Errors, Freaks and Oddities on U. S. Stamps

Question Marks in Philately

Dr. Stanley B. Segal

Bureau Issues Association, Inc.

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by

Dr. Stanley B. Segal

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Dedicated

to

Nonny, Richard, Stephanie,

Scott and Greg

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PREFACE

FREAKS and errors have been collectable items ever since the United States government had its first stamps printed by Rawdon, Wright, Hatch and Edson in 1847. In every stamp manufacturing operation there will always be a certain amount of printer's waste. This accumulated material is strictly accounted for and destroyed. Every organization that has been responsible for the production of U.S. stamps, including the Bureau of Engraving and Printing, has always been under the strictest security arrangements. It is for this reason that when some of this printer's waste is accidentally passed over a post office counter and into philatelic hands, an extremely interesting and usually quite rare and collectable freak or error has entered the philatelic realm.

A freak and error collection is in reality a study of the types of printing and perforating methods, along with the equipment being utilized to achieve normal stamp manufacture at any given time. An error, freak, and oddity collection (which hereafter will be designated as EFO) certainly shows the evolution and modernization of our production techniques that at the present time have enabled the Bureau of Engraving and Printing (BEP) to produce literally billions of multicolor stamps on mammoth presses. Each piece of equipment and production technique is responsible for different types of EFO's, and as machinery and techniques continue to change, the types of freaks and errors available to the philatelic community will change correspondingly.

In order to facilitate the continuing manufacture of the numbers of stamps required by our growing population. the BEP has continually upgraded equipment and instituted as many automated procedures as possible. This automation greatly increases the speed of production while lowering costs, but this same automation brings with it a lack of visual inspection at each juncture along the production path, and this has greatly expanded the amount of freak and error material available to the public. There is no doubt that the amount of EFO material reaching the public is actually a very small percentage of the total stamp production, but with the vast quantities of stamps being produced, a small percentage yields a large amount of material. It seems that with each new issue another major error or highly collectable freak is found.

There has been a great increase in the popularity of EFO material among the collecting fraternity. Quite a number of articles have been written about EFO material for numerous philatelic publications and the lay press as well. Unfortunately, not all of these articles are particularly factual or correct, and some of them have been downright distorted and misleading, particularly in regard to ascribed value. A lack of knowledge combined with a desire to sell newspapers has put astronomical figures on some of our more recent EFO's.

Increased publicity and interest in EFO material has brought with it a corresponding increase in value, a value which is governed entirely by the law of supply and demand. The increase in collector interest and demand has far outstripped the supply of EFO material available to the collecting fraternity. producing a substantial increase in prices. This increase in value has in itself produced greater publicity for EFO material insofar that dealers and auction houses now prominently display, advertise and merchandise this

type of material when they can get it, where only a few short years ago few would bother to handle this questionable stuff. Several of the largest auction houses now feature EFO material in their catalogues, and some even reserve sections in them for these unusual varieties.

It would be interesting to plot a value graph for certain freaks and errors over the past ten years. A freak retailing for $2 ten years ago is now in the $10-$20 price range, and at the present time values are going only one way—straight up. Unfortunately, when there is money to be made, certain unscrupulous or at least misinformed dealers and collectors will put outlandish prices and values on their stamps, and when misinformed dealers are selling their wares to equally misinformed collectors, someone is sure to get his fingers burned. Many ads have appeared in the philatelic press advertising quite ordinary freaks and errors at quite unrealistic prices, and this by supposedly informed, reputable dealers whose names alone lend an aura of respectability to the product, a respectability far in excess of its true value. In this book we will make no attempt to put a value on a specific freak or error, as no matter how accurately this may be accomplished, the passage of time will completely alter the evaluation. Let it suffice to say that the value of a particular freak or error is the one decided upon between an informed seller and an informed buyer, and the main purpose of this treatise is to provide some of their information.

We intend to provide our readers with a general knowledge of the nature of freaks and errors, to discuss how each type of EFO occurs during the manufacturing cycle, and to describe the different types of equipment that produce our recent and contemporary stamps. This book will most likely be outdated by the time of publication, or shortly thereafter. The author would appreciate being advised of new discoveries of older varieties inadvertently left out of this book, plus new varieties found after publication. Should reader interest warrant, a catalogue of known freaks and errors is contemplated as a future endeavor. The author may be reached through the offices of the Bureau Issues Association.

STANLEY B. SEGAL

New York, New York
Dec. 1, 1978

INVERTS

Figures 1-4

Fig. 1. Inverts of the 1869 issue.

THE most popular and most desirable of all errors produced are the inverts. These rarities can only occur on multicolored stamps when a sheet is reversed in the press for one press run, producing an inverted image of one of the components of the design. The famous 24c airmail invert, of which but one sheet of 100 stamps was issued, so far as is known, is probably the best known U.S. error. Its continued rise in catalogue valuation proclaims its desirability. When a stamp is printed in more than one press run, the possibility of an invert exists. The Bureau of Engraving and Printing has taken elaborate precautions to reduce the possibility of an invert occurring, by installing complex and sensitive electronic equipment. In 1962, the Dag Hammarskjöld stamp was found with the yellow color inverted. Unfortunately, these legitimate error stamps were reprinted (by the Bureau) to reduce the value of the inverted panes that had been found. As long as multiple press runs are utilized to produce multicolored stamps, the possibility of additional inverts exists.

The U.S. 1869 issue was printed by the National Bank Note Company, and the 15c type II, the 24c and 30c values are known with inverted centers. Actually it is not the centers that are inverted but rather the frames, as the centers were printed first. In order to print a bicolor stamp two separate passes through the presses were neces-

Fig. 2. Invert of the 24c airmail stamp.

sary. This procedure usually was a two-person operation, with the printer inking and wiping the plates, and an assistant laying down and removing the printing paper. In the case of the inverts, the sheet printed on the second press run was put down on the plate inverted, so that the vignette appears reversed in relation to the frame

Fig. 3. 1869 issue proofs deliberately inverted.

1869 Issue — Proofs

Inverted Centers

The three known inverted centers plus the 90-cent value of this issue were deliberately reprinted as proofs on cardboard. The 15-cent value proof, however, is type III, not the type II as found on the actual inverts. The 90c Lincoln proof with frame inverted was never discovered among the normally issued stamps.

Pan-American Inverts

The Pan-American issue of 1901 was the first try at printing bicolor postage stamps by the Bureau of Engraving and Printing. These stamps were also printed in two separate press runs with the vignettes or centers printed on the first press and the frames on the second press run. Inverts exist on the 1c, 2c, and 4c values, but only the 1c and 2c inverts were ever sold over a post office counter. The 4c invert was deliberately printed by the Bureau. It was erroneously reported that the four-cent stamp had been discovered inverted and the Bureau decided to print two similar sheets, a total of 400 stamps, for their own purposes. These stamps were given to the Third Assistant Postmaster General, Edwin Madden. Some of these stamps were overprinted "Specimen," a sheet of 100 went into the Post Office Department files, and 194 copies were destroyed. Many of the stamps were given away, and in 1916-17 the sheet of 100 kept by the Smithsonian was broken up and traded to collectors and dealers in exchange for material that the Government needed for its own collection.

Fig. 4. Pan-American issue inverts.

MISPERFORATIONS

Figures 5-11

PERFORATION varieties are among the more common types of freaks. They can assume different shapes and forms and are very popular among collectors. They can be found on examples of our earliest perforated stamps right up to current issues.

Change-of-Design Misperforations

Misperfs are most desired by collectors when they "change the design," when the perforations are shifted in such a manner that the denomination or inscriptions appear misplaced in relation to the rest of the stamp. It is possible to find perfect change-of-design misperfs, in which the freak appears to be completely normal until compared with the actual stamp as printed.

Horizontal Misperforations, Vertical Misperforations, Two-Way Misperforations

Misperfs can be simple or complex. The horizontal or vertical perforations may be shifted into the design of the stamp. Less frequently both the horizontal and vertical perforations will be shifted in relation to the design—a two-way misperf.

Diagonal Misperforations

During the perforating operation a sheet may be twisted so that the perforations run diagonally through the design. Diagonal misperfs are usually quite striking, and stamps on the pane usually vary from near normal to spectacular.

Cross-Gutter Misperforations

The most desirable misperforation freaks have the perforations shifted to include the gutter space normally found between stamps, plus the design from the stamp across the gutter (from the adjoining pane). These rare misperfs are known as cross-gutter misperfs, and to the informed EFO collector most desirable, as they are the most difficult to obtain.

Margin Copies

Depending upon the direction of the perforation shift, a portion of the selvedge may appear inside the perforations replacing a portion of the normal design.

Marginal markings may be incorporated and become part of the stamp design. It is possible to find misperforated stamps with the plate number, "Mail Early" or "Mr. Zip" symbol inside the perforations.

Wide and Narrow Misperfs

Misperfs can be found in many odd and unusual shapes and forms. On most perforating equipment the pin wheels are adjustable and can be locked into different positions to accommodate the size of the stamp being perforated. This flexibility enables the Bureau to perforate different sized stamps on the same equipment without having to resort to elaborate and expensive changes. On rare occasions the pin wheels can become loose and shift their position during a run. Depending upon the degree of slippage of the pin wheels wide and narrow stamps can be produced. I have seen panes of stamps in which only the outside row has been affected, and others in which the wide and narrow stamps exist in combination with each other.

Fig. 5A. "Change of design" misperfs.

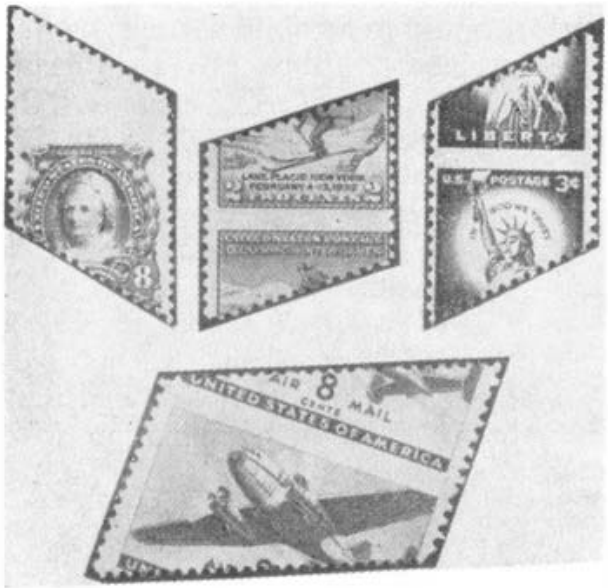


Fig. 7. Diagonal misperfs.

Fig. 5. "Two-way" misperfs.

Fig. 6. "Two way" misperfs.

Fig. 10. Margin copy misperf with plate number inside the perforations.

Fig. 8. Cross-gutter misperfs.

Fig. 9. Margin copy misperfs with plate numbers and other selvedge markings incorporated into the designs.

Fig. 11. Vertical perforating pinwheels that had not yet moved into proper position caused these wide and narrow stamps.

CRAZY PERFS

Figures 12-13

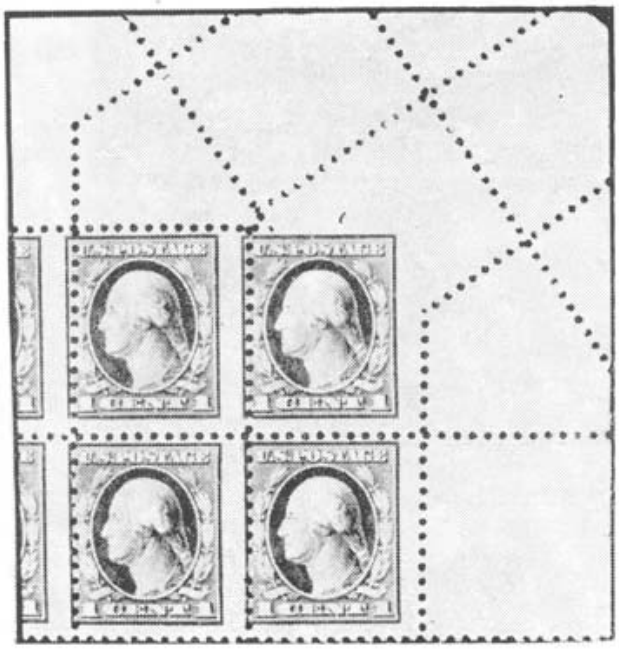


Fig. 12. "Crazy perfs".

Fig. 13. Crazy perfs on a rotary press product (3c Presidential) resulting from a tear and folding-over of the paper web after printing but prior to perforating.

DURING the perforating operation, a sheet may be folded over, causing the perforations to run through part of the sheet in an irregular pattern. This type of perforation variety is known as "crazy perfs". One just has to see such an example to realize how they were named. Most crazy perfs are found on stamps that have been perforated in individual sheet form, where the folding-over of a corner can occur. Modern stamps printed on a webfed rotary press and perforated in the roll form are infrequently found with crazy perfs, because the web has to be torn in order for the fold to occur. Crazy perf freaks on continuous-web-produced stamps are quite desirable.

DOUBLE PERFS

Figures 14-15

Fig. 14. Double perfs on the Wildlife Conservation issue—blocks from the lower right corner of the left pane and the lower left corner of the matching right pane.

A recent addition to the field of freaks are double perf varieties in which a sheet has been fed through one of the legs of the "L" perforator a second time. This type of freak has been discovered on a few modern stamps. Double perfs on 19th century stamps are quite often reported and command little interest. At that time, perforating was done by hand and the operator could stop and start again, completely ignoring the first set of perfs, when the initial effort was incomplete or off-centered. The primary interest was to save the sheets rather than waste them, and little thought was given to the varieties created.

Fig. 15. Double perfs on the Emily Dickinson stamp with the horizontal gutter space perfs appearing in their normal position between panes.

IMPERFORATES

Figures 16-19

SOME issues, normally perforated, have occasionally been found in some form of imperforate condition. This can vary from just one or two perf holes missing between rows to an entire sheet being imperforate. Imperforates may be caused by different malfunctions of the equipment or by the procedures and techniques involved in stamp production.

Our earliest United States stamps were issued imperforate. The inconvenience of having to cut or tear single stamps from the pane in order to use them on letters quickly became apparent, and in order to facilitate the use of stamps, perforations were added to the sheets. With the advent of perforations a new type of variety became available to the public—imperforates. Stamps that under normal circumstances should have been fully perforated were found missing rows of perforations or completely imperforate. At the beginning these varieties were not considered significant. Several of our early imperforate between errors (a pair of stamps perforated completely around with no perforations down the center) came about when a sheet of stamps was perforated one row off. The normally imperforate row in the center of the sheet was now shifted either one row to the right or to the left. Subsequently when the sheet was separated into post office panes, this normally imperforate margin between panes was missed in dividing, resulting in imperforate between pairs.

19th Century Single Stamp Imperforates

Many of our earlier stamps are found in seemingly imperforate or part perforate condition. The catalogue lists many of these errors and they are quite desirable acquisitions when in pairs or blocks. Single copies of these issues, however large the margins appear to be, should be considered as only curiosities or reference material, as they can easily be made by trimming wide-margined or straight-edged copies of the normally perforated stamp.

Fig. 16. 19th century imperforate error pair.

1869 — 15c Reissue Imperforate Horizontally

The 1869 - 15c Reissue was found in a sheet of 100 missing all the horizontal perforations. The frugal clerk who found the stamps simply cut them up and sold them. Obviously the error did not impress him or his customers. There are no known pairs in existence but in this particular case single copies imperforate horizontally have been expertized as their history is well documented.

We will make no attempt to list all of the imperforate errors as standard catalogues cover that ground very well. However, since imperforates are so popular with collectors, a partial history of some of the outstanding ones is certainly in order.

Fig. 17. 2c Columbian imperforate error pair.

1893 Columbian Series — Imperforate

The 1893 Columbian issue was printed by the American Bank Note Company. The B.K. Miller Collection at the New York Public Library on 42nd Street contains a complete set of horizontal pairs completely imperforate. These varieties are not recognized by the catalogues because they were never sold over a post office counter. The Columbian pairs had been presented to John Wanamaker, who was Postmaster General at the time of issue, and in time found their way into the Miller Collection. In spite of the fact that they do not merit catalogue recognition, many collectors would pay a small fortune to own them.

2c Columbian — Imperforate

The 2c Columbian stamp is catalogue-listed in a completely imperforate condition. These stamps are found in very poor condition, creased and stained and with no gum. It is thought that they were recovered from paper scrap sold by the American Bank Note Company to waste paper dealers. These imperforates were never sold over a post office counter, but for some reason they have been afforded catalogue recognition.

Bureau Issue of 1895 — Imperforate

The series of 1895 is also known completely imperforate. These stamps also were never purchased over a post office counter, but interestingly enough they were in a way purchased from the Post Office Department. The Bureau of Engraving and Printing had just taken over the production of U.S. stamps from the American Bank Note Company. Gilbert Jones, one of the owners of the New York *Times*, aided and advised the Bureau in setting up their operation. This service was provided by Mr. Jones gratuitously, and as a reward he was allowed to purchase normally perforated stamps of all denominations available at the post office and trade them in on similar amounts of imperforate stock provided by the Bureau. In spite of their clouded history, these imperforates are quite desirable and command high prices when available.

8c Trans-Mississippi

The 8c stamp of the Trans-Mississippi issue exists imperforate horizontally. This is the first commemorative stamp error of this kind and probably the most desirable. The stamp was perforated in two passes through a perforating machine, and the sheet in question simply missed the second pass through the perforator. The history of this pane of 50 is well known. The pane was discovered in the Philadelphia main post office "between the wrapping paper of a bundle of stamps" by Robert Watts. a postal clerk. Being an enterprising chap, he sold it for double face to a Mr. Levin, a Philadelphia locksmith. Needless to say, with each subsequent sale of pairs and blocks the price increased. Just note the value

Fig. 18. 8c Trans-Mississippi imperforate horizontally pair.

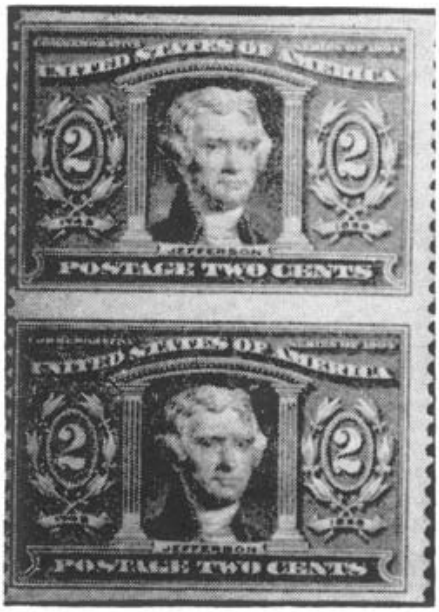


Fig. 19. 2c Lousiana Purchase imperforate horizontally pair.

given this error by our modern cataloguers.

2c Louisiana Purchase 1904

The 2c stamp of the Louisiana Purchase Series, issued April 30, 1904, was found in a pane of 50, imperforate horizontally. The history of this pane is not as well documented as that of the 8c Trans-Mississippi error. The pane was from the right side of plate 215, and is the only one known. Being the second commemorative issue found imperforate, these horizontally imperforate pairs are avidly sought if and when they appear at auction and command a tremendous premium.

THE ELECTRIC EYE ROTARY PERFORATOR AND ITS ABERRATIONS

Figures 20-32A

IN the 1930's the Bureau started producing great quantities of stamps on web-fed rotary presses. This was a tremendous improvement over flat plate printing as many more stamps could be printed in a given amount of time than before.

Web perforating started about 1920 for sheet stamps. In the mid-thirties, the electric eye rotary perforator was set up.

Perforation holes are made by sets of matching pin-and-die wheels appropriately mounted on shafts. On the electric eye perforator the vertical perforations are placed first by several wheels which are adjustable in number and position depending upon the size of the stamps being perforated. The horizontal perforations are placed by a large roller equipped with several rows of horizontal pins that run the length of the roller, with each row separated from one another by a distance wide enough to accommodate the size of the stamps being perforated. There are two or more electric eye devices that pick up on the electric eye markings printed on the paper web to keep all perforations where they belong. The last horizontal roller on the perforator is actually a knife which severs the web into sheets, which are then "counted" into stacks of 100 prior to being guillotined into post office size panes in a separate operation.

The perforating devices are set so that each perforates the same row over and over as each stamp-plate impression on the web is perforated. Each set of perforating pins and counterpins falls on the same position of each segment passing through them.

Part Perfs

A very interesting type of freak can be found on definitive-size stamps that were perforated between November 1942 and April 1944. Pins on the horizontal roller of the electric eye rotary perforator either became worn or broken. One must remember that these were war years and that proper repair and maintenance of the equipment at the Bureau was difficult.

There are three major constant varieties found on the Presidentials, the Defense issue, and some of our savings stamps perforated at this time. These appear as vertical pairs with only three or four perforations between pairs. The configuration of the perfs is always the same along with their position on the pane. Shown are some examples of these part perf freaks. The variety with four perforations spaced ". . . ." is found on the lower left panes between stamp #71 and 81. There are two different three-perforation varieties. One of these varieties spaced ". . ." can be found on upper right panes between stamps #71 and 81. The other three-perf hole variety spaced ". . ." can be found on lower left panes between stamps #61 and 71. As repeating varieties they are of special interest, and perhaps can be found on all of the rotary press Presidential denominations.

In order to determine when these freaks were produced at the Bureau, one has to find the variety in combination with the plate number of the pane. Then by researching the "to press" and "canceled" dates of the plate, one can narrow down the period of time involved when these particular break-

Fig. 20. Presidential part perfs variety ". . ." from upper right panes between stamps 71 and 81. (On the 10c stamp an extra perforation hole to the left demonstrates the continual breakdown of perforating pins to make this variety.)

Fig. 21. Presidential part perfs variety ". . ." from lower left panes between stamps 61 and 71.

Fig. 22. Four perforation holes between vertical pairs of Presidential stamps ". . . .".

downs of the perforating equipment occurred.

It is also possible to find examples of these varieties with an extra perf hole or two in combination with the part perf examples discussed. These illustrate the progressive nature of the perforating pin breakdowns.

Imperforate Between

The improper functioning of one perforating wheel can cause a sheet to be perforated with one row of perforations partially or completely missing. An example of this type of malfunction can be commonly found on the 1½c Presidential and the 1 - 2 - 3c National Defense series, which are found with horizontal pairs imperforate between. Pairs can be found with only *one* perforation hole between, but these are considered freaks, of very nominal value. The pairs completely missing the perforations between are major errors, but since so many have been found they too, are of nominal value. This type of error appears as a pair of stamps, completely perforated around the perimeter and completely imperforate between.

Fig. 23. Waterfowl Conservation issue, vertical pairs imperf between.

Blind Perfs

The improper functioning of a perforation wheel may result in blind perfs, when the perforations have indented or cut the paper but have not broken through. Blind perfs are freaks. It is important when examining imperforate items to be certain that they are not examples of blind perfs. Many imperforate between errors exist as both blind perf and imperforate varieties, often on the same pane. The Grandma Moses stamp imperforate between is a good example of such a variety. If the imperforate condition occurs between a stamp and the marginal selvedge (not between stamps), we have a desirable freak, which should not be considered equal in value to an imperforate between pair.

