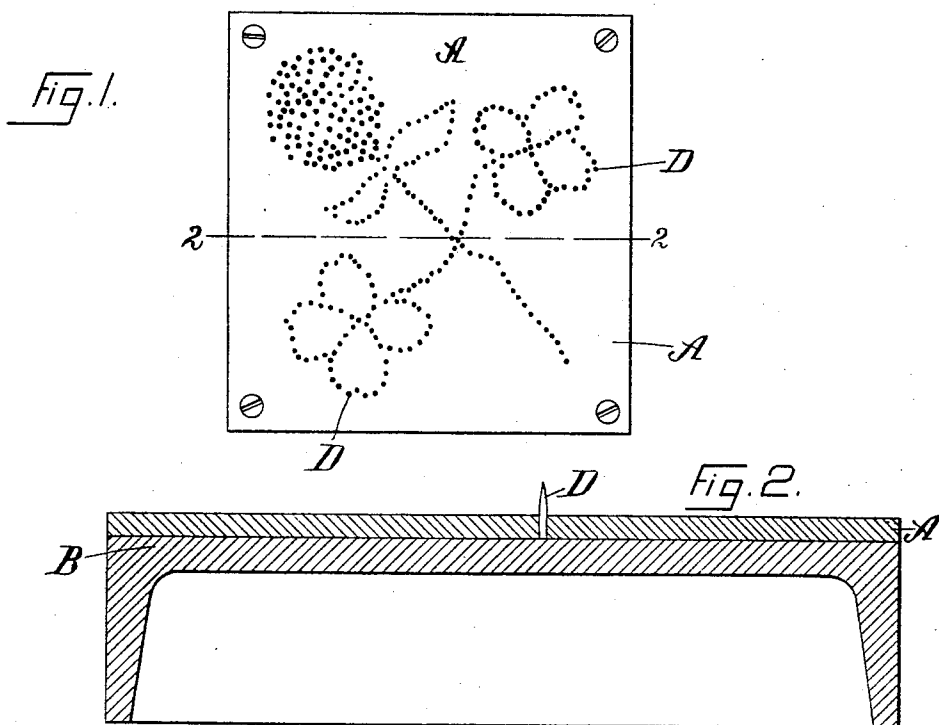


(No Model.)

F. E. HOUSH.  
PATTERN PLATE.

No. 579,979.

Patented Apr. 6, 1897.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

FRANK E. HOUSH, OF BOSTON, MASSACHUSETTS.

## PATTERN-PLATE.

SPECIFICATION forming part of Letters Patent No. 579,979, dated April 6, 1897.

Application filed April 13, 1896. Serial No. 587,260. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK E. HOUSH, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in the Art of Making Pattern-Stencils of Paper and Like Materials, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of a pattern-block.  
Fig. 2 is an enlarged section on line 2 2 of Fig. 1.

My invention relates to the art of producing pattern-stencils of paper or other suitable material, by means of which stencils the embroidery-pattern is put upon an article to be decorated, and has for its object to produce the pattern-stencils more quickly and more cheaply than as heretofore been used.

The method at present employed in producing paper pattern-stencils is, as compared with my method, slow and expensive, while the pattern upon the stencils is not absolutely uniform, as is the pattern upon stencils made by my method.

In making pattern-stencils heretofore the method employed has been as follows: The design to be formed is sketched upon a sheet of paper, and that sheet is then laid on four or five other sheets. These sheets are then run through a sewing-machine by an operator, and the design is followed and pricked out through the sheets by the needle of the machine. In this way six sheets are perforated at one time. The operation is repeated for each six sheets required. It is obvious that this is a slow and expensive process when large quantities of one pattern are required, and it is also obvious that the design cannot always be perfectly sketched repeatedly by the draftsman, nor always perfectly followed by the operator on the sewing-machine. The resulting product will therefore be more or less imperfect.

My invention consists in forming a pattern-plate upon which the pattern to be pricked out upon the paper is formed by a multiplicity of pointed pins, the points of the pins being type-high and the pattern-plate being adapted to be placed in an ordinary printing-press. The sheets to be pricked can be fed into the press as in the printing process and any quantity of the required pattern-stencil produced at about the speed of ordinary printed matter.

To form the pattern-plate, I take a sheet of leather, leather-board, or other suitable material of, say, three-sixteenths of an inch in thickness and mark the pattern upon its surface. The design is then followed out by drilling a series of small holes at intervals of, say, one twenty-fourth of an inch apart. Into each of these holes is inserted a pointed pin D, say three-eighths of an inch long, which pin is driven through the sheet until the pointed end projects, say, one-eighth of an inch. The size of the hole drilled to receive the pin is such as to make a tight driving fit when the pin is inserted, so that the pin is held from any movement by the constrictive force of the pin-plate. When all the holes have been filled, the pin-plate A is mounted upon a base-plate B of suitable height to make the projecting points of the pins type-high. The pattern-plate thus formed may, as has been said, be worked as a type-form is worked in an ordinary printing-press.

I am aware of the patents to Henry B. Cobb, No. 346,580, dated August 3, 1886, and George H. Springer, No. 196,395, dated October 23, 1877, and disclaim all shown therein.

What I claim is—

1. The pattern-plate above described, made up of a sheet of elastic and flexible material upon which a pattern is formed by points set in perforations at regular intervals along the pattern-line and held by friction in the sheet of elastic material, and a base-plate upon which the pattern-sheet is mounted and secured, substantially as described.

2. The pattern-plate above described, formed of a sheet of elastic and flexible material upon which a pattern is formed by points set in perforations at regular intervals along the pattern-line and held by friction in the sheet of elastic material, substantially as described.

3. The pattern-plate above described, formed of a sheet of elastic and flexible material upon which a pattern is formed by points set in perforations along the pattern-line and held by friction in the sheet material.

FRANK E. HOUSH.

Witnesses:

JOHN R. SNOW,  
H. P. GUILLO.