

(No Model.)

2 Sheets—Sheet 1.

E. J. BROOKS.

SEAL PRESS.

No. 298,284.

Patented May 6, 1884.

FIG. 1.

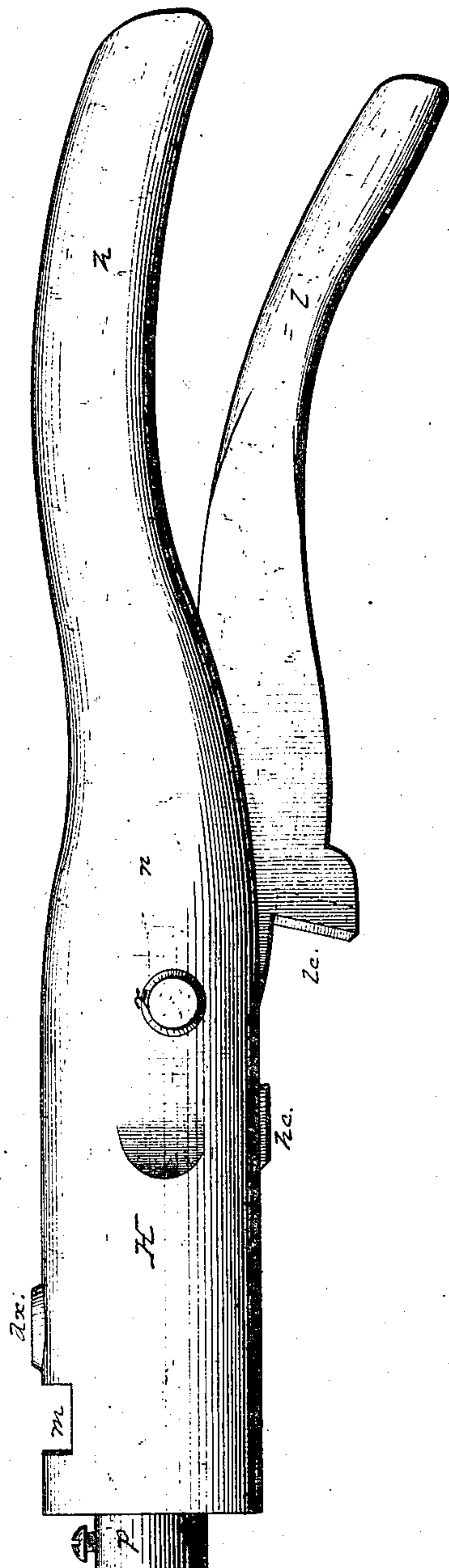
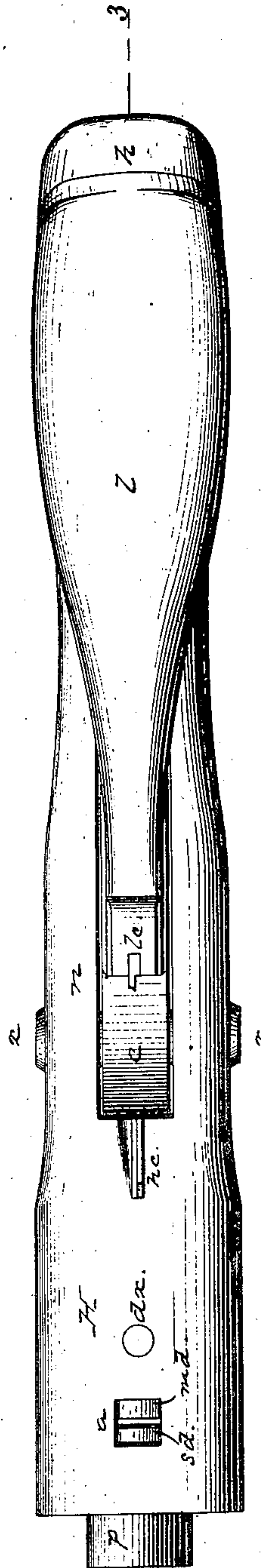


FIG. 2.



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(No Model.)