Horizontal Imperf, Vertical Imperf, Completely Imperforate

There are three types of imperforate errors. Some of our older and modern sheet-fed stamps required two passes through the perforating equipment to complete the horizontal and vertical perforations. If one of these passes is missed we have a major error, imperforate vertically or imperforate horizontally depending upon the format of the stamp. If both passes are missed a completely imperforate major error results. A number of our recent commemoratives have been found imperforate either vertically or horizontally and these are quite desirable additions to any collection. At the present time this type of error has been found on the 6c Walt Disney, 8c George Gershwin, 8c Robinson Jeffers, 8c Willa Cather, 8c Lyndon Johnson, and the 10c Lexington and Concord Bicentennial stamps.

Completely Imperforate

In the past few years stamps produced on the nine-color Huck press and the Andreotti press have been found completely imperforate. In these cases, the perforating unit on the press had not yet been engaged, usually at the start of a press run. The first few "make-ready" sheets through the press were not perforated. These stamps

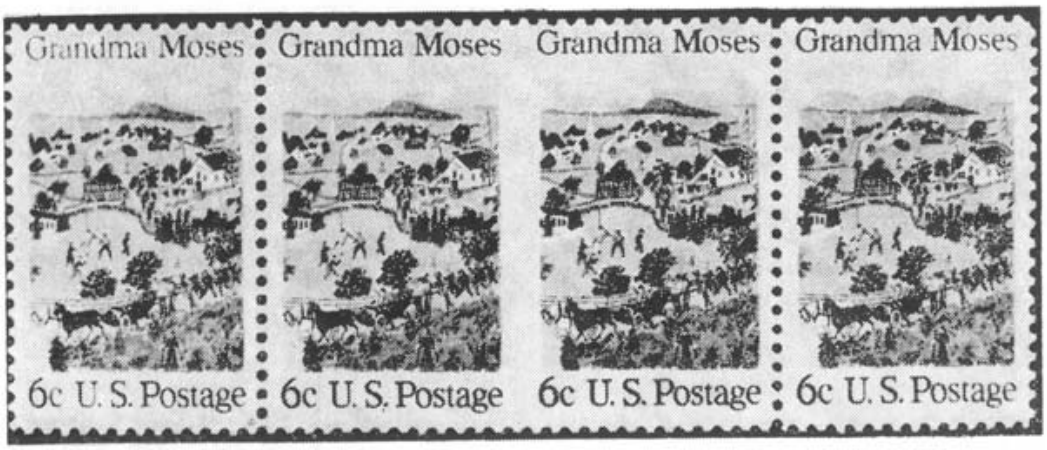


Fig. 24. Grandma Moses issue, horizontal pair imperf between.

Fig. 25. 1½c Presidential block of four, horizontal pairs imperf between.

Fig. 27. Wisconsin issue, imperf vertically pair.

Fig. 26. Completely imperf pair, von Steuben issue.

Fig. 28. Wisconsin issue, imperf horizontally pair.

should have been destroyed as waste, but were inadvertently issued. The imperforate Christmas issues are examples of such errors.

Imperforate Between

The perforating unit on the nine-color Huck press is responsible for imperforate between errors. This press is used to produce both regular and commemorative size stamps and the perforating unit, which is an integral part of the press, is adaptable for either size. By retracting alternate rows of the horizontal perforations, both size stamps can be perforated by the same perforating unit. On some regular size stamps the commemorative perforating setting was used on the perforating unit, resulting in imperforate between regular issue-sized stamps.

Imperforate Coils

Some of our most common imperforates can be found on coil stamps. In these cases the stamps are not perforated on the presses but are fed into coiling equipment in an imperforate condition. The coiling equipment perforates them, slices the sheets, counts them, and finally rolls and packages them. This equipment is so totally automatic that little visual control is utilized. A number of non-perforated segments have gone undetected so that a great number of imperforate coils have been counted, packaged, and disseminated to the public. Almost every modern coil stamp has been found imperforate, many of them in such large quantities that their value is quite nominal considering that they are major errors. A few of our modern coils, however, are extremely rare with less than 20 pairs known, and these errors merit high catalogue values and command much higher prices than the more common imperf coils. Our rarest modern imperforate coil is found on the 1c green Washington issue of 1954. Imperforate coil line pairs are quite desirable even on the more common varieties,

Fig. 29. Imperforate coils.

and as such have more value than the ordinary imperfs.

Combination Perforating Errors

One of the more interesting aspects of collecting EFO's is that not every type of freak or error can be easily categorized. Many mishaps can occur during the production of a stamp, resulting in unique combinations of freaks and errors being found on the same pane. The upper left pane, plate

number 16269, of the 2c carmine stamp, perforated 11, unwatermarked, released Jan. 15, 1923, illustrates just such a case. This stamp was flat plate printed in sheets of four hundred, and in this case the upper left pane was torn and twisted during the perforating operation. The sheet was at this time retrieved by a plate printer and an on-the-spot repair was fabricated using Kraft paper tape on the reverse side. The sheet was then hand-cut into its four component panes of 100 stamps each, and by some strange quirk the upper left pane escaped the confines of the Bureau.

The pane has ten rows of "horizontal" perforations running diagonally through approximately the first six vertical rows of stamps. There are no vertical perforations because the sheet was caught before this stage and the paste-up repair made. What initially appear to be vertical misperfs are in reality imperforate vertically errors, but with freak horizontal perforations, a combination freak and error variety. The remainder of the pane appears completely imperforate, and this part of the pane also presents a problem to the collector, as the stamp itself was normally issued in an imperforate condition. A check of the plate numbers utilized in printing the imperforate stamps reveals that plate 16269 was never used to print them. As long as the imperforate stamps remain as part of the pane they have to be considered as major errors, but if removed there would be no way to differentiate between them and normally produced imperforate stamps of this issue. The pane does not fit neatly into any one category discussed in this book. Unique items such as these add to the spice and excitement of an EFO collection.

Misperfed Coils

The same conditions that have made imperforate coil pairs one of our most commonly found errors, have placed

Fig. 31. Misperfed coils.

the misperfed coil in the same position among perforation freaks. It is not uncommon to find a packaged roll of 3,000 stamps misperfed.

Imperforate Booklets

Booklet pane stamps are produced in large sheets which are subsequently perforated. Depending upon the format of the stamp, either the horizontal or vertical perforations are omitted from alternate rows. Under normal conditions, the booklets are separated into panes by a guillotine cut through these imperforate spaces. A sheet may be folded prior to this separation, so that the cut creates an imperforate be-

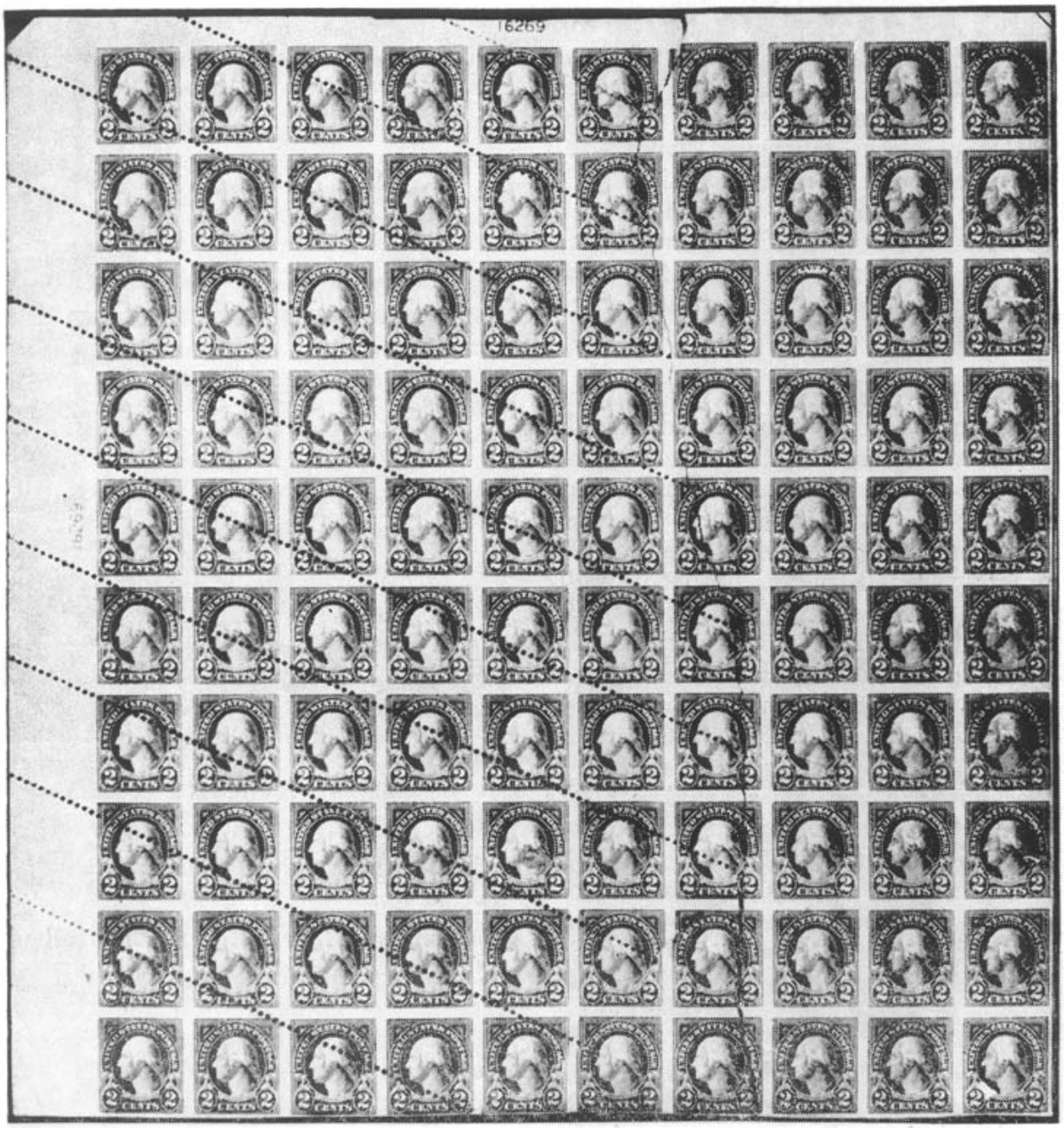


Fig. 30. Front of 2c 1923 pane with combination printing errors.

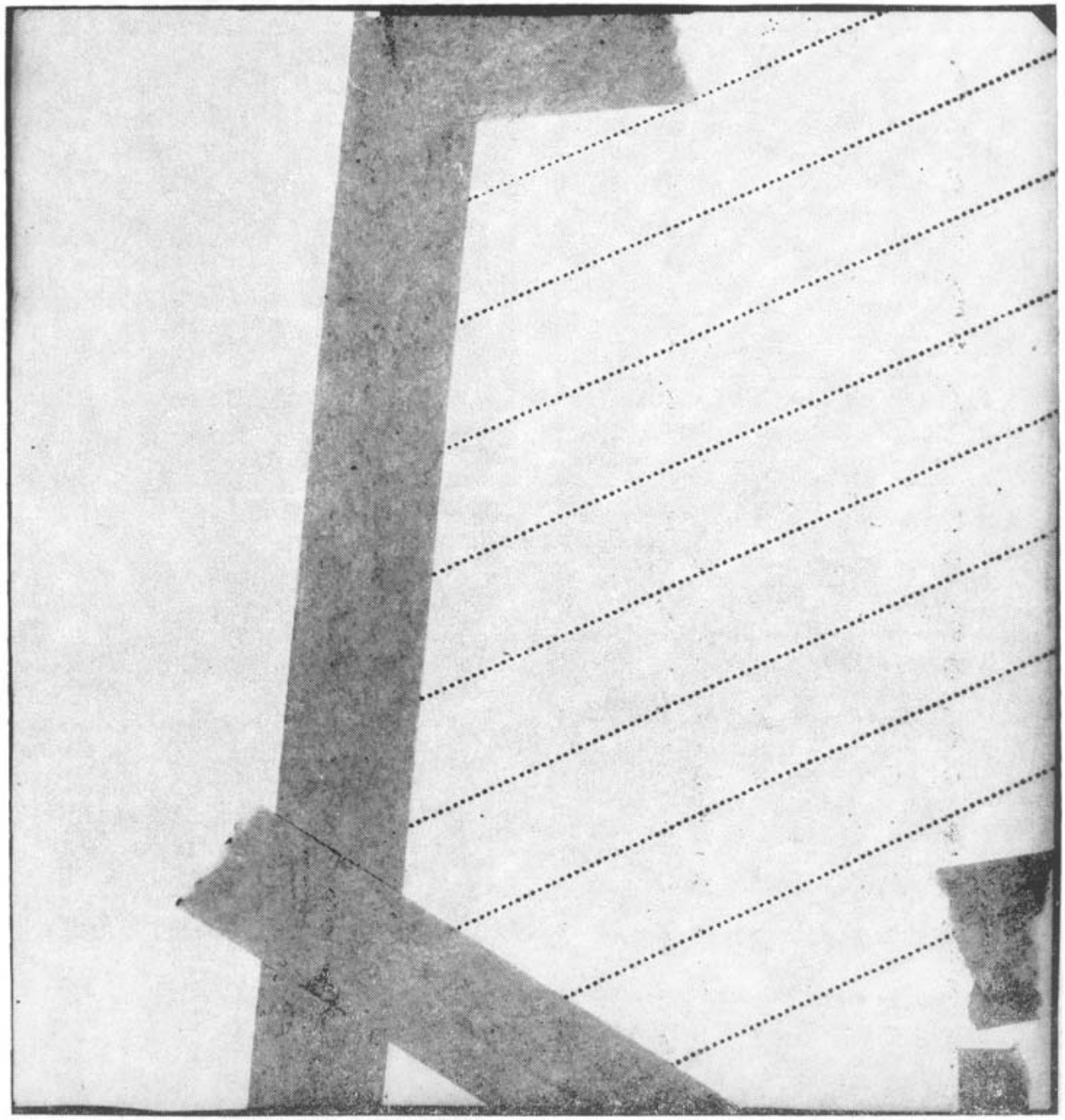


Fig. 30. Back of 2c 1923 pane with combination printing errors.

tween pair within the irregularly cut booklet pane. This type of imperforate between error is quite rare and desirable and is considered a major error. If a foldover produces an incomplete pair imperforate between, this variety is considered a freak.

Fig. 32. Booklet panes imperf between.

Fig. 32A. 5c Washington booklet pane that was folded over twice before the sheet was sectioned into individual panes. It consists of a full pane plus parts of two others, including two imperf between the stamp and Zip message varieties on the top row.

MISREGISTRATIONS

Figures 33-39A

NEW production techniques have led to a great increase in the number of misregistrations reaching the collector. Most of our modern commemoratives are being produced by a combination of presses and require several passes to complete the design. In order for these stamps to be properly printed, the sheets have to be exactly aligned for each press run. Should a sheet be misaligned for any of these press runs, a portion of the design will appear in an improper position on the stamp. This type of freak is known as a misregistration, and many wild and interesting varieties have been found. Shifts of 8-10mm have been found on some of our commemoratives; the magnitude of these shifts produces quite collectable and desirable freaks worthy, in some cases, of quite a high premium. As a general rule, the greater the degree of misregistration the greater the value.

Fig. 33. Misregistration (Marquette issue) of intaglio portion of design; offset portion properly centered inside perforations.

Fig. 34. Misregistration (Magsaysay issue) on Giori press stamp; "Champion of Liberty" shifted so that it appears at bottom of one stamp and is missing from the bottom margin copy.

Fig. 35. Misregistration of intaglio portion of design; "Boston Tea Party" inscription appears twice on bottom stamp but is missing from the top stamp of the pair.

Some of our modern stamps produced on a single web-fed press have also been found misregistered. In these cases, even though the web does not have to be fed into different presses, misregistrations have occurred. These stamps are printed from a number of cylinders, each one responsible for a separate color and separate portion of the design. At times the synchronization between these printing rollers is

Fig. 36. Misregistration (John Sloane issue) with intaglio portion of design out of register horizontally and vertically. The "8 cents" is missing from the bottom stamp. It and the inscription on the top stamp actually belong across the vertical gutter on the stamp on the right pane.

Fig. 37. Misregistration (Kossuth issue) with plate number shifted into the lower right stamp.

disturbed so that the printed stamps show some degree of misregistration, even though they were printed in only one press run.

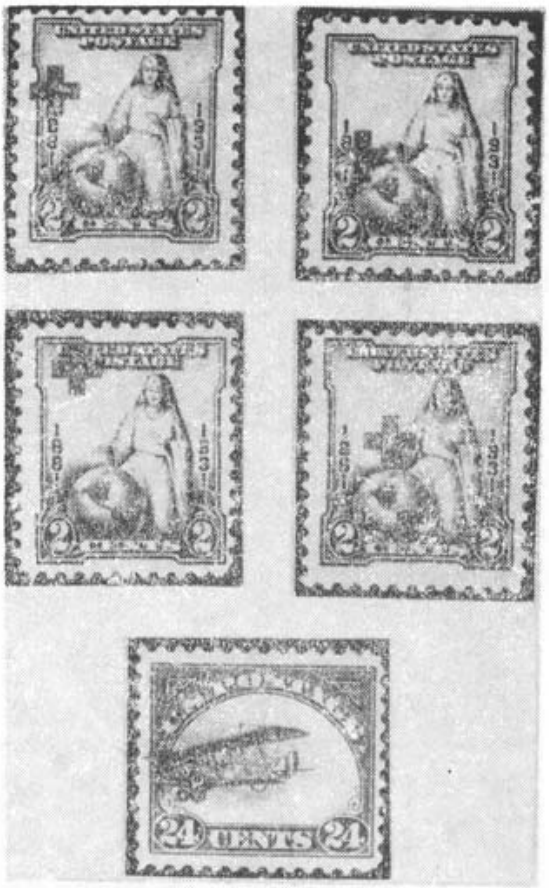


Fig. 38. Flat plate press misregistrations, with the plane on the 24c airmail "flying" through the left frame and the Red Cross stamps with varying positions of the crosses.

Misfeeds, Wet Printing Shrinkage

Some of our earlier bicolor stamps have been found with their centers or vignettes shifted in relation to the frame. This type of misregistration can be caused by a misfeed during one of the press runs, or by the uneven shrinkage of the moistened paper used to print our earliest stamps. In fact uneven shrinkage of moistened paper necessitated a change in the spacing of the stamps on the Yorktown issue of 1932, producing two different stamps worthy of catalogue recognition. Shown is a plate block of this issue demonstrating a progressive misregistration of the vignettes due to uneven paper shrinkage. This is a very desirable

Fig. 39. Misregistered plate block, Yorktown issue. The stamps on the right are severely misregistered, while those on the left are nearly normal as a result of uneven paper shrinkage of the wet-printed flat plate product.

Fig. 39A. 24c airmail stamp with the "grounded plane" flat plate misregistration variety.

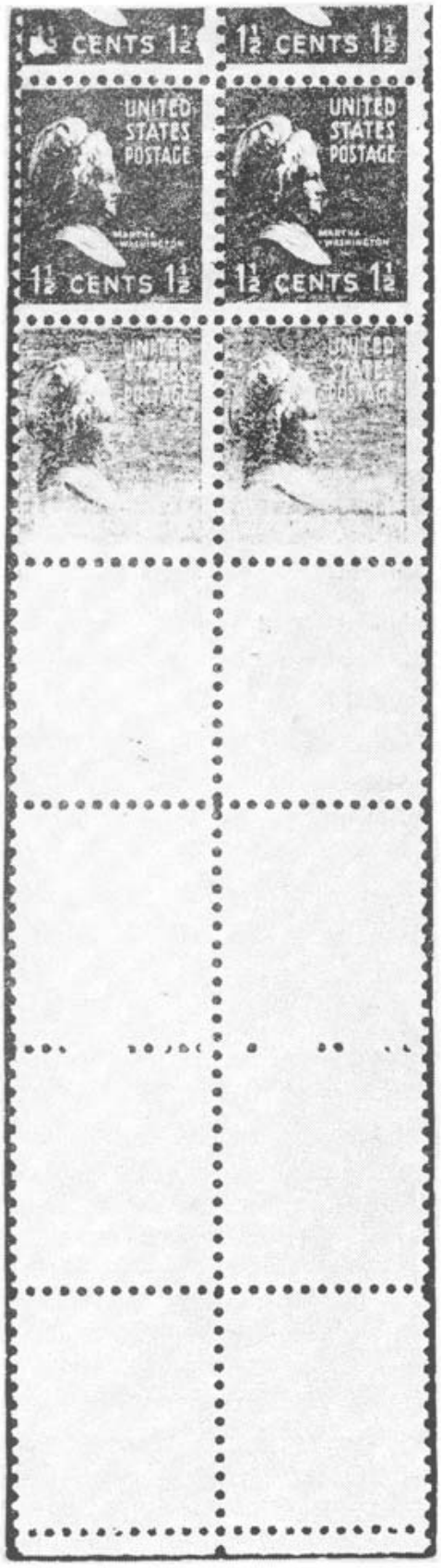
item as it clearly demonstrates the connection between production techniques and freaks encountered. The Yorktown stamp required two press runs, and the sheets had to be dampened twice.

COLOR ERRORS

THE $5.00 Presidential Issue (1938 series) is known in a red brown and black shade instead of the normal carmine and black. This error came about when the carmine ink was contaminated during the printing by "lamp black," and the error has been authenticated by the Bureau of Engraving and Printing. The catalogue value of this error is quite high, so proper expertization is an absolute requisite when a purchase is considered, as this error can be made by exposing normal stamps to hydrogen sulfide.

SMEARED AND DRY PRINTINGS

Figures 40-41



A printing plate can be overinked or underinked. A heavily overinked plate can produce a smeared stamp with the image practically unrecognizable. By the same token an improperly inked plate may produce a dry printed stamp that may also be unrecognizable. The controls necessary to properly ink the plate are finely tuned. Wiping pressure, improper adjustments and improperly prepared inks can all account for over and underinked stamps. When something goes amiss in the printing cycle we often find both dry prints and overinked smeared prints on the same sheet. Our earlier rotary press stamps were printed on pre-dampened paper (wet printed). On these stamps smears and dry printings are more prevalent than on the subsequent rotary press stamps, printed on dry paper, utilizing newer presses and greater pressures. Our more recent issues show very few examples of smeared or dry prints. As printing techniques have become more sophisticated there has been a corresponding decrease in the smeared and dry print varieties available to the public.

Photo courtesy of Marvin Frey, New York.

Fig. 41. Blank and dry printed stamps in combination with normally printed stamps on a 1½c Presidential block of 12. This type of freak can occur at the start of a press run when the printing cylinder and the web are not properly engaged.

