

F. WOSINSKI.
HAND STAMP MACHINE.
APPLICATION FILED APR. 27, 1909.

963,972.

Patented July 12, 1910.

Fig. 1

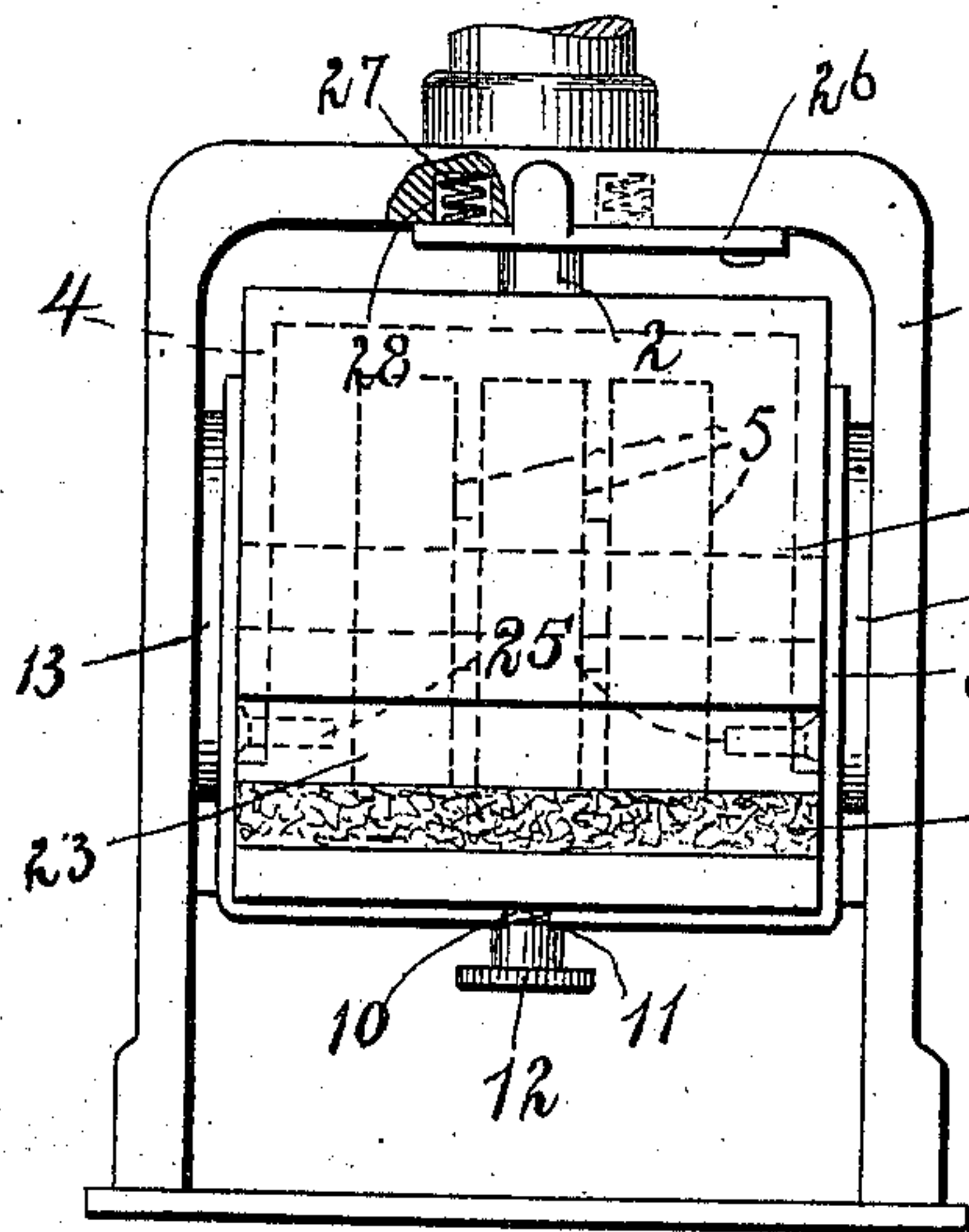


Fig. 2

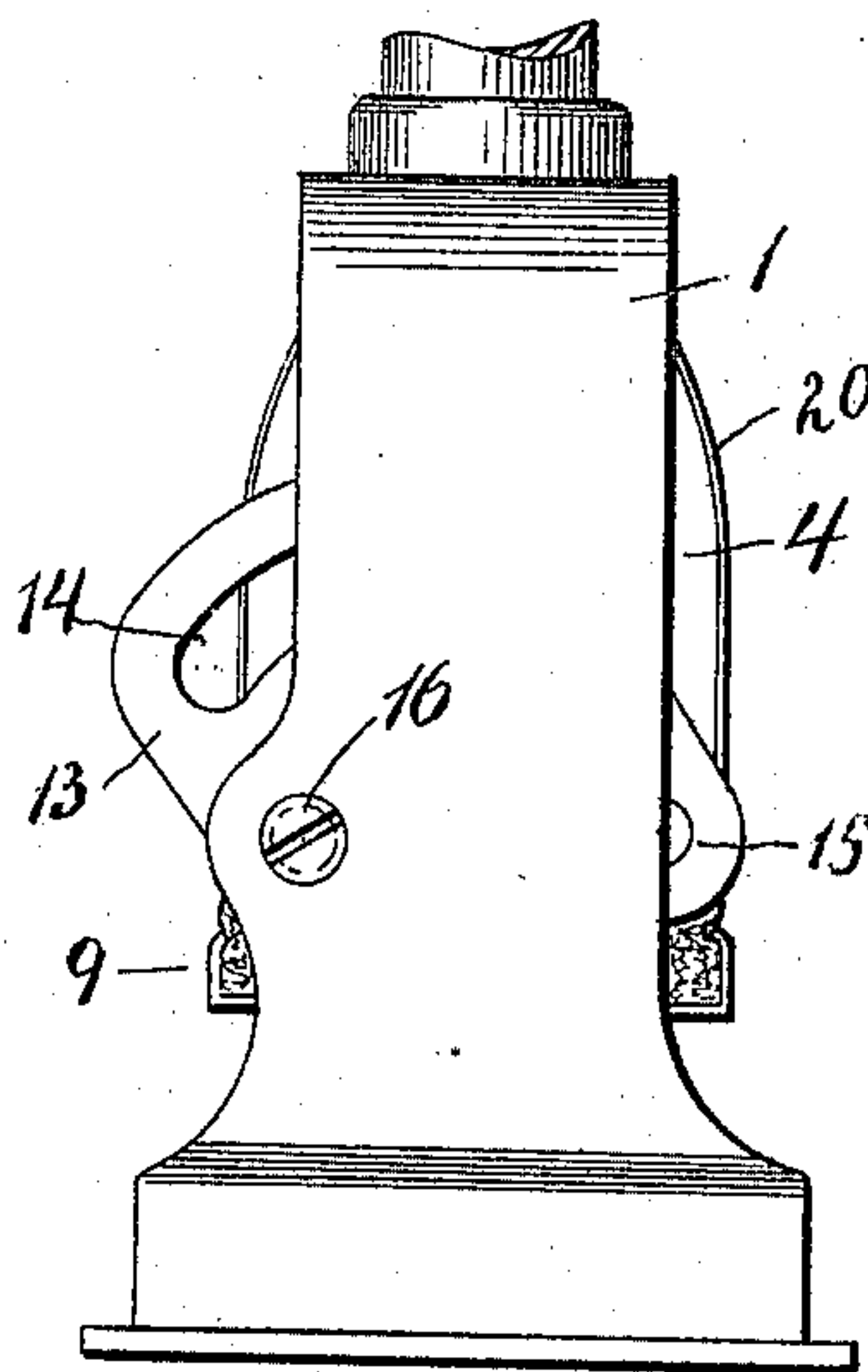


