

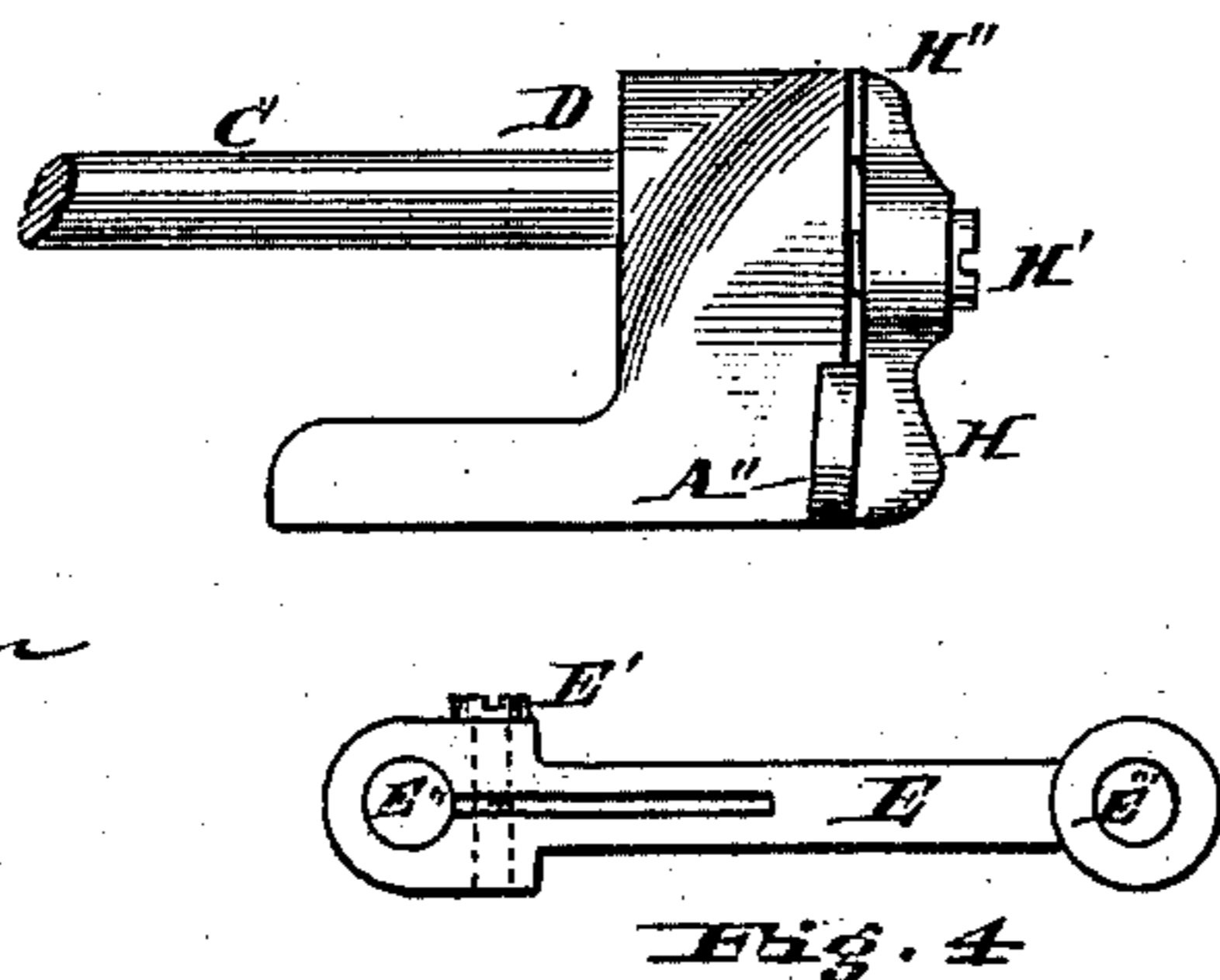
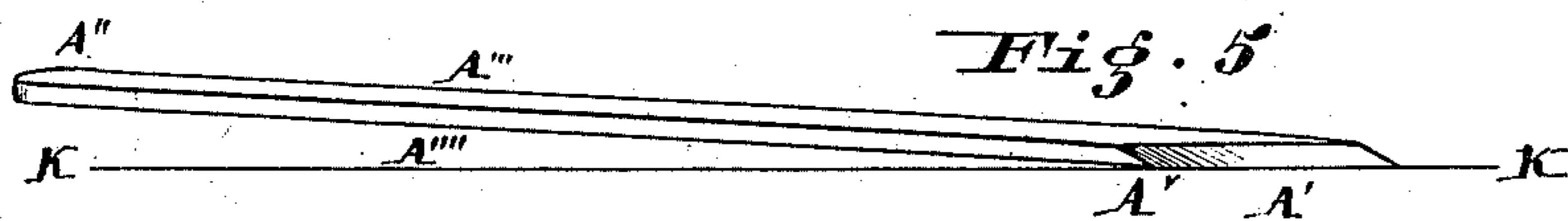