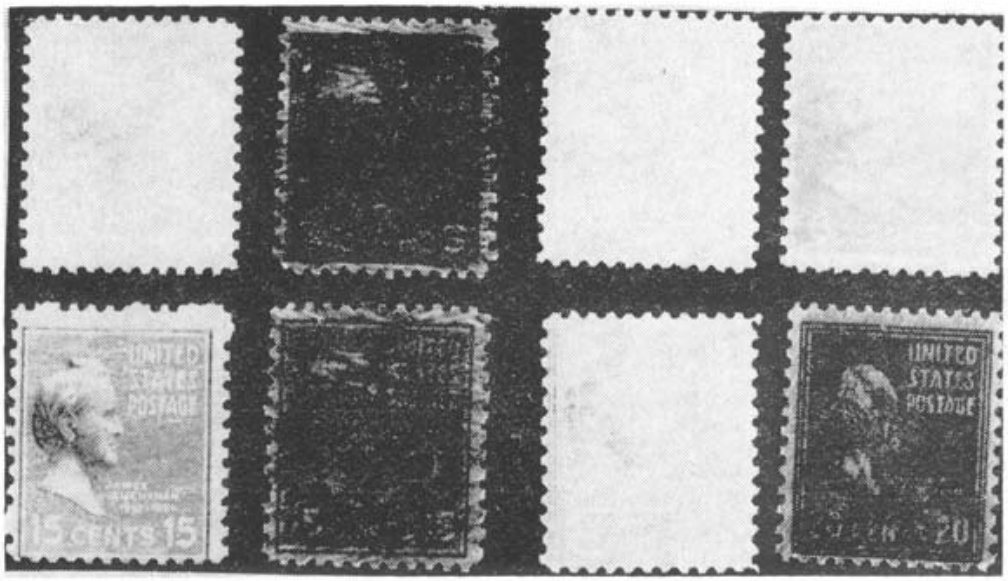


Fig. 40. Dry and smeared prints respectively of the 3c, 6c, 15c and 20c Presidentials.

BUREAU ISSUES ASSOCIATION 1930
INCORPORATED 1938
P.P.N.A. 1926
KNOW YOUR COUNTRY'S STAMPS

Fig. 42. 5c carmine error in a block of nine.

Fig. 43. 5c carmine error double in a block of 12.

STAMPS PRINTED IN THE WRONG COLOR

Figures 42-43

VERY few U.S. stamps have been printed in the wrong color. The most famous of these occurs on three stamps printed from the same plate. Plate number 7942, a plate of 400 subjects, was used to print the 2c carmine stamp issued in 1917. Defects were corrected in three positions on this plate, but a five-cent transfer roll was used instead of a two-cent transfer roll. (It should be noted that the reversed image of the five-cent looks very similar to the image of the two-cent.) About 50,000 sheets were printed, each containing three errors. These error sheets were delivered to the public in three forms, perforated 10, perforated 11, and imperforate, resulting in three different catalogue-listed errors from the same source.

The 4c Columbian issue was found printed in blue instead of ultramarine, one of the few known errors of color where the wrong color ink was used in printing the stamps. These error stamps are among the most desirable in U.S. philately.

There are other color errors listed in the catalogues. These are usually cases where lake has been substituted for carmine. In certain cases these varieties are given a separate catalogue number, while in other cases they are considered just varieties of the issue. It is interesting to note that through the judicious use of certain chemicals or heat, carmine can be turned into lake, long after the stamps have left the Bureau.

MISSING COLORS

NEW production techniques that have resulted in our modern misregistrations are also responsible for "missing colors". The only missing color error found prior to the 1965 Florida commemorative (missing the yellow color) was on the Red Cross issue of 1932. On the latter stamp the lower left corner of the sheet was folded over during the second press run. The red cross was printed on the back of the sheet, producing a missing color variety on the front. Each of the presses used to produce our modern multicolor stamps has been responsible for at least one missing color error.

For a stamp to be considered as a missing color major error all of the color printed from an individual cylinder or plate must be missing, down to the last dot.

COLORS REVERSED

Almost unusual variety also occurs on the 1968 Christmas stamp. The light yellow and dark yellow inks were purposely switched in the ink wells during the production run of this stamp. A fair percentage of sheets can be found with the two yellows reversed on each stamp. This is a distinct variety, easily seen, and it is surprising that this unusual variety has created little or no demand among collectors and has been completely ignored by our cataloguers. Imagine what would have happened if the blue and red colors had been switched!

A complete collection of color varieties and color errors requires diligent research and effort on the part of the collector. Even our cataloguers cannot always decide how to classify color varieties and errors, and in certain cases don't recognize legitimate varieties (for reasons known only to themselves). Sources of information for the collector of color varieties and errors regarding value and classification include periodicals published by stamp societies, reliable public auction catalogues with their prices realized, and specialized catalogues, which unfortunately are few and far between.

Double Sheeting

The most common cause for a color omission is double sheeting. When two sheets go through the press at the same time, the doubled sheet does not come into contact with the printing plate. If this occurs on the Giori component of the press run, the intaglio impression is slightly impressed into the paper, indicating that the sheet went through the press.

Dry Ink Well

Another cause of missing colors may have occurred on the 1968 Christmas stamp (missing the yellow color). In this case the yellow ink well may have run dry during the press run. The error was not noticed because the missing yellow error appears quite similar to the normally printed stamp.

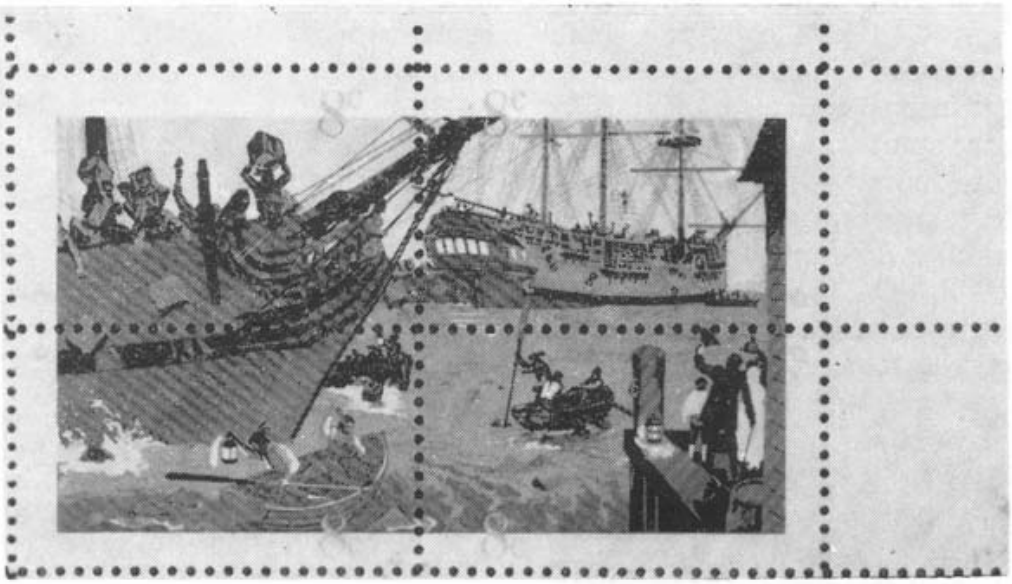
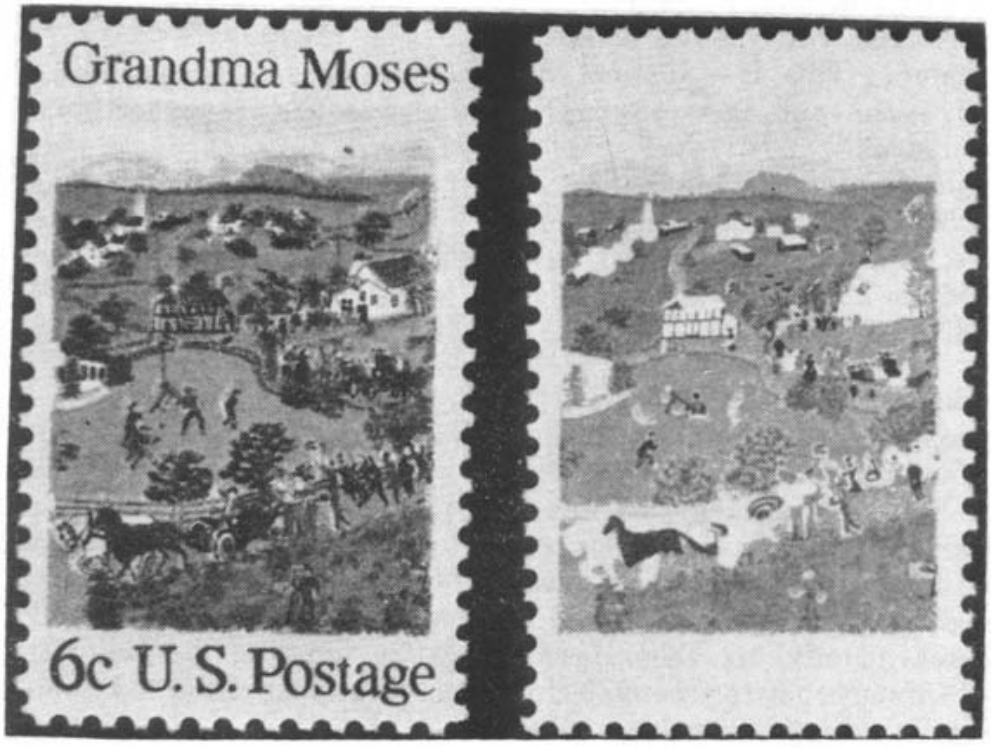


Fig. 44. Missing colors—the intaglio portion of the design—on the Boston Tea Party and Grandma Moses stamps are missing due to double sheeting.



IMPROPER CYLINDER ADJUSTMENT

Figures 44-44A

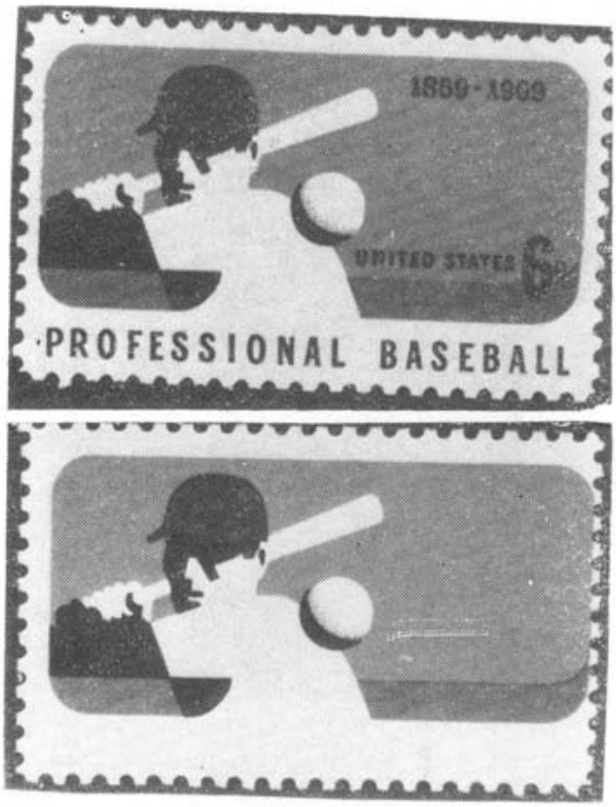


Fig. 44A. Missing colors—the intaglio portion of the design—on the Baseball stamp.

On stamps printed by multi-cylinder presses, the Andreotti, two-color Harris offset, the nine-color Huck, and the web 8-color gravure/intaglio, a color can be omitted when one of the cylinders is not properly engaged and in contact with the paper. This variety of color omission can be found on several of our Andreotti press-printed Christmas stamps. When stamps are printed on the Andreotti, a stoppage of the press disengages the printing cylinders from the paper (so that the ink will not cake and dry and rip the web when the press is restarted). The portions of the sheet where the cylinders raise from the web are missing the color of that particular cylinder. These sheets are supposed to be destroyed. Examples of this type of omission have been found on the 1970 Christmas with the black color omitted, and with the blue color omitted. Another missing color type was found on the 6c 1969 Baseball stamp, printed by a combination of offset and intaglio (Giori) presses. Incomplete adjustment of the printing cylinder at the start of the Giori press run resulted in the black color being omitted.

FOLDOVERS

Figures 45-46

A foldover between press runs may result in a portion of the sheet missing one or more of the colors. These are usually quite spectacular in appearance. In most cases only a small portion of the stamps on the pane is so affected. Only those stamps with the color entirely omitted should be considered true major errors. Those with any portion of the omitted color(s), no matter how minor, are considered only freaks. This type of error is similar to the missing cross on the Red Cross of 1932, even though different production techniques were utilized.

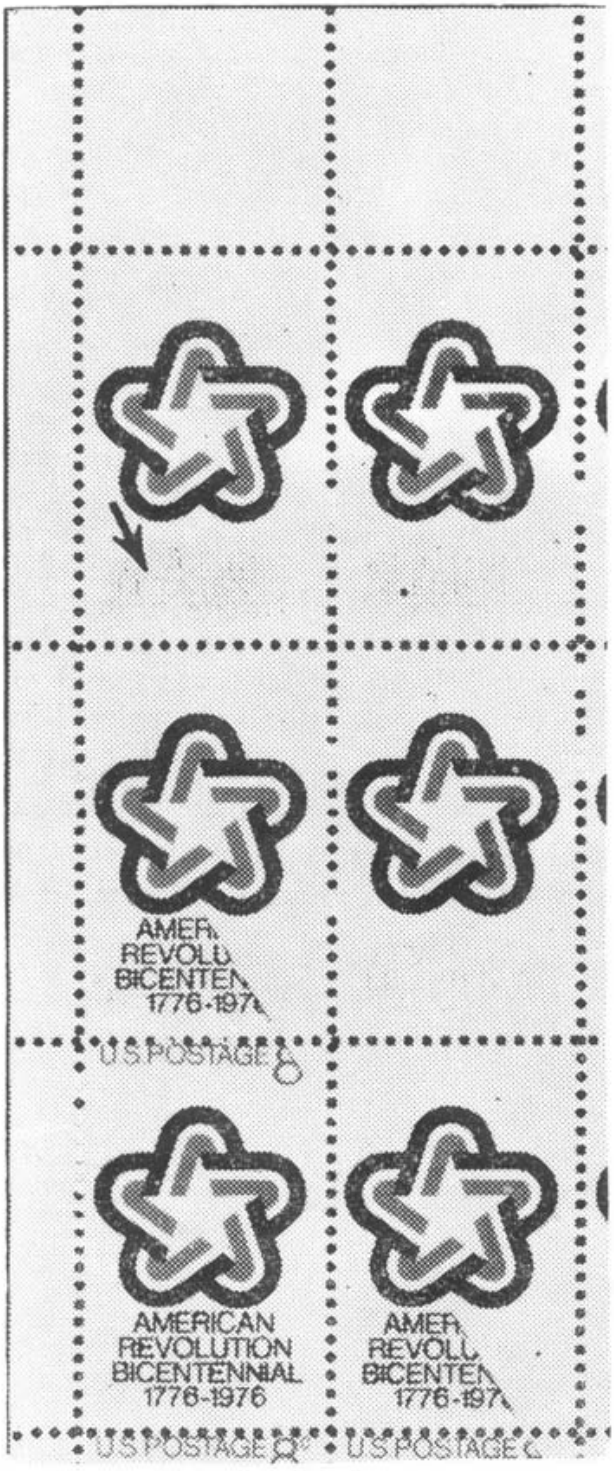


Fig. 45. Missing color on ARB emblem stamp due to a foldover of part of the sheet on the Giori press run. A slight tagging "ghost" is present on some portions of the missing color stamps.

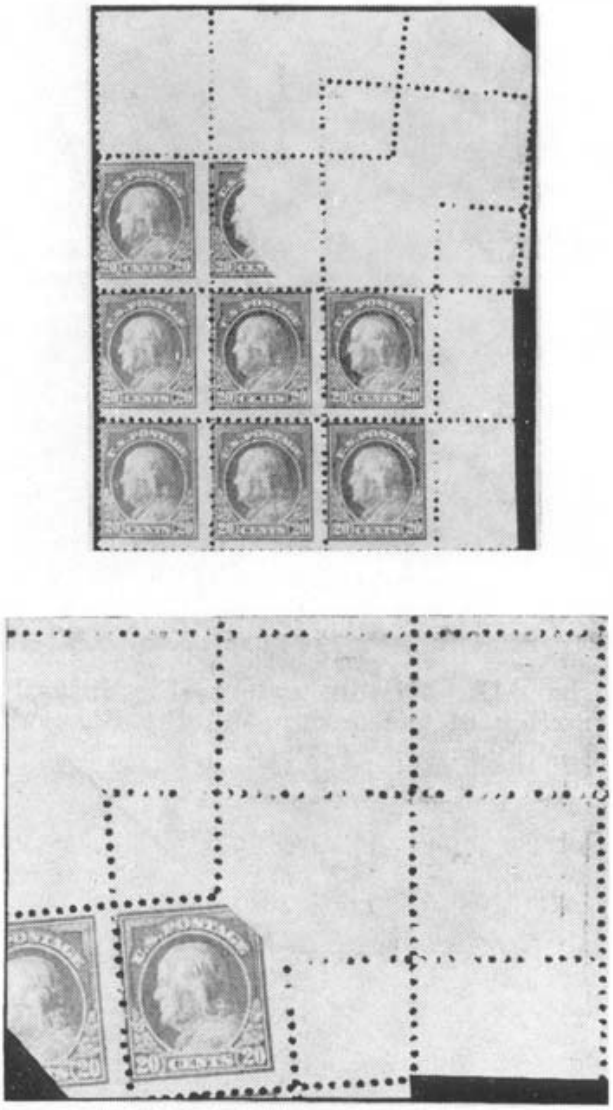


Fig. 46. Foldover prior to printing, front and back, with almost 100% of the design printed on the reverse.

PRINTING VARIETIES

Figures 47-48

Color Variations

Certain of our stamps have been printed over extended periods of time, necessitating new batches of inks for continued production, and thus creating different shades of color for the same stamp. In certain situations these different shades have been given catalogue recognition as minor varieties, as new stamps, and as major errors.

Shades

It is not uncommon for a stamp to be listed as either carmine, deep carmine, red or lake, four separate varieties of the same stamp. The 2c Panama Pacific perf. 12 commemorative is listed in a lake-shaded color and catalogued at $150. The 2c Yorktown issue of 1931 is given a subletter (b) by some cataloguers and priced at $175 for the dark lake and black variety. The normal variety catalogues about 35c. These catalogue prices change yearly. The 2c regular issue of the 1894 series printed by the Bureau of Engraving and Printing exists in pink, pale pink, lake, dark carmine, scarlet and dull scarlet. Some of these shades are given major catalogue numbers.

Color Changelings

Color changes in some of our stamps can be brought about long after the stamps have left the Bureau. Certain inks are light sensitive and fade; violet becomes pink, green becomes yellow. Other inks can oxidize; yellow becomes brown. Heat and chemicals can alter the color of certain stamps, while removing colors in other cases. Unfortunately, carmine shades can be changed into lake, and it takes very sophisticated equipment to distinguish the fake from the true color variety. Buying from reputable dealers and making use of an accredited expertization service are the collector's best weapons in keeping his collection free of "manufactured" and counterfeit varieties. I have seen every stamp of the Washington Bicentennial series of 1932 in a color other than it was issued in. These changelings are interesting but have *no* value.

Broken Inking-In Roller

A white space on a sheet can be caused by a broken inking-in roller. The inking-in roller is in reality a piece of felt or rubber that inks in a specific area of the printing plate. On the Giori multicolor press, each individual inking-in roller is responsible for inking in the same area on the same stamp on companion plates on the press at the time. A broken inking-in roller will therefore affect the same portion on each sheet printed from the different plates on the press. An example of an error from a broken inking-in roller was reported on the Magna Carta stamp when plate blocks from lower left panes were found without the black plate number. Examination will reveal the blank impression of the number from the engraved printing plate indented into the paper.

Solvent Inking Variety

A solvent-inking variety can show up as a blank or faintly printed area on the stamp. Some printing presses are equipped with tanks containing solvent used to clean excess ink from the squeegees or rollers which clean the printing plates or cylinders. If some of this solvent is accidentally brought onto the printing plate, the ink will disperse or dissolve, and a portion of the sheet will have a faint, missing, or washed-out impression. The 8c Bolivar "missing wreaths" variety is an example of this type of freak.

Fig. 47. Missing colors caused by broken inking-in roller: 4c Water Conservation missing part of the design on the lower left stamp plus the first two numerals of the plate number; 5c Magna Carta missing the entire plate number.

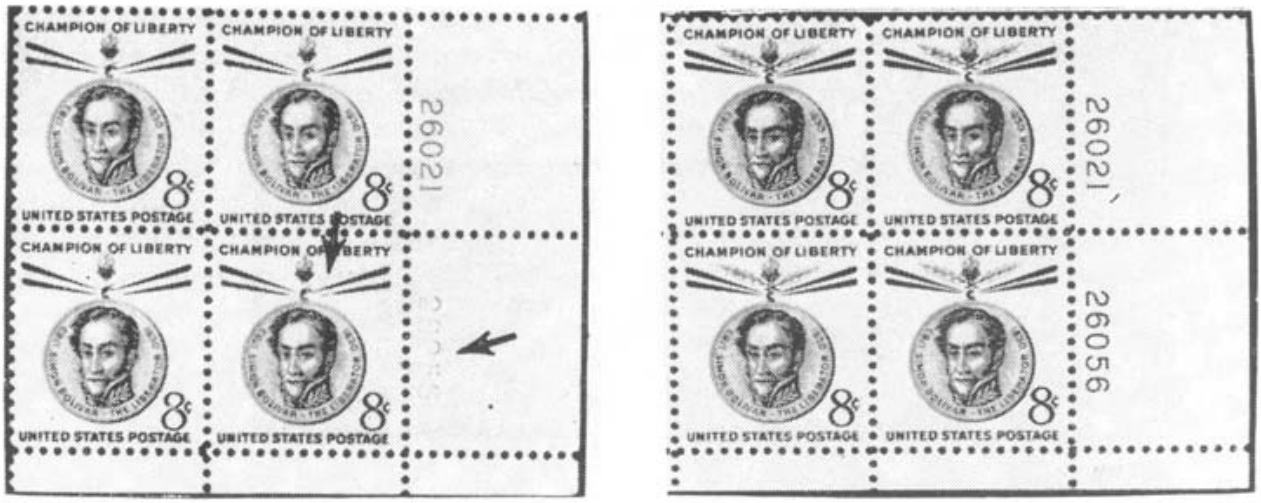


Fig. 48. Solvent inking variety on the 8c Bolivar—"missing wreaths"—and under-inking of the blue plate number. Normal stamps are shown at the right for comparison.

The most spectacular solvent-inking varieties found to date have appeared on the 6c and 8c Olympic comemoratives. On these the wording and the denomination are completely missing. In the case of the 8c stamp, the black-inked figures in the bobsled along with the black Olympic ring, both printed from the same cylinder that printed the wording and the denomination. are present. What we actually have is an interesting freak but in no way a missing color error. It is an example of a selective loss of ink from the plate. usually caused when excess solvent is carried onto the printing cylinder and washes out the ink from the shallower engraved portions of the plate. On the 8c Olympic stamp, the deeper portions of the plate retained enough ink to print certain portions of the design while other parts of the design were blanked out. This freak is an excellent example of a "solvent-inking variety" probably worth $40 to $50 for a single stamp, but it is definitely not a true missing color error. which would be worth about five times as much. (See Figure 106.)

OFFSETS

Figures 49-50

Fig. 49. Offsets: 8c Wildlife Conservation block; three "Mail Early" singles offset on the gum; 6c flag block of four offset on bottom two stamps.