Fig. 3

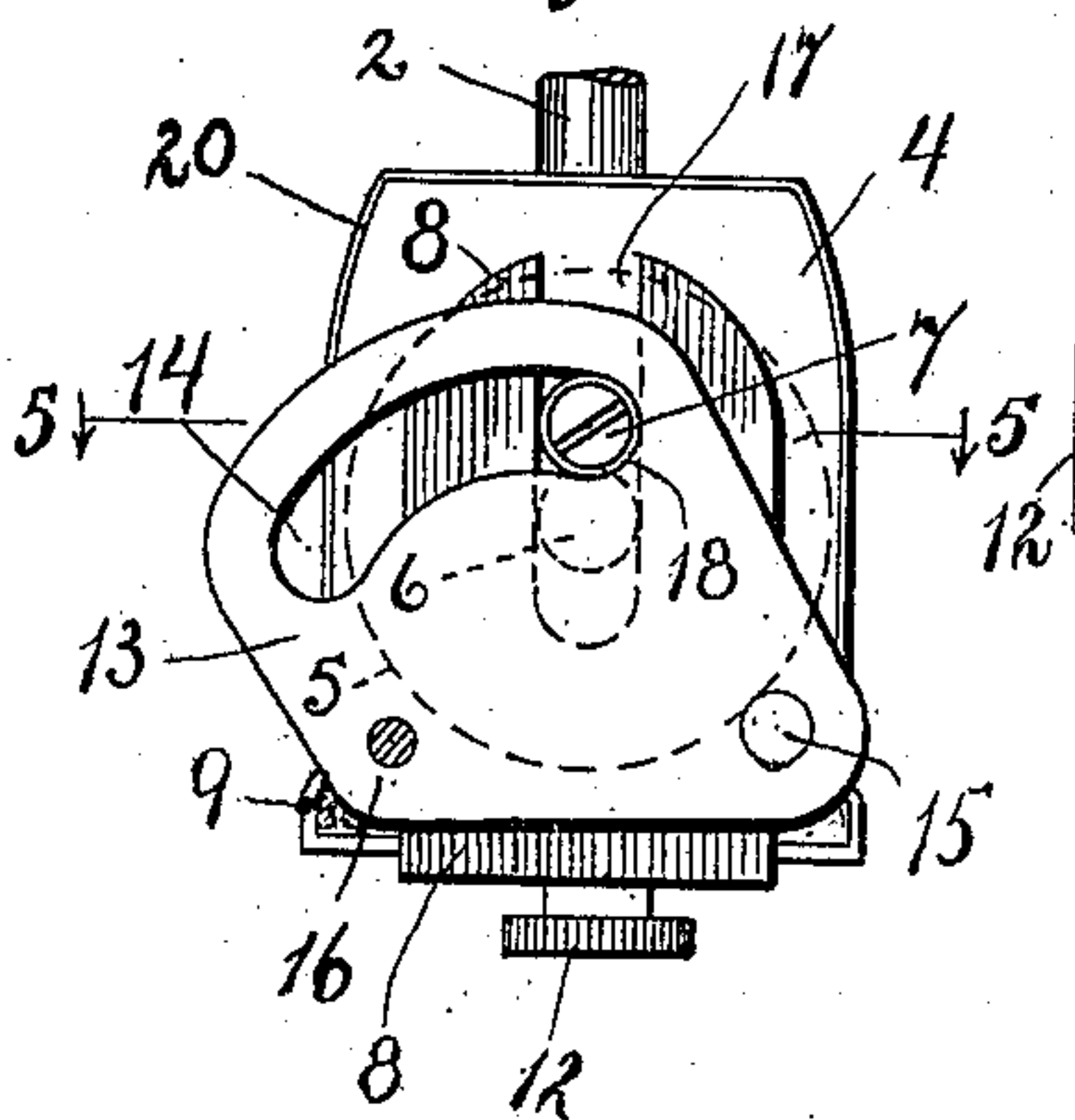


Fig. 4

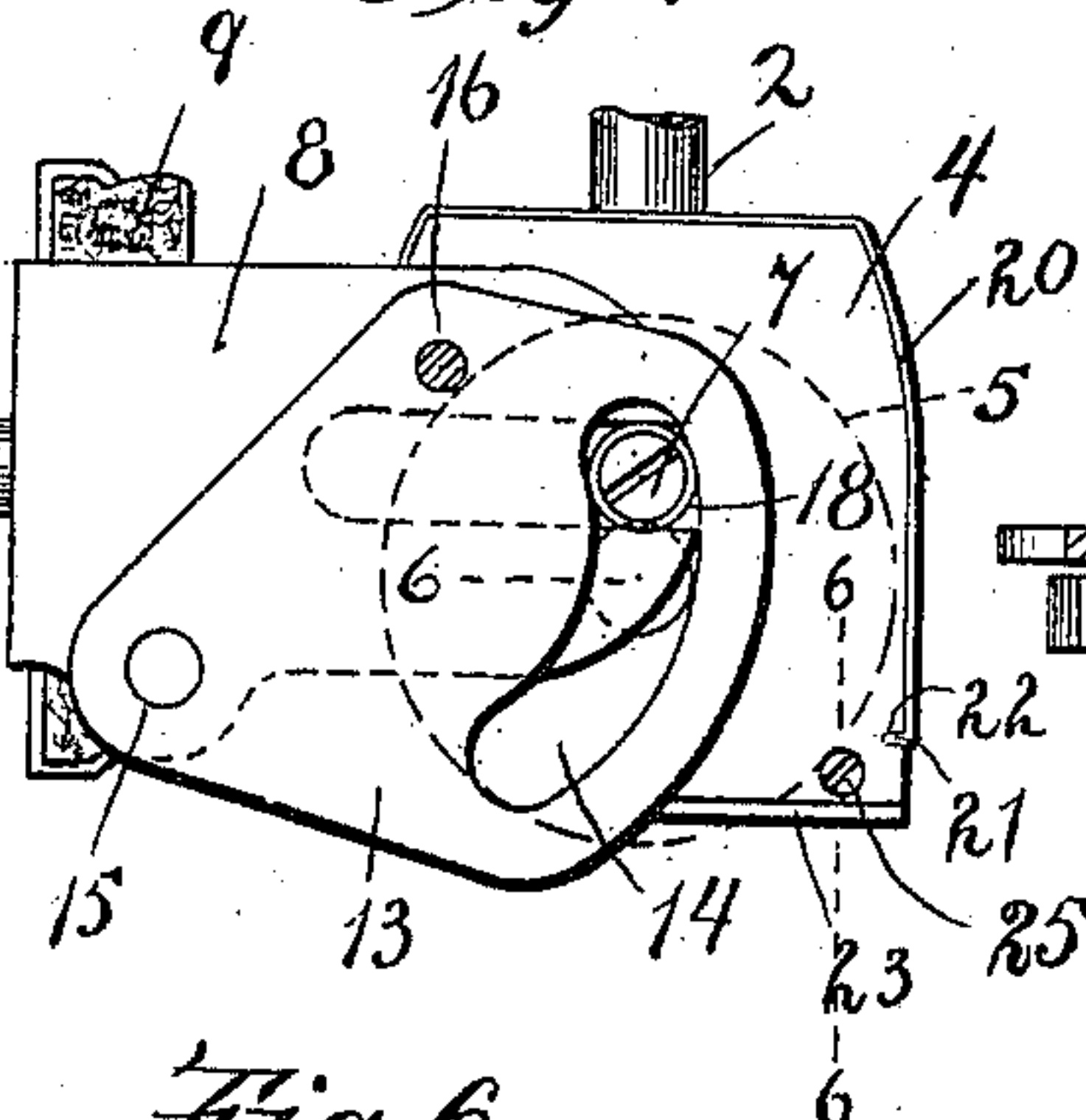


