

(Model.)

2 Sheets—Sheet 1.

C. ZUBE.
Bolt.

No. 237,657.

Patented Feb. 8, 1881.

Fig. 1.

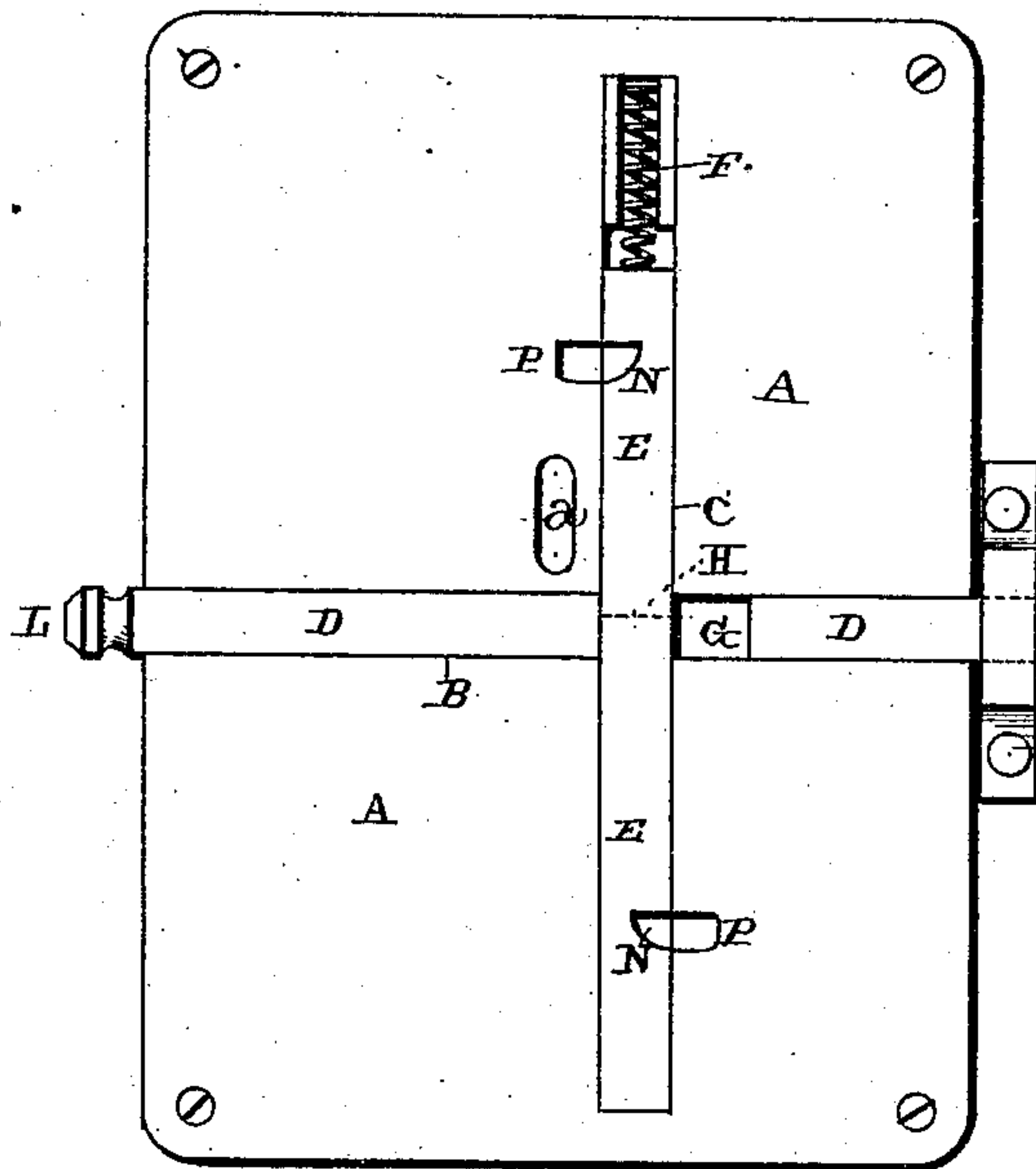


Fig. 4.