A mirror image on the back or gum side of a sheet of stamps occurs when there is a misfeed of the paper and the blanket roller (which presses the paper to the plate) accidentally comes in direct contact with the printing plate. The image of the stamp is printed on the blanket, rather than the sheet of paper, and then is transferred to the back of the next sheet of stamps printed.

Multicolor stamps requiring multiple press passes show incomplete designs in their offset images. In these cases the offset image will show only the components of the particular press run when the offset occurred.

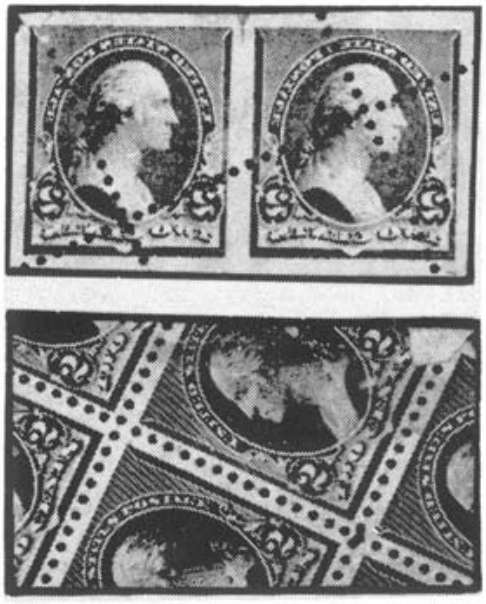


Fig. 50. 1890 two-cent carmine stamps —very sharp offset on a flat plate printed stamp; front (at bottom) and gum side (top).

DOUBLE PRINTS

Figures 51-54

DOUBLE printed stamps may be classified as either errors or freaks. An error double print is due to a sheet being fed through the press a second time, usually because the first impression was too light.

Fig. 51. "Double print" of the country name under the flags of the Overrun Nations issue.

Kiss

Most double prints encountered on post-1920 stamps are the results of a "kiss" or slippage when the printing plate or cylinder comes into contact with the paper a second time. The Overrun Country series of 1943, printed by the American Bank Note Company, is known with an apparent doubling of the country name. These doubles are usually no more than two or three rows wide and are due to a small amount of slippage of the offset printing roller cover at the start of a press run. Even though the name appears doubled, they are not true double impressions and are not errors. As freaks they are still quite desirable; a complete set of this issue with doubled country names would be quite remarkable.

Tagging Doubles

Fig. 52. Tagging doubles.

On modern issues there are several factors that can produce apparent double prints. The most common double print found on our recent stamps are tagging doubles, which appear as double prints but are not. In these cases the roller that applies the phosphor tagging to the printed stamps par-

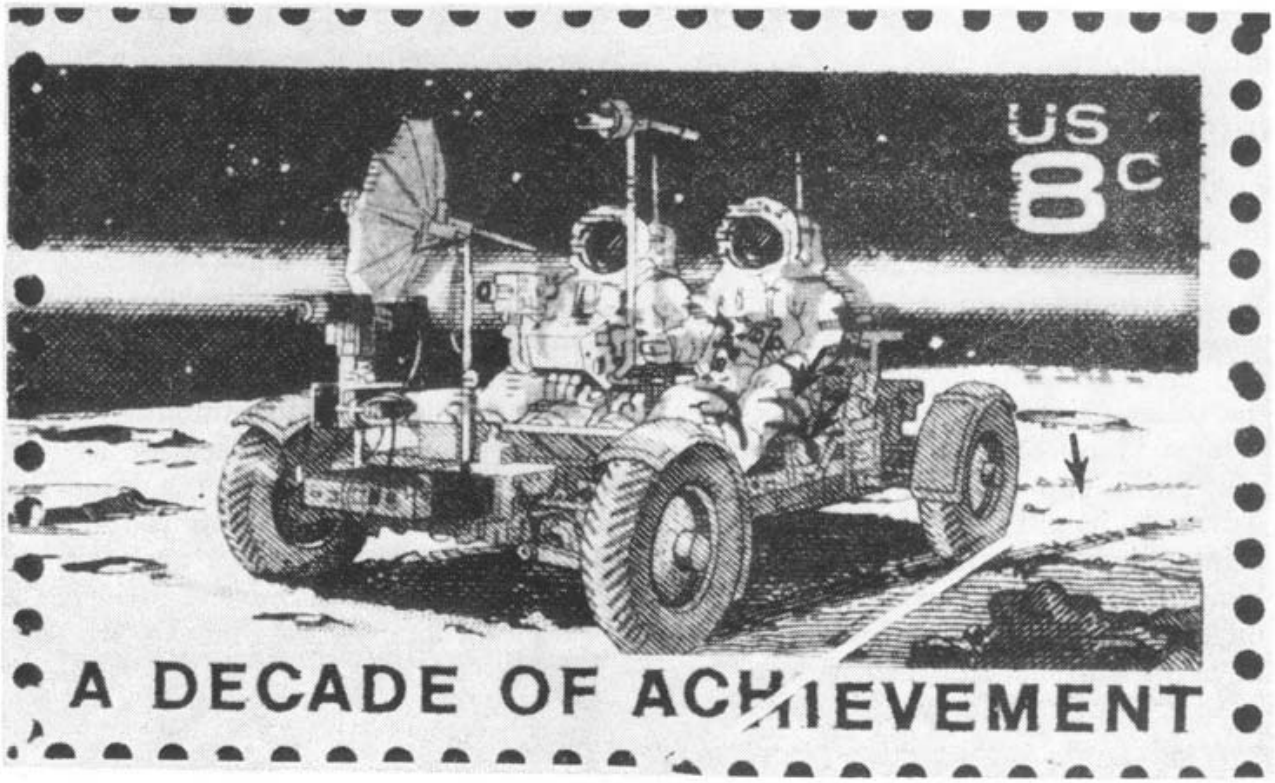


Fig. 53. Offset doubling—an apparent double print of the stripes on the astronaut's arm. Note the small pre-printing paper crease.

Fig. 54. Phantom plate numbers.

tially dissolves and picks up ink from the sheets being tagged, and subsequently offsets this image to the next stamps under the tagging roller. Frequently this double image shows up only in the area of the plate numbers. The tagging offset will "print" directly on top of the normally printed image and show up as a ghost plate number. If the sheets are slightly out of alignment during tagging, the image will not overlap, showing up as a second image.

Tagging doubles are not errors but minor freaks.

Offset Doubling

Another type of double print found on our multi-process, multicolored stamps are known as offset doubles. When two offset colors are printed in one press run, the second offset roller will pick up wet ink from the sheet as the roller prints the second color. This color will offset onto the sheet as the ink builds up on the second roller. Normally it will not be noticeable as it prints directly on to the first printed image. Shown is an example of an offset double on the Space Achievement issue with a small crease in the stamp. This crease is wide enough so that the offset image is printed alongside the first image and not directly upon it. It appears as a double print. Offset doubling is considered a freak and does not warrant catalogue listing.

Phantom Plate Numbers

Doubling found on rotary press-printed stamps can result in phantom plate numbers. These freaks occur on stamps printed on a continuously moving web. When the squeegees used to clean the roller (which regulates the edge of the web) are removed or adjusted, the roller may pick up ink from the printed plate number on the edge of the sheet and subsequently transfer it to the blank selvedge further along the web.

DOUBLE PAPER

Figures 55-57

ONE of the more common freaks found on rotary press-printed stamps are double papers. At one time our catalogues considered rotary press double papers worthy of recognition. A double paper on a rotary press issue is the result of a splice where two rolls of paper are connected. The paper is overlapped for the height of several horizontal rows and connected on the front and back of the web by transparent tape. The piece of the web on top of the splice receives the plate impression while the underlying paper remains blank. When a double paper is separated, the underlying part of the web will show up as blank stamps in combination with printed stamps.

Splices

Double paper varieties are also known on sheet-fed stamps. The double paper is produced either by the paper manufacturer or the paper gummer. Paper is produced and gummed by manufacturers under contract to the Bureau of Engraving and Printing. The 1972 Christmas stamps were printed by rotogravure on the Andreotti press in web form. Examples of double paper varieties have been found on them. Normally these web splices are removed, but on occasion these freaks escape the inspectors. Shown are examples of the paper manufacturer's splice—as well as the paper gummer's splice on the Giorgione Christmas issue of 1971. Note the heavy red plastic tape of the former as opposed to the thin flexible, almost transparent tape of the latter.

Fig. 55. 5c, 6c, 8c, 10c and 11c Presidentials on double paper and printed over the Scotch tape paste-up on the face of each stamp.

Fig. 56. Paper manufacturer's splice for Andreotti press paper.

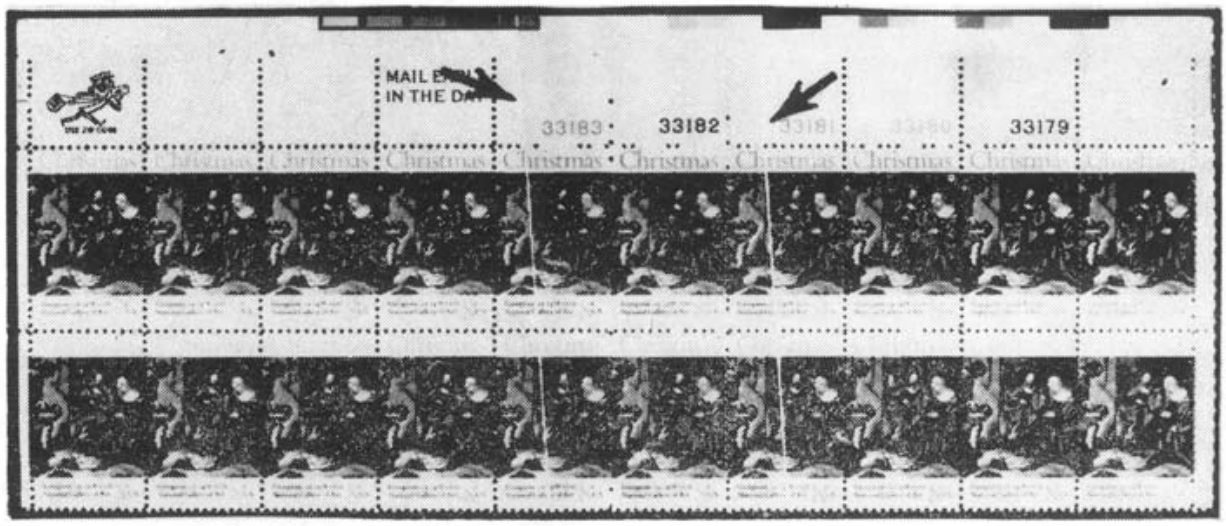


Fig. 57. Paper gummer's splice for Andreotti press paper.

REPAIRS

Figure 58

AN unusual type of freak is a Bureau paper repair. These varieties occur when a sheet of stamps is torn or miscut during the production run. The sheets are usually reconstructed when the defect is found and put through the remaining procedures necessary to complete production. Then they are removed from the normal stock, so as not to reach the public. Most of the older Bureau repairs were made with gummed kraft paper on the back of the sheet. Shown is a remarkable Bureau repair on the White Plains stamp issued in 1926. The repair was made utilizing the tape used to seal boxes of stamp booklets. It is interesting to note that this paste-up reconstruction of the White Plains sheet was responsible for one imperforate horizontally pair reaching the public. This pair was only the third example of an imperforate error found, the previous ones being the 2c Louisiana Purchase issue of 1904, and the 8c Trans-Mississippi issue discussed earlier.

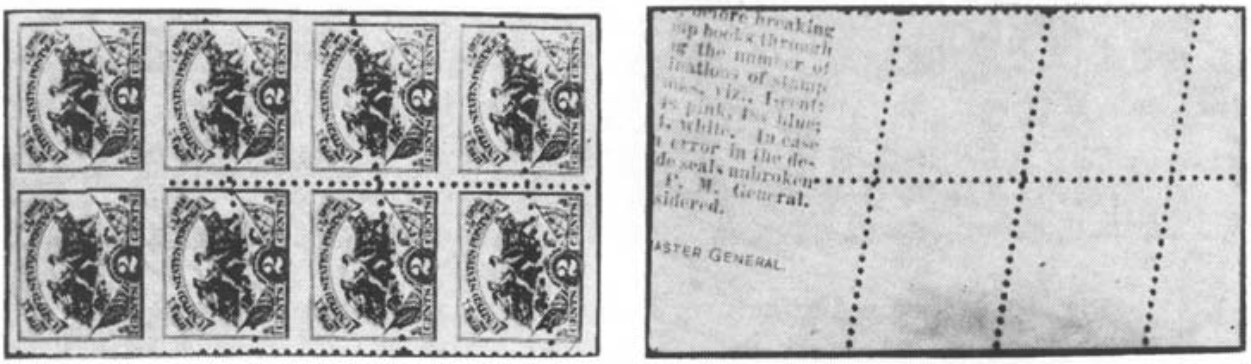


Fig. 58. Paste-up repair (front and back) on Battle of White Plains block of eight.

PRINTER'S WASTE

Figures 59-61

A number of stamps from the 1926-27 rotary press series have been found very faintly printed, both gummed and ungummed and completely imperforate. These stamps were never regularly issued and were not sold by post offices. The varieties occurred in several ways. Rotary presses were cleaned after a press run by putting solvent on the printing plates and running paper through the press to wipe up the remaining ink, thus producing waste. Also, at the start of a press run and before necessary final

Fig. 59. Printer's waste from 1922 issues—5c and 8c blocks.

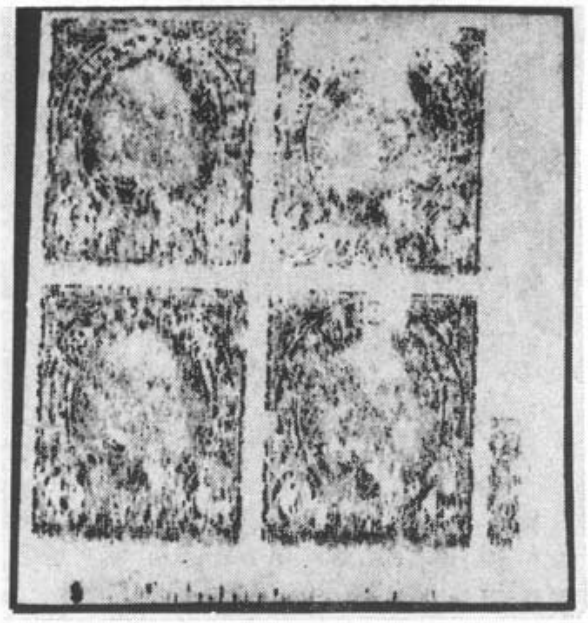


Fig. 60. Printer's waste from 1922 issues—6c plate block.

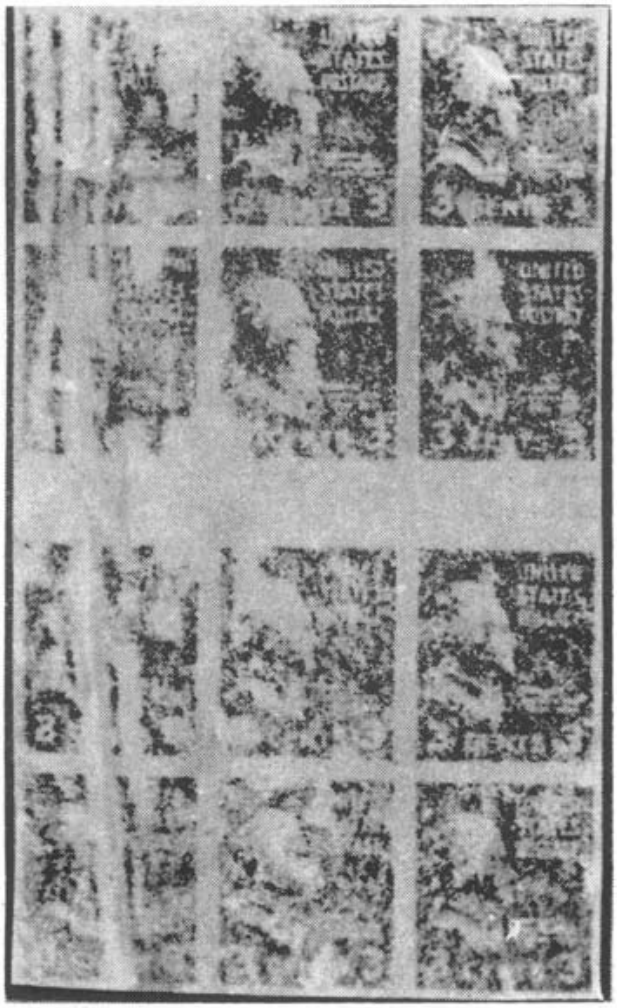


Fig. 61. Printer's waste, 3c Presidential cross-gutter block.

adjustments were made, and proper printing pressure applied, a certain amount of printer's waste was produced. This was sold to waste paper dealers, who subsequently sold it to stamp dealers. The Secret Service attempted to confiscate this material and did recover much of it. It is found on the 1½c, 2c, 4c, 5c, 6c, and 8c stamps of this 1926-27 rotary press issue, with the 2c and 5c the most common, the 1½c and 8c scarce, and the 4c and 6c rare. Shown is some philatelic waste on the 3c Presidential issue of 1938, a scarce example of printer's waste. In spite of the fact that this piece is imperforate and a full gutter variety, it is only a printing freak and does not merit catalogue recognition.

WIDE SPACING OF OVERPRINTS AND STRETCHED PRINTS

Figures 62-67

A condition known as "wide spacing" can be found on Kansas-Nebraska, Molly Pitcher, and Hawaii overprinted stamps, and more recently on the 2c, 7c, and 8c postage dues of the 1959 issue. The Kansas-Nebraska series overprints were typographed. It was necessary for the press to have a hand control that would enable the operator to move the overprinting roll forward or backward in relation to the web of stamps to compensate for misregistration during the overprinting procedure. The normal distance between overprints on the sheet is 22mm. Wide spacing overprints up to 32mm apart exist as a result of the gutter margin, as is explained below.

Fig. 62. Stretched overprint on 2c Nebraska bottom block of four.

If the hand control was turned in one direction just as the overprint was being applied, a condition known as a "stretched print" would be created.

Fig. 63. Wide spacing on 1c Kansas block of six.

The normal height of a Kansas or Nebraska overprint itself is 3mm on the capital letters. A stretched print can be 4½mm high.

Constricted Overprints and Missing Overprints

If the hand control was turned in the opposite direction just as the overprint was being applied, a constricted print with the capital letters only 2mm high could be created instead of the normal 3mm print.

Fig. 65. Missing overprint, 1c Kansas. Although not a 100% missing overprint, this block of six demonstrates how the error occurs.

Fig. 64. Wide spacing on 3c Nebraska block of six.

Fig. 66. 3c Nebraska block of 10 with the middle row missing the overprint.

On the Kansas-Nebraska series, the ordinary stamp is 25mm high. Since the wide spaced overprints can be 30-32mm apart, it is possible for the overprint to fall in such a manner that one horizontal row across the web will be completely missing the overprints.

Wide spaced overprints and missing overprints have been afforded catalogue recognition and as such are considered major errors. The stretched and constricted overprints are interesting varieties that show up in the printing process and are considered only variations or freaks. Another way that the catalogued varieties can be produced is if the stamp plate is not properly registered to the overprinting electrotype. The horizontal gutter space between plates can be shifted in such a manner that this increase of 3/8 of an inch (the height of the horizontal gutter space) will fall fully on the pane and not between panes, bringing about a horizontal row of wide spacings. This increase in heights can also be responsible for a missing overprint, as the height of the gutter space plus the normal distance between overprints is wide enough for one horizontal row of stamps to be completely missed by the overprinting unit.

Fig. 67. Postage due stamp wide spacings

Postage Due Wide Spacings

The distance between the overprints on the 1959 postage due series is normally 16mm but may vary by ½ to 1mm due to differences in web tension. Wide spacing varieties have been found on the 2c, 4c, 7c, 8c, and 10c denominations in this series in which the space between overprints is 24-25mm. The extra 8-9mm on the wide spaced pairs is to allow for the horizontal gutter between panes; the postage due wide spacings are actually giant misregistrations. On the examples shown, the overprint on the bottom stamps of the wide spaced pairs should have been printed on the stamps above and the overprint on the top stamps should have been printed across the horizontal gutter, on the bottom row of stamps from the pane above. This variety occurred at the start of a press run when the registration of the electronically controlled typographic unit was manually adjusted incorrectly to the rotary web.

GUTTER SNIPES

Figures 68-78

IN this section we will endeavor to discuss different types of gutter snipes and pairs, and to introduce a new type of gutter error that has recently been discovered.

Stamps have been customarily printed in sheets of 200 or 400 subjects, and subsequently divided into post office panes of 50 or 100 each depending upon the size and format of the design. As the size of our modern stamps has gotten larger, the number of stamps per post office pane has decreased. No matter what the size, each pane on a complete sheet is separated by vertical and horizontal gutter spaces, and these spaces are accomodated on the perforating equipment so that there are corresponding horizontal and vertical gutter perforations running along the gutter spaces.

There are exceptions to this rule. Stamps produced on the nine-color Huck press do not have any gutter space between panes. Other older issues have had panes separated by guide lines or by a single wide vertical gutter. It is impossible to make any hard and fast rule as to what form gutter pairs, gutter spaces and gutter perforation varieties might take, especially with the innovations being made by the Bureau of Engraving and Printing in the manufacture of our modern stamps.

Production of Post Office Panes

Once the full sheet size is reached during the stamp production cycle, the next step is to cut it into post office pane size. The full sheets are stacked, counted, inspected, packaged between cardboard, stapled and then guillotined into individual panes. It is during this guillotining procedure that most gutter snipe varieties arise.

Foldover Gutter Snipes

To get post office panes, the full sheets are stacked and guillotined both horizontally and vertically. Under normal circumstances the guillotine falls through the center of the gutter space, but occasionally the gutter space is not where it is supposed to be. A sheet may be folded over diagonally or

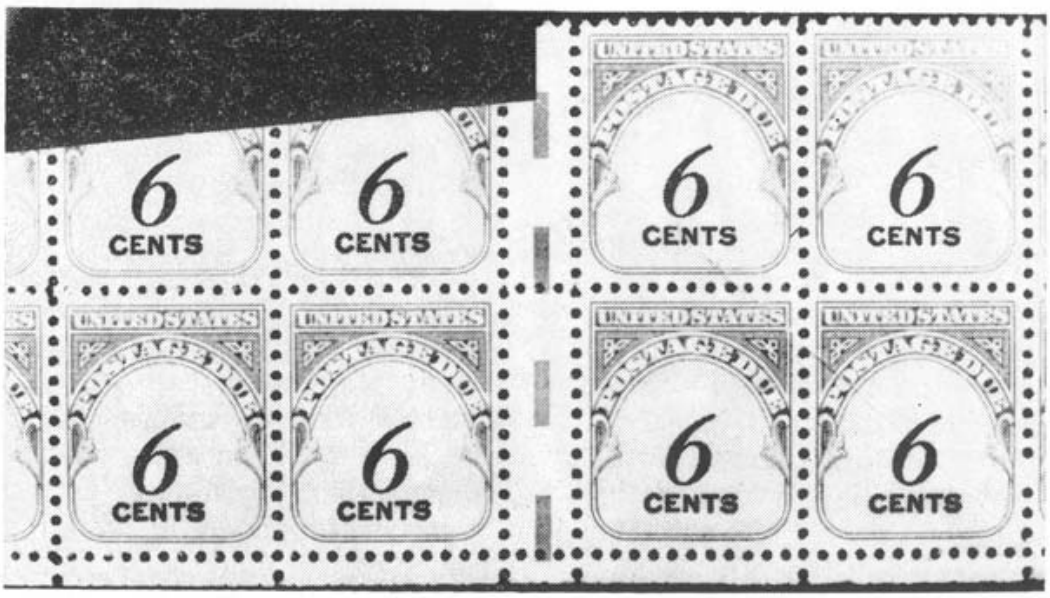


Fig. 68. Foldover gutter snipes on 6c postage dues.

