imitation by means of photography, he then proposed the use of cobalt blue, which color cannot be photographed and cannot be converted into another photographable color by any means. In order to prevent transfer printing onto stone, he planned to apply two different and differently colored, partially interlocking images (for example in black and yellow), which would create a confused image when "overprinted".

Beck, who devoted constant attention to the perfection of stamp and postage stamp printing, invited *Husnik* to a
Visits to Vienna and held the views expressed by *Husnik* during this debate
Ideas so important that he approached the Ministry of Finance with the request to
dedicate the amount already approved for the experiments that *Krackowizer* was to
carry out to an inappropriate increase for the purpose of *Husnik*
He was able to spend the holiday months of August and September 1872 at the Court and
State Printing Office and to work with the (at home)

outgoing) technical resources, experiments were carried out on the production of stamps and irremovable stamps. The suggestions for the work of the Court and State Printing Office that arose from these experiments by *Husnik* and from further correspondence with him, prompted *Beck* to obtain *Husnik's* leave of absence, first for the 1873/74 school year and then for a further year, and to assign him to (temporary) service at the State Institute for this period. With regard to stamps, *Husnik* was to continue to pursue the idea of transfer stamps. In addition, however, his advice and assistance were also frequently called upon for the production of a new stamp issue, which had turned out to be necessary and which was to be carried out using the previous procedure (i.e. without applying the transfer principle), as will be shown in the next section.

D. PECHER'S TWELFTH ATTEMPT

After *Pecher's* eleventh attempt, the Court and State Printing Office decided not to pursue the idea of transfer stamps in its experiments. Only one external designer, the Viennese "technologist" *Eduard Dorn*, came up with a proposal for transfer stamps, which he submitted to the printing office in the first months of 1871. This proposal was rejected because the undamaged removal was achieved quite well not only with unusual solvents such as acetic acid and alcohol, but even with water. The State Printing Office itself now turned to the question of what means other than the transfer principle, the implementation of which had repeatedly failed, could be used to make the repeated use of the stamps as difficult as possible. In doing so, it took up an idea that had already been pursued in the planned issue of 1869 and the subsequent attempts - albeit only in passing - namely: to choose the most sensitive printing inks possible for the production of stamps, which would suffer irreparable changes in any attempt to erase lettering or overstriking. At the end of 1871, *Pecher* produced new test stamps accordingly, which were presented to the Ministry of Finance on January 5, 1872 (*Pecher's* Twelfth Attempt). At the same time, the printing works reported that they had succeeded in preparing the printing ink in such a way that any attempt to remove the overstriking or "heading" from an obliterated or overwritten stamp using any kind of acid would fail because the ink and obliteration ink would turn blue and the color of the stamp image would also be changed, making the stamp completely unsuitable for further use. What the report intended to say with this unclear wording only becomes clearer upon closer examination of the test stamps themselves and from later mentions in the files.

The stamps are made on fairly strong paper using the copperplate printing plates of the 5 kr value (with the emperor's head) and the natural printing plates used for the tenth attempt. Since the stamps have no printing on the underside, the leaf veins are printed on the top as a background. The fact that it is now reversed (inverse) for this reason can be seen from the legend 5 kr (in the horizontal rectangle), which appears in mirror writing. The two circular spaces in the two lower corners are empty. The numbers 18 and 70 were probably ground out of the printing plates because they had already become outdated over time. The copperplate printing on these stamps has a brownish tint. In the natural printing, as far as a judgment is possible, three colors can be distinguished: a red, a yellow and a gray. Since the great sensitivity of these colors was almost a condition of their selection and since very delicate shades were used, the judgment becomes uncertain with slightly faded copies. According to the files, it seems that four different colors were used. If that were really the case, then a red and a reddish brown would be distinguishable. No information could be found about the chemical constitution of these colors. A file note from 1875 indicates that these were "plant colors susceptible to atmospheric agents (!)."

This twelfth attempt *by Pecher* brought - apart from the "changing" colors of the brand fund - two essential innovations.

The *first* of these is that the stamp paper is sometimes completely light, sometimes blue-spotted, and sometimes almost entirely blue (and quite intensely) over the surface. This coloration is caused by the prussian salt with which the paper was impregnated. However, the impregnation no longer took place during paper manufacture, as with the official stamp paper, but only immediately before printing, and this was appropriately combined with the intensive moistening that had to be done for copperplate printing anyway. The recipe given is the dissolution of 10 lots of yellow prussian salt in 40 measures of pure water. The *second* innovation is the use of a sensitive color for copperplate printing, which turns reddish when moistened with acids. This color, the invention of which was attributed *to Pecher*, was probably the same one that *Worring* had mentioned in January 1871 as "*Pecher's chemical color*" during experiments with obliteration colors (see above, page 438). A detailed instruction was later drawn up for the production of this paint. The most important ingredient was a vegetable dye, logwood. 3 pounds of sulphate of clay, 4 lots of ferrous vitriol, 2 lots of simple chromate of potash and 1 pound of logwood extract were dissolved in 20 pounds of boiling water. This solution was precipitated with 3½ pounds of carbonate of soda and then filtered. The filtrate was washed two or three times with pure water, dried and rubbed with the required amount of linseed oil varnish. One part of the usual oil could be added to three parts of this paint.

carbon black copper printing ink without noticeably affecting the sensitivity of the former.

If we now know that the stamp paper was impregnated and that a variable vegetable dye was used for the copperplate printing, we can judge how imprecisely the Court and State Printing Office expressed itself in the aforementioned report of February 5, 1872. What turned blue when acids were used was the stamp paper and not the ink or even the obliteration ink. The change in the color of the stamp image, however, meant the logwood ink turning into a reddish tone when treated with acids.

It should be noted here that from now on, in the language of the court and state printing office, natural printing is referred to as "top printing". It may remain an open question whether this was done to emphasize that this printing was no longer applied on the underside (underprint) of the stamp as before, but on the top side; or because natural printing (as letterpress printing) followed on from copperplate printing, for which the paper had to be heavily moistened, and could therefore be partially printed over.

The Ministry of Finance gave only an evasive answer to the proposal of January 5, 1872. The printing works were advised to carry out further tests to determine whether the newly proposed sensitive top printing inks had sufficient resistance to external influences (especially under the not infrequently very unfavorable conditions of wear) and whether these inks could not be made more pleasing and more distinct in their tone (inspection order of February 27, 1872 and decree of June 25, 1872). The latter decree also states that the choice of inks will only be made when a decision has been made to hold a new issue.

E. HAUSNER'S RECENT APPEARANCE

The pharmacist *Anton Hausner* also appeared at the Vienna World Exhibition in 1873 and exhibited a "royalty patented paper for fixing writing", the properties of which he explained in a printed exposé intended for the international jury. As the objects he exhibited did not achieve the intended effect, on 24 July 1873 he sent a petition from Krapina to the Ministry of Finance, to which he attached his exposé and in which he announced, referring to the easy etching away of the lettering on stamps using the "anti-ink" that was then on the market (from *M. Thilen*, Vienna, Goldschmidgasse 3), that he was able to produce stamps from which the print would also disappear if the lettering was etched away. He offered to demonstrate experiments and mentioned that this object had been tested and

recognized. In the exposé he made two demands in relation to the effects of the anti-ink (composed of acids and chlorine, invented by a Frenchman), that the "writing be fixed", that is, the paper to be written on must be prepared in such a way that the writing cannot be erased without leaving visible traces; and furthermore that his "kuk privileged security color print" be applied either as a tone print, over which text words are to be written, or as a stamp image. He presented blanks and test stamps and claimed that if an attempt was made to etch away lettering, the print would disappear even sooner than the writing. Among the somewhat confusing sentences in the exposé is the following passage: "Sub **D** also presents blanks which the government puts into circulation; on which the security printing privileged to the manufactured item was used, as was loyally communicated to the Commission against Secrecy during the inquiry initiated by the Royal Hungarian Ministry of Finance."

When asked to comment on this intervention, the Court and State Printing Office (based on a note by *Wöhlert* about *Hausner's* project of using prussiate of blood, which was not entirely accurate in its details) presented the history of the experiments at the time and the purchase of this idea in 1859. With regard to *Hausner's* new proposals, it was emphasized that the sample sheets mentioned by the latter should be examined in particular. One sentence from *Wöhlert's* note deserves special mention, in which he mentions that the Schöglmühle had modified the impregnation process demonstrated by *Hausner* in order to save money, and *Wöhlert remarks*: "This system of saving money when using prussiate of blood, however, may have made the preparation less suitable for the purpose."

The Ministry of Finance then commissioned the printing works to have the objects exhibited by *Hausner* inspected by experts; this was more practical than entering into negotiations with the proponent or approaching the Hungarian ministry mentioned by him. Hofrat *Beck* sent Inspector *Wöhlert* and Factor *Pecher* to the exhibition, where a representative appointed by *Hausner* was working in the agricultural machinery hall.

He demonstrated to the above-mentioned people how to etch the print (a background) and the lettering using anti-ink and gave them two sheets of the prepared paper. *Pecher* immediately recognized that the ink used by *Hausner* for printing was made from plant material "according to the effect of the chemicals used"; one of the two sheets was impregnated with yellow prussiate of blood; the second was first impregnated with this salt and then, after drying, with a copper salt solution. Such a process was completely unacceptable for practical use due to its toxic effect. The Court and State Printing Office immediately had some test prints made (29 August 1873), both on the prussiate of blood paper and on the copper salt paper.

as well as on *Hausner's cyan copper paper*. Both papers show only a minimum of the color tone caused by the impregnation. The copper printing plates for the 5 kr stamps with the Kaiser's head were used for the top printing, but the underprint plates to be mentioned later were used for the background, which had already been prepared for the planned emission in 1873 (eight-rayed stars, small year).

The color of the underprint is reddish brown on some stamps, yellow on others. In *Wöhlert* and *Pecher's* report of August 29, 1873 on the success of their mission and in the report from the printer to the Ministry of Finance, which is word for word identical, it is stated with regard to these print samples that the vegetable ink recommended in *Hausner's* exposé was used for the *underprint*.

This is probably not to be taken literally. Since *Hausner* did not give any details about the nature of his printing ink and the printing company's delegates were not given any samples of this ink, the printing company was also unable to use *Hausner's* ink. It was therefore probably only an imitation that was used, which *Pecher* produced based on what he had seen at the exhibition. More precise information cannot be given, because both of the above-mentioned underprint inks (red-brown and yellow) do not react to acids. Incidentally, the paper does not react to blue. In contrast, the overprint turns reddish and is therefore made with *Pecher's* logwood ink. At the same time, the State Printing Office presented print samples on other paper, impregnated using its own method immediately before printing, to enable comparisons. These are stamps of 5 kr and 2 fl, which also have the red-brown background and the copperplate print made with logwood ink. Here too, the "colorful underprint" is said to have been made using plant-based ink. These stamps show an intense bluing of the paper. The printer emphasizes that these are samples of the stamps that have been submitted to the ministry on several occasions.

In its report, the printing company came to the conclusion that *Hausner's* process was neither new nor did it represent progress. He had already been rewarded with 1000 fl for the idea of impregnating with prussiate of blood; however, the use of plant-based inks for stamps had been known in the printing company for several years. The Ministry of Finance then rejected *Hausner's* proposals on 13 September 1873. Before he received this decision, he had written letters to *Wöhlert* and *Pecher* on 25 and 30 August 1873, informing them of his representative's report of the delegates' visit to the exhibition, in which he made himself available for a commission to test his proposals and referred to a "narrow-minded opinion of Director *Bauer* in 1870" allegedly known to *Pecher*. As a precaution, the Court and State Printing Company immediately informed *Hausner* that he should turn exclusively to the Ministry of Finance. An urgent petition by *Hausner* to the Ministry of Finance, which coincided with the rejection of his offer, remained unanswered. One sentence of this

The urgent request, in which *Hausner* estimated the annual damage to the treasury through the repeated use of stamps and bills of exchange at hundreds of thousands of guilders, against which his prepared paper and his security underprint would protect the state treasury, prompted the Ministry of Finance to consult the Court and State Printing Office again on the matter. This gave Inspector *Wöhlert* the opportunity to point out again in a statement dated October 28, 1873, that when the stamp paper is impregnated during paper manufacture, too little potash salt is added for reasons of economy; since this small quantity becomes even smaller and disappears completely during the following procedures, particularly when moistening before copper printing and when pressing, the preparation completely misses its purpose. *Wöhlert* is alluding to the fact that the papers from the 1870 issue (as well as the later ones from the partial issue in 1866) do not produce a clear blue reaction to acids and that one has to "torture" the paper with the strongest acids in order to achieve even the slightest hint of a reaction.

Then, as has already been noted, it is not the procedure ordered by *Pleniger*, how the paper should be impregnated *in statu nascendi* (1859), that is to blame, but the later insistence of the Ministry of Finance that the paper should be produced as thin as possible and without a blue tint, for which purpose not only the bluing with Prussian blue was omitted, but the impregnation was also reduced in order to avoid the blue clouds that could arise as a result of unwanted reactions.

For the next stamp issue, *Wöhlert* recommended that the paper should no longer be impregnated during production, but only under a moistening for copperplate printing, as was the case with the paper of the sample stamps that had already been submitted several times. This probably referred to *Pecher's* twelfth attempt and the sample stamps of August 29, 1873. A solution of 3 pounds of prussiate in a bucket of water would be sufficient for this impregnation of the paper, and this would still be more effective than trying to increase the amount of prussiate added during paper production, because this would be leached out during subsequent manipulations. These repeated and emphatic statements *by Wöhlert* lead to the conclusion that the supervenient impregnation used from *Pecher's* twelfth attempt onwards was thought up by the former.

When *Hausner* had received the evasive reply from the printing office and the rejection from the Ministry of Finance, it soon became clear that he was not inclined to let up on this matter so easily, but rather to get as much out of it as possible. To this end, he now came forward quite openly with a deduction that he had previously only hinted at very subtly. He endeavoured to establish a connection between the Austrian government and what had happened between him and the Hungarian State Printing Office in 1870.

It can be seen from a letter *from Hausner* to Hofrat *Beck* dated 20 December 1873 that he had asked a lawyer, Dr. *Sommerfeld*, to intervene with the Ministry of Finance. This representative was told that the government had already paid *Hausner* for the improvement of the stamps by means of security printing and had acquired it for his own use. This is an obvious distortion, since the information provided by the Ministry of Finance could only have referred to the paper impregnation and not to a printing method.

It is not clear whether this distortion came from *Sommerfeld* or from *Hausner* himself. *Hausner*, however, immediately took advantage of it by stating that this was an erroneous claim; because at the hearing held in Ofen in 1870, as the original report that reached him shows, it was not his "combined printing process for securing the typeface" but the process of Mr. *Alois Pecher* that was "recommended and acquired by the high government for joint use".

After years of experimentation, he invented an oil print which, when etched, suffered the same fate as the ink used for lettering, and on 16 August 1869 he took out a privilege. At the same time, he informed the Hungarian Ministry of Finance through official channels. On 12 December 1869, he was informed by the State Printing Office in Ofen that a detailed examination and assessment of his invention had been ordered; he was asked to either provide the inks or provide further details for the purpose of producing a sample. He then travelled to Ofen and rubbed the inks with printing varnish in the State Printing Office himself, after the State Printing Office Director had assured him of secrecy. After a long time, he received the sample stamps produced in the Hungarian State Printing Office. Although they were completely consistent, according to a decision dated 5 June 1870, the Director did not recommend *Hausner's* method for acceptance and purchase, but that of *Alois Pecher*, kk

Chief Factor of the State Printing Office in Vienna. Nevertheless, announcement stamps and bill of exchange sheets of 1 fl upwards were put into circulation in Hungary, which were provided with his (*Hausner's*) security printing, which involved a violation of his privilege and an abuse of trust. He complained about this to the Hungarian Ministry of Finance and was told verbally that "a new miracle" had been revealed to him there, namely that these stamps and bill of exchange sheets were neither produced nor are produced in Hungary, but in the kk

State Printing Office in Vienna. He also received a notice from the Zagreb Finance Directorate on 27 July 1873 that the "criticised "

Colors could be used by anyone, including the Vienna State Printing Office, as they wished.

He concluded this story with the frank assertion that this was a violation of his privilege and of the confidentiality promised to him in Ofen and that the Imperial and Royal Court and State Printing Office was not entitled to use his colour combination or

to use only individual colors from it. If justice is not done to him, he intends to turn to the Reichsrat and the Reichsgericht.

After clear action, *Hausner* intervened with the kk Ministry of Finance reiterated its claims in an articulate manner:

1. He had communicated his privileged invention of a security oil print to the Hungarian government in return for secrecy; however, after examining it, the speaker in question had recommended that the purchase be made of Alois *Pecher* rather than his (*Hausner's*) invention ;
2. However, this invention had not yet been used, the

stamps were still being issued with the old green print and this circumstance enabled ongoing malpractice.

3. recently announcement stamps and bill of exchange blanks of the guilder categories with *his* privileged security oil prints.

Since his complaint had been rejected by the Hungarian Ministry of Finance on 27 July 1873, he appealed to the sense of justice of the kk Ministry of Finance. The privileged secrecy and the promise of confidentiality given to him had been violated and neither the Hungarian nor the Imperial and Royal Government had yet bought his invention. In this submission, too, *Hausner* was reluctant to clearly express the insinuation contained in his allusions.

He apparently made the accusation that the Hungarian government had disclosed *Hausner's* color recipe (directly or perhaps through *Pecher*, whose affiliation with the Court and State Printing Office *Hausner* always emphasizes in a very special way) to the Imperial and Royal Court and State Printing Office; the latter now uses his process in the production of stamps, which he considers to be the responsibility of the Austrian government.

The Imperial and Royal Ministry of Finance now demanded full clarification of the facts by asking the printing company to state whether it was aware of *Hausner's* procedure and whether it was actually being applied.

In its statement, the State Institute stated that it had had no knowledge of *Hausner's* invention of a "peculiar negative pressure", for which he acquired a privilege on 16 August 1869, which was extended until August 1874, until *Hausner's intervention* in July 1873 and the visit of the experts to the World Exhibition. His mention of an invention *by Pecher* that had been examined by the Hungarian government had only the factual background that

Bauer and *Harrer* had been instructed in the details of stamp production at that time and had also witnessed some of *Pecher's* attempts to produce stamps using the new process with the reverse print.

Bauer probably informed his government of this and recommended *Pecher's* method. *Pecher*, however, did not submit a request to the Hungarian government and was not

Acquisition of his method took place. In this case, neither the management of the institute nor the organs were in direct contact with the Hungarian government. The printing works also noted that *Hausner*, with the green stamps from which the ink writing can be easily etched away, evidently meant the Hungarian stamps, which were first produced in the court and state printing works according to the Finance Ministry's decree of September 20, 1867, Z.36953 (April 1868 to August 1870) and for which chromium oxide, which is resistant to all reagents, was used. *Hausner* could not mean the Austrian stamps (from the 1870 issue), which also had green underprinting, because these were printed with a sensitive ink (ultramarine green) which completely disappeared when the ink was etched away. This green security ink had already been considered and proposed at a time when *Hausner's* privilege did not yet exist.

Finally, the printers point out that *Hausner* could only have meant the Austrian announcement stamps of the 1870 issue (with red natural print) and the bills of exchange of the guilder categories that have been in circulation since 1870 when he was printing his security oil prints. Plant dyes were used for these, namely Munich varnish, which is well-known as a commercial item and indispensable for printing work, for the stamps (since the start of the issue), but madder varnish for the blanks (since June 10, 1870), both in the commercially available form without any further chemical preparation. It is mentioned that madder varnish and Munich varnish consist of the aqueous extract of madder root, which is mixed with alum and precipitated with soda carbonate. The use of these well-known and generally used colorants cannot be the subject of a privilege. Incidentally,

The Munich printing works have been using madder varnish since 1858 for the red tonal printing of the domestic pass sheets, for which the *Hausner* impregnation was subsequently also used. According to another note, madder varnish has also been in use since 1869 for the printing of the 5 fl state notes.

The Ministry of Finance then issued a notice to *Hausner* on March 25, 1874, in which it was clearly explained that the Hungarian Ministry of Finance had not informed either the Austrian Ministry of Finance or the Court and State Printing Office of a printing process offered to them by *Hausner*, and that the State Printing Office had only become aware of this printing process in August 1873. Furthermore, since plant dyes had been used in the printing works since 1858 and the use of well-known dyes was open to everyone, and finally the idea of preparing paper with prussiate of blood had been bought from him in 1858, there could be no question of an abuse of trust or a violation of privilege. Moreover, it must have been

to take the intended further steps. In fact, even before he had received the above-mentioned notification, *Hausner* presented a memorandum to the Imperial and Royal Reichsrat in Vienna through the deputy Dr. *Foregger*.

In it he praised the test stamps made in Ofen using his method as completely appropriate and added that proof of this was that the kk

The State Printing Office in Vienna was already producing stamps with the combined color printing that was privileged to it (*Hausner*), and these were initially announcement stamps. From the further content of this prememoria it becomes clear that *Hausner* was not looking at the Austrian, but at the Hungarian bills of exchange from 1 fl upwards produced by the Court and State Printing Office. The petition was submitted to the government by the House of Representatives on May 23, 1874. It was first sent to the Ministry of Commerce and was sent to the Ministry of Finance in August 1874 with the addition that *Hausner's* privilege was still in force and the corresponding description of the privilege was being kept secret.

Since the difference that had now emerged regarding the bill of exchange was not significant, the court limited itself to referring *Hausner* to the decision of 25 March and returning the attachments to the petition to him.

Hausner's test stamps, which he claims were produced in the Hungarian state printing works, are incredibly primitive in appearance. They generally imitate the shape of the Austrian and Hungarian stamps of the time, as they have a leaf vein with a circular field left out in the upper part for the value designation. The raw leaf veins - *not* a natural print! - are yellow-red. The value designation 3 kr in the middle circle and a line enclosing this circle are printed in a black, slightly brownish color. The paper is very thin and translucent; its rather intense blue, cloudy coloration is evidently due to impregnation with prussiate of blood. The edges are cut.

F. BRANDED PAPERS, ROLLER REPAIR AND WASTE PERCENTAGES

Some time after the failure of the planned issue in 1869, the remaining stocks of the papers purchased for this purpose were liquidated. Although they were not watermarked papers, the controls that had been introduced for such specially marked papers had also temporarily taken hold of the tissue paper. The remaining stocks were therefore stored in the "secret" depot of the state debt treasury and, when there was no longer any talk of their use, were brought to the attention of the control bodies.

First, this happened with regard to the tissue paper, which was produced in the Schlöglmühle in November 1868 and then in December of this year

and in January 1869 it was first provided with a layer of rubber and then with a layer of glue by the exposed bookbinders of the Court and State Printing Office.

Of these, 8,000 double sheets measuring 21 x 49½ inches at 7 fl 46 kr per neuries and 4,500 double sheets measuring 18 x 42½ inches at 5 fl 53 kr per neuries remained in stock. The Reich Finance Ministry intervened to have these quantities removed from the paper depot. This led to the Court and State Printing Office taking over this paper in July 1870 for the same price, in order to use it to make labels for the packages of marked envelopes and correspondence cards. It was not until five years later that it was mentioned that there were also considerable remnants of the tissue paper that the *Rödersche* paper factory had supplied for the planned issue in 1869. At that time, 170 reams (85,000 sheets) of the 18 x 23 inch format were purchased at 6 fl 56 kr, or 1115 fl 20 kr. In all probability, 21 more sheets were delivered. How firmly the Court and State Printing Office believed in the success of the 1869 issue is evident from the fact that it kept 54,000 sheets of this paper for use. After the issue failed, it returned this quantity, except for 199 sheets, to the paper depot. Of the latter sheets, it then gave away 178¼ sheets in October 1875, which only had the varnish print on them, and was therefore completely discharged after 20¼ sheets had already been written off in April 1870. These 20¼ sheets provide a measure of how many trial prints were produced at 1 fl, 25 kr, 3 kr, 1 kr announcement and 6 kr calendar. When negotiations took place in March 1875 about what should be done with the remainder of Röder's tissue *paper* before the 178¼ sheets were handed over, strangely enough only the 31,021 sheets that the printing works had not removed were mentioned, while the 53,801 sheets that it had set aside were not mentioned either then or later. The state printing works was initially prepared to take over the remaining stock of 31,021 sheets at a price of 5 fl and to process them into telegraph printing blocks. But then it requested that this stock of paper be kept, pointing out that "the idea of producing stamps on transparent paper has not yet been abandoned, but that its practical implementation should be sought later". This remark, dated March 22, 1875, was probably one of the last allusions to this process to which the State Printing Office had devoted so much zeal and effort. What happened to *Röder's* paper afterwards could not be determined.

There have been repeated complaints about the paper used for the stamps issued in 1870, whether the paper now in private hands

Paper mill tried to economize as much as possible, whether the printing works were less lenient towards a private supplier than they had previously been towards a state-owned company, which, moreover, has been

had a joint board in the person of *Auer*. The complaints mostly related to the poor sizing and to blue clouds and spots in the paper and in one case to an abnormal thickness. In view of the recurrence of such complaints, the factory was once required not only to replace the paper with usable paper but also to reimburse the costs incurred for the initial processing of the paper in the printing works.

In view of the changed general price situation, the Ministry of Finance granted the Schlöglmühler Aktiengesellschaft an increase in the contract paper prices starting on January 1, 1872. However, this price increase did not apply to stamp papers. The prices for these papers continued to apply as they had been after the introduction of the centesimal denomination. The purchase contract for the paper factory envisaged a quarterly regulation of these prices; however, this contractual provision was never actually implemented.

The standard prices when the centesimal denominations were introduced were (for the stamps of the non-Italian parts of the empire): format $9\frac{1}{2} \times 16$ inches 3 fl 39 kr, format $10\frac{1}{2} \times 16$ inches 3 fl 74 kr and format 12×16 inches 4 fl 06 kr. When the five-year period for the delivery of paper agreed in the purchase contract was approaching its end, a competitive negotiation was announced. The records of the negotiations show that the prices mentioned above were still in use, although in the meantime the second format split had occurred, which had created *four* formats, three of which were smaller than the previous ones ($9\frac{1}{2} \times 14$, $10\frac{1}{2} \times 14$, 12×14 and 12×16 inches). This introduction, which was evidently made for the purpose of the greatest possible paper economy, had, strangely enough, not resulted in any price reduction; In a document from the year 1874, the first three formats are listed with the old prices, although one dimension of all three formats had been reduced from 16 inches to 14 inches, so that the savings benefited the treasury paper factory and not the stamp duty. The price of the preserved 12×16 inch format remained the same (4 fl 06 kr). The joint-stock company had adopted this situation when it was founded. A modification had only arisen from the fact that it had granted the treasury a 5 percent discount. The effective prices of the four formats were therefore 3 fl 22 kr, 3 fl 55 kr, 3 fl 85 kr and 3 fl 85 kr.

Likewise, for the paper of bills of exchange ($21\frac{1}{2} \times 24$ inches) and promissory notes (21×24 inches) only 9 fl 89 kr was paid instead of 10 fl 42 kr, and for the paper of newspaper stamps ($18\frac{1}{2} \times 24$ inches) only 7 fl 91 kr was paid instead of 8 fl 33 kr.

In the competitive negotiations for the further paper supply, the Schlöglmühler Aktiengesellschaft was victorious. The new contract (dated October 2, 1874) was only concluded for 3 years (July 2, 1874 to 1877). The prices for the four stamp formats were now (according to the agreed

Pound prices of 1 fl 20 kr) 3 fl, 3 fl 30 kr, 3 fl 60 kr and 4 fl 80 kr, for bills of exchange 9 fl 90 kr., for promissory notes 10 fl 80 kr and for newspaper stamps 9 fl.

The prices just mentioned for the four formats were not actually applied. Before the new contract came into effect, it had become necessary to reach a new price agreement for the new, modified formats of the next stamp issue, the first stock of which had to be produced. This was, however, only a calculation, as the pound price of 1 fl 20 kr was retained. The remaining stamp requirement for the 1870 issue was produced on paper from the existing stocks in the second half of 1874. These stocks were of a considerable size. There was only a shortage of the 10½ x 14 inch format, which was then covered by the two larger formats.

In 1871 the watermark roller was repaired, but only very scant information about it has been preserved. In March the supervisory commissioners of the State Debt Directorate, who were stationed in the Schlöglmühle, reported that the roller had become unusable for stamp paper. At the beginning of April the roller was sent to Vienna for a new screen to be made.

On June 17, the supervisory commissioners reported that the roller produced had been found to be completely satisfactory. At the same time, they presented six sample sheets of stamp paper produced with this roller. The court and state printing office declared this paper to be suitable. A protocol entry from March 1872 shows that this repair was carried out by the screen manufacturers *Hutter* and *Schranz* "in the name of *Herndlhofer*". As already mentioned above (page 329), it is not certain whether the completely open letters of watermark No. 3 - to which the special designation No. 3 b could be added - were already applied to the roller screen during the roller repair in January 1866 or only during the repair mentioned here in 1871.

In March 1871, *Reck*, on the occasion of a certificate presented to him regarding the waste produced in a large print run, went into more detail about the question of what percentage could be tolerated. In response to *Worring's* report that up to 6 percent of waste could be tolerated in copperplate printing, up to 2 percent in letterpress printing, and up to 3 percent in gluing and perforating, the "Head of the Department for Stamp Gluing and Perforating", *Vinzenz Mozik*, was informed that exceeding the 3 percent limit would be punished by deductions from wages. The percentage of waste permitted here (11 percent) was quite high.

XXXII. CHAPTER

A REVIEW OF THE ADNEXES

It has already been mentioned above (in Chapter XVII) that with the transition from the Convention coin to the Austrian currency, the former special trade book stamps lost their special existence; that the stamp amounts for announcements were set at 1 and 2 Nkr. and for calendars at 6 Nkr.; that a blue natural print was introduced for these three categories, and that the value designations 1 kr, 2 kr and 6 kr were added to the retained German and Italian destination legends - in the same form for both the German and Italian stamps - which then appeared to be a very strange combination for the latter stamps. It has also already been shown how the green newspaper stamp of 2 kr CM became a brown (red in Lombardy) stamp of 4 Nkr. after the stamp sets were changed; how, as a result of the preferential treatment of the press, this became a stamp of 2 Nkr, to which a blue (black in Lombardy) stamp of 1 kr was finally added.

Now we should briefly touch on the further fate of these stamps up to 1875. There was no further change in value or design. In particular, these stamp sets were unaffected by the extraordinary war surcharge of 1859, so that there was no reason for any change on this occasion. On the other hand, *Hausner's* preparation of the stamp paper was readily adopted for calendar and announcement stamps; in the same way, in 1869, wide perforations (12 and 12½) were applied to these stamps - both without any special regulation or order. As soon as the production of these consumption stamps became necessary and became available after the introduction of the modifications, it was already carried out in the new manner. Neither of these applied to newspaper stamps, however: for these, a special paper of a different format (18½ x 24 inches) was used and no impregnation or perforation took place at all.

mentioned two one

The bluish prepared paper was not used for the calendar and announcement stamps of Lombardy. They were produced on the pink paper that had been pre-marked since January 1, 1860, but only with narrow perforations. After the introduction of the wide perforation, these were no longer printed and therefore there are no *widely perforated* consumption stamps on pink paper at all and in particular none on watermarked paper. The German consumption stamps, on the other hand, have been produced on watermarked paper since June 1, 1864, namely the calendar and announcement stamps on paper with the (always cross-shaped) STEMPEL-MARKEN watermark.

The newspaper stamps, however, were printed on paper with the watermark ZEITUNGS-MARKEN., which was also used for the newspaper postage stamps.

The watermark on newspaper stamps is always in the same direction. Since the stamp images were arranged on the plate in such a way that four blocks of 100 images each were separated from each other by wider strips and two blocks were placed with their heads facing two other blocks, if you hold the sheet of stamps up to the light so that it can be read correctly, the watermark and the stamp legend are in the same direction on half of the stamps, but on the other half the watermark is upside down.

The above statement that the prepared paper was used for calendar and announcement stamps must be qualified in one respect. No announcement stamp of 2 Nkr has yet been found on bluish paper. In fact, this stamp - apart from the one printed on pink paper for Lombardy - is only known to have been printed on white paper and with close perforations, as it was produced at the start of the issue in 1858. The files also do not show that a new print of this category took place until the issue in 1870. A single note from March 1860 mentions the destruction of waste paper from calendar stamps, then announcement stamps of 1 and 2 kr, and finally newspaper stamps of 1, 2 and 4 kr. However, the last mention (4 kr) shows that this (at least in part)

Waste paper that had been collected over a long period of time. The destroyed 2 kr stamps could therefore very well have come from the first printing in 1858.

Starting in June 1864, there is a complete lack of information about the number of print runs of consumption stamps due to the availability of delivery lists. The following were printed: *calendar stamps* in June 1864, in July and November 1865, in November 1866 and in September 1867; *announcement stamps* of 1 kr in June and September 1864, in April and September 1865, in February 1866, in August 1867 and in March 1868. The announcement stamps of 2 kr were not printed at all in the period from June 1864 until the issue in 1870. Since the waste lists from the last period before the introduction of watermarked paper, which go back to the autumn of 1863, do not contain any mention of this category, it can be assumed with a fair degree of certainty that it does not exist at all with wide perforation. The only other stamps that could appear would therefore be on *Hausner* paper with narrow perforation.

With regard to the graphic production process of the announcement and calendar stamps, it should be noted that the first printing in 1858 used auxiliary letterpress printing for the legends. For the calendar stamps and announcement stamps of 1 kr, full copper printing was used at the same time as the prepared paper was used. With regard to the 2 kr stamp, an interesting detail emerges from the files.

When the centesimal denomination was introduced, which also applied to the consumption stamps, numerous plates in stock were melted down, as the redesign was only carried out on *one of* the raised plates, which then had to form the starting point for the production of the new printing plates. From the aforementioned 2 kr category of the announcement stamp, the following were now destroyed: six worn-out printing plates, five unused raised plates and 45 unused indented plates. The total of 56 plates is then marked "including 29 pieces without a value". These 29 blank plates were intended for combination with the auxiliary book printing. This shows that the plates for full copper printing had already been prepared for this category, but that in 1864 a large number of plates for auxiliary book printing were still unused, which is why the use of the full copper printing plates had certainly not yet become necessary. The centesimal transformation undoubtedly affected a solid copper printing plate, so that in the following period the production of these stamps was only possible in solid copper printing.

The material of these categories found in stamp collections is quite sparse. The consumption stamp signature, which competed with the stamps, was used in the larger cities, where the main opportunities for stamping calendars and announcements also arose. Since the use of stamps was from the outset the rarer mode of paying taxes, it is not surprising that not a large number of such stamps have come down to us. As far as can be judged from the available material, the 1 kr announcement stamp (with narrow perforation) was printed on several types of bluish prepared paper; it is also known on medium blue normal paper. With wide perforation and at the same time on watermarked paper, this category occurs on three shades of bluish paper, on a very light bluish and on a white floret paper, which can be identified with the paper of the VIIL creation of March 1867 (leading types 90 kr and 5 kr misprint without legend).

When the preliminary work for the planned issue in 1869 began, it was planned to include the consumption stamps in it. The announcement stamps in particular were to be produced using the decalcomania process. For the calendar stamps, however, no thought was given to ~~applying this~~ ^{should} new principle. In the case of the latter stamps, therefore, only considerations of a general uniformity of the stamp stock must have been decisive, which made it seem desirable that the calendar stamps also bear the emperor's portrait.

To make things easier, it should be noted that there are three different types of design to consider for the trial prints of the announcement stamps, but only *two* for those of the calendar stamps.

A. ANNOUNCEMENT MARKS

The *first* type of execution, as envisaged in *Laufberger's* drawings, is illustrated by *Teplar's* woodcuts. One of these three engravings shows the guilder stamps, the second the kreuzer stamps and the third the calendar stamps. The reason why no special image was made for the announcement stamps was, as later events show, that it was intended from the outset to choose the same size (10 x 18 lines) and design for these stamps as for the kreuzer stamps. The only difference was to be the colors and a special legend. Nothing can be inferred from *Teplar's* woodcuts because they only appear in black and white and do not yet have any legends.

It now appears that this first design of the announcement stamps, and indeed the underprint, was abandoned before the printing plates were made, as was probably the case with both general Kreuzer stamps. At least no test stamps with this first underprint design have survived for either the Kreuzer or the announcement stamps.

The second design of the announcement stamps is also only from the "first" Description of the Court and State Printing Office from April 1, 1869; supporting documents no longer seem to exist. According to this description, the announcement stamps differed from the Kreuzer stamps only in that everything on them, except for the black-printed bust, was printed in green. This information may not have been entirely accurate. Green was probably the new (*Röder*)

bar and the negative pressure with the annate 18 and 69 in its two upper corners.

On the other hand, the fuchsia print (which probably read "1 kr Ank.", as on the later announcement stamps) cannot have been green. Likewise, the frame of the head portrait, including the attached cartouche, was certainly printed in the same black color as the head on the same plate.

Another difference between the announcement and kreuzer stamps, according to the above description, was that on the former "the word announcement is placed under the value". This meant that on the announcement stamps, the cartouche attached to the oval frame of the head portrait had a different form of legend than on the kreuzer stamps. While on the latter, the value designation (for example, 3 kr) stood out in fairly large, recessed letters against the dark, grainy background of the cartouche, on the announcement stamps the cartouche was divided into two stripes of unequal width. In the upper, wider strip, the legend (1 kr) was in recessed, somewhat smaller letters and the background was filled with diagonal cross and horizontal lines. In the lower (somewhat narrower) white strip, the

Legend "Announcement" written in open (two-line) capital letters. The letters are so small that special attention is required to discover this legend.