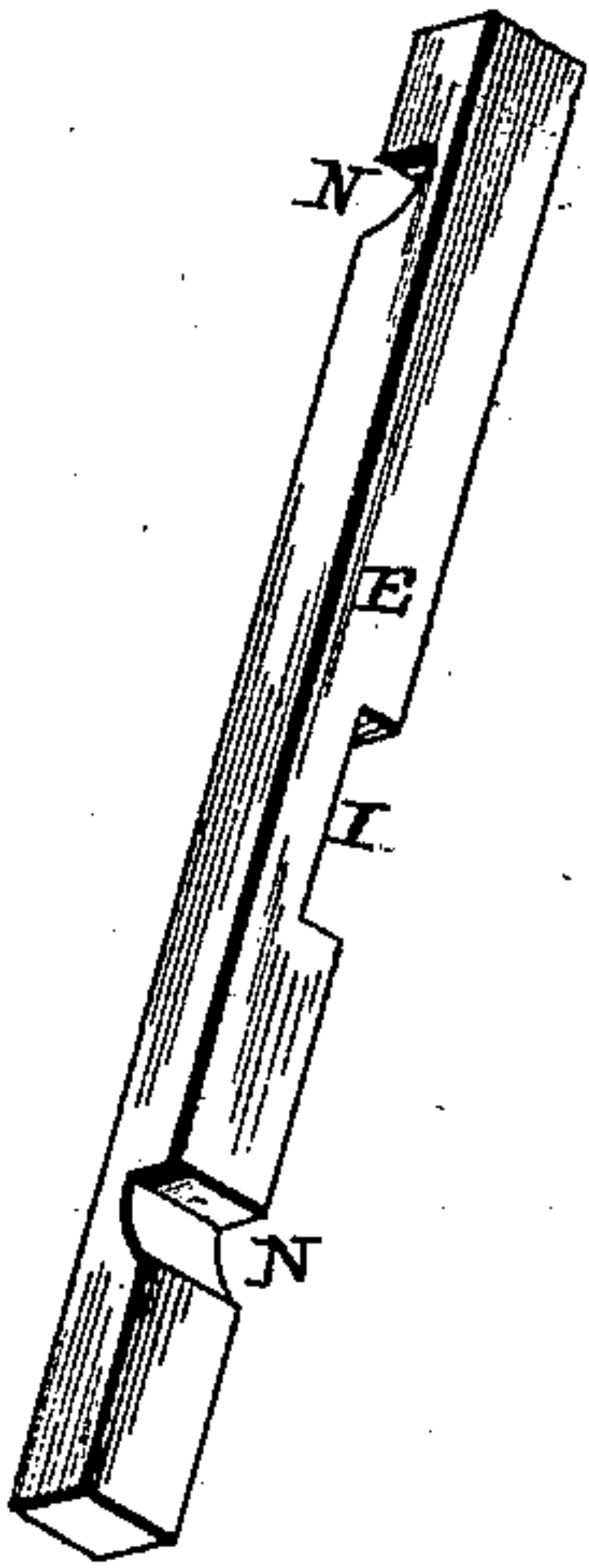


Fig. 2.