Fig. 69. Foldover gutter snipes on 6c precanceled Roosevelt block.

Fig. 70. 30c Presidential showing gutter snipe plus 95% of adjacent stamp at left.

turned and folded over in such a manner that when the sheets are cut into panes the gutter and part of the adjacent sheet remain attached, possibly producing horizontal or vertical gutter pairs.

Full gutter pairs have been afforded catalogue recognition and as such should be considered errors. Shown is a 30c Presidential pair in which 95% of the stamp adjoining the vertical gutter is present. This pair is a desirable freak, but since the adjoining stamp is incomplete, missing the full design and perforations, the pair cannot be considered a true error.

Accordion Fold Gutter Snipes

Another type of fold that can produce a gutter pair is known as an "accordion fold". It occurs when a sheet is folded back on itself, first in one direction, and then in the other in the shape of the letter "Z". These folds will change the position of the gutter space. Accordion folds can produce quite spectacular gutter varieties as shown by the 2c Presidential block with two extra horizontal rows above the gutter. This is an acceptable error and as such merits catalogue recognition.

Crazy Perf Gutter Pairs

Gutter pairs can be produced in different ways and can appear in different forms. Shown is a 3c Presidential block with an extra row of stamps above the horizontal gutter. This stamp was printed in web form on a rotary press, and subsequently perforated on an electric eye rotary web-fed perforator. The perforator takes the

Fig. 71. "Accordion fold" gutter snipe on 5c Christmas stamp.

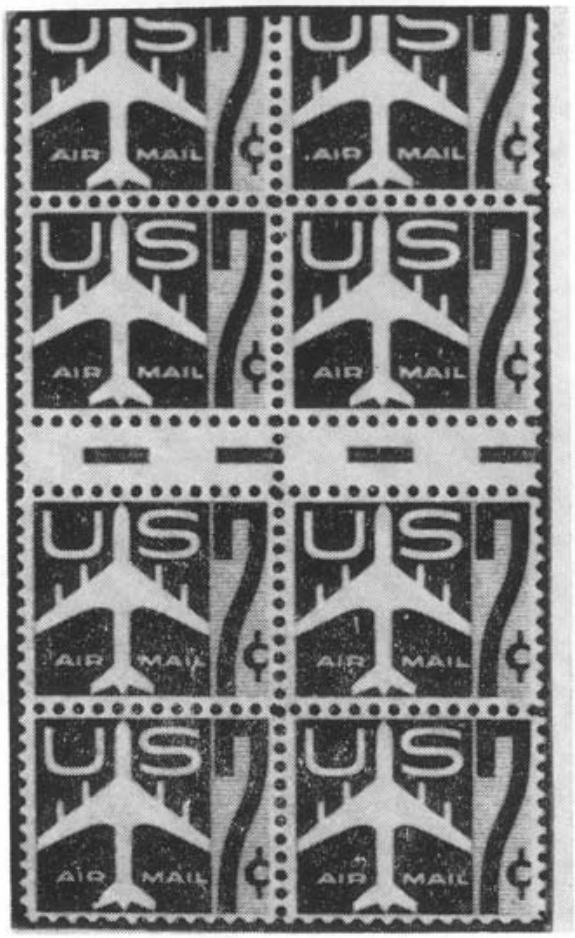


Fig. 72. Accordion fold gutter snipe with complete rows of stamps on each side of gutter and nearly complete rows at outside.

Fig. 75. Horizontal and vertical gutter snipes on 2c rose, type 1A, of 1917-19.

Fig. 73. Accordion fold gutter snipe on 2c Presidential stamps.

Fig. 74. Crazy perf gutter snipe on 3c Presidential stamps.

continuous web, puts in the horizontal and vertical perforations, and sections the web into individual sheets of 400 stamps. For the case in point, during the perforating operation the web was torn and folded over so that the horizontal gutter space was not in its proper position in the stack when the sheets were guillotined into post office panes of 100 each. The guillotining operation along with the faulty perforating procedure produced these crazy perfed gutter pairs, a combination freak and error, and an extremely rare piece and desirable.

Favor Sheets

On rare occasions the Post Office Department has given complete unseparated sheets to privileged individuals, so there are a number of gutter pairs and blocks listed in the catalogue that are not the result of faulty production techniques, but are "favor sheets" and as such do not belong in a collection of freaks and errors.

Perforation Variety Gutter Snipes

A new type of gutter snipe variety has recently come to light. It is possible for the perforations on a sheet to be misregistered to such a large degree that the gutter space perforations normally found between panes can be shifted so that the gutter perfs run through the stamps themselves, with a fully perforated "stamp" appearing on each side of this perforated gutter. To date this type of perforation shift gutter snipe has been found only on the Walt Disney commemorative stamp issued September 11, 1968, and only four complete snipes of this type are known at the present time. In the time necessary to collate and publish this book, this type of error has been found on other issues.

Fig. 76. Perforation type gutter snipe on the 6c Disney commemorative (front and back).

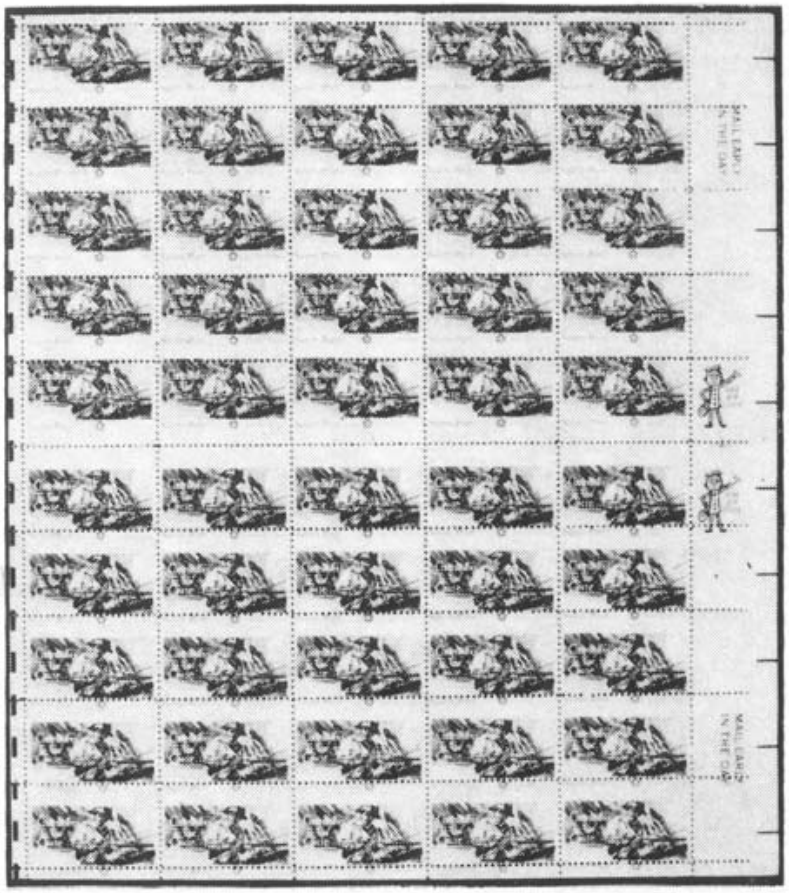


Fig. 77 Interpane gutter snipe on the Salem Poor issue.

Fig. 78. Perforation type gutter snipe on the 10c Bunker Hill (front and back).

Interpane Misperf Gutter Snipe

This is a rather startling gutter variety that appears from the gum side as a normally perforated pane. When the pane is turned face side up, you can see that it is actually composed of parts of two panes with the blank gutter space between them. Somehow in this case there was a mis-synchronization between the perforating and the sheeting operations. This variety is almost the complete antithesis of the Disney misperf gutter variety, where the stamp pane was sheeted properly but the gutter perfs were shifted down into the design. On the Salem Poor pane shown, the perforations are normal in relation to the pane, but the design and sheeting are off.

WALT DISNEY COMMEMORATIVE STAMP PRODUCTION

THE Walt Disney commemorative stamp is a freak and error collector's dream. The discovery of the perforation variety gutter snipe brought the number of major errors known on this stamp to seven. Aside from these major errors there are also a goodly number of misperfs and misregistrations known.

The Disney stamp was printed by the Achrovure Division of the Union-Camp Corporation of Englewood, New Jersey, using a sheet-fed Koenig & Bauer photogravure press. This press can utilize five printing cylinders which are twice the circumference of those used on the Andreotti press. The Disney stamps were not printed in the normal format of four panes of 50 stamps to each sheet, but rather as eight panes of 50 stamps with a sheet size of 400 stamps. The sheet was arranged as if two regular size sheets had been placed one above the other with a wide horizontal gutter separating the top four panes from the bottom four panes. A dash was placed after each plate number on the lower four panes to differentiate the lower four plate positions from the upper four. After the printing and tagging operations were complete, the sheets were sent to the American Bank Note Company where they were perforated 12 x 12. The stamps were then shipped to the Bureau of Engraving and Printing for final sectioning and shipment to post offices.

MAJOR DISNEY ERRORS

Figures 79-80

IN all, three security printing organizations had a hand in the production and inspection of this stamp. In spite of this the following major errors have been found on this stamp:

a) Ochre color missing
b) Blue color missing
c) Black color missing
d) Imperforate
e) Imperforate horizontally
f) Horizontal Pair—imperf between
g) Perforation—gutter snipe

Disney Perforation Gutter Snipe

The discovery of the perforation gutter snipe on the Walt Disney stamp was a lucky happenstance. A New York auction had a misperfed Disney sheet described thus:

"6c Disney, Sheet (50) Horiz. Misperf. at an angle, UL 5 stamps imperf in top margin. Double row of perfs. beneath top row of stamps, on other rows perfs angle from above 'Walt Disney' at right to well below at left, Mr. Zip's head part of LL stamp! etc."

As I examined the sheet I was particularly unimpressed by the degree of the diagonal horizontal misperf. Most of the stamps appeared quite normal, with only a few stamps on the pane that I would consider collectable. It was not until I turned the sheet over to put it back in the envelope that I noticed that the horizontal gutter perfs were shifted down into the sheet itself. What I had considered to be only a

Fig. 79. Two major Disney errors (normal stamp at left): missing black (center) and missing ochre (right).

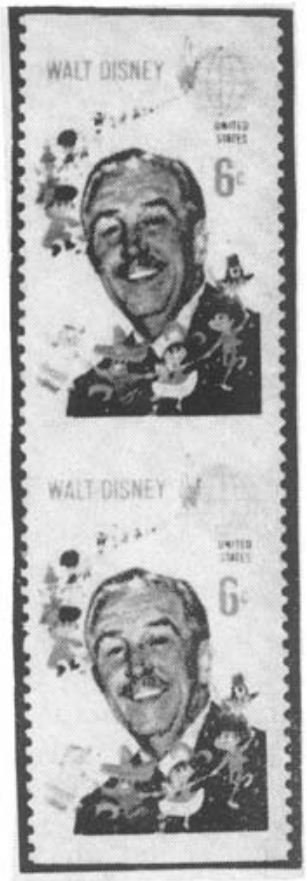


Fig. 80. Imperf horizontally pair of Disney stamp.

minor misperf was in reality the greatest misperf I had ever come across in all my years of collecting freaks. The horizontal perforations had been shifted down a full 47mm, the entire length of the stamp plus the height of the horizontal gutter. In fact, these horizontal gutter perforations were shifted down so far that in the upper left corner of the pane there were four complete gutter pairs. Each of these pairs shows a completely perforated stamp on each side of the horizontal gutter perforations. The magnitude of this seemingly innocuous perf shift had actually been responsible for producing a 100% gutter pair in a completely original fashion, creating an entirely new category of gutter pairs.

Perforation Gutter Snipes—New Finds

It is interesting to note that in the time it has taken between writing the book and editing it, other commemorative stamps have been found with a perforation gutter snipe—the 10c Lexinton-Concord Bicentennial issue, and the Clara Maas issue. Perforation techniques being what they are, more of these errors are sure to follow.

PREPRINTING PAPER CREASES

Figures 81-82

Fig. 81. Pre-printing paper creases on single color stamps.

Fig. 82. Pre-printing paper creases on bicolor and multicolor stamps.

ONE type of freak that can be found on practically every U.S. stamp from number one right up to the present are preprinting paper creases. Usually these occur as the printing plate touches the paper. A small wrinkle in the paper will be pressed over in such a manner that the inside of the crease will remain uninked, as it is covered by the folded over paper. When the paperfold is subsequently opened, a white area splits the printed stamp. Shown is an example of a simple pre-printing paper crease with crazy perfs.

Preprinting Creases on Multicolored Stamps

On our modern multicolor printed stamps requiring more than one press pass, preprinting paper creases can take on more exotic forms. If the crease occurs after one or two of the colors have been printed, we can get a variety where the crease is fully printed in some color(s), but missing other colors.

PREPRINTING PAPER FOLDS

Figures 83-86

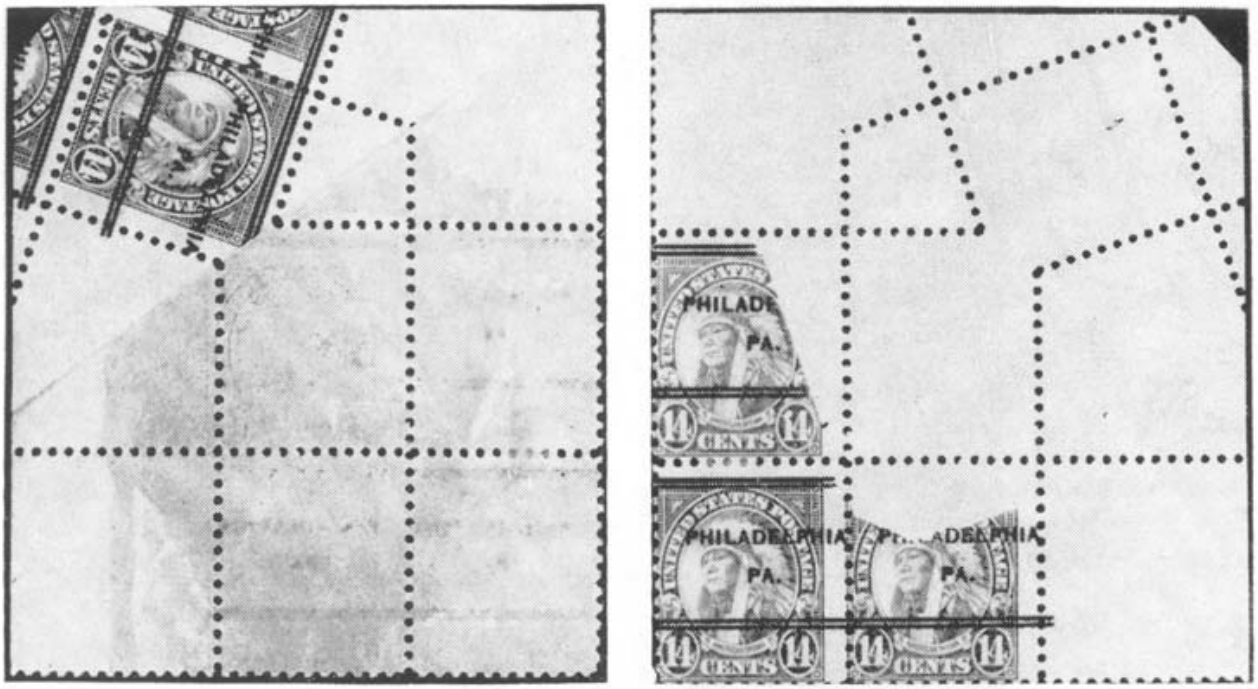


Fig. 83. Pre-printing fold on 14c flat plate press stamp of 1922 series.

PRIOR to or during the printing operation a sheet may become folded, thus missing part of the print. The missing section of print is usually found on the back of the fold. This type of freak is usually quite scarce. When viewed from the front with the fold opened, the sheet will appear with a blank area. If the folded portion of the sheet was towards the printing plate, this missing portion of the design will appear on the back of the sheet. As stated earlier, this type of fold (on the second press run) was responsible for the missing cross on the Red Cross stamp, issued in 1932.

The unique block shown on page 55 is an excellent example of a combination crazy perf, printed-on-the-back freak from the Giori press. Prior to printing, the paper was torn and folded over towards the printing cylinders. In this condition it was printed, perforated and finally separated into post office-size panes. When the foldover is opened, there is a large blank area the space of five stamps on the face, with the corresponding missing print appearing on the back.

⟹

Fig. 84. Range Conservation issue—pane as it appeared when purchased.

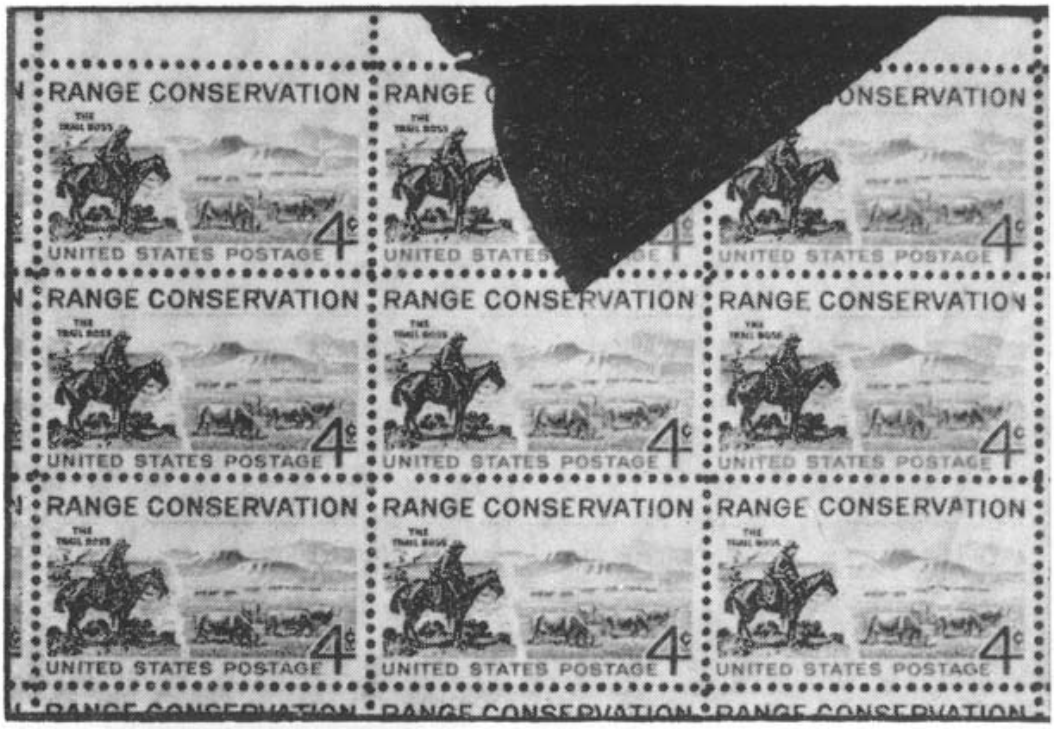


Fig. 85. Range Conservation issue—pane with fold opened.

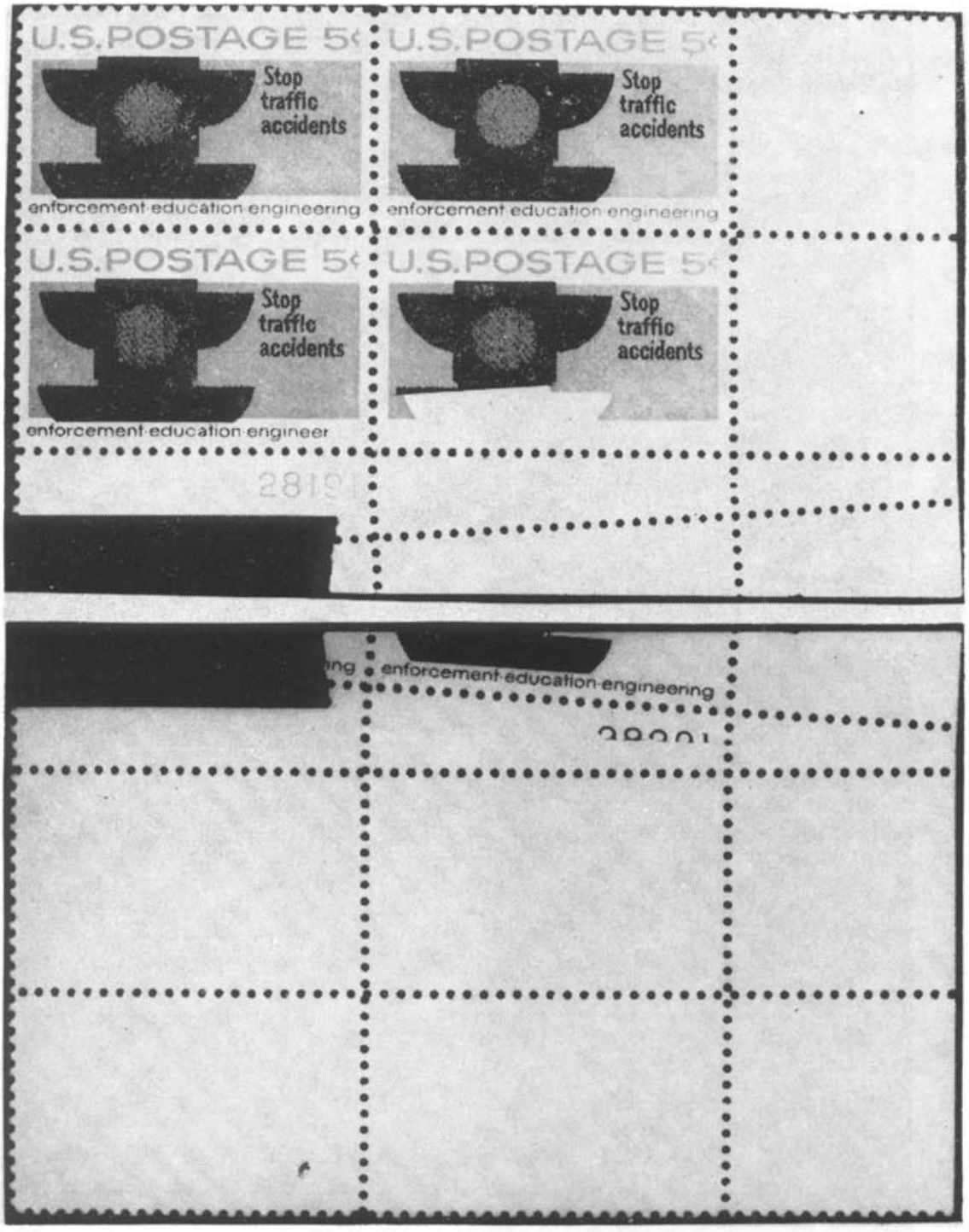


Fig. 86. 5c Traffic Safety, lower right plate block printed on the Giori press with the black plate number and part of the design missing from the lower right stamp as a result of a foldover prior to printing. These missing components appear on the back of the block.

