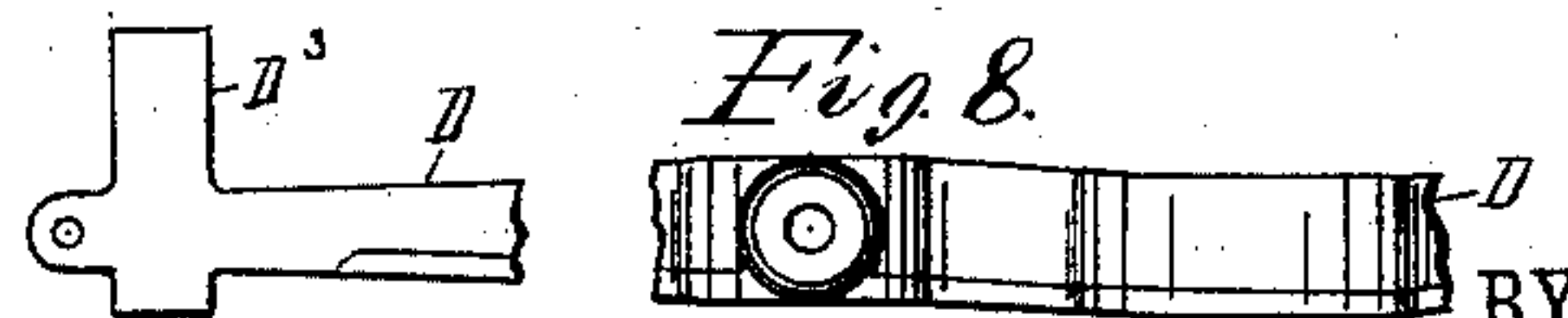
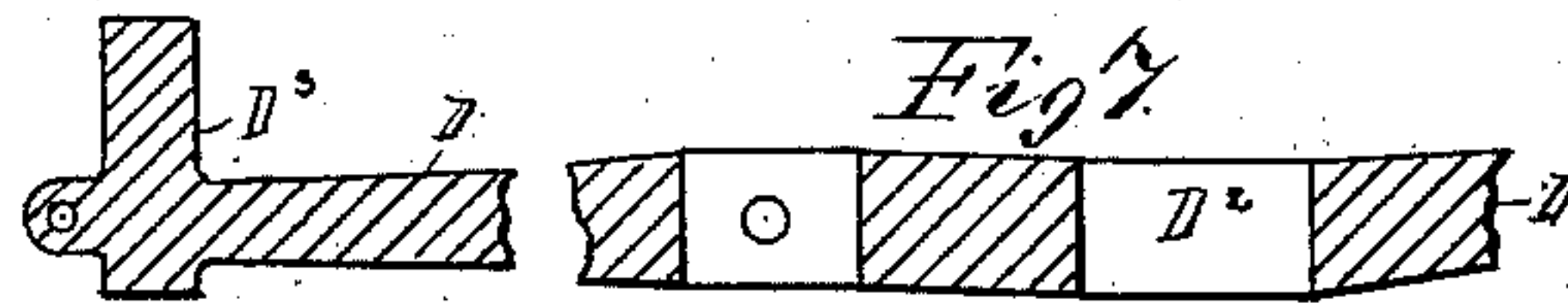