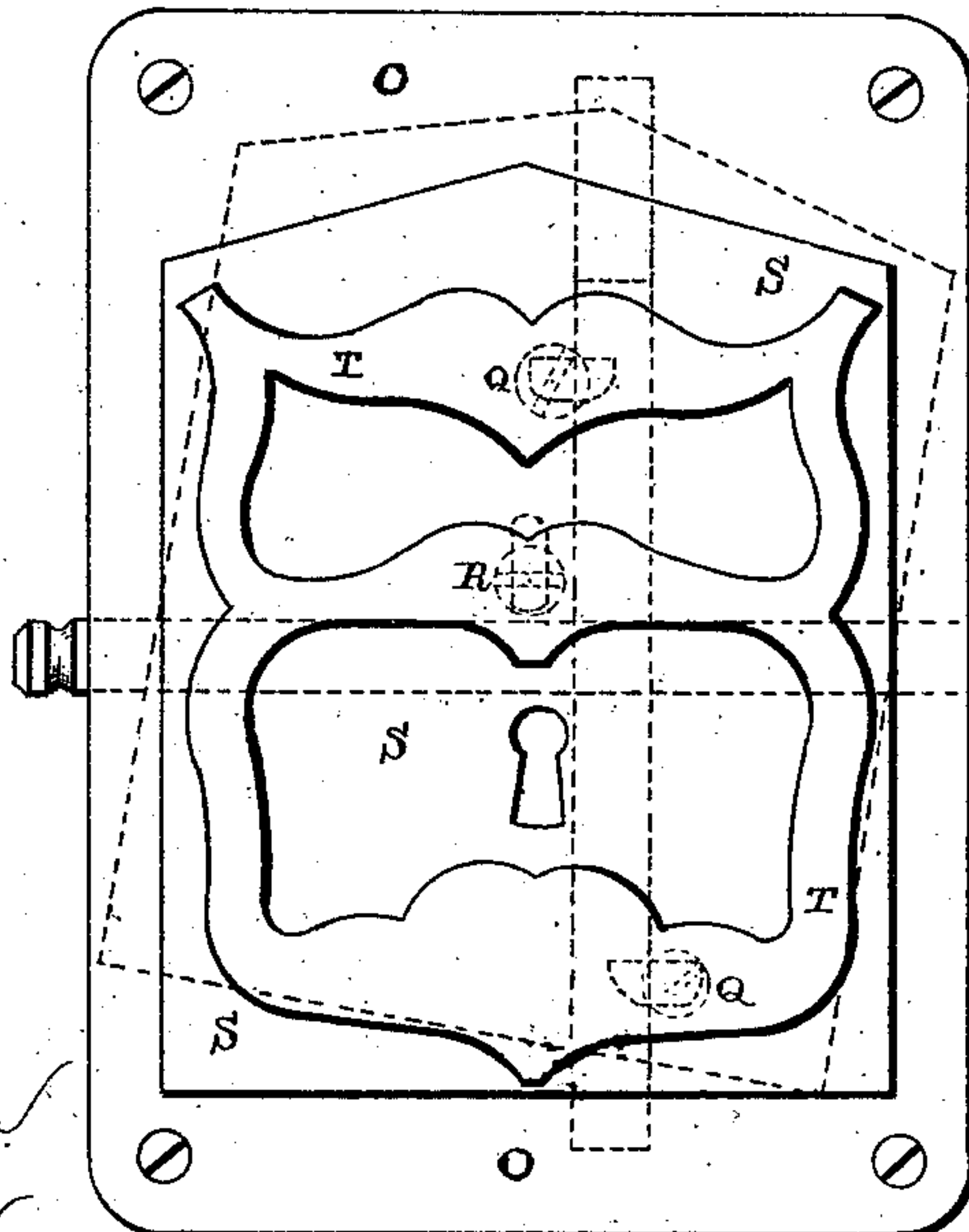
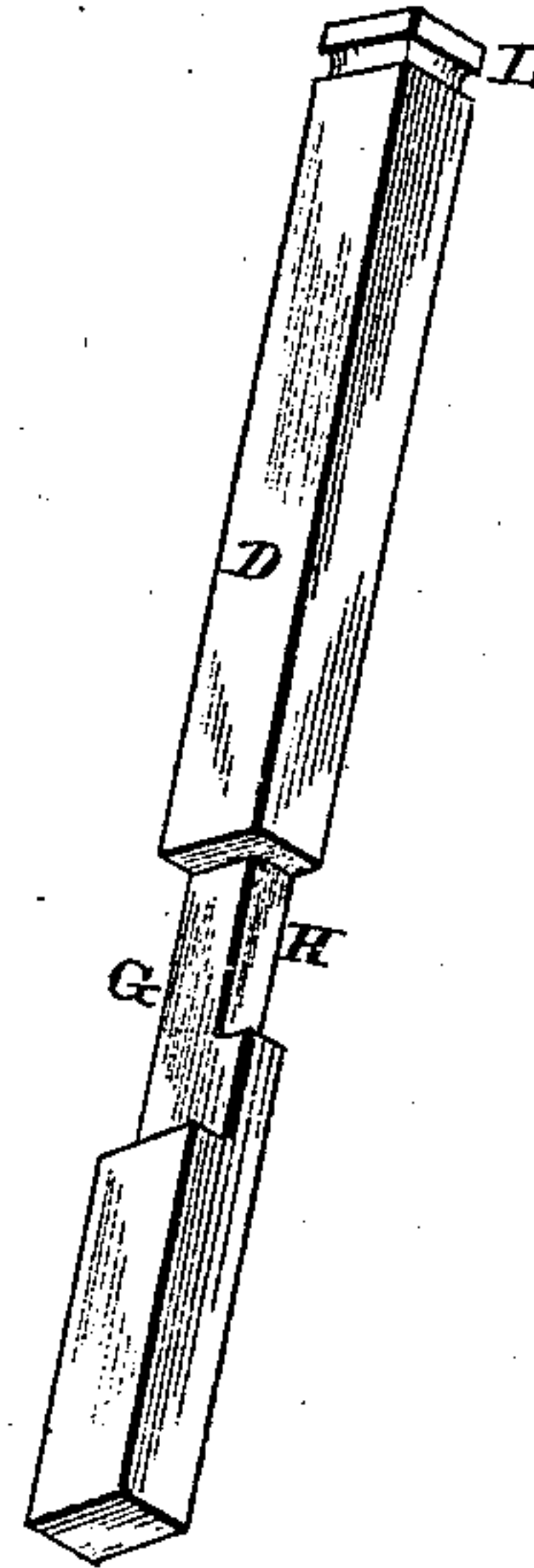