Fig. 5

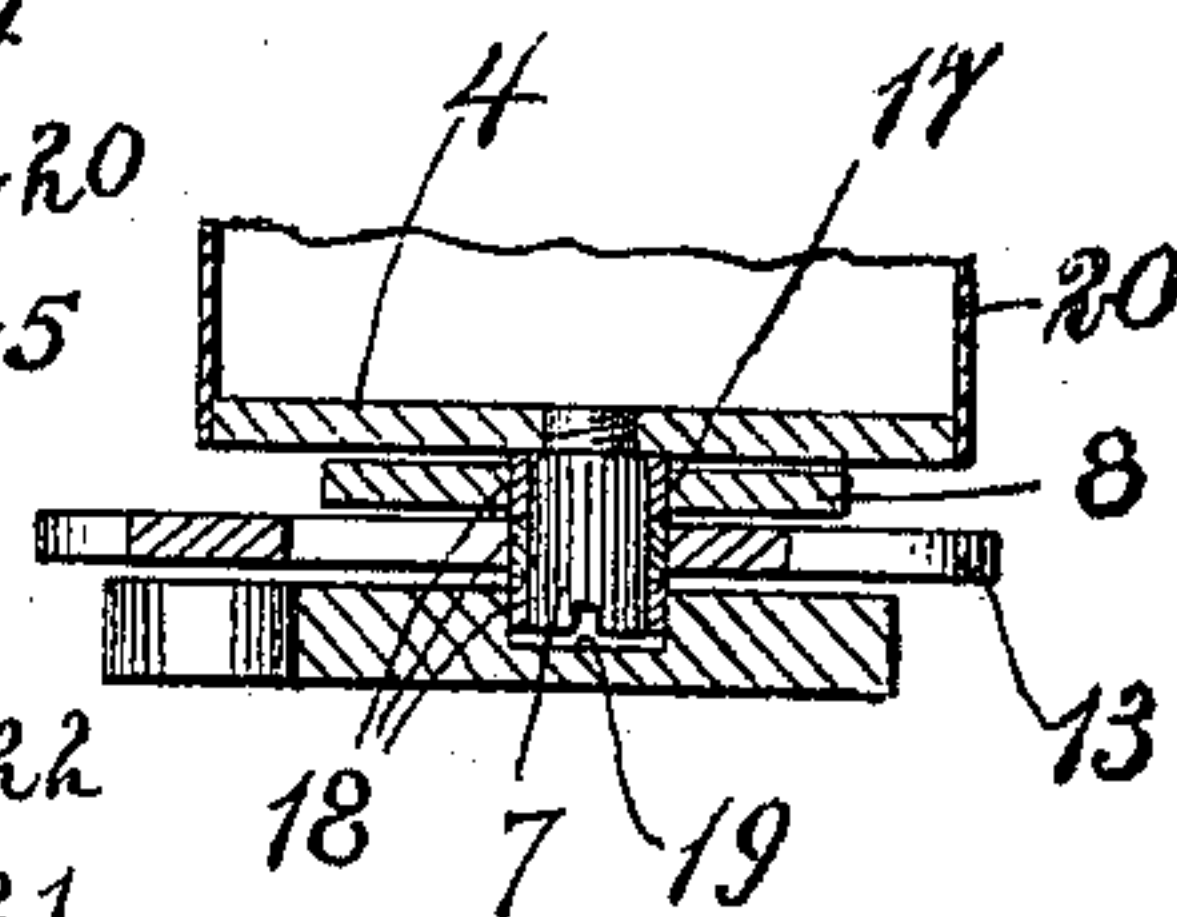


Fig. 6

4

Fig. 8