The *third* design of the announcement stamps can be seen from the "second" description in the files, but even more clearly from the test stamps that have been preserved. In these stamps, which the Court and State Printing Office submitted to the commission on June 16, 1869, which was held on the *Fichtner* stamps, the underprint is the reddish-yellow color that the Ministry of Finance did not want to allow for the Kreuzer stamps. The fuchsia print is already red. The head image, frame and cartouche are brown, like the Kreuzer stamps. Only the border remains green. The striking fact that in the second description only the announcement stamps of 1 kr are mentioned, but not those of 2 kr, without anyone noticing this oversight, indicates the hasty nature of the work, and that at that time no one believed that the issue would actually take place.

B. CALENDAR STAMPS

Teplár's woodcut of the calendar stamps agrees with the description of 1 April 1869.

It therefore seems that this design was largely appropriate to the conditions of execution from the outset, so that there was no need for modifications such as those that had to be made to the designs for the guilder and kreuzer categories, particularly with regard to the bar and the underprint. Incidentally, there were no difficulties in the execution of the calendar stamps, perhaps because, as mentioned, the transfer process was not used for them. It was therefore not necessary to use *Röder* tissue paper for these stamps and to make it translucent by impregnation. Nevertheless, these test stamps were actually printed on impregnated Röder paper. This quality of the paper of the test stamps led to the aforementioned treatise being published in *A. Moschkau's* "Magazine for Germany's stamp collectors".

(No. 4, October 1871) is based on the assumption that the bearer of these marks was goldbeater's skin. It is not impossible that the author of the treatise had learned something of this kind from his Viennese informants and that the latter in turn had "heard something ringing" about *Nejedlý's* experiments with goldbeater's skin and passed it on in a misleading way.

It should be noted here that in the above-mentioned philatelic monograph "Fundamentals of philatelic studies and Stamp collecting" by Higher Regional Court Judge *Viktor Suppantšitsch*, Leipzig 1908,

It appears that stamps from the United States of America, which probably meant the project stamps mentioned several times, were made on goldbeater's skin. This is probably erroneous: stamps from America on goldbeater's skin have not been reported at all; the ones that have been reported are printed on transparent paper and not on goldbeater's skin.

According to *Teplár's* woodcut of the calendar stamps and their first description, below the head portrait enclosed by an oval double line, "in an elongated frame consisting of two lines" - which meant a rectangular panel lying at the foot of the stamp - was the year of production in dark numbers on a white background. In the two side pieces of the border, the words "K. k. oesterr. Stempel-Marke" were to be written, and in the upper (slightly wider) piece of this frame, the words: "6 kr. Kalender". Finally, the radial placement of the number 6 and the word Kalender was planned in all four corners of the space enclosed by the border. According to the description, the head portrait was to be printed in brown and everything else in green. Calendar stamps of this design have not survived.

The *second* (also included in the printing report of 1 April 1869)

The description shows that up until the commission of June 16, 1869, only one change had been made, namely that the year in the rectangular panel below now consisted of open (two-line) letters and the background of the rectangle had a light grain. The border, which is attached here on both sides and at the top, retained the dark writing on a light background until the end; the legend in it also remained in the spelling "Stämpel". So here a Röder border was not chosen at all.

The 1869 issue did not materialize. A new issue of the consumption stamps was therefore organized in the same way as for the general stamps, using the old plates. This was to be recognizable by the ultramarine blue overprint of the year 1870. The color of this annate overprint meant that the blue color of the natural printing chosen for the consumption stamps in 1858 was now abandoned and a red color was chosen instead. In the proceedings described above on the occasion of *Hausner's appearance* at the Vienna World Exhibition, it was mentioned in the records that Munich lacquer was used for these stamps.

Collectors distinguish between whitish and bluish paper on both consumption stamps issued in 1870 - at least the two calendar stamps and the 1 kr announcement stamps. The bluish tint is not important, as there was no intention behind the choice of this coloured paper. On the contrary - blue cloudy paper was considered less suitable and if this colour exceeded a certain limit, the paper

factory. The announcement stamps of 1 kr on bluish paper, which are in collectors' hands in strikingly large numbers, are used in the regulation. This may have had the following reason.

After the abolition of the announcement stamp had been considered in the Ministry of Finance as early as 1857, but was not pursued further, mainly for reasons of press friendliness, because there was concern that the independent announcements and posters would be too much competition for newspapers charged with advertising fees, in 1867 it was considered to drop both the announcement stamp and the fee for insertions. However, the matter initially only progressed to the point that the relevant draft bill office had its materials published in the official Vienna newspaper in order to "provoke a discussion of the important practical questions that were often involved". With this process (which had not been usual until then), it was natural that a long time had to pass before further steps could be taken. However, the matter did not settle down after this statement by the government. Six years later, the abolition of the announcement stamp and the advertising fee became a fact through the law of 29 March 1874, RGBI No.30.

The announcement stamps issued in 1870, of which a considerable number remained in the hands of the parties when they were cancelled and were immediately snapped up by collectors, are the last to exist in Austria. With their elimination, the adnexa of the general stamps was reduced to the only calendar stamps. The only other consumption stamps that remained were the newspaper stamps, both of which were cancelled at the end of 1899. But the newspaper stamps do not really deserve to be called adnexa of the general stamps. Having been issued before the latter, they continued to lead an independent, special existence in which they were almost closer to postage stamps than to "financial stamps", which in reality they were. Their redesign phases were also always very special: only with the introduction of the Austrian currency and the resulting implementation of the tax amounts did the newspaper stamps share the fate of the general stamps and there was even a parallelism in the choice of colors between the coloring of the natural self-printing and the image printing for the Italian (red) and non-Italian parts of the empire (brown).

It should only be noted that the above-mentioned two-form nature of the new natural print of the 1870 issue, which has the veins of a beech leaf, can also be seen in the consumption stamps, namely the calendar stamps and the announcement stamps of 1 kr, which belonged to the old 3 kr CM design. The announcement stamps of 2 kr are not an option in this case, because they had the old 6 kr CM design.



SIXTH SECTION

THE BIENNALE MISSIONS

XXXIII. CHAPTER

THE PROPOSALS FOR A NEW ISSUE

A. THE INSUFFICIENCY OF THE PLATE APPARATUS OF THE FIRST GROUP



The issue in 1870 was only a stopgap measure, prompted by the failure of the planned issue in 1869 and by the fact that something had to be done about the abuses in the revenue stamp system, particularly the large number of repeated uses of stamps. In addition to the measure of a change of issue, which in itself has a far-reaching effect on repeated uses, because the previous stamp material in the hands of the malversers suddenly becomes unsuitable for renewed use and it takes a long time before they come into possession of material from the new issue, a means of directly making such malversations more difficult was also chosen for the new issue in 1870. It was only a half-way solution, however, since a radical remedy could not be found.

This information was provided by the sensitivity of the ultramarine colours to etching out the devaluation marks. If the "scraping off" could not be prevented,

at least the repair of used stamps, namely the erasure of the cancellation marks, should be made impossible. But the fee administration could not remain calm in the long run. The Court and State Printing Office also left this question unanswered for little more than a year after the start of the issue in 1870. By the end of 1871 *Pecher's* twelfth attempt was already completed. These test stamps with matt, sensitive vegetable inks for natural printing, with logwood ink for copperplate printing and with moistening of the paper with a solution of prussiate of blood before printing were sent to the Ministry of Finance in January 1872, which then ordered new tests to be carried out to test whether the inks of the overprint were not too sensitive and would not suffer too much from external influences. The final decision on the choice of inks was reserved for the time when a decision had to be made on the organization of a new issue.

Such a new issue was not only generally considered at the time (due to the provisional nature of the 1870 issue); rather, for other reasons, it actually appeared to be a foreseeable possibility. The first impetus for this came from a petition from the Upper Austrian Chamber of Notaries, which was sent by the Ministry of Justice to the Ministry of Finance, in which it was proposed that, in order to prevent the backdating of documents as far as possible, new stamps bearing the respective year should be issued every year from 1872 onwards. After a survey of the costs and time required for a new issue, the Ministry of Finance pointed out in its reply to the Ministry of Justice the loss that the exchange would suffer each time due to the remaining stocks becoming unusable, as well as the additional work and inconvenience associated with the larger initial stockpiling, with the exchange and the subsequent exchange requests.

One could not undertake such a thing year after year. However, the Ministry of Finance had planned to change the stamps more frequently - approximately every *three* years - and the first preparatory work in this direction was already being done at the State Printing Office. The latter sentence gave the proposal of January 5, 1872, a significance that it had not actually had; but it was in turn a hint to the Court and State Printing Office. Since the current issue dated from 1870, according to this new program, the year 1873 should have brought another issue. This was actually understood as such.

The next step in this area and at the same time a further impetus for a new issue was a report from the printing works on 22 April 1872, which informed the ministry that the raised plates in use (for the production of the intaglio plates required for the copper printing of the stamps) had already become so worn out through many years of use - *gutta lapidem cavitat* - that the production of new raised plates had become unavoidable. This wear had progressed so far that

the raised plates could only be used for a very short time. The Court and State Printing Office would have had the work required in this case, which is part of normal service operations, carried out itself without any problem, if it had not caused such high costs that the plate machine for a completely new issue could be purchased at the same expense. However, an issue of new stamps with a different design is highly recommended, because the existing stamp designs are neither appropriate for their purpose nor for the changed taste of modern times; their execution also does not correspond to the current advanced technical standards.

The Ministry of Finance (30 April 1872) requested numerical details and more detailed proposals on the design of a possible new issue. The printing works then reported that it would be most expedient to now carry out the issue with the portrait of the Emperor, which had been planned for some time, since so much preparatory work had already been done for it that only an expenditure of 3524 fl (1224 fl for master and raised plates and 2300 fl for printing plates) seemed necessary, while a complete renewal of the plate apparatus according to the old drawings would cost 3579 fl (1642 fl for master and raised plates and 1937 fl for printing plates). This list did not make the choice difficult for the Ministry of Finance, especially since it was also taken into account that 1200 fl had already been spent on the plates with the Emperor's portrait, which they did not want to let go to waste.

There was no doubt that the old stamp plates, which had been in use since 1854, and insofar as some of them had not been reconditioned in the meantime, needed a radical facelift. Signs of wear and tear had already become apparent, particularly on some of the frequently printed values. The wear and tear of a raised plate is evident in the dulling of those parts that are supposed to receive the ink in the lower plate. These depressions are therefore shallower than before in the printing plates taken from already dulled raised plates and it now happens more often, especially when these depressions are also considerably wider, as is the case with the numbers and letters of the value legend on the stamp plate, that the printer's assistant removes almost all of the ink when wiping the plate and that the print lacks blackness in these places.

The regeneration of the plate apparatus with the old stamp drawings would have
According to the cost estimate of the Court and State Printing Office, it cost:

for the guilder categories:

12 original plates (= mother plates) at 30 fl = 360 fl and 36 high plates at 5 fl = 180 fl; then

for the cruiser categories (including the three consumption stamps):

19 original plates at 40 fl = 760 fl and 57 high plates at 6 fl = 342 fl.

The higher price for the lower category is due to the fact that since the introduction of the centesimal denomination, 100 units were combined on one plate and this plate therefore had a larger surface area overall, while for the (higher) guilder values, 50 units made up one plate and these plates had a smaller format, as the corresponding paper format already shows.

The printing works were not precise in their information, because the 1 fl value of the old design was one of the larger plates. The above list also shows that when the stamping machine was first purchased, more than one raised plate was produced for each value. It was probably only by chance that it appeared that there were three raised plates for each value. In reality, *one* raised plate was enough for the rare values, whereas a larger number of plates were purchased as a reserve for the frequently printed stamps. If the printing works only stated in its report that the existing raised plates had become unusable, but in its cost calculation also cited the much more expensive master plates in addition to new raised plates, this clearly shows that it was using all means at its disposal to completely redesign the stamps. It was certainly not yet necessary to produce new master plates, since the centesimal originals that had been in existence since 1864 could not yet have been noticeably worn out.

The cost estimate mentioned above shows that, in relation to the long form stamps with the emperor's portrait, in addition to the original plate for the 5 kr value, original plates for all twelve guilder values - the 1 fl value now shares the fate of the guilder values - had already been produced. This was probably done in the autumn months of 1869, since *Benedict* had completed the new engravings for the top print mentioned above in Chapter XXIX (frame of the portrait, value legend cartouche and border combined in *one* piece) in July 1869. These engravings were only made in three sizes (guilder, kreuzer and calendar) because the announcement stamps were to be the same as the kreuzer values and only had to bear a different inscription in their value legend cartouche (which had to be engraved in the original type).

Regarding the calendar stamp, it must be mentioned here that *Benedict's engraving*, intended for copperplate printing, differed somewhat from the original engraving (designed for letterpress printing). The ornaments are designed differently in detail and are more delicate. The legend in the right and left frame pieces already has the orthography "stamp". The word calendar in the upper frame piece is in capital letters. The number 6 in the four corners is no longer dark on a light background, but light in a dark oval. The panel below the head portrait intended for the year is now empty, as it was planned to provide the new calendar stamps with a brightly coloured background, the year

into this background and to let them fall into the empty plate of the copper print.

As the cost estimate of the State Printing Office shows, the value legends for the only values in question had already been engraved in galvanic copies of *Benedict*'s engravings for the guilder and kreuzer categories. The quotation is: "30 plates for the fee rate, 6 fl 180 fl each." Since the calendar stamp was already engraved with its fee rate from the outset, engraved with the stamp amount was only necessary for the twelve guilder categories, the 16 kreuzer categories and the two announcement stamps. In the space next to the value legend, the unnamed engraver added fine white ornaments that fill the background of the square cartouche and vary from value to value. For the twelve guilder values, all of the large original plates had already been compiled based on the original types completed in this way. Of the other denominations, only the 5 kr denomination had progressed to this stage, and there were already three printing plates of this denomination, each costing 12 fl. and which had been used for the test *prints* since the second half of 1869.

It should be noted here that *Nejedly* stated in a later document (dated January 1875) that he had been striving for a different engraving for the different stamp values from the very beginning (the preparatory work for the issue in 1875), but that this had failed due to *Jacoby*'s resistance and the fact that a large part of the plates were already ready. These negotiations with *Jacoby* probably took place in May 1872, according to the events mentioned.

The printing works had estimated the same costs for the originals (master plates) and the raised plates of the new issue as for a possible regeneration of the old issue (30 fl and 5 fl, or 40 fl and 6 fl). The total number of printing plates required for all 31 stamp values was given as 155. With regard to the printing, the Court and State Printing Office requested that the proposed sensitive overprinting inks be accepted, as this method was relatively the best of those tried so far. On June 25, 1872, the Ministry of Finance approved the production of the additional plates for the long stamp form and requested that a notification be made as soon as the work was finished. Since the printing works had not mentioned whether and with what success the resistance of the sensitive overprinting inks had been tested, the ministry now ordered even more clearly that tests should be carried out to see whether these inks would not change under the sometimes very unfavourable conditions of wear and tear, and furthermore whether they could not be produced in a more distinct and pleasing tone. When *Nejedly* noted in the relevant document of 25 June 1872 that the original plates, according to previous experience, had been 18 years old,

last, he meant the experiences that had just been made and not previous experiences that had been available for a longer period of time. For now, 18 years have passed since the first introduction of the stamps.

B. THE INITIATION OF THE PRELIMINARY WORK FOR THE NEW ISSUANCE

Since the Ministry of Finance had ordered the complete plate apparatus for an issue with the Emperor's portrait to be produced, the publication of this issue seemed imminent, and since the intention of a three-year change of issue expressed to the Ministry of Justice meant that the 1870 issue would have been replaced by a new one starting in 1873, the Court and State Printing Office did not have much time left for the necessary preparations when it received the Ministry of Finance's decree of June 25, 1872. These were therefore immediately started on all lines and a precise and constant monitoring of the relevant work in all departments was initiated by the management of the institute. This work concerned the plates for the copperplate printing, the stamp paper, the drawing of the underprint and the colors for this.

1. The most difficult and least susceptible of expedited work, the galvanoplastic manufacture of plates for copperplate printing, had fortunately already been completed to a considerable extent. Nevertheless, this work was expected to take another eight months, so that it would have taken well into 1873.

2. Another subject of consideration was the stamp paper. With the change in the shape of the stamps and the choice of only two sizes for the general stamps and the announcement stamps, as well as a third size for the calendar stamps, a change in the format of the stamp paper was also necessary. *Pecher* estimated the paper dimensions that would be necessary in the future as follows:

Gulden categories, 50 pieces per sheet, dimension 11 x 12½ inches;

Kreuzer categories and announcement stamps, 100 per sheet, dimension 10¾ x 17¼ inches;

Calendar stamps, 100 per sheet, dimension 10½ x 14 inches.

The paper format for the calendar stamps (10½ x 14 inches) already existed; only the two other formats were new. The printing works came to an agreement with the Schlöglmühl paper factory and on 1 August 1872 received the information that these two new formats could also be produced with the existing watermark roller; the individual sheets would not always have the watermark in the middle, which was also the case with most of the previous stamp paper formats.

was not the case. Later, the printing works specified the paper formats for the Kreuzer stamps as 9½ x 11 inches and for the calendar stamps as 7½ x 11 inches, since it was now intended to use only the denomination 50 for these stamps. However, the latter format seems to have been abandoned completely and the paper intended for the Kreuzer stamps was also used for the calendar stamps.

The first order for the new paper was made, as should be mentioned here in advance, in May 1874. The following sentence in this order letter dated May 23, 1874 is very important:

"The new stamp paper should be produced in a more white color and *without* the addition of prussiate of potassium hydroxide and should be delivered in sheets cut to the dimensions given. The existing watermarks should also be used on the new stamp paper in such a way that the watermark appears clearly on every sheet regardless of the location."

With this order, the use of *Hausner's* preparation, the impregnation of the paper *in actu nascendi*, which could be described as "stuff impregnation" in contrast to *Wöhlert's* supervenient "leaf impregnation", definitely ceased. The State Printing Office may have received special verbal approval for this important step. However, the only evidence available is that in a report dated November 24, 1873 on the measures taken for the new issue, the printing company mentioned in passing the items on which it had obtained *Husnik's* report, and stated that this report had advocated "the previously suggested moistening of the paper with prussiate of blood immediately before the printing manipulation, because the purpose of this method, which consists in the noticeable change in the stamp colors when acids are used to etch out the ink from stamps that have already been written over, could be achieved more effectively than by simply impregnating the paper with prussiate of blood during its production." This report was then "noted with approval" on May 11, 1874. The printing company should not have seen this alone as approval for the abandonment of a long-standing and nevertheless important protective measure. However, it viewed leaf impregnation as merely a modification of the impregnation (by postponing it to a later stage), which it considered itself entitled to apply without further ado.

However, it is also possible that, as indicated above, she had already received verbal, explicit authorization to act in this way.

3. The third subject of preparation was the coloured background of the stamps, for which the drawings had to be made, the printing plates produced and the colours to be used selected.

It was considered out of the question that the background should have an ornamental design. The natural printing was no longer an option. This corresponded to the suggestions of *Worring*, then to what *Harrer* had said on this issue - presumably on the basis of what he had learned in the court and state printing office - and had already been agreed upon for the planned issue in 1869. *Wöhlert* was to take the necessary steps with *Pecher* and the factor *Hülsebusch* (from the lithographic department) regarding the design. Regarding the colors of the so-called stamp background (sometimes overprinted, sometimes underprinted), *Pecher* thought that there would be no objection to their more decisive and pleasing production and that the concerns about their variability were unfounded. In order to enable the ministry to make an independent assessment, test stamps were to be printed on 20 sheets (of a paper similar to watermark paper) and glued. There was no need to wait for the new design for the background. *Pecher* was instructed to submit such prints by August 15, 1872, and to include a statement regarding the dyes chosen and the new paper preparation, as well as the advantages to be achieved by both.

None of these test prints are believed to have survived. However, that they were actually made is evident from a comment by *Pecher* on 20 November 1872, according to which approximately two months ago (i.e. in September) Stamps were presented that were printed with sensitive black ink and ephemeral bright colours, namely the guilder stamps with lacquer paint from redwood, the kreuzer stamps with ultramarine and the calendar stamps with a mixture of redwood and ultramarine (*Pechers* 13. Experiment). All acids would have a destructive effect on these colors. Moreover, the paper was soaked in prussiate during printing: this makes the ink indelible on the one hand and the paper turns blue when moistened with acids on the other. *Pecher* did not express himself clearly here, however. Since no test prints of this kind are known, it is not possible to say what the drawing of the underprint looked like, i.e. whether plates of the newly selected drawings were already used. Nor is there any certain idea of what the print with redwood looked like - unless the red-brown that was used for the test stamps on the occasion of *Hausner's* appearance at the World Exhibition was redwood.

The stamps from the 13th attempt do not appear to have been forwarded by the printers. The only test stamps that reached the Ministry of Finance were a different type of stamps that *Pecher* sent in on 20 November 1872 and that were presented to the Ministry two days later for approval of the designs and colours of the stamp base (*Pecher's* 14th attempt).

These were stamps of 2 fl, 5 kr and 6 kr calendars. The copperplate print was made with logwood ink. The

Paper was soaked in prussiate during printing. Red madder lake was used for the background of the guilder stamps, silk green for the kreuzer stamps and blue (according to later references, violet) madder lake for the calendar stamps.

Regarding the last-mentioned colour, there were differences of opinion as to whether it was fixed or variable. However, regarding the other two colours, it was stated that they "completely resist the effects of the atmosphere". The background designs for the guilder stamps consisted of white six-pointed stars; for the kreuzer stamps of small plates formed by two concentric circles; and for the calendar stamps of wheel-like circles divided eight times by spokes, which can hardly be described as stars, as was later done. All three designs contained the year 1873 in their lower part, in a narrow, rectangular cartouche, which for the guilder and kreuzer stamps was placed slightly below the black-printed value legend cartouche, but for the calendar stamps fell into the small frame of the copper print intended for the year. In the two upper corners of the guilder and kreuzer stamps, there was a round field in full color, in which the value figure was left out in white. According to the printer's report, the designs were delicate to make imitation more difficult; nevertheless, they were still easily recognizable even to the naked eye. The colors proposed were fixed colors that resist the effects of light and atmospheric moisture. The colors that had been used for the test stamps presented on January 5, 1872 should have been avoided because they faded under the influence of light and even after long periods of storage. The logwood color of the copperplate printing and the impregnation would now serve to protect the stamps against tampering.

The Ministry of Finance approved the "overprint designs" on December 5th, based on this "first draft" of November 22nd, 1872, but objected that the logwood color of the copper print was easily blurred; the opinion of Professor *Husnik* should also be obtained regarding the choice of colors and a durable glue.

C. HUSNIK'S INTERVENTION AND CONTROVERSY WITH PECHER

Husnik had spent the holiday months of 1872 at the Court and State Printing Office and then made several proposals to prevent the repeated use of stamps and in general to produce printable plates for all three processes (intaglio, planographic and relief printing) from photographs. In relation to relief printing, *Husnik's*

These efforts, as should be noted here, have not led to any practical results, since they were overtaken at the beginning of the eighties by *Meisenbach's* invention in Munich of inserting a grid of intersecting dark lines in front of the photographic plate, and the autotype based on it.

With regard to the stamps, *Husnik* had carried out printing experiments with water-soluble inks, then with relief pressings and with internal perforations, but these proved to be impractical when tested in the printing works. On the other hand, two other suggestions, which he demonstrated on test stamps, were met with approval.

For this purpose he carried out printing tests on transparent paper with a blue colour and using the plate which had been used for the underprint in *Pecher's* tenth experiment (natural self-printing, in which three plates with the legend 18, 5 kr and 70) by applying this print *above* the layer of glue. These test stamps have no overprint. To avoid brittleness he also mixed 3 lots of glue with 65 grains of calcium chloride. This solution did not gelatinise, but remained liquid without decaying. He therefore proposed applying the glue not by brushing it on, but by printing on the paper (as with paint), which would be a much more expeditious method. Since *Husnik's* test stamps were removed undamaged from *Pecher* using a mixture of glycerine and spirit, *Husnik* proposed mixing the color with fuchsin or another aniline dye so that the spirit would change the color, turning it red. *Beck* reported these experiments and suggestions *by Husnik* to the Ministry of Finance in October 1872 and requested that the stamps be temporarily assigned to the State Printing Office. This request, which had to be agreed with the Ministry of Education and was therefore only approved in May 1873, was submitted to the Ministry of Finance when it received the "first sample" of the test stamps with the madder lake colors and silk green. In view of the mission that this expert was to carry out, it seemed appropriate to hear his opinion now before the final decision was made regarding the new issue, and the above-mentioned order was therefore issued on December 5, 1872.

Beck sent a letter of request to *Husnik* about the order he had received, the detail of which suggests that *Husnik* had not been informed of all the details of the state institute's previous experiments during his stay at *Pecher's* court and state printing works. This letter explained the most important things about the impregnation of the stamp paper, the nature of the colored inks used, the method of producing the logwood ink and the preparation of the glue. The recipe for the impregnation was a solution of 1 part of prussiate of blood in 60 parts of water. It was added that when writing with ink on prepared paper, the contact of the ink in the

The iron oxide contained in the ink combines with the prussiate of blood to form Prussian blue, which then spreads over the paper when the writing is washed out. Not all colors are suitable for printing on paper prepared in this way. Pure metal oxides such as verdigris, zinc yellow, the blue copper colors (mountain blue), then Prussian and Paris blue, and finally ultramarine should be avoided if possible. Yellow and red iron colors, on the other hand, and then earth and lacquer colors are suitable for use. As a precaution, every color to be used must be moistened with a concentrated prussiate of blood solution before printing in order to be able to assess its durability. The instructions for making logwood color differed slightly in terms of quantities from the (final) recipe given above (1 pound logwood extract, 2 lots of ferrous vitriol, $\frac{1}{2}$ lot of chromic acid of potash, $\frac{1}{2}$ pound of sulphate of alumina, 10 pounds of water). Regarding the underprint colors, it was noted that

Madder lake and silk green are commercially available. The terms blue and violet madder lake are used as synonyms. Regarding the gluing, it was stated that 25 pounds of good Cologne glue should be soaked in 75 pounds of water for twelve hours, then dissolved in moderate heat and mixed with 1 pound of soda carbonate. The soda neutralizes the acid in the glue so that it does not irritate the printing inks; but then, due to its hygroscopic properties, it promotes the flexibility of the glue layer of the stamps. Finally, *Husnik* was also specifically informed of the smudgeability of the logwood print when moistened and touched with wet fingers, which the ministry had emphasized.

Husnik submitted his report on December 16, 1872. He described logwood paint as being entirely suitable for the purpose. To prevent smudging, a few drops of varnish (colophony or damar resin dissolved in turpentine) should be added to the linseed varnish before rubbing. He also recommended adding carbonate of copper oxide, copper sulfate or carbonate of iron oxide to the logwood paint, as these chemicals dissolve when the stamps are treated with water or acids and create new colors with the prussiate of potassium hydroxide. If, however, a completely different black was desired for copper printing, iron sulfate hydrate, copper sulfate or other black sulfur compounds with metals, especially lead, could be used. For underprinting, *Husnik* recommended the following as very durable: chromium oxide (yellow-green); carbonate of copper oxide (blue-green); simply chromic lime or strontium (light yellow); Iron oxide hydrate or carbonate of iron oxide (red). All of these colors, which are soluble in acids, would disappear when characters were etched; some of them would also form new colors with the prussiate of potassium hydroxide. As an additive to the glue, *Husnik* recommended 60 grains of calcium chloride per 2 parts of glue (a modified amount compared to his earlier suggestion); this would give the glue durability and flexibility.

This document, which was requested by *Husnik* on the express instructions of the Ministry, The report was prepared by *Pecher*, to whom it was submitted for review,

strangely enough, it was received and fought with the greatest irritation. To him, who had been the sole voice in matters of stamps for almost ten years, it may have seemed an intrusion into his domain and a threat to his position. He rejected outright all of the methods recommended by *Husnik*. The addition of rosin or damar resin makes the copper printing ink sticky. This makes it difficult to wipe the plate clean and damages the print, as the damp paper strongly repels the resins. He supported this and his other statements with test prints showing 5 kr. stamps (with the plate underprint in reddish-brown color) (*Pecher's* 15th test). Regarding the suggested additives to logwood ink, *Pecher* objected that sulphate of copper oxide combines with the prussiate of potassium hydroxide to form brown cyanocopper and thereby weakens the effect of the impregnation; copper sulfate reddens the printing ink; Finally, iron oxide was superfluous, since logwood ink already contained sulphate of iron oxide, and gave the colour a reddish-brown tinge. The black printing inks made from sulphur compounds recommended by *Husnik* were abhorred in the practice of copper printing, because they quickly rendered the copper plates unusable; sulphur lead in particular offered no advantage. He also made test stamps with the latter. He also made stamps with the iron oxide, which he claimed was durable, and stamps whose copper print was made with copper oxide. The bluish-green colour of the latter turned to brown when glued.

He demonstrated this on some stamps by gluing only the lower half of them.

The test stamps printed with iron oxide have a brown-red copper print. There are also test stamps with black-blue copper print, but nothing definite can be said about the method of production. Regarding the colored inks mentioned by *Husnik*, *Pecher* noted that chromic lime changes from light yellow to dirty gray. The unchanging chromic oxide, on the other hand, had long been known to the printing press and had been used for stamps in earlier times, except for the 1 fl state notes. This refers to the Hungarian stamps produced in Vienna and possibly also to the green natural print of the 1854 issue. Finally, *Pecher* also advised against the addition of calcium chloride to the glue suggested by *Husnik* because of the bad taste and the irritation it would have with some colors. Incidentally, there are enough substances in soda sulfate and potassium carbonate and in glycerine to reduce the brittleness of the glue.

Since the Court and State Printing Office had to submit a report on *Husnik's* report due to the ministerial order, it could not let the matter rest despite the sensitivities that had come to light and the delay that the new issue suffered as a result. *Pecher's* objection of January 20, 1873 was therefore sent to *Husnik*, who submitted a kind of reply on February 13, 1873. He, too, did not hold back with his opinion.

He repeatedly refers to individual

Claims *Pochen*; directly as untrue and adds with evidence that *Pecher* was "fighting with his own weapons". He also pointed out that *Pecher* had added far too much of the resin solution to the logwood dye experiments and that he had used a glue mixed with acid when decolorizing the stamps printed with copper oxide "by mistake or for some other reason". He himself had been able to apply half of the glue to such stamps without any change in color.

Now Hofrat *Beck* believed that a third impartial person had to be involved. On February 20, 1873, he commissioned *Wöhlert*, together with *Pecher* or other persons to be employed, to carry out printing tests using the means specified by *Husnik*. He was also to comment on the method of producing stamps that *Pecher* had newly devised. Five different printing inks were now produced and control tests were carried out using these, as well as the soot ink normally used for copperplate printing and *Pecher's* logwood ink. The 5 kr drawing (without background) was used as the copperplate printing form. Older of these prints were made on light blue paper. *Wöhlert* rejected the addition of rosin and damar varnish because they contaminate the printing plates, which is detrimental to the appearance of the products and to expedited work. The sulphuric copper oxide attacks the steeling of the plates and causes a reddish tint. The addition of carbonic iron oxide or copper oxide offers no advantages whatsoever. *Wöhlert* also spoke out against the addition of calcium chloride to glue, as it caused a bad taste and glycerine was much preferable. *Wöhlert's* statement of March 29, 1873 does not contain a word about *Pecher's* method of producing brands. Before he had even submitted this statement, *Pecher* insisted on filing a formal reply against *Husnik* on February 28, 1873, in which he again denied everything that the latter had put forward.

This controversy has not been settled directly in the records. In fact, there has now been a lengthy pause in the preparations for the new issue.

In any case, they could not be completed until the slow electroplating process had completed the required plate apparatus.

In addition, it was now decided that *Husnik* would be assigned to the Court and State Printing Office, but due to the school situation and his illness, this was postponed until late in the autumn of 1873. Thus, it was not until November 1873 that the printing office was able to comply with the Ministry's order of December 5, 1872 to provide a new report and *Husnik's* report. *Husnik* had submitted two reports to the Court and State Printing Office on November 14, 1873. One was directly prompted by *Hausner's* appearance at the Vienna World Exhibition, as described above. Since *Husnik* explained in this report that the printing office's now-used method of impregnating sheets with prussiate of blood had greater advantages than *Hausner's* method of impregnating fabric,

This report was used, as mentioned above, to support *Pecher's* last (14th) experiment. *Husnik's* second report, dated November 14, 1873, concerns *Pecher's* logwood dye, the glue and the three proposed "overprint" colors. *Husnik* speaks objectively in favor of *Pecher's* proposals based on printing tests he carried out. As on an earlier occasion, he described the logwood dye as excellent and unmatched in chemistry, both in terms of its durability in light and air and in terms of its immediate change to red when acids are used. He acknowledged that the addition of varnish solution, which he advocated, did indeed eliminate the smudgeability of the logwood dye, but impaired the printability and appearance of the color. Incidentally, the smudgeability at the time was caused by the freshness of the print and disappeared when it dried sufficiently. With glue, the most important thing is good quality; If it were too sour or too brittle, an addition of ½ pound of carbonate of soda to 20 pounds of glue would help. Finally, *Husnik* approved of the colored dyes (red and violet madder lake and silk green), but also recommended Prussian and Paris blue, especially since the prussiate of the paper did not alter them, because they themselves were made from prussiate of water.

When *Husnik* submitted these two reports, the printing company reported on November 24, 1873 that the electroplating work would take another two months. The production of the letterpress plates for the color printing had been paused because the year had to be visible on them; these plates would take another three to four months. This was to indicate that the year 1873 had already lost its meaning, but the printing company had not yet received any further orders in this regard. The stamps from the 14th test that had already been submitted were attached to this report to show that the logwood color could no longer be smudged.

The printing works also presented the prints made with *Husnik's* cooperation (5 kr stamps with red and violet madder lake and silk green) and added that the plate for one and the same value, namely 5 kr, had been used for all of these test prints, since it was only a matter of making the colors visible; the red represented the application for the guilder stamps, the silk green that for the kreuzer stamps and the violet that for the calendar stamps. Two things are particularly noteworthy about this "second template": *firstly*, that a new underprint appears to have been used for the red and violet 5 kr stamps, which consists of octagonal stars and shows the year 1873 in a different shape from stamp to stamp and in a slightly smaller size than on the underprint plates with the plate ornament, without it being clear that this new underprint design had been approved by the Ministry of Finance; and *secondly*, that

The silk green stamps still have the plate ornament of the underprint, so that it is not objectively possible to tell whether they date from the 14th century.

Pecher's experiments from 1872 or from the test prints made in *Husnik's* presence around October or early November 1873.

The printer noted that other fixed colors available included the Berlin or Paris blue recommended by *Husnik*, as well as cobalt blue and dark chrome yellow. Cobalt blue and chrome yellow 5 kr stamps, which have the eight-rayed background, were included for illustration purposes.

Four days after the report of November 24, 1873 was submitted, the printing works received an order from the ministry to submit the technical description of the stamp, calendar and announcement stamps intended for publication, and also, in view of the considerable time required for the logwood ink to dry, to report whether the start of the new issue could be set for July 1, 1874; and finally to comment on whether there was a risk of the smudgeability recurring in damp places of wear. Another matter of concern to the ministry was the question of whether the new stamps could not be confused in practice with the telegraph stamps introduced in the meantime by means of the Trade Ministerial Decree of July 14, 1873, RGBI No. 129, which also contained the head of the emperor based on *Jacoby's* engraving (in reverse for letterpress printing, since the telegraph stamps were initially produced using this process). At the same time, *Nejedly* ordered experiments to be carried out with an adhesive consisting of gum arabic with the addition of crystallized sulphate of alumina.

The printer allayed the concern about the similarity with the telegraph stamps by a report dated December 13, 1873, pointing out that the latter stamps had a different format than the revenue stamps and were always one-coloured, while all revenue stamps were produced in two colours. Moreover, the image for the revenue stamps could now only be changed at great expense because most of the plates had already been completed.

Concerning the logwood ink, the printer reported on May 3, 1874, that when varnish was used as a binding agent, it dried as quickly as other inks and that there was no fear that the ink, once dry, would suffer from moisture.

Regarding the glue suggested by *Nejedly*, the printing company admitted that it was useful and cheap, but warned against its use because of its lower adhesive strength and the difficulties it would cause when handling it. *Pecher* had stressed that it would then be necessary to abandon the usual practice of hanging up the coated sheets. Glued sheets could be hung up to dry because the glue would dry immediately.

after coating, the glue would become jelly ("gelatinize"). Gum, on the other hand, would remain liquid and would run off, so that the upper part of the sheet would be thinly gummed and the lower part very thickly gummed. Laying the coated sheets flat to dry would delay this and make mass production more difficult. *Pecher* made no mention of *Husnik's* suggestion to counteract the disadvantages of a liquid glue by printing it like a color .

D. THE FINAL PREPARATIONS

The period from November 1873 to May 1874, in which the final decision regarding the new issue was made, was filled with work and negotiations in several directions.

A. One of these negotiations concerned a proposal *by Husnik* to change the existing impregnation agent. On December 15, 1873, *Husnik* submitted a written proposal in which he mentioned that he himself had approved of the previous impregnation of the paper of stamps and bills of exchange with prussiate of potassium hydroxide, but that another party had raised the objection that this paper changes its tone and turns bluish over time in damp places. He then proposed using simply potassium chromate for impregnation, which is unaltered by air, light and moisture, but when treated with acids turns the paper first red and then green and even corrodes it.