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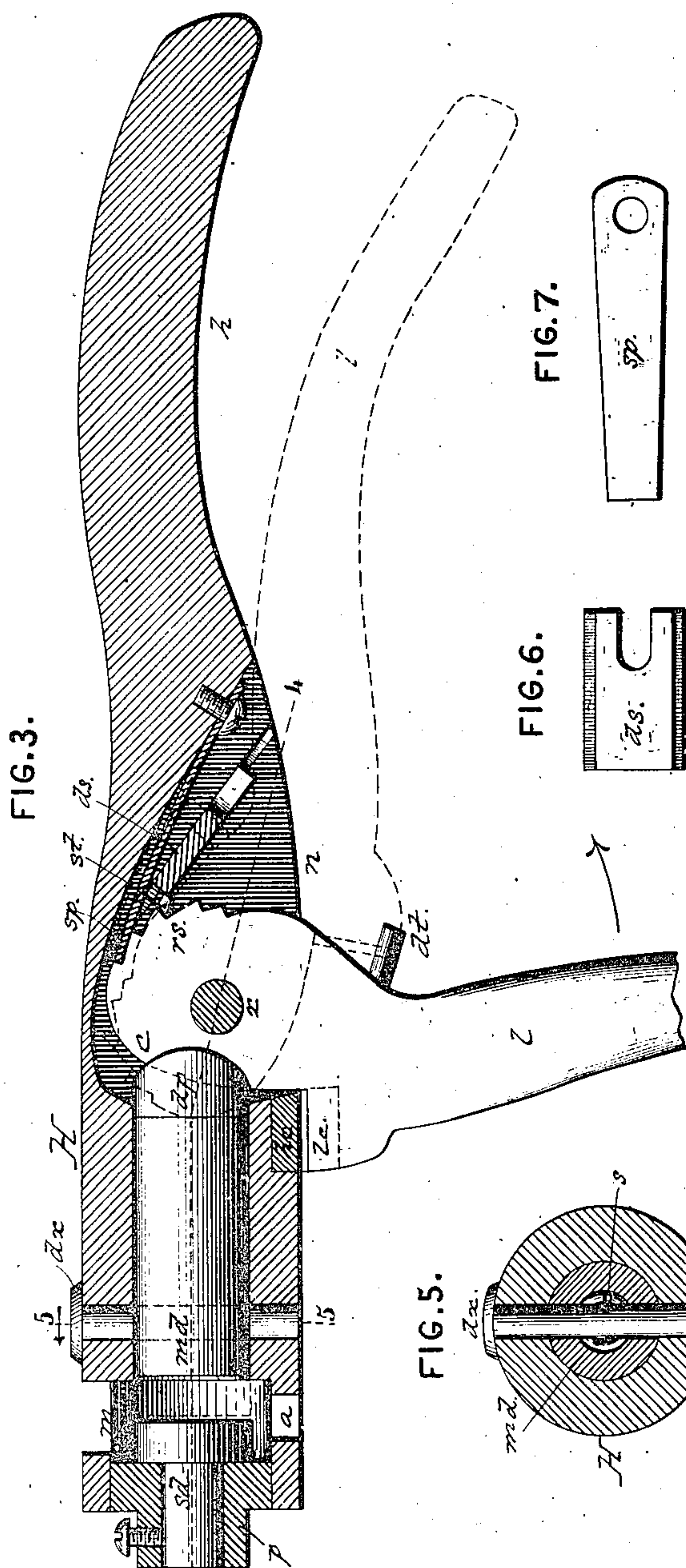


FIG. 3.

