

No. 758,676.

PATENTED MAY 3, 1904.

A. MEYERS.
LOCK.

APPLICATION FILED JULY 21, 1902.

NO MODEL.

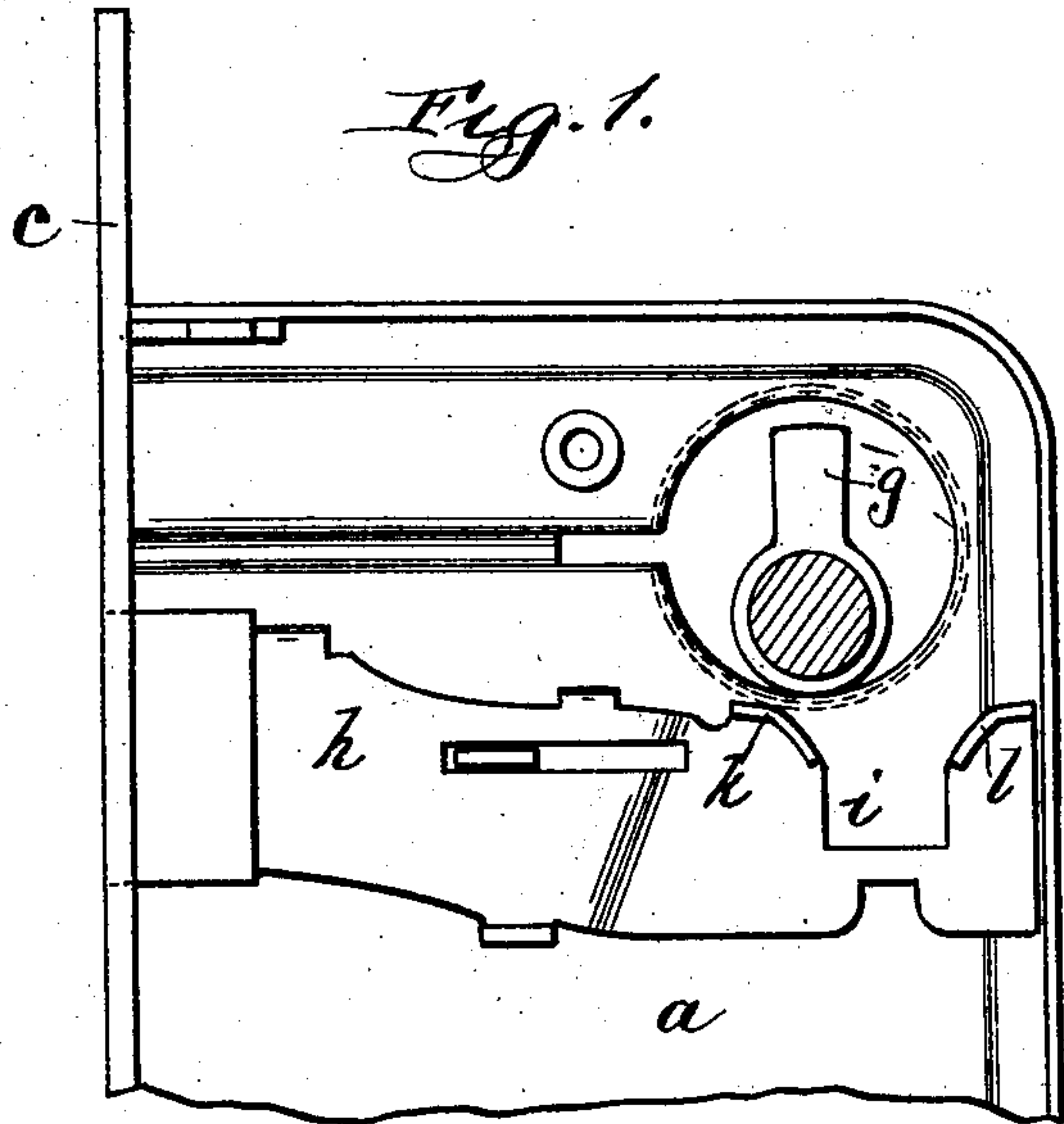


Fig. 3.

