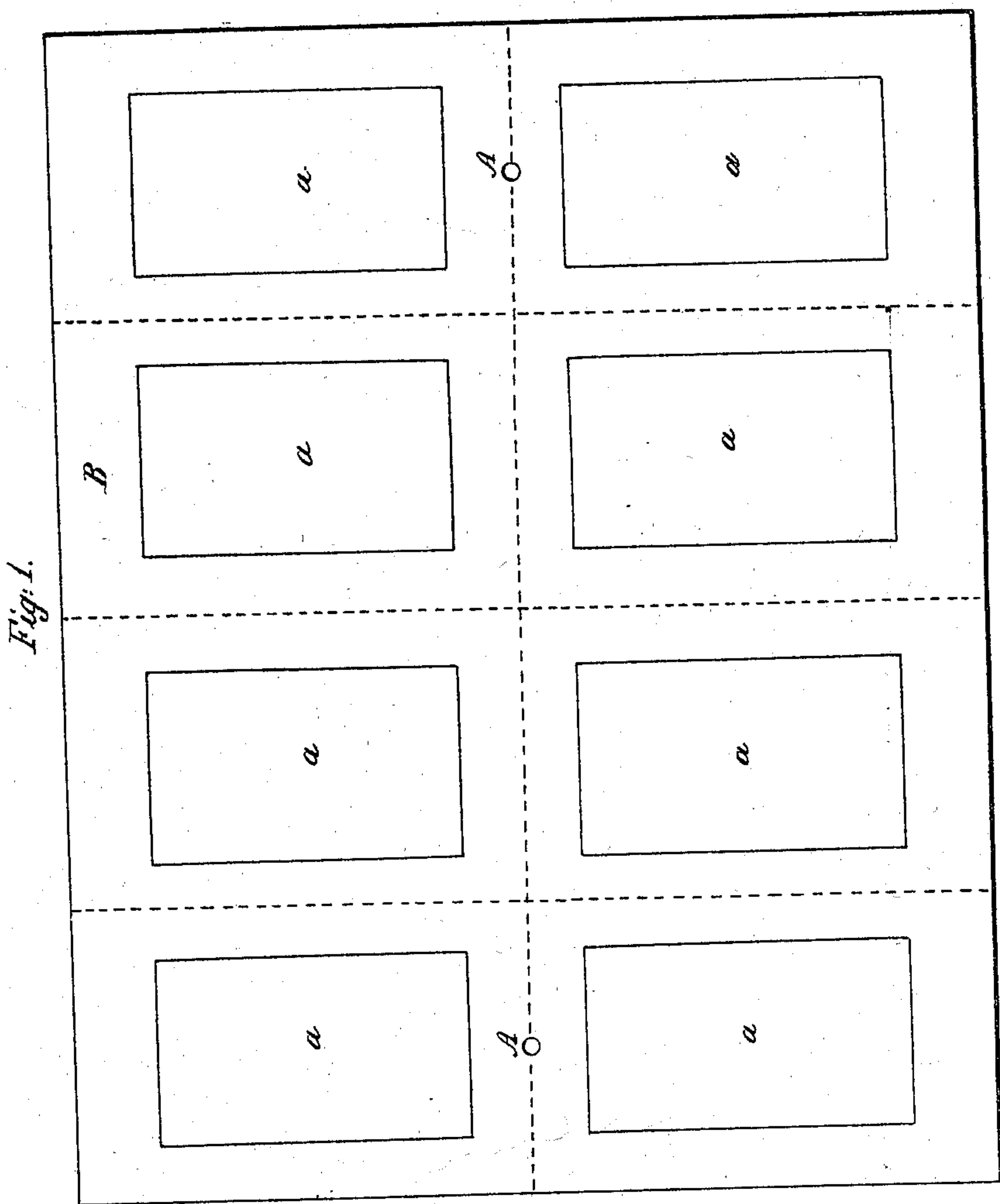
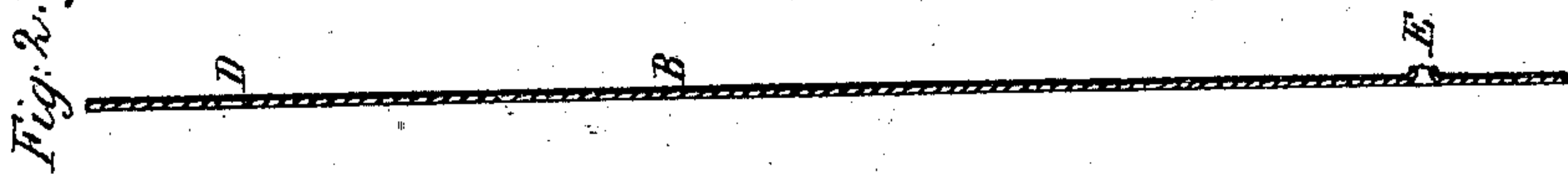


*S. T. Bacon.*

*Registering Appr's for Printing Press*

*N<sup>o</sup> 23146.*

*Patented Mar: 8. 1859.*



*Witnesses*

*Thos. H. Dodge*  
*Edw. F. Brown.*

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# UNITED STATES PATENT OFFICE.

