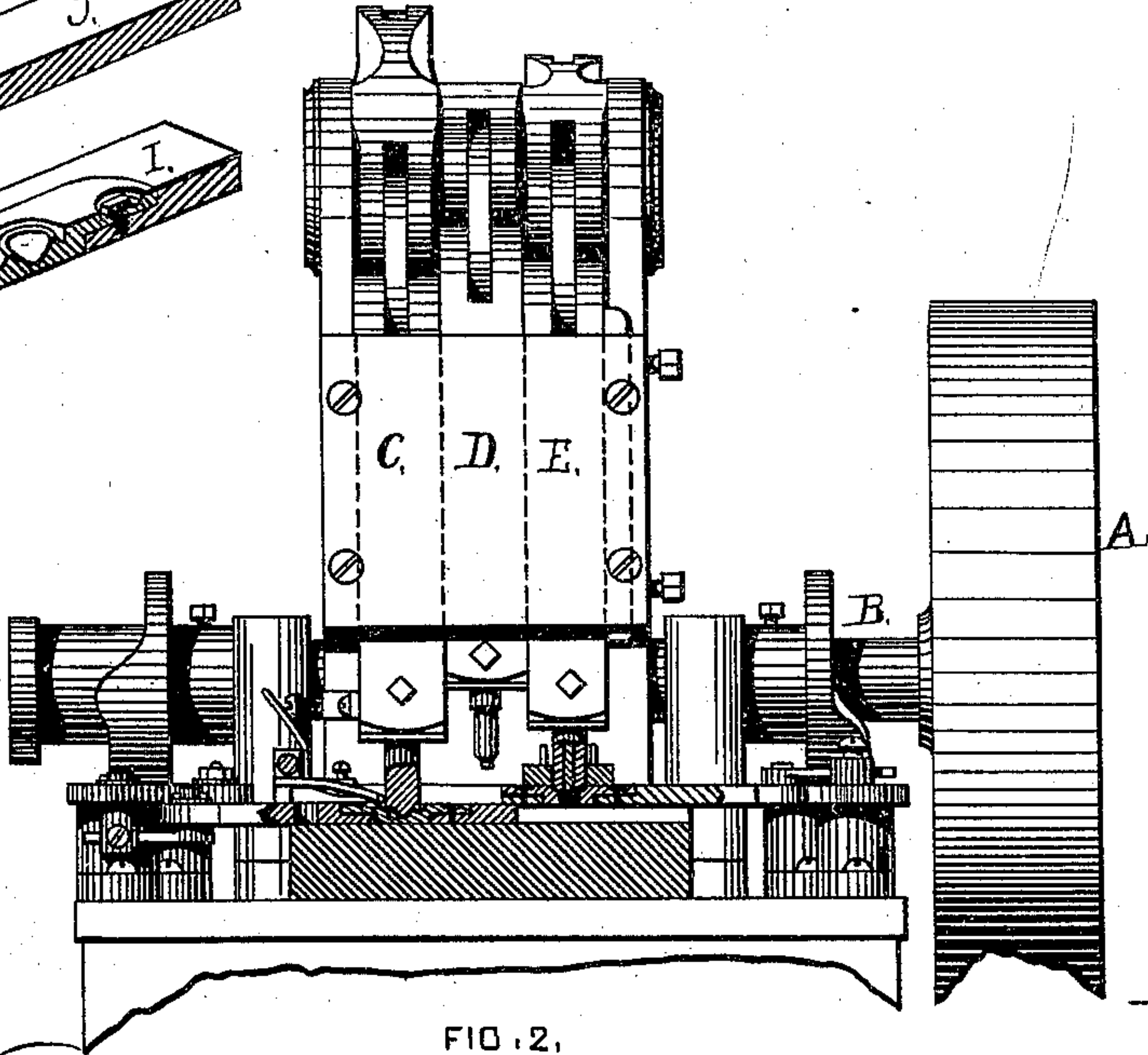