Inspector *Wöhlert* was entrusted with examining this suggestion. With *Husnik's* assistance, he dyed some sheets of paper yellow with potassium chromate, left them to dry and then exposed them to air and light. The yellow shade changed after just one or two days. Furthermore, the dye came off when the sheets were moistened, so it was reasonable to think that someone could wash out such stamps or bills of exchange, remove the writing and then recreate the yellow color. Finally, *Wöhlert* made impressions of the colors chosen for the stamps (gulden red, kreuzer green, announcement stamps blue, calendar stamps violet) on the prepared sheets of paper, to show how much the color was influenced by the yellow paper due to the optical contrast effect. In particular, the blue of the announcement stamps appeared green. Among other things, *Wöhlert* also made impressions with an ornament that was surrounded by strips with the legend K. k. The paper appears framed with a stamp and in which the underprint of the blue ½ kr stamp from *Pecher's* fourth test can be recognized. These tests, made by *Wöhlert* between 16 and 27 December 1873, also show another change that has occurred over time. The paper has since become completely grey and there is a complete decomposition of the

paper fibers, so that the paper resembles a thin gray layer of lime in appearance and consistency. *Husnik* acknowledged the shortcomings of potassium chromate, but attributed the poor lightfastness of the colored paper to the fact that the commercially available drug was contaminated with the very light-sensitive potassium dichromate. He also reported that he had carried out experiments with prussiate of potassium and tested the insensitivity of the paper tone to sunlight. However, there was still concern, particularly with changeable blanks, that someone could wash out the salt with water and then erase the writing with acids. This would not be possible if the paper pulp was saturated with baryta chromate. Such paper could also be used for stamps if they were given a green or vermilion underprint, since these colors do not change the tone on a yellow background.

The State Printing Office arranged for a trial production of such baryta paper in the Schlöglmühle and intended to carry out similar experiments for bills of exchange, for which no colored underprint was necessary. However, for stamp stamps (after a trial print to be mentioned below, which probably belongs here) no further pursuit of this idea was given up because of the change in tone of the colored colors.

B. Another subject of consideration was the design to be given to the announcement stamps. This had not yet been discussed in the previous tests and preparatory work for the new issue, because the idea of the planned issue in 1869 was to base the appearance of the announcement stamps on the Kreuzer stamps. Therefore, when the new *Benedict* engravings were produced (for copperplate printing), no special engraving was made for the announcement stamps, especially since the special filling of the value legend cartouche, which was the only thing required, could be done in the same way as the engravings in this cartouche for the individual Kreuzer values. However, the Ministry of Finance now seems to have been so certain that the announcement stamp would be abolished that the issue of new stamps of this type was no longer seriously considered. This is indicated by a note dated 1 December 1873 in a file of the Court and State Printing Office. It says here that, according to information received from Ministerial Department 9, announcement stamps should not be given priority and could also be issued in the new form at a later date. It was so obvious that this could not be serious and that in reality no separate new issue would be organised for the announcement stamps alone that the printing works included these stamps in their work in any case. They did this on the grounds that the preparatory work for the announcement stamps was completely parallel (or more correctly, identical) to that for the other stamps and therefore there was no justification for their later publication. These stamps were to be different from those of the Kreuzer stamps.

categories in that the copperplate print should contain the word Announcement below the value (as was the case in 1869) and that a different underprint color (yellow or blue) should be chosen. In fact, the Court and State Printing Office had plates made for the copperplate print of the 1 kr announcement stamps.

C. Using these plates, a few test specimens of announcement stamps were then produced, at the same time as the production of test stamps of the other categories, which *Wöhlert*, who was now in charge of the preparations for the new issue, arranged in agreement with *Husnik*. This stamp production, which took place between mid-March and 28 April 1874 and in both cases all technical aspects were subjected to a new, detailed consideration and review, was a kind of dress rehearsal for the new issue. In order to be able to see exactly what the new stamps would look like, the Ministry obtained authorization to use 2000 sheets of watermarked paper for these stamps. On 28 April 1874, *Wöhlert*, with *Husnik* co-signing, presented six sheets of such test stamps (1 fl, 5 kr, 1 kr announcement stamps and 6 kr calendar stamps). Three types of 1 fl stamps were produced (all with a red madder lake background): white paper impregnated with prussiate of blood, one type printed with logwood ink, the second with ordinary, unchanging copper printing ink; then, the third type, logwood ink on a yellow natural paper recommended by *Husnik* (possibly the paper produced in the Schlögl mill and impregnated with baryta chromium). Three similar types of 5 kr stamps with a silk green background were attached to a second sheet. On a third sheet, *Wöhlert* presented 5 kr stamps in which the green underprint was made with a mixture of indigo blue and zinc yellow. He recommended choosing this printing ink instead of silk green because it had been shown that it was almost insensitive not only to atmospheric agents (as required) but also to acids and anti-ink, which ruled out its use. On two further sheets, stamps were attached to which the acids and anti-inks most frequently used by the malversants had been tested. *Wöhlert* stated that when using clover salt, citric acid and anti-ink, the transience of the coloured colours and the reaction of prussiate of blood were mainly at work, so that in these cases the protection of the gradient was more due to these agents than to the logwood dye. On a final sheet, announcement and calendar stamps were attached, the former with a violet underprint, the latter with a blue underprint, and finally stamps which had been glued with gum arabic (mixed with sulphate of clay), as *Nejedly* had suggested. The announcement stamps were printed with violet madder lake, which had previously been intended for the calendar stamps. *Wöhlert* started from the consideration that the announcement stamps would

Kreuzer stamps are the same in shape; if the former were printed with a blue background, which might be difficult to distinguish from the green background of the Kreuzer stamps, there would be a risk of confusion. With the Kreuzer stamps, which are of a different shape, the blue color does not raise any such concerns. The blue color chosen was consistently referred to by *Wöhlert* as "copal blue." Whether this meant cobalt blue, which *Husnik* said had excellent properties compared to photographic imitation attempts and which had already been used for 5 kr test stamps, remains to be seen. This template was still in the preparation stage when the law of March 29, 1874, RGBI No. 30, which abolished the announcement stamp, came into effect. The printing works seem to have had doubts as to whether it should really stop producing the new announcement stamps for this reason. This doubt was probably resolved by an oral statement from the ministry, whereupon the printing directorate suspended work on these stamps and ordered that the calendar stamps should now be given the violet madder lake color that was originally intended for them. Such calendar stamps were now still being produced for submission to the ministry. Of the 2000 sheets of watermarked paper measuring 10½ x 14 inches (which was also sufficient for the guilder plates) that were saved for these - if one could call it that - dress test prints, 735 sheets were returned to the paper depot, but 1265 sheets were printed, namely 180 sheets for 1 fl stamps, 1042 sheets for 5 kr stamps, 3 sheets for 1 kr announcement stamps and 40 sheets for calendar stamps, 1100 sheets were completely printed, 165 sheets incompletely printed (i.e. not provided with all combination prints). When choosing the watermark paper for these stamps, the intention was expressed to treat them as test stamps only for the time being, but to later discard them to save costs. This intention was not carried out. Even if the test stamps were capable of being used up, they were destroyed with the waste paper. To date, no stamps of this type that would have escaped destruction have come to light. The relatively large number of test prints on watermark paper was, as a comment by *Wöhlert* shows, mainly due to the fact that the impregnation of the leaves with prussiate of blood had to be tried out first and the correct amount of this salt had to be found through systematic experiments; experiments were also carried out with mild *Pecher* logwood ink and, after making several print samples, a modification of the original recipe was actually found to be appropriate.

D. A particular difficulty in the preparatory work was the newly selected underprint funds. The printing works were moving into a completely new area after giving up the natural self-printing. Regarding the Kreuzer category, the initially selected design had to be changed.

(with the discs referred to above as plates, each consisting of two concentric circles) had to be removed and a new one produced. Another difficulty was that the value had to be stated in the underprint in addition to the year. This meant that special original plates had to be produced for each of the 31 stamp categories (12 guilder values and 16 kreuzer values of the general stamps, two announcement stamps and one calendar stamp), whereas without this special feature three originals would have been sufficient. The production of these originals was one of the reasons why the new issue was delayed so much, as can be seen from a report from the printing works dated 17 December 1873. Four days earlier (on December 13, 1873), the printing works had suggested adding the year 1874 when the 2000 sheets of watermarked paper were used for the large-scale tests, in view of the fact that the year 1873 that had previously been used had already lost its meaning and the new issue was now planned for July 1, 1874. This also no longer seemed appropriate. The production of the original plates would have taken at least another three months with the planned, only slowly progressing method of etching - these are sometimes shown as copper etchings, sometimes as gold etchings. In view of this, the printing works wanted to abandon this method and considered two more expeditious methods that would nevertheless not impair the purity of the printed image. These were the use of galvanized woodcuts and the use of zincography. In the latter case, however, the zinc plates and the impressions would have to be made outside the institution, in the zincographer *Tomassich*'s establishment, under the strictest control, of course. The Ministry of Finance processed the reports of December 13 and 17, 1873 on December 16 and 21. In the first decree, it permitted the year 1874 to be added, but in the second, it permitted the year 1875. Deviating from the etchings for the underprint was not permitted, because the purity and beauty of the underprint was important and printing in a private institution would be associated with inconveniences. The Ministry preferred to accept a delay in the new issue and also deviated from the date of July 1, 1874.

It should be noted here that the above-mentioned method of gold etching is intended to produce a suitable inversion for book printing from a finished deep plate - usually produced by means of a pantograph, relief engraving or guilloche. For this purpose, the depressions in the copper plate are filled with gold and then an etching is applied which only attacks the copper and not the gold. The latter soon appears raised. The etching is carried on until a sufficient relief is achieved (also taking into account the possible need for grinding), after which the electroplating of the plates can begin.

XXXIV. CHAPTER

THE EMISSION 1875

I.

At the end of April 1874, the preparatory work had finally progressed to such an extent that the printing works was able to report on May 3, after presenting the last test stamps and the technical description, that the copper printing plates were completely ready and that the overprint plates would be completed by the end of May. The first stock of stamps could be delivered by the end of November.

As early as May 11, 1874, the ministry authorized the immediate start of printing, the extent of which was to be determined by the expected order from the central stamp wear magazine. All state authorities were informed of the new issue expected on January 1, 1875, in order to be able to work toward the best possible use of the remaining stocks from the 1870 issue. This time, the Court and State Printing Office tackled the matter systematically and, above all, issued *pro foro interno* a detailed internal "Instruction for the production of the stamps of the 1875 issue" with six sections.

The *first* point was that the logwood dye was to be produced under the personal supervision of the factors *Tomassich* and *Hiesam*, and the green dye for the underprint of the Kreuzer stamps was to be produced under the supervision of the chief machine master *Steinbach*, and that this was to be done in one year's time. Test prints were also to be made with each newly produced quantity of dye in order to be able to test the effect of the acids. This had already been done for the logwood dye (above in XXXI).

Chapter, Section C) is the recipe given. For printing, this ink should be mixed with one third of ordinary carbon black ink, because this has been proven not to prevent the acid reaction from occurring.

The instructions for the green color were as follows: ½ lot of the best indigo and 4 lots of zinc yellow rubbed with varnish to make printing ink. Because of the different coloring powers of the indigo, a test should always be carried out beforehand. This dye should be specifically light and, when rubbed with a hard object, should show a copper sheen on the surface. Commercially available madder lakes should be used for red and violet underprints.

In the *second* point, the solution of 10 lot of yellow Prussiate of blood in 40 measures of pure water is prescribed.

In a *third* point it was stated: "Since it has been established by renewed tests that the so-called cold printing process (the rubbing of the ink on cold plates and the wet wiping with potash) is more advantageous for printing larger quantities than that with heated plates, since in the first-mentioned

This process not only produces a clean and beautiful print,

"but also the efficiency of every printing press can be increased threefold, so the first-mentioned process should be used when printing the new stamps." No earlier part of the documents had mentioned heating the plates, presumably because it was taken for granted.

The *fourth and fifth* points stipulated the most precise supervision and sheet-by-sheet revision of copperplate printing and typographic hand presses.

Finally , the use of the best Cologne glue was ordered. 33 pounds of dry glue were to be soaked in 67 pounds of water, boiled slightly after swelling and mixed with 10 lots of soda. In the warm season, only one day's supply was to be used.

II.

The last attempt by *Husnik* to use the transfer process took place in the period until the required first stock of stamps for the new issue was ready . On June 1, 1874, he requested that eight sheets of ordinary paper that he had provided should be printed with the stamp in black; he would then glue them himself, and then they would be printed in the printing shop *over* the glue with blue ink to which a little fuchsin would be rubbed. The fuchsin addition would be a protective agent against attempts to use a mixture of spirit and (some) glycerin to remove the stamp, because the fuchsin, which is easily soluble in spirit, would quickly spread over the entire stamp.

This idea was not new, since *Husnik* himself had carried out similar experiments (without overprinting) in the autumn of 1872. A note in the relevant file of the printing works seems to indicate that, due to the difficulties encountered by the head of the supervisory service with regard to test prints, the new stamp plates were not used for the overprinting desired by *Husnik* , and that the sheets presented were provided with a different black print. Nothing further is mentioned about this experiment. However, the fact that it was actually carried out can be seen from a strange aftermath. On February 4, 1875, *Pecher* addressed an intervention to the management of the institute, in which he pointed out that, among the numerous experiments he had carried out to achieve the safety of use of the stamps, a color he had composed that could be changed by acids and alcohol (a mixture of ultramarine and fuchsin) had received the most approval. Although his project did not succeed for reasons "which should be discussed on another page", the idea was not lost because this colour was later used for underprinting on passports. Recently Professor *Husnik* has been using this colour for stamp samples without specifying the origin. *Pecher* asks that the

Priority of the production and first application of this color should be maintained.

Husnik made a special statement on this, stating that the blue of his test stamps was not ultramarine at all, but a different blue; that the color blue was not important here at all, since not all stamps could be blue and therefore other colors would have to be used; and finally, that fuchsin was not important, but generally only a color additive that was soluble in spirit, which was different according to the circumstances, and that, in particular, for red stamps (so that the removal tests could be more easily recognized), a blue color that was soluble in spirit would be used as an additive. *Husnik* added that he had been completely unaware that a mixture of ultramarine and fuchsin had already been used in the printing works. He himself had added fuchsin to various colors in stamp samples on September 18, 1872, but did not want to claim priority for this. The only regrettable thing was the amount of effort that *Pecher* had put into removing *Husnik's stamps*.

This controversy has not been resolved any more than the first one mentioned above. mentioned. No experimental stamps of this kind have come to light.

III.

The first order for paper for the new issue was for 25 reams of the dimensions 11 x 12½ inches (guilder stamps) and 125 reams of 9 x 11½ inches (kreuzer and calendar stamps). The Schlöglmühle stock company objected that it could not produce a smaller quantity of one type than 100 reams, whereupon the order for the larger format was increased accordingly. The price claimed for these papers was 3 fl 70 kr and 2 fl 70 kr. However, since the paper supply contract was just coming to an end at that time and a new price per pound of 1 fl 20 kr was agreed upon in the new three-year contract, which came into effect on July 2, 1874, the prices were reduced to 3 fl 30 kr for the 11 x 12½ inch format at 2¾ pounds per ream (500 sheets) and 2 fl 40 kr for the 9½ x 11 inch format at 2 pounds per ream.

During the printing work, the fatal circumstance arose that almost the entire first shipment of the new stamp paper (37 bales with 184,000 sheets) proved unusable because the paper developed blue spots when moistened with the prussiate solution. The factory promptly replaced it with new paper. Thus the printing work could continue uninterrupted and the printing works were able to finish on time, although after the original order for the first supply of 478,380 stamp sheets at the beginning of October, a further order for 300,000 sheets was received. To cope with this, the daily delivery was increased to 10,000 sheets. The first order was "delivered" on November 20, 1874. The delivery of the second quantity, as the printing works informed the ministry, would be completed in the first days of December.

The Ministry of Finance had previously requested information as to whether a change was necessary with regard to the description of the stamps presented on May 3, 1874. When this was answered in the negative and the completion of the first stock of stamps appeared to be assured, the Ministry of Finance issued the introductory regulations for the new issue in 1875 on September 30, 1874, Z.25296, RGBI No.125, V.BI No.29. The new stamps were put into use and obsolete on January 1, 1875. The previous stamps from the 1870 issue were withdrawn from obsolete use on the same date; if they were already in private hands, they were not put out of use until January 31, 1875. During the month of January, stamps from the earlier and the new issue could therefore legally be used side by side. Surplus stamps could be exchanged until the end of April 1875. They became invalid on the last day of April unless they had been attached to business books and blanks and officially over stamped in time.

As a reminder of the Ministry's concerns about the confusion of the new stamps with the telegraph stamps, a paragraph in the regulation appears in which the differences between the two types of stamps in terms of dimensions, edge designation and type of value designation are pointed out, and it is pointed out that the telegraph stamps are printed in only one colour, whereas the stamps are printed in two. It is also stated that the new issue does not apply to the 1 kr and 2 kr newspaper stamps.

The stamps of the twelve guilder values are described as follows:

"The stamps for the guilder amounts are 47 millimeters high and 25 millimeters wide; the print is black on a red background. In the upper part of the stamp, the image of His Majesty the Emperor Franz Joseph appears in medallion form in black on a white background, below this the value of the stamp in white lettering, both the image and the value framed accordingly. The outermost edge of the stamp is framed with double lines and corner rosettes.

Both in the upper and lower part of the frame is the legend: KK Austrian stamp, in the two sides: Imperial. Royal Austrian stamp in black lettering. The red background consists of six-part stars arranged one after the other; in the upper corners there are red medallions with the value of the stamp in white numbers, in the lower part an oblong red field with the year 1875 in white numbers."

It should be noted here that the third guilder value, which has the value legend 2 fl 50 kr in the printed image, has the value designation in the red medallions as 2½. The medallions only contain numbers and no ligatures indicating the type of money.

The technical description of the sixteen Kreuzer values was:

"The stamps for Kreuzer amounts are 39 millimetres high and 21 Millimeter wide; the print is black on a green background. The image

“His Majesty the Emperor, the value designation and the edge edging are arranged in the same way as on the guilder stamps. The legend in the upper and lower frame bars reads: Stamp mark, in the side bars on the left: KK Oesterr. Stamp, right: Imperial Royal Austrian Stamp. The green underprint consists of eight-part stars; in the upper corners there are green medallions with the value of the stamp in white numbers, in the lower part an oblong field with the year 1875 in white numbers.”

Finally, the following description of the calendar stamps was given:

“The calendar stamps are 27 millimetres high and 21 millimetres wide; the print is black on a violet background. The image of His Majesty appears on a white background; the outer edge is bordered at the top and on both sides by double lines, between which the legend: 6 kr calendar, on both sides: KK Oesterr. stamp stamp appears in black lettering; on the four inner corners, in black medallions, the number 6 is printed in white and below and above it, respectively, the word: calendar in black. The lower part of the stamp contains an open oblong violet field with the year 1875 in white.

The violet background is formed by eight-part asterisks.” The difference in the spelling of Stempel and Stempel in one and the same standard is due to the fact that the Reichsgesetzblatt retained the old orthography longer than the finance administration in its ordinance gazette and in its stamps; however, the legends of the stamps had to be reproduced very precisely by the Reichsgesetzblatt.

Also noteworthy is the use of the word background for color printing, which had previously been referred to as overprinting or underprinting without there being any fixed terminology. It should also be emphasized that here for the first time the dimensions of the stamp characters are given in meters. The metric system of measurement was soon introduced into stamp law with regard to the standard dimensions of paper sheets specified in Section 30 of the Fees Act by the Ministerial Decree of May 26, 1875, RGB1. No.83. The dimensions of the stamp paper, however, remained in Viennese measurements until July 1877 because of their contractual binding. It was not until the new paper supply contracts valid from July 2, 1877 that they were expressed in millimeters and a price per kilogram was given instead of the previous price per pound, from which the prices of the individual types were calculated. Likewise, from now on, the term ream always meant the new ream of 1,000 sheets.

The paper dimensions chosen for the 1875 issue of 11 x 12½ inches for the guilder stamps and 9½ x 11 inches for the kreuzer and calendar stamps, as well as the information that 50 stamps were printed on one sheet, show that the plan, which was floated in 1869, to print the new issue on full sheets had been agreed upon. If one takes into account the dimensions of the guilder and kreuzer stamps (25 x 47 millimetres and 21 x 37 millimetres) specified in the issue regulations and tries to imagine,

As to how these drawings could be put together to form one sheet, the decisive factor seems to be that in both cases five times the larger dimensions (235 and 195 millimetres) is still smaller than ten times the smaller dimension (250 and 210 millimetres). Since the sheets of paper were rectangles, the 50 stamps with their longer dimension (five times) would necessarily border on the narrower edges of the paper and with their upper and lower parts (ten times) on the longer edges of the sheet of paper. The denomination was therefore the same for both the guilder and the kreuzer (and calendar)

Stamps were such that, if you imagine the stamps in a readable position, they made up five horizontal lines of 10 each. In both cases, sheets of paper were printed horizontally.

From this it would follow that if the watermark legend ran in these horizontal rectangles from one of the shorter edges to the other (i.e. between right and left), the watermark and the stamps would be parallel, and that if the watermark legend ran between the top and bottom, i.e. between the two longer sides of the rectangle, the watermark would be positioned crosswise to the stamps. Since there are no records of how the guilder sheets (11 x 12½ inches) and the kreuzer sheets (9½ x 11 inches) were cut out of the entire paper sheet during the production of the stamp paper, we must assume here in which position the watermark is actually found in the stamp material of the stamp collections. From large quantities of stamps (with fractions of watermarks) belonging to all stamp values, the strange phenomenon arose that the watermark on all stamps sometimes appears parallel, sometimes crosswise.

In the kreuzer values, both positions of the watermark are found with approximately equal frequency. From dated pieces it seems to emerge that the parallel position belongs more to the early period of issue, the cross position more to the later period. In the guilder values, the parallel watermark predominates.

The dimensions of the stamp paper (9½ x 11 inches and 11 x 12½ inches) would make it seem obvious that the paper web was always cut into strips of 11 Vienna inches and then cut into 9½ or 12½ inch pieces. However, it seems that sometimes strips of 9½ and 12½ inches were cut and then cut into 11 inch pieces.

Probably in each individual paper creation the most economical option was used in the given case.

IV.

In March 1876, the State Debt Directorate informed the Ministry of Finance that the roller for the stamp paper had become so damaged that it would be necessary to replace it with a new roller. The joint-stock company

Schlöglmühl estimated the cost of the production to be carried out in the factory at 149 fl. 87 kr. However, it was possible to reduce this amount to 135 fl. 90 kr. Due to urgency, the repairs had already been postponed. The Ministry of Finance noted that in such an urgent case, negotiations had taken three months to save 14 fl.

This delay also jeopardized the timely supply of bills of exchange, of which two million had to be produced due to the new bill of exchange stamp law of March 8, 1876, which came into effect on May 1, 1876. The latter statement was probably not valid because the bills of exchange were printed on different watermarked paper. The State Debt Directorate did not fail to point out this fact. It reported that 255,698 sheets of paper for the kreuzer denomination and 90,409 sheets for the guilder denomination were in stock in the secret depot and in the paper factory. These large stocks seem to have led to the delay in repairing the roller. It was not until the beginning of September 1876 that the supervisory commissioners took over the repaired roller, requested payment of the amount of 135 fl 90 kr and presented three newly produced sample sheets. The latter were sent to the Court and State Printing Office for inspection. The relevant document states that the technical inspectorate was unable to assess the suitability of the roller from these three sheets, which only contained individual parts of the watermark, because they were unable to form a complete picture of the dimensions of the roller and the order of the letters of the words stamp-marks. They therefore simply requested a piece of paper the entire length and circumference of the roller. This piece of paper, which was received on September 26 and immediately returned to the company, proved that the roller was suitable.

In a later document it is noted that this repair was equivalent to a complete replacement of the roller. This is confirmed by the documents relating to the repair. The supervisory commissioners in the Schlöglmühle factory had informed the State Debt Directorate that the roller had been defective for some time and was causing a disproportionate amount of waste. It was necessary to cover the old frame with a new screen, whereby the previous brass letters could be reused. The cost estimate drawn up by the factory shows that the "Egouteur" essentially consisted of a "copper sleeve shaft" more than 64 inches long, which was bent from 1 line thick copper sheet and into whose ends the old pins running in the bearings were inserted, then of the end and support disks fitted onto which first a base screen and then a fine screen (as a cylinder jacket) were attached. The brass watermark letters were then soldered onto the latter screen. The copper shaft and the screens were added during this repair. The letters were not

not only the old ones, but were also re-applied as closely as possible to the previous form. This can be seen from the fact that no noticeable change in the arrangement of the letters can be seen in the stamp material.
can be stated.

V.

Soon after the 1875 issue appeared, the audit office reminded that 88,584 sheets of the 1870 issue were still in stock in the paper depot of the State Debt Office (namely 8,678 sheets of 9½ x 14 inches; 10,147 sheets of 10½ x 14 inches; 35,015 sheets of 12 x 14 inches and 12,744 sheets of 12 x 18 inches) and that some use had to be made of these because the State Printing Office only ever issued paper of the two new formats for the new stamps.

The State Printing Office stated that it could only use this older paper for the calendar and ½ kr stamps. It had a yellow tint that was noticeably different from the new white paper and gave the "coloured overprint ink a different shade". This could cause objections if two stamps of the same value were used next to each other on the same document and looked clearly different. This risk did not exist with the calendar stamp and almost none with the ½ kr stamp. This suggestion from the printing office was approved. The remaining stock mentioned should be used up in about three years. The first ½ kr stamps were printed on this paper in May 1875. All four dimensions of this remaining stock now had the watermark running between the two narrower edges, so that it had to appear in the same direction on the calendar and ½ kr stamps. Calendar stamps with this watermark position have not yet been reported. But even if they were found, it would not be possible to conclude with certainty that they were printed on the paper residue from the 1870 issue, because the kreuzer values from the 1875 issue have both positions of the watermark. The same applies to the ½ kr value.

At best, it could be said that the calendar stamps and stamps of ½ kr that have *light white* paper cannot be the same as the paper issued in 1870. Conversely, however, a yellowish stamp paper does *not* allow a firm conclusion. Some other categories of 1875 stamps also appear on yellowish paper produced later (in the new formats), which cannot be distinguished from the yellowish paper of the calendar stamps and stamps of ½ kr mentioned above. As early as February 1875, the Schlöglmühle paper factory was informed that "a large part of the newly delivered paper had a yellowish cast, which changed and impaired the appearance of the color print. The

Acid reaction cannot be used to distinguish whether a calendar or ½ kr stamp is printed on old or new paper. Since the paper of the 1870 issue had the cloth impregnated with prussiate of potassium hydroxide, but the new paper had the leaf impregnated, the blue reaction should occur in both cases.

Strangely enough, however, it did not occur in either case. Even with stamps from the 1875 issue that are still unused or that are still stuck to documents, i.e. that (as stamps) have not been subjected to any significant use at all, a blue reaction cannot be observed. *Wöhlert's* impregnation of the leaves must therefore have been carried out with even greater economy than he had accused the earlier impregnation of the cloth. Because it can only be due to the economy and not to the nature of the impregnation of the leaves (apart from the very thinness of the paper), especially since test stamps from the period before the 1875 issue that were impregnated with prussiate of blood still react promptly today. It is not surprising that, given this situation, the usual stamp material of collectors, which has sometimes been washed many times, does not show a blue reaction. In contrast, the two other protective reactions of the new emission, the reddening of the logwood color and the disappearance of the underprint color, are still clearly perceptible.

WE.

The green underprint ink for the Kreuzer stamps, a mixture of indigo blue and zinc yellow, shows the disadvantage that all color mixtures have, namely the unevenness of the color tone in stamps from different editions. The different colorings, which can even lead to a distinctly bluish tint, can also be partly attributed to later influences. The zinc yellow component is very sensitive to alkalis, while indigo resists them. Stamps treated with alkalis become pure blue.

VII.

From the 1875 issue onwards, a phenomenon well known to collectors from earlier issues, namely the drawing impressions on the back of the stamps, disappeared. Many stamps bear more or less clear fractions of the black print of their own design on the back, especially in those parts which had more abundant printing ink. This is particularly the case with the value legends.

These were contaminations on the back of the stamp sheets, which arose from the fact that during copper printing, sheets were placed on top of each other as they had been taken out of the press. Of course, the colors were not yet dry and every upper sheet, which lay with the unprinted side over the print of the lower sheet, could take on color from it, especially if the stack of printed sheets was always

became higher and thus exerted an ever greater pressure. These imprints remained more or less visible through the applied layer of glue and are even more clearly visible after the glue has been washed off. The 1870 issue is the last one in which such imprints can be found. The reason for their disappearance is probably that from the 1875 issue onwards the printed sheets were "shot through", that is, a "dirty sheet" was always inserted between two freshly printed sheets and left there until the printing ink was dry. These dirty sheets, which can be reused over and over again, now absorb all imprints. The first documented mention of this shooting through in the production of stamps is contained in *Mieling's* description of the production of his decal stamps.

Perhaps this mention provided the inspiration for the Court and State Printing Office to introduce this - in itself of course long known - precautionary measure in the production of stamps.

CHAPTER XXXV

CHRONICLE OF THE EMISSION 1875

A. THE DELIVERY OF PAPER QUOTAS

During the urgent work for the first stockpiling of the 1875 issue, the Court and State Printing Office, according to a report dated October 29, 1874, wanted to raise again the question that had already been raised in 1866 but then remained unanswered for no apparent reason, whether, in order to save money and now in particular to speed up full delivery, it might not be possible to deviate from the strict observance of the principle that a stamp sheet must be thrown out as waste even if only one stamp is spoiled. However, Court Councilor *Beck* refrained from this request and limited himself to mentioning in his report of October 29, 1874 that approximately half of the supplementary order of 300,000 sheets represented the replacement for the waste that had arisen during the implementation of the main order, which had been delivered in fewer quantities. The Ministry of Finance took up the matter - perhaps also prompted by an oral intervention - and requested a report from the Vienna Finance Directorate as to whether half and quarter sheets with consistently flawless stamps could be separated and delivered from these waste papers, which were often discarded only because of a single stamp or a very small number of stamps. The term "sheet" brought some ambiguity into the negotiations, since the sheets on which the stamps were printed were of such arbitrary and unidentifiable quality.

The sheets were of such a size that they could not be easily related to the term "sheet". If the term "sheet" had been understood to mean a double sheet, the question of whether *half* sheets with stamps could be supplied would have been superfluous, since this was the usual method of supply anyway. If, on the other hand, the term "sheet" had meant only one sheet, the question of whether quarters of the same could be supplied was irrelevant, since the sheets containing 50 stamps could be divided into halves but not into quarters. Despite the difficulties raised by the leading authorities, the Ministry of Finance approved the separate supply of half sheets containing 25 completely usable stamps each, which were to be discarded from the waste paper, but only as a temporary measure to remedy the problems which had arisen from the forced production of the first stock.

From the waste paper of the first prints for the 1875 issue, 2000 stamps were given to *Husnik* to conduct tests on the authorization of the Ministry of Finance. What type of tests these were and what results they led to cannot be determined from the files.

B. THE WASTE PERCENTAGE

During the issue in 1875, the question of the acceptable percentage of waste paper occupied the management of the State Printing Office twice. In July 1875, an internal regulation reduced the permissible percentage of waste paper, which had been standardized in 1871 at 11 percent, to 8 percent, namely 4 percent for copperplate printing, 1 percent for type printing (color printing), 2 percent for sizing and 1 percent for perforating. Exceedances were to be punished with deductions. It was then agreed that the deduction should only be imposed if the total of 8 percent was exceeded, so that

Compensations for the success and failure of the various manipulations were possible. The reduction in the percentage of waste in book printing was only apparent, because the 1870 issue involved two printings, but now only one. In contrast, the reduction in copperplate printing was effectively 2 percent, and the new cold process required much faster work.

The waste paper question arose for the second time in August 1876, when, in addition to the current production of 5,000 to 6,000 sheets, 9,000 to 10,000 sheets were to be produced daily as an initial supply for the 1877 issue. This resulted in 14 to 15 percent waste paper. From the investigations into the reasons for this phenomenon, it can be seen what changes had occurred in the relevant operations in the meantime. Gluing and perforating were now already carried out by female workers.

worried. The increase in waste caused by the hasty work would disappear again if work was carried out more smoothly, and for this purpose the number of perforating machines in particular should be increased. With the copperplate printing, no defects would have occurred, with the exception of the folding caused by the particularly thin sheets of paper. Finally, the large amount of waste from type printing would have been caused by a major change in the workforce, since ten experienced printers would not have agreed to the newly standardized remuneration for the additional hours, which is why other personnel (including apprentices) had to be brought in to produce the underprint.

C. MISTAKES

The order that each stamp value should have its own underprint and that the underprint in the two upper corners should indicate the amount of the stamp was the source of a new type of misprint, namely when a mix-up occurred and after the copper print had been made, not the corresponding underprint but a different underprint was used to print the star fund. Two such cases have arisen and become known in the records. In the first case, in May 1875, the second-hand dealer *Johann Hübel* handed over three 1 kr stamps to the police station in Ottakring, which he had attached to invoice blanks and which had been obliterated without any problem, and pointed out that the underprint of these stamps was 15 kr. The printing works reported that during the hasty production of the first stock for the 1875 issue, a mix-up of a 1 kr and a 15 kr sheet had occurred, which went unnoticed during the revision and super-revision. The culprit, auditor *Dewertoll*, had already been removed from this position and dismissed, and arrangements were already in place to make such violations impossible in the future. About half a year later, a second case arose when the Brixen tax office sent the central stamp office a sheet of 43 stamps, which had the copper print of the 12 kr value but the underprint of the 36 kr value, with the request that 43 new 36 kr stamps be issued. This incident was also attributed to the urgent first print run in October and November 1874 and the inadequate revision by *Dewertoll*, who had since been readmitted to the institution as a matter of mercy. He immediately offered to pay the amount for the purchase of the 43 stamps at 36 kr to be sent to Brixen. This settled the matter without the question of whether the office in Brixen should not have demanded 43 stamps at 12 kr instead being addressed. No further copies of any of these misprints known from the records have come to light. However, not enough

These embarrassing incidents for the printing company: at the end of February 1875, a sheet of watermarked paper was found in the courtyard of house number 53 in Roßau, on which only the copperplate print of 50 36 kr stamps was visible. Investigations revealed that this was a waste sheet from the November 1874 print run, which had been brought with the other waste paper to the building mentioned, the former state-owned porcelain factory, to be burned in the factory furnace. A more detailed technical assessment made it seem possible that the strong draft had carried the unburned sheet through the chimney. As improbable as this was, particularly because of the lack of burn marks, the matter remained at that. It is a fact that can be stated with all stamp issues that most misprints occurred during the first stockpiling. This may be due to the newness of the work for the staff involved, but also to the lack of practice of those responsible for checking and sorting out waste paper.

D. THE GRAZ BRAND COUNTERFEITING

Much more important for the fee differential and the stamp system than these small, if rather unpleasant, incidents was the fact that this was the first time that a genuine *stamp counterfeit* had occurred. A squeamish assistant to the Graz Finance Directorate named *Karl Krischay* was reported by the merchant *Max Tamborini* in Graz for offering him a counterfeit 20 fl stamp for purchase. *Krischay* admitted that he had produced three 20 fl stamps. It cannot be said with certainty whether *Krischay* executed the drawing on the lithographic stone entirely by hand or whether he traced all the lines of the black copper print on a genuine stamp with a grease paint that enabled transfer onto stone or, finally, whether he made the copper print of a genuine stamp suitable for transfer printing using one of the known processes and then only corrected the defective areas on the stone. Multiple noticeable dimensional deviations would argue in favor of the first-mentioned alternative. In any case, *Krischay* must have been a very skilled draughtsman, as he did not fail to overcome the obstacle of imitation, which was the head portrait, where even the slightest deviation from the lines produced in the copperplate print can significantly alter the appearance and expression. Only a truly artistic hand could create the similarity of the facial features and thus a drawing capable of deception. *Krischay* allowed himself more freedom in the arabesques; but these deviations are only noticeable upon close examination and comparison with genuine stamps. *Krischay* must have drawn the red underprint directly on the stone. The arrangement of the stars is completely arbitrary.

This forgery by means of printing was an important and unpleasant occurrence. In April 1875, *Wöhlert* had taken some pride in a statement that no forgeries had occurred up to that point; artistic execution and the use of two printing techniques had contributed to this result.

The forger managed to sell two stamps. When he tried to sell the third stamp to *Tamborini* on September 13, 1875, the latter became suspicious. *Krischay* was found guilty of the crime of fraud, partly completed and partly attempted. Regarding the type of forgery, it is only stated that *Krischay* produced the stamps by lithography using his knowledge and skills in calligraphy. This shows that they were not hand drawings, but reproductions by means of printing.

E. SAMPLE COLLECTION FOR JAPAN

During the issue in 1875, Austrian stamps were given to a foreign government as samples for the first time. This took place in October 1875 at the request of the chargé d'affaires of Japan. In view of the purpose of the samples, which made devaluation by obliteration, piercing or embossing seem inappropriate, and also in view of the great uniformity of the stamps, the printing works produced a sheet with 50 1fl stamps, a sheet with the same number of 1 kr stamps, and finally a sheet with 50 calendar stamps for the Japanese government, making certain color modifications. In the first two sheets mentioned, the colors of the underprint were swapped, i.e. the guilders were printed with a green background and the kreutzers with a red background. The calendar stamps were given a blue underprint instead of a violet one. The Japanese embassy was made aware of the change in colors when the samples were sent. Moreover, these patterns were not made on watermarked paper, but on ordinary paper.