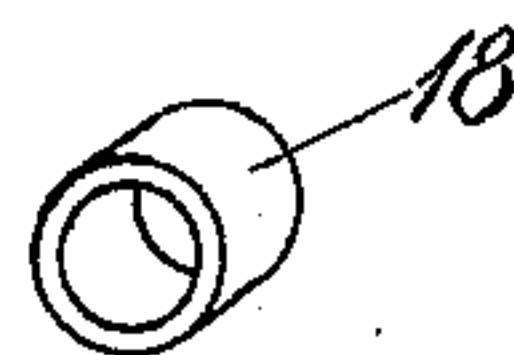
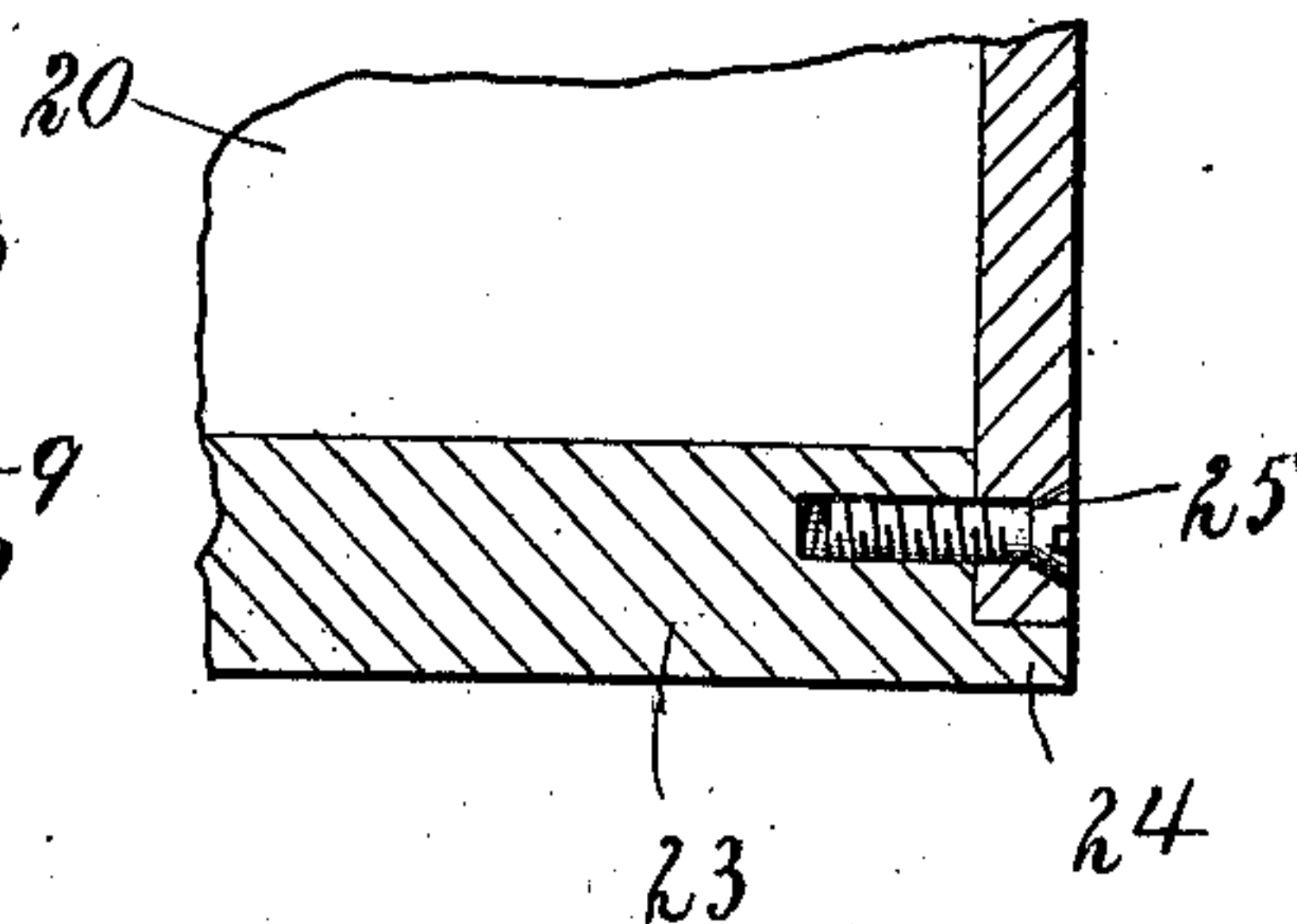
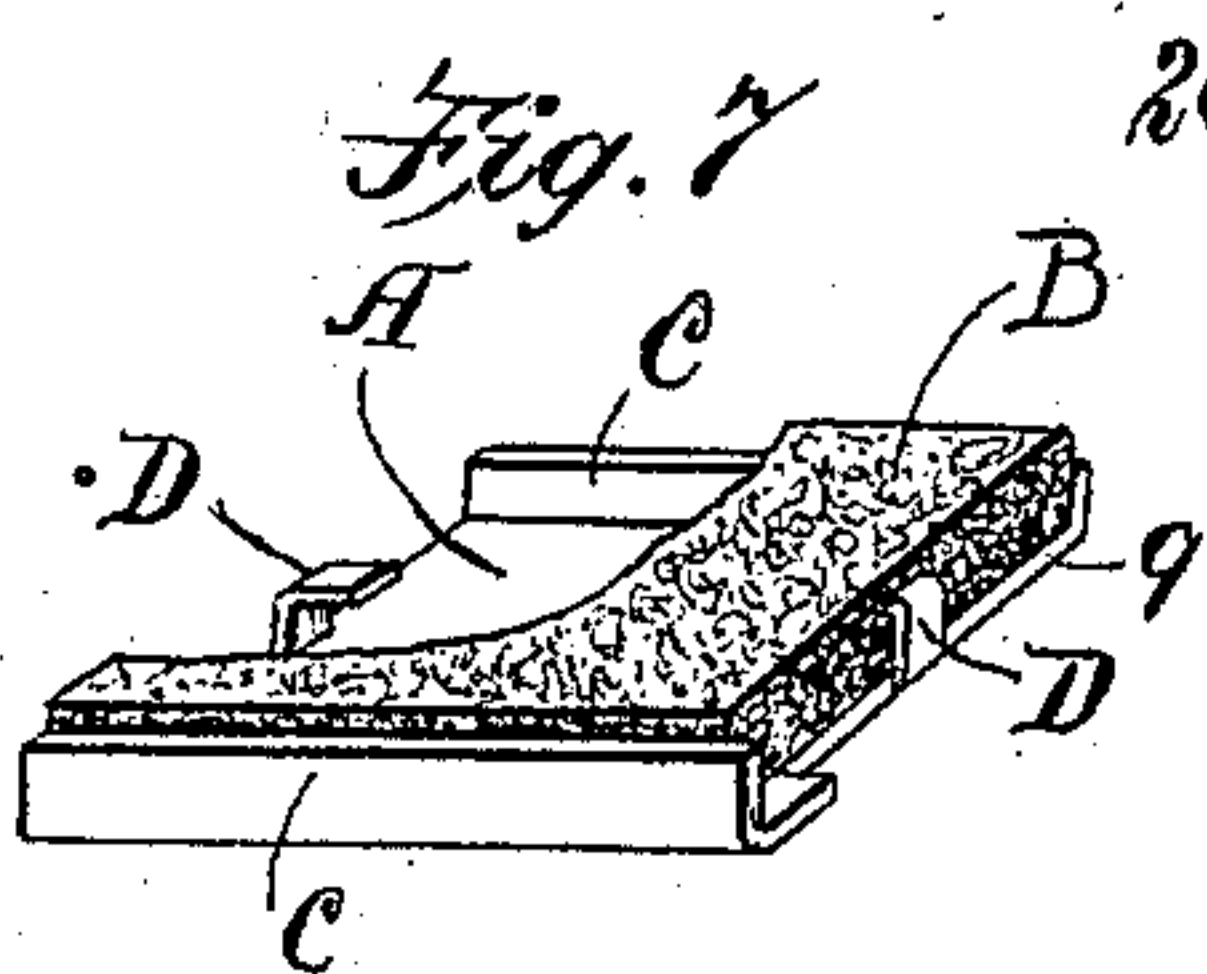


Fig. 7



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UNITED STATES PATENT OFFICE.