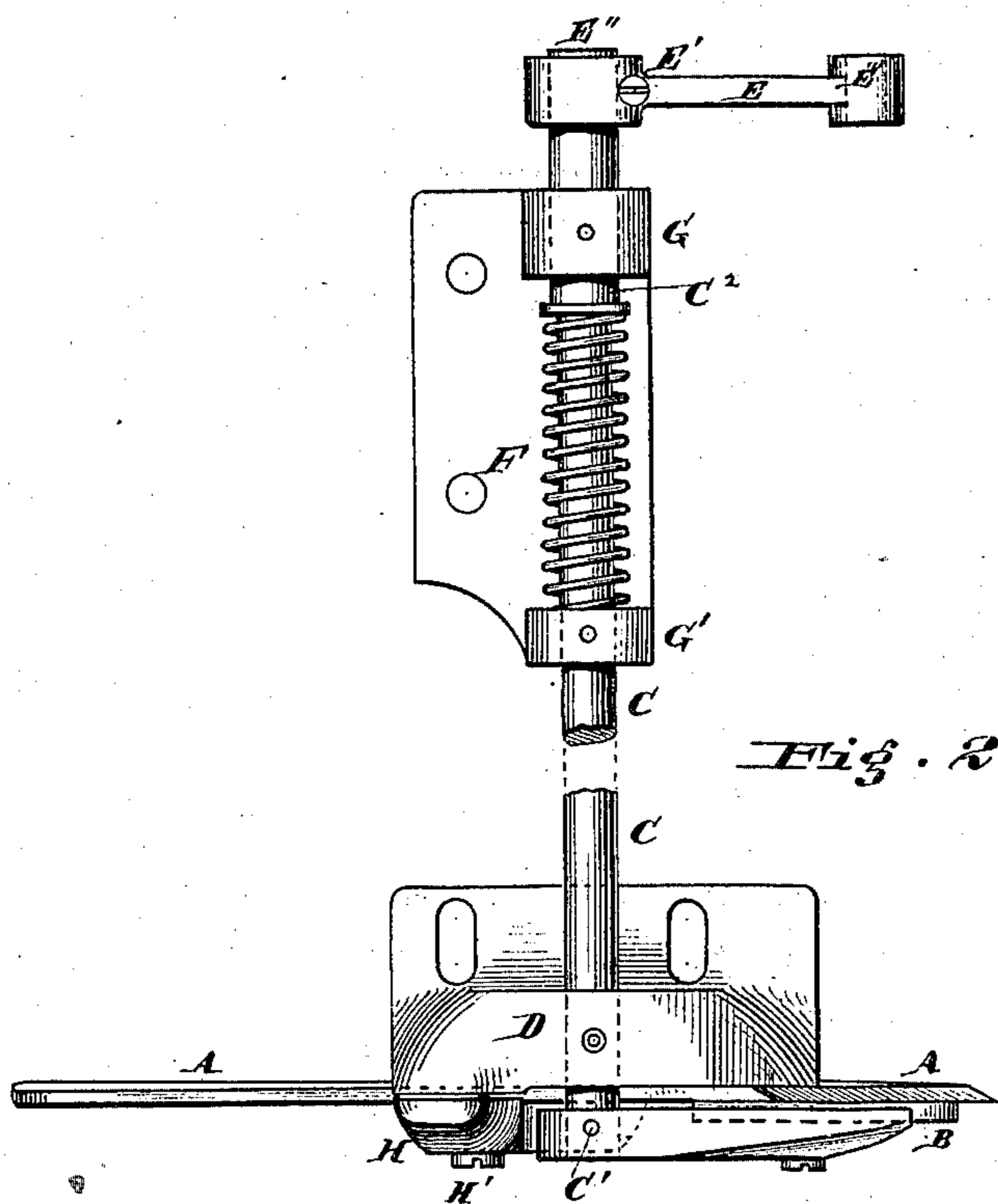
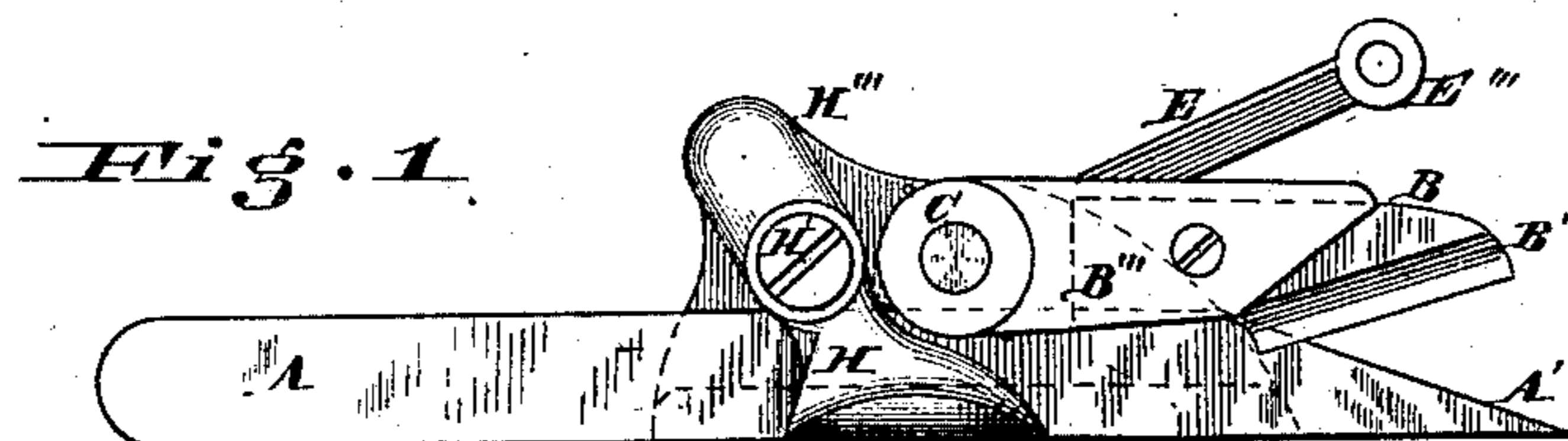
(No Model.)