Fig. 3.



Witnesses.

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Inventor.

Chas. Zube,
per
F. A. Lehmann,
Atty.

(Model.)

2 Sheets—Sheet 2.

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Fig. 5.

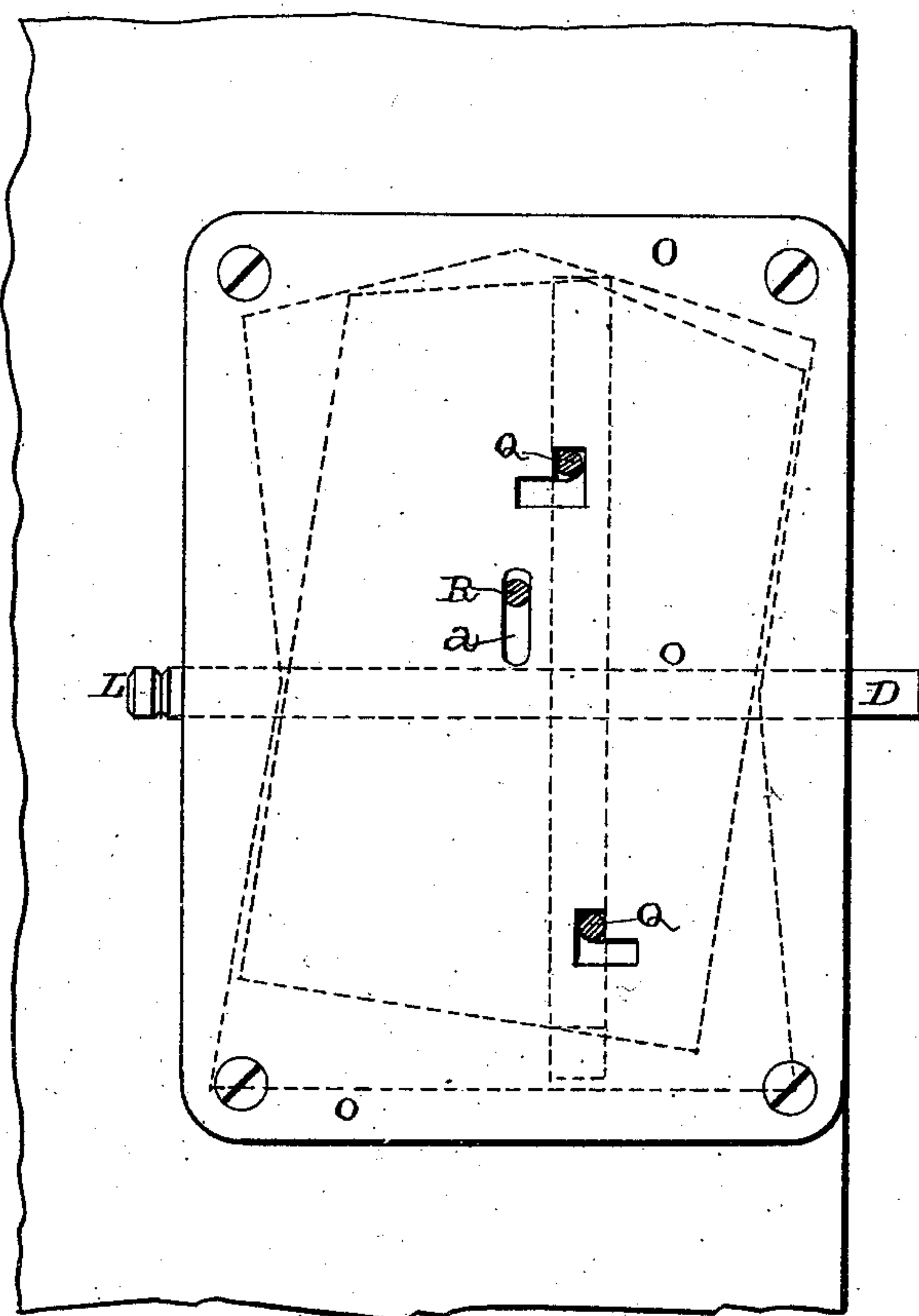
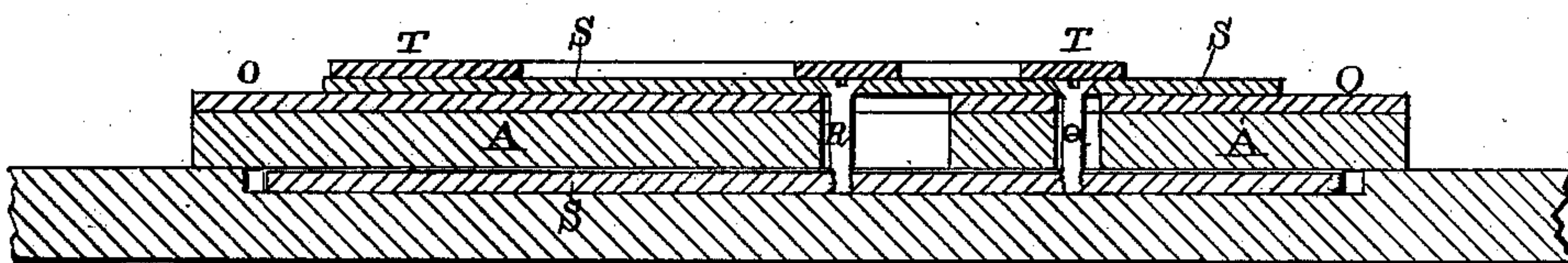