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HAND-STAMP MACHINE.

963,972.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRANK WOSINSKI, a subject of the Emperor of Germany, and a resident of the borough of Brooklyn, county of Kings, and State of New York, have invented certain new and useful Improvements in Hand-Stamp Machines, of which the following is a specification.

My present improvements in hand-stamp machines include first, a shield inclosing the printing wheels, protecting same from dust, and preventing the operator from coming into contact with their inky surfaces, especially at the sides of the machine; second, the mechanism for swinging the ink pad to the side of the machine upon its down or printing stroke has been modified to bring said pad into a position at the side of the machine in which it is out of contact and entirely clear of the printing wheels, thereby preventing the inking of said wheels at points where it will do no good, but may be disadvantageous in soiling objects on which the machine may be laid or the person of the operator, especially where the protective shield, heretofore referred to, is omitted; third, the action of the machine has been improved by providing a plurality of rollers on each of the studs at the sides of the numeral wheel frame. These rollers greatly reduce wear and make the machine operate much more smoothly, as will best appear from the detailed description. Fourth: The locking means for securing the plunger in its elevated and other positions has been improved so that said means is not subject to accidental locking or unlocking. Fifth, improved means is provided for securing the die plate to the bottom of the numeral wheel frame whereby the full printing surface of said plate becomes available for printing purposes.

In the drawings, showing (with as much detail as is necessary to the present purposes) a hand stamp machine embodying my improvements, Figure 1 is a front elevation of a hand-stamp machine embodying my improvements, showing the handle broken off and with a portion of the frame of the machine cut away; Fig. 2 is a side elevation of the machine of Fig. 1; Fig. 3 is a view similar to Fig. 2 of the parts remaining after the main frame 1 has been removed; Fig. 4 is a view of the same parts as in Fig. 3 but in the position occupied when the pad has

been swung out to the side; Fig. 5 is a sectional view, partly in elevation, on the line 5—5 in Fig. 3; Fig. 6 is a vertical partial section in elevation on the line 6—6 in Fig. 4, Fig. 7 is a detached view of the ink pad; and Fig. 8 is an enlarged perspective of one of the rings 18.

Describing now my improvements with particular reference to the devices of the drawings, and reserving it to the claims to point out the novel features and to define the scope of the invention, 1 is the main frame, 2 the plunger working through the top of said frame, provided above with a handle (not shown) and below carrying a printing wheel frame 4. The usual printing wheels 5 are operatively supported on shaft 6 extending across said frame.

7 designates studs projecting from the sides of the printing wheel frame and located above the ends of the printing wheel shaft. These studs are guided in vertical grooves 19 on the inside of the main frame.

8 is the ink-pad frame having the general U-shape shown with its legs straddling the sides of the printing wheel frame and slotted at 17 to receive the studs 7. This frame carries the ink-pad 9 and for this purpose has a slot 10 to receive a threaded shank 11 projecting from the pad, upon which is a thumb nut 12 adapted to be tightened against the frame when the pad is in position to secure it permanently in place. As usual, the ink-pad frame, when the plunger is in elevated position, carries the ink-pad under the printing wheels, whereas during the descent of the plunger and printing wheels, as in printing, said frame is swung to carry the pad out to the side of the machine. The improvement in this particular part of the machine resides in the means for carrying the ink-pad not only to the side of the machine, but so far to the side that the ink-pad is entirely out of contact with the printing wheels and can additionally be removed with great ease by merely loosening the thumb nut 12 and sliding the pad upward to carry its threaded shank out of the slot in the pad frame. The means for thus operating the pad frame includes a link 13 at each side of the machine located between the leg of the pad frame and the inside of the main frame, each link being provided in its upper portion with a curved slot 14 receiving the stud 7 of the wheel frame, and at one of its lower

corners 15 is pivotally connected with the leg of the pad frame, and at its other lower corner 16 is pivotally connected with the leg of the main frame. The result of the construction is that downward pressure on the plunger of the machine carries the wheel frame studs 7 down against the under sides of the link slots 14 and pivots said links about their pivotal connection 16 with the main frame, whereupon said links in their downward swinging motion act through their pivotal connections 15 with the pad frame to swing said frame out of its underneath position into a position at the side of the machine, said frame, during this motion, turning about the studs 7 as an axis, and having a certain sliding motion relative to said studs provided for by the slots 17. The fact that the pad frame has its fulcrum above the numeral wheel shaft, or at least not coincident therewith, together with the other features shown or described in this connection, causes the pad to clear the side of the machine as it swings outwardly on the down stroke and brings about the advantages heretofore indicated in this connection.