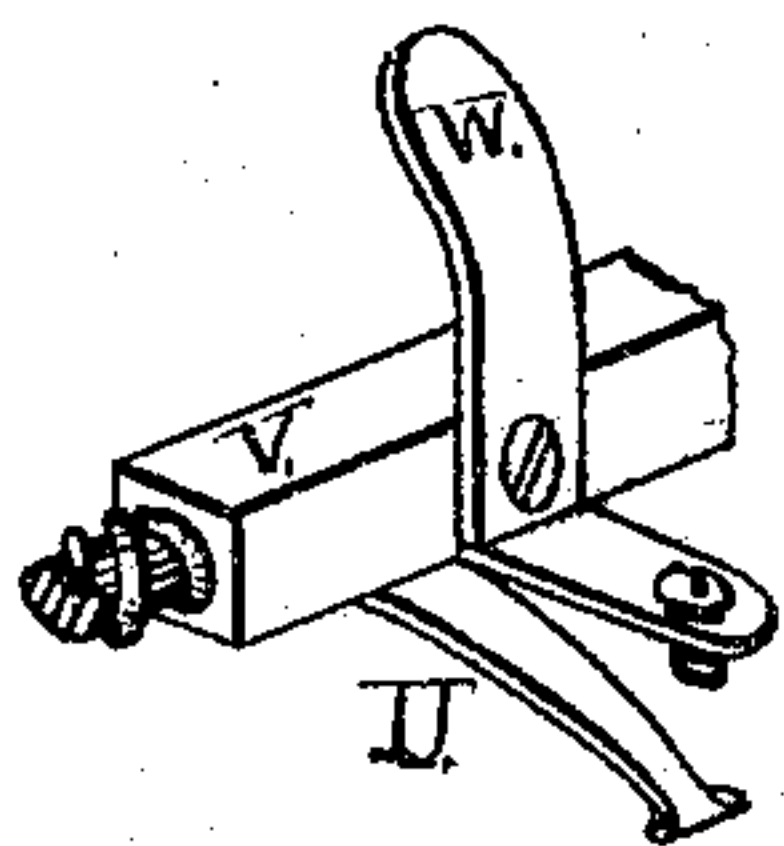
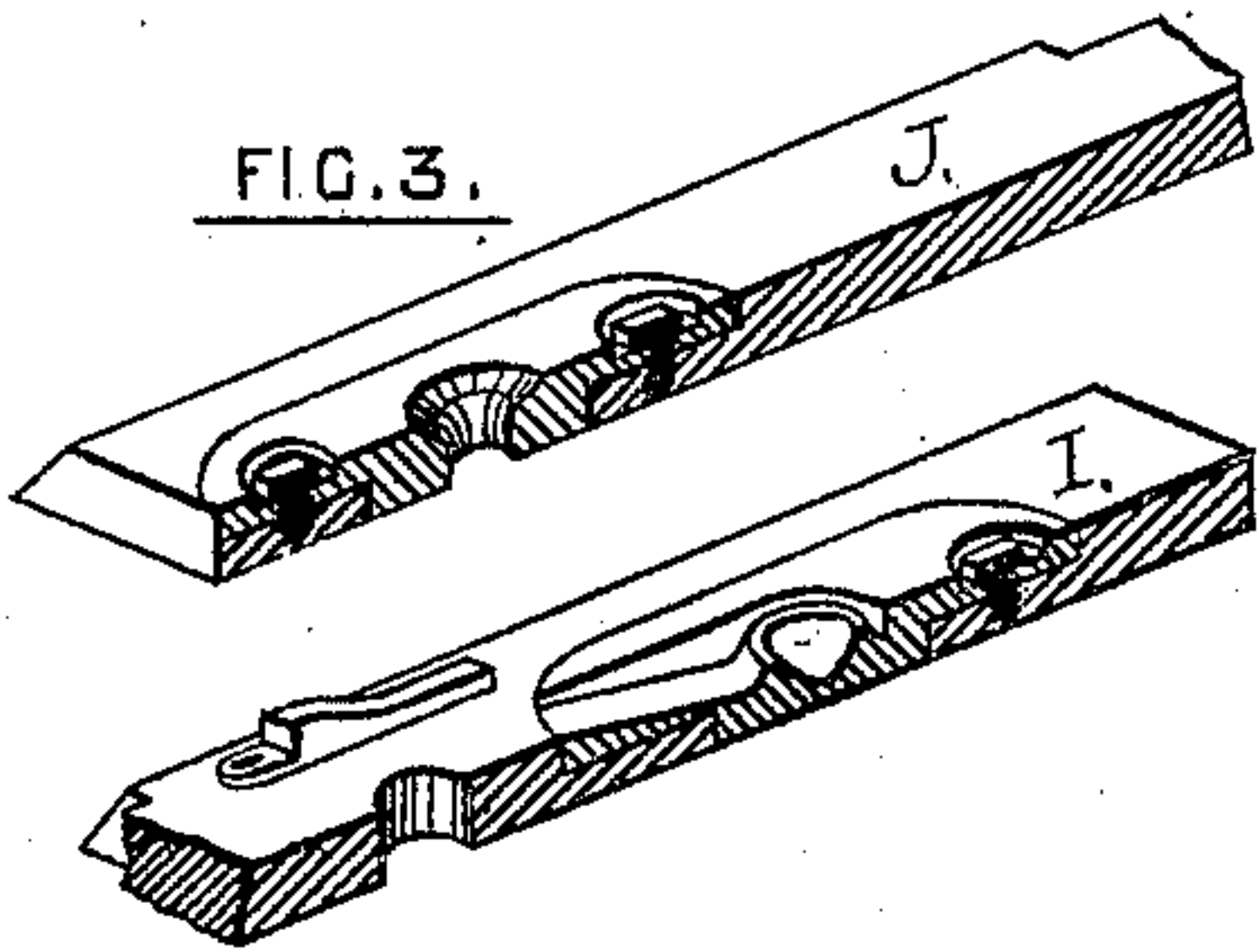