UNPRINTED AREAS ON STAMPS

Figures 87-89

IF a foreign object falls on the plate or is attached to the sheet, the ink on the plate does not reach the paper, leaving a blank area. We even find stamps printed over a piece of string on the plate, which will result in an irregular white line across the stamps upon removal of the string.

Fig. 87. 10c Panama-Pacific stamp printed over string.

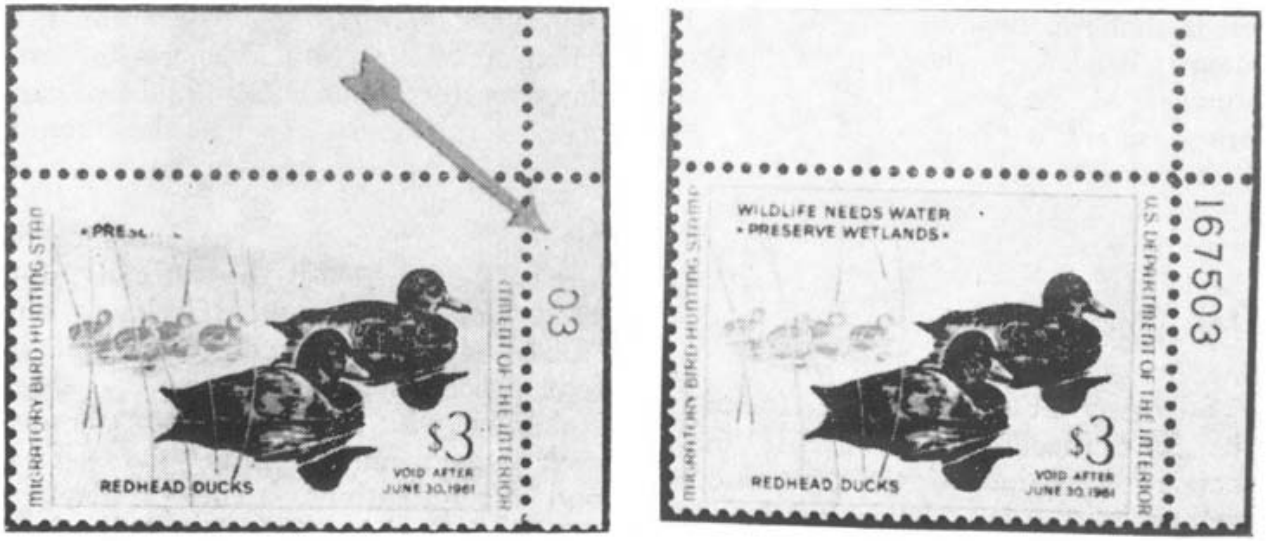


Fig. 89. Unprinted areas on stamps: The upper right plate single of the 1960 Duck stamp is missing the first four digits of the plate number (normal at right). This came about when an extraneous scrap of paper came between the printing plate and the stamp during the printing process.

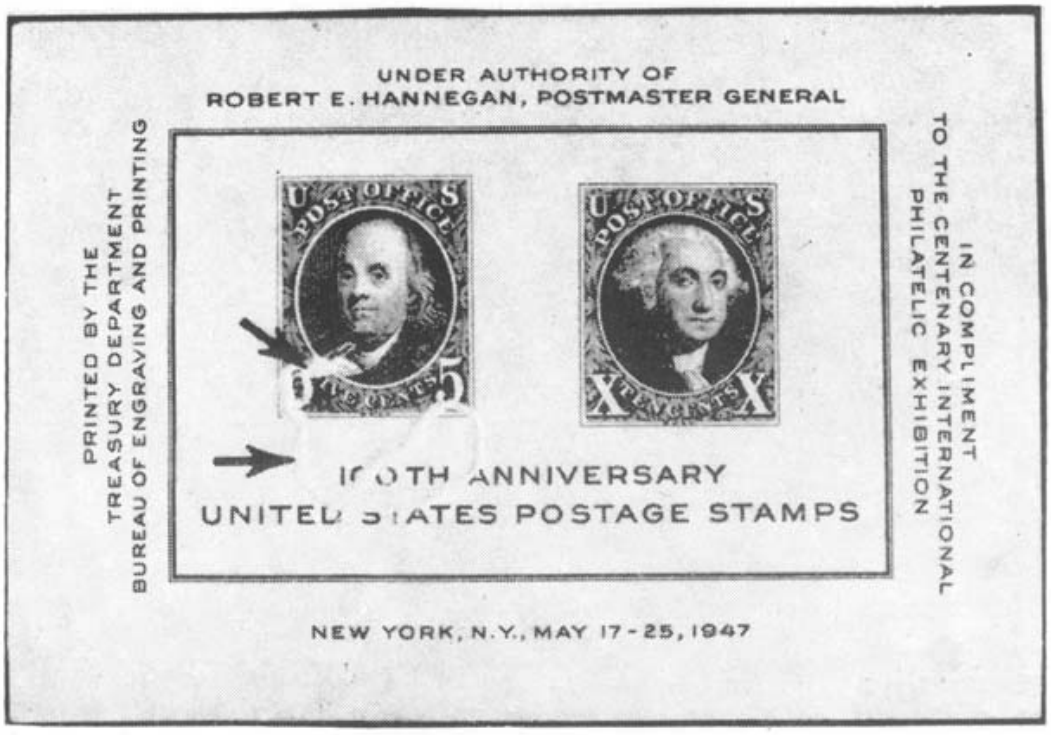


Fig. 88. CIPEX souvenir sheet printed over string, leaving blank areas in and below the 5c stamp.

INTERPHIL BICENTENNIAL SOUVENIR SHEETS

Figures 90-92A

THE four different souvenir sheets produced by the Bureau of Engraving and Printing for the INTERPHIL stamp show in Philadelphia in 1976 have caused quite a stir among collectors, non-collectors, and the fraternity of EFO enthusiasts. As a general rule, any type of freak or error that can be found on our regular stamp issues can also be found on souvenir sheets, as production methods are basically the same. Prior to the Bicentennial souvenir sheets, however, very few EFO's have appeared on souvenir sheets, other than on the SIPEX sheet issued in 1966 in Washington, D.C.

So many EFO's have been found on the four Bicentennial souvenir sheets that a discussion of their production method is in order. Basically, the overall design or mural was printed, the denominations were overprinted, the sheets were tagged, perforated and cut. The initial printing of the design and wording beneath it was done on the six-unit Miller offset press; the souvenir sheets were printed six to a production sheet, with five stamps to each individual souvenir sheet. Originally, the denominations and "USA" were to be printed in intaglio on a Giori press, but after production runs had started, difficulties developed and it was decided to print everything by lithography.

The design of the sheet in four colors, plus the black wording, was printed in one press run. The second press run was utilized to overprint two of the stamps with "USA" and the denomination. The third press run on a two-color offset press overprinted the "USA" and denomination on the remaining three stamps, with one stamp in one color, and the other two in another color. Phosphor tagging was applied to the stamp areas on a fourth press run. The perforating was done on the fifth press run on a converted letterpress normally used in overprinting currency. Examination and division of the production sheets into the six component souvenir sheets followed. They were then packaged into envelopes for distribution to the public. Sheets for first day cover distribution also had two cancellations printed thereon at the Bureau.

Freaks and errors are known for all four souvenir sheets. The 13c sheet is known cancelled (at the Bureau), imperforate, untagged and missing the "USA" and denomination, a total of four processes omitted. The 24c sheet is known with five perforated stamps, each tagged, and including the "USA" and denominations. The problem is that the mural is missing, and the sheet is an example of four steps of the printing on blank paper. The 24c sheet is also known imperforate, untagged and missing the "USA" and denomination.

Bicentennial Souvenir Sheet Invert

The most exciting error found on these sheets is an *invert*. The 24c sheet has been found with the denominations that should have appeared on the two right stamps on the sheet, inverted and printed under the two left stamps on the sheet. The three denominations on the first three stamps on the left are normal. The invert occurred on the second press run when a press sheet was inadvertently put back on a skid in an inverted position. There was an electronic device that was supposed to stop the press when this occurred, as one corner of each sheet was

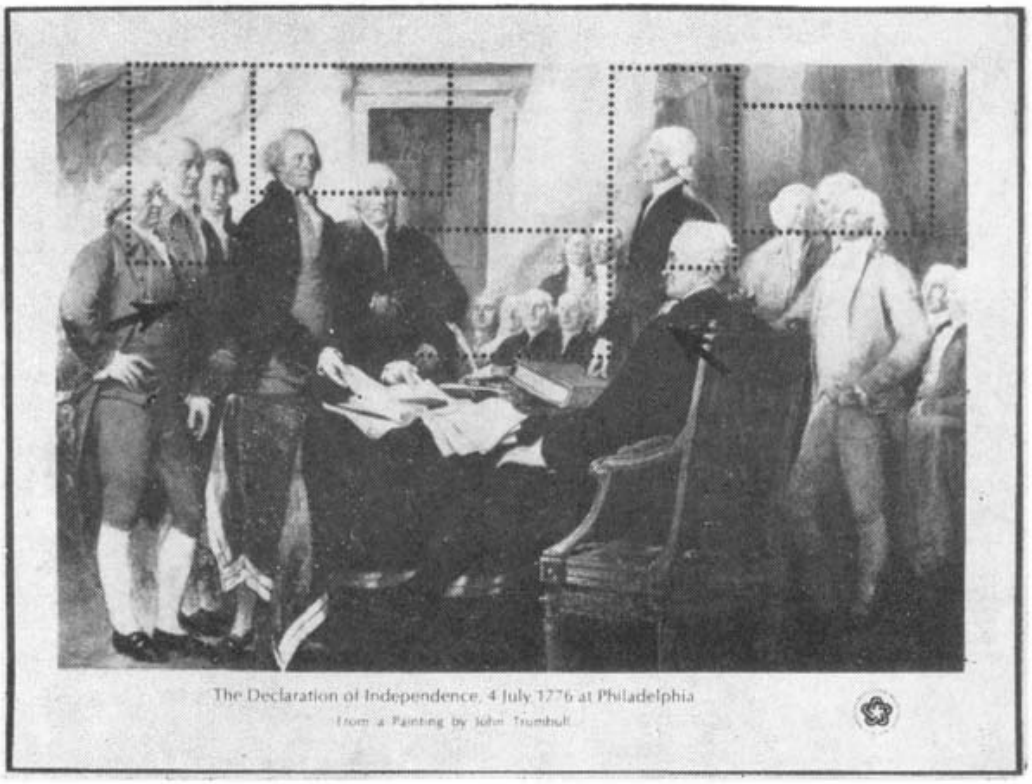


Fig. 90. 18c Bicentennial souvenir sheet misperf.

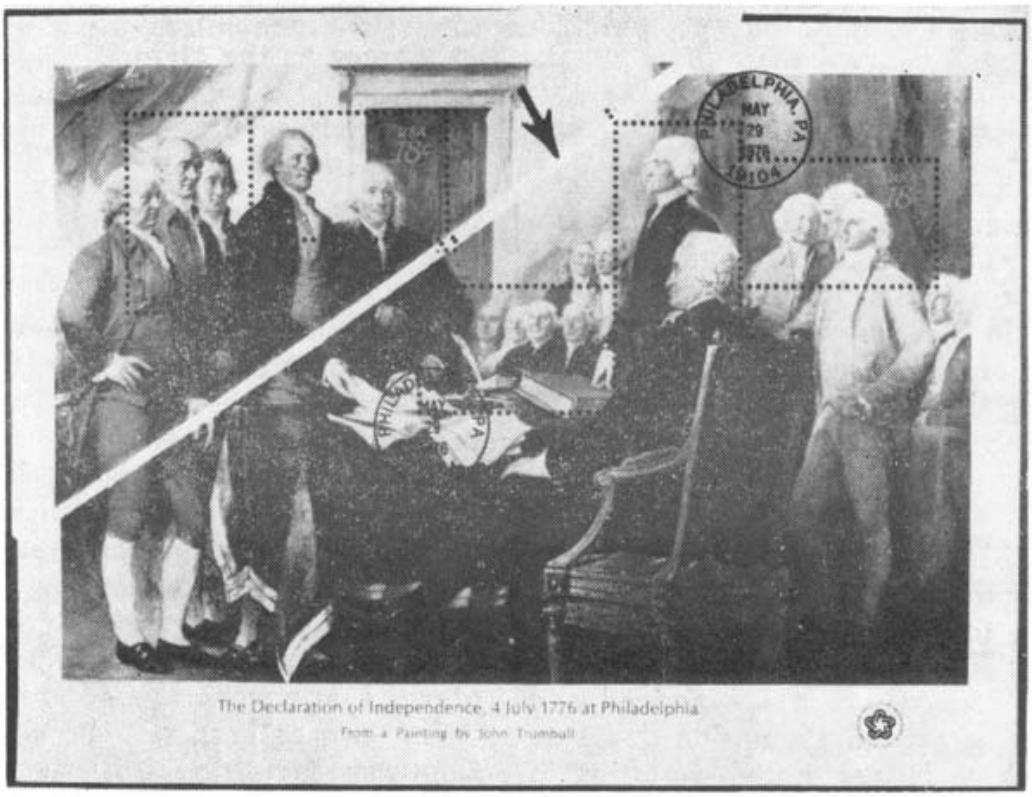


Fig. 91. 18c Bicentennial souvenir sheet pre-printing paper crease.

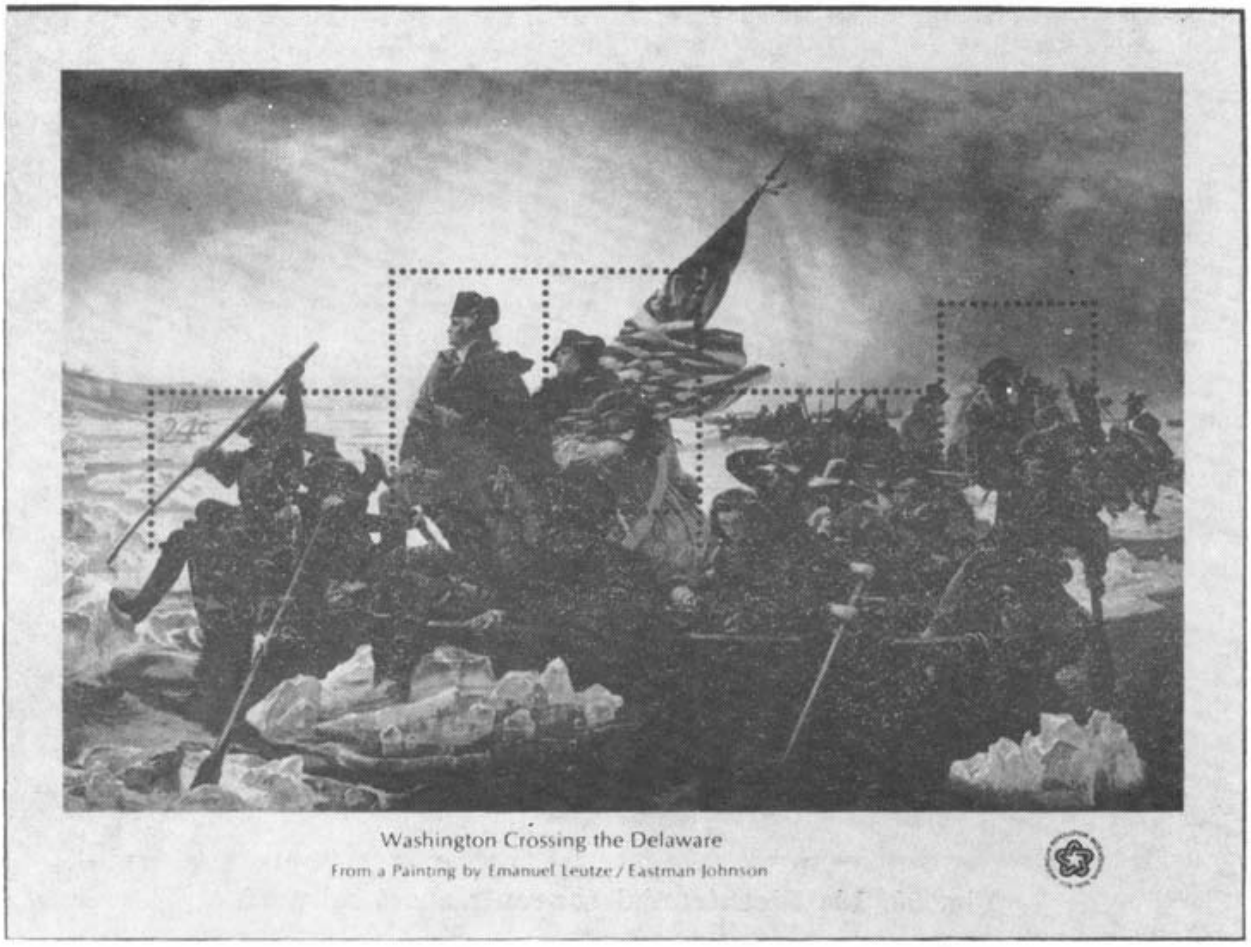


Fig. 92. 24c Bicentennial souvenir sheet with two denominations inverted under the first two stamps on the left. The same two denominations are missing from their place on the two stamps at the right.

cut off diagonally, and should a sheet have been inverted, the paper in this corner would be present and trigger a very fine micro-switch that stopped the press. In this case it didn't. Since the production panes were printed with six souvenir sheets to each, there should be five more inverts "floating" around waiting for the observant collector.

The 31c souvenir sheet has been found with the perforations inverted in relation to the overall design of the sheet. This occurred when a fully printed sheet of six was examined and inadvertently put back upside down on the stack to be perforated, resulting in the first inverted perforation freak known. Again, there can easily be five more of these spectacular perforation freaks just waiting to be found.

The 31c souvenir sheet is also known imperforate, untagged and missing the "USA" and denomination. All sheets are known missing one or more of the denominations, and perforation and misregistration freaks have been found. I have seen one sheet with a 3-4mm preprinting paper crease. Since all were printed six to the sheet, for every missing color error, imperforate error, misperforation or misregistration there should be companion copies.

How did all this EFO material come about? The work was done in a large room, and as each step in the production was completed it was stacked on skids, and moved to the next press. Samples were on top of the skids, and press men pulled production copies of the work in progress at ran-

Fig. 92A. 31c souvenir sheet with inverted perforations. Photo supplied by Lawrence E. Levin of Tampa, Fla.

dom to check the work. These were returned to the top of the stacks on the skids. One can only assume from the types of errors found that some sheets were placed on the wrong skids, thus missing one, two, or more of the press runs. Working on a very tight schedule that had been set back due to the necessary change in printing of the denomination and "USA", not enough time was left for proper inspection, resulting in this windfall for the EFO collector.

SIPEX SHEET

Figure 93

TEN years before the production of the four Bicentennial souvenir sheets, the Bureau produced the SIPEX sheet. This item was printed in sheets of 24 subjects, with plate numbers and other marginal markings. A combination of intaglio and offset presses was used to complete the design. The printing was completed without a hitch, but during the separation of the sheets into 24 individual souvenir panes, foldovers developed. I have seen 20 such examples, 19 of which have incorporated into the pane a plate number and marginal markings that normally should have been trimmed off. One exists with such a large foldover that two different plate numbers plus color bars are attached to the souvenir pane.

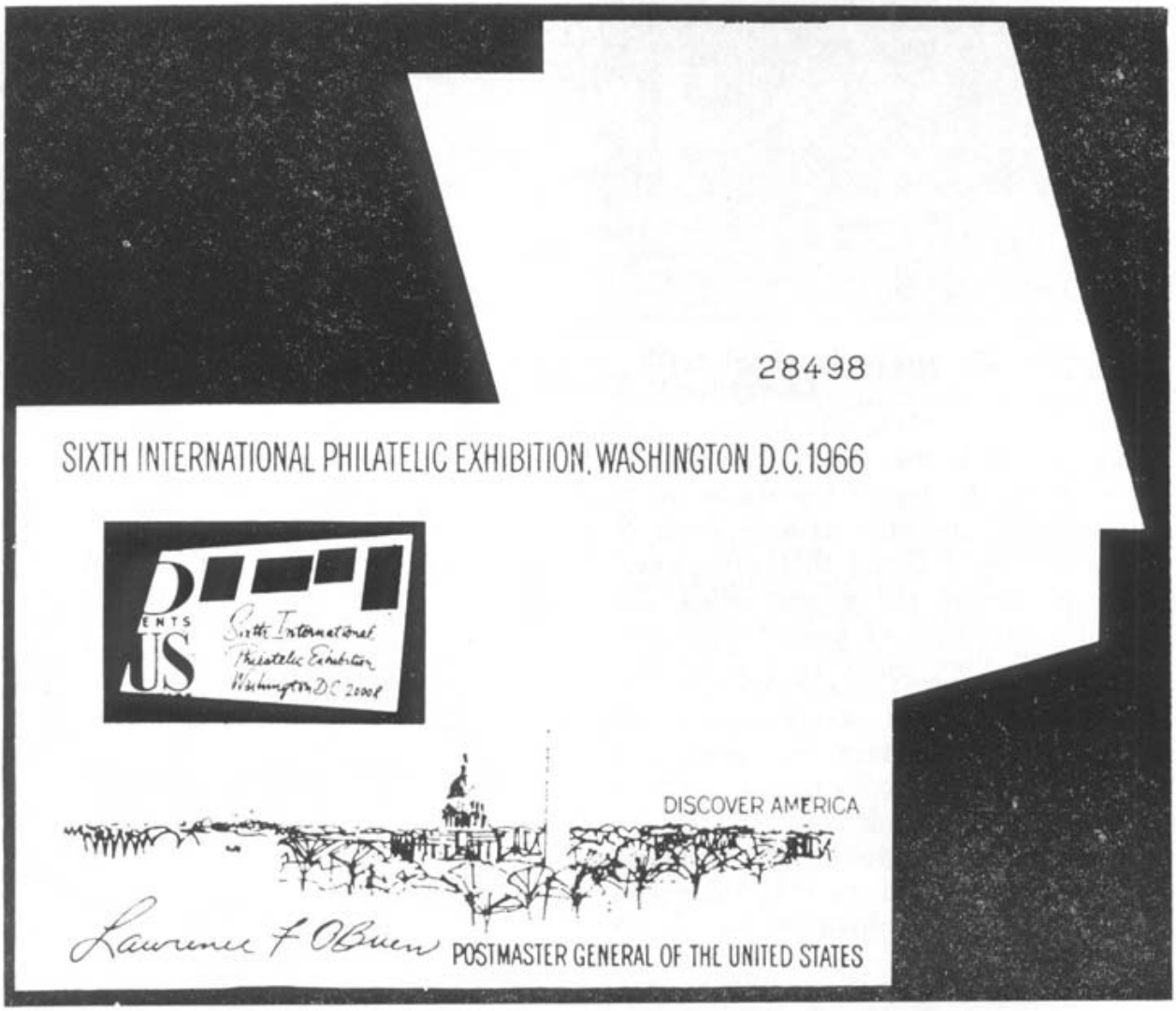


Fig. 93. SIPEX souvenir sheet miscut showing plate no. 28498 in upper right corner.