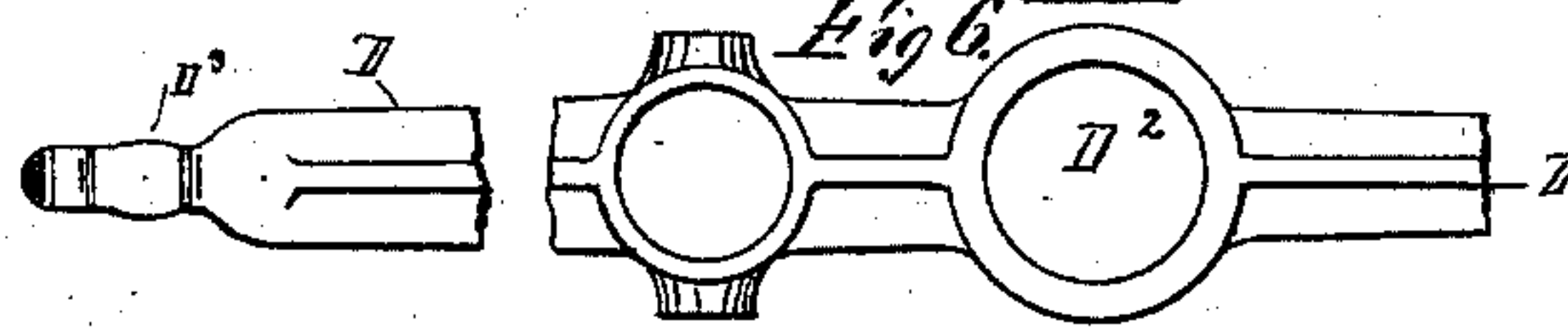
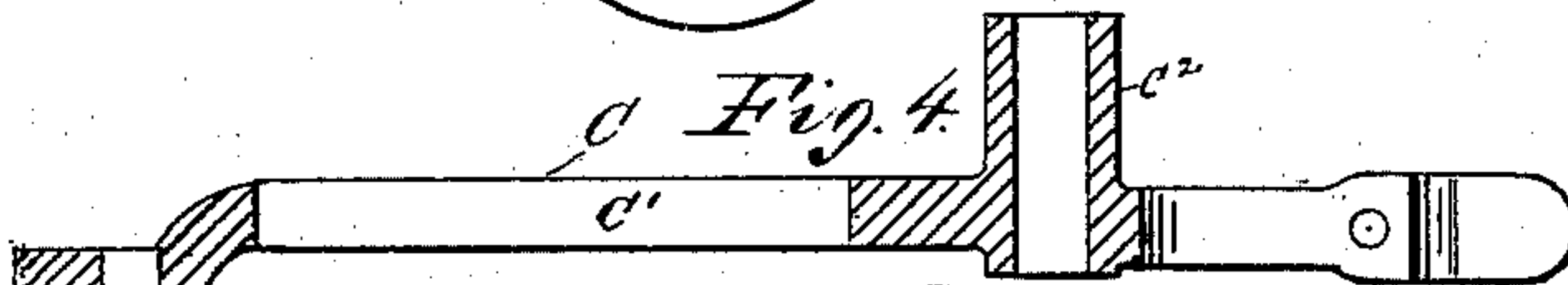
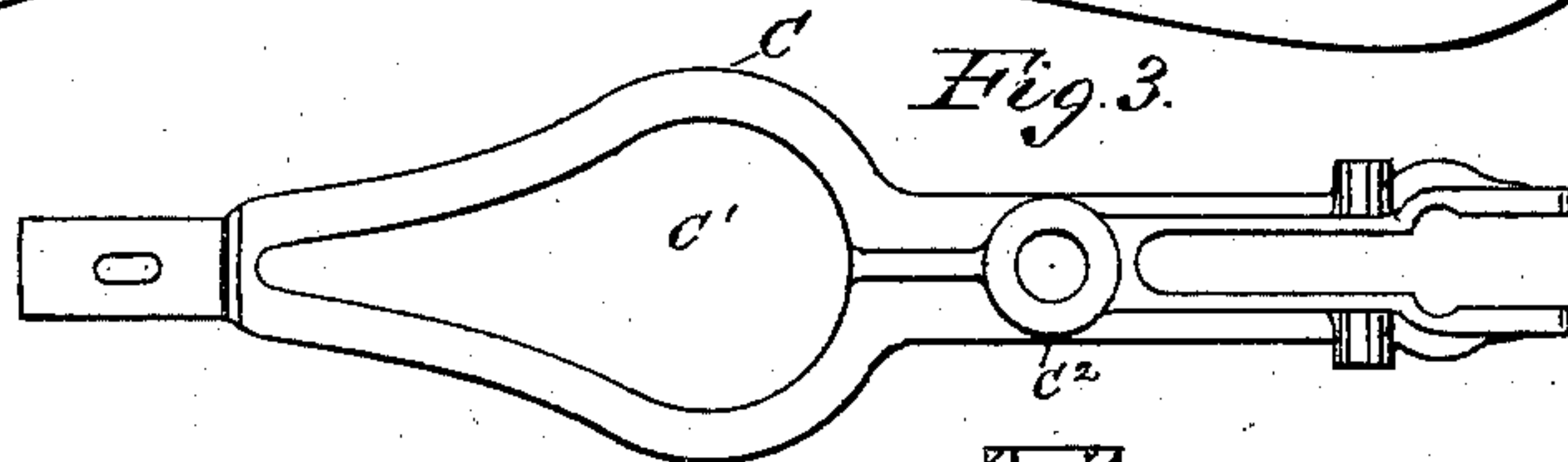
