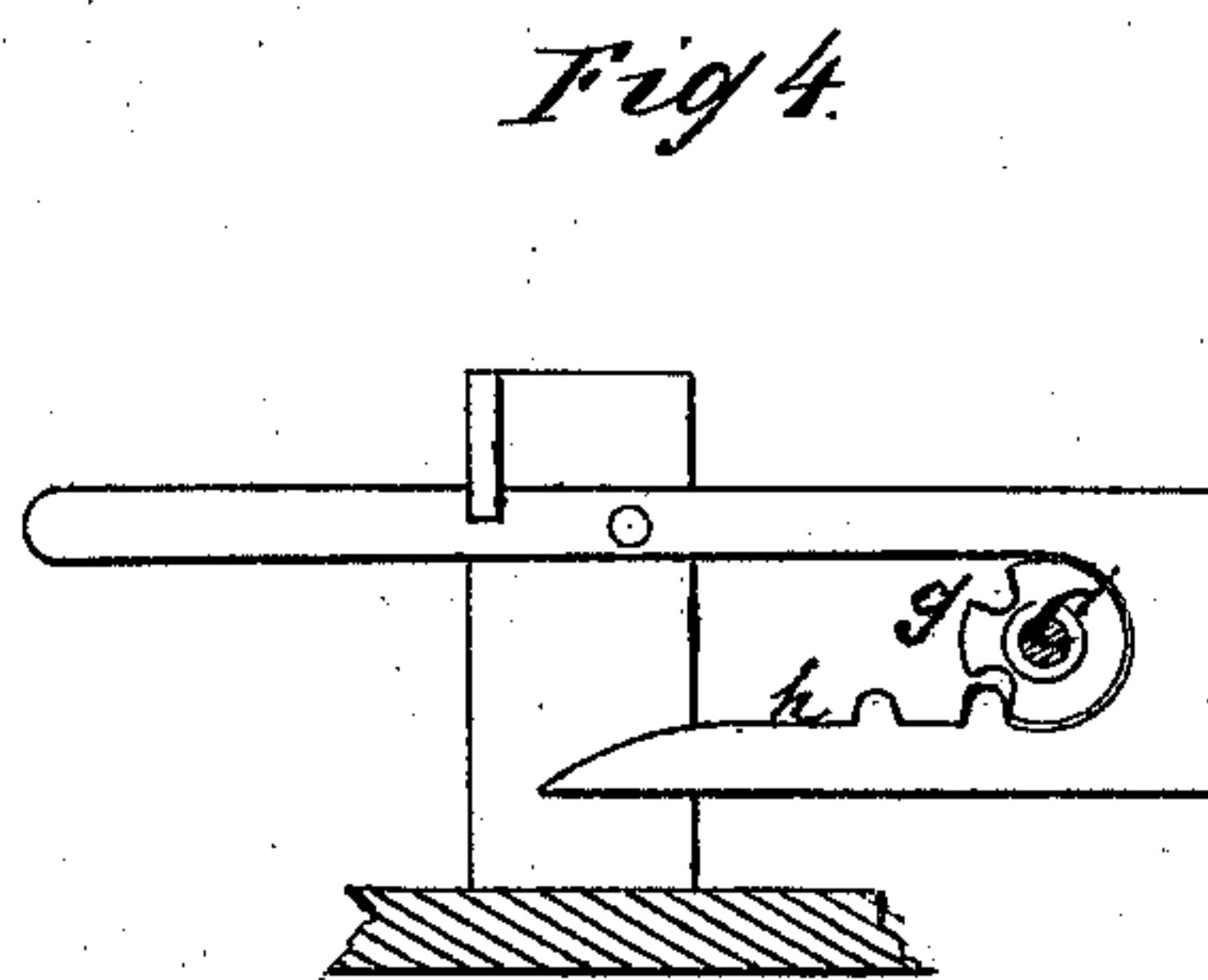