BOOKLET PANE PRODUCTION

IN order to properly appreciate the freak and error varieties that are found on booklet panes, a resumé of their production is in order. The 360-and 400-subject booklet plates have been printed on Cottrell continuous web-fed rotary presses in recent years.

The first example of this type of press was manufactured by the Huck Company and was delivered to the Bureau in 1950. Stamp production started on this press in 1952. Five additional presses based on the Huck prototype were ordered from the Cottrell Company and were received and placed into service in 1955 and 1956, at which time they started to supplant the older Stickney rotary presses, which were completely phased out by 1962. The basic principles of operation on the Cottrell presses are essentially similar to those of the Stickney presses, but speed and production increased approximately three times with the introduction of the Cottrell presses. These presses can be used to produce definitive and commemorative sized stamps plus booklet and coil stock. According to the government's information release on "Web Monocolor Intaglio Presses (Cottrell Presses)", the operation of the presses is as follows:

"As the web of paper starts through the press, slight moisture is applied. Next the roll receives the impressions by application of a short pressure contact with paper-wiped intaglio printing plates. There are two curved plates on the press, each containing the stamp image. Approximately 50 tons of pressure is applied per linear inch through the contact of a large roller against paper and plate. The printed web then proceeds through an overhead oven where the ink is dried. Next, it travels through an area where it may receive a typographic impression for precancelation (or, if this is not the case, it will receive the phosphor coating). The web then passes through the oven again and travels on to the next process, which is the application of the adhesive. After the adhesive has been applied, the web goes through a final oven dryer and is then rewound, gum side out, to be perforated on [a Harris-Seybold electric eye rotary perforator]."

The Cottrell presses also have a typographic rubber mat attachment which can be used to precancel or overprint the web when required. This unit is equipped with electronic controls similar to those on the electric eye perforator, which provides for continuous automatic registration of the overprints. A similar type of unit on the press can be utilized to phosphor tag the face of the web after the printing operation.

The printed stock comes off the press in roll form. It is then perforated, counted and cut into individual sheets on the Harris-Seybold electric eye perforators. The sheets are then examined, and damaged stock is removed, with the remainder assembled in stacks of 100. Five units of 100 whole sheets are then trimmed along the *outer* margins using a guillotine cutting machine which reduces the stock to sheet size for the collating process. The whole sheet stock is then hand-collated between the outer covers. On the 400-subject stock a collated unit consists of the top and bottom covers, and five sheets of ordinary postage with separator tissues between. This represents 50 booklets. Changes in production techniques will necessitate changes in format, i.e., booklets with matte surface or "experimental" gum do not have separator tissue.

Early in 1974 the hand collation process was replaced by a mechanical collating procedure. This became possible as the new "dry gum" adhesive being used in booklet pane production elimi-

nated the need for the tissue paper interleaving between the printed stock.

Sixty booklet sandwiches assembled one atop the other constitute a "collated box." The collated box is then separated into five sections, placed into a gluing box, and the top edges of the sections are glued. The gluing is to hold the individual strips of ten books intact until they are stitched (stapled). Each glued section consists of 60 strips; each strip is separated and is representative of ten finished books. The strips are then "criss-crossed" to facilitate stitching. The individual glued strips of ten books are then stitched on a multi-head stitching machine. The individually stitched strips are then manually counted and assembled into units of 80 strips preparatory to being cut into individual books.

Recently the process of gluing, stripping and stitching has been replaced by a new binding method that produces a glued book without staples. A stack of booklet panes approximately four feet high is placed on an "A" frame, where the outer selvedge edge is "roughed-up" using a hacksaw blade. This provides a greater surface area to which the glue can stick. A cold glue is then rolled across the entire selvedge edge of the stack and air dried.

A heavy chipboard divider is placed between each ten strips of books to facilitate counting after packaging. Ten units of 80 strips each are placed into a guillotine cutting machine and separated into individual booklets. The individually cut books are manually placed into a chipboard carton that accomodates 240 booklets. The carton is closed and sealed with a plastic overwrap and eventually delivered to post offices.

Goebel Bookforming Machine

The latest innovation in the production of booklets is the Goebel bookforming machine. This equipment was designed to further automate and facilitate the process of preparing booklets of pre-printed stamps for sale either in vending machines or over-the-counter in post offices. According to the government release, "The machine is fed with a roll of pre-printed and examined stamps and a roll of blank cover stock. The stamps are automatically slit and perforated and a small strip of the stamp adhesive is moistened. The cover stock is printed in two colors on the face and one color on the back. The stamps and covers are automatically registered and the stamps affixed to the covers via the moistened strip of adhesive. The combined web is split into individual books, folded in half, and glued shut with a strip of suitable adhesive, making a complete book. Books are automatically inspected and defective books rejected. The equipment delivers 15,000 completed books per hour. As of late January 1977, the Bureau began using this equipment to produce the . . . $1.00 vending book, containing seven 13-cent Flag stamps and one 9-cent Capitol stamp."

Fig. 94. Miscut and misperfed booklet panes.

MISCUT BOOKLETS

Figure 94

A shift of one of the sheets (or the entire pack) during the guillotining operation will produce miscut panes. These may include parts of stamps from adjoining panes or the plate number and electric eye markings that are normally trimmed off. It is possible to find even a complete plate number on an improperly cut booklet pane. The greater the percentage of the plate number, the more valuable the pane.

Imperf Between

Foldovers can also occur when the sheeted stamps are made into sandwiches, prior to being cut into individual panes. Foldovers can produce exotic results; a number of booklets have been found with pairs imperforate between, a desirable type of error, often unique.

Misperfed Booklet Panes

On rare occasions the stock being used to collate the booklets has been misperfed. If these sheets are not discovered (and they usually are) after completion of the booklet-producing procedure, one will be able to find a misperfed booklet pane. These panes are quite desirable freaks. The misperforation of booklet pane stock usually occurs at the beginning of a run when the perforating equipment is being set up. The perforator is manually and electronically synchronized to the printed web (with the initial misperfed stock being discarded) until properly perforated stamps are being produced.

PLATE NUMBER COLLECTING. BACKGROUND NOTES

I have a very interesting plate number price list published by J. M. Bartels & Co. of Washington. D.C. and dated July, 1896. It is a priced catalogue and reference list of the plate numbers of U. S. stamps issued from 1847 to 1896. There is much valuable information to be gleaned from the list. For example, the first regular issue stamps of 1847, printed by Rawdon, Wright, Hatch and Edson, were printed from plates lacking plate numbers. Early plate material was collected in strips rather than blocks as we do today. The size of the strip varied from issue to issue. The second issue of 1851-57 printed by Toppan, Carpenter, Casilear and Co., issued imperforate, was supposed to be collected in strips of four, while plate strips of stamps from the eighth issue (1890-93) from plates of the American Bank Note Co. were collected in strips of five. For certain plate numbers on the 1c and 2c stamps, however, strips of seven were needed to follow the accepted custom of the time.

The first plate number (#1) assigned by the Bureau of Engraving and Printing was used for the 2c Type I triangle unwatermarked stamp issued in 1894. This stamp was printed in both pink and carmine over a period of time, resulting in two different collectable plate strips of three, each available in four positions—top, bottom, right and left.

Perhaps the publisher's preface to the price list is the most enlightening thing of all. Remember, this was written in 1896: "Plate number collecting, so far as the United States stamps are concerned, is not a new thing. For many years some of our largest collectors have been adding plate number strips to their collections, but during the past two years it has become a very popular branch of philately. Since the Bureau of Engraving & Printing, of Washington, D. C. has taken the contract for printing the adhesive postage stamps, the collecting of their plate numbers and imprints has become a regular fad with the collectors of U. S. stamps. . . ." It is rather obvious that the fad has caught on.

Not all plate numbers used by the Bureau in producing U. S. stamps are meant to be made available to the public. Plate numbers on coils and booklet panes are normally trimmed from the stock before the product reaches the public. Lithographic plate numbers on combination intaglio-offset multicolored stamps are placed so far out in the marginal selvedge that they, too, are trimmed off before the post office panes reach the public. There are many other examples of Bureau plate numbers that during normal production end up with the waste paper, and not as part of the product available to the public. On occasion examples of these numbers can be found, due to miscutting or fold-overs on booklet panes, mis-slitting of coils so that part of the plate number remains attached to the strip, or fold-overs on sheeted stock so that normally trimmed plate numbers remain attached to the sheet. (See SIPEX sheets.)

PLATE NUMBER COILS

Figures 95-98

ROTARY press-printed coils can at times be found with a percentage of the plate number attached to the coil strip. These varieties occur when the rolls of stamps are slit off center so that instead of having the plate numbers completely trimmed off from the web, a portion of them remains. The larger the percentage of the number shown, the greater the philatelic demand and value. One hundred percent numbers are extremely rare and command a very high premium and, in fact, one can go an entire philatelic lifetime without acquiring an example of a one hundred percent number.

Reconstructed Plate Numbers

Fortunately there is another way we can collect a one hundred percent coil plate number. That is by reconstructing the number using two partially numbered coils bearing the same number. Plates used to print certain of our coils have a plate number in both the top and bottom margins, and by mounting a top and bottom partial plate number strip together, one can effectively reconstruct the original plate number. These reconstructed numbers command much less of a premium than a one hundred percent plate number coil strip.

Presidential Series Coil Production

It is possible to reconstruct a collection of the plate numbers used to print the Presidential series coils. There are 13 different stamps in this series, and 368 different plates went to press to print them. The format of the stamps is not the same for the entire series. There are nine sidewise coils that appear as horizontal strips, slit at the top and bottom, and four endwise coils that appear as vertical strips slit at the left and right sides. The printing plate layouts for the sidewise and endwise coils differed. The sidewise coil plate was 10 stamps high by 17 stamps wide with a plate number over the upper left stamp and below the lower right stamp on the plate. The endwise coil printing plate was 15 stamps high by 10 stamps wide, with a plate number to the left of the lower left stamp and again to the

Fig. 95. Reconstructed plate number on the 4c sidewise Presidential coil.

right of the upper right stamp. The spacing of the stamps on the plates was such that the 15 endwise stamps exactly equalled the dimensions of the 17 sidewise stamps. The two plates were equal in size overall, even though the sidewise plate was of 170 subjects and the endwise plate of 150 subjects. Since both plates were equal in size, they could be printed on the same rotary press. (Rotary refers to the fact that the printing plate is curved, with two plates locked together around a cylinder or drum for each press run.) The stamps were printed from a continuous web, which was rewound at the other end of the press.

The printed web was gummed on this press and later perforated and slit into its 10 component strips, either vertically or horizontally depending upon the format of the stamp. If the web was mis-slit during this operation, it is possible to find a percentage of the plate number attached to either the top or bottom strip. The numbers found would alternate, first one from the first plate on the press, followed by the number from the second plate.

Surprisingly, partial plate numbers on Presidential coils are relatively common, and while this material is no longer available at the post offices, much of it is in collectors' and dealers' hands. A diligent search would probably uncover a good many of these partial plate number coil strips just waiting to be "reconstructed." I have looked through literally hundreds of Presidential coil strips and have never seen a misperf. There are no recorded imperfs either on the Presidential coils. Our modern coils seem to abound in mis-perfed and imperforate condition. But it is very unusual to find even small percentages of a plate number attached to a modern coil.

Mounting an example of a top and bottom on a sidewise coil or a right and left partial plate number on an endwise coil serves to reconstruct the number. There are many collectors who have endeavored to complete such a collection for the Presidential coils, and for all I know a few may have been successful. It would be virtually impossible starting "from scratch" to reconstruct all 368 plate numbers used in the printing of this series coils, but to put together a collection of one of each of the 13 different Presidentials in reconstructed coils would certainly be possible—not easy, but possible. But then the fun is in the search.

Fig. 96. Miscut coils—4c Lincoln imperf showing electric eye markings at the top.

Mis-Cut Coils

An improperly cut coil frequently shows a portion of the design from the row above or the row below. Shown is an imperforate coil mis-slit so far off center that a large percentage of the electric eye bars used for the electronic registration of the perforating and slitting equipment is incorporated into the top margin. This is an example of a freak and major error in combination.

The strip of four of the 10c Jefferson Memorial coil also illustrates a combination freak and error. Note that the stamps are mis-slit and also imperforate. Cellophane tape is attached at the right of the strip, indicating a Bureau repair of the printed stock, which was most likely torn during the coiling procedure.

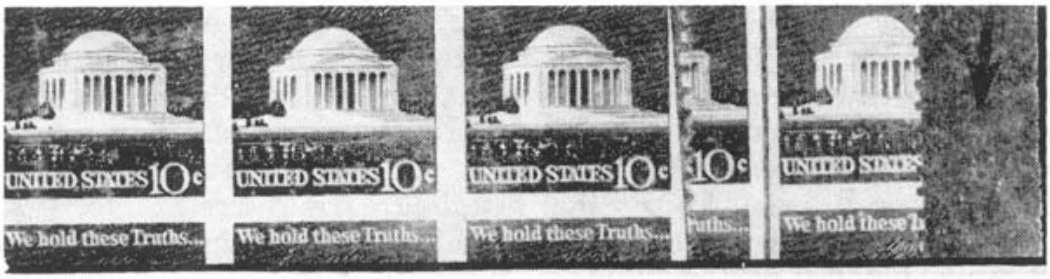


Fig. 97. Miscut coils—10c Jefferson Memorial imperf and miscut with a Bureau Scotch tape repair at right.

Fig. 98. Imperforate and mis-slit 9c Freedom to Assemble coil with 100% plate number.

432-Subject Plate Coil—Imperforate, Miscut, Double Plate Number

The 9c "Freedom to Assemble" coil is just one of many stamps printed from a 432-subject plate on a Cottrell rotary press. The number 432 refers to the number of engraved images on the curved intaglio plate. The plate is arranged 18 stamps high by 24 stamps wide. Two plates of 432 each are locked together around a cylinder or drum for each press run. Each plate is assigned its own plate number. The plate numbers are found in the lower right and lower left positions on each plate. The line pairs found on the Cottrell press product are actually a "print" from the ink that accumulates in the seams between the two plates on the press at the time of printing. On a 432-subject plate these line pairs occur every 24 stamps. Accompanying each line are two plate numbers, one from each plate on the press. As plates are changed during a press run, the combination of numbers will also change. These companion plate numbers are printed in the lower selvedge of the web, approximately 1/8 inch below the inferior border of the stamps themselves. With each full rotation of the two joined plates, the position of each number will "flip-flop" in relation to each other. On the 9c coil illustrated, plate number 37168 is found to the left of plate number 37167. At the next line pair the two numbers will again appear but reversed in order. (Actually, this is academic as coil plate numbers are trimmed off during a normal production run through the coiling equipment.)

All stamps now being printed for coil production are plated 18 stamps high, no matter on which press they are printed. To produce coils the web of stamps is run through separate coiling equipment once printing is completed. This equipment, which is made to accomodate a web 18 stamps high, perforates the web, slits it into its 18 component strips, counts the stamps and packages them into rolls of 100, 500 or 3000 as the case may be. As previously stated, in a normal operation the slitting process removes all extraneous selvedge along with all traces of the coil plate numbers so very few of these plate numbers ever reach the public.

Since there are so many plate number collectors, even small percentages of these numbers found on mis-slit coils are considered collectable.

Very few examples of partial plate numbers have been found from 432-subject plates, and to the best of my knowledge the 9c coil illustrated here is the first example of one hundred percent-plus plate numbers from these plates. The coil strip in question is from the bottom row of the printed web. The error occurred during the coiling operation itself, either at the start of a run when the equipment was being set up, or when a breakdown of some sort necessitated readjustment of the web. In either event, the perforating wheels were not engaged as the web passed between them, resulting in the imperforate condition of the coil. Second, the web was so poorly centered in the machine that as it was slit into strips, the bottom selvedge containing the two plate numbers was incorporated into the bottom coil, resulting in this spectacular combination freak and error. (A roll or web can feed off-center at almost any time as well as in the beginning or the end. It is not as likely to occur in the middle of a run.)

PRODUCTION TECHNIQUES IN THE MANUFACTURE OF U.S. STAMPS

IN an attempt to produce multicolored stamps in tremendous quantities, the Bureau of Engraving and Printing utilizes innovative procedures and presses to facilitate the manufacture of these stamps. This introduction of new presses and procedures has allowed the Bureau to keep up with the ever-increasing demand for these stamps. With each change, however, the prevalent type of freak and error reaching the public changes.

GIORI PRESS

THE first Giori presses were used to produce multicolor stamps. They print from intaglio (line engraved) plates and can use as many as three inks which may be combined to produce as many as seven colors. When the Bureau decided to increase its multicolor capabilities even further, Giori printings were combined with Harris offset press printings. The continued production of multicolored stamps on a combination of presses, utilizing multiple press runs, greatly increased the number of misregistration freaks reaching the collecting public.

GIORI PRESS AND HARRIS OFFSET COMBINATIONS

THE use of multiple press runs opened the door for the great number of missing color errors that have been found. Double sheeting, dry ink wells, and improper engagement of printing cylinders are all factors in the missing color phenomenon. Stamps printed on Giori presses and combination Giori-Harris presses are perforated on an "L"-shaped perforator which is mechanically fed individual sheets.

NINE-COLOR HUCK PRESS

Figures 99-103

THE personnel at the Bureau have introduced giant rotary web-fed multicolor presses to further facilitate their capacity to produce our country's stamps. These presses are responsible for certain types of freaks and errors. The nine-color Huck press is used to print multicolor stamps from intaglio plates. A short description of this giant press is in order to better understand the types of freaks and errors found on its products.

This press has three intaglio printing units each capable of printing three colors each, and it is this 3 x 3 capacity that has given the press its name. By overlapping certain inks, the number of colors can be increased. Each printing unit is equipped with its own ink supply and inking-in rollers. The first printing unit prints indirectly. This unit has a transfer blanket wrapped around it, and the ink is applied to it from the engraved plates rather than directly to the paper. The blanket then offsets the image on the paper, greatly reducing the amount of pressure necessary to produce a clear image, and thus greatly reducing the amount of distortion to the paper. This in turn enables much greater control of the registration as the web continues through the second and third intaglio printing units.

Fig. 100. 8c Huck flag plate block fully imperforate at left and blind perfs at right.

Fig. 99. 6c Huck flag imperf between.

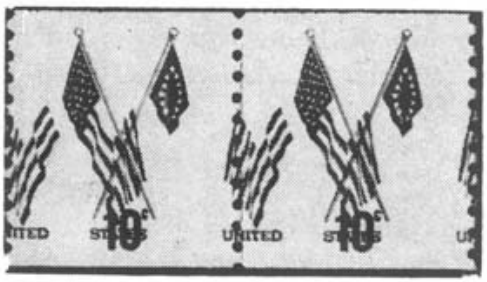


Fig. 102. 10c Huck flag coil misregistration of the red and blue colors of the flag.

Fig. 101. Huck press misregistration on 1968 Christmas stamp; wording appears to be missing at bottom of vignette.

Fig. 103. Three different misperfed 8c Huck press flag stamps.

Perforating Unit

An innovative feature of this press is that the perforating unit is part of the press, and the continuously moving web does not have to be rewound and fed into a separate perforator to complete the operation. Stamps perforated by this rotary harrow method will have perfect corners, with no overlapping of the horizontal and vertical perforations. The perforator on the nine-color Huck press is a rotary harrow that has the capability to perforate both regular issue and commemorative-sized stamps. This is accomplished by retracting alternate rows on the perforator, and this capability is responsible for a number of major errors that have been found on the products of the Huck press.

Huck Press Imperforate Between

Both the 6c and 8c White House Flag stamps have been found as horizontal pairs imperforate between. These varieties are major errors, and should never have escaped the Bureau.

Huck Press Misregistrations

Registration on this press has been near-perfect, and at the present time very few collectable misregistrations have appeared on stamps produced on it. Shown is a copy of the 1968 Christmas stamp in which the wording "VAN EYCK", etc., is missing from the stamp. In this particular case, a slight misregistration has moved the wording up into the design, thus obliterating it; it is a very small misregistration, but one which effectively alters the design.

Huck Press Misperfs

Very few perforation freaks have been found on stamps produced on this press, and these are usually the result of improper synchronization of the rotary harrow perforator to the printed web at the start of a press run.

ANDREOTTI PRESS

Figures 104-106

THERE is another web-fed multicolor press in service at the Bureau at the present time. This rotogravure press is known as the Andreotti. It is 110 feet in length and has seven printing stations with provisions for an eighth. Provisions have also been made for the addition of a perforating unit, but up to 1975 most stamps printed on it were perforated on a Seybold electric eye rotary web-fed perforator, which is also utilized to perforate rotary web-fed press-produced regular issues. At the time this book is being edited, the rotary harrow has been incorporated into the Andreotti press. The perforations from this harrow do not conform to those of the Seybold electric eye perforator, and an examination of stamps perforated on each will clearly show the difference. A unique feature of this press is that the fifth, sixth, and seventh printing units can be reversed so that the web can be printed on either side. This technique is utilized in printing air letter sheets and has also been employed in printing the Postal Employee commemoratives which have a "commercial" message printed on the back.

Andreotti Missing Colors

A number of missing color errors have been found on stamps printed on the Andreotti press. When the press is stopped, all printing cylinders disen-

Fig. 104. Andreotti press 1970 Christmas stamp with missing black color (normal at left).

gage from the web. This is done so that the ink will not dry and cake, sticking to the web, and tearing it when the press is restarted. The area that is unprinted when the cylinders are disengaged is usually four stamps wide in the narrow dimension. These error sheets should be destroyed at the Bureau, but in a few instances they have gotten past the inspectors and into the hands of the philatelic community. These missing color varieties are true errors.

Unfortunately for collectors of freaks and errors, the registration of colors on stamps printed on the Andreotti press has been close to perfect but for a rather unusual type of misregistration brought about by a specialized mechanism on the press.

Fig. 105. "Staircase misregistration" on Andreotti press products: "uphill racers" (top) and "downhill racers" (bottom).