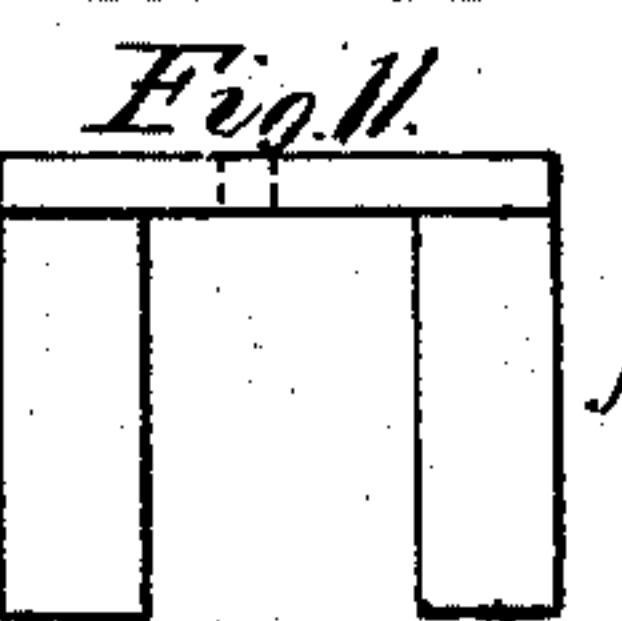
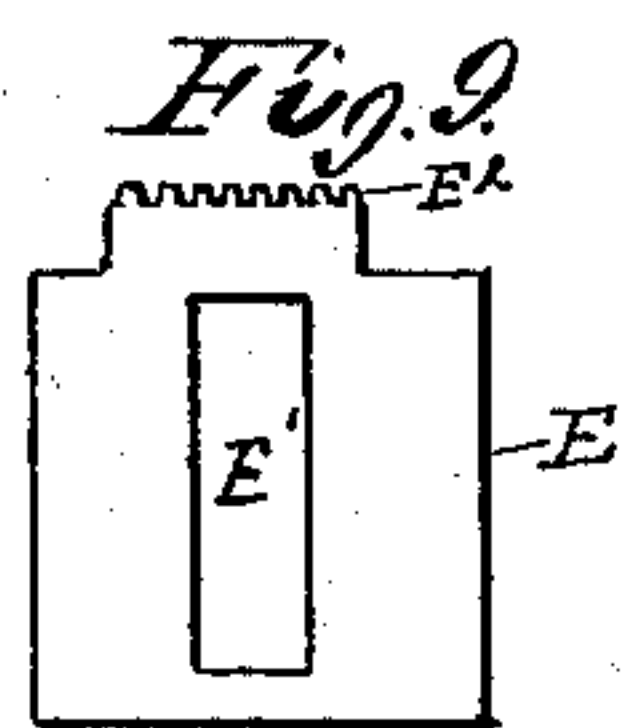
