

(No Model.)

B. B. HILL.
Hand Stamp.

No. 239,779.

Patented April 5, 1881.

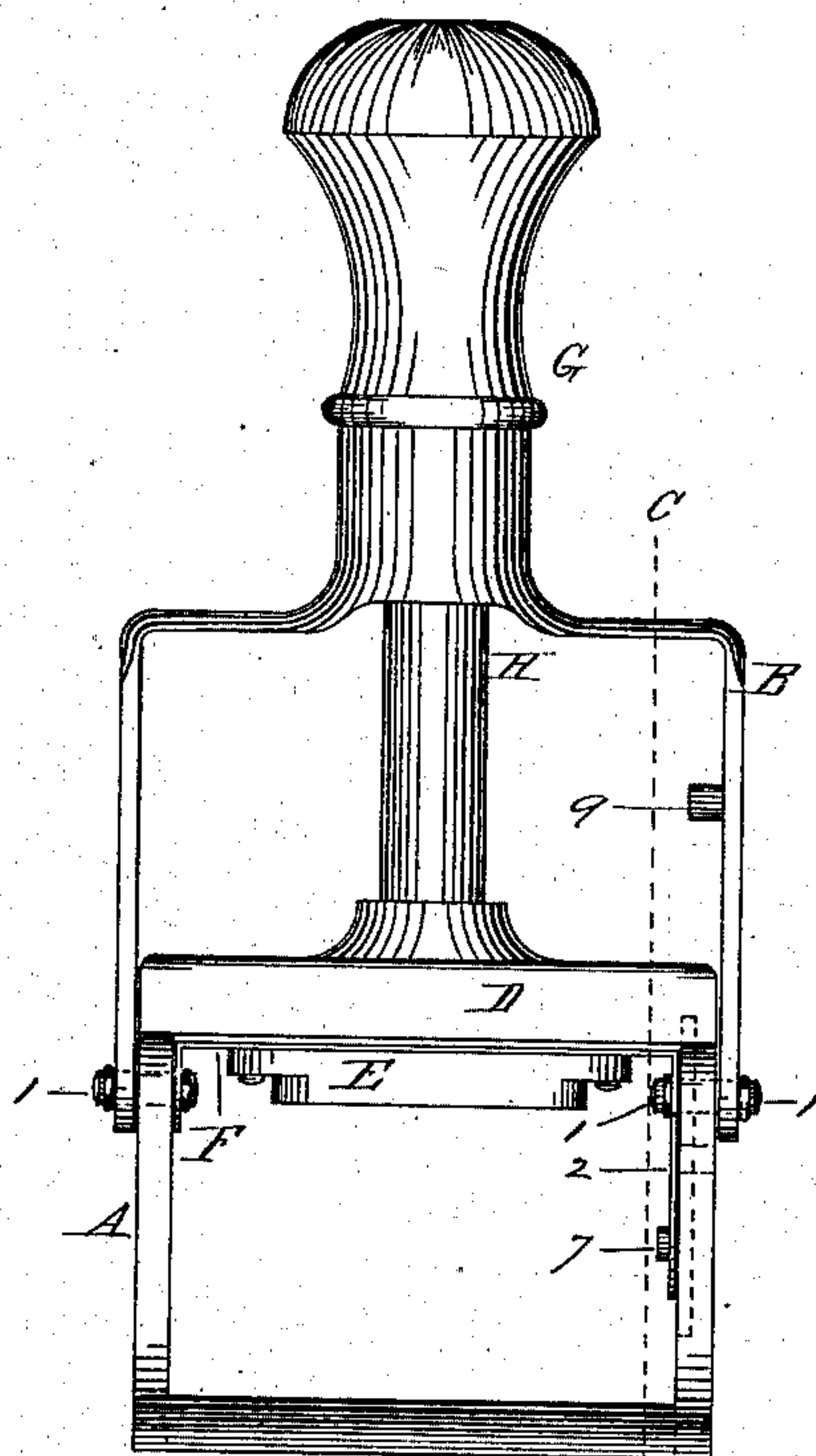


Fig. I

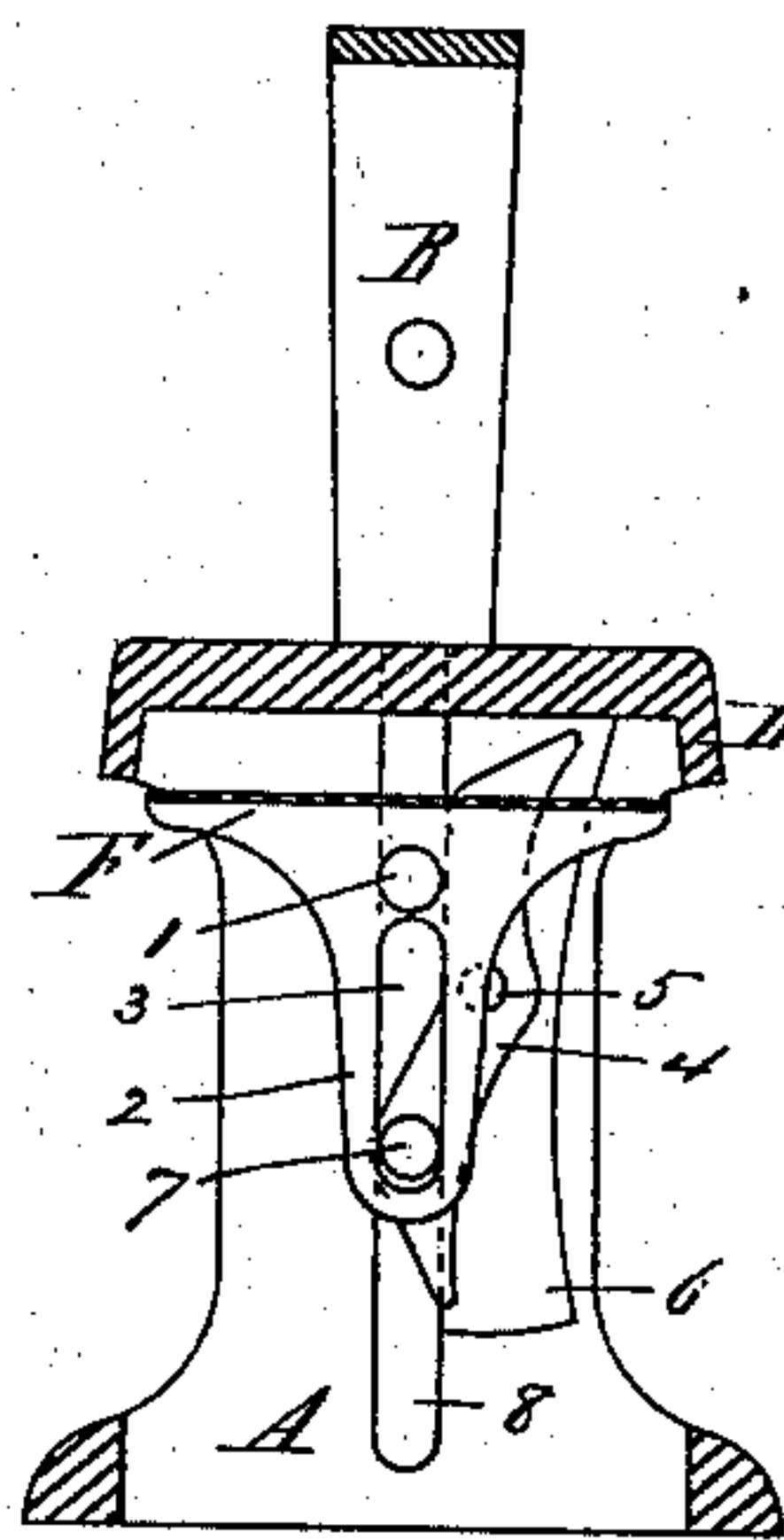


Fig. II

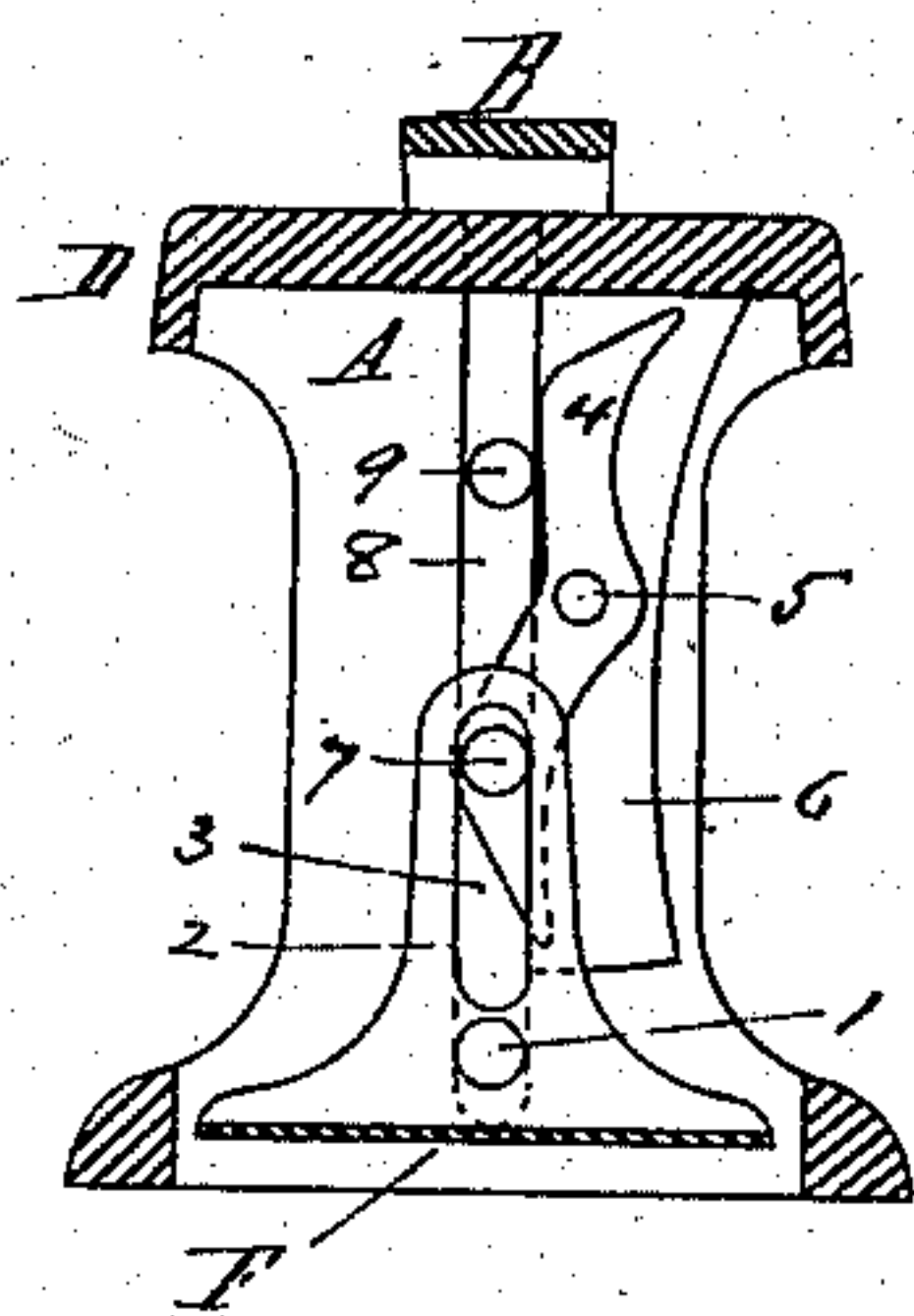


Fig. IV

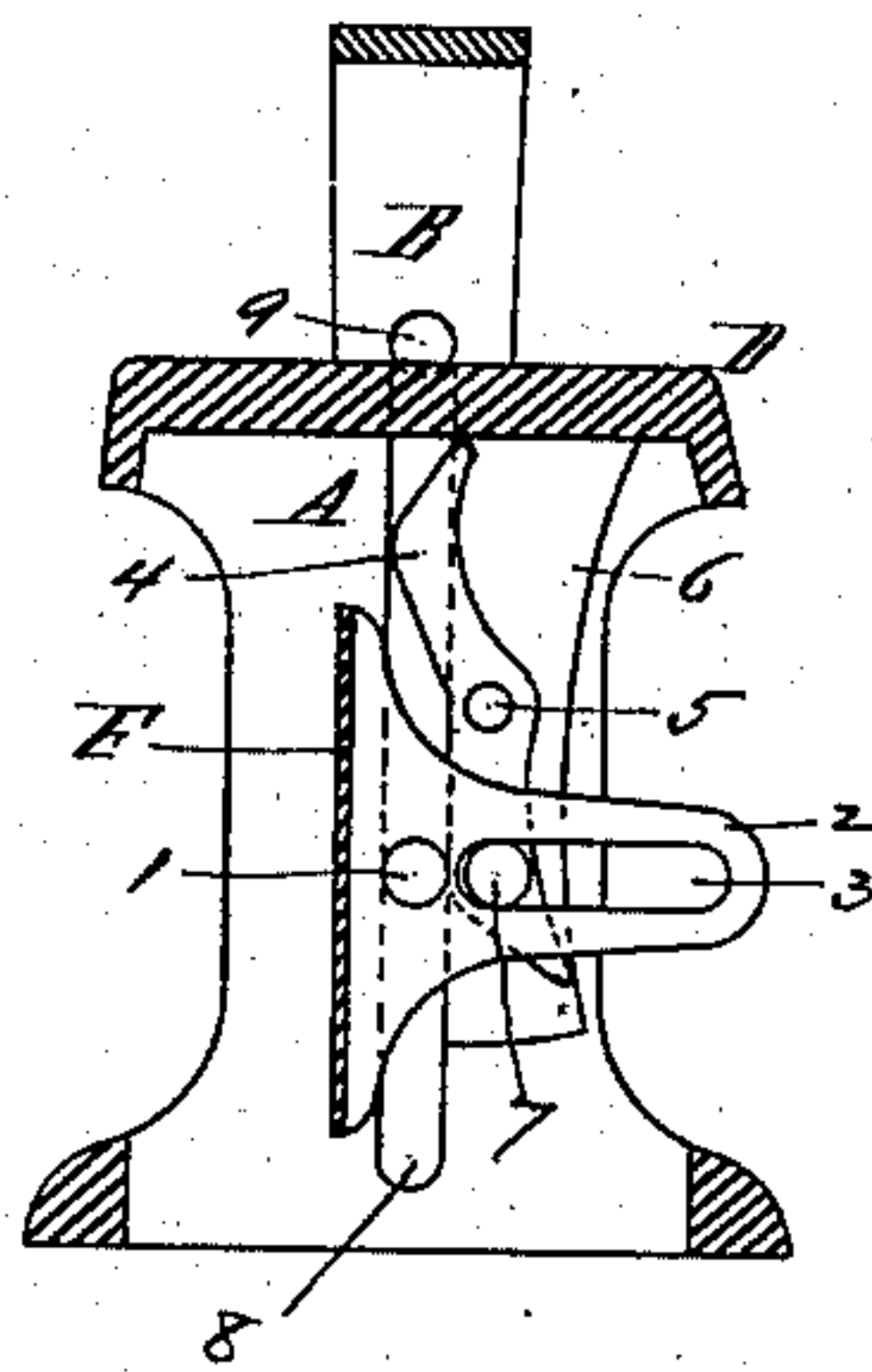


Fig. III

Witnesses.

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BENJAMIN B. HILL, OF SPRINGFIELD, MASSACHUSETTS.

HAND-STAMP.

SPECIFICATION forming part of Letters Patent No. 239,779, dated April 5, 1881.

Application filed January 29, 1881. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN B. HILL, of Springfield, in the county of Hampden and State of Massachusetts, have invented a new and useful Improvement in Self-Inking Hand-Stamps, (which has not been patented to any person in any foreign country with my knowledge and consent,) of which the following is a specification.

10 The object of my invention is to provide a cheap, effective, and easily-operating hand-stamp, in which the ink shall be automatically applied to the printing-characters of the stamp by the operation of taking the imprint; and I
15 accomplish this by the mechanism hereinafter described, and illustrated in the accompanying drawings, in which—

Figure I is a front view of my invention. Fig. II is a vertical transverse section of the same at line C of Fig. I. Fig. III is a vertical transverse section on the same line, showing the hand-piece and yoke partially moved down and the die-plate partly turned over, as in the operation of taking an impression; and
25 Fig. IV is the same section on the same line, but showing the hand-piece and yoke forced entirely down and the die-plate wholly turned over, as in the operation of taking an impression from the printing-characters secured to the die-plate.