J. BIGELOW.

TRIMMING ATTACHMENT FOR SEWING MACHINES.

No. 313,802.

Patented Mar. 10, 1885.



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JOHN BIGELOW, OF PHILADELPHIA, PENNSYLVANIA.

TRIMMING ATTACHMENT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 313,802, dated March 10, 1885.

Application filed April 19, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN BIGELOW, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Trimming Attachments for Sewing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to the construction of a shear trimming device adapted to sewing-machines, and more particularly to the position and method of securing the stationary blade.

The construction of the upper blade is practically the same as shown in my application filed June 5, 1879.

Figure 1 is an end view showing upper blade, rock-shaft, lower or stationary blade, and its holding device. Fig. 2 is a plan view. Fig. 3 is a rear view showing the position of the stationary blade. Fig. 4 is a detail view of the crank. Fig. 5 is a diagram showing position of stationary blade.

The cutting-edges of the blades A' and B', Fig. 1, are placed in the usual relation to each other to make a shear or draw cut. The upper blade, B', is attached to the angle-piece B'', Fig. 1, which in turn is secured to the rock-shaft C, having bearings at D and G, Fig. 2. The shaft C is shouldered at C'. It is surrounded by a coil-spring, F, one end of which presses against the shoulder C' and the other end against the loose bearing G'. A crank, E, surrounds the shaft C at E', and can be set in any position on the same by means of the clamp-screw E', Fig. 4. The crank E receives a vibrating movement at E'' from any suitable moving part of the machine. The lower or stationary blade, A, is a long plate having one of its ends A' cut off at an acute angle and sharpened to a shear-edge.

In order to save the necessity of hollow grinding the blade is placed in a laterally and

longitudinally inclined position, as shown in Figs. 3 and 5. This position tends to make its cutting-edge incline away from the cutting-edge of the blade B. To avoid this, the plate or blade A is set at an acute angle to the cutting-line, as shown at A'' in Fig. 5, K K being the cutting-line, A' A' the cutting-edge of the blade A, and A'' A' K an enlarged view of the acute angle to which I have referred. The shaft C, carrying the upper blade, is raised sufficiently high in its bearings to allow the blade A to pass under it, as shown in Fig. 1. The blade A can be held in position in the manner shown in my application of June 5, 1879, or by the block H and screw H' shown in the drawings.

The operation of the mechanism is that of most shearing devices. The blade B is vibrated by its connection with the rocking shaft C, and its cutting-edge V' is kept against the cutting-edge A' of the lower blade, A, by the action of the spring F pressing at C' on the shaft C.

This device has its stationary bearing attached to the work-plate of a sewing-machine at F, and its bearing D adjustably attached through the slotted openings shown in Fig. 2. The cutting-edges are just behind the sewing-needle, and can be set in any desired relation thereto by the set of the bearing D.

I claim—

1. A stationary seam-trimmer blade having its body set at an acute angle to a vertical plane, within which said blade's cutting-edge and the vibrating blade are located, in combination with a vibrating blade and the work-plate and stitch-forming mechanism of a sewing-machine, substantially as described.

2. In combination with the stitch-forming mechanism of a sewing-machine, a shear trimming device consisting of a vibrating blade and a stationary blade, the latter arranged to be adjusted forward in a direction at an acute angle with a vertical plane, within which said blade's cutting-edge and the cutting-edge of the vibrating blade are located, substantially as described.

3. In combination with the stitch-forming mechanism of a sewing-machine, a trimming device consisting of a vibrating blade, and a stationary blade which is a long plate having

both lateral and longitudinal inclinations to a vertical plane, within which its cutting-edge and the cutting-edge of the vibrating blade are located, whereby hollow grinding of the
5 said stationary blade can be dispensed with, substantially as described.

4. In combination with the work-plate of a sewing-machine, a trimming device having a rock-shaft, which carries the vibrating blade
10 supported above said work-plate by suitable bearings, and a stationary blade arranged be-

neath said rock-shaft at an acute angle to a vertical plane, within which said blade's cutting-edge and the cutting-edge of the vibrating blade are located, substantially as de- 15 scribed.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN BIGELOW.

Witnesses:

G. W. BALLOCH,
L. DEANE.