STEUBEN T. BACON, OF BOSTON, MASSACHUSETTS.

## REGISTER FOR SHEETS OF PAPER.

Specification of Letters Patent No. 23,146, dated March 8, 1859.

*To all whom it may concern:*

Be it known that I, STEUBEN T. BACON, of Boston, in the county of Suffolk and Commonwealth of Massachusetts, have invented a certain new and useful Improvement in Obtaining Register for Sheets of Paper in Printing and Paper-Folding Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawings, and letters of reference marked thereon, forming a part of this specification.

To enable those skilled in the art to which my invention belongs, to make and use the same, I will now proceed to describe it.

It is well known by those accustomed to print and fold paper, that the present mode of obtaining register of the sheets, is very defective and objectionable. It is generally effected in this way, viz: When the sheet is receiving its first impression two holes or perforations are made in or through the sheet by what are termed register points or pins. These holes are usually made in the sheet of paper as shown at A, A, Figure 1, which represents a sheet of paper after having received one impression. The object of the holes or perforations thus made, is to guide the attendant in feeding or properly presenting the sheet to the printing press for receiving an impression on the opposite side, and also to afford a guide in presenting or feeding the printed sheets to paper folding machines, so that the pages of printed matter on both sides of the sheet shall be both printed and folded in register. To accomplish this, it is the present practice, to provide the feed tables of printing and folding machines with what are termed register points or pins, so constructed and arranged that the points shall project a little above the top of the feed table, for the purpose of enabling the attendant to adjust the sheet so that the points in the table shall enter the holes in the sheet, and thus render the position of the sheet such that when carried forward, either to be printed or folded it will be printed or folded, as the case may be, in register. It has been found in practice, however, that the present mode of making the holes or perforations in the sheet, is very objectionable, since the holes being made by a pointed instrument, the paper is not only torn and left ragged, but a "bur"

is left on the side of the sheet, which is very liable to be pressed back into the hole, during the various operations preparatory to folding the printed sheets, especially in book work. Again, when the holes are thus made, the least strain on the sheet is liable to tear the holes out, and often in this way the register is not only destroyed, but the printed matter injured in appearance &c., by the sheets being torn as above stated. Again, from the liability of the bur being pressed back into the hole, it is often very difficult to feed the sheet in proper register with any degree of rapidity, owing to the length of time consumed in getting the sheet in proper position when such difficulties exist.

To obviate all of these difficulties is the object of my invention.

I make the holes by cutting or punching a portion of the paper entirely out as shown at A, A, Fig. 1. This can be done at the same time the sheet is receiving its first impression in the printing press, by any suitable mechanism provided and attached to the press for that purpose, or it may be done, when great accuracy is necessary, before the sheet is fed to receive its first impression. It will thus be seen that I obviate the objections both as regards the tearing out of the holes &c., as well as the filling up of the holes by the pressing back of the bur &c.

By a very simple experiment it will be evident that the cutting out of a portion of the paper to form the holes, is a great improvement over the old method of making the holes by a pointed instrument.

There is not half the difficulty experienced in feeding the sheet or placing it on the register points to be printed or folded as by the old plan.

Fig. 1, shows a sheet B, after having received an impression on one side, the pages of which are represented at *a, a, a*, &c. while the holes cut out after my plan are seen at A, A. Fig. 2 is a cross section of a sheet with two holes D, E, showing the difference in the appearance of the register holes when made after the old plan and after my plan.

The hole D, is made by cutting out a portion of the paper, and illustrates my improvement, while E, represents a register hole made after the old plan.

An examination of these figures will at



once prove the superiority of my plan over the old plan.

Having described my improvement what I claim as my invention and desire to secure  
5 by Letters Patent, is:

Punching or cutting holes in sheets of paper for the purpose of securing a more

perfect and rapid register in printing and paper folding machines, substantially as described.

STEUBEN T. BACON.

Witnesses:

THOS. H. DODGE,

EDW. F. BROWN.