F. THREE PROJECTORS

With the abandonment of the transfer principle, which had been so close to being implemented in the 1870 and 1875 issues, the number of designers also dropped considerably. A project by the Viennese industrialist *Albert Eckstein* from the beginning of 1875, for which the files contain nothing more than the fee claims, is only mentioned here because *Beck*, in reporting on *Eckstein's* offer,

mentioned that the printing works were constantly looking at improving stamps with removable prints and were recently pursuing a direction that they expected to achieve success that would surpass previous results. What these studies by the institute consisted of remains unknown.

Nothing more is known about another designer, the chromolithographer *Vincenzo Marzini* in Padua, other than that he called his invention a *sistema trasfigurativo* and sought employment in the state institution.

A third designer named *Anton Zajíček* from Prague immediately announced his idea, which was that the stamps should be printed in white relief or that the cancellation should be carried out by means of relief printing. The institution's response was that relief printing had no value because it would easily disappear even in the event of malpractice; even the application of overprints on the white relief printing did not prevent their removal because the traces of manipulation could easily be covered up with barite or cream white.

G. PUNCHING THE EXCHANGE MATERIAL

The choice of the new stamp design with the emperor's portrait meant that the regulation issued in July 1865 that the eagle (or an eagle) had to be punched through with a hole punch on exchanged stamps had become inapplicable because the new stamps no longer featured an eagle. As early as the first days of 1875, the Ministry of Finance received a request from a tobacco and stamp magazine asking where on the stamps the punching should now be made.

When asked for its opinion, the Court and State Printing Office proposed that the emperor's portrait be specified as the part to be perforated, "because this is the most difficult part of the stamp to copy." This motivation only becomes understandable when one thinks of the incident that would have given rise to the introduction of perforation of the stamp, namely the aforementioned malpractices of the court accounting trainee *Wallnöfer*. The purpose of the perforation was to make the stamp so unusable that it could no longer be reproduced in a way that would have allowed it to be used and exploited.

Of the two normal cancellation procedures: overwriting and obliteration, the former had proven to be insufficient for the exchange material.

The stamping could have been overprinted. However, since the state administration gains permanent possession of the stamp material in question when it is exchanged and it only has to pass the internal censorship procedure, it is possible to resort to the more radical method of punching holes without having to run the risk of "cleaning out" which is not entirely excluded with obliteration. When punching out a section of the stamp image, it is of course very important that

to remove such a piece, which is not easy to replace. From this point of view, however, the head portrait was the most suitable, since to complete it on a piece of paper inserted into the hole would have required considerable skill.

The Ministry of Finance also took action with the decree of 14 January 1875, Z.223-40, its arrangement in the sense suggested by the printer.

H. TESTING OF UNDERPRINT COLOURS

In the question of the colors to be chosen for the fund, the Ministry of Finance at that time oscillated between two poles. At one point, sensitivity was declared to be the most important thing in order to protect the state treasury against malpractice; at another, however, resistance was demanded of the colors so that no defects would arise when worn out. In the latter respect, the "atmospheric properties" (!) play a special role in the documents. As if it were the purpose of the stamps to be exposed to all possible rigors of heat and cold, damp and dryness, dullness and sunburn and the like!

Evidently, atmospheric dyes were a buzzword that was fashionable at the time, and there was concern that the progress of stamping could be compromised if the complainers were given the weapon that the new stamps would not be able to withstand atmospheric dyes. Although the very sensitive vegetable dyes that *Pecher* had initially envisaged in his two preliminary studies for the 1875 issue were abandoned and the choice fell on madder red, madder violet and indigo mixed with zinc yellow, which, according to *Pecher*, were the right middle ground between the two extremes, the Ministry of Finance nevertheless ordered a further test of the overprinting inks in use in December 1875 to reassure the public (in preparation for the new bill of exchange law) with regard to their resistance to bleaching agents. It now seems that concern that these inks were not sensitive enough has once again gained the upper hand.

In the same month, the Court and State Printing Office reported on the results of the tests carried out. The arrangement of the tests was systematic in that various inks in use at the time were used to overwrite the stamps; furthermore, 1 kr stamps and 1 fl stamps - i.e. stamps with both underprinting inks - were subjected to overwriting and etching tests - the calendar stamps were practically not taken into consideration -; and finally, tests were carried out with a whole range of the ink application agents in use at the time. The report lists these as: citric acid, clover salt, oxalic acid, nitric acid and sulphuric acid, then the

firstly, anti-ink, mentioned by *Hausner*, and finally an etching agent, which has since been sold under the name Tintivoro. The composition of the latter two agents is no longer known today. Regarding the anti-ink, all that is known is what *Hausner* said about it; the report from the State Printing Office mentioned here also states that this agent contains chlorine.

The report expressed the results somewhat diplomatically. It pointed out that all these means, by destroying the ink more or less thoroughly, alter the black print, which consists of logwood extract, in a noticeable way, which is why the printing works attach the greatest importance to the use of this ink. But the requirement that the colored overprint inks show a certain perishability when in contact with acids was also actually met. There are probably other, even more sensitive inks, but they should have chosen ones that withstand atmospheric influences. The madder inks and indigo combined stability against external influences with a certain degree of susceptibility to acids. As little as these statements meant, the ministry had no choice but to be calm about it.

The report mentioned above also dealt with the question of whether it was necessary to erase the lettering and add a drawing to the parts of the stamp image that were destroyed in the process. This concern was described as unfounded because the thinning of the paper at the erased point would always remain visible and it would be very difficult to fill in the damaged area of the underprint on the "sharpened" paper without making it visible. Sandarak (orig. realgar) is mentioned as an aid in this operation, without clearly stating how it should be used.

I. MUSTERABDRÜCKE

A much more recent document, namely from 1891, provides information on the production of a kind of proof of the 1875 issue, about which the documents "from the time" are completely silent. In 1891, the Hungarian Ministry of Finance was concerned with the question of whether the year of issue should be printed on the Hungarian stamps when they were changed. In order to gain a thorough overview of all the arguments for and against this, the Ministry sent Section Councillor *Karl Lász* to Vienna to study the matter here, where this measure had long since been implemented. The Austrian Ministry of Finance was very willing to help the Hungarian delegate. And in order to provide comprehensive information and the most vivid clarification, the Hungarian Ministry was given a collection of all Austrian stamps on which

the year of issue was printed on it (i.e. starting with the 1870 issue), as well as some test stamps using the decalcomania method, which were being negotiated at the time, namely, as should be mentioned in advance, Mercury head stamps without a coloured edge. This last point, in connection with others from earlier and later times, characterises the position of the Ministry of Finance, which was always ready to treat everything in this area that contributed to increasing the protection of the property as a matter of common interest and which therefore did not share the - again quite understandable - tendency of the Court and State Printing Office to secrecy towards the other government. Among the sample stamps that were compiled for Hungary, the already mentioned sample stamps from the 1870 issue appear on orange-coloured paper and also those for the 1875 issue *on light yellow paper*. In addition to such sample impressions of the general stamps of the 1875 issue, calendar stamps of this issue on even lighter paper (also with cut edges) have also come to light.

Furthermore, sample impressions of the ½ kr and 1 fl denominations were found in collections, namely: impressions of the background alone on pink paper (green for ½ kr, red for 1 fl) and those of the top print alone on light yellow paper (both black).

From the 1875 issue onwards, the Court and State Printing Office appears to have abandoned the practice of making sample impressions on *coloured* paper. There is no mention of such impressions in later issues, and none have come to light. The reason for this may have been that the coloured paper significantly changed the appearance of the coloured print and therefore did not really meet the purpose of the sample.

In the sample impressions of the 1875 issue, the yellow paper made the red guilder values appear brownish, but the green kreuzer values appeared so grass-green that the original stamps never looked like that.

A document from the State Printing Office also shows that samples of all stamp values of the 1875 issue were made on watermarked paper and were put together in complete series of one of each value. The main purpose seems to have been to obtain the imprimatur for one of these samples. Furthermore, such compilations were presented to the relevant personalities to illustrate the new issue.

These sample stamps differ from the stamps actually issued only in that they have cut edges rather than perforated edges. This practice of keeping the sample stamps the same paper color as the original stamps and omitting the perforation was then retained in subsequent issues. However, such sample stamps with perforated edges (stuck on cardboard) also occur.

Here we should mention another act of the printing press, according to which a destruction of experimental stamps of the long form,

which affected 375 stamps of 2 fl, 7325 stamps of 5 kr, 825 calendar stamps, then 250 stamps of the guilder design without amount and 1500 stamps of the kreuzer design without amount. The mention of the 2 fl value shows that these attempts probably originated in 1873, because the 2 fl plate had already been used for such prints since the autumn of 1872. Gulden and kreuzer prints without amount have probably not survived, since nothing of this has come to light so far.

Finally, as should be mentioned here, the first edition of the "Sample Book for Stamps" of the Court and State Printing Office, already mentioned several times, also dates back to 1875, in which (perforated) original stamps were pasted from the issue in 1858 up to and including the issue in 1877.

The printing works were given series of the current stamps so that the "investigation department" set up at the company, which was responsible for assessing the stamps in question, had comparison material available for its reports. These stamp series had to be kept on record as representing money for the duration of the issue in question. After they had "expired", when the issue had ceased to be valid and no more relevant cases had occurred, these stamps were issued from the deposits and pasted into the sample book because they no longer represented any monetary value. From later times, that is, from the 1879 issue, only

Sample stamps with cut edges were glued in. The investigation department no longer needed original stamps, as the sample stamps were sufficient, which, although printed on "fake" paper, had the same paper color as the original stamps.

K. THE DESTRUCTION OF THE PLATE APPARATUS OF THE FIRST GROUP

In December 1875, as already mentioned in Chapter XXXI A, the copper plates used for the 1870 issue were "destroyed" by "scratching the stamp" and melting them down. Since the difference between this issue (1870) and the previous ones lay in things that were not printed on the copper plates, this actually meant the destruction of the plates for the entire first group of stamp designs. The management of the printing works wanted to use this moment, when the first appearance of the stamps was to disappear from the scene, not only to keep sample impressions of them for the future, but also to keep the possibility open by keeping plates of being able to continue to make impressions if necessary. This intention could not be realized, however, because it turned out that this had already been made impossible by the overzealousness of certain members of the credit department. When the management of the institution received the request to initiate

When the plate was submitted for melting, all the plates had already been filed through. This was done with the good intention of making it so impossible to use the plates to make copies that the previously usual commission-based supervision of the melting down would become completely superfluous and all that was required was a commission-based counting and handover to the main mint. This incident prompted the management to establish as a principle for the future that every time a plate of stamps was destroyed, an undamaged plate was to be reserved and kept for safekeeping. However, for the older period of the stamp system, the damage had already been done.

In the list of whole plates to be melted down, two types of intaglio plates are explicitly listed alongside raised plates: those for producing raised plates and those for copperplate printing. The latter are the printing plates, but the former are the mother plates (which differ from the printing plates in that they lack the particularly robust adjustment required for printing), of which there was always only one. Raised plates, on the other hand, could be up to seven for one category. All plates had 100 "compartments". Their shape thus originated with the introduction of the centesimal denomination.

Accordingly, the denominations abolished in 1864 no longer appear (18 fl, 16 fl, 14 fl, 8 fl, 72 kr, 30 kr, 6 kr). The fact that "50" divisions were not also listed was probably an oversight. No plates are listed for the value of 1 kr because plates made of type material were used for this.

It is noteworthy that there were also plates for the consumption stamps with Italian legends (6 kr Bollo per gli almanacchi, then 1 kr and 2 kr Bollo per gli annunci).

Even more important was a second part of the plate catalogue, according to which incomplete plates with a smaller number of stamp marks and individual plates were also destroyed. There is every reason to assume that on this occasion not only the plates into which the new value legends had been engraved on the occasion of the regenerations carried out at various times and then during the 1864 regulation (the new original types) were destroyed, but also the original engravings by Kotterba (under the title "deep plates without amounts"), along with any originals without legends produced by *electroplating*.

Finally, it is worth mentioning that raised plates made of electroplated copper for "*underprint sheets*" are also listed. Two plates contained two sheets each, all the others only one sheet each. These therefore appear to have been electroplating intermediate stages for the production of the printing plates for the production of the natural self-print. In view of the time when these plates were destroyed, it could be assumed that these were leftovers from the production of the new natural self-print for the 1870 issue.

CHAPTER XXXVI

THE EMISSION OF 1877

It is a curious observation that the development and formation of the stamp system was also subject to certain general laws that prevail in other areas. As is the case with all new things, it began with an abundance of variety that was hardly necessary in practice, with each stamp class having its own special design and a different size. Then, because progress is known to zigzag, there was a swing to the other extreme, namely to excessive uniformity. Conceived by *Worring* and aimed for in the planned issue of 1869, it became a reality in the issue of 1875: a reduction in the number of stamp sizes and designs to a minimum, which probably went too far. There were now (if one ignores the calendar stamps and only considers the general stamps) only two stamp sizes and only two designs. Instead, a new idea emerged, which was initially only implemented on a modest scale: to use color differences to help distinguish the stamp values from one another. Such color differences did, however, exist from the very beginning: however, they existed only outside the series of general stamps, were chosen only as a stopgap measure instead of producing special designs, which was no longer possible due to lack of time, and were intended to indicate the difference between types of *stamps* of a very different nature.

The excessive uniformity achieved in the 1875 issue soon proved to be a disadvantage. In practice, it made it difficult to distinguish between different stamp values. And this was a major problem, particularly in cases where the frequency of use of certain stamps made confusion very unpleasant. In January 1875, the Ministry received a letter from the lawyer Dr. *Emanuel David* from Auscha, in which he pointed out how easy it was to confuse the stamps most commonly used in legal practice, 10 kr, 12 kr, 15 kr and 36 kr, with the new issue, because they had the same size, design and color, and because one had to have a good eye to easily recognize the value, which appeared matt in white. He therefore suggested giving these four values different colors. The Court and State Printing Office did not agree with this suggestion, pointing out the difficulty of finding enough colours that would, on the one hand, resist atmospheric influences, but, on the other hand, allow the action of chemical reagents.

The chosen brand size also makes it impossible to create larger and more conspicuous

The only effective remedy would be to introduce differences in dimensions; such differences would also prevent the falsification of smaller values to higher ones. *Nejedly* noted that from the beginning he had striven for differences in engraving, but this had failed partly because of the resistance of Professor *Jacoby* and partly because a large part of the plates had already been completed.

A change would have required great expense and more time than was available.

David's suggestion was thus left unaddressed for the time being; however, later events showed that this incident had been felt to be important. It is also not impossible that the occurrence of a counterfeit stamp produced using mechanical means (the *Krischay case mentioned above*) made it seem advisable to abandon a design that had not withstood counterfeiting. In fact, barely a year had passed since the introduction of the new stamps when a completely different new design was already being discussed.

The first to come forward with relevant proposals was Chief Factor *Lauter*.

His proposal, presented on March 4, 1875, was mainly that in the event of a new issue, the stamps should be printed with galvanic copper deposits on the *König & Bauer* two-color high-speed press. He understood this to mean the transition to letterpress printing for the production of the stamps. He cited three reasons for this:

1. The print would be cleaner and more even than on the copperplate printing press, because the application of the ink in copperplate printing and in general in hand presses is never completely reliable. Incidentally, copperplate printing requires twice as much ink as type printing, because at least half of the ink is lost through wiping. The notes of the English bank and the higher-value English postage stamps are also printed by Galvanos on the letterpress printing press and still look like steel engravings.

2. The thousand finished stamp sheets, which previously cost 43 fl 38 kr, could be delivered for 25 fl.

For comparison purposes, it should be noted that according to a document from 1874, 1000 sheets of newspaper stamps of 1 kr and 2 kr (200 stamps per sheet) cost 24 fl 78 kr and 1000 sheets of calendar stamps (100 stamps per sheet) cost 43 fl 50 kr.

3. Since the two-color machine allows for a meticulous adjustment of the printing forms for the black and the green or red printing, waste would be reduced to a minimum (barely 1 percent). *Lauter* also suggested the following details for the implementation:

- A. The emperor's head, which *Knöfler* had just finished for stamps, should be used; *Knöfler* might have to make a new head and frame, which could then be reproduced electroplated. The black

The field for the value amount to be omitted should be kept dark (without decoration), as is the case with both stamps on the postal waybills currently being printed.

B. In order to avoid the time-consuming preparation of the individual forms, the printing plates should be set up to mutate the value legend (by inserting interchangeable pieces). The value should be indicated in the upper background fields with clear black numbers or with mutable letters in black print and the underprint should not contain any value designation at all. Only one black print plate and one underprint plate each would then be needed for the guilder values and the kreuzer values. This would amount to a total of 200 (!) galvanic clichés, plus the mutation types, whereas up to now numerous expensive copper and letterpress plates have been used.

C. The two-colour machine can be used to *dry* print very thin, not glued or only lightly glued, well satinised paper, which should be coloured greenish for the Kreuzer marks and reddish (in the fabric) for the Gulden marks .

Such paper, which is subsequently coated with a layer of glue that is difficult to dissolve, would make it very difficult to reuse the stamps because the ink would bleed through when written over and could not be removed with any caustic without discoloring the paper coloring and the underprint. The long shape of the new stamps also makes it very difficult to remove them without damaging them.

D. The glue should be made more durable and less soluble by adding a rubber solution. To remove the stamps, they would have to be moistened more, which would make them more likely to be destroyed. The impregnation with prussiate of blood and the use of logwood paint could be retained. *Lauter* added that the proposed stamps would not have to look like the stamp mark on the postal waybills, since a woodcut suitable for letterpress printing would be obtained.

Wöhlert supported *Lauter's* proposals and, with regard to the transition to book printing, pointed out the further advantage that sheets with 100 stamps could be printed, whereas previously, due to the difficulty of copperplate printing, plates with 50 stamps had to be used. He also considered it self-evident that the new stamps should bear the emperor's image. However, the artists who would have to do the drawing and cutting should be given free rein and *Jacoby's* copperplate engraving should not be imposed as the basis, because then at best a good copy could be produced which could not bear comparison with the original, which was effectively executed down to the smallest detail.

Hofrat *Beck* left these proposals pending until August 1876; however, since the principles for a completely new issue had already been established by then, *Lauter's* suggestions were no longer used.

At the beginning of February 1876, the State Printing Office received verbal instructions from *Nejedly* to report how large the first stock of the 1875 issue had been; whether an equally large stock of stamps could be produced by the end of October 1876 with a different underprint (natural self-printing, several different colors, year 1877); how much the corresponding costs would be; finally, how much time and money would be required to possibly issue a new issue in a completely different form. This order shows that *Nejedly* had already formed the intention of moving away from the new long stamp form, which had been chosen at the time mainly because of the costs already invested in the plate machine. In an emergency, he only considered *an* issue in this form, for which all the necessary improvements would have to be made. If he wanted to fall back on natural self-printing for the fund, this was obviously a consequence of the Graz forgery. A leaf vein would not have been as easy to imitate as a geometric pattern. The suggested increase in the number of bright colors, however, probably goes back to the suggestion of the lawyer *David*.

The Court and State Printing Office reported on February 9, 1876, that the first stockpile of the 1875 issue consisted of 770,000 sheets of 50 stamps each. Printing such a quantity would take six months. If only the vacuum were to be changed for a new issue, the necessary plates could be produced in six weeks. If a new copperplate printing were to be chosen at the same time, several months would be needed for drawings, engraving and the production of the plate apparatus. It follows that only a new issue with a changed vacuum could be envisaged for January 1, 1877.

Completely redesigned stamps could only be issued from January 1, 1878. In either case, a decision would be necessary soon. New vacuum plates would cost 500 fl, a completely new plate machine 8000 fl, namely for 29 stamps (16 kreuzer values, 12 guilder values, calendar stamps) 800 fl for drawings, 3400 fl for original engravings, 3800 fl for the first plate supply.

As early as February 22, 1876, the Ministry of Finance announced that it was considering a change in issue every two years. Since the current stamps had been put into obsolescence on January 1, 1875, a new issue would have to take place on January 1, 1877 and another on January 1, 1879. For the former, only the underprint would have to be changed by adding the year 1877 and by using colors that were noticeably different from the current ones. When this was presented, a report would be made on the behavior of the colors chosen against destructive chemicals. For the 1879 issue, however, according to experience, it would be advisable to choose several different sizes for both the guilder and the kreuzer denominations, which would make it possible to produce completely new ones.

Drawings and plates. The printing works were commissioned to start the preparatory work for this. The relevant ministerial file also contains the reasons why it was reluctant to switch to *annual* new issues, although it would appear to be in the interest of the public to change issues as often as possible. Fourteen months had already passed since the introduction of the issue in 1875 and there were still mass requests for exchange from parties; the destruction of the confiscated stocks had not yet been carried out everywhere. This meant that two years was the minimum period for an issue.

The Court and State Printing Office was in a rush for the new issue, which was to be held at the beginning of 1877, because the Ministry wanted the first supply to be ready by the end of September, while this work seemed to require at least seven months. Therefore, in the first week after receiving the decree, i.e. by February 29, the new plates for testing various underprints were completed and a report was submitted to the Ministry on March 22, 1876, with the test prints. In these tests, the printing office, in accordance with the instructions received at the beginning of February, dropped the previous underprint design consisting of stars and returned to the veins of a tree leaf in natural printing. Likewise, in order to be able to make the value information in the upper part of the underprint larger and clearer, it stopped placing the numbers in round corner medallions, which took up a lot of space. The year 1877 was placed in a ribbon loop in the lower part of the stamp. Three different underprints (I, II and III) were produced, which differed in the representation of the value digits in the upper part. In model I, the underprint was divided into two parts, which were produced using different graphic processes: the lower part contained the natural printing (letterpress printing), the upper part contained the value digits made in "flat color printing" (correctly colored flat printing, i.e. lithography), cut out in white and placed "slanted" (correctly slanted) in the corners. In the other two models, the leaf veins extended into the upper part, where the digits were placed without a frame, in model II cut out in white, in model III in full color (on a white background). The printing works declared the combination of letterpress printing and lithography in model I to be unadvisable. The full color of the digits in model III made them more conspicuous; nevertheless, this model was not recommended either because of the easier possibility of counterfeiting. According to a note in the files of the State Printing Office, 17 test stamps were presented, which were produced on ordinary paper, namely 3 stamps of 50 kr, 3 stamps of 1 fl, 8 other stamps of 1 fl and 3 stamps of 20 fl.

The printing company discussed the question of which colors to choose most extensively. The condition of a certain resistance to atmospheric influences and strong sensitivity to acids would correspond to

only the previous colours: madder red and the indigo and zinc yellow Green. The reddish-violet madder of the calendar stamps is less sensitive. the other colours used in the present experiments: Grey (mixture of Munich lacquer, ultramarine and black); brown (jacaranda) and blue (Ultramarine). The following proved to be completely fixed in the tests: Neurot; Reddish yellow (acajou lacquer) and chrome green. A short conversation with Professor *Pohl* The consultation conducted by the technical university has confirmed these views of the Printing company confirmed that it had matched all nine colours mentioned to the samples submitted. used, but recommend only the first six. Accordingly, all values in divided into six categories and given the following colors:

1. Category 13 values ($\frac{1}{2}$ to 50 kr), red madder lake;
2. " 3 " (60 to 90 kr), red-violet madder lake;
3. " 6 " (1 fl bis 5 fl), grün;
4. " 3 " (6 fl to 10 fl), grey;
5. " 2 " (12 fl and 15 fl), brown;
6. " 1 " (20 fl), blau.

So you should go from the previous *two* colours to *six* colours. For The calendar stamps should have the previous underprint drawing with the year 1875 should be retained; however, for printing a reddish-yellow colour (cacajou lacquer).

The decree of the Ministry of Finance of 30 March 1876, written by *Nejedly* accepted the replacement of the previous star designs with tree leaf veins, but ordered that for each of the categories established by the printing house a *Another* sheet is chosen. It should be ensured that the drawing of the veins a pleasing appearance and allows a clear print, such as This was the case with the Hungarian stamps. The year 1877 in ribbon loops was approved. Regarding the white digits in the upper Parts of the coloured field were arranged, with respect to the cruiser and the For the kreuzers, the type of The same placement as the 1875 issue should be retained, but the round medallions become oval, which creates the necessary space for larger digits In the case of the guilder values, however, the value digits should be placed obliquely in the upper Corners, i.e. radially, as the printer does with the partly letterpress, Partly lithographed, the model I had proposed. The models on This pattern next to the numbers visible side decorations on the new Gulden stamps are to be applied. The stamps issued by the printer for the six categories The requested colours were approved; however, it was determined that the Calendar stamps would also have to remain unchanged with regard to colour.

Without the files giving any information about it, the Preparation and presentation of the imprimatur impressions. This still existing template brings a surprise: the stamp characters are directly on

individual sheets of paper approximately the size of an eighth of a sheet of writing paper, printed by hand and in copperplate printing, the latter being recognizable by the fact that a wide, smooth edge around the stamp image shows the strong pressure that took place in the copperplate printing press. In order to be able to produce these prints, the printing house had to have individual printing blocks for all stamp images and for all funds, the existence of which is nowhere mentioned in the files. Such an observation can neither be made before nor after, since the subsequent imprimatur impressions always represented individual stamp images separated from whole sheets.

After receiving the imprimatur, the Court and State Printing Office immediately began producing the first stock for the 1877 issue. At the beginning of June 1876, the work became so urgent, as 5,000 sheets of the 1875 issue and 8,000 sheets of the 1877 issue, a total of 13,000 sheets, had to be produced daily, that the machine master *Sonnleithner* made a successful attempt to create the vacuum on the high-speed press, which accelerated the work and enabled a reduction in costs from 4 fl. 50 kr to 1 fl. 50 kr per 1,000 sheets. However, they soon returned to printing the stock using a hand press, because the high-speed press produced too high a rate of waste. In the last days of June, 22 presses had to be worked from 6 a.m. to 11:30 p.m. The overtime pay was not excessive, however: a female worker received 3 kr, a male worker 10 kr and a particularly qualified worker 20 kr for each hour. On July 18, 1876, the work had progressed so far that the State Printing Office was able to submit the technical description of the modified vacuum to the Ministry of Finance for the purpose of announcing the new issue. This was approved by decree of September 21, 1876, Z.24735, RGBI No.120, V.BI.

No. 27, announced that the 1877 issue would be cancelled as of January 1, 1877. This measure only affected the general stamps (16 in the Kreuzer category and 12 in the Gulden category). The calendar and newspaper stamps remained unchanged.

The regulation also contains an explicit statement that "the stamp marks printed on postal and railway waybills are not affected and remain unchanged". The fact that these two so-called stamped postal items, which will be discussed in more detail below, have been mentioned here, while the bill of exchange and the promissory notes are ignored, is because the mentioned waybills had stamp marks on them which resembled the general stamps of the 1875 issue, except that the black print was typographically executed. Since the issue regulation did *not* include postal and railway waybills in the 1877 issue, the result is that there are no such waybills with the stamp mark from 1877.

The general stamps issued in 1875 were withdrawn from use on January 31, 1877; during the month of January, both issues were in use alongside each other. Surplus stamps could be exchanged until the end of April. On that day, they ceased to be valid. The exception for stamps that had been officially cancelled on business books and blanks in good time was also maintained in this announcement.

The description of the new stamps highlights that they differ from the previous stamps only in terms of the coloured underprint. This was changed both in terms of colour and design. In terms of colour, there were now not just two series as before, but six, namely two of the kreuzer denominations and four of the guilder denominations. The colours used were: red ($\frac{1}{2}$ kr to 50 kr); violet (60 kr to 90 kr); green (1 fl to 5 fl); grey (6 fl to 10 fl); brown (12 fl and 15 fl); and finally blue (20 fl). The nature of these colours was as above: red and violet madder lake; indigo and zinc yellow mixed to make green; Munich lake mixed with ultramarine and black to make grey; jacaranda; and finally ultramarine blue.

With regard to the underprint, it was pointed out that it represented the veins of a tree leaf. It contained a looped band printed in full color just below the denomination printed in black (still logwood color!) and in it the year 1877 in white numbers. In the guilder categories, the entire upper space between the frame and the portrait medallion was printed in full color; in the corners there was the denomination of the stamp in white numbers placed radially to the central image and white decorations on both sides of the latter. It should be noted here that these decorations are missing in the value of 2 fl 50 kr and that the omitted numbers (as in the 1875 issue) read $2\frac{1}{2}$. In the case of the guilder values, on express instructions from the ministry, care was taken to ensure that the part of the underprint printed in full color did not extend into the edge of the copper print, as this would have made the legend less legible. The natural print therefore continued to the edge at the top and on both sides of the stamps. Each of the six groups or color categories actually has a *different* natural print in accordance with the ministry's instructions, as can be seen from the different positions of the stronger leaf veins. A beech leaf was probably used as the basis here too.

Regarding the Kreuzer values, the description in the regulation of 21 September 1876 stated that oval medallions printed in full colour were to be placed radially to the central shield in the two upper corners of the underprint and that they contained the value designation in white numbers. This radial position did not correspond to the Ministry's instructions. If no verbal authorization had been given in this case, this was the result of an arbitrary decision by the printing works which went unnoticed.

Of the colors in this issue, violet madder lake proved to be the least successful. As with the calendar stamps, there are very different nuances here too (in the values of 60, 75 and 90 kr). Sometimes a formal discoloration can be seen, which almost turns brown.

XXXVII. CHAPTER

MISZELLANEA ZUR EMISSION 1877

I. On the occasion of the first printing of the new stamps, the management of the Court and State Printing Office decreed that in future, before using galvanic printing plates, whether they were newly produced or only retouched, a test proof should always be presented to the technical inspector so that he can check carefully whether a defect had arisen which would affect the full conformity of the printed products with the printing plates previously used.

II. In 1876, the Japanese embassy presented the Austrian government with a collection of 63 different Japanese stamps and was given an analogous collection of Austrian stamps in return. This consisted of 49 German, two Italian and two rasterized (textless) stamps.

Bills of exchange, a promissory note and two railway waybills, all of these postal items overprinted with the word "Muster".

Furthermore, a full sheet (with 50 stamp characters) of each of the six colour groups of the issue was produced on ordinary paper with a different order of colours, namely the 50 kr value with violet, the 90 kr value with red, the 1 fl value with blue, the 7 fl value with brown, the 15 fl value with grey and the 20 fl value with green underprint. Finally, signature impressions (black playing card stamps, black and red newspaper stamps and calendar stamps) were obtained from the Central Stamp Office and included in the collection intended for Japan. (two-tone and

III. It should also be mentioned here that the Hungarian Ministry of Finance, which had noticed the change in the year-numbered issues in this half of the empire (1870, 1875), sent to the kk

Ministry of Finance to inform them of their experiences with this measure. The answer was that a periodic change in the stamps every two years was planned in order to make it as difficult as possible to cover up reductions in the stamp rate by subsequently attaching stamps to documents that were originally issued without stamps.

According to the observations made, the wear and tear did indeed increase with each change of stamp. The cost of a change of issue amounted to 25,000 fl, including 15,000 fl of production value of the remaining stocks to be destroyed and 8,000 fl of production costs for new plates. The increase in the wear and tear of stamps with each new issue, highlighted by the Ministry of Finance, would of course only be a consequence of the "cover-ups" cited as the reason for the more frequent changes of issue if, after the announcement of the new issue, the wear and tear of the *older* stamps in their last period of validity had suddenly increased, something the Ministry did not say clearly about.

IV. In December 1876, a proposal was put forward by the notary *Josef Kubinger* from Persenbeug, who pointed out the stamp rate of 1 fl. 50 kr for applications for incorporation and requested the issue of a new category of this value in order to save on stamp costs. The printers calculated that with the number of 40,000 applications per year given by *Kubinger*, 91 fl. 32 kr could be saved on stamp production costs. The cost of creating a new stamp value would, however, amount to 481 fl. 56 kr, so that it would take *several* years just to recoup this expenditure. With the basically standard two-year duration of each issue, this would be completely impossible on the open market.

V. Since the 1877 issue differs from the 1875 issue only in the changed underpressure, it is easy to understand that the conditions with regard to the watermark have remained generally the same. Both stamps of the 1877 issue also have watermarks that sometimes run parallel, sometimes crosswise.

With regard to the Kreuzer values, no difference in the frequency of any of the positions of the watermark could be found. However, with the guilder values of the new issue, the cross-position, which was previously the rarer one, now seems to be the rule, with parallel positions occurring almost only as a rare exception.

VI. The paper supply contract with Schlöglmühler Aktiengesellschaft, which had been renewed for three years (until July 2, 1877) after its initial five-year term (mid-1869 to July 2, 1874), expired during the issue in 1877. In the competitive negotiations announced for a further three years to "secure demand", this stock company was again the best bidder. As already mentioned above in Chapter XXXIV under III, these negotiations were already under the sign of the metric system of measurement. The two formats of paper for the long stamp form ($9\frac{1}{2} \times 11$ and $11 \times 12\frac{1}{2}$ Vienna inches) were converted to 250×289.7 and 289.7×329.2 millimeters. The target weight per Neuries of 1000 sheets, which was to be 4 Viennese pounds for the first type and $5\frac{1}{2}$ Viennese pounds for the second, was calculated at $2\frac{1}{4}$ and 3 kilograms. It was agreed with the factory that only $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$ should be counted as fractions of a kilogram.

The price per kilogram agreed in the new contract of July 30, 1877 (valid from July 2, 1877 to 1880) was, oddly enough, different for each of the two formats. For the paper of the guilder denominations it was 1 fl 86 kr, for the other (consisting of the larger sheets) 1 fl 90 kr. From this the prices for the Neuries of 1000 sheets were deciphered as 4 fl 19 kr and 5 fl 70 kr.

VII. A decree of the Ministry of Finance dated September 3, 1877, Z.21.967, went one step beyond the usual perpetuation of the use of such stamped printed matter with regard to stamps which were affixed to trade books or blanks of bills of exchange, invoices and the like and were officially obliterated, and declared that such stamps were equal to the valid stamp stamps not only with regard to *use*, but also with regard to *exchange*. This completely eliminated the effectiveness of all regulations on issuing exchanges with regard to such obliterated stamp stamps. Anyone who owned unused or spoiled stamp stamps without official obliteration at the time of an issue exchange had to keep to the announced deadlines for exchanging them. However, there was no rush to replace spoiled blanks with obliterated stamps, because this could be done at any time, even if issue exchanges had occurred in the meantime.

VIII. As an appendix to the description of the 1877 issue, we must mention a phenomenon whose precise chronology is uncertain. The philatelic catalogues list, after the 1858 issue of newspaper stamps, an issue of the same in 1878, which would have affected the 1 kr and 2 kr stamps. It was mentioned above that the green 2 kr CM newspaper stamp used from March 1, 1853 throughout Austria (including the Italian provinces) was replaced on November 1, 1858 by a 4 Nkr stamp (Type I), which was printed red in the Italian provinces and brown in the non-Italian provinces. As early as January 1, 1859, as a result of the reduction of the new 4 Nkr rate to 2 Nkr, the above-mentioned stamps, which had been in use for barely two months, were replaced by a brown and a red 2 kr stamp (Type II). On the same day, a blue (black for Lombardy-Venetia) newspaper stamp for 1 kr came into use, which was of type I because the printing plates for the 4 kr stamp had been used to produce it, after a slight change in the value. When these plates were "printed out" due to wear and tear, new plates were produced for the 1 kr stamps. The stamps produced with these now show type II.

This type change must, as already mentioned, have taken place before May 1866, because there are not only blue, but also black 1 kr stamps of type II and the latter were no longer printed after the loss of Lombardy-Venetia.

Stamp collectors, who also consider newspaper stamps to be collector's items, now refer to another new type of this blue stamp of 1 kr and the brown stamp of 2 kr as the 1878 issue. The size and general appearance of both stamp values as well as their colors have remained the same. The printing of the new stamps is finer and sharper than before. The most striking difference, however, is the double-headed eagle that occupies the middle of the stamp. The new eagle is somewhat smaller and has a noticeably smaller crown than before; on the other hand, it has a larger light shield instead of the smaller dark shield. This new design of newspaper stamps lasted until 1890.

Strangely enough, the published standards are completely silent on this alleged issue. Indeed, there is not even the slightest hint of such a measure in the files. Nevertheless, the fact that these stamps in a new design have been in existence for years speaks all too clearly. We finally managed to find two sheets on which the new designs of the 1 kr and 2 kr stamps are printed. Next to each of these two prints is a corresponding stamp of the older type, as if for comparison. Below this is the word "Imprimatur" and the production of the section head *Ender (von Mallenau*, the author of the bill of exchange stamp law of 1876 and a commentary on it). Further down is the signature "*Linsbauer*, supervisory commissioner" and the flourish of the name of Factor *Grey*. These two sheets now show the matter in a different light than the view of philatelists. This is clearly not a new issue, but merely a change of type, which was always regarded as an internal matter of the financial administration, and therefore not requiring any announcement, and often even as a matter solely concerning the printing works.



Second type change (small crown)

Newspaper stamps were used in very large quantities because of the boom in the press. Since the plates were made of a material that was not very durable and therefore had to be replaced frequently, the negative molds eventually became worn out and it was no longer possible to cast usable printing plates.

New originals had to be produced. Whether the eagle with the small crown was chosen intentionally in order to produce more attractive printed products or whether there were no more eagles of the older type in stock remains to be seen.