Fig. 6.



WITNESSES.

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J. A. Lehmann,
att'y

UNITED STATES PATENT OFFICE.

CHARLES ZUBE, OF MERIDEN, CONNECTICUT.

BOLT.

SPECIFICATION forming part of Letters Patent No. 237,657, dated February 8, 1881.

Application filed December 1, 1880. (Model.)

To all whom it may concern:

Be it known that I, CHARLES ZUBE, of Meriden, in the county of New Haven and State of Connecticut, have invented certain new and
5 useful Improvements in Bolts; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had
10 to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in bolts; and it consists in the combination, with the bolt-frame, of two plates, which are secured
15 to its inner and outer sides by means of bolts which pass through the frame, two of which screws, when the plates are in a line with the frame, catch in notches in the frame on opposite sides of the locking-rod, while the third
20 screw serves to guide the plates in their longitudinal movement, after they have been turned, in such a manner that the two end screws are made to catch in notches made in opposite sides of the locking-rod, as will be more fully
25 described hereinafter.

The object of my invention is to provide a locking attachment for ordinary bolts whereby the bolt can be locked securely in position without the aid of a key, and locked in such a manner that only those who understand the operation of the bolt will know how to operate it.

Figure 1 is a plan view of the bolt-frame with the plates removed. Fig. 2 is a similar view, showing the covering-plates in position and the other parts in dotted lines under them.
35 Fig. 3 is a perspective of the locking-bolt, and Fig. 4 is a perspective of the locking-rod. Figs. 5 and 6 are detail views.

A represents the bolt-frame, which has two
40 grooves, B C, extending at right angles across its outer face. The groove B, in which the locking-bolt D is placed, runs through entirely from side to side, so that the ends of the bolt can project beyond the edges of the frame A
45 upon both sides at once, or from one side only, according as the bolt is moved forward or drawn backward. The groove C extends longitudinally from nearly end to end, and in which the locking-rod E is placed. This rod
50 is not as long as the groove in which it is placed, because it is to have an endwise movement for

the purpose of compressing the spring F, which is also placed in one end of the groove, and against which spring the inner end of the rod E bears.