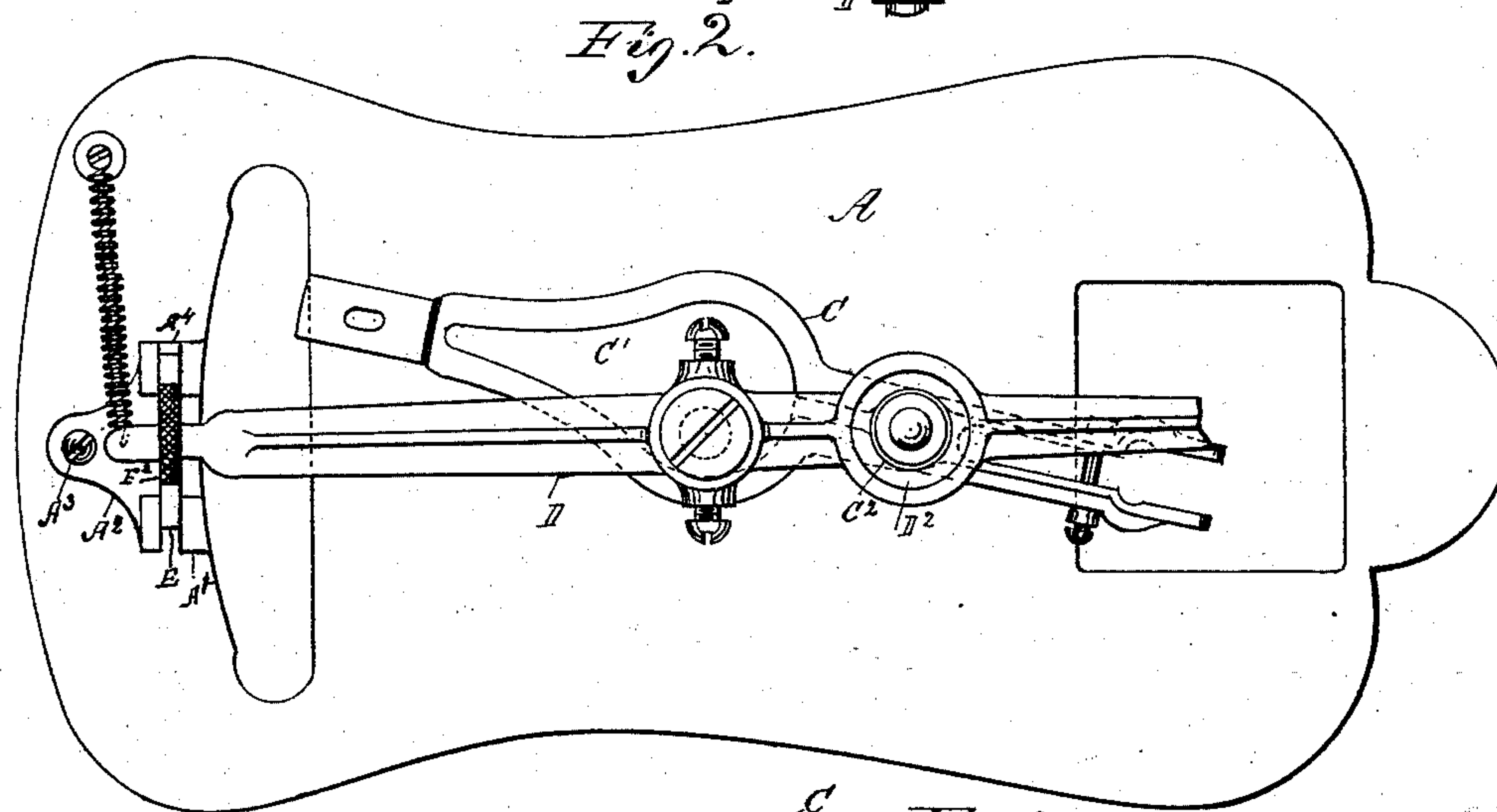
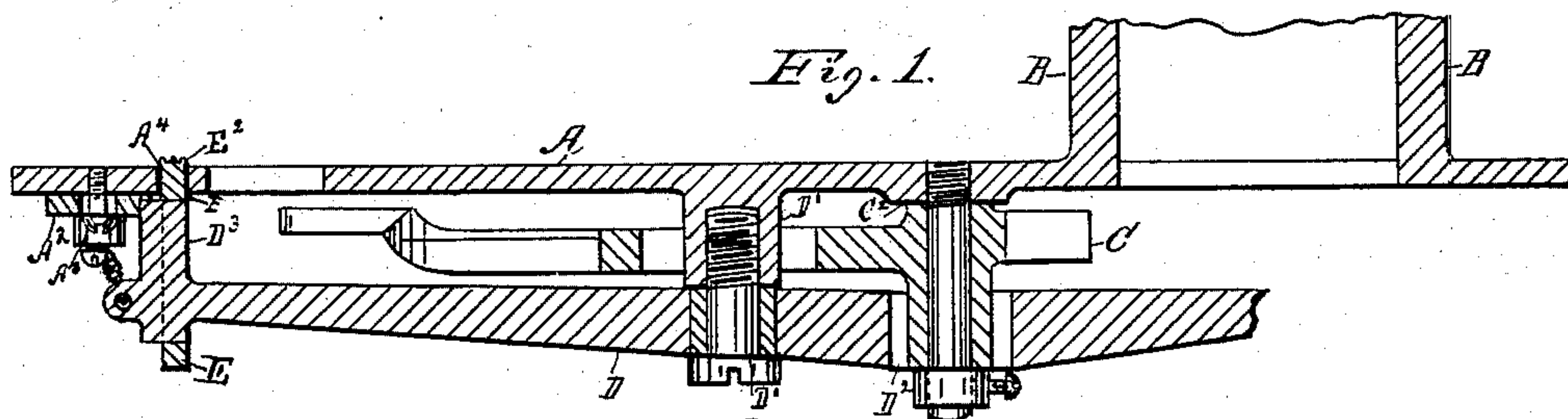