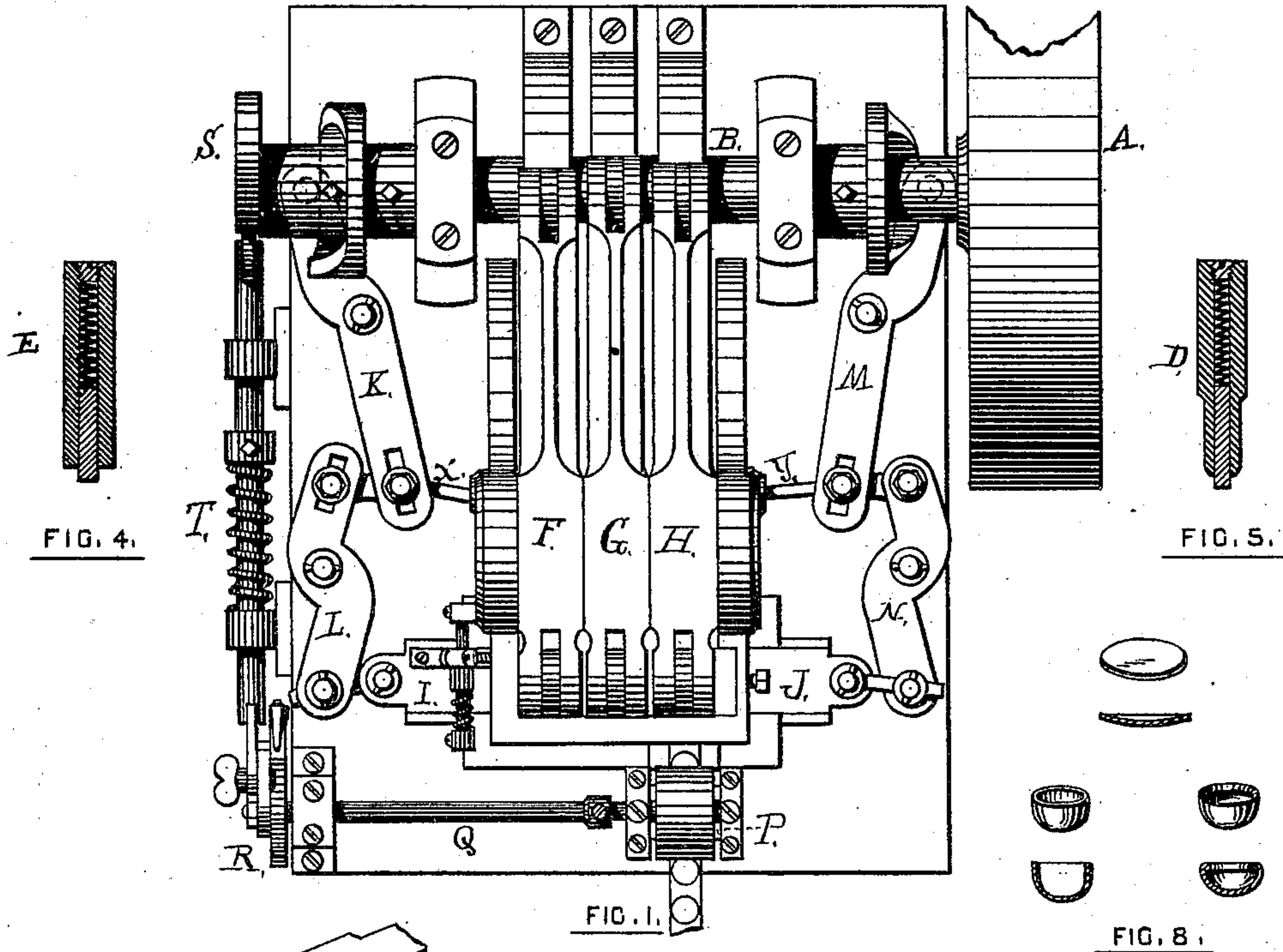