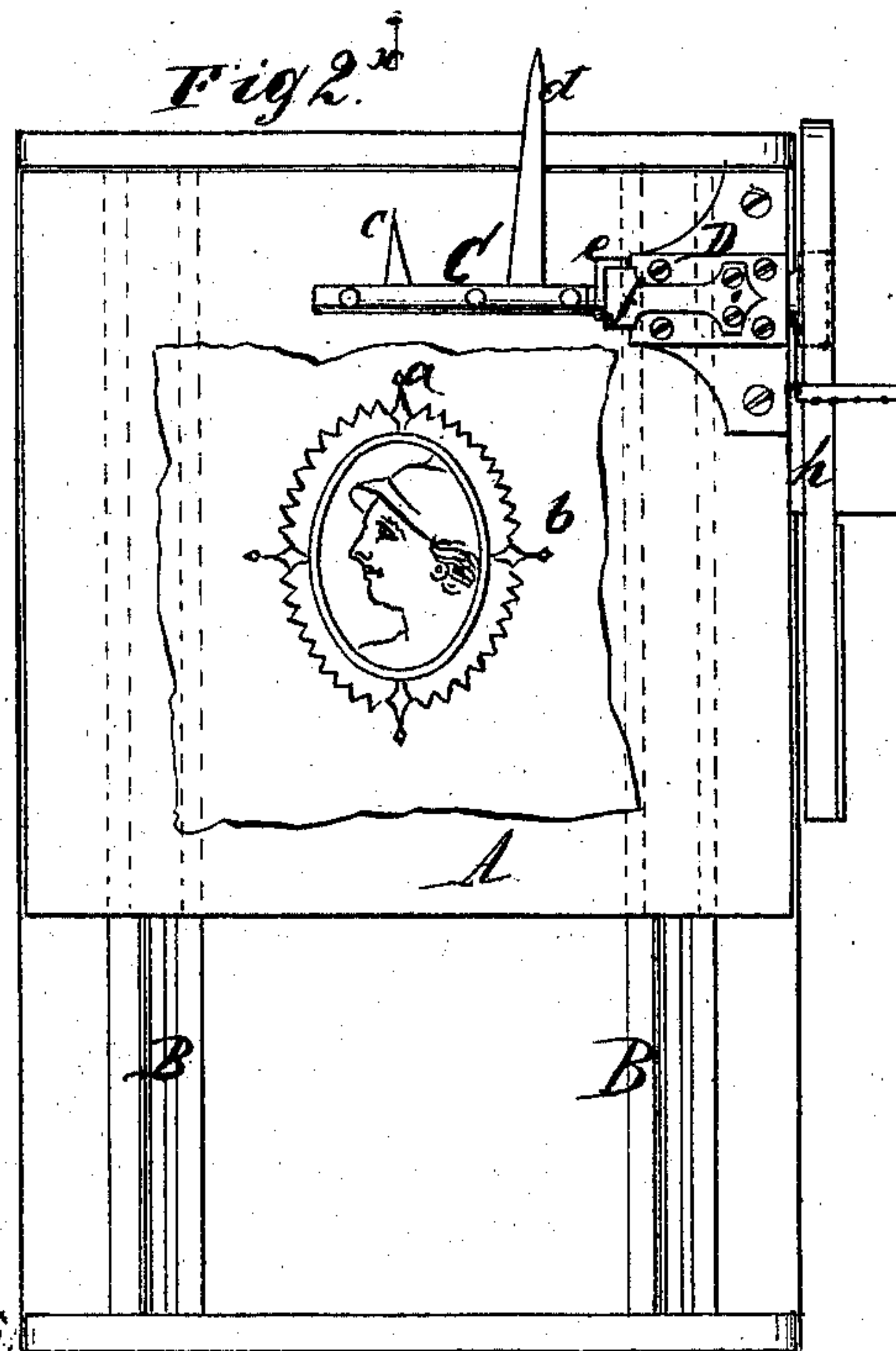
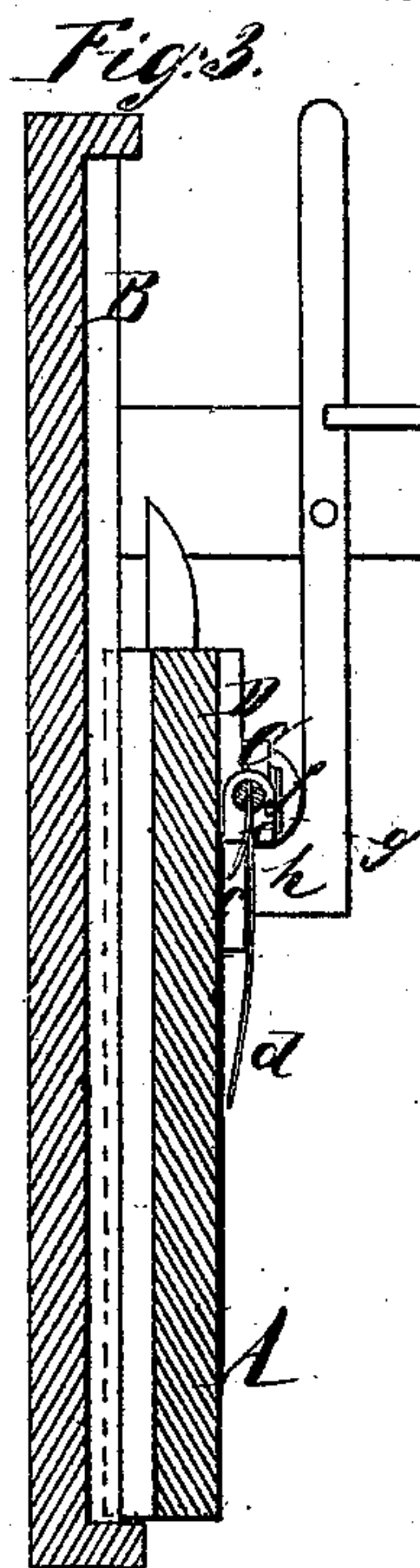