(No Model.)

J. TRIPP.
SEWING MACHINE

No. 282,408.

Patented July 31, 1883.



WITNESSES: .

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INVENTOR

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JAMES TRIPP, OF NEW YORK, N. Y., ASSIGNOR TO CHAS. T. BECKWITH
AND ELLEN F. BECKWITH, OF OBERLIN, OHIO.

SEWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 282,408, dated July 31, 1883.

Application filed February 8, 1883. (No model.)

To all whom it may concern:

Be it known that I, JAMES TRIPP, a citizen of the United States, residing at the city of New York, in the county and State of New York, have invented certain new and useful Improvements in Sewing-Machines, of which the following is a specification.

My invention relates to improvements in sewing-machines; and it consists in the peculiar arrangement and construction of the shuttle-lever and feed-lever, whereby I am enabled to arrange all the centers in a straight line, thereby avoiding side draft—a great defect which is experienced in machines in which the levers are crooked round or bent so as to reach the working centers; and, also, in the arrangement and construction of the feed and of the end of the feed-lever operating in conjunction therewith, all as hereinafter more fully described, and indicated by the claims.

The accompanying drawings form part of this specification, and represent what I consider the best means of carrying out my invention.

Figure 1 is a sectional view of the bed-plate of a sewing-machine and a portion of the post with my improvements applied thereto. Fig. 2 is an under side view of the bed-plate with my improvements applied thereto. Fig. 3 is an under side view, Fig. 4 a longitudinal section, and Fig. 5 a side view, of the shuttle-lever. Fig. 6 is an under side view, Fig. 7 a longitudinal section, and Fig. 8 a side view, of the feed-lever. Figs. 9, 10, 11, and 12 are detail views of parts separately.