Although the two imprimatur sheets show that only a change of type took place, they do not give any precise information about the time when this change was made. The three names given fit the

The year 1878, but also earlier and later years, will have to remain the same for the time being, as the collectors have determined from the initial appearance of these new stamps.

From the point of view of assuming a change in type, the lack of an announcement seems understandable. Even in the field of general stamp printing, several changes in type had been made without it being considered necessary to announce this. Only the graphic arts expert or the experienced collector would immediately notice such changes. However, the regulations are not intended for such specialists, but for the general public.

In view of the *first* type change mentioned above in Chapter XVII under **C**, which occurred in the 1 Nkr stamp before May 1866 and can be recognized by the different position of the crown band in relation to the beak of the heraldic eagle's head on the right, this is referred to as a *second* type change. This is not entirely accurate, however, since only the 1 kr stamp saw a second change. In the case of the 2 Nkr stamp, however, the change shown here was not preceded by a first type change.

XXXVIII. CHAPTER

NO ADNEXE

The abolition of the announcement stamp in the law of March 29, 1874, RGBI No.30, V.BI No.10, relieved the 1875 issue because now - if one ignores the newspaper stamps, which almost always have a special existence - only the calendar stamp remained of the adnexa. In fact, the Finance Minister's Ordinance of September 30, 1874, Z.25296, RGBI No.125, had only listed and described the calendar stamp apart from the general series of stamps. But the next issue regulation, the Finance Minister's Ordinance of September 21, 1876, Z.24735, RGBI No.120, V.BI.

No. 27, had to mention new categories of such appendices. This was done in a merely referential, not dispositional form, with the last paragraph of the regulation stating that the newspaper stamps of 1 kr and 2 kr, then the calendar stamps of 6 kr, "finally the stamp marks printed on postal and railway waybills" were not affected by the regulation and remained unchanged. This meant that *two* new developments entered the field of stamp standards. These are postal stationery, that is, printed items prepared for handwritten completion, provided with a "financial stamp" and intended for a purpose beyond the mere tax-related

However, the character of adnexa can only be attributed to these two postal items to the extent and for as long as they are "printed" on them by the design of the

stamp mark to the general stamp marks. However, as they received their own, differently designed stamp mark, they no longer belong in the scope of the present presentation, just as the postal stationery that existed on the basis of the fee system, the actual postal stationery (bills of exchange, promissory notes, commercial instructions) cannot be treated in more detail here for this very reason, since they always had their own special, differently designed stamp marks (so-called stamp vignettes). The emission regulations seem to have followed similar considerations and it seems to have been for this reason that the regulation of 30 September 1874 makes no mention of postal waybills, although they already existed at that time. For the same reason, however, the decree of 21 September 1876 had to commemorate the two postal stationery items mentioned, because they already had a stamp mark that was an exact replica of the stamps of the 1875 issue and even bore the year 1875.

A. THE POSTAL WAYBILLS

It has already been mentioned above, when describing the change in type of the 5 kr value of the 1858 issue, that the Fees Act of 9 February 1850, RGBI No. 50, had left all consignment notes stamp-free. The amendment of 13 December 1862, RGBI No. 89, on the other hand, subjected them to the 5 kr stamp.

The law of February 29, 1864, RGBI. No. 20, amended this by making the stamp only 1 kr for a transport distance of no more than 5 miles. However, postal items were expressly excluded from this reduction. Postal waybills were therefore subject to the 5 kr stamp in all cases.

It was the responsibility of the person sending the postal parcels to prepare these waybills and to stamp them with the required stamps. In essence, such a waybill was a copy of the address on the parcel itself. Waybills could be entirely handwritten or made out using forms produced by the private printing industry. In 1871, following negotiations with representatives of the trade and industry sector and with the Hungarian postal authorities, the Ministry of Commerce approached the Ministry of Finance for approval to create official postal waybills with pre-printed stamps for 5 kr, which were to be used by the post offices. Waybills of this kind were to be used for both ordinary mail and for

Cash on delivery shipments (in this case combined with cash on delivery receipts) can be used. In the report written on this by Ministerial Counselor Dr. *Julius Fierlinger*, it is doubtful whether sticking the stamp on is really as onerous for business people as has been claimed. However, since the Ministry of Commerce, which is primarily responsible for this, recognizes such a need, the Ministry of Finance only has to examine whether it is legally permissible. In this case, it is stated that there is *no* express authorization for the financial administration to allow another form of stamping to be used instead of stamps, since Section 1 of the regulation of March 28, 1854, RGBI No. 70 (which is to be regarded as a law), categorically states that the payment of duties, which previously had to be made using stamp paper or confirmed by printing the stamp mark, must in future be made using the company's own stamps in accordance with the regulations. However, the tax authorities subsequently considered themselves empowered to establish an alternative form of stamp duty payment through administrative means. The introduction of stamped bills of exchange by decree of 7 March 1860, RGBI No.62, and the introduction of stamped promissory note sheets by law of 7 November 1862, RGBI No.85, were not relevant here, however, because these were statutory norms. However, the signature of announcements and calendars (decree of 15 July 1858, RGBI No.103) and the issue of stamped private promissory notes (decree of 23 November 1862, RGBI No.86) were permitted through simple regulations. According to these precedents, the introduction of the desired postal waybills could be considered a matter that could be dealt with administratively without violating the law.

The Ministry of Commerce then issued two regulations (under reference number 5770-750 and published in the Postal Ordinance Gazette No. 45): a decree of October 12, 1871, RGBI No. 125, and a regulation of October 14, 1871, RGBI No. 127. According to these, for mail items with cash on delivery, stamped waybills were introduced on light pink paper and combined with cash on delivery receipts, and for mail items *without* cash on delivery, waybill blanks were introduced printed on white paper and also bearing the "financial stamp" - this expression appears here for the first time. The blanks were either printed in German or (for postal districts with several common national languages) in a bilingual form and cost 6 kr. The use of red waybills was compulsory, the use of white waybills was optional. By the Ministerial Decree of 5 August 1872, Z.20593-2267, a "pale lilac" paper was later introduced instead of the light pink.

There is some information about the preparations for the first printing of the postal waybills. After receiving the aforementioned approval from the financial authorities, the Minister of Trade *Schäffle* had agreed with the Hungarian

The Ministry of Commerce agreed on December 1, 1871 as the date of commencement of application and then asked the Ministry of Finance to provide details of the production and delivery. In the relevant application, the Court and State Printing Office stressed that the special costs of the 5 kr: stamp to be affixed to the consignment notes would, according to a preliminary calculation, be approximately the same as the production of the same number of stamps, including the paper fee. However, the black printing of the stamp would take place under the same text printing of the consignment note, so that only one further separate printing manipulation would be necessary for the stamp, namely the application of the colored underprint. However, since the stamps have 50 or 100 images on one plate, but here only four blanks, this makes production more expensive.

At the same time, the printing works reported that, due to urgency, they had already had a drawing drawn up for the stamp and that they would submit the design to the ministries for approval. It was noted that the preparation costs would be very low, "since this is only a stone etching or a woodcut and then lead casts". The latter only refers to an intermediate stage and not to the printing plates, since the latter were type metal, because by the nature of things stereotype plates had to be used for this blanket printing - unless the printing works had identified lead and type metal here. In an accounting statement, the amount of 744 fl 44 kr is estimated for the production of 500,000 quarter-sheet consignment notes, to which an additional amount of 250 fl was added as a special expense for 125,000 impressions (4 each) of the colored underprint. This print cost 2 fl per thousand, while the black blank print cost 72 kr per thousand.



In the report of November 8, 1871, the printing company submitted a drawing for the stamp image to be produced for approval. This draft was returned to them on November 17 with tacit approval.

The "financial stamp" was placed in the middle just below the heading on the first postal waybills (those on white paper were called "waybills" and those on pink paper were called "waybills for cash on delivery shipments"). In general, this stamp was obviously intended to be similar in design to the existing stamps issued in 1870. It therefore had a circular stamp plate in black print, a raised rectangular natural self-print in green, in the upper part of which the round stamp mark was moved up, and below the latter the black year 1871. The green color was certainly not ultramarine green, because it would be resistant to acids.

However, since it is destroyed by strong alkalis, it is probably chromium oxide, which is popular in printing. The post offices had to obliterate this financial stamp with their official seal, so that part of the seal went over the stamp print, but the rest was visible on the white blank. The round stamp mark is divided into an upper and lower half (filled with rather primitive leaf ornaments) by a horizontal rectangular cartouche with the legend 5 kr, which is similar to the value information panel hanging below the stamp vignette of the contemporary bill of exchange. In the upper part, the double-headed eagle is also attached in a round space.

The files provide no information about the designer and engraver of this stamp.

To produce the printing plates, the set for four blanks was first assembled and then a plaster negative was taken from the entire mold, which was to be used to cast the stereotype plates. A lead mold of the black stamp mark (with the full height of the cone) had to be inserted into each of the four sets of blanks. The year 1871, which is located below this mark, was again set in letters. This explains the fact known to collectors that there are considerable differences in these annates in terms of the appearance of the letters, their distance from each other and the distance of the whole year from the stamp plate. The number of these variants is not small, because in addition to the German consignment notes, a new set of four blanks had to be produced for each of the bilingual editions in order to be able to produce the stereotype plates. In the bilingual consignment notes, the stamp mark is slightly offset in relation to the blank text, namely more upwards in the white blanks and slightly downwards in the red blanks. Therefore, different stereotype plates must have been used to apply the green natural print to the bilingual waybills of both types than for the German blanks. The paper of the postal waybills does not bear any watermarks.

After some time, without any announcement being made, the text of the white consignment notes was changed. In connection with this, the finance stamp was moved from the middle to the top right corner of the blank (as seen from the viewer). Since the black stamp now occupies the same typographical position in the monolingual and bilingual blanks, a common plate could be used for the natural printing. The year 1871 is now set in much smaller letters.

The attempt by the Court and State Printing Office to make the stamp on the first postal waybills as similar as the stamps issued in 1870 probably had an unintended effect. The Ministry of Finance's regulation of 30 September 1874, Z.25296, RGBI No.125,

had introduced the issue of postal stamps in 1875 without mentioning the postal waybills in any way. In Trieste, however, it seems that, precisely because of the similarity of the stamps, it was expected that the green stamps on postal waybills bearing the year 1871 would also be dropped along with the stamps issued in 1870. A report from the Trieste Finance Directorate shows that the local post office, when it had still not received any postal waybills with new stamps in February 1875, placed a large order in Vienna, which was also filled with postal waybills with the previous stamps. After reaching an agreement, the Trieste Postal Directorate then turned to the Ministry of Commerce and the local Finance Directorate turned to the Ministry of Finance with the aforementioned report (dated February 18, 1875). The Finance Directorate put forward a rather dubious view. The fact that the regulation of September 30, 1874, although it does not mention postal waybills at all, stipulates in the final paragraph that trade and commercial books, bills of exchange, invoices and the like can be used without objection even after January 31, 1875, if the older stamps on them were used by means of a proper official over-stamping that took place before January 31, 1875, makes it clear that just as the use of bill of exchange blanks, so too would the use of waybill blanks be inadmissible after January 31, if the over-stamping did not refer to an earlier date. This confused reasoning overlooked the fact that in the final paragraph of the regulation, with regard to bill of exchange blanks, it was not the stamp vignettes of the official blanks that were meant, but rather stamps that were attached to blanks of any kind. Incredibly, however, the Ministry of Finance adopted this interpretation of the last paragraph of the regulation and considered it necessary to publish a decree dated March 3, 1875, Z.5477-772, in the Regulation Gazette No. 4, according to which postal waybills with the stamped older form in the sense of the final sentence of the regulation dated September 30, 1874, 2.25296, V.BI No.29, could be used without objection until further notice. This decree is the only published standard of the financial administration which contains a remote hint that a distinction should be made *between an older and a newer* form of stamp on postal waybills.

Almost simultaneously with the above-mentioned Trieste report, the Ministry of Finance received a document from the Ministry of Commerce on 28 February 1875, according to which the Trieste Postal Directorate was to receive instructions on the continued use of the existing postal waybills and the Court and State Printing Office was to be instructed to use the *new* stamp of 5 kr, which came into effect with the Finance Ministry's decree of 30 September 1874, for future orders of waybills with and without cash on delivery. The approval of the Ministry of Finance for this order was based on the smooth

Verification of the act of inspection. The failure to make public announcement appears to have been an oversight.

The new stamp mark that continued to appear as a result of this act, which replaced the mark with the annate 1871 in the unchanged consignment note forms, resembles the 5 kr stamp of the 1875 issue in its appearance. The green underprint of octagonal rosettes (which were referred to as asterisks by the regulations) with the year 1875 cut out in the writing field and the number 5 also cut out in both upper corners is combined with a black print that contains the emperor's head with the oval frame, below this the cartouche with the value legend and finally the border on all four sides. This black print is, however, significantly different from that of the stamp marks. Above all, it is not made in copperplate printing, but in letterpress printing. This is easily recognizable by the relatively poor lineaments of the emperor's head. It is an inversion of the *Jacoby* engraving for the purpose of letterpress printing, and a *different* one than that which had been made for the planned 1869 issue. The oval frame and the rest of the drawing is an analogous inversion of *Benedict's* engraving. In the latter piece, too, a striking difference can be seen in that the square cartouche next to the recessed legend 5 kr is printed in *full* color, while the revenue stamps had ornaments next to the legend. Finally, an obvious difference between the stamp mark on the postal waybills and that on the revenue stamps is that the latter is made with *Pecher's* security ink, while the postal waybills, including the black print of the stamp mark, were printed with letterpress ink.

In the collection of various impressions of stamps from different years held by the Court and State Printing Office, there is also a black impression of the 5 kr value (without green underprint) made on white paper.

This print was made using letterpress printing. The value legend cartouche is printed in full color. Next to it is noted: "1875 improved by *Stanzl*". This is probably the person who adapted the stamp printing form for the letterpress printing required for the postal waybills or at least carried out the final retouching. Regarding the underprint of the postal waybills of the 1875 issue, it should be noted that it always has a lively light green color. It is printed with a different color than the mixture of indigo and zinc yellow used for the stamps and the more or less bluish tones of the Kreuzer stamps do not appear here. According to the above, this stamp was made towards the end of February 1875. The same is also evident from *Lauter's* applications of March 4, 1875, mentioned above (page 315), regarding new principles for a future stamp issue. In them, he requested that the field

for the value amount dark, that is to be kept without decorations, so that the value amount shines out clearly "as with the stamps on the postal waybills which are just being printed".

With regard to these postal stationery with financial stamps, unlike the actual postal stationery, it is doubtful to what extent one should speak of issues, new issues and changes in issues. They fall under the control of *two* departments: the Ministry of Commerce is responsible for the blanks, and the Ministry of Finance for the stamp mark. There are modifications to the blanks with an unchanged stamp mark and changes to the stamp mark with the same shape of the blank; but sometimes both changes occur at the same time. The relationship between the new form of the blank or stamp and the previous one is sometimes alternative, sometimes cumulative. The latter is probably the rule, since with postal stationery, in order not to lose the value of the remaining stocks, it was always possible to allow them to be used up if at all possible.

With regard to the *first* postal waybills in particular, it is difficult to speak of an issue at all, since the stamp with the year 1871 has not been *valorized* by any announcement of the financial administration .

B. THE RAILWAY WAYBILLS

In terms of fees, the waybills used in the railway freight business initially shared the fate of the postal waybills. Declared to be stamp-free as a rule by the Fees Act, they were subject to a stamp of 5 kr by the amendment of 13 December 1862. The reduction of the fee to 1 kr for a shipping distance of no more than five miles stipulated in the Act of 29 February 1864 did, however, apply to railway waybills - unlike postal waybills.

A second differentiation with regard to the railway waybills arose from whether the shipment was to be transported as ordinary freight or as express freight. In the latter case, the use of red paper was prescribed by the railway operating regulations. These regulations also stipulated the mandatory wording of the waybills and also required that these waybills be *pre-printed* . Waybills written in their entirety were therefore not permitted. The stamp duty on the waybills had to be paid using the correct use of stamps.

The reason why these waybills came into the financial administration's attention in a special way was the replacement of the Railway Operating Regulations of 1 July 1872, RGBI No.90, by the Operating Regulations of 10 July 1874, RGBI No.75. Both regulations had published samples of white and red waybills in their appendices. The differences

The differences between the forms were that the older ones contained the form for customs weight and (in addition to the Austrian currency) for thalers and silver groschen, while the newer ones contained the form for kilograms and marks. Furthermore, the white printed forms in the older regulations were headed "waybill", in the later "freight goods", while the header on the red forms was "express goods" in both cases. Finally, the newer form has the instruction "administration stamp" in the top left corner. This stamp was intended to certify that a waybill was in the correct form. The railway companies had waybills for sale at all freight stations, which they had produced at their own expense in private printing works. However, the railways were obliged to accept waybills from other sources as long as they complied with the regulations. Of course, it was not possible to rely on the fact that the consignment note provided had to be collated with the pre-printed form every time a consignment was sent, and it was therefore ordered that every consignment note had to be stamped with the stamp of a railway administration from the outset. When the consignment was received, it was then only necessary to confirm the presence of this stamp. In order to have this stamp "previously" printed, certifying the conformity, the large forwarding companies or other traders and businessmen who had their own consignment notes printed, or printing companies who issued such consignment notes on speculation, had to present their printed matter to a railway company and pay the standard fee for the stamping. In places where several railways had their stations, the consignment notes stamped by one company were also to be accepted by the others for the receipt of goods. During the second half of 1874, according to the new operating regulations, both the old and the new consignment notes could be used. From 1875 onwards, however, the new forms were to be the only ones permitted.

The impetus for the introduction of the waybill blank with stamped stamps came from the Court and State Printing Office. In May 1874, the Court and State Printing Office suggested to the Ministry of Finance that, in order to prevent malpractice with the stamps on this document, which was used on a large scale, the railway administrations should in future obtain the waybills from the State Printing Office to cover their wear and tear. This would at the same time provide the latter with a corresponding increase in employment.

The Austrian railways, which at that time had a central body in the Directorate Conference with alternating chairmanship, were in full agreement with the suggestion of the Court and State Printing Office. They even demanded that these consignment notes should be declared obligatory so that they themselves would be exempted from the obligation to check consignment notes presented and to stamp them with a control stamp, after which the previous imitations of this stamp could no longer be used. The Ministry of Trade also

declared that this measure was in the interest of transport. However, due to the risk of private printing works being accused of criminal prosecution, the compulsory use of these forms could not be ordered. However, the waybills produced by the State Printing Office would not only be handed over to the railway administrations, but could also be sold by small-scale retailers and tobacconists (through "private use", as it was called in contrast to "railway use") in the same way as postal waybills. However, since the operating regulations required the waybills to be stamped with a railway's control stamp, it would be necessary for the printing works to come to an agreement with one of the larger railway administrations to provide the latter with the railway stamp. As soon as the Ministry of Commerce found out which control stamp was to be used, it would take steps to ensure that this stamp was recognized by *all* Austrian railway administrations, in *accordance* with the relevant provisions of the operating regulations. As mentioned above, the operating regulations had stipulated such mutual recognition only in the case where several railway administrations had freight receiving stations in one and the same place. While the Ministry of Commerce, in view of the new situation, went beyond the provisions of the operating regulations, which had become too narrow, in this one direction, it stuck to the wording of the operating regulations with regard to the imprinting of a control stamp, although this provision no longer made sense for officially produced consignment notes. Moreover, the way the Ministry of Commerce envisaged it, namely that the printing works would stamp the consignment notes piece by piece using a borrowed seal, as a railway administration had previously done, was not very practical. On March 22, 1875, the Ministry of Finance authorized the printing works to obtain such a seal and then immediately begin printing.

For the time being, the consignment notes would only be issued in German. On March 23, 1875, the printing works announced that they had received information from the Ministry of Commerce that the control stamp was only required for those consignment notes that were to be worn out by the public and could be used for this or any other railway; on the other hand, consignment notes that were issued for use on the company's own route were not subject to this stamp. The company could begin printing the latter type of consignment notes immediately.

The Imperial and Royal Privileged State Railway Company was prepared to provide its stamping service for the stamping of the other consignment notes. However, it pointed out that the other large railway administrations would not view a foreign railway stamp without great dislike. The State Printing Office therefore suggested alternating the control stamp and added that this would be possible with large print runs without any significant expense. It was therefore evident that it was already thinking of inserting these control stamps into the printing plates rather than manually stamping them.

The printing works immediately began printing the railway waybills with a financial stamp but without a control stamp, and they informed the railway administrations by circular that the four types of waybills issued could be obtained from them from March 26, 1875. On May 22, 1875, they then reported that 9,967 fl. 75 kr had already been received as proceeds for the waybills and express waybills with the 5 kr and 1 kr stamps issued to various railway administrations. The printing works had been authorized by the Ministry of Finance on May 3, 1875 to sell these directly to the railways for the first orders from the railway administrations. From June 1, 1875, however, the Central Stamp Office was to arrange this sale to the railways. Likewise, after negotiations on the control stamp had been concluded, this office would have to arrange for the distribution of postage and stamp stamps to those who used the blanks (with the control stamp).

The negotiations regarding the use of these forms dragged on for some time because it emerged that a third modality was also being considered, namely the ordering of such consignment notes by large forwarding companies or other transport companies, which also wanted to have their company name printed on their required forms; furthermore, because agreement had to be reached with the Ministry of Commerce and the Directors' Conference on the draft regulation to be issued; and finally, because changes to the forms were imminent in accordance with the operating regulations for the railways of the Association of German Railway Administrations.

This was a relief when the State Printing Office was informed by the Executive Committee of the Railway Administrations that no importance was any longer attached to the distinction between consignment notes which bore a control stamp and those which did not - which was natural, since previously stamping was seen as a burdensome obligation which had not been extended any further than seemed necessary, whereas now the control stamp printed by the printing office could easily be present even where it had not previously been required. The printing office welcomed this as an advantage for its work and for manipulating wear and tear. There is a certain lack of clarity in the regulations and the files as to which consignment notes should remain without a control stamp, and it later emerged that this was not actually the case, since the railways had no need of *stamped* consignment notes *of their own* and sold all the consignment notes they received to the parties. The only difference was whether someone bought a consignment note for any future use or whether he bought it for immediate use when a shipment was already in the process of being sent, which was less common. In view of this, the first consignment notes issued by the State Printing Office (without a control stamp) were actually in accordance with the regulations.

poorly equipped. So it also seemed advantageous in this respect that in future all consignment notes should be provided with the control stamp. However, the abandonment of all distinctions was not in the spirit of the Finance Ministry's Accounts Department II, which had to examine the matter before the regulation was published. The Department proposed that the consignment notes which were given to the railways for wear and tear and those which were given to stamp wearers should be distinguished by the position of the stamp mark: in the first case it should be in the left-hand corner, in the second case in the right-hand corner of the blank (from the viewer's perspective). This proposal was accepted, although it had no real reason or purpose, and although it paralyzed the advantage which resulted from the consistent affixing of the control stamp. On December 29, 1876, Z.33141, the introductory regulation of the Ministry of Finance (RGI No.5, V.BI No.2 ex 1877) finally appeared concerning the railway waybills with printed stamp marks and with the control stamp, which came into use on April 1, 1877.

With regard to this control stamp, a suggestion from the Ministry of Trade helped to overcome the difficulties caused by the susceptibilities of the individual railways. According to this, a double-headed eagle with the inscription "For the Austrian" was now used as the "company stamp for the railway administrations".

Railway administrations, from the Imperial and Royal Court and State Printing Office", to the left of the heading "Frachtgut" or "Eilgut". With regard to the stamp marks for 1 kr and 5 kr, the printing office had already created a precedent with the waybills printed between March 22, 1875 and the end of March 1877 and delivered to the railways without a control stamp. For the black printing of the 5 kr stamp, it had chosen the same *Stanzl* printing form that had been prepared very shortly before (towards the end of February 1875) for the postal waybills. Now, however, the need arose to create a printing form for the 1 kr stamp. For this, too, the inversion of *Jacoby's* engraving of the emperor's head and the framing engraved by *Benedict* were used.

Only in the black cartouche below the oval frame the legend 1 kr was omitted.

On the waybills for freight, the underprint of the stamps was green, as on the postal waybills. However, the green color would not have stood out well on the red paper of the express waybills. The underprint was therefore given a violet color here according to the decree of December 29, 1876. However, the color contrast makes this underprint appear blue.

Three things should be noted here: *that* the stamp marks on the blanks without a control stamp were in the top left corner of the paper and that this position was then retained for the consignment notes intended for rail use. *Furthermore*, on July 6, 1877, the State Printing Office was authorized to subsequently stamp the remaining stocks of the aforementioned consignment notes with the control stamp in order to make them "suitable for use"

to make", so that one could also find waybills which do not have the control stamp in exactly the same place as the waybills in which this stamp was already included in the printing block. *Finally*, the decree of December 29, 1876 contains the inappropriate expression: "The railway waybills ... have the stamp *mark* of 1 kr and 5 kr affixed to a green (violet) background." Another earlier place with *this* use of the word mark was the Trade Ministerial Decree of October 12, 1871, Z.5770-750, RGBI No.125, which introduced the white postal waybills.

39 KAPITEL

THE PREPARATIONS FOR THE 1879 EMISSION

Starting with the ministerial order of February 22, 1876, which fixed the date of the next issue as January 1, 1877 and the next issue as January 1, 1879, and for the first issue only the change in the color printing was envisaged, but for the second issue the choice of completely new designs, the work for both issues ran parallel to one another. When the printer was commissioned to start work on the latter issue, the only restriction imposed on him was that the expenditure of approximately 8,000 fl. could only be incurred in the years 1877 and 1878 (each half of it).

The State Printing Office initially interpreted the Ministry's announcement that, based on experience, it would be desirable to consider "several different sizes for both the guilder and kreuzer categories for the 1879 issue, which would also require the production of new drawings and copper plates" to mean that in general the shape of the existing long stamps and the image of the emperor's head should be retained, but that these stamps should be produced in several sizes. The printing office therefore designed drawings for such new stamps, namely in four different sizes for the kreuzer values and in four sizes for the guilder values, in order to illustrate the size differences and also roughly the appearance of the intended stamps. The drawings were produced on pink paper for the kreuzer categories and on bluish paper for the guilder categories and essentially consist only of the usual border and the head portrait in an oval frame. The heads were cut out of original stamps and glued into the drawings. The top border was to contain the year 1879 in the middle. For the Kreuzer values, the value legend should be in words under the head image

be placed in an arched shape (similar to the 1866 issue) and the value figures should also be placed in both upper corners. For the guilder values, the cartouche attached to the oval frame at the bottom had to contain the value figures, whereas the value legend in words was to be placed in an arch above the emperor's image. The stamps of this graphic design are still raised rectangles, but no longer as slender as those of the 1875 and 1877 issues. This project was never printed. It was submitted on May 29, 1876. The printer's main question was whether the emperor's image should be retained for the 1879 issue. If so, in order not to impair the purity and clarity of the print, it had to be avoided that it should be reduced in size.

This may be the subject of a reduced-size photograph of *Jacoby's* engraving of the emperor's head, which is glued onto a collection sheet (in the possession of the Court and State Printing Office) of mostly unused stamps.

The drawings included in the printer's report were intended to illustrate what stamps of different sizes (with the emperor's image in the same size) would look like. Since, in addition to the different formats, different designs for the underprint could be adopted and strikingly different colors could be chosen for these, it was advisable to retain the emperor's image, as the portrait resemblance offered the most effective protection against forgeries. In the event that the emperor's image was no longer to be used and a radical change in the copper print image was desired, the printer first asked for the different formats for the new stamps to be determined. In this case, it proposed making an appropriate selection from the stamp sizes issued in 1870, because these stamps had an appropriate length and width ratio and it would not seem reasonable to issue even smaller or even larger stamps. The printer submitted an alternative proposal with regard to the sizes, designs and colors.

According to one proposal, the sixteen Kreuzer values were to be divided into four categories of four values each. Each category was to have a particular size and a particular design. The underprint was to be red for the first two categories and green for the other two. The 12 Gulden values were to be divided into four categories of three values each, each with a different size and design. The color of the underprint was to be gray for one category, violet for the second, blue for the third and brown for the fourth. This proposal therefore included eight sizes, eight designs and six colors, of which the Gulden values did not appear in the Kreuzer values. In the event that the latter was not important, another proposal was made. According to the proposal, there were to be seven designs, one for each of four values. These four values were to be distinguished from one another by the underprint colors, which were in

of the period: red, green, blue, violet (only for the highest guilder values: red, green, grey, brown). However, there should only be five sizes, with two drawings of each kreuzer value being of the same size.

The printer also requested that the legend: KK Austrian stamp be retained, that the year of issue be made visible in the stamp image itself, and finally that the value be expressed in both numbers and words, both in black print. Blank white numbers should only be used when stating the year of issue.

The Ministry made its decision on June 12, 1876. Using a sheet on which the printer had drawn up the 14 different stamp sizes for the 1870 issue, seven formats were chosen for the new stamps. Four denominations were always to have the same format. If we go back to the 1854 issue, the formats of the drawings appear to have been chosen for the following convention coin dies: 3 kr, 10 kr, 45 kr, 2 fl, 3 fl, 10 fl, and 20 fl.

As regards the last format, the printer was given the option of reducing its width somewhat. A special design was to be provided for each of the seven sizes. The newspaper and calendar stamps were to retain the same design as before, except that the year 1879 was to be added to the latter. The suggestions regarding the legends, the denominations and the year of issue were approved. The decision on the underprint and the colors was to be made at the time when the stamp designs were chosen.

The Court and State Printing Office immediately took the necessary steps to obtain suitable drawings. Court Counsellor *Beck* contacted the management of the Imperial and Royal Museum of Art and Industry and was advised to entrust Professor *Hermann Herdtle* in Stuttgart, who was already being considered for a position at the Museum's School of Applied Arts, with the delivery of drawings. *Herdtle* was asked about this by letter on June 18, 1876. He was informed of the seven selected sizes.

As a precaution, the year 1878 was chosen as the date of issue. It involved the production of figural and ornamental designs in seven different types and sizes, namely four designs for the Kreuzer amounts and three designs for the stamps from one guilder upwards. At the same time, the above-mentioned stamp designs (with the emperor's head glued in) designed in the state printing office were sent to him for inspection and it was announced that the stamps bore the legend in small print: K. k.

Austrian stamps would have to be inscribed; the value would be included in letters and in large letters in the black print; as would the year 1878. The stamps would be printed in copperplate and would have a similar underprint as the Hungarian and older Austrian stamps. The plates for this underprint (the *background* here

The stamps would be printed in the State Printing Office. The image to be designed for black printing would not necessarily have to be circular as before; in three or four of the designs it could also be rectangular. It would only have to be taken into account that the lower third of the underprint or background would have to remain free and would not have to have a black drawing, because this lower part of the stamps was intended to be overwritten. The value amounts should be expressed in figures that are as large and eye-catching as possible.

In addition to the two sheets of stamp drawings mentioned above, which had been made in the institute, the following were also enclosed as samples with the letter, according to the file: 2 stamps from the 1875 issue (2 kr and 2 fl); 2 stamps from the 1870 issue (1 kr and 1 fl); 14 stamps from the 1858 and 1866 issues ($\frac{1}{2}$ kr, 2 kr, 10 kr, 25 kr, 75 kr, 1 fl, 2 fl, 2 fl, 50 kr, 3 fl, 5 fl, 7 fl, 10 fl, 15 fl, 20 fl); and finally 17 Hungarian stamps, which were described as drafts and were therefore probably test prints on yellow paper; however, this is unlikely to have been the case for four of them, because the citation for them reads: "1 sheet of photograph with three stamp images 7 fl, 6 fl and 5 fl; 1 piece without denomination".

On June 25, 1876, *Herdtle* declared himself willing to produce the designs and promised to deliver them by mid-September. He also asked whether exactly one third of the bottom of the stamp had to be left blank and whether the emperor's image had to remain. The answer, which was apparently that the drawings were entirely free and could take up more than two thirds of the stamp's height, has not been preserved. Nor can it be determined when *Herdtle* sent in the first part of the drawings. This must have happened around August 20, 1876. In a letter dated September 8, *Herdtle* sent the rest of the drawings, claiming that he had sent the first part two weeks earlier. *Herdtle's seven drawings*, which must have been made in the prescribed sizes, have not survived in their original form.

Soon after the order was placed with *Herdtle*, the Court and State Printing Office (on July 1, 1876) turned to *Friedrich Sturm*, professor at the School of Applied Arts at the Imperial and Royal Austrian Museum of Art and Industry in Vienna, to obtain drawings from him as well. The programmatic messages sent to him correspond to what had been written to *Herdtle*; the only difference was that the year 1879 was given to the former as the intended year of issue.

As a sample, he was given a complete set of the 1870 issue including the calendar stamp, 9 Hungarian Kreuzer stamps and two stamps from the 1875 issue. These were probably all sample impressions.

Sturm presented his brush drawings on November 6, 1876, adding that they were designed at four times the magnification and therefore had to be reduced to the required size by photographing.

Of his seven drawings, six have survived, which are for the values of 1 kr, 10 kr, 60 kr, 1 fl, 10 fl and 50 fl, so that the third drawing (intended for the values of 12 kr, 15 kr, 25 kr and 36 kr) has been lost. These designs are more painterly than graphic, with shadows and halftones, which must have been an obstacle to their use as stamps. *Sturm* characteristically used the spelling "Stempl" for the legends. He enclosed a further 16 sketches with his drawings, simply noting that they were not drawn by him and that he feared that they might be the wrong size. These sketches were hastily drawn pen and ink drawings, with a rough background drawn in green pencil. Some contain remarkable motifs. Some are signed *LE Petrovits*. They were by the Viennese painter and illustrator *Ladislaus Eugen Petrovits*. When *Herdtle* sent in the rest of his drawings on September 8, 1876, *Lauter* requested that the Viennese history painter *Ernst Peßler* should also be invited to provide drafts. *Peßler* announced his willingness to comply with the invitation of September 12, 1876 just four days later, noting that making the sketches in larger dimensions would make the draftsman's work easier and make assessment easier. It is not known when he sent in drawings. *Herdtle* received a fee of 75 fl; the fees of the other draftsmen are not clear from the files.

The Court and State Printing Office now produced lithographic reproductions of *Herdtle's* and *Peßler's* drawings in the prescribed sizes, for which purpose *Peßler's* designs first had to be reduced in size photographically.

On January 18, 1877, *Wöhlert* and *Lauter* presented the management of the State Institute with five sheets of such lithographically executed stamp drawings. Sheet 1 contained *Herdtle's seven drawings*. They were for the values of ½ kr, 10 kr, 25 kr, 75 kr, 2½ fl, 6 fl and 20 fl. Sheet 2 contained *Peßler's seven drawings*; in the same way as *Herdtle's*, without an underprint; both sheets have only a tone print consisting of brown parallel lines. Only a part of sheet 2 with five of these lithographic images has survived. Four of them correspond in terms of drawing and value to four of the five original sketches that have survived (1 kr, 7 kr, 50 kr and 7 fl). The corresponding sketch is missing for the fifth lithograph (10 fl). The fifth existing original sketch is worth 1 fl. From the seventh drawing, which was intended for the Kreuzer values of 12, 15, 25 and 36 kr (the third drawing in ascending order), both the drawing and the lithograph are missing. Its appearance is not unknown, however, because it was subsequently chosen for the calendar stamp and remained in use until this tax was abolished. It is noteworthy that in the letter to *Peßler*, although it was dated later than that to *Sturm*, 1878 was again given as the year of issue, and that he, according to the received disposition

In keeping with this, he had included the year 1878 in all of his drawings, like *Herdtle*. The lithographers of the state institute, who were better informed on this point, used the year 1879 in all lithographic reproductions. In another sheet 3, the stamp drawings were provided with a "patterned underprint in 7 designs", in a sheet 4 with an "underprint of sheets in natural self-printing" and finally in a sheet 5 with a "line underprint in four variations". These three sheets have not survived. Regarding sheet 5, there is a note in the files according to which it contained lithographs based on *Peßler's* designs. There are also indications that sheet 3 contained lithographs partly based on *Herdtle's and partly on Peßler's* drawings. These three sheets were intended to illustrate the ideas of the court and state printing office regarding a suitable underprint.

Lauter commented on this as follows: "Up to now, there has been no imitation of stamps using plate printing for those with natural self-printing; two stamps with patterned underprints, each worth 20 fl, were made in Graz using hand drawings. In contrast, many thousands of stamps that are repeatedly used are objected to every year. The simple line underprint (sheet no. 5) is intended to make it almost impossible to reuse a stamp that has been used once. A word written on grid lines cannot be erased without this being immediately noticeable, and any addition to the erased or etched fine lines would also be immediately noticeable. The imitation (production of plates) of the line underprint (page 5) would, however, be less difficult than the reproduction of the extremely difficult to imitate natural self-print (page 4) or the patterned design (page 3). Nevertheless, it would be advisable to consider the *Peßler* stamp samples with line underprint shown on page 5, because this would make the reuse of a stamp that has already been used much more difficult than with the stamps with natural self-print or designs (pages 3, 4). The black printing of these stamps will in any case be carried out from artistically engraved copper printing plates, which gives the stamps a finer appearance than the sample templates that are only hastily executed by lithography (pages 1-5). Black printing alone should therefore provide sufficient protection against imitation by means of plate printing."