Staircase Misregistration

The Andreotti has the capability of having additional rolls of paper added to the press without having to shut down the press. This transition is highly automated, and the new roll is joined to the expiring roll by a "flying paster." Strips of double-sided plastic tape are used to splice the new web to the old roll. This tape will cause the automatic registration devices on the press to momentarily lose control of the web. Automatic controls will then take over and make the appropriate register

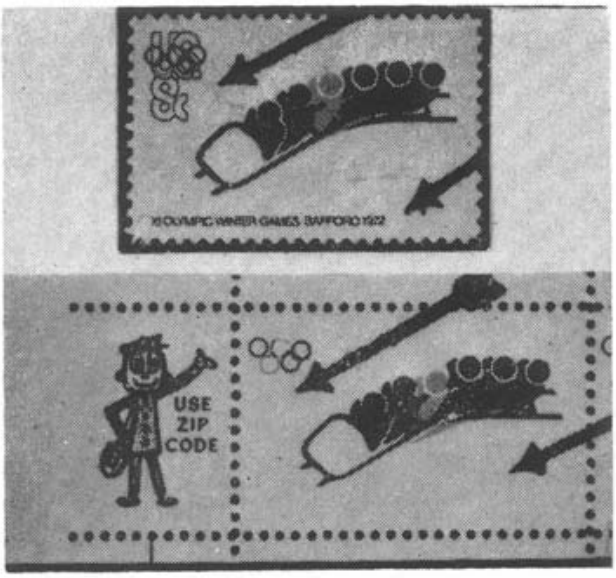


Fig. 106. Solvent inking variety on 1972 Olympic Games stamp—inscriptions and denomination missing (normal copy at top).

corrections and re-synchronize the printing units. The type of misregistration that occurs has a "staircase effect," with each color being a little further out of registration than the preceding one.

Andreotti—Solvent Inking Varieties

Another type of freak has been found on stamps produced on the Andreotti press. This is a selective loss of ink over parts of the stamp (as mentioned earlier), so that certain portions of the design are printed, while other portions printed from the same inking cylinder are not. Shown is a stamp that had been advertised as a missing color error at a substantial price. It is a Mr. Zip single in which the wording "XI OLYMPIC WINTER GAMES - SAPPORO 1972" and the denomination, both printed in black, are missing. Unfortunately, the Olympic ring and a pair of the bobsledders also printed in black from the same cylinder are present, which takes this variety out of the missing color error category. A similar "missing color" has also been found on the 6c Olympic stamp of the same series. These actually are "solvent-inking" freaks in which solvent was inadvertently carried onto the printing cylinder and selectively washed the black ink out of the shallower etched areas of the cylinder, while allowing the deeper areas to print. There certainly will not be enough copies of this variety to fill the demands of the many EFO fanciers who will want an example for their collections, and as a result these stamps should sell at a nice premium. Still, these stamps are "only" freaks and should never command the prices that true color errors do.

CHRISTMAS STAMPS: PRODUCTION

Figures 107-126A

AS previously stated, study of freaks and errors is in reality a study of the production techniques used by the Bureau in producing our postage stamps. A collection of the types of freaks and errors found on the multicolor Christmas stamps produced since 1966 is a good example of how such a freak collection can mirror the changes in techniques, presses, and procedures at the Bureau over a given period of time.

Fig. 107. 1966 Christmas stamp misregistration and misperf varieties.

The 1966 Christmas stamp was a multicolor Memling Madonna portrait in a small format. Several press runs were required to complete the design. The stamp was printed in sheet form and perforated on separate equipment. No major errors are known on this stamp, though there are some nice misregistrations and misperfs, similar in nature to other freaks found on multicolored stamps produced by the Bureau at this time using similar techniques.

The 1967 issue with the same Memling Madonna was produced as a commemorative-sized stamp. Two different presses were used to print it. The blue gown and the orange background were printed in one press run on a two-color Harris offset press, with some overlapping of the inks to produce green. A second press run on the Giori press printed the dark brown of the outline, the light brown of the hair, the flesh tones and lettering and the red of the mantle. Some outstanding examples of misregistrations are found on this stamp along with a perfect offset of the intaglio (Giori) portions of the design.

The 1968 Christmas stamp was the first to be produced on the nine-color Huck press. The first indirect impression was of a light yellow and a dark yellow color. The second intaglio unit printed the red and blue colors, with the third intaglio unit printing the brown and dark green colors. The brown and green in combination appear black. Two major errors are known on this stamp: missing yellow and completely imperforate. Very few freaks have been found. One of the nicest appears on a plate block from the lower right pane in which the "AS 6c" from the left stamp and the "CH" from the adjoining stamp are missing. About 50 to 100 examples of this variety exist, but it is not a plate variety. In this case a part of the inking-in roller broke off, so that this portion of the plate received no ink, resulting in the blank area.

The 1969 Christmas issue, "A Winter Sunday in Norway, Maine" by an un-

Fig. 108. 1967 Christmas stamp misregistration variety.

Fig. 109. 1968 Christmas stamp imperf pair.

known artist, was also printed on the nine-color Huck press. This stamp required the use of only two of the printing units to complete the design, with the red, light green and yellow colors

Fig. 110. 1968 Christmas stamp—broken inking-in roller caused missing letters and numeral on bottom two stamps.

Fig. 111. 1969 Christmas stamp (Winter in Maine) misperfed (top) and missing green background (bottom).

printed by the first indirect printing cylinder, and the green and brown colors printed by the second intaglio unit. This 1969 Christmas stamp is found with a missing color, but the area involved is so small that it has practically been ignored by the collecting public. The light green hills in the background of the vignette have been found missing on a large number of sheets. The stamp

Fig. 112. 1969 Christmas (Winter in Maine) plate block misperfed. One of the few misperfs found on a 9-color Huck press product.

has also been found completely imperforate. A rather spectacular misperf has been found as well; perforation freaks on the nine-color Huck press product are quite scarce.

The 1970 Christmas stamps were printed on an Andreotti press by the Guilford Gravure Corporation located in Guilford, Connecticut. The Nativity design by Lorenzo Lotto was to be printed by the Bureau of Engraving and Printing, but a delay in the delivery of the Bureau's Andreotti press necessitated the use of the Guilford Company equipment. Two missing color errors have been found on this stamp, one missing the black color. and one missing the blue color. These color errors are brought about during press stoppages. On the Andreotti, when the press is stopped, the printing cylinders disengage from the paper so that the ink will not dry and cake and tear the web when the press is started up again. The size of the area that is affected when a printing cylinder disengages from the web is about four stamps wide in the narrow dimension. These sections of the web, each missing one color of the complete design. are supposedly removed and destroyed.

In 1970 the Guilford Company also printed four antique Christmas toy stamps in a se-tenant combination. These stamps appeared in two formats, as the regularly issued stamps and also "precanceled". The precancel was in the form of two wavy black lines running horizontally across the top and bottom to either side of the image of the toy and the 6c denomination.

The non-precanceled stamps have been found with the black color missing and are among the most valuable of all the missing color errors found to date. A plate number vertical pair of the baby carriage and rocking horse stamps with a first day cover cancel is known completely imperforate. One other pair is known imperforate. What

happened to the other 46 stamps from the imperforate pane is at the present time a mystery.

Fig. 113. 1970 Christmas stamps (antique toys) imperforate.

Fig. 114. 1970 Christmas stamps (antique toys) precanceled, misperfed so that the plate numbers appear inside the perforations on the right side.

The 1971 Christmas issues also were printed on the Andreotti press, but this time at the Bureau of Engraving and Printing, which had finally gotten its own press set up. Two stamps were printed for the holiday. One was the "Partridge in a Pear Tree" and the other was the Giorgione Nativity. The partridge stamp is known missing the tan color, while the Giorgione stamp is known missing the gold color. At the time of production of these stamps, the Andreotti-printed stamps were perforated and sheeted on Seybold electric eye rotary perforators. Some misperfs are known on the partridge stamps but to date no freak perforation varieties on the Giorgione stamp have been seen.

Fig. 115. 1970 Christmas stamp (religious) missing gold color.

The two Christmas stamps for 1972 were Andreotti press products, too. The religious motif stamp was a detail from a painting by the "Master of the Legend of St. Lucy." A number of these stamps have been found missing the pink color; a missing yellow color error is also known. These errors, like the 1971 partridge missing the gray color and the Giorgione Nativity missing the gold color, are found in complete panes, not in four-row widths like the previous missing color errors found on the Andreotti product, and occurred when one of the printing cylinders was not engaged at the start of a press run. Because in the case of the partridge and the St. Lucy stamps the error is similar in appearance to the normal, they went undetected. The St. Lucy Legend stamp is known with the figures inside the vignette misregistered.

Fig. 116. 1971 Christmas stamps partridge misperfs.

The second Christmas design for 1972 was Santa Claus. This stamp was printed in six colors on the Andreotti press. To date no major errors have been found, though several rather nice misperfs and misregistrations are known.

Two Christmas stamps were produced for the 1973 season, both on the

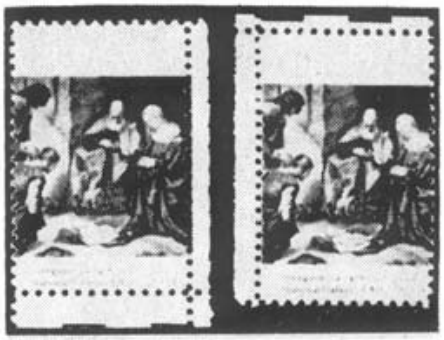


Fig. 117. 1971 Christmas stamps (religious) missing gold color left; normal at right.

Fig. 118. 1971 Christmas stamp misregistration on Mail Early single.

Andreotti presses in six colors. The designs were a needlepoint Christmas tree and a Madonna and Child by Raphael. A major error has been found on the 8c needlepoint stamp—a lower left pane horizontally imperforate between the third and fourth rows. This stamp, like all Andreotti products, was perforated on the Seybold electric eye rotary web-fed perforators, as a perforating unit had not been set up on the Andreotti at this point in time. No major errors have been discovered on the Raphael Madonna stamp, though some minor misregistrations and misperfs do exist.

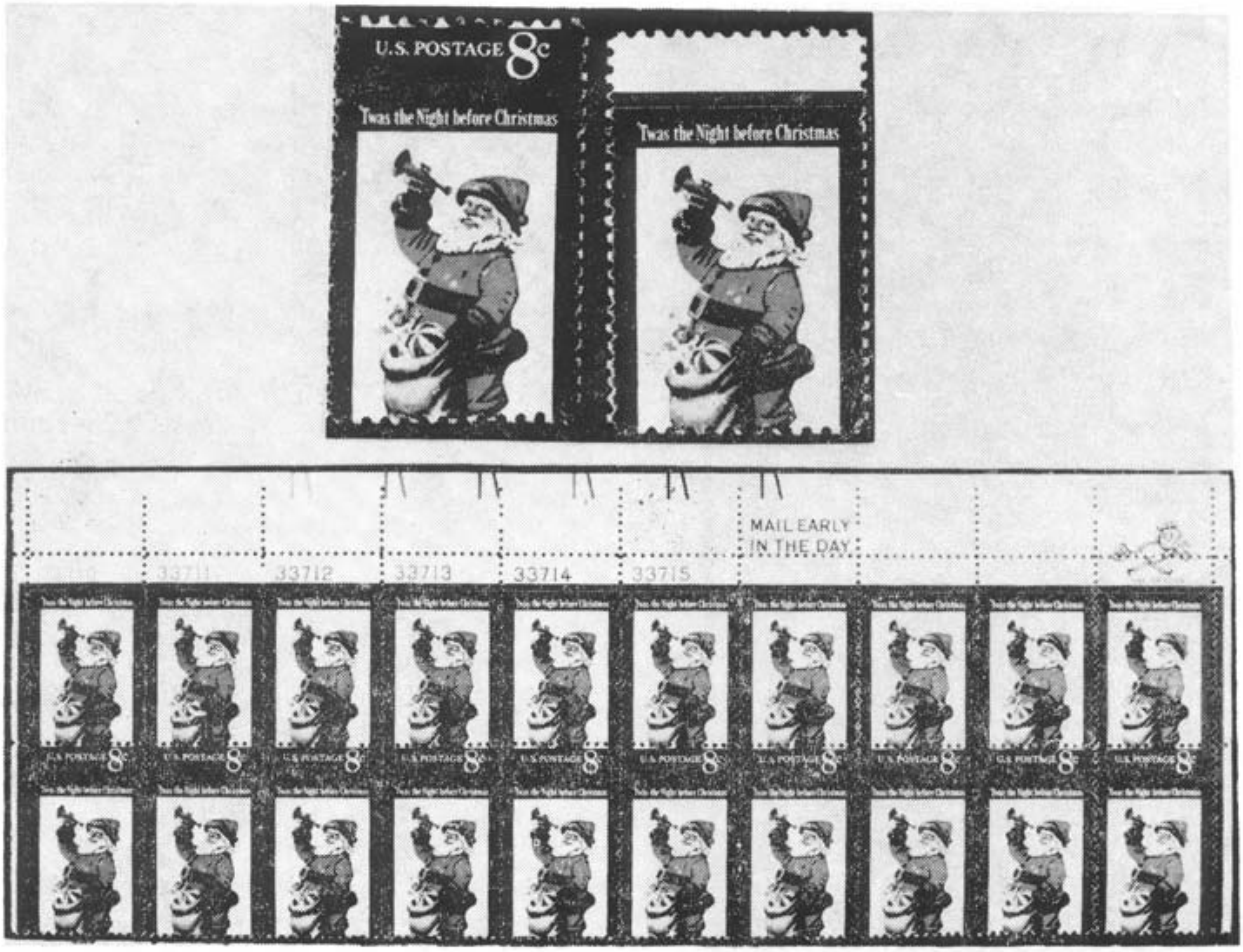


Fig. 119. 1972 Christmas stamps (Santa Claus) misperfs: two singles and plate block of 20 with the numbers incorporated into the "design" of the top left six stamps.

Three 10c stamps were issued for the 1974 Christmas season. One of them was a pressure sensitive stamp, depicting the dove of peace weather vane atop the Mount Vernon home of George Washington. These stamps come with a peel-off lacquered backing paper. The paper surrounding each stamp was die-cut and stripped away to reveal the perforations of the backing paper. Die-cutting and stripping was also done around the plate numbers and other selvedge markings. No major errors have been found on this stamp, and only very minor freaks have been seen. The other 1974 Christmas stamps were of a Currier and Ives print and an altarpiece from the Metropolitan Museum collection. These two stamps were printed on the Andreotti press and perforated on Seybold electric eye rotary web-fed perforators. No major errors are known on these stamps.

Only two Christmas stamps were issued for the 1975 holiday mailing season. Because of the pending change in the postal rate, the stamps were printed without a denomination. One of the stamps was from a Christmas card design by Louis Prang which appeared in 1878. The other was based upon a Madonna and Child painted by Ghirlandaio, a fifteenth-century Italian artist. Both stamps were printed on the Andreotti gravure press, which at this time had its own in-line perforator, similar to the one on the nine-color Huck press. Both these Christmas stamps have been found completely imperforate. The most likely explanation for this is that at the start of a press

Fig. 120. 1973 Christmas stamps (needlepoint)—two vertical misperfs.

Fig. 122. 1973 Christmas stamps (religious)—two horizontal misperfs.

Fig. 121. 1973 Christmas stamps (needlepoint) vertical pair imperf between.

Fig. 123. 1974 Christmas stamps (Currier & Ives)—two horizontal misperfs.

run the printed web passed through the perforating unit before the unit was operative. These "make-ready" sheets should have been found and destroyed but fortunately reached philatelic hands. Not all of the 1975 Christmas stamps were perforated on the Andreotti in-line perforator, as other perforating equipment at the Bureau was utilized. This resulted in misperfs similar in nature to commemorative stamps that are printed by a combination of offset and intaglio presses and perforated on the "L" perforators.

Designs for the two 1976 Christmas stamps were based upon a Nathaniel Currier print of 1855 and a 200-year old Madonna and Child painting by

Fig. 124. 1975 Christmas stamp (Prang card) misperf on Mail Early single.

John Singleton Copley executed in 1776. Both stamps were printed on the seven-color Andreotti gravure press, but in addition, for the Currier stamp, 70 percent of the stamps were printed on the gravure portion of a new web-fed eight-color combination gravure-intaglio press recently installed at the Bureau of Engraving and Printing. The intaglio portion of the new press was not utilized for this issue.

Fig. 126. 1975 Christmas stamps (religious) completely imperf Zip block.

Fig. 125. 1975 Christmas stamps (Prang card) completely imperf Zip block.

Fig. 126A. Completely imperforate pairs of the 1976 Christmas stamps.

The remaining 30% of the Currier stamps differ from those printed on the new press. These differences are not freaks or errors but normal variations due to production techniques. The most apparent differences have to do with the format of the pane, position of the plate numbers, and the absence of some of the marginal inscriptions in the selvedge. Panes from the new press have so-called "floating" plate numbers which move progressively up and down the selvedge on a pane-to-pane basis. Each pane produced on the new press has no additional selvedge, and no marginal markings in the one wide selvedge that it does have. A post office pane looks like no other ever before seen but remember these are not EFO varieties, just normal examples of a new press and plate layout being utilized by the Bureau.

The Copley Madonna Christmas stamp and both types of the Currier Winter Pastime stamps have been found completely imperforate, resulting in three different collectable errors. Marginal pairs of the Currier imperforate error printed on the Andreotti press and on the gravure portion of the new combination press can easily be recognized due to the differences in selvedge markings used on each press. Imperforate pairs without selvedge markings from each press can also be differentiated from each other by variations in color and shade, as solvent-based inks are utilized on the Andreotti press and water-based inks on the newer press. To date no misregistered or misperfed freaks have been found on the 1976 Christmas stamps.

The new press is capable of printing regular-sized, commemorative-sized or booklet pane stamps on a continuous web of pregummed coated paper, phosphor-tagging them, precanceling them and printing on the back if so desired, perforating the web and cutting it into post office panes of 100.

AS printing equipment and techniques change and as greater automation is utilized in an effort to expedite the production of billions of stamps with an attendant decrease in the amount of visual inspection, the number of freaks available to the collecting public will probably increase. Still, this small amount of (philatelic) waste will never satisfy the demand for this material, and values should continue to rise. The best advice I can give the collector interested in this type of material is to learn as much as possible about the production of his country's stamps and especially to know his specialty. Increasing one's knowledge certainly plays a large part in the pleasure one derives from one's collection, and the pursuit of information concerning one's hobby should always play a prominent role in the philatelic quest.

THE QUESTION MARK

Figure 127

UP to this point there is one question that we have obviously avoided answering, and that is, "What is the difference between a freak and an error"? Unfortunately, this is an impossible question to answer to everyone's satisfaction.

Photo courtesy of Richard D. Gininsky, New York.

Fig. 127. Special delivery stamp imperforate top margin.

Illustrated is a 10c Special Delivery stamp issued September 6, 1888. It is the champion wide-margin copy of all time, as the horizontal perforations normally found at the top of the stamp are missing. If the second row of perforations had been missing rather than the top row, we would have had a vertical pair imperf between and everyone would agree that this is a legitimate error. An imperforate condition between a stamp and its selvedge is considered a freak. This should not demean the stamp under discussion in any way as it is still quite collectable and valuable. "Common usage" has decreed that this is a freak and not an error, but who determines "common usage"? The answer is, our catalogues. If an item is catalogued as an error, it is an error; otherwise it should be considered a freak. Unfortunately this is a very unsatisfactory answer, but one that I will have to stand with until I hear a better one. A number of errors listed in the catalogue should, I feel, be deleted; conversely, many, I feel, should be included which are not. I know that our catalogue compilers are dedicated professionals doing their jobs to the utmost of their ability, but differences of opinion will always be with us. especially in the classification of EFO's. In many cases there is a very fine line between certain freaks and certain errors, and I believe it really doesn't make a difference if our wide-margined Special Delivery stamp is a freak or an error. What it probably all boils down to is that you should collect what you enjoy collecting, and let the other person worry about whether it is a freak or an error.

In closing, I would especially like to thank my friend Richard Gininsky, a Nassau Street stamp dealer who started me on collecting freaks and errors, and who enthusiastically supported this study. I would also like to thank George Brett, whose book, *The Giori Press*, started me on a quest for information on EFO's; Jacques Schiff, Jr., who provided valuable help in deciphering many of the freak varieties mentioned herein; and Mr. Everett J. Prescott, Chief of the Office of Currency and Stamp Printing at the Bureau of Engraving and Printing, for supplying much of the information on production techniques described in this book.

REFERENCES AND SOURCES

Because this book is intended to be an introduction to the field of EFO's rather than an exhaustive study, a formal bibliography would be inappropriate. Moreover, the literature devoted exclusively to EFO's is not as yet extensive. Aside from a few scattered articles in philatelic periodicals, the largest number of studies on the subject has appeared in *The United States Specialist* under my byline. Volumes 37 to 45 and volume 48 (1966-1974 and 1977), which are indexed in the December issue of each year, are fruitful sources of information. Many of the back issues of these journals are available from the Executive Secretary, Bureau Issues Association, 16 Sammis Lane, White Plains, New York 10605.

These same journals are also filled with detailed descriptions of printing presses and production methods by George W. Brett. Mr. Brett is the acknowledged authority in the field, and his writings provide valuable insight into the genesis of many EFO's.

Basic to the reference library of any collector interested in EFO's are certain standard catalogs and texts, as listed below. When using the catalogs, one should never overlook the introductory portions, since many fine nuggets of information are found there.

—*Scott's United States Stamp Catalogue Specialized*—necessary for its almost universally accepted numbering system.

—*Minkus New American Stamp Catalog*—especially good for its explanation of luminescence and "tagging" varieties.

—*The Giori Press*, by George W. Brett, published by the Bureau Issues Association in 1961. The pioneering characteristics of this press in the production of U S. multicolor stamps elicited a thorough study by Mr. Brett in this 110-page, profusely illustrated book. It is invaluable for understanding EFO's from the Giori and similar presses.

—"Johl"—The late Max Johl wrote a series of four volumes on *The United States Postage Stamps of the 20th Century;* this is the basic reference for U. S. stamps of the 20th century to 1937. Later he produced two volumes on commemorative stamps only up to 1947. The originals are difficult to locate and expensive, but the Quarterman Publications reprint version is still available from philatelic literature dealers at a reasonable price. However, it includes only regular, parcel post and airmail issues of 1902-1935.

—"Glass"—The late Sol Glass, Chairman of the BIA, wrote *United States Postage Stamps 1945-1952* as a continuation of Johl's work.

—"Brookman"—The late L. G. Brookman did for 19th century U. S. what Johl did for 20th century, with the original edition of *The United States Postage Stamps of the 19th Century* appearing in 1947. In 1966, a three-volume reprint with small modifications was marketed by Linquist Publications.

—*Fundamentals of Philately*, by L. N. and M. Williams—This massive, 600-page basic reference to postage stamp production is filled with valuable insights into U. S. as well as foreign stamp varieties. Published by the American Philatelic Society in 1971, its authors were Englishmen who benefitted from the expert editing of BIA member David Lidman.

If one's interest lies primarily in contemporary EFO's, one can form a reference library by keeping abreast of the new issues through the philatelic press. However, the general, commercial press, under the urgency of deadlines, often prints accounts of EFO's that are incomplete or in error, using reports from

collectors who may not be fully informed. Their reports must be continually winnowed and sifted in order to arrive at the truth of a given situation. Moreover, some collectors who discover new EFO's write directly to the Bureau of Engraving and Printing for an explanation and then regard the forthcoming correspondence as the last word. One should be aware, however, that the people at the Bureau take a different approach to stamp production matters than collectors do and hence their explanations must be interpreted in the light of philatelic parlance.

Probably the best solution is found in the careful reading of the publications of the Bureau Issues Association, especially of its journal, *The United States Specialist.* Because of the desire for accuracy, it may not be the first with the news, but when it does carry a report, it has the cachet of authority.