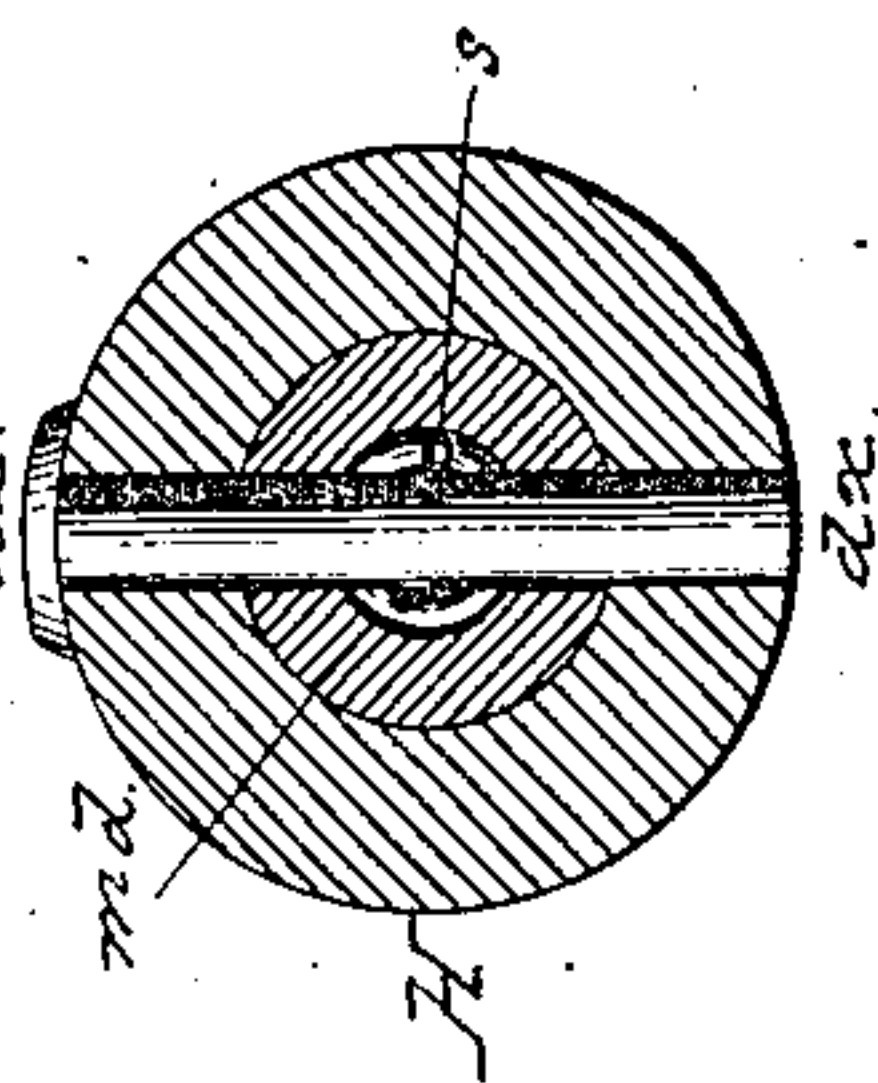


FIG. 6.

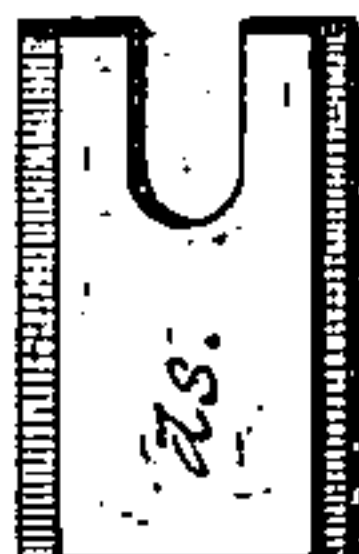
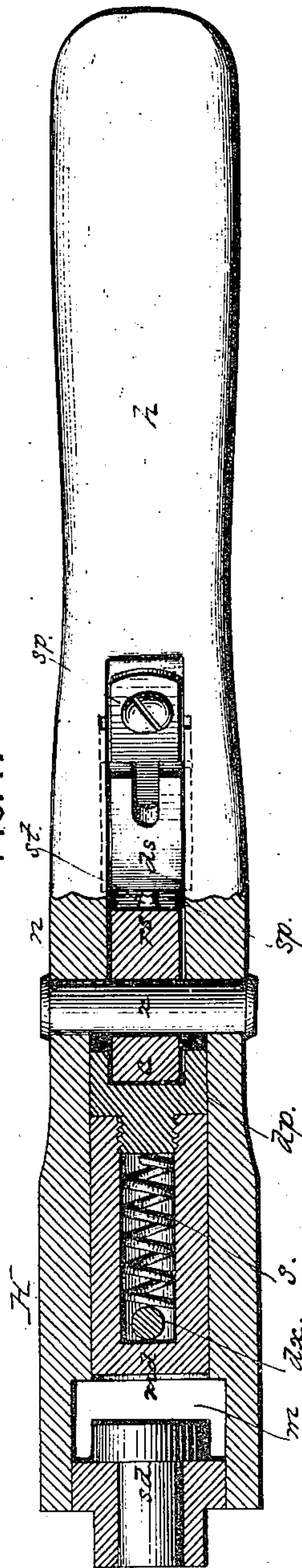


FIG. 7.