The printing house presented the aforementioned lithographs with the original drawings by *Sturm* and *Petrovits* to the Ministry of Finance on January 22, 1877. From the report, which essentially followed *Lauter's* statement, some things can be seen more clearly (for example, that the underprint was made with "tree leaves in 7 variations"), whereas the reference to *Krischay's* forgery in Graz is even less precise. *Lauter*

speaks of the contrast between stamps with natural printing and patterned underprinting in relation to the forgeries; when he says with regard to the former that imitation of the same *by means of plate printing* has never occurred, and then states with regard to the latter that two examples were made in Graz by means of hand drawing, the latter obviously still only refers to underprinting. The report to the ministry, on the other hand, states: "There has not been a case of imitation of stamps by means of plate printing to date and the state printing office is only aware of one isolated forgery in which stamps were imitated by means of hand drawing." The report would be correct if one does not want to count lithography as plate printing and considers the preparatory drawing of the lithographer as a "hand drawing". Such syllable-stamping was probably just an attempt to conceal the unpleasant incident. Plate printing in forgeries was a feared nightmare, because it would have enabled mass forgeries.

With regard to *Sturm*'s drawings, it was reported that their photographic reduction to the required size and lithographic reproduction had not been carried out because these drafts arrived too late and the submission to the Ministry of Finance could not be postponed any longer, and because they appeared to be far surpassed by the drawings of *Herdtle* and *Peßler* and therefore could not be considered at least for the next upcoming issue.

This motivation and the concealment of *Lauter's* touch that *Sturm's* designs had been declared unsuitable for use as stamps by experts indicate that special consideration was given to *Sturm*.

The printing house also emphasized that the lithographs had only been executed hastily and that, particularly in the case of the figurative drawings, it was left to the artistic sense and ability of the engraver to make any necessary improvements and embellishments to the drawings when engraving the plates, which is why the management will take care to entrust only the most renowned artists with this work.

Regarding the choice of designs, the printing house, according to its report, was guided in its proposal by the principle that the Kreuzer values should have only ornamental designs, while the Gulden values should have "figural" designs, which had already been observed to a certain extent in 1854. The printing house hoped that this would lead to greater uniformity in all Kreuzer values and also in all Gulden values, so that this would result in a further distinguishing feature between the two categories. The report also mentioned the fact that only three of the proposed designs contained the double eagle. The printing house commented on this that the eagle could be inserted into the four remaining designs, but that it could not be eliminated from the three mentioned designs due to their layout. In order to make its proposal regarding the design to be chosen,

In order to illustrate the designs, the Court and State Printing Office had the lithographs of the sketches it recommended compiled on one sheet. It preferred *Peßler*, from whom five drawings were submitted, to *Herdtle*, from whom only two designs appeared suitable. To avoid repetition, it should be remembered here that it had already been agreed that the stamps would be given seven sizes and seven different designs, namely four for the Kreuzer values (size and design I for ½, 1, 2 and 3 kr; II for 4, 5, 7 and 10 kr; III for 12, 15, 25 and 36 kr; IV for 50, 60, 75 and 90 kr), and three for the Gulden values (V for 1, 2, 2½ and 3 fl; VI for 4, 5, 6 and 7 fl; VII for 10, 12, 15 fl and 20 fl). *Peßler's* drawings were proposed for size categories I, II, V, VI and VII and *Herdtle's* for size categories III and IV. It would be pointless to describe all of these drawings in more detail here. This choice was subsequently maintained only for one category, namely category III (12, 15, 25 and 36 kr), for which an ornamental drawing *by Herdtle* was considered, which he had originally proposed for the 2½ fl. value.

It consisted of an elongated, upright, concavely bevelled central shield, narrower in the lower part, a so-called horse forehead shield (*chanfrein*), which was surrounded by ornamentation in ever-widening circles. This is a remarkable ornament because of its asymmetry, and goes back to prehistoric customs, when buildings were still decorated with real horse and cow head skeletons. Four corner ornaments formed the transition to the square shape of the entire design.

With regard to the underprint, the printers strongly advocated the gridded line underprint, with the lines being horizontal for the Kreuzer denominations and vertical for the Gulden denominations. The report also shows that these gridded lines on the sheet presented ("in four variations") were already printed with the colors that the printers had in mind for the new stamps. They were identical in nature to the (*six*) colors already used for the 1877 issue; only they had a paler tone and were made from finer dyes. The printers renewed their proposal that the sequence red, green, blue and violet should be observed in each category, while in category VII the sequence should consist of red, green, gray and brown, which together resulted in six different colors. The Ministry of Finance's decree of February 7, 1877, ignored the question of colors and, in order to speed up the lengthy work of engraving and plate production, limited itself to the choice of drawings. *Nejedly* evidently had a different taste than the printing press, because he kept (apart from the aforementioned *Chanfrein* drawing *by Herdtle* for category III) only a single sketch *by Peßler* (for category VII), which the printing press had already proposed for this category.

This drawing was actually executed, but was later assigned to a different category (VI). It shows Austria sitting on a throne with a sword and shield in a circle cut off at the bottom.

The Ministry made no choice for two other categories (V and VI), but wanted new lithographic templates to choose from, for which three designs by *Sturm* that had been announced at the same time were to be used. The Finance Ministry chose new drawings for categories I, II and IV, all three by *Herdtle*. The last two of these were actually executed for the 1879 issue. For category II, a design was planned in which a circular central ornament was surrounded by eight leaf festoons and the whole was framed in a square by dark borders. The design for category IV has an analogous central piece, above it two griffins next to a head and below it two fruit garlands; to the right and left two wide strips with black ornaments. This creates a horizontal rectangle that is enclosed by a border of equal width.

To ensure this, the Ministry proposed that it would endeavour to ensure that even obliteration that was not quite sharp should be clearly visible on the stamps. Therefore, all areas that were printed in full color on the lithographs were to be replaced by hatching or dots on the copperplate engravings. The year was to be removed from the copperplate image everywhere and only printed in the background. As this meant that a diagonal crossbar to the right and left of the seated Austria figure, on which the numbers 18 and 79 were printed, lost its previous meaning, it was to be filled in with appropriate ornaments. Regarding the imperial and royal eagle, it was noted that its inclusion in all marks was desired, but not made a condition. In addition to the seven designs mentioned above, the Ministry of Finance chose an eighth one and ordered that it be made for a new 25 fl stamp category to be put into circulation. Here too, a sketch drawn up by *Herdtle* (for 20 fl) was chosen.

With regard to the underprint, the Ministry of Finance decided to retain the natural print of a tree leaf skeleton. The choice of the linear underprint requested was reserved for a future issue and was tied to the condition that it would be possible to make all the lines completely uniform and to regulate the meeting of the background and the copper print so precisely that the same points of the latter would always be hit by the same lines of the underprint, which would then be a sign of authenticity.

Within a week of receiving the instructions from the Ministry of Finance, the printers produced lithographic reproductions of all eight selected drawings in the prescribed size, both on

individual sheets (sheets I to VIII corresponding to the sizes and drawings I to VIII listed above) as well as all eight impressions combined on a single sheet. To illustrate the complete appearance of the stamp images, these eight reproductions were provided with a lilac-colored underprint.

It is formed by a leaf vein (different for each design) in which the year 1879 is printed below the black print, which takes up a little more than two thirds of the stamp, in recessed italic letters (that is, slanted letters) with shadow lines on the right. In two stamp images, the natural print covers the entire surface; in two, the middle field is filled with horizontal hatching in the underprint color; in four, finally, the middle part remains white.

Of the three *Sturm* designs that the ministry had suggested with the reservation of a later selection, two were chosen, one of which, which *Sturm* had planned for the highest Kreuzer values, represented an archway within which (under a head with stylized wings) a cartouche contained a double-headed eagle made of light hatching and above it the value of 2½ fl printed in full color. The second design consisted of a panel with rolled-up branches, held by two floating putti; on top of this was also a hatched double-headed eagle and on it in black color 7 fl (originally provided by *Sturm* with the legend 10 fl). Neither design stood out to their advantage from the other six drawings. These six reproductions show the difference compared to the first lithographs that the year 1879 has been omitted from the black print.

In accordance with the ministry's wishes, the double-headed eagle now appears in all designs. In *Herdle's* 20 fl design (two female figures reaching out to each other, now intended for the new 25 fl stamp), such an eagle - albeit somewhat distorted - was originally planned. In the other five designs, it was added. In the ½ kr, 10 kr and 75 kr values, this was done in the circular background of the value digits, designed in the style of the Japanese chrysanthemum rosette, where the eagle formed by light hatching was also added. In the 12 kr value with the horse forehead design, which was originally planned for 2½ fl and therefore now had to be reduced in size, a small black double-headed eagle was added instead of the panel with the year. Finally, in the enthroned Austria *Peßler* chosen for the 10 fl value, a black broad double-headed eagle was placed in each of the two upper corners. When these lithographs were presented on February 18, 1877, the printer noted that the point technique would be chosen for the figurative engraving and that the drawings would have a paler appearance than the lithographs due to the delicate engraving.

In order to speed up the start of the engraving, the ministry issued its decision on February 24, 1877. The print was approved, but it was ordered that the italics be replaced by standing numbers.

In the aforementioned 12 kr drawing, where the leaf veins ran across the central field, and in the drawings for 10 fl and 25 fl, where the central fields were filled in by hatching in the underprint color, these fields were to be left white. The Ministry wanted the engraving not only to be perfect from an artistic point of view, but also to be executed in the interest of pleasure in such a way that imitation would be as difficult as possible. With regard to *Sturm's* design with the archway, the imperfection of which was obvious, the decree cautiously expressed itself in the sense that it was left to the artist to make the necessary changes and improvements during the engraving. At the same time, the Ministry made a ninth choice, namely for the calendar stamp, which had not been provided for until then. For this purpose, design No. 6, designed by *Herdtle* for the 6 fl denomination, which had been proposed by the printing house in its first application for the highest Kreuzer denominations, was chosen and its reduction to the previous size of the calendar stamps was ordered. The most important part of this design was a quatrefoil with triangles, that is, a quatrefoil with the tips of a square emerging from the notches, similar to the way in which the tips of the sepals emerge in the heraldic representation of the rose. With this choice, six of the seven drawings sent in by *Herdtle* were accepted for execution.

The aforementioned orders of the Ministry of Finance formed the starting point for the work of the Court and State Printing Office, which now began with great vigour. It related to three main items: the copper plate apparatus, the vacuum printing and the stamped paper.

A THE COPPER PLATE APPARATUS

After the drawings for the copperplate printing had been chosen, the most important thing now was to arrange for the copperplate engraving. Since the ministry had ordered that the first stock of stamps had to be ready by the end of September 1878, and the electroplating work was something that could not be accelerated significantly, it seemed necessary for the printing works to be in possession of the original engravings within three months, i.e. by the beginning of June 1877. There were differing opinions in the court and state printing works regarding the copperplate engraver who should be entrusted with this work. *Wöhlert* and *Lauter* spoke in favour of the copperplate engraver *Johann Sonnenleitner*, who had repeatedly proven his qualifications for this type of work.

and is particularly reliable with regard to compliance with delivery deadlines.

Hofrat *Beck*, on the other hand, was in favor of *Louis Jacoby*, whose successful engraving of the emperor's head was still in actual use. *Beck* consulted with *Jacoby* on March 4, 1877 and sent him the order the following day, specifying the delivery date ("three months in advance"). The order was accompanied by instructions written by *Wöhlert* entitled "Notanda for the engraver," which initially only mentioned eight engravings, since the lithographic sample size for the calendar stamp could not be presented until the second half of March. *Wöhlert's* instructions were: "In order that the engraving of all eight stamp sizes could be completed within three months, the engraver should be left to decide which assistants he intends to acquire for this purpose, since it is desirable that everyone works under his direct supervision and according to his instructions, and he should also take responsibility for the flawless execution and artistic engraving of all stamps, keeping in mind the current local printing style (mass production). Furthermore, so that the overall impression and appearance of the stamps would not be endangered by the engraving of the font and values, which engraver *Benedict* should take care of as the most suitable in Vienna, *Benedict* should also work under the supervision of (Mr. von *Jacoby*) The engraver must receive both the original sketches and the lithographic reductions, with the express remark that both sketches and reductions are only cursory drawings that are only to be given an artistic appearance through the engraving. The shape and size of the stamps must be exactly the same as the lithographic reductions on sheets I to VIII. Professor von *Jacoby* should consult *Professor Herdtle* regarding the detailed execution of the stamps on sheets I, II, III, IV and VIII, Professor Sturm regarding the stamps on sheets V and VI, and the painter *Peßler* regarding the stamp on sheet VII. The figures on stamps V, VI, VII and VIII are to be executed in dot style. The eagles on sheets I, II, IV, V and VI must be engraved completely matt, precisely in fine lines or dots. The *value amounts* are not to be engraved in the original plates in either numbers or letters; this is only done in the galvanic copies of the original engravings. The value in figures is to be the same size on all Kreuzer stamps, as on Sheet II, and the same size on all Gulden stamps, as on Sheet VII, in beautiful, very clear figures. The value in letters is to be engraved as clearly as possible on all stamps, as in the lithographic reductions, in block letters. Particular care must be taken with the stamps on Sheets V and VI, because the sketches and reductions of these are the most hastily handled. All stamps should be engraved very lightly and delicately, and only the value in strong figures and letters should stand out. The stamps should be executed in the following order:

done: first stamp II is to be engraved, then III, IV, I, V, VI, VII, VIII. Immediately after completion, each stamp is to be delivered individually without a value amount." This instruction spoke of engraving the writing and value amounts and then of engraving the value amounts in numbers and letters. This made things a little obscure, since the legend "K. k. österr. Stempelmarke" could very well have been engraved on the original plates.

To avoid any misunderstanding, *Jacoby* expressly stated that he would not put up any writing at all.

In March 1877, the lithography for the calendar stamp was completed and submitted to the ministry on March 16. After approval on March 22, this drawing was sent to *Jacoby* on March 25, 1877 .

He was reminded of the urgency of the engravings on April 11th, whereupon he delivered the plates of categories I, II, III and IV, together with drawings and reductions, on April 16th, without having adhered to the order prescribed. A print was made of each of these plates in order to be able to assess the success of the engraving. The impression was not favorable, so that the Court and State Printing Office felt compelled to return the plates to *Jacoby* on April 18th , pointing out their defects. *Jacoby* objected that the work could not yet be considered finished and that the completely precise artistic execution could only be started after the legends had been engraved, since "the outstanding visibility of the legends required appropriate treatment of the ornamentation and the actual stamp image." *Jacoby* therefore handed over one of these engravings (No. 11) to the printing office on April 20th, another four on April 24th and three more on May 2nd. These also included the calendar stamp. However, an engraving for drawing V (1 fl to 3 fl) was still missing. The Ministry of Finance had in the meantime abandoned the execution of draft V (with the archway, after *Sturm*) . The printers then asked *Ernst Peßler* on 18 April 1877 for one or two further drawings, and two drafts were sent to him as size samples with the comment that neither had received approval from the Ministry of Finance.

From the fact that the designs sent to him were described as size samples for the V category, it can be concluded that these were lithographs in the agreed size. However, there were only three lithographs for this size: one after *Herdtle* with the so-called horse forehead shield, another after *Peßler* himself (two seated female figures, one with a hammer and vice, the second with a compass and gear wheel) and the third was *Sturm's archway drawing*. Since *Herdtle's* design had been *approved* for a different value , only the other *two* lithographs could have been described as rejected designs. *Peßler* seems to have delivered two drawings before May 23rd . Because on that day one of them (in photographic reduction) was

approved by the head of section *Ender* for the 1 fl, 2 fl, 2½ fl and 3 fl stamps (category V). The second drawing was temporarily left aside, but was used in June. *Peßler* does not seem to have put much effort into composing the drawing for the 1 fl stamp. It is essentially the same as the drawing he had previously made for the 7 fl stamp. The only difference is that the bodies of the two figures representing trade and industry were previously turned away from each other, but their faces were turned towards each other, whereas now the opposite is the case. The second drawing, which was temporarily retained, contained two female figures, shown sitting and leaning against each other. This single drawing contains *three* shields for the denomination.

The new design for the 1 fl stamp was given to the engraver immediately after approval by section chief *Ender*. He delivered the engraving on June 14th, and a proof was made the same day and sent to him, thus completing his work. In the meantime, the electroplating department had first produced raised plates and then new intaglio plates from the engravings, and *Benedict* received these for engraving the legends. It seems that he only had to complete one engraving for each size category, namely the one for the smallest value in the category (i.e. ½ kr, 4 kr, 12 kr, 50 kr, 4 fl, 10 fl, plus 25 fl and 6 kr calendars). He delivered the first plate on May 1st, and the others between now and June 16th.

The 1 fl engraving delivered by *Jacoby* on 14 June was not copied using electroplating and therefore the legend was not engraved. The reason for this was that a kind of crisis had now occurred with regard to the work done so far. On 16 June, eight test prints (for ½ kr, 4 kr, 12 kr, 50 kr, 4 fl, 10 fl, 25 fl and 6 kr calendars) were made with the help of the intaglio plates made by *Benedict* for the purpose of obtaining the imprimatur, to which the aforementioned print made *avant la lettre* from the last (intended for the smallest guilder values) Engraving was added as the ninth.

When the matter had progressed to this point, it became clear that the four engravings returned to *Jacoby* had not been improved by the final processing and that the later engravings had not fulfilled the expectations. *Jacoby* had taken the matter lightly, perhaps because of the urgency, or because he had seen from the notes he had received that he was free to call in any collaborators. His engravings had, as it turned out, been made by etching and then re-engraved. The printing company described this as a process that should not be used to increase value because it did not create any artistic effect and posed the risk of possible forgeries. The prints of the engravings were even inferior to the proofs produced by lithography in the institute.

The Court and State Printing Office still holds the prints made of *Jacoby's* engravings on June 16, 1877. They were subsequently attached to a cardboard sheet that bears the form "Stamp stamps of the 1879 issue" with a grid of sixteen rectangular fields, which was therefore intended for the attachment of sample stamps of the 1879 issue.

The words "Prof.

Jacoby's" to which the rest of the legend only fits very loosely. Even a cursory inspection of these impressions shows that the engravings were crude and imprecise and that the Court and State Printing Office was right with its exhibitions. As *Jacoby*, on the other hand, insisted that the engravings were flawlessly executed, the Court and State Printing Office found itself in an unpleasant situation. The Ministry of Finance had itself arranged almost all the details for the 1879 issue and had even gone into the details of the drawings. The preparatory work for this issue can be described as the culmination of the Ministry's intervention in stamp matters. Only *one thing* had been left to the State Institute: the choice of the engraver - and this was precisely where such a fatal failure occurred! This was all the more important as it was an urgent matter and so much time had been lost in the meantime.

In order to remedy the situation as quickly as possible, Hofrat *Beck* decided to start the whole job from the beginning again. He entered into negotiations with the copper engraver *Johann Sonnenleitner* and the academic copper engraver *Josef Benedict* (who had engraved the legends in *Jacoby's* engravings and had already engraved frames and borders for the Kaiserkopf stamps based on *J. Laufberger's* drawings) and entrusted them with the new execution of the copper engraving work.

Both had done such a good job in producing the plates for the first Hungarian stamps that they seemed fully up to the task at hand. *Sonnenleitner* was to take on the guilder stamps, *Benedict* the kreuzer stamps; the former promised to finish in ten to twelve weeks, the latter in 40 to 50 days. *Sonnenleitner* was provisionally given the drawings and reductions for three sizes (V, VI and VII), while the imminent subsequent sending of a drawing for the 25 fl denomination was planned, which had actually been ordered from *Peßler* the day before (on June 21, 1877). *Sonnenleitner* (like *Jacoby* before him) was not to have to add any writing.

Benedict took over the engraving of sizes I, II, III and IV. At the same time, the change occurred that drawing I (based on *Herdtle's* design) was now dropped. For the values of ½, 1, 2 and 3 kr, *Herdtle's* drawing (the cranked quatrefoil) that had previously been intended for the calendar stamp was to be engraved, while for the latter stamp a drawing by *Peßler* was used. This essentially consisted of a circular ornament within which at its highest point a smaller, one-sided

A circle containing the head of Austria was attached. *Benedict* therefore had to deliver five engravings, one every ten days. He also had to include all the letters and numbers, including those in the plates engraved by *Sonnenleitner*. It was now expressly stated that the legend "Imperial Royal Austrian Stamp Mark" could already be engraved in the original engraving plates, while the value legends were to be engraved in the galvanic deep plates that were to be produced.

In general, it was said that the aim was to achieve *the lightest* possible execution "as with the Hungarian stamps". The documents show that the reason for this was the desirable easy visibility of the obliteration. The execution of the figures in dot style, which had been expressly planned for *Jacoby*, now appears to have been tacitly dropped.

The engagement of *Sonnenleitner* and *Benedict* seems to have been made with the Ministry's prior knowledge, as it took place on the same day as the re-determination of the drawings for size I and the calendar stamp, which had been carried out by the Ministry of Finance. The next day (June 22, 1877) the printing company submitted a written report. In its justification, it explained in detail the reasons why the engraving had been assigned to *Jacoby*. It also referred to an inquiry into state printing matters held in 1876, in which the Academy of Fine Arts was designated as the competent body for assessing artistic questions and the printing company was recommended to make use of the council of this institute and the experts working there, including *Jacoby* as a professor of copperplate engraving, for important artistic works. The Ministry approved the request made by Hofrat *Beck* the very next day (June 23, 1877).

At the same time it was announced that the ministry was reserving the engraving of the drawing for the 25 fl stamp ordered from the historical painter *Peßler* in copper for a later date. Since the printer's report made no mention of this order, this, as well as the rapid issuing of the decree, shows that the ministry had been kept up to date with all events and knew everything, whether it had been mentioned in the report or not. Another question, about which the files provide no information, also seems to have been settled in this oral exchange. *Peßler's* 10 fl drawing with Austria enthroned, which had been chosen by the printer and the Ministry of Finance for the VII size category (i.e. the values of 10, 12, 15 and 20 fl), appears in the actually produced stamp series of the 1879 issue assigned to the VI category (4, 5, 6 and 7 fl). This change in its purpose was connected with the fact that the second *Sturm* drawing (a cartouche held by two flying putti with scrolls and hanging festoons) was now also dropped. Since one drawing was now missing, the second draft delivered by *Peßler* in May (with

the three shields) was chosen for execution. However, because it was richer in figures than the Austria design, it was better suited for the higher values (VII), which necessitated the transfer of the Austria design from the VII to the VI category.

The time when this change took place is clear from the report of the Court and State Printing Office dated June 22, 1877. It states that it had been advised that certain changes in the choice of drawings for the various value categories were desirable, and that it had already had a (presumably lithographic) test print made according to these suggestions, which it submitted with the request for subsequent confirmation of the changes made in a short time. This lithograph (no longer extant) must have been made between June 18 and 22, 1877. The drawing of the 25 fl stamp, which was now recognized as unsuitable, was probably no longer included on it. According to a memo, the order for a new drawing for this 25 fl stamp on June 21 was not revoked, and the drawing that was delivered was even handed over to *Nejedly* and approved by section chief *Ender* ; however, its engraving had already been suspended in advance.

The lithographed template of June 22 must also have already made the exchange of drawings for the calendar stamp clear. There is a memo stating that on June 21, 1877, the drawing previously chosen for the calendar stamp was chosen for the first stamp category, whereas *Peßler* 's design for a 12 kr stamp (according to the lithographic template) was chosen for the calendar stamp. The new lithograph intended for the ministry was therefore made shortly before the report of June 22, 1877.

This meant that the drawings for the new issue had been definitively established, as they were then actually implemented. In summary, it should be noted that after all these numerous changes, the final result is simple and not difficult to remember: the four Kreuzer drawings are by *Herdtle* and were engraved by *Benedict* ; the three Gulden drawings are by *Peßler* and were engraved by *Sonnenleitner* ; finally, the calendar stamp is in the middle: the drawing is by *Peßler* and the engraving by *Benedict*.

Sonnenleitner and *Benedict* appear to have delivered their engravings on time. The Court and State Printing Office was able to submit impressions of the completed new stamps on two plates to the Finance Ministry for approval on November 19, 1877. *Jacoby* was paid the fee of 1350 fl. The files do not reveal how much *Sonnenleitner* and *Benedict* received.

The described peripeteias in the choice and execution of the drawings explain some irregularities in the appearance of the new

Stamps. In his four drawings for the Kreuzer values, *Herdtle* had stylized the background of the value indication in a chrysanthemum-like manner. This white rosette was to contain light-hatched double-headed eagles according to the later arrangement. Since only two of *Herdtle*'s drawings mentioned above were executed for the Kreuzer categories (II and IV), only two categories have these shadowy eagles in a dotted manner. In II, the wing feathers are lightly left out and the background is therefore filled with delicate vertical hatching. *Herdtle*'s drawings were subsequently also chosen for the I and III categories, one of which even had a chrysanthemum design (in an egg-shaped form), while the centerpiece of the second was the horse's forehead shield with multiple bevels.

In these two drawings, no hatched eagles were added because the former already had two double-headed eagles in both upper corners and in the latter, the eagles had already been added in place of a plaque with the year when it was first redesigned. However, in order to do something, the bevelled central shield was given a light ornament (while at the same time widening its lower part, making it more symmetrical). In the VII category (10 fl to 20 fl), a very light double-headed eagle in a dotted manner can also be seen below the value legend in figures, while the background of the value legend in the other two drawings of the guilder values does not have such an eagle. The reason for this was that these two drawings already contained eagles anyway, while *Peßler* had not planned any eagles in drawing VII.

Here we should note a fact concerning the copperplate printing in which the aforementioned, definitely selected drawings of this issue were executed, which is not mentioned at all in the documents, but can easily be demonstrated by an experiment with any acid: the black print of the new stamps turns reddish brown when it comes into contact with acids and is therefore produced in the same way as the 1875 and 1877 issues, using a mixture of logwood ink and ordinary copperplate printing ink.

B. THE VACUUM AND ITS COLOURS

In the decree of February 24, 1877, the ministry had ordered that instead of the cursive letters of the year 1879, which were in the lilac-colored natural print of the original, "*standing*" numbers should be used and that the middle part of the drawings should be left white. The electroplating department was now given the task of completing a print with the year 1879 in pleasing, upright numbers by March 15, so that the imprimatur could be obtained quickly. This approval was given on March 23, according to a note in the files.

It is not clear whether only a single impression was used, which generally illustrated the newly chosen type of numerals to be applied, or whether the different sizes of the numerals were already planned, as they were then chosen for the actual version. It is curious that in the brown natural print for the lithography of the calendar stamp of the first version (after *Herdle's* 6 fl drawing, which was later dedicated to the I category of general stamps), which was submitted to the Ministry of Finance at the same time and was approved one day earlier (on March 22, 1877), the letters are also straight, but have a coarser character than those used for the general stamps and do not fit well into their size scale. A different size of the numerals of the year was now chosen for each of the seven categories, although the difference between the highest Kreuzer category and the first two Gulden categories (IV, V and VI) is hardly perceptible.

It should be noted here that in the above-mentioned lithographic reproduction of the calendar stamp, which was the basis for the approval of the Ministry of Finance on March 22, 1877, the order that the calendar stamp should be the same size as the previous stamp of this type (with the portrait of the emperor) appears to have been followed exactly. The later *Benedict* engraving, on the other hand, made the stamp somewhat narrower than before and somewhat higher. Its width was thus brought closer to the size of the general stamp stamps, but it is noticeably higher. The natural self-printing of the calendar stamps that was used also completely matches the underprint of the first category in terms of the year and the veining, but is higher than it. The plate for the underprint of the calendar and that for the underprint of the first category are so identical that it was evidently only subsequently trimmed: in the former in width, in the latter in length.

The production of the plates for printing the backgrounds (in denominations of 50) could only begin once the drawings of the stamp categories had been finalized and the cut-out to be made in the veins of the page was known. The electroplating department was instructed to produce 24 underprint plates for the 5 kr denomination, 16 for the 1, 3, 7, 10, 12, 15, 36 and 50 kr denominations and 8 for all other denominations. This work had to be completed by the end of December 1877. In fact, this seems to have been the case much earlier, because the backgrounds were already printed on the two plates with proofs of the new engravings submitted to the Ministry on November 19, 1877, so that the printing works could also request approval for the underprint colors chosen.

The proposal now submitted and approved by the Ministry regarding these colours differed somewhat from the proposal submitted on 21 January 1877, which remained unfinished at that time, in that it now required an even more regular

Periodicity of the colours was proposed. The previous proposal had stated that for each (design and size) category, the smallest value should be red, the second green, the third blue and the fourth violet. As an exception, a partially different colour sequence was proposed for the highest category (VII): namely, instead of red-green-blue-violet, the scale: red-green-grey-brown. In the new proposal, the use of violet madder lake, the colour of which was very variable, was completely abandoned and the brown colour, which had previously only been planned for the 20 fl value, was proposed for the largest values in each category. At the same time, the grey colour planned for the 15 fl value was dropped in favour of blue, so that the colour sequence red-green-blue-brown was now used without exception and the stamp series *is a four-colour one*. For the new calendar stamp, which had not yet been considered in the application of January 21, 1877, a red-brown natural print was requested. The reason given for the colors was that the four values belonging to a design would then be distinguished from one another not only by the value legend but also by the color, because one and the same color would only be used once in each category. The colors were deliberately chosen to be less intense, because this would enhance the delicate copperplate engraving and make it more difficult for counterfeiters to manipulate the stamps in order to reuse them. The colors chosen were red madder lake, chrome green, Paris blue and jacaranda brown, and finally red-brown lake for the calendar stamp. The colors resist atmospheric influences sufficiently, but are attacked by acids.

With regard to the natural self-printing, it should be mentioned that a beech leaf was probably chosen for this again (as had been the case since 1870) and that the previously observed practice that copperplate printing and background must complement each other to form an overall image, but must not overlap in any way, was now abandoned. However, it was not really possible to stick to the previous practice. The almost square stamp image, printed in black, took up far more than two thirds of the total space on the majority of stamps, which is bordered by a thin black line (in II, III and IV even by a double line). If one had only wanted to place black and color printing next to each other, the latter would have been limited to a narrow strip in the lower part of the stamp, i.e. the writing field. However, the upper parts also wanted to benefit from the acid sensitivity of the colors. So the black and color printing actually overlap for the most part. Since the copperplate printing was done first and the colour printing was therefore printed on top of it, the term "underprint" is not really appropriate here. Within the natural self-printing, which fills the entire stamp size, circular cut-outs were made with the obvious intention of creating the circular areas that remain white.

to make the digits of the value appear more conspicuous. There are only two exceptions to this: in category VII, two heads protrude into the round field of the value and the natural print also has two corresponding bulges; in category VI, however, a larger circle was left out of the colored print, which encloses not only the field for the value digits but also Austria on the throne. The overlap of copperplate printing and colored printing achieved its *practical* purpose: to make the value digit (in the field left out of both prints) stand out with even more conspicuous clarity, in an excellent way. On the other hand, this significantly impaired the artistic appearance of the stamps. In the guilder categories in particular (with the exception of Austria on the throne), the figurative representations appear very depressed and practically disappear.

It was probably a result of the unpleasant incidents at the time of the issues with the long stamp shape that, during the negotiations on the new issue, everyone decided from the outset and without any special mention not to indicate the stamp value in the natural print. This prevented misprints. At the same time, this resulted in a simplification of the plate apparatus - which, strangely enough, is not even mentioned in the files - since a special underprint plate was no longer required for each individual value, but only for each of the (seven, and eight with the calendar stamp) size categories, because each size category had a design that was common to all stamps in that category and only had differences in the legend. During the preparatory work, this advantage did not seem to have been recognized at all, as can be seen from the above-mentioned order regarding how many underprint plates were to be produced for each value.

C. THE STAMP PAPER

The departure from the greatly exaggerated shape of the stamps issued in 1875 and 1877, the return to the more harmonious dimensional relationships of the first stamp forms and the choice of seven (eight with the calendar stamp) different stamp sizes meant that the previous stamp paper (9½ x 11 inches equal to 250 x 289.7 millimetres and 11 x 12½ inches equal to 289.7 x 329.2 millimetres) no longer appeared to be usable. The Court and State Printing Office, sticking to the denomination 50 for all categories, determined *three* paper sizes to be the most suitable for the new issue, namely size A at 21 x 30 centimetres for the values of ½, 1, 2, 3, 4, 5, 7 and 10 kr (i.e. categories 1 and II) and for the calendar stamp; size B with 23 x 35 centimeters for the other Kreuzer values (categories III and IV); finally size C with 28 x 40 centimeters for the Gulden values (categories V, VI and VII).

The Schlöglmühler Aktiengesellschaft, which was informed of this on November 10, 1877, set the prices at 3 fl. 63 kr, 4 fl. 63 kr and 6 fl. 57 kr for the Neuries per 1000 sheets based on the weight price that had been agreed in the contract of July 30, 1877, which was valid for the period from July 2, 1877 to 1880, without further investigating which of the *two* standard prices (1 fl. 86 kr or 1 fl. 90 kr) it had adhered to for the individual sizes and how it had assumed the ream weights. The Aktiengesellschaft noted that the previous watermark roller no longer seemed suitable for the changed dimensions. Since the frame of this roller was still in perfect condition, the coating would have to be modified, which could be accomplished in six weeks. The coating would have to be pulled off the roller; then the letters on it would have to be removed, moved and a new row of 13 letters added (not counting the two punctuation marks); finally all the letters would have to be "sewn on" and the cover pulled back onto the roller. The cost, including the price of the letters to be replaced, would be 65 to 70 fl. The factory company also noted that the redesigned roller could also produce watermarked paper of the previous dimensions. This is self-evident. The only thing that mattered was that no sheet would be left *without* a watermark. If a sheet had parts of a second watermark in addition to one, this did not matter. The Court and State Printing Office reported the matter to the Ministry of Finance on November 19, 1877 and estimated the paper requirement for the first stamp supply at 600 Neuries of size A, 400 Neuries of size B and 15 Neuries of size C.

The Finance Ministry's resolution of this report, which also concerned the two tableaux with the final copperplate engravings and the choice of colors, can no longer be found in the existing files, since these years of the file material in particular have been affected by extremely extensive scarification.

As far as can be seen, the planned complete redesign of the watermark roller did not come to fruition. On January 28, 1878, the Directorate of the State Debt informed the printing works that the factory management had carried out new tests; according to which the existing roller could also be used for the new stamp paper formats after an insignificant change made free of charge. At the same time, six test sheets produced with the modified roller were sent to the State Printing Works.

For a reason that is no longer clear, the printing works received five more test sheets of the new paper formats on February 5, 1878, which they found to be completely suitable in terms of quality, dimensions and the position of the watermark. The first paper purchase was then made for the stockpiling of the new issue, namely 511 Neuries of size A 21 x 30 centimeters for the eight small Kreuzer values.

and the calendar stamp; with 359 Neuries of size B 23 x 35 centimeters for the eight higher Kreuzer values and 56 Neuries of size C 28 x 40 centimeters for the guilder stamps. After this first supply was completed, it emerged that a considerable remaining supply of 292,047 half sheets of 9½ x 11 inches of the paper intended for the Kreuzer values of the 1877 issue remained in the paper depot of the State Debt Office. It was then used for the Kreuzer values of the new issue.

It should also be noted that in July 1878 a counterfeit 1 fl stamp was discovered in Graz, which had been redesigned to 5 fl. However, no further data on this are available.

CHAPTER XL

THE EMISSION OF 1879

The Court and State Printing Office had acquired the newly ordered stamp papers in time to submit proofs of the new stamps to the Ministry of Finance for the imprimatur on April 20, 1878, and to enclose the technical description.

On May 1, 1878, it was informed that the announcement of this description would take place at the end of September. The relevant regulation of October 8, 1878, Z.25523, V.BI No.37, then appeared in the Reichsgesetzblatt as No.132. It contains the most detailed and comprehensive description of the design of the stamps that has ever appeared in the entire field of Austrian stamp stamps. Since the new designs lasted for a considerable time and through several issues, their official description is reproduced here:

“The new stamps are divided into eight size categories, and the individual values within these categories are differentiated by different colored underprints.

Category I contains stamps in denominations of ½, 1, 2 and 3kr,

Category II the stamps of 4, 5, 7 and 10 kr,

„ „ III the stamps of 12, 15, 25 and 36 kr,

„ „ IV those of 50, 60, 75 and 90 kr,

„ „ V the stamps of 1, 2, 2½ and 3 fl,

„ „ VI those of 4, 5, 6 and 7 fl,

„ „ VII finally those of 10, 12, 15 and 20 fl,

während der Kalender-Stamp die VIII Größen-Kategorie bildet.

According to the following special description of the stamps, the Stamps for the lowest value of each category *red*,

"those for the second *green*, those for the third *blue* and those for the fourth and highest stamp value brown underprint. The calendar stamps have a *reddish-brown* underprint.

On all stamps, the actual stamp image is placed in the upper space, which is equal to two-thirds of the size of the stamp. In the lower field of the stamps, which is left free from the black print and is intended for overwriting, the year of issue "1879" is visible in white numbers.

Across the entire stamp, with the exception of the part showing the value in figures, the skeleton of a tree leaf is printed as a background.

The stamps for ½, 1, 2 and 3 kr are 28 millimetres high and 22 millimetres wide. A larger circle, in which the words "Kais. kön. österr.

Stamp mark", below which the value of the mark is written in letters, encloses an eight-part decorated space, in the middle of which is an egg-shaped shield with the value in numbers. In the upper corners is the kk

Eagle attached. The ½ kr. stamp has *red underprint*, the 1 kr. stamp has *green underprint*, the 2 kr. stamp has blue underprint, and the 3 kr. stamp has *brown* underprint.

The stamps for 4, 5, 7 and 10 kr are 31 millimetres high and 24 millimetres wide. Black strips enclose the image. In the opposite strips are the words: "Kais. kön. österr.