In each of the views similar letters of reference are employed to indicate corresponding parts in all the figures.

A represents the bed-plate; B, a small portion of the post of a sewing-machine with my improvements applied thereto.

C is my improved shuttle-lever, which, as shown, is constructed with a cavity or opening, C', adapted to allow of its free motion, and at the same time admitting of the pivoting of the axis or bearing D' of the feed-lever D to the bed-plate of the sewing-machine, within the cavity or opening C' of the shuttle-lever C, without in any way interfering with the to-and-fro motion of the said shuttle-

lever C, the shuttle-lever being pivoted on a hub or center, C². The feed-lever D is pivoted on an axis or bearing, D', carried by or affixed to the bed-plate A, and provided with a cavity or opening, D², adapted to allow of the free motion of the same, and also admitting of the pivoting of the axis or bearing of the shuttle-lever to the bed-plate of the machine, within the opening D² of the feed-lever D, without interfering with the lateral and vertical motions of the feed-lever D. The feed-lever D is formed or provided with a flat T-shaped piece, D³, adapted to operate within a vertical opening or slot formed in the center of the feed-piece E. The feed-piece E is supported by the T-shaped portion D³ of the feed-lever D, and it is guided in its motions by means of guides or sockets A', formed on or affixed to the bed-plate A. The guides or sockets A' may be either cast with the bed-plate or separately affixed thereto; or I can arrange the feed-piece E to operate between a plate or bearing affixed to or connected with the bed-plate A and a gib or bearing-surface, A², supported and controlled in position by a set-screw, A³. An opening, A⁴, is formed in the bed-plate A, to allow of the free motion of the end D³ of the lever D.

The feed-piece E is constructed in the form of a parallelogram, having a vertical central opening, E', hereinbefore referred to, adapted for the reception of the T-shaped portion D³ of the feed-lever D. On its upper side the feed-piece E is provided with the ordinary roughened surface or series of teeth, E².

The gibs or bearing-surfaces A² are so arranged as to allow of the requisite vertical and horizontal movements of the feed-piece E.

The T-shaped portion of the feed-lever D is formed with slightly rounded or curved sides, as shown by Figs. 6, 7, and 8, for the purpose of allowing of the free motion of the feed-lever D within the feed.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a sewing-machine, a shuttle-lever constructed with a cavity or opening adapted to allow of its free motion, and at the same time admitting of the pivoting of the axis of the

feed-lever to the bed-plate within the said opening, substantially as shown and described.

2. The combination, with the bed-plate of a sewing-machine, of a shuttle-lever provided 5 with an opening adapted to receive the pivot-pin of the feed-lever, and a feed-lever having an opening adapted to receive the pivot-pin of the shuttle-lever, substantially as described.

3. The combination, with the feed-lever D, 10 provided with the T-shaped portion D³, of the feed-piece E, having the opening E', adapted to receive the said portion D³ of the lever D, substantially as hereinbefore set forth.

4. The combination, with the feed-lever D, 15 provided with the T-shaped portion D³, having rounded or curved sides, of the feed-piece E, having the opening E', adapted to receive

said T-shaped portion D³ of the lever D, and suitable guides for said feed-piece, whereby the latter is adapted to be reciprocated in a 20 rectilinear path by the vibrating feed-lever, substantially as set forth.

5. The combination, with the bed-plate A, having guides A', of the feed-piece E and the adjustable plate or gib A², adapted to engage 25 said feed-piece at each end thereof, substantially as set forth.

In witness whereof I have hereunto set my hand this 31st day of January, 1883.

JAMES TRIPP. [L. S.]

Witnesses:

JOHN S. WALKER,
CHARLES LANG.