In the drawings, A represents the fixed frame, open at the bottom, with a vertical slot, 8, in each end, and with a recess, 6, made in the inside at one end, in which is pivoted, at 5,
35 a vibrating bar, 4, having its upper and lower ends beveled or inclined on the side next the slot 8, and provided at the lower end with a pin or stud, as 7, which projects through a slot, 3, made in the ear 2 on one end of the die-plate F. This die-plate is pivoted at each
40 end to the lower ends of the yoke B, which is provided with a stud, 9, on the upper part inside, and the slot 8 in one end of the fixed frame A extends up through the end of the ink-pad D, so that the said stud 9 may pass
45 down in said slot, wherever the hand-piece and yoke are forced down. The die-plate F is adapted to receive any desired printing-characters on the side opposite that from which
50 the ear 2 extends, and the face of the die or printing-matter is held up against the ink-pad

D by a spring within the piston H, extending up into the hand-piece G.

The operation of the invention is as follows: When the stamp is not in use the die-plate F 55 is held by the elasticity of the spring within the piston H, with the face of the printing-characters thereon up against the ink-pad D, whereby the ink is supplied, the position of the die F being shown in Fig. 1. As the hand- 60 piece and yoke B are forced down, however, the pivot 1 at one end of the yoke impinges against the lower part of the bar 4, below its pivot 5, and forces that end of the bar away from its position, covering the slot 8, and into 65 its recess 6, carrying with it, by means of the stud 7, the ear 2; but as this outward movement of the lower end of the bar 4 is limited by the wall of its recess in the frame, and as the pivot 1 continues to move down the move- 70 ment of the ear 2 commences to be a rotary one around the stud 7 as a pivot, and the latter changes its position in the slot 3 of the ear to a point quite near to the pivot 1, as shown clearly in Fig III, when the die-plate 75 F is then turned half its rotary movement in passing down. As the downward movement of the yoke B continues the stud 9 in the yoke B, passing down the slot 8, impinges against the upper end of the bar 4, (which has been 80 thrown in by the outward movement of its lower end,) and this contact of the stud 9 and upper end of the bar quickly throws in its lower end, carrying with it, of course, the ear of the die-plate, until, when the die-plate F 85 has reached its extreme limit of downward movement, it has made exactly a half-revolution, the face of the printing-characters being on a horizontal plane, and in a position to give an impression. 90

It will be seen, as shown in Fig. IV, that the form of the bar 4 is such that when the stud 9 is bearing against the edge of said bar 4 the axis of the stud 7 at the lower end of said bar is in a vertical plane passing through the 95 axes of the stud 9 and pivot 1, both in the slot 8. When the downward pressure upon the hand-piece is removed the elasticity of the spring within the piston H causes the yoke B to move up again, and in passing up the stud 9 100 moves up out of contact with the edge of the bar 4, and the pivot 1, striking against the lower

inclined end of said bar, throws out its lower end, carrying out the ear 2 and causing the die-plate F to revolve around the stud 7 as a pivot, and the pivot 1, after it passes the bar-pivot 5, strikes against the edge of the bar 4 and moves the lower end of said bar in again, and carrying in the ear 2 until the studs 9 and 7 and the pivot 1 are all in the same vertical plane, when the die-plate F is then in a plane parallel with the lower surface of the inking-pad D, and the printing-characters thereon are against said surface.

Any desired printing-matter may be secured to the die-plate, from which to take an impression, and when arranged in this manner the machine is free from complication, operates easily, is always supplied with ink ready for printing, and when not in use the type or printing-characters are always protected from the accumulations of dust and dirt.

Having thus described my invention, what I claim as new is—

In a self-inking hand-stamp, the combination of a fixed vertically-slotted frame, a vibrating bar pivoted midway its length to said frame and provided with a stud in its lower end, a yoke having a stud in its upper part and a pin in its lower end, to operate against the edge of the vibrating bar, and a die-plate pivoted to the lower end of said yoke and provided with a slotted ear, to receive and engage with the stud on the vibrating bar, whereby the said die-plate is operated in being supplied with ink, and in making the imprint, substantially as described.

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Witnesses:

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