The locking-bolt D has a recess, G, cut in its
55 outer side where the locking-rod passes over its top, and which recess serves as a stop to limit the motion of the bolt in either direction. Also, cut in the upper edge of this bolt is a recess or
60 notch, H, which is just wide enough to allow the locking-rod to catch in it when the bolt is shot forward for the purpose of locking the door.

The locking-rod E has a recess, I, cut in its
65 inner side where it passes over the top of the locking-bolt, which recess I is long enough to allow the rod to move endwise sufficiently far to move the end of this recess out of the short
70 recess H, which is cut or made in the top edge of the locking-bolt. As soon as the bolt is shot forward for the purpose of locking the door the tension of the spring forces the locking-rod
75 downward, so that the upper end of its recess I catches in the short recess H in the bolt, and thus locks the bolt in position, so that it cannot be drawn backward until the locking-rod
80 has been moved endwise far enough to allow the bolt to move freely back and forth. The outer end of the locking-bolt is provided with a head, L, which always projects beyond the
85 outer edge of the frame, so that by taking hold of it it can be drawn backward when it is free to move. The locking-rod has also a notch or recess, N, preferably of the shape shown, made
in opposite edges, and in which notches the screws catch for the purpose of moving endwise.

Upon the top of the frame is placed the plate
90 O, which holds the locking bolt and rod in position, and which is secured to the frame by the same screws which secure the frame to the door. Through this outer plate and through the frame A are made the two slots P, through
95 which pass the two screws Q, which serve to lock the locking-rod by catching in the notches in its opposite sides, and a third longitudinal slot, a, through which passes the screw R, which guides the two plates S. These two plates S
100 are applied to the outer and inner sides of the frame, and are connected together by the three screws Q R, which pass through the slots in

the frame and its cover, so that when one moves both will move. In order to hide the outer ends of these screws they are covered over by an ornamental molding, T, which is applied to the outer side of the outer one of these two plates S. When the two plates stand in a line with the frame A the two screws which pass through the two plates near their ends extend simply through the slots in the frame, and do not in any way come in contact with the locking-rod. This locking-rod, being inclosed wholly within the frame, and having no visible means of operating it, holds the bolt while it is shot forward in such a manner that it is impossible to move the bolt backward.

When it is desired to unlock the bolt, so that a person can catch hold of its projecting end and pull it backward, he must catch hold of the outer plate and first give it a twisting turn, so that the two screws Q will be moved sideways and made to catch in the notches of the locking-bolt, and then the plate must be pushed upward for the purpose of moving the rod endwise, so as to move it out of the recess H, which is made in the top of the locking-bolt. When the plate is turned as described the two screws Q are brought almost in a line with each other, and when the plate is pushed upward the screw R slips idly in the slot in the frame, while the other two screws unite in moving the locking-rod. The slots through the frame and outer covering-plates are made L-shaped, so that the screws can be given first a sidewise movement and then a longitudinal one.

In order to mislead burglars or others who may attempt to open the bolt, a key-hole is

made through the two outer plates of the bolt. This bolt can only be operated by first giving the plate a twisting movement and then a vertical one, as already described.

Where it is desired to dispense entirely with the two outside plates, which are connected together by the screws Q R, the slot C will be made to extend through the lower end of the frame, and then the locking-rod will have its end reach down flush with the lower edge of the frame. In order to unlock the bolt, it will be necessary to press up against this rod with one of the fingers, so as to raise it out of the recess H, made in the upper edge of the bolt.

Having thus described my invention, I claim—

1. In a bolt, the combination of the frame A, having the recesses B C, holes P, and a slot, a, with the notched locking-bolt D, locking-rod E, having the recesses N in its opposite edges, and the two plates S, secured together by the screws Q R, the locking-rod being made automatic in its downward movements by means of a spring, substantially as shown.

2. The combination of the locking-bolt having a recess in its upper edge with the locking-rod having recesses in its opposite sides, and the two plates which are connected together by the screws Q R, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 26th day of November, 1880.

CHARLES ZUBE.

Witnesses:

TOMAS TETLEN,
CHAS. WM. MANN.