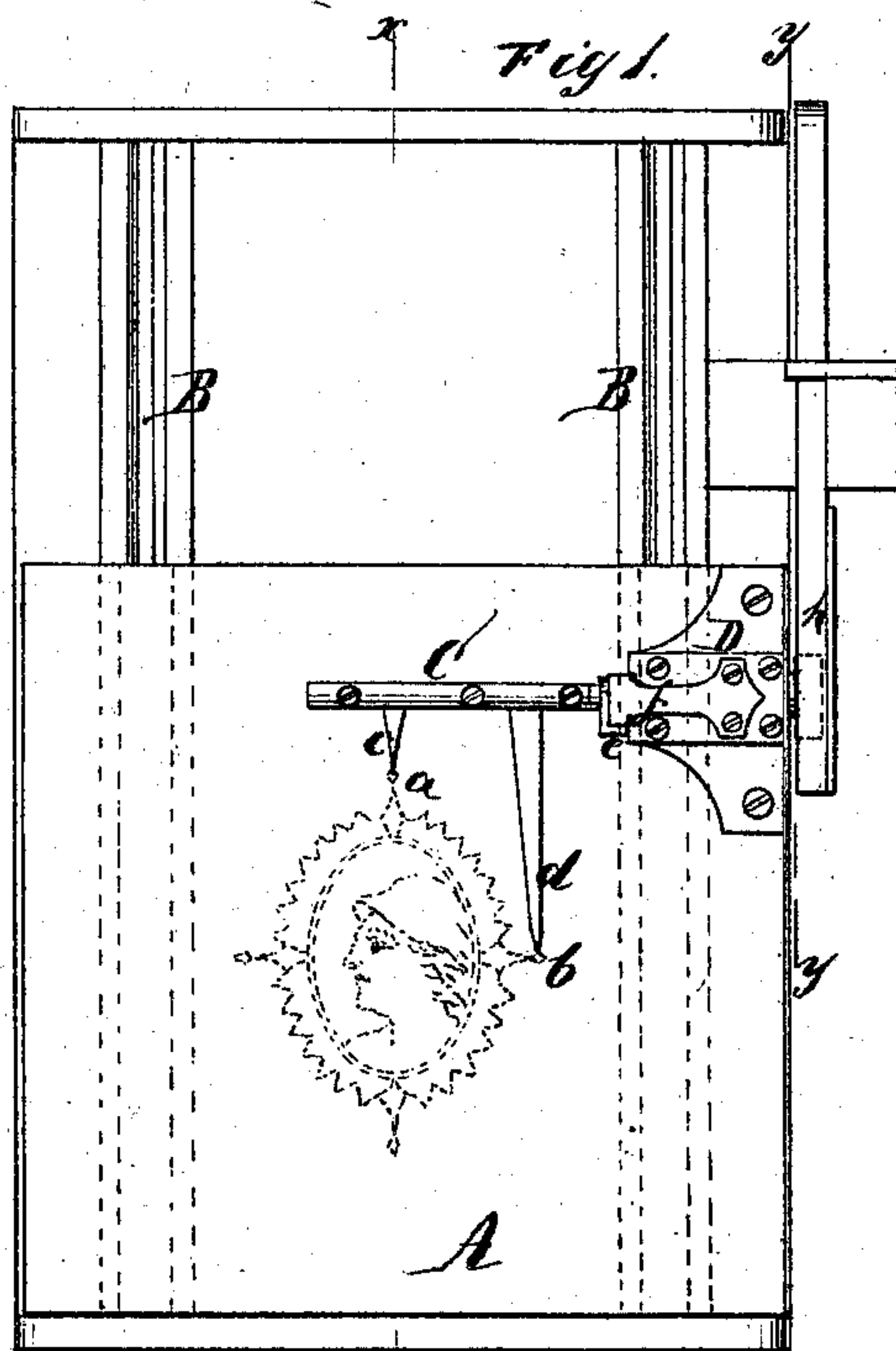


