

PLATE VARIETIES COMMITTEE
C. W. BEDFORD, CHAIRMAN
319 VANIMAN STREET
AKRON, OHIO

BUREAU ISSUES ASSOCIATION

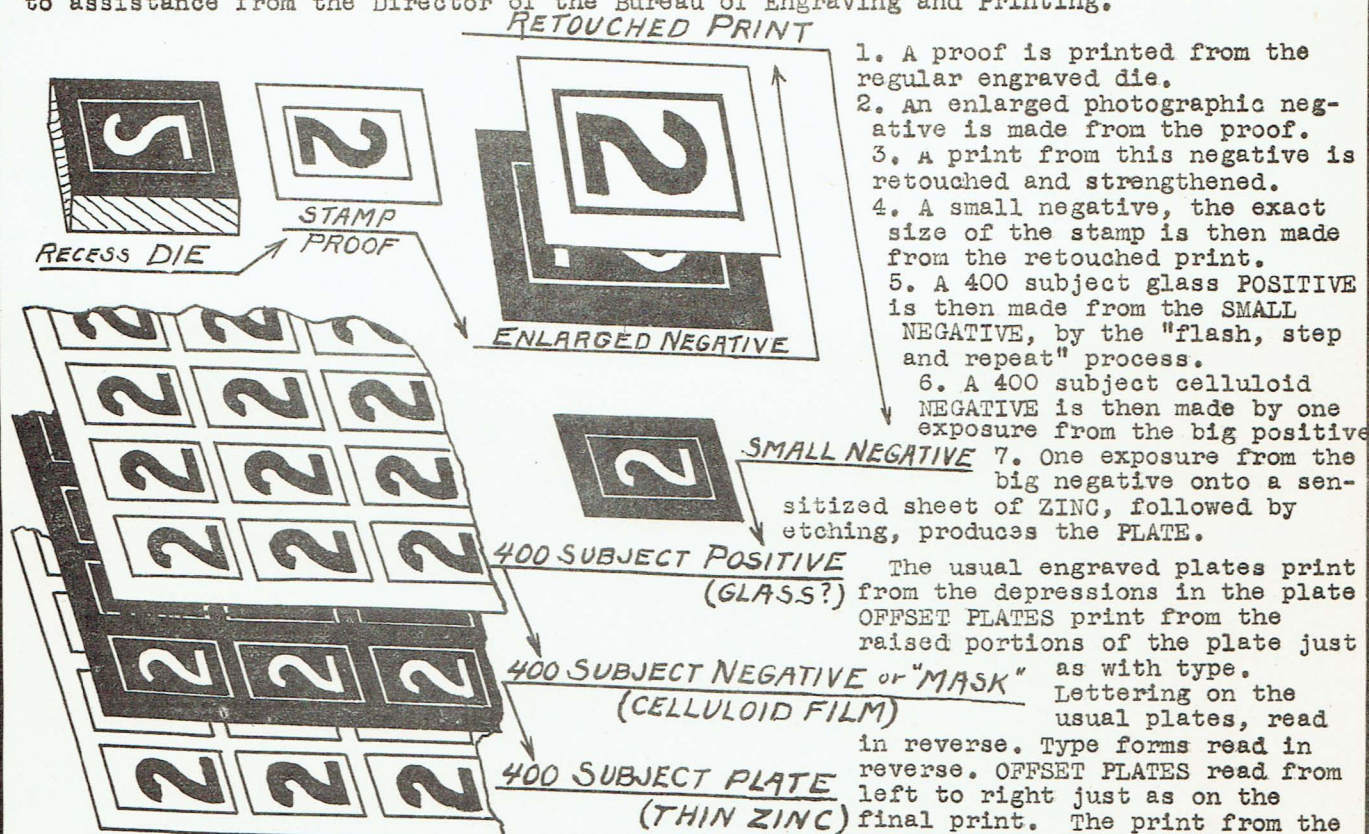
"KNOW YOUR COUNTRY'S STAMPS"

THIRD EDUCATIONAL REPORT

Shift Hunter Letter No. 37

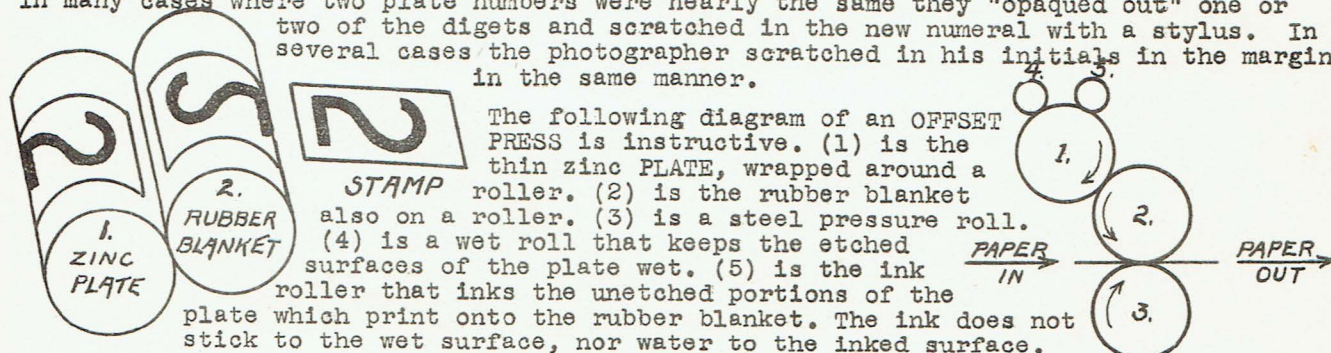


In order to appreciate and properly interpret the many varieties found on the Offset stamps of 1918, it is necessary to know the details of plate manufacture which are widely different from the regular engraved printings. Many of the technical discrepancies which have previously appeared in the philatelic literature are here explained, thanks to assistance from the Director of the Bureau of Engraving and Printing.



reads in reverse just as a type form, and this blanket of rubber, wrapped around a roll, prints the final stamp on the paper.