Stamp mark" in white lettering. The middle is a circle enclosed by festoons, in the middle of which is the kk eagle in dotted style, on which the value designation in figures, and on the edge the value of the stamp in letters. The 4 kr stamp has *red underprint*, the 5 kr stamp has *green*, the 7 kr stamp has *blue*, and the 10 kr stamp has *brown* underprint.

The stamps for 12, 15, 25 and 36 kr are 33 millimeters high and 26 millimeters wide. A large circle encloses the image. In the upper half of the circle are the words: "Imperial Royal Austrian Stamp" and the Imperial Eagle, in the lower half the value is given in letters. Concentric to the outer circle is a laurel wreath, which encloses a shell-shaped area, in the middle of which is a pointed shield containing the value in numbers. The stamps for 12 kr are *red*, the stamps for 15 kr are *green*, the stamps for 25 kr are *blue*, the stamps for 36 kr are *brown*.

The stamps for 50, 60, 75 and 90 kr are 34 millimetres high and 27 millimetres wide. The space enclosed by four strips contains the words "Imperial Royal Austrian Stamp Mark" in the opposite strips. A wider strip within the first right and left contains black ornamental decoration. In the circular central image, the kk is in dotted style.

Eagle, on which the value is indicated in numbers, on the edge of the circle the value is indicated in letters. The stamps for 50 kr are *red*,

the 60 kr stamps are *green*, the 75 kr stamps are *blue*, the 90 kr stamps are *brown*.

The stamps for 1, 2, 2½ and 3 fl are 38 millimetres high and 30 millimetres wide. Allegorical figures sit on either side of an architectural base: on the left is commerce, on the right is agriculture with their attributes. At the feet of the base is the value of the stamps in letters, in the middle with numbers. The imperial eagle crowns the medallion. In a circular cut above the heads of the figures are the words: "Imperial Royal Austrian."

Stamp mark" is affixed. The stamps for 1 fl are *red*, the stamps for 2 fl are *green*, the stamps for 2½ fl are *blue*, the stamps for 3 fl are *brown*.

The stamps for 4, 5, 6 and 7 fl are 42 millimeters high and 32 millimeters wide. In the middle of the stamp image is "Austria", armed with a shield and sword, sitting on a throne-like chair. A larger circle, in which are the words: "Imperial Royal Austrian Stamp" completes the whole. At Austria's head is a small circle, with the value designation in letters twice; in the middle of this is the value in numbers, and on the step at the feet the value is again indicated in letters. The imperial eagle is shown in both upper corners of the stamp, radially to the circle. The stamps for 4 fl are *red*, the stamps for 5 fl are *green*, the stamps for 6 fl are *blue*, the stamps for 7 fl are *brown*.

The stamps for 10, 12, 15 and 20 fl are 45 millimeters high and 34 millimeters wide. Two allegorical female figures, representing art industry and trade, sit on an architectural base, holding out their left hands.

The right hand of one figure rests on the shoulder of the other, who in turn has the attributes in her right arm resting it in her lap. There are six shields in the architecture. In the middle shield above the heads there is the imperial eagle in dotted outlines and the value in numerals, in the lower shield on the base the corresponding value is also expressed in letters.

This is exactly the amount shown in figures on the two middle pointed shields. On the two upper trapezoidal shields, the words "Kais. kön. österr." are visible on the left and "Stamp stamp" on the right. The 10 fl stamps are *red*, the 12 fl stamps are *green*, the 15 fl stamps are *blue* and the 20 fl stamps are *brown*.

The calendar stamp is 29 millimeters high and 22 millimeters wide. A larger circle encloses the image. On the left are the words: "Imperial Royal Austrian" and on the right: "Calendar Stamp", below is the value in letters. In the upper part of the circle is a medallion with the head of "Austria", below which in the square central shield is the value in figures. The underprint color is *reddish brown*."

If the colour of the underprint of the calendar stamp in the above reproduced regulation and in several places in the files.

would be expressly described as reddish brown, one would rather describe the color of the calendar stamps as purple based on the stamp material. It is noteworthy that this regulation (following the procedure of the emission regulation of 30 September 1874, RGBI No. 125) retains the spelling "Stämpel" (with ä) - even where it cites the legend on the stamps, which actually read "Stempel", while the index to the regulation gazette of 1878 in general and even specifically when citing the regulation of 8 October 1878 already has the spelling "Stempel". This form of the word Stempel appears in the regulation gazette of the Ministry of Finance with the year 1874 and is consistently retained, so that the regulation of 8 October 1878 appears to be a retrograde one in this case. The more conservative Reichsgesetzblatt stuck to the older form "Stämpel" until the end of 1887. It remains to be seen whether the description of the eight different drawings reproduced above meets the requirements that can be placed on a good description: that it should begin with the most striking element of the picture that catches everyone's eye and from there connect the other components with it, but in any case it should be so clear that one can already get a rough idea and immediately identify a stamp that appears. According to the official descriptions, the latter is hardly possible.

The new stamps became obsolete on January 1, 1879. On January 31, the older stamps (from the 1877 issue) were taken out of use. During that month, stamps from both issues could be used side by side. A three-month exchange period was granted for unused stamps. At the end of April 1879, all stamps from the 1877 issue became invalid. The exception were stamps (from all older issues) on business books and forms that had been officially cancelled in good time. The decree of October 8, 1878 also noted that the newspaper stamps would remain unchanged and that the stamp marks printed on postal and railway waybills would also be made in the style of the new stamp marks. The final sentence added that postal waybills with the printed earlier stamp marks could continue to be used until they were completely used up. With regard to this postmarked postal item, the case arose of a *cumulative* new issue, where a new design of the postmarked stamp is announced and thereby valorized, but the condominium of the old and the new stamps must exist not only for a short transitional period, but permanently. The above is of course to be understood *cum grano salis*, since, as already explained, no valorization norms had been issued with regard to the waybills with the first two forms of the stamp. The Ministry of Finance's decree issued on 8 October 1878 quite correctly spoke only of postal waybills, because at that time

only such existed. A few days later, however, the Ministry of Commerce introduced a different type of printing with the decree of October 16, 1878, Z.30190, which consisted of yellow, stiff paper, also printed on the back, and bore the heading "Postal accompanying address". Here, too, the green 5 kr stamp with the year 1875 was attached to the right-hand side (quite low). One could use the previous white postal waybills (with whatever stamp and in whatever position of the first stamp) or the yellow postal accompanying addresses, until the Ministry of Commerce declared postal accompanying addresses obligatory from February 1, 1880 with the decree of December 16, 1879, Z.39492, and excluded all types of waybills for shipments without cash on delivery.

This meant that not only the officially issued white postal waybills with the stamp marks 1871 and 1875, but also handwritten waybills or waybills made out on private blanks using stamps remained inadmissible.

After the yellow postal address appeared, no more white postal waybills were printed, and therefore no more with the 1879 stamp. The citation in the regulation of 8 October 1878 that the stamps printed on the postal waybills would also be made in the style of the new stamps remained unfulfilled as far as the white waybills were concerned. However, the 1879 stamp was used for waybills combined with cash on delivery notes. Here too, a change occurred soon afterwards, as these waybills were replaced by (with accompanying postal addresses (Decree of the Ministry of Trade of 30 April 1880, Z.5985). The latter also bore the 5 kr stamp with the year 1879. Their paper, like that of the waybills, is described cash on delivery certificates United) in the regulations as replaced became "pale lilac-coloured", but is much bluer than the previous one (like ultramarine against Prussian blue). There are also such postal addresses with the stamp from 1879 on a completely different looking paper, which finally really appears as "pale lilac-coloured". The stamp on these postal stamps has the same appearance as on the 5 kr stamps, which also had a green underprint with leaf veins and the year 1879. The black print here is, however, produced in letterpress and therefore has a somewhat rougher appearance. However, it is by no means simply a reversal of the engraving intended for the copperplate printing of the stamps as a single printing block to a second separate print. Rather, because the economy of printing required the use of stereotype, a manufactured inversion of the intended type was placed in the set form of the blank at the appropriate place, in order to then be able to cast uniform printing forms for the black print of the entire blank (including the stamp mark). The printing forms with the Kaiser's head prepared by Stanzl must have been done in the same way in 1875.

The reason why the Finance Ministry's decree of October 8, 1878, Z.25523, RGBI No.132, V.BI No.37, only mentioned postal waybills in its final sentence, but made no mention of the continued use of railway waybills, was that at the same time a change had to be made to the latter which seemed incompatible with the continued use of the older type of printing. In a decree of April 30, 1878, RGBI No.38, the Ministry of Commerce had prescribed new forms for railway waybills, which were to be used exclusively from January 1, 1879. The waybills were given a much larger format, had a precisely designated place for the control stamp, and left the back blank for the party's company name to be added. The inscriptions now read "waybill" and "express waybill". On the same day on which the issuing regulations for the stamp issue in 1879 were issued (8 October 1878), a Finance Ministerial Order was issued regarding the new railway waybills (Z.20801, RGBI No.128, V.BI No.36). According to this, they were to be stamped "conform to the stamps of the 1879 issue".

The underprint should be green for white waybills and violet for red express waybills. The different position of the stamp mark depending on whether it is intended for railway wear or private wear - this expression, however, appears to be avoided - has been retained.

The black printing of the stamps is done using letterpress printing. The printing blocks for the 5 kr stamp are identical to those already mentioned for the postal addresses. For the 1 kr stamp, a reversal was made and stereotyped.

The second group of Austrian stamps, the stamps with the long, narrow shape and the emperor's portrait, came to an end with the appearance of the 1879 issue. Of all the designs that were successively created in this area, this one had the shortest lifespan. It was created for the planned 1869 issue and represented the exponent of all the new ideas and aspirations that were to be realized at the same time as the transfer principle. When this failed for the time being, at least the external shape was realized, but only half-heartedly, so as not to lose the money that had already been invested. The unusual shape of these stamps did not meet any real needs, since it was not easy to achieve a plus beyond overwriting with a line of text and the older, more harmonious stamp designs were sufficient for this. The occurrence of the first real stamp counterfeit also contributed to shortening the lifespan of this group. Strangely enough, in the field of stamps in general, the psychological reaction to the discovery of counterfeits is always to immediately change to a new design of the stamps in order to at least render the counterfeiter's previous work worthless.

The characteristic moment of the second of the stamp issues in comparison to the first group is, on the *one* hand, the abandonment of the original individualization of each stamp value in terms of the graphic design and the transition to a single general form (which was subjected to a certain simplification in terms of the detail of the design only for the lower Kreuzer values, thus showing a merely quantitative, not a qualitative difference here); *on the other hand*, however, the abandonment of the original uniformity of the coloristic appearance and the transition to color differences of the individual stamp values (*two colors in the 1875 issue*, but already *six colors in the 1877 issue*).

CHAPTER XLI

INCIDENTS DURING THE EMISSION 1879

The following incidents are particularly noteworthy from the period of issue in 1879:

I.

In September 1879, *Joseph J. Casey*, editor of the "Stamps Journal" in New York, approached the Imperial and Royal Ministry of Finance with a request to provide him with a description of the system in place in Austria for collecting all kinds of taxes through stamps (including samples of all existing and expired stamps and postage stamps). This somewhat far-reaching request led the Court and State Printing Office to report to the Ministry of Finance on the extent to which it would be able to comply with such a request. It reported that there were no impressions of the issues of 1854, 1858 and 1866, nor was there any printing material for producing new impressions of such impressions. How little precise information about these issues was known in the printing office is shown by the citation of the stamp values that were assigned to each issue. The 1854 issue in Convention coin would have consisted of the following values: $\frac{1}{2}$, 1, 3, 4, 5, 6, 7, 10, 12, 15, 25, 30, 36, 50 and 60 kr, 1, 2, $2\frac{1}{2}$, 3, 4, 5, 6, 7, 8, 10, 12, 14, 15, 16, 18 and 20 fl. If exactly the same values were mentioned for the 1858 issue, as well as those of 72, 75 and 90 kr, the reason for not mentioning these three amounts in the first issue was evidently that it was known that the guilder of the Convention coin had only been worth 60 kreuzers.

For the 1866 issue, twelve guilder denominations were given (omitting the full 14, 16 and 18 fl.); 16 kreuzer denominations were also given, including 6 kr and 30 kr, whereas 1 kr, 4 kr and 72 kr are missing. The information about the other issues is already exact because the corresponding material was available. For the 1870 issue, it was noted that there were no printing utensils, but impressions on coloured paper. For the 1875, 1877 and 1879 issues, it was stated that both proofs on coloured paper and the printing blocks were available and that the production of proofs on white paper for the 1875 issue would cost 31 fl. and for the other two issues 29 fl. each. The Court and State Printing Office added that, in order to prevent abuse, the overprint "Sample without value" might have to be affixed to each piece.

This is the only place in the files where the existence of sample impressions on *coloured paper* for the issues of 1877 and 1879 is mentioned. The colour is not specified and cannot be specified because such sample impressions have not been found to date. The overprint "Sample without value" proposed by the printer for cancelling the stamps is evidently a postal reminiscence. The stamps issued to the Japanese government in 1876 were overprinted with the word "Sample". Presumably every piece bore this overprint. Sample impressions are known from both earlier and later times, each piece having the word Sample printed in blue in antiqua capitals (presumably with the rubber stamps and aniline dyes that were new to use at the time).

Soon after, a different imprint was prescribed. In May 1877, the printing works submitted a report to the Ministry of Finance, in which it was stated that it was important for them to have a collection of all valuable securities, in order to gain clues regarding the technical execution, particularly for new issues, and to be able to avoid similarities and repetitions. The previously usual prints on colored paper could not meet this purpose, because the color of the paper made it difficult to reliably assess the colors and their effect and harmony with the rest of the design. The printing works therefore asked for permission to produce a full sheet of each type of valuable securities on white paper without a watermark, but otherwise executed in a precise manner, for a permanent sample collection. The Ministry agreed to this, but at the same time ordered that each such sheet should be provided with "the designation: Worthless Chema" (!), to be clearly printed in red within the text.

This red overprint was created with widely spaced antiqua capitals, which were arranged in two lines. The first line contained the word WERTHLOSES, the second the word SCHEMA. This shorter word then had a horizontal fill line on the right and left until

the width of the upper word was reached. This overprint was printed once on each sheet. A fill line covering the entire width was printed over those rows of stamps that were not hit. Some sample stamps therefore have red letters or parts of them, while others only have parts of the fill lines.

The printing works appear to have made immediate use of the permission it received. There are sample impressions of the 1877 issue on white paper that show the red line mentioned. Strangely enough, the same stamps also have the blue overprint "Sample" mentioned. In the stamp sample book of the Court and State Printing Office, the red overprint is only found in the 1879 issue, since up to and including the 1877 issue, the original stamps received for comparison purposes for the stamp research department were always glued into the sample book after the issues had expired.

It should be noted here that the samples of the 1881, 1883 and 1885 issues in this sample book also have the overprint "worthless scheme". The impressions of the 1888 issue glued into the sample book, on the other hand, only have a *vertical* red line as a cancellation mark. In this case, a simplifying change seems to have been made; for in a document from the printing works from 1891 it is mentioned that the samples of the stamp collection printed on strong white paper "are provided with a red line as required". Incidentally, there are also sample impressions of the 1888 issue (also on white paper with cut edges) which do not have a red line, but do have the blue overprint "sample" mentioned several times on each piece.

The stamps of the 1893 issue glued to the sample book have cut margins, but no overprint and are also made on original paper.

In the sample collection mentioned above, which exists next to the sample book at the Court and State Printing Office, there are also whole, uncut sheets of the sample impressions made on white paper from the issues of 1877 up to and including 1893. The sheets of the issues of 1877, 1879 and 1881 bear the red overprint "Worthless Scheme" including the fill lines. The other sample impressions have no overprint.

To return to Casey, it should be noted that due to the extensive scanning of the files of that time, it was not possible to determine whether he received the desired stamps or not.

II.

In 1880, the question arose again in official negotiations whether the security of the stamp and fee differential could not be ensured by abolishing the stamps and the reintroduction of stamp paper

There is a document on this from the hand of the section councillor Dr. *Maximilian Chiari*, who discussed all relevant questions and was evidently intended to inform the finance minister Dr. *Julian Ritter von Dunajewski*, who also turned his attention to the fee during the action to eliminate the deficit. *Chiari* did not take part in this presentation in any direction. He stated that the two main defects of the stamps were that the parties can issue the documents unstamped and avoid paying the fees as long as the document is not used for official purposes; and furthermore that the stamps can be used repeatedly. The advantages of the stamps are that they are more difficult to imitate, that the payment of the fee is more convenient for the public - a factor that influences the profitability of any fee, but mainly the lower overhead costs. Given the starting point of the negotiations, the latter aspect was the only decisive question. A survey was sent to the provincial authorities to ask whether they considered the introduction of stamp paper to be advisable, and in particular whether the stamp reductions would be significant. After that, it was just a matter of calculating what would be more advantageous for the state treasury. The negotiations came to nothing, - especially since, according to an exposé written by *Nejedly* (then ministerial secretary) attached to the file, the question of overhead costs was an auspices from the outset. The costs of producing stamps were estimated at 69,000 fl. for 1877 and 113,000 fl. for 1878. In contrast, the annual expenditure for the necessary stamp paper, even without the cost of the initial installation, would have amounted to 1½ million guilders.

very unfavorable

Nejedly recapitulated the entire history of the introduction of the stamps and listed all the disadvantages that the stamp paper had brought with it, as well as all the objections "which were raised against the stamp system, mostly by the then stamp officer, *Section Councillor Edlen von Schwarzwald*". He also mentioned that *Schwarzwald's* proposal to limit the stamps to cases of post-stamping had been considered insufficiently justified by Undersecretary of State *Michael Freiherr Rueßkefer von Wellenthal* and that it had therefore been left to stand due to the fruitlessness of the negotiations and consultations that had lasted several years on the use of the stamps.

Now, after 26 years, the same reasons for and against stamp paper and stamps would be put forward as before. He then turns to the crucial question of costs. In this case, the main consideration was that paper of the previous poor quality and printing of the previous simplicity could no longer be used as stamp paper. *Nejedly* had obtained a statement from the State Printing Office on the technical questions, which also included seven paper samples. The cost of paper alone would have been

Quality 388,000 fl, with the best 648,000 fl annually. *Nejedly* noted that the samples presented were far from the excellent quality used for document paper in England, France, Holland, Belgium and Italy and would hardly be available in Austria, "because the state no longer has its own paper factory and private companies are forced to have their factory equipment manufactured using wood and straw substitutes, kaolin and other types of earth in order to achieve the required cheapness, weight and smoothness of the paper. The parchment-like, almost untearable paper made from corn flour, as Hofrat *Auer* had it produced in the Schläglmühle in the 1860s, was completely forgotten despite the abundance of the raw material." This posthumous obituary is the only place in the files where something good was said about corn flour paper.

There may be a memory error here, as *with Nejedly's* further claim that no case of counterfeiting has occurred so far with stamps produced using copperplate printing (the reason for this may also be the small size of the object). Part of the stamp paper could be produced using copperplate printing and part using letterpress printing, just as copperplate printing is used for official bills of exchange for the guilder categories and type printing for the kreuzer categories. "If letterpress printing is chosen, it should be two-coloured to achieve greater security against counterfeiting, e.g. the vignette and the frame in a stronger colour, the top print in a light, colourful colour. Furthermore, so that the writing is not etched out of the sheet and the sheet cannot be used for another copy, either all four sides or the first and fourth sides should be provided with a frame and a light-coloured underprint using natural printing or with a pantographed pattern."

Given this rich graphic program, it is understandable that the production costs of stamp paper (in the four variants: letterpress printing in one color or two colors, copperplate printing alone or with tone printing; and the alternatives: first and fourth page printed or all four pages printed) were estimated at a minimum of 854,440 fl to a maximum of 2,702,440 fl per year. The list was obviously intended to have a deterrent effect. It is also worth mentioning that the waste of stamps amounted to 12 percent in 1877, 11¼ percent in 1878 and 8 percent in 1879. *Nejedly* also states that it turned out that the originally glued paper on the bills of exchange had been deglued after the copperplate printing and was therefore flowing, which is why these blanks had to be re-glued and satinized after printing. Regarding the ink, which was important in terms of the reuse of stamps, *Nejedly* mentions the following details, which were intended to demonstrate his chemical knowledge: "In earlier times only tannic acid was used, which

yellowed after a long time, as the old documents and files show, but can always be refreshed with pyrogalllic acid. It penetrated deeper into the paper fiber and could only be completely removed with difficulty and by experts. At present, however, the price of Aleppo galls is far too high for a good writing ink made from them to find willing buyers. Substitutes are used, such as pernambuco, blue, chestnut wood, oak bark, catechu in combination with chromic acid of potash, sulphate of alumina, tartaric acid, etc., or with the even cheaper aniline. All of these inks, as well as the so-called alizarin ink (which, by the way, contains no trace of alizarin), offer very little resistance to the inks used to destroy writing, and are even destroyed by light and the ozone content of the air. For this reason, the state printing works carried out years of experiments with various colors for stamp printing. made until such and the correct procedure for using them was found. ... In general, since the introduction of stamps in 1854, particular attention has always been paid to the choice of paper and inks. However, no means has yet been found to completely protect them from detachment and reuse. The agent - bone glue - which makes them suitable for attachment when moistened, becomes soluble again when moistened again. What's more, this organic substance, like any other, is subject to the general laws of nature, and over time and depending on the nature of the storage location, it sooner or later decays, the decomposed parts evaporate, the binding power ceases and the stamps fall off of their own accord. The ideal adhesive, which, when applied to the stamps, would chemically bond inseparably to the stamp paper in one part and, with the other unbound part, would have the same effect on the document paper, has not yet been found. The attempts to date have not produced any favorable results. Professor *Kletzinsky*, who had been working on this question for a long time in the interests of the stamp office, accidentally invented the so-called mineral glue, which, however, could not be used for stamps because it is only effective when freshly prepared and soon completely silicifies. Simple potassium chromate makes the glue insensitive to water and other solvents when exposed to light, but it was not possible to fix this factor for the indefinite time of the stamp attachment that had been discovered. Experiments with fish glue, casein, dextrin and types of resin also failed to achieve the desired result.

"In a completely opposite direction, attempts were made by the draftsman in 1864 to print the stamps on the back of a paper made transparent by means of a hat, so that the stamp image would remain, if not completely, then at least to a large extent on the document paper when the stamp was removed. The result achieved up to 1869

The result was not satisfactory in that not all of the print samples were uniform and satisfactory, and because various technical difficulties prevented mass production. Since then, the matter has been dropped because the State Printing Office is fully occupied with current work and does not have the technical strength or even the financial means to continue the further tests - possibly without significant success. Of the numerous projects submitted by private individuals against the reuse of stamps, not a single one was worth considering. The reuse of stamps was partly controlled by ordering the overwriting or over-stamping and crossing of them in certain cases. Private documents that are not immediately intended to be the subject of an official act can probably be issued without the use of stamps for the time being. But since the stamps have been changed every two years since 1875 (1875, 1877, 1879, 1881), the parties are compelled in such cases to re-stamp the documents, because otherwise, in the event of judicial or official use, they would not be able to do so after the stamp material from the year of issue has been destroyed, and they would have to bear the disadvantageous consequences of the stamp abbreviation."

What *Nejedly* says here about the experiments using the decal principle sounds almost like an obituary, and this resigned look back was obviously intended as such. However, through a strange chain of events, this presentation, intended as information for Minister *Dunajewski*, became the germ of a new series of developments which then led to final success.

III.

At this point, it is worth mentioning briefly what happened with the *crossing* of the stamps mentioned by *Nejedly* in the summary statement quoted above . The matter took place more than 20 years ago.

In January 1860, the Supreme Audit Office informed the Ministry of Finance that the accession officer of the Ofen State Accounting Department, *Alois Daszon*, had been handed over to the criminal court for replacing and exchanging stamps. To prevent such malpractice, the Ministry of Finance issued two orders on 21 February 1860, Z.7525-359, V.BI No.11, initially for the members of the Finance Department, which, based on analogous provisions regarding stamp paper (the so-called "censorship line"), prescribed the cross-crossing of the stamps with ink, in such a way that both lines intersect in the middle of the stamp. The first order obliged all liquidating or paying officials to carry out this cashing procedure and imposed a fine for failure to do so. The second order prescribed the carrying out of

This thwarting was presented to the dispatchers and the registry and archive bodies. On 25 March 1860, RGBI No. 82, a ministerial decree with the same wording was announced, effective for all departments.

This arrangement is still in effect today. By a decree of May 9, 1860, Z.22617-1229, RGBI No.122, the restriction was made with regard to the records that the crossing out should only be carried out on those documents that were to remain in permanent custody. At the same time, as the parties began to imitate this convenient procedure, it was announced that the parties were not permitted to cross out in order to fulfil the stamp obligation and that a merely crossed out stamp would be considered as not being present.

By the ministerial decree of 28 December 1897, RGBI No. 306, the court chancelleries were relieved of this obligation on the occasion of the civil procedure reform.

Finally, it should be noted that for the area of fee service, § 48 of the instruction of 17 January 1885, Z.1728, further tightened the details to the effect that the crossing out had to take place with *black* ink.

IV.

During the issue of 1879, a change occurred in the factory that was to supply the paper for the stamps. Since the autumn of 1856, when the use of paper supplied by the manufacturer *Josef Reichle* to print the stamps was discontinued and the purchase of paper from the new stamp factory in Schlöglmühle began, the source of supply had remained the same, even when this factory was transferred to private hands in 1869. Based on a provision included in the sales contract, the newly founded joint-stock company retained the supply of this paper for five years (until July 2, 1874). Two three-year supply contracts were then concluded.

On July 2, 1880, however, this supply was transferred to a new competitor who had emerged victorious from the competitive negotiations as the party demanding the minimum price: the Joint Stock Company for Paper Manufacturing in Neusiedl in Lower Austria. The result of these negotiations was that the supplies for the state's paper requirements had to be distributed among five companies offering tenders. Regarding the papers (with and without watermarks) for "credit and securities", the delivery was awarded to the Neusiedler Aktiengesellschaft for three years, that is until July 2, 1883. This also included the stamp paper.

The new delivery contract of 22 September 1880 shows that the price of the stamped paper had become significantly cheaper. The price per kilogram fell from 1 fl 86 kr and 1 fl 90 kr to 90 kr. For the formats marked No. 24 A, B and C of the 1879 issue

(21 x 30, 23 x 35 and 28 x 40 centimeters) the last prices of the Schlöglmühle were 3 fl 63 kr, 4 fl 63 kr and 6 fl 57 kr per Neuries of 1000 sheets, from which a 5 percent discount had to be applied. After the kilogram price of 90 kr agreed with the factory in Kleinneusiedl, these ream prices were 1 fl 74.6 kr, 2 fl 32.2 kr and 3 fl 11.6 kr, i.e. about 50 percent cheaper. The ream weights were now 1.94, 2.48 and 3.46 kilograms.

The change in the supplying paper mill naturally meant that the state supervisory commission was moved from Schlöglmühle and installed in the Neusiedler paper mill. All watermark rollers were first transferred from Schlöglmühl to the paper mill in Franzensthal, which also belonged to the Neusiedler Aktiengesellschaft, where they were examined by experts and their dimensions were measured. It turned out that the rollers for the paper for bills of exchange, promises, newspaper and stamp stamps would fit well with the paper machines in Kleinneusiedl and could be used without any problems. They were therefore immediately transferred to this paper mill.

XLII. CHAPTER

THE EMISSION OF 1881

The basic decision to change the issue every two years forced the Court and State Printing Office to start thinking about the new issue before the 1879 issue had been in effect for a full year, given that the work of producing an initial supply would take several months. In October 1879, negotiations began on how the stamps for the next issue in 1881 would be designed. There was no question that the copperplate printing would remain unchanged. It was also agreed that the color print, which was the only one to be renewed, would have the annate 1881 instead of the year 1879. The printing office also planned to change the color colors, namely the previous sequence of red, green, blue and brown would be completely reversed, so that the values of each category would have the colors brown, blue, green and red in ascending order. A light green underprint was considered for the calendar stamp; The expected cost of the plate change was not high. The number of vacuum plates required based on experience was estimated at 240 for size categories I, II and III, 180 for category IV, 120 for category V, 100 for categories VI and VII, and then for the calendar stamp at

60 pieces each, so a total of 1200 pieces were estimated. The plates for guilder values were valued at 55 kr, the others at 45 kr. This resulted in 564 fl.

The cost of engraving the year in the original print was estimated at 36 fl. The requirement for plates therefore amounted to 600 fl. The printing works had two underprint plates made with the year 1881 and two stamps each of 3 fl and 3 kr with this underprint in red. These proofs were submitted to the Ministry of Finance on October 18, 1879, with a request for simultaneous approval of the intended color change. The Ministry decided on November 20, 1879 that the new issue would not change the existing colors and that only the year 1881 would be added in the original print. The digits of this year should, however, be *higher and wider* than in the proofs submitted. On December 16, the printing works submitted *two* new proofs arranged according to these suggestions. On January 17, 1880, the Ministry returned *three* (of the four submitted) proofs with approval. Nothing detailed can be given about the relevant further steps (apart from the fact that the plates for the 1879 underprint are no longer available because they are said to have been reworked for the 1881 issue, which was only possible for the individual original plate and not for both complete printing plates), as here again there is a gap in the files caused by scrapping. The fruit of the negotiations, however, was the Finance Ministry's regulation of October 10, 1880, Z.31151, V.BI No. 38, published in the Reichsgesetzblatt under No. 132, which declared the 1881 stamp issue to be obsolete from January 1, 1881. The "technical" description of the new stamps was in this case extremely brief, as it was limited to the statement that the new (general and calendar) stamps differed from the previous ones only in that "the year of issue (1881) appears printed in the lower colored field".

This new annate is the most important distinguishing feature of the new issue, given that the designs and colors have remained the same, and due to the size of the numbers (which increases with the size of the stamp image from category to category), the most striking. The stamps from the 1879 issue were no longer valid at the end of January 1881, i.e. after a one-month condominium. The exchange period lasted until the end of April 1881. The usual exception was made for business books and blanks. The decree also mentioned that the newspaper stamps of 1 kr and 2 kr each would remain unchanged, and further that the year 1881 would also be printed on the stamp mark of the postal address and railway waybills. However, postal stationery of this type with the previous stamp mark (year 1879) was permitted to continue to be used until they were completely used up. With the version that the year 1881 is "printed" into the stamp mark

The intention was to point out that the black letterpress printing of the forms, including the black stamp, remained exactly as before; what changed was only the natural printing with the year affixed to it.

Regarding the production of the underprint for the stamps, a circumstance from September 1881 must be mentioned here. A laconic document from the printing works lists, in a not entirely understandable way, "samples of stamp printing plates (namely two intaglio plates, then 100 underprint plates) made of celluloid". Nowhere is it mentioned whether only one attempt was made to produce such plates, or whether printing experiments were also carried out with them. At one of these stages, the impracticability of using this material must have become apparent.

During the issue in 1881, two designers appeared: the district postal commissioner *Adolf Storch* in Budweis and the "cartographer" *Karl Matzek-Fialla* in Vienna, both with negative results. In January 1881, *Storch* presented the Ministry of Finance with test stamps he had made himself, in which the black print contained a replica of English half-penny stamps with the image of Queen Victoria and the imprint "Malta". He explained that his invention to prevent reuse consisted in gluing two very thin pieces of paper together and then printing them. The printed upper paper would be damaged if attempts were made to remove the cashing marks. "Grid-shaped cuts" were also to be made in the upper paper so that some of the print would fall onto the lower paper.

Every night he brought improved stamps and a "test sheet with genuine Bavarian stamps". At the state printing office, *Pecher*, who had acquired a masterly skill in removing stamps and cancellation marks over time and whose ingenuity in the choice of removal and cleaning agents had not yet been resisted by any project stamp, carried out a series of experiments with *Storch's* stamps and with a number of stamps printed with eagles that he had made himself according to *Storch's* suggestions, for which he also used paper with a grid pattern. *Pecher* removed obliterations with chloroform and inks with acids and hypochlorite, even from grid-patterned paper, without the ruin of the stamps that *Storch* had predicted. *Pecher* emphasised the immense difficulties that would arise in large-scale production, as it would be technically impossible to laminate, print, gum and perforate large sheets of thin or even grid-like paper well and without creases. The moistening required for copperplate printing would also no longer be possible. Likewise, finer engravings and drawings could no longer be printed, but only larger fonts and coarser designs. Incidentally, the matter is not new, as *Josef Winner*

from Philadelphia had a privilege to use exactly the same process "for improvements to postage and stamps" from 1876 to 1879. The institute knew about this process, but paid no further attention to it because of its technical impracticability. *Pecher* forgot in this mention that the duplication of the stamp paper had already been suggested by Professor *Kick* of the Prague Polytechnic during the negotiations before the planned issue in 1869. When *Pecher* laid emphasis on the fact that he had also succeeded in removing *Storch's* stamps undamaged, he was overshooting the mark, since *Storch* himself had not attributed any irremovability to his stamps.

The second designer, *Karl Matzek-Fialla*, on the other hand, attributed this very property of non-removability to the test stamps he had produced. What these stamps looked like and how they were produced cannot be seen from the files, as *Fialla* only spoke at length about the properties he attributed to them and the payment arrangements he wanted. *Pecher* removed the test stamps with diluted hydrochloric acid, with water and even dry, without causing any damage.

Both of the above-mentioned projects remained unsuccessful.

A third designer also appeared again, the "qualified pharmacist and consulting chemist" *Ludwig Krackowizer*. He offered the court and state printing office improved adhesives, namely a rubber solution for postage and stamps and a paste for bookbinding work, and also promised a plastic mass he had invented and was still in the testing phase, which was intended to replace gutta-percha for casting galvanic negatives.

The rubber was to be made stickier by using boric acid; the starch was also to be partially converted into glucose by cooking it with acid sulphate, thereby making it more adhesive.

In his report of June 14, 1882, *Pecher* advised against acquiring these inventions. Paste was only used in very small quantities in the institute. But rubber was not suitable for stamps. The method of application would have to be changed, since the rubberized sheets did not allow hanging.

Unlike glue, gum does not gelatinize. The sheets hung at the top would drip and contaminate those hanging below. The adhesive layer would also be uneven: weak at the hanging point, a bulge at the other end. Moreover, the easy solubility of gum means that when applying the stamps, the adhesive could often be diluted too much by careless moistening and the stamps would not adhere securely to the paper.

Rubberized stamps are also easier to "peel off" than glued ones. As a result, *Krackowizer's* offer was not considered. There was no further mention of the plastic mass.

XLIII. CHAPTER

THE EMISSION OF 1883

I.

The initiative for the preparations for the 1883 issue came from the Ministry of Finance. On February 19, 1881, the Ministry of Finance asked the Court and State Printing Office to report on whether the existing copper plates could still be used for another issue or whether measures had to be taken to produce a new plate machine. In any case, printing tests would have to be carried out with regard to the negative pressure, because the color print of the current issue was very unclear and it was difficult to recognize the skeleton of the sheet. The printing office announced on May 13, 1881 that the copper plates could be retained for the period 1883 and 1884 without any problems. However, if the Ministry of Finance so desired, they would contact the director of the Stuttgart Trade Museum, *Liezen-Mayer*, and Professor *Keller-Leusinger*, to prepare drafts that could then be used for the 1885 issue. For the next issue (1883), however, the previous stamp images were to be retained, but no longer printed in *black*, but in *bright* colors. Although this would cost 1 fl. 80 kr more than before for 1000 sheets, it would offer significant advantages, as the obliteration would be more visible and the two superimposed colors of the copperplate and the underprint would be attacked evenly by acids.

This proposal, as must be noted here, involved the abandonment of *Pecher's* logwood dye and thus a clear departure from his ideas and the results he had achieved. *Pecher*, who was now being used for other tasks in the state institute, only had the opportunity to make a statement on the record on March 3, 1885 about this measure, which he disapproved of. From his statements we can also deduce the fact, which is not mentioned anywhere else, that the state printing office had tacitly, without any authorization and without asserting any reasons, abandoned the impregnation of the leaves with prussiate of blood (which was to be carried out before copperplate printing) at the same time as it had abandoned *Pecher's* printing ink.

Furthermore, it should be mentioned here that the unclearness of the natural printing, which was highlighted by the Ministry of Finance in the decree of 19 February 1881, was later the subject of a further negotiation. In July 1882, the Prague Finance Directorate sent the Ministry of Finance 30 stamps from the 1881 issue, which had such an unclear natural printing that the said Directorate doubted the authenticity of the stamps. These stamps were sent to the Court and State Printing Office with the

It was reported that the natural print on the same did not correspond to the ministry's intentions, as it was very unclear and the leaf skeleton could hardly be recognized. The printer pointed out that the first impressions that had been submitted for the imprimatur had shown the leaf skeleton clearly printed. However, as the sharp printing of this veining "did not correspond" - by which was evidently meant a criticism from the representative in the ministry - the original of the underprint blocks had been run over with the dot roulette and as a result the leaf skeleton appeared more delicately when printed. This then sometimes caused the underprint to be unclear. For the next issue (1883), the leaf skeleton was left clear as a result of the instructions that had already been received shortly afterwards.