A plurality of rollers consisting of tubular rings 18 are provided on each wheel frame stud. Thus, there are seen to be three of these rings on each stud, having a width respectively equal to the thickness of the leg of the pad frame 8, the slot space in the link 13, and the depth of the groove 19 in the main frame. Without these rollers, the action of the machine is not only unnecessarily hard, but the printing wheel frame studs are subjected to great wear, and particularly to wear which is uneven in the three sections of the length of the stud. Thus, the pad frame, the link and the groove in the main frame have rubbing contact with the studs in contrary directions and to unequal extent. The use of the rollers gives independence to the frictional action of these parts and secures not only a more easily operated machine, but one in which the wear is more uniform.

To prevent the printing wheels from being exposed at the sides of the machine where they will be liable to contact with and soil objects on which the machine is laid, or the person of the operator, also to keep dust out of the wheels, I have provided a shield 20 of peculiar construction consisting of a top portion perforated with an opening receiving the plunger 2, said top portion resting upon top of the printing wheel frame, and further consisting of side portions inclosing the open sides of said wheel frame and having at their bottom edges inwardly turned flanges 21 registering with slits 22 in the legs of the wheel frame and adapted to be retained in said slits by the spring of the sides of the shield toward each other. For

this purpose, the shield is made of springy sheet metal.

The die plate 23 extends between the extremities of the legs of the wheel frame and further has a shoulder 24 on either side underhanging the ends of said legs. It is secured permanently in this position by screws 25 inserted from the sides of the wheel frame legs into the sides of the die plate. These securing screws are, therefore, entirely out of the way so far as marring or interfering with the printing face of the die plate is concerned, which is accordingly available over its entire surface for printing purposes.

26 is a lock plate fulcrumed, as usual, on the underside of the top of the main frame, and having an elongated opening through which is received the plunger, the side of which opening is adapted to be received into a notch or notches along the length of the plunger, and thus lock it stationary. The present improvement resides in applying to this old style form of lock plate, spring means putting said plate under normal tension against accidental moving from either its locking or unlocking position. These springs are short spiral springs 27 located under compression in recesses 28 in the main frame and exert their spring action upon the upper side of the lock plate. The result is that the plate stays in whichever position of adjustment it may be left, and the difficulty is done away with of the accidental locking and unlocking of the plunger when the reverse condition is sought.

The ink-pad 9, best shown in the detached view in Fig. 7, consists of a metal back A and a supported piece of felt B. The metal back has upturned sides C and end lugs D with inwardly directed extremities which are received into the ends of the felt pad B, whereby the pad is held fixedly in place until such time as it may be desired to remove and replace it by another piece of felt, which, it will be seen, this arrangement readily permits.

Having thus described my invention, what I claim is:—

1. A hand-stamp machine, comprising in combination with the printing wheel frame, a shield of springy sheet-metal having a top resting on the top of the wheel frame and having sides with normal tendency toward each other inclosing the open sides of the wheel frame, and having their bottom edges directed inwardly toward the wheel frame and received in slits in said frame.

2. A hand-stamp machine comprising in combination, a main frame with legs internally provided with upright grooves; a printing wheel frame having studs projecting one from each end above the axis

of the printing wheels; a pad frame consisting of U-shaped member with its legs straddling the ends of the wheel frame and slotted to receive the wheel frame studs; 5 links one on each side between the main frame and the leg of the pad frame, each of said links being provided with a curved slot receiving the wheel frame stud and having at one bottom corner a pivotal connection with the pad frame and at its other 10 bottom corner having pivotal connection with the main frame.

3. In a hand-stamp machine, the combination of a main frame, a wheel frame having end studs received in vertical guides in the main frame; a U-shaped pad frame with legs straddling the ends of the wheel frame and slotted to receive its studs; a link between the main frame and the pad frame 15 having a slot receiving the wheel frame stud and having pivotal connection with the pad frame and another pivotal connection with the main frame; and three cylindrical rings on each stud located at the bearing parts 20

respectively of the pad frame, the link and the guides in the main frame. 25

4. In a hand-stamp machine, the combination of a main frame having legs with internal upright guides; a wheel frame having end projections received in said guides; 30 parts fulcruming on said projections; and a plurality of loose bushings on each projection devoted severally to the engaging parts.

5. In a hand-stamp machine, an ink pad 35 comprising a metal back A and a supported piece of felt B, the metal back having upturned sides C and end-lugs D spaced from and independent of the sides C, said lugs having inwardly directed extremities adapted to be forced into the ends of the felt B. 40

Witness my hand this 16 day of April 1909, at New York, N. Y.

FRANK WOSINSKI

Witnesses:

GEORGE M. KIDDER,

FRANK E. CAMPBELL.