Many plates were made from one BIG NEGATIVE. The plate numbers were changed on the big Negative for each new plate. This was done by (a) printing sets of plate numbers on paper, (b) photographing the prints on a negative and (c) "stripping" the plate numbers off the negative and attaching them to the edges of the big 400 subject negative. In many cases where two plate numbers were nearly the same they "opaqued out" one or two of the digets and scratched in the new numeral with a stylus. In several cases the photographer scratched in his initials in the margin in the same manner.



Bureau Issues Association

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This report with Rotaprint illustrations, is mailed gratis to all B.I.A. members through the kindness of several public spirited members whose names we are asked not to mention. You can show your appreciation by mailing your \$2.00 to the Chairman of the Plate Varieties Committee as your share of the expense of these illustrated reports.

This is the first report of and will introduce to you

Mr. Don F. Lybarger, B.I.A. 250, Chairman of the

OFFSET PLATE VARIETIES COMMITTEE

Mr. Lybarger will be glad to receive correspondence and plate varieties on the Offset Issue of 1918 and with your cooperation he hopes to add to the Shift Hunter files a more comprehensive expose of these stamps than has ever before been attempted. As with the regular plate variety work please enclose return postage as you write to "Don".

NOTES ON THE U.S. OFFSET PRINTING ISSUE OF 1918-20

The Offset Printings of 1918 comprised the first departure from engraved plates for U.S. stamps. Scott's catalogue lists 7 major varieties, Nos. 525 to 536, but there are numerous Types, Plate Varieties and Ink Varieties as well as a most interesting history of the sequence of plates to be traced through the Plate Numbers which vary from plate to plate and even vary on a single plate. It is no easy matter to get together a comprehensive collection of even one of these stamps.

Many collectors have already contributed to the data which has been gathered for publication in these columns. We will have occasion to frequently refer to the writings of A. E. Owen and of the late J. B. Leavy.

Reasons for the Offset Issue

The offsets are a by-product of the World War. At that time the demands on the Bureau were burdensome and speed was essential in turning out postage stamps. Materials for their proper manufacture became somewhat scarce or poor in quality. The barites used as a base in printing inks grew inferior, contained considerable grit and rapidly wore out the plates. Also it was difficult to obtain the necessary quality of steel for the making of engraved plates. The order was therefore issued early in 1918 temporarily to make the 3¢ stamp by the offset printing process.

The Photographic Process of Plate Production

The method of making plates for the printing of stamps by the offset process is ably illustrated by C. W. Bedford in the accompanying report.

1. The Bureau struck a proof from the original engraved die of the stamp to be produced.
2. A photographic negative was then made from this proof and greatly enlarged.

3. A print from this enlarged negative (or the negative itself) was cleaned and touched up so that its lines were clear and sharp.

4. This retouched design was next reduced to normal stamp size and the negative thus created became the SINGLE MASTER NEGATIVE.

5. The single master negative was placed in a "step and repeat" photographic machine, and a large sensitized plate (doubtless of glass) was placed in the portion of the machine under the negative. The apparatus then flashed an impression of the single master negative on the photographic plate beneath it, moved to the next position on the plate where it likewise left an impression, and so on back and forth across the plate until the imprint of 400 stamps was made. The glass plate was then developed and became the 400 SUBJECT MASTER POSITIVE. It is understood that the guide lines and arrows were placed upon this positive by hand.

6. From the positive was made a celluloid negative which may be called the 400 SUBJECT MASTER NEGATIVE.

7. This master negative was next used to impress its design of 400 stamps (by contact photography) upon a thin plate of zinc which had been sensitized much in the manner of an undeveloped photographic plate. The plate was developed and the 400 stamp design was etched in with acid in much the same way that zinc etchings are made commercially by photo engravers.

The Printing Process

The zinc plate was now placed on the revolving shaft of the offset printing press. Being very thin and flexible the plate readily conformed to the cylindrical shape of the shaft. The longest portion of the plate extended along the length of the shaft. As the shaft revolved the plate first made contact with a wetting roll which moistened it. It next was wiped by a roll which touched the surface of the plate but permitted the etched portions to remain moist. Then the plate was inked by rollers which for the purpose of distributing the ink smoothly were several in number. Since ink will not mix with water no ink found its way into the crevices of the plate, and thus the etched parts of the plate are the colorless portions of the printed stamp.

The plate in its revolution having been wet, wiped and inked, left its impress upon a large rubber cylinder known as the "blanket". Paper fed into the press came in contact with the blanket which transferred the impression it had received from the plate to the paper. The plate "offset" its impression on the rubber cylinder, and the latter in turn printed it upon the paper.

For this reason the process is known as "offset printing". Since the surface of the plate reproduced the printed portions of the stamp, "surface print" is the term often used to designate a stamp of this issue.

Don F. Lybarger,
422 Engineers Bldg.,
Cleveland, Ohio.