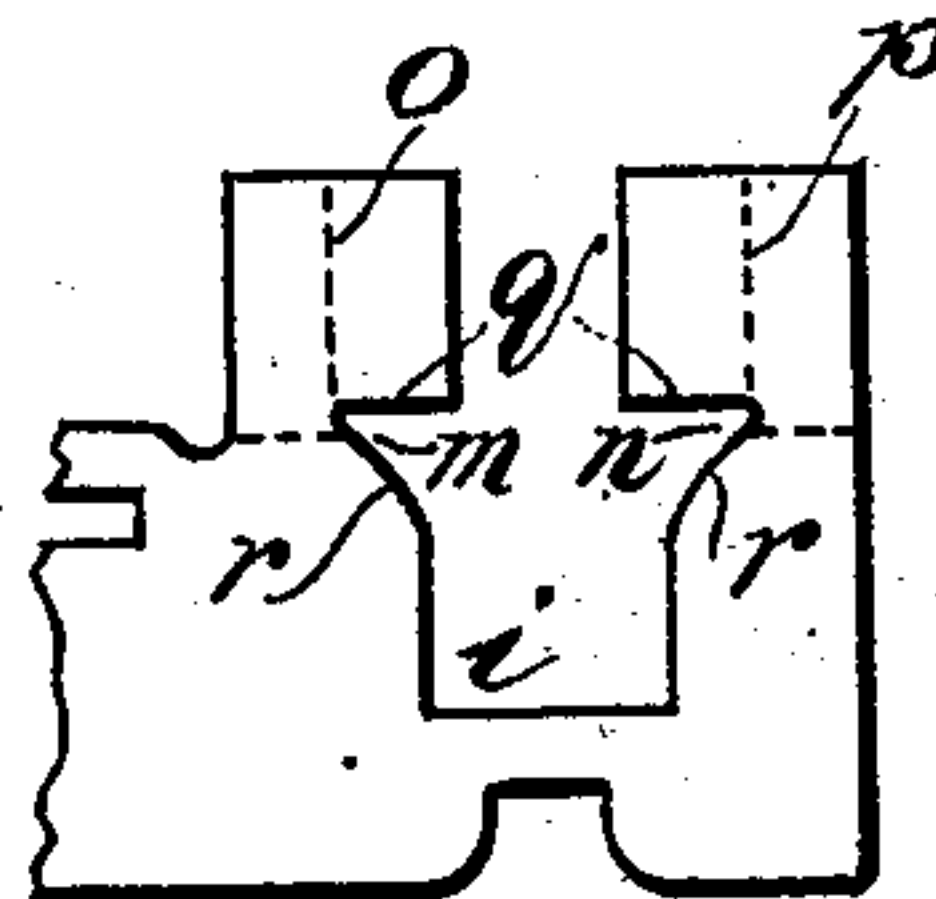


Fig. 2.

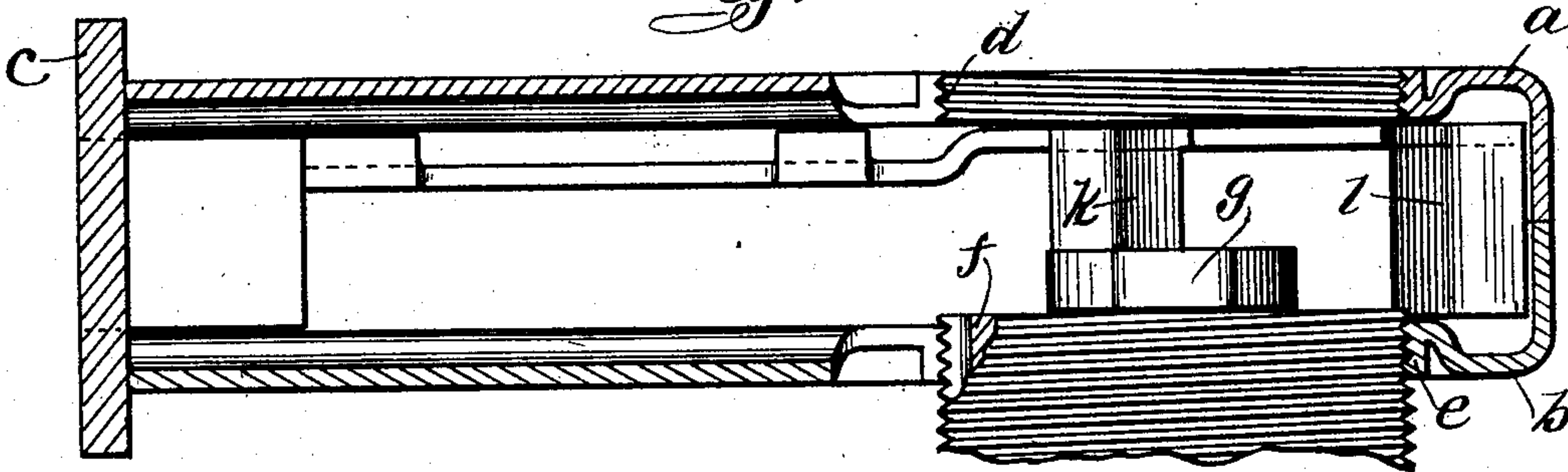


Fig. 4.