FIG. 4.



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# UNITED STATES PATENT OFFICE.

EDWARD J. BROOKS, OF EAST ORANGE, NEW JERSEY, ASSIGNOR TO E. J. BROOKS & CO., OF NEW YORK, N. Y.

## SEAL-PRESS.

SPECIFICATION forming part of Letters Patent No. 298,284, dated May 6, 1884.

Application filed October 19, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD J. BROOKS, a citizen of the United States, residing at East Orange, in the State of New Jersey, have invented a new and useful Improvement in Seal-Presses, of which the following is a specification.

A serious trouble to makers and users of seals as means for securing the doors of railway freight-cars and the like has heretofore existed in the allowances necessary to be made for imperfect work on the part of "sealers," due to carelessness, collusion with thieves, or a disposition to favor other fastenings. Devices to facilitate perfect work in the construction of seals and of seal-presses have been multiplied.

The object of the present invention is to so construct or so furnish a seal-press as to compel the user thereof to press every seal to the required extent, and thus produce uniform impressions and perfected fastenings.

This invention consists, first, in the combination of a pawl-and-ratchet device, for insuring complete movements, with the means for applying power to the die or dies of a seal-press of any description, for pressing lead seals, tin-strip seals, paper seals, wax seals, or seals of any other description fastened and provided with distinguishing marks by pressing or stamping.

The invention consists, further, in a peculiar combination of a pawl and ratchet with the other parts of a "new-style" seal-press of distinctive shape designed for their reception, and in a novel device for applying and disengaging the detent-pawl, as hereinafter set forth.

Two sheets of drawings accompany this specification as part thereof.

Figure 1 of these drawings is a side view, and Fig. 2 an edge view, of said new-style seal-press closed as it is when carried in the hand. Fig. 3 represents a longitudinal section thereof on the line 3 3, Fig. 2, showing the press in full lines "open," as for the reception of a seal to be pressed, and in dotted lines "closed," as at the completion of a pressing operation. Fig. 4 represents an edge view of the open press, partly in section on the line 4 4, Fig. 3. Fig. 5 represents a cross-section on the line 5 5,

Fig. 3; and Figs. 6 and 7 are face views of two parts of the pawl-and-ratchet device detached.

Like letters of reference indicate corresponding parts in the several figures.

My said new-style seal-press is composed of parts as follows, viz: first, a main casting comprising a recessed cylindrical "head," *H*, and a flattened "neck," *n*, and a rigid handle, *h*, substantially in line therewith; second, a lever-handle casting comprising a second handle or lever, *l*, and a combined cam, *c*, and ratchet-sector *rs*, the latter fitted in thickness to and pivoted by a transverse pin, *x*, within a recess in the back of said neck *n*, communicating with that of the head *H*; third, a stationary die, *sd*, supported face inward at the outer extremity of the head *H* by means of a concentric plug, *p*, Figs. 3 and 4; fourth, a hollow movable die, *md*, extending longitudinally from the mouth *m* of said head *H* to the cam within said neck-recess, as shown in Figs. 3 and 4; fifth, a spiral retracting-spring, *s*, Figs. 4 and 5, within said movable die *md*, reacting between a plug, *dp*, at the rear end of the die, and a pin, *dx*, extending through slots in said die near its front end; sixth, a spring detent-pawl, *sp*, Figs. 3, 4, and 7, secured on its outer end by a screw or rivet, *r*, within the outer end of said neck-recess, and adapted normally to engage at its inner extremity with the teeth of said ratchet-sector *rs*, as shown in full lines in Fig. 3; seventh, a disengaging-slide, *ds*, Figs. 3, 4, and 6, fitted to oblique ways cut in the sides of said neck-recess, and crossing near their inner extremity the normal plane of said spring-pawl; eighth, a pair of tappets, *dt st*, carried by said hand-lever casting, in the form of stud-pins cast fast therein and adapted to coact with said slide *ds*; and, ninth, a pair of cutters, *lc hc*, embedded, respectively, in the lever of said lever-casting and the head of said main casting.