J. W. PRESBRY.

MACHINES FOR MAKING COLLAR BUTTONS AND STUDS.

No. 176,808.

Patented May 2, 1876.



WITNESSES.

INVENTOR.

Walter B. Winnech

Jo. J. Rich

J. W. Presbrey

UNITED STATES PATENT OFFICE.

JEREMIAH W. PRESBREY, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO
EDWARD A. LUTHER AND W. H. LUTHER, OF SAME PLACE.

IMPROVEMENT IN MACHINES FOR MAKING COLLAR-BUTTONS AND STUDS.

Specification forming part of Letters Patent No. **176,808**, dated May 2, 1876; application filed
December 20, 1875.

To all whom it may concern:

Be it known that I, JEREMIAH W. PRESBREY, of Providence, in the State of Rhode Island, have invented a new and useful Machine for Making Collar-Buttons and Studs; and I do hereby declare that the following specification, taken in connection with the drawing making a part of the same, is a full, clear, and exact description thereof.

Figure 1 is a top view. Fig. 2 is a front view with feed-rollers removed. Fig. 3 shows section in perspective of carrier-dies. Fig. 4 is the No. 1 punch. Fig. 5 is the No. 2 punch. Fig. 6 is the No. 3 punch. Fig. 7 is the device for removing the button. Fig. 8 is a perspective and section of process of forming.

The object of my invention is to produce a machine that will form the front and back of a collar-button or stud from a strip of stock without the intervention of hand labor, and consists in the mechanism for that purpose, hereinafter described.

A is the pulley, and B the shaft. The shaft B is provided with suitable eccentrics for operating the plungers C D E through suitable levers F G H. I and J are carriers, which move horizontally beneath the plungers, and transfer the stock from one plunger to another, and are operated by cams upon the main shaft B through levers K L and M N. The stock is placed upon a roller beneath the machine, and the end placed between the feeding-rollers, which are directly in front of the plunger E, and are operated as hereinafter described.

As the stock is drawn under the plunger E by a well-defined rotary movement of the feed-rollers, the plunger E, actuated by its cam upon the main shaft B, descends and cuts out from the strip of metal a circular piece, as shown in Fig 8, which is carried through the die and rests upon the carrier J, which, moving inward, conveys it to its position under the plunger D, which forces the metal into its

proper shape, and through the carrier-die J, to its proper position upon the carrier I, which at that instant moves outward and brings it under the plunger C, which, descending, turns over the edge, when the piece is picked out, as hereinafter described, and falls into a box below. The under feed-roller is upon a shaft, Q, having upon its opposite end a ratchet-wheel, R, and pawl, which is operated at regular intervals by a cam, S, upon the end of the main shaft B through the rod T. A finger, U, through the action of a spring upon the rod V, catches over the edge of the front or back of the button, as the case may be, after the plunger C has performed its work, so as to pull it out at the next receding movement of the carrier, and allow it to drop through a hole in the carrier into a box below. The finger U is kept elevated, except at the proper instant, when the pressure is removed from the lever W, and it falls so as to catch the edge of the piece. The carriers I J are actuated in their horizontal motion by a side cam upon the main shaft B, through levers K L and M N, the levers K and M being kept in contact with the cam by a spring, the tendency of which is to throw outward the rods X and Y, which are connected with the levers. The plungers D and E are provided with an inside spring-clearer, which clears the piece from the plunger at the proper instant.

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

The plungers C D E, actuated by suitable levers and cams, operating in combination with the carriers I J, actuated in like manner, the whole arranged and operating in the manner substantially as described, for the purposes specified.

J. W. PRESBREY.

Witnesses:

WALTER B. VINCENT,
JO. T. RICH.