A. HILGENREINER.

Registering-Attachments for Printing-Presses.

No. 143,904.

Patented Oct. 21, 1873.



Witnesses:
Ernst Bilhuber
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per
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UNITED STATES PATENT OFFICE.

ANTON HILGENREINER, OF NEW YORK, N. Y.

IMPROVEMENT IN REGISTERING ATTACHMENTS FOR PRINTING-PRESSES.

Specification forming part of Letters Patent No. **143,904**, dated October 21, 1873; application filed July 31, 1873.

To all whom it may concern:

Be it known that I, ANTON HILGENREINER, of the city, county, and State of New York, have invented a new and useful Improvement in Registering Attachment for Printing-Presses; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming a part of this specification, in which drawing—

Figure 1 represents a plan or top view of my invention when the platen is thrown forward to receive a fresh blank or piece of work. Fig. 2 is a similar view of the same when the platen is moved in to receive a new impression. Fig. 3 is a longitudinal vertical section of the same in the plane $x x$, Fig. 1. Fig. 4 is a similar section of the same in the plane $y y$, Fig. 4, in a larger scale than the previous figures.

Similar letters indicate corresponding parts.

This invention consists in combining a registering-shaft having one or more pointers with the reciprocating platen of a printing-press, the registering-shaft being provided with one or more pointers and with a pinion, which gears with a toothed rack, in such a manner that when the platen is drawn back to receive a fresh blank the pointers are turned down upon it, and by their aid the blank can be adjusted in the required position, and as the platen is moved in under the die or chase, the pointers are caused to swing back, and by these means designs in various colors can be printed with accuracy and with dispatch.

In the drawing, the letter A designates the platen of my press, which moves on guideways B, so that when the same is pushed into the position shown in Fig. 2, the work previously adjusted on it will come under the die or chase (not shown in the drawing) in the proper position to receive the impression, and when the platen is drawn out to the position shown in Fig. 1, it is in a convenient position to receive a fresh blank.

In printing designs in various colors the same blank has to pass through the press several times, once for each color, and in order to bring the various colors in the proper relation to each other, the blank must necessarily be adjusted on the platen in exactly the same position pre-

vious to receiving the successive impressions. This object can easily be accomplished in printing on paper or other comparatively stiff material; but in printing on satin or other soft and flexible material, the operation of adjusting the blanks on the platen for the successive impressions presents difficulties which I have overcome by my invention.

In taking the first impression I place the blank on the platen so that the die will produce the required impression as near as possible in the required spot, as indicated in Fig. 1 in dotted outline. On this first impression I select two prominent points, $a b$, which serve to adjust the blank for the subsequent impressions in precisely the same position which the same occupied on the platen in receiving the first impression; and for this purpose I use a shaft, C, which has its bearing in a bracket, D, secured to the reciprocating platen A, and on which are secured two pointers, $c d$, in such a position that, by adjusting the blank on the platen, the pointer c will bear on the point a , and the pointer d on the point b of the first impression. (See Fig. 1.) On the shaft is secured a square collar, e , which is exposed to the action of a spring, f , that is fastened to the bracket D, so that when the shaft C is turned to the position shown in Fig. 1, the pointers will be depressed upon the blank, and when the shaft is turned to the position shown in Fig. 2, it will be retained in this position by the action of the spring f on the square collar e . The motion of the shaft is produced by a pinion, g , which is mounted on its end, (best seen in Fig. 4,) and which engages with a rack-bar, h , secured on the bed-plate of the machine in such a position that, when the platen is pushed into the position shown in Fig. 2, the shaft C is turned back, and when the platen is moved to the position shown in Fig. 1, the shaft C is turned forward, and the pointers $c d$ are brought to bear on the surface of the platen, or on the surface of the blank adjusted on said platen. By these means I am enabled to adjust the blanks on the platen, so that the successive impressions will register with each other, and designs in various colors can be printed with accuracy and with dispatch. The pointers $c d$ are secured to the shaft C by a clamp or other suit-

able means, so that the same can be adjusted at the required distance apart, or that the pointers can be removed and replaced by others of different shape or length, according to the requirements of different designs.

What I claim as new, and desire to secure by Letters Patent, is—

The reciprocating platen A, carrying the

shaft C, having one or more pointers, *c d*, and a pinion, *g*, which gears with the rack-bar *h*, all combined and arranged to operate substantially as described, for the purpose specified.

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Witnesses:

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