The several parts with their appurtenances may be made of any suitable metals, and may be modified as to shape and proportions and other mechanical details to suit different users. Said mouth *m* in said main casting is adapted in the example to admit the disks of lead-and-wire or lead-and-tin seals, a relatively small aperture, *a*, Figs. 2 and 3, in the back of the



head *H* accommodating the protruding shackle ends. By modifying this feature and the dies as required, the said new-style press may be adapted to press seals of other varieties, or the pawl-and-ratchet feature as herein set forth may be embodied in seal-presses of other forms.

The operation of the said new-style press as illustrated by Fig. 3 may be described as follows: Grasped by the handle *h*, the open press, as shown in full lines, is applied to the seal to be pressed, the seal-disk being readily located within the mouth *m* between the faces of the dies *sd md*. The lever *l* is then operated by the free hand of the sealer, and the cam *c* is thus caused to act on the inner end of the movable die *md*, sliding it forcibly outward, and pressing the seal-disk against the stationary die *sd*. As soon as the lever has moved far enough to tighten the dies on the seal-disk, the spring pawl *sp*, coacting with the ratchet-sector *rs*, precludes backward movement of the lever, and if the seal-disk be compressed to any degree whatever by the dies its withdrawal is prevented until the pressing operation is thoroughly completed. As the movable die reaches the limit of its movement the disengaging-tappet *dt* on the lever *l*, coming in contact with the disengaging-slide *ds* at the inner end of its deep notch, causes said slide to partake of the further motion of the lever. The disengaging-slide now moves inward into contact with the spring-pawl *sp*, and disengages the latter from the teeth of the ratchet-sector *rs*, permitting the motion of the lever *l* to be reversed, but not until the seal is perfected by fully closing the press, as represented by dotted lines in Fig. 3. Consequently each seal must be fully pressed, if pressed at all. Failure to press at all would of course be detected by the most cursory inspection, and the use of a different press would be detected, owing to the peculiar distinctive shape of the new-style press, which is preferred for this reason.

In opening the press to release the pressed seal and preparatory to another sealing operation, the tappet *st*, projecting from the ratchet-sector *rs*, is brought into contact with the inner end of the disengaging-slide *ds*, and, forcing the slide outward, allows the spring-pawl *sp* to resume its normal plane and its coaction with the ratchet-sector for insuring the completion of the next pressing movement, and sets the slide for the succeeding disengag-

ing operation. The movable die *md* itself is forced back by the spring *s* within it, compressed in the pressing operation, and the parts may be so proportioned that this spring shall open the lever *l* when the latter is simply released at the end of the pressing operation. By forcibly opening the press, a seal-shackle caught between the cutters *hc lc* may be readily severed, and the seal-press may thus be used in customary manner in unsealing cars and the like, as well as for sealing them, or pressing or stamping their seals. The combination and arrangement of said cutters, being substantially the same as that described in Letters Patent No. 235,398, granted December 14, 1880, to E. J. Brooks & Co., as assignee of Frederic Anthes, is hereby disclaimed in favor of the latter.

Having thus described my said improvement in seal-presses, I claim as my invention and desire to patent under this specification—

1. In a seal-press, the combination, substantially as herein specified, of a lever-handle, a movable die or dies actuated thereby, and a pawl-and-ratchet device which prevents retracting said die or dies after a pressing operation is begun until the same is completed, as means for insuring uniform impressions and perfected fastenings in pressed seals, in the manner set forth.

2. The combination in a seal-press, substantially as herein described, of a main casting comprising a recessed head, *H*, a recessed neck, *n*, and a rigid handle, *h*, the former provided with a pair of dies, a lever-handle casting comprising a lever-handle, *l*, and a combined cam and ratchet-sector, *crs*, and a spring detent-pawl, *sp*, secured within said recessed neck and engaging with said ratchet-sector, to prevent reversing the motion of said lever-handle, to release the seal, until the pressing operation is fully completed and the seal thus perfected.

3. The disengaging-slide *ds*, in combination with the tappets *dt st* on the lever-handle casting, and the detent-pawl *sp*, substantially as shown and described, for disengaging the latter and freeing the same, in the manner set forth.

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Witnesses:

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