This lack of clarity in the natural print is particularly noticeable in the stamps printed in light colors (red and brown), but it also appears in the 1879 issue with these two colors. The effects of the dot roulette are clearly visible in the bottom right corner of the natural print, especially in the two largest Kreuzer values and the smallest Gulden values, since the colored print here appears to consist of parallel hatching. This hatching now occurs evenly in the same values of *both* first issues (1879 and 1881). Two conclusions can be drawn from this: firstly, that the treatment with the roulette must have taken place during the preparatory work for the 1879 issue, and secondly, that this overrolling (grillage) on the natural print plates must have taken place before the year was added, so that in different copies of the same plates the year 1879 could be added once and the annate 1881 later. It is difficult to imagine that the plate already bearing the year 1879 could have been reworked into one bearing the year 1881. The above-mentioned fact that the printing plates for the natural print with the annate 1879 are no longer available can therefore be attributed even less to the fact that it is not really possible to rework all of these plates.

In the report of May 13, 1881, the Court and State Printing Office attempted to take into account the concerns already expressed in the Finance Ministry's decree of February 19, 1881 regarding the unclear natural printing by offering two new underprint designs for the 1883 issue. It presented six test impressions, namely three 1 fl stamps and three 4 fl stamps, of which the former had a "star-shaped pattern", namely six-rayed stars in the wheel-like shape that had been included in the underprint of the calendar stamps with the emperor's head (issue 1875), while the background of the 4 fl stamps was made in natural printing and contained a "new, clear framework". Both designs already had the year 1883 on them.

These six test stamps (with cut edges) were simultaneously
Patterns for the color combinations of upper and lower print, which

the printing works proposed the use of both new issues. These colours, of which the first mentioned below refers to copperplate printing, the second to letterpress printing, were as follows: for the 1 fl stamps: pattern No. 1 brown-green; No. 2 red-grey and No. 3 grey-red; for the 4 fl stamps: pattern No. 4 brown-blue; No. 5 blue-brown and No. 6 green-brown.

According to the printer's suggestion, the following should now be produced:

1. according to pattern No. 1 the values of $\frac{1}{2}$ kr, 4 kr, 12 kr, 50 kr, 1 fl, 4 fl and 10 fl;
2. according to pattern No. 2 the values of 1 kr, 5 kr, 15 kr, 60 kr and the calendar stamp;
3. according to pattern No. 3, the values of 2 kr, 7 kr, 25 kr and 75 kr;
4. according to model No. 4, the values of 3 fl, 7 fl and 20 fl;
5. according to pattern No. 5 the values of 2½fl, 6 fl and 15 H; finally
6. according to pattern No. 6 the values of 3 kr, 10 kr, 36 kr, 90 kr, 2 fl, 5 fl and 12 fl.

If these color combinations were approved and in accordance with the choice to be made regarding the background pattern, the underprint plates would be made and proofs submitted for the imprimatur. The Ministry of Finance (20 May 1881) also requested information on how long the existing original plates would still be usable; how much the named artists would have to be paid for the drawings; how much time and money would be required for the engraving; and what the total annual additional cost of the proposed copperplate printing in colored colors would be.

On May 28, 1881, the printing works announced that the original plates they had could be used for many years to come, because they were not used in printing, but were only intended for the production of printing plates and therefore would hardly wear out at all; the drawing and engraving would cost 3,600 fl, but the first plate machine would cost a further 9,000 fl; this work would take at least 10 months; the annual additional costs of color printing would amount to 2,201 fl 40 kr. The Ministry of Finance then approved the applications for the drawings and colors on July 13, 1881 and decided to retain the natural printing. The six samples were returned to the printing works.

On this decree, *Lauter* noted on July 28, 1881, that the underprint plates were to be produced for 1883 and that the stamps of the Kreuzer category were to be printed in the future at 100 pieces per sheet, which is why both the plates and the paper had to be ordered in good time: The intention indicated here to switch to double formats of denominations for the Kreuzer values was soon realized, as will be explained below.

The new natural print proposed by the Court and State Printing Office and approved by the Ministry of Finance differs from the previous one mainly in that the central ribs and even more so the lateral ribs are much thinner. This is apparently due to the fact that a leaf from a different tree species was now chosen. While, as mentioned, the leaf for the 1879 (and 1881) issue was probably made from a beech, the much weaker ribs of the natural print of the 1883 issue indicate the use of a birch leaf according to the botanical determination made by Professor Dr. *Günter Ritter Beck von Mannagetta and Lerchenau*. This natural print was then retained in the subsequent issues of the third group.

A special feature of the underprint of the 1883 issue is that the size of the annate no longer varies from one of the seven design categories to the other. Instead, there are now only three sizes: one for the four smallest and one for the four largest values, while all twenty values in between have the same year number consisting of medium-sized digits. This means that for the smallest of these twenty values, the digits of the year number are disproportionately large and therefore extend into the lower edge of the stamp mark.

II.

On October 14, 1881, the Court and State Printing Office reported to the Ministry of Finance that a significant saving of more than 18,000 fl per year could be achieved in the printing costs of stamps if the Kreuzer stamps up to and including 36 kr (i.e. the first three size categories) were no longer printed in 50 but 100 copies per sheet. 1,000 sheets of 50 stamps would cost 43 fl 38 kr, while the same number of sheets of 100 stamps would cost 50 fl. The transition to the double format had already been announced to the Neusiedler paper factory. There was also no objection to the now partially necessary production of larger paper formats using the existing watermark roller. The new paper prices could easily be determined using the contractual price per kilogram of 90 kr. The transition to larger printed sheets also suggested once again the old idea that these sheets should not be thrown out in their entirety because of a single failed stamp, but that it should be permitted to supply parts of 50 and 25 stamps, as the Ministry of Commerce had allowed with regard to postage stamps.

These applications were probably approved by the Ministry of Finance's decree of 25 October 1881, Z.31750, which has not been preserved and whose content is only alluded to in later documents. However, the fact that these applications were actually approved is not known.

found, with regard to the delivery of sheet quotas, it emerges from later mentions, but with regard to the double format, it emerges from the fact that from now on a change in the paper formats appears.

The formats No. 24 A, B and C intended for the 1879 issue had the dimensions 21 x 30, 23 x 35 and 28 x 40 centimetres and were A for the Kreuzer stamps from ½ kr to 10 kr (sizes I and II); B for the other Kreuzer stamps (sizes III and IV); and finally C for the Gulden stamps. The nominal weights were 1.94, 2.48 and 3.46 kilograms, the prices 1 fl 74.6 kr, 2 fl 32.2 kr and 3 fl 11.6 kr.

Format C remained unchanged, but was to continue to be used not only for the guilder stamps but also for the values of 50 kr, 60 kr, 75 kr and 90 kr. (size IV). The other two formats were changed and a fourth format D was added. Format A for the values of 12 kr, 15 kr, 25 kr and 36 kr (size III) had the dimensions 33 x 40 centimeters; the Neuries (1000 sheets) had a target weight of 4.12 kilograms and cost 3 fl 70.8 kr. Format B for the values of 4 kr, 5 kr, 7 kr and 10 kr (size II) was to weigh 3.66 kilograms and cost 3 fl 29.4 kr (30 x 39 centimeters). Finally, for format D (28 x 35 centimeters), which was intended for size I (½ kr, 1 kr, 2 kr and 3 kr), the target weight was 3.06 kilograms and the price for the Neuries was 2 fl 75.4 kr.

The transition to the double format required changes to the copper printing plates and the plates for the underprint for the Kreuzer values up to 36 kr. Nothing about this could be found in the files. This may have been related to the fact that in April 1882 the printing works raised the question of whether one of the new high-speed presses from König and *Bauer* could be used to produce the underprint for the new issue (1883), since their construction enabled an exact fit.

Tests were ordered, but the results were negative. As the factor Sonnleithner reported on May 13, 1882, the thinness of the stamp paper made it impossible to insert it accurately. Despite using the three best punchers, 15 to 20 percent of the paper was wasted. This idea was therefore abandoned.

III.

After the applications for the new issue were approved on July 13, 1881, a considerable amount of time passed before the Court and State Printing Office was able to submit sample impressions for obtaining the imprimatur. This took place around the end of March 1882 without a special report. On April 5, 1882, the Ministry of Printing Office approved 35 stamp impressions with a total nominal value of 106 fl 51½ kr for the 1883 issue, which would have been submitted in a short time. With regard to the colors of the underprint, the Ministry of Finance noted that

they look too little different for the 1 kr, 5 kr, 15 kr and 60 kr values from those for the 3 kr, 10 kr, 36 kr and 90 kr values, which is why a different colour, such as grey, should be chosen for one of these two series. With regard to the copperplate printing of the 3 fl and 7 fl stamps, it was noted that the violet colour should be given an appropriate addition to prevent it from fading too quickly. As soon as the print run for the first stock is completed, the printer should submit the description for publication.

Two things are striking about this document: firstly, the number and the total value of the proofs, but then the mention of the copper printing inks in the values of 3 fl and 7 fl.

The number of test impressions (35) shows that six more impressions were submitted than the number of categories of general stamps including calendar stamps (28 + 1). Since the monetary value of a complete set of 29 stamps was 91 fl 51½ kr, but the value of the 35 impressions was given as 106 fl 51½ kr, the surplus six stamps had a nominal value of 15 fl. Now the above-mentioned first six impressions represented exactly this value (3 pieces at 1 fl with star background and 3 pieces at 4 fl with leaf rib background) and there is therefore no doubt that these six stamps were submitted again. However, in the meantime, negotiations regarding the stamp colors must have taken place verbally and as a result of these negotiations, individual deviations from the colors of the six samples must have taken place. According to these samples, the 3 fl and 7 fl stamps were supposed to be in the colors brown and blue and to match the 20 fl stamp in the colors used. But now a violet copper printing color (which had not been used before) is mentioned and the 20 fl stamp is not included.

What the changes were now made are shown in a report from the Court and State Printing Office dated July 4, 1882, in which it was announced that more than half of the first stock had already been delivered to the Central Stamp Office and that, as ordered, a grey background had been chosen for the 3 kr, 10 kr, 36 kr and 90 kr stamps and that the copper printing ink for the 3 fl and 7 fl stamps had been prepared accordingly in order to prevent them from fading too quickly.

At the same time, the description to be published and an imprint of each stamp were enclosed. In this description, the colors are already specified as they appear in the emission regulations, namely ½ kr, 4 kr, 12 kr and 50 kr brown-light green; 1 kr, 5 kr, 15 kr and 60 kr blue-light brown; 2 kr, 7 kr, 25 kr and 75 kr gray-pink; 3 kr, 10 kr, 36 kr and 90 kr dark green-gray; 1 fl, 4 fl and 10 fl brown-light green; 2 fl, 5 fl and 12 fl dark green-yellow; 2½ fl, 6 fl and 15 fl blue-pink; 3 fl and 7 fl violet-orange; 20 fl purple-gray; calendar stamp blue-brown. Since the number of supplements to the report of 1 July 1882 appears to be three, the sample stamps were distributed on two sheets,

as was customary before, whereby the calendar mark was then attached below the Kreuzer values.

There were two such sheets with the glued-on proofs on which the clause "Imprimatur, 24/4. 1882 *Chiari*" appears. The printer had therefore, as a precaution, obtained an express imprimatur in a short space of time after making the changes indicated to it.

The proofs submitted on July 4 were returned to the printing works with the decree of September 19, 1882, Z.21248, with reference to the emission regulations published simultaneously in the Reichsgesetzblatt (as No. 134) and in the Verordnungsblatt (No. 44) and with the order to have the year 1883 inserted in the postal addresses and in the railway waybills.

The new stamps bearing the year 1883 were declared obsolete on January 1 of that year. The condominium with the older issue lasted until the end of January, and the subsequent exchange period until the end of April 1883. The usual perpetuation clause was included in the regulation for obliterated stamps on books and blanks. With regard to the newspaper stamps of 1 kr and 2 kr, it was stated that they would remain unaffected by the change in issue. Finally, it was announced that the year 1883 would also be printed on the stamp mark on the postal addresses and railway waybills; however, the postal stationery of this type bearing the older stamp could be used until they were exhausted.

IV.

While the emission regulation of October 8, 1878, Z.25523, RGBI No.132, had described the stamps according to size categories (also designs), in ascending order, and for each category listed the cycle of (background) coloring that always recurred in the same way, the new regulation for the 1883 emission was able to be briefer, as it did not need to repeat the descriptions of the designs. It took the same-colored ones from each design or size category of the Kreuzer and Gulden values in order to avoid any repetition. This resulted in coloring categories that included four stamps each for the 16 Kreuzer values and three stamps each for the two Gulden values. As an exception, the 20 fl stamp was separated from the last category of Gulden values and given very special colors. There were therefore four colour categories of four Kreuzer values each, three categories of three Gulden values each, a fourth category of Gulden stamps consisting of two values, and a fifth category made up of the 20 fl stamp alone. Including the calendar stamp, there were therefore ten different

Colours. The emission regulations begin, oddly enough, with a list of the guilder values, followed by the kreuzer values - each time in ascending order - and conclude with the calendar stamp. In the following, the stamp values are listed in the same order and each group of values is given the colours in brackets; as in the above, the first colour refers to the copper print of the stamp image, the second to the letterpress of the underprint, which was called "background" here: 1 fl, 4 fl, 10 fl (brown-light green); 2 fl, 5 fl, 12 fl (dark green-yellow); 2½ fl, 6 fl, 15 fl (blue-pink); 3 fl, 7 fl (violet-orange); 20 fl (purple-grey); ½ kr, 4 kr, 12 kr, 50 kr (brown-light green); 1 kr, 5 kr, 15 kr, 60 kr (blue-light brown); 2 kr, 7 kr, 25 kr, 75 kr (grey-pink); 3 kr, 10 kr, 36 kr, 90 kr (dark green-grey); calendar stamp (blue-brown). The collector could clearly illustrate the structure of the choice of colours in the first two issues of the stamps with these drawings, in that on a raised sheet at the bottom the four largest guilder values were placed close to each other, then above them the four next largest values, each vertically above the lower ones and therefore with wider gaps between them; above this again the four next equal-sized stamps were attached in a similar way, and so on. This created four columns that became increasingly narrower towards the top, each of which consisted of stamps of the same colour. The horizontal rows, on the other hand, always contained stamps of the same size and the same design.

A similar structure can also be used for the 1883 issue.

But only the first column consists of stamps of the same color. In the second and third columns, the four Kreuzer values and the three Gulden values have the same color. Finally, in the fourth column, only the four Kreuzer values have the same color. Then follow two Gulden values of the same color, while the 20 fl stamp, as the foundation and cornerstone, stands out from the series due to its special coloring, which does not recur in the entire issue.

By combining the various stamp sizes (and the designs that correspond with them) with the various colors, the 1879 issue had evidently sought to realize the idea that each color should only ever appear in a different design, so that all denominations with the same design should be different from one another not only in terms of the legend, but also in terms of coloring. A new idea was now added to give the guilder denominations a different four-part color cycle than the kreuzer denominations had, and also to deviate from this new cycle for the highest denomination in order to characterize the higher denominations with a unique appearance. The newly selected seven underprint colors would almost have been sufficient for this. By combining these colors with the six colored colors that now replaced the previous black copper printing ink, the distinctions could be made even more noticeable.

The type of dyes used for printing could not be determined from the files nothing can be taken out.

The beginning of colorful copper printing and the oversized dates on some values are the characteristic innovations that the 1883 issue brought.

V.

The phrase used in the new issuing regulation (in the same way as in the previous one) with regard to the postal address and railway waybills, namely the impression of the year 1883 in the postmark on these postal stationery, conceals the fact that these postmarks have now become much more dissimilar to the postage stamps in their overall appearance than was the case with the 1879 and 1881 issues. Up to now, it was only a matter of differences in the chemical constitution of the ink with which the actual postmark image was printed: but this ink was *black* in both cases.

Now, however, the copperplate printing on the analogue stamps has turned blue, but the stamp mark on both postal stationery items is still printed with printing ink.

The underprint of the postmarks on these postal stationery also shows a significant difference from the underprint of the 1 kr and 5 kr postmarks of the general series. While a new natural self-print with thin leaf veins and larger digits for the year was chosen for the latter, the underprint on these postal stationery retained the previous veining and the previous letter size. Therefore, the protrusion of the annate into the design of the overprint is not noticeable here, especially on the 5 kr postmark.

With regard to these adnexa of the 1883 issue, significant changes occurred during the latter's duration: on the one hand, an increase, on the other, a decrease.

The increase was due to the number of accompanying postal addresses and was the result of the international agreements that were now taking effect in trade relations. The international agreement of November 3, 1880, RGBI No.88 ex 1881, established the system of sending postal packages without a value declaration up to 3 kilograms (colis postaux) at a uniform rate. For these foreign shipments, international accompanying postal addresses (on pink paper) were introduced from July 1, 1883 by the Ministry of Commerce's decree of June 2, 1883, Z.19356. With regard to cash on delivery shipments, a change had already been made that, according to the Minister of Commerce's decree of March 15, 1883, RGBI No.32, one half of the printed form was no longer to be called a cash on delivery slip, but a postal order.

When the ministerial decree of 10 June 1883, RGBI No.115, introduced cash on delivery with a

This resulted in the need to issue pink postal addresses combined with postal orders. These new postal stationery had the same 5 kr postmarks as the yellow or purple printed forms intended for domestic use.

With regard to railway waybills, the regulation of the Ministries of Finance and Commerce of 1 April 1884, RGBI No. 41, stipulated the *compulsory* use of newly issued forms. These new waybills have a completely different type of stamping, which, moreover, no longer have a brightly coloured underprint and therefore enable cheaper production. This means that these railway postal items are excluded from the series of appendices to be dealt with here.

WE.

A change has also been made to some of the stamp material from the 1883 issue. of the watermark. This is what happens.

On December 22, 1881, the state supervisory commissioners in the Neusiedler paper factory reported to the State Debt Directorate that the watermark roller for stamp paper No. 24 had become so damaged and was producing so much waste paper that it was no longer suitable for further use. The factory management declared that not only a new screen but also completely new letters were required. The existing letters were too *high for the paper that could be produced with it*, which meant that too much pressure was being placed on the paper and a significant percentage of waste was being produced. On December 28, 1881, the factory company for which *Eduard Musil* was a signatory reported that the damaged dandy roll could no longer be repaired and that a new one would have to be purchased. The State Debt Directorate had the roller sent by the supervisory commissioners to the Viennese central administration of the Neusiedler Aktiengesellschaft and asked them to arrange for the procurement of a new roller. On January 14, 1882, *Musil* announced that no parts of the professionally examined roller were usable anymore and that a new roller would cost 210 fl. The order for the same had already been placed and would be processed in three weeks. The old letters were cut off (for safety reasons). The Viennese mold maker *Simon Triblnig* was entrusted with inspecting the old roller and making the new one. The new roller he delivered to Neusiedl had to be sent back to the manufacturer several times because the brass letters were too sharp-edged and caused holes in the watermark. The roller returned to the factory after the last of these repairs on April 8, 1882 could not be used due to a lengthy; Due to the standstill of the paper machine due to repairs, it could only be tested towards the end of June 1882 and was now deemed usable. The State Debt Directorate noted in a file

from October 24, 1882, that the State Printing Office had meanwhile quickly convinced itself that the paper produced with the new roller was perfectly suitable for printing the stamps. At the same time, the management asked the Ministry of Finance for approval of the roller change, which had already been carried out as a matter of urgency in view of the need to create a stock of stamps for the 1883 issue. The reason given here was probably not valid. The watermark roller had not been in the paper factory for at least half a year (from the beginning of January 1882) and no stamp paper could have been produced during this time. Since, nevertheless, the majority of the first stock for the 1883 issue had already been completed and delivered on July 4, 1882, there were evidently very considerable stocks of stamp paper in the depot of secret papers.

As far as the records show, the first paper production with the new roller did not take place until October 1882. Although this date falls into the last period of validity of the 1881 issue, it is nevertheless possible that stamps from this issue were also produced on paper with the new watermark No. 4.

On the other hand, however, the stamps from the 1883 issue still have, to a large extent, watermark No. 3, which existed from February 1866 (VII. creation of the mauve-tinted paper for the Kreuzer issue) until October 1882. Strangely enough, however, as should be mentioned here in anticipation, there are also stamps from the 1885 issue with this same watermark, which can only be explained by the fact that there were larger stocks of certain formats which were only used up after a long time, or that individual older bales of paper were inadvertently only used up after a long time.

The new watermark No. 4 has a legend that is roughly the same length as watermark No. 3. It therefore appears that the previous circumference of the roller (20½ inches) has been retained. The height of the letters is also the same, namely 11 lines (6 Cicero). The character of the font is no less the same. In the open interior of the letters, however, the separating bars for the letters A, E, K, M, N, P and R (which can be clearly seen in watermarks No. 1, 2 and 3a) are now missing. Furthermore, the new letters consist of significantly wider lines and their overall width has therefore also become larger. These thicker letters form the third type of font used for the watermarks on stamp paper. The first font was the 12-line-high narrow letters of watermark No. 1, which were introduced in June 1864 but were only used in a single paper creation. After just a few weeks, the second creation of watermark paper in August 1864 produced the letters of watermark No. 2, which were only 11 lines high. Watermark No. 3, which began with the VIIth creation in February 1866, was in all probability not a new typeface, since it was probably

the old letters were reattached to the expanded cylinder circumference (at greater distances from each other) and, as far as new letters were used, these were similar to the older letters (except for a difference in the interior of individual letters). Thus, the new wide letters used from October 1882 onwards on the cylinder designed by *Triblning* form the third and final typeface, because the watermark continued to be unchanged as long as it was still in use.

In March 1885, the watermark roller needed to be repaired again, as its screen had become so damaged that the factory management declared that it would not be able to process any more paper orders until it was repaired. The roller was withdrawn and, as *Simon Triblning* had already retired from the business, it was handed over to the *Hatter and Schrantz* company for repair. According to the company's invoice, the work consisted of covering it with a new screen and repairing, silvering and soldering the letters. The cost was 80 florins. The roller that was returned to the factory worked perfectly straight away. The previous arrangement of the five rows of letters was probably retained exactly, as no change in the watermark can be seen.

VII.

It seems that the change in denomination and paper format, which was decided on because of the transition to the double format, was only implemented in the 1883 issue, although the request for this was submitted on October 14, 1884 and approved in the same month. In this request, the Court and State Printing Office emphasized that the format change should only take effect after the existing stocks had been exhausted. The agreement between the State Printing Office and the State Debt Directorate, which established the names of the four new formats 24 A to D, dates from November 16, 1881. By this time, the roller of watermark No. 3 was already so unusable that it was withdrawn at the beginning of January 1882 and replaced by the new one, which did not come into use until October 1882. Until then, only paper from the existing stocks was used. Even the first stock for the 1883 issue was still printed on this old paper and therefore with the old denomination. It can therefore be concluded with some certainty that only the plates issued in 1883 were brought into the denomination of 100. This change in denomination occurred for the Kreuzer values from ½ kr to 36 kr and the three new double formats D (28 x 35 centimetres), B (30 x 39 centimetres) and A (33 x 40 centimetres) were used for these twelve values. The old format C (28 x 40 centimetres) remained and was used for the Gulden stamps and the four highest Kreuzer values (50, 60, 75, 90) in the denomination of 50. Subsequently - when? is not known anywhere - another change occurred.

that the 50, 60, 75 and 90 kr Kreuzer values were also printed on paper format D (28 x 35 centimeters), which differed from format C only in one dimension and was sufficient for these four Kreuzer values. Of course, this paper was only sufficient for the previous plates of these four values. They remained at the denomination 50. Paper type D thus represented a double format for the four smallest Kreuzer values (and the calendar stamp), but a single format for the four highest Kreuzer values.

This situation can be seen from a document from June 1887. The stocks of type D were exhausted, while there was such a large stock of type C that there seemed no likelihood of it being used up for the small orders for guilder stamps before the issue was completed. The printing works therefore requested permission from the Ministry of Finance to use type C instead of D for the time being in order to avoid ordering type D for stamps of 50 to 90 kr, especially since the price difference (3 fl 11.4 kr instead of 2 fl 75.4 kr) could not be taken into account compared to the risk of having to scrap unusable remaining stocks of C. The printing works were not aware that with the supposed exception they were actually only returning to the previous normal situation.

With regard to paper formats, as well as paper prices and the supplying factory, stable conditions prevailed from now until the reforms that began in 1893. When the supply contract of September 22, 1880 expired, the agreement was extended for a further three years, i.e. until July 2, 1886, by means of a simple additional clause to the previous contract dated May 30, 1884, while maintaining all conditions. This clause expressly stated that format D (28 x 35 centimeters) with a ream weight of 3.06 kilograms and a price of 2 fl 75.4 kr. was used. It was also stipulated that the factory should provide the supervisory commissioners with free accommodation or pay the value of the accommodation, and that it should also bear the allowances and travel expenses of these bodies.

For the next three years (2 July 1886 to 1889) the contractual relationship was then extended unchanged without any competitive negotiations, but the original contract and the supplementary clause were merged into a single document dated 23 August 1886. Finally, with the agreement of 27 June 1889, the delivery contract was initially extended for three months (until 2 October 1889) and then with the supplementary agreement of 2 September 1889 for an indefinite period with three months' notice - all this under unchanged conditions.

The unilateral provision of rights for the state administration without an obligation to accept them subsequently made it possible to simply leave the previous contractual relationship unchallenged without a formal contractual termination when the transition to a different type of paper took place in 1893.

VIII.

Two incidents from the time of the 1883 issue should be noted here: that, at the request of the Central Stamp Office, the order was made to deliver the stamps in packages of 1,000 sheets, whereby the Stamp Office had to return the cardboard covers that were released - and a price regulation with regard to the preparation work that followed printing, the cost of which amounted to 7 fl 11 kr per 1,000 sheets, was distributed differently, so that gluing, hanging, laying and rolling would become cheaper, but perforating and tearing would become more expensive. In these last two operations, a considerable distinction was made between sheets with 50 and those with 100 appointments. The prices of 3 fl 30 kr and 2 fl 10 kr for perforating 1,000 sheets are understandable when one considers that the sheets were still punched individually.

IX.

In response to a survey by the Ministry of Finance into the experience of the stamp offices with the stamps issued in 1883, the Prague Finance Directorate reported in March 1884 that the fragility of the stamps had largely disappeared due to the addition of glycerine to the glue by the printers. On the other hand, the perforation of the stamp sheets often lacked the required cleanliness and sharpness and was often not straight and even. The printers commented that the two circumstances cited by the Prague authorities were related. The glycerine eliminated the fragility of the stamps, but resulted in a certain toughness of the stamp sheets, which meant that the waste from the "perforation" tended to stick to the perforated areas. In order to eliminate this defect, the perforating machines have been reconstructed and in the future, during the revision, all sheets whose perforation does not appear to be carried out with the required cleanliness, sharpness and accuracy (straight line) will be eliminated.

There seems to have been a misunderstanding regarding the "straightness". What the Prague authorities complained about in this case was not something that could be eliminated by precise work, but a consequence of the long-standing condition of some perforating machines and probably the result of an earlier "reconstruction". Since the previous issue in 1881, conspicuous and unsightly irregularities in the rows of holes have been noticeable on some stamps. Some holes are outside the straight row on one side or the other, some appear to be pushed close together, some even cut through each other. It is difficult to imagine the condition of the perforating machines that could produce such a result - a veritable wilding of the perforation.

In individual cases, such poor perforations can also be observed in the 1885 issue.

The measures taken with regard to the perforating machines appear to have omitted to reproduce the coarsest perforating cuts.

While the perforations 9 and 9½ were the predominant ones in the 1870 issue and have continued to be common since the 1875 issue alongside the medium perforations (10 to 13), they then become rarer from issue to issue, disappearing with the 1888 issue. Coarser perforations than 10½ are still no longer to be found.

It should also be noted here that in November 1885 the perforation of the stamps was separated from the gluing department, with which it had been associated since the time of the bookbinder *Rollinger*, who had been carrying out this work on a contract basis, and placed in the credit printing department. This was caused by an increase in the percentage of glycerine added to the glue. This prevented the brittleness of the stamps, which had been criticized by some. However, the stamp sheets now dried more slowly. In the damp and cold atmosphere of the gluing department, the glued and hung sheets froze overnight and only dried the next day after the ovens had been heated, and even then only slowly and incompletely. This inadequate drying then caused great difficulties for the perforators. To remedy the situation, the heating ovens were removed and steam heating was introduced, but at the same time the perforation was moved to other rooms.





SEVENTH SECTION

THE SECOND PHASE OF REFORM EFFORTS AND THE SOLUTION TO THE PROBLEM

XLIV. CHAPTER

THE EMISSION 1885



The 1883 issue marks the end of the series of biennial issues, that is, those stamp issues which, although they were not time-limited when they were created, were nevertheless cancelled by the financial authorities every two years in accordance with the pre-established plan. This distinction based on the period of validity does not coincide with the group classification based on the visual appearance of the stamps, their designs. The series of biennial issues begins with the second stamp design, that is, the stamps with the emperor's head, but continues into the third group of designs (that is, the stamps based on the designs of *Peßler* and *Herdle*), without, however, exhausting the latter. There are only five biennial issues: 1875, 1877, 1879, 1881 and 1883. The next, which came into being in 1885,

The first issue remained in use *for more* than *two* years. In fact, from this point on, the validity period of each subsequent issue became longer and longer. The two-year period was never returned to.

The five biennial issues bear this name only because of their de facto (but also previously intended) two-year duration. However, there was no legal *limitation* of two years, as this would have had to be stated at the time of issue, which in Austria - unlike Spanish stamp law and its subsidiary laws - never happened. It is therefore not possible to distinguish between limited and unlimited issues in Austria: they were all unlimited from the start. The termination of the issues always took place through a *causa superveniens*, the decreed bill of exchange.

With regard to the issue changes, one could distinguish between two types: those brought about by a concrete, valid, factual reason (caused) and others decided without such a reason purely on the basis of the duration of the issue when it was believed that the issue had now been in force for a sufficient period (arbitrary). The latter opinion could be a planned one, as in the case of the five biennial issues, or it could only arise subsequently, as was the case with the issues that now follow.

Even more laconic than the documents on the creation of the 1883 issue are those on the arrangements for the further issue. On November 28, 1883, the Court and State Printing Office submitted impressions of the stamps planned "for 1885 and 1886" in a new color combination to the Ministry of Finance for approval. By decree of December 14, 1883, this proposal was approved without any further comment.

However, from a note in the printing works' files, it can be seen that the state institution had also considered a fundamental change in the underprint. The credit department was instructed to produce underprints with the year 1885 for all eight (size and design) categories by August 25, 1883, both in the previous type of underprint, but with a different annate, and then also in a new type with a fine pantographed pattern and the year 1885. The latter design of the underprint does not seem to have been satisfactory. Test prints of all values were soon made with the natural self-print as a background, and a tableau with glued-on stamps was submitted by the credit department on November 28, 1883.

It was forwarded to the Ministry of Finance on the same day.

On 9 August 1884, the printing works submitted the description of the new stamps for the purpose of publication. The Ministry of Finance then issued the new issuing regulation on 8 October 1884 under Z.28648, RGBI No.172, V.BI No.40, whereby (without changing the newspaper stamps of 1 kr and 2 kr) from 1 January 1885 onwards new stamps with the

"in the lower colored field" year 1885 were put into obsolescence. The condominium with the older issue had to last until the end of February, the exchange period until the end of April 1885. Stamps on books and blanks that were obliterated in time were not affected by the decommissioning.

As in the previous two emission regulations, with regard to the design of the stamps, only the description published for the 1879 issue is cited, and it is added that the difference between the new stamps is only the colour and the "printed" year 1885. The colours used are listed in the same order of stamp values as was done for the 1883 issue. These colours are to be named here in such a way that the first one refers to the stamp image, the second to the "background": 1 fl, 4 fl, 10 fl (blue-brown); 2 fl, 5 fl, 12 fl (green-red); 2½ fl, 6 fl, 15 fl (brown-green); 3 fl (grey-green); 7 fl (red-light grey); 20 fl (violet-orange); ½ kr, 4 kr, 12 kr, 50 kr (blue-red); 1 kr, 5 kr, 15 kr, 60 kr (green-violet); 2 kr, 7 kr, 25 kr, 75 kr (brown-blue); 3 kr, 10 kr, 36 kr, 90 kr (grey-green); calendar stamp (brown-red). These colours do not quite match the description approved by the Ministry of Finance on 14 December 1883, since the black colour appears to be replaced by grey for the 3 fl and the 3 kr to 90 kr denominations, and the yellow colour appears to be replaced by orange for the 20 fl denominations. What is even more striking, however, is that the black colour has been replaced by brown for the calendar stamp.

The coincidence that in 1885, during a discussion about how to compose a good obliterating ink that would be sensitive to the same agents that attack the printing inks of stamps, the question of the chemical constitution of these inks arose, led to a quotation by *Pecher* concerning the six inks used for copperplate printing and the seven inks used for letterpress printing.

The former were as follows: 1. *Grey*, consisting of 3½ parts zinc white, 3 parts Hamburg white, 1½ parts black and 15½ parts Milori blue; 2. *Brown*, consisting of equal parts black and Terra di Siena; 3. *Milori blue*; 4. *Green*, consisting of 28 parts silk green, 2 parts state note green and 1 part chrome yellow; 5. *Red*, Munich lacquer; 6. *Violet*, consisting of 5 parts Munich lacquer and 1 part Paris blue.

The seven colours of the natural print were: 1. *Brown*: Jacaranda; 2. *Red*: Madder Lake in pieces; 3. *Green*: Chrome green; 4. *Grey*: Black and white; 5. *Orange*: yellow ochre; 6. *Violet*: reddish brown lacquer; 7. *Blue*: Parisian blue.

If the stamps of the 1885 issue are arranged in the same way as mentioned above, in a structure consisting of four columns tapering towards the top, it becomes clear that the colour scheme is now even more extensive than in the 1883 issue. In the latter case,

the entire first column has one and the same background color. Now, in the first column from the left, as in the other three, the Kreuzer tokens have a different background color than the Gulden tokens. In the fourth column, where previously only the 20 fl denomination had its own background color, all three Gulden denominations belonging to it now have special colors.

The issuing regulations concluded with the announcement that the year 1885 would also be printed on the postmark on the "postal accompanying addresses", but that the existing stocks with the older year could be used up. At the same time, the printing works received the order (on October 8, 1884) to add the year 1885 to the postal accompanying addresses and playing card seal stamps once the existing stocks were exhausted. On the same file of the Court and State Printing Office, the following note appears on November 22, 1884: "Imprimatur sheet with 1 stamp per 5 kr and 1 stamp per 1 kr for postal accompanying addresses adopted for 1885." This was clearly an oversight, as only the 5 kr stamp was possible for these postal stationery items. The railway waybills, which knew the gradation of the stamp according to the transport distance, already had a differently designed stamp at that time. The imprimatur sheet most likely only bore the underprint with the year 1885, as the plates for the blank printing, including the black print of the postmark, remained unchanged. The need for such a special imprimatur arose from the fact that the older leaf veining with the thick ribs and the smaller digits of the year were retained even in these postal addresses.

There is not much to report about events during the existence of the 1885 issue.

A. FIRE IN THE STATE PRINTING HOUSE

On April 2, 1884, a fire broke out in the credit department on the third floor of the printing building on Singerstrasse. This gave rise to negotiations about an alternative method of storing the keys to this department. The fire had partly damaged and partly completely destroyed a considerable number of stamps that were just being produced. This damage affected a total of 82,400 sheets. Of these, 10,309 sheets were of type 24 A with stamps worth 36 kr; 10,300 sheets were No. 24 D with stamps worth 1 kr; 30,900 sheets were No. 24 B with stamps worth 5 kr; 20,600 sheets were No. 24 B with stamps worth 7 kr and 10,300 sheets were No. 24 B with stamps worth 10 kr. What was not completely burned was delivered to the Neusiedler paper factory, weighing 283½ kilograms, which crushed it and shipped it to

the weight at 3 fl per hundredweight. This memo shows the price that had to be paid for the torn edges of the stamp sheets that had to be taken back by the factory according to the contract.

B. CHROME PAPER AND GELATIN COATING

In September 1884, the Ministry of Finance heard that *before* using stamps, painters were applying a gelatin coating to them, which made it easier to remove the obliteration from the stamps and use them again. The Court and State Printing Office was therefore instructed to investigate the matter in the Institute's investigation department, where objectionable stamps were examined for authenticity and repeated use.

The technical inspector *Raimund Lauter* stated that *stamps* with a gelatin coating had not yet been produced, but that the Prague financial district directorate had objected to gelatinized postal and newspaper stamps from *Vinzenz Paseka*. This was reported to the Ministry of Finance. At the same time, *Lauter* suggested that as a remedy to the gelatinization of stamps, they should be produced on chromo paper covered with a thin layer of chalk. When the front side is wetted with water or chemicals, the chalk layer and the printing inks would come off, whereas wetting the back side would not endanger the chalk layer. At the same time, a sheet of thicker chromo paper was printed with 50 stamps of 50 kr from the 1885 issue and presented to the Ministry for inspection, and it was reported that a factory had ordered a significantly thinner chromo paper. Tests carried out with this paper would be presented soon.

5 kr stamps issued in 1883 and 50 kr stamps issued in 1885 were printed on this new paper, and *Pecher*, as head of the research department, was given these to test. His tests showed that there was no damage to the chalk layer due to moistening. He was even able to remove ink writing without damaging the chalk layer. The discoloration of the red underprint ink on the 50 kr value that occurred during this gave him the opportunity to point out that this was an ink that was susceptible to air exposure and should not be used for credit purposes. In another order, he provided such stamps with a gelatin layer and an obliteration, which he then erased without leaving any trace. This showed that chromo paper, which was considerably more expensive than normal paper, offered no advantage. With this act, *Pecher* drew *Beck's* attention back to his logwood ink, which he had used up to and including the 1881 issue and then abandoned. It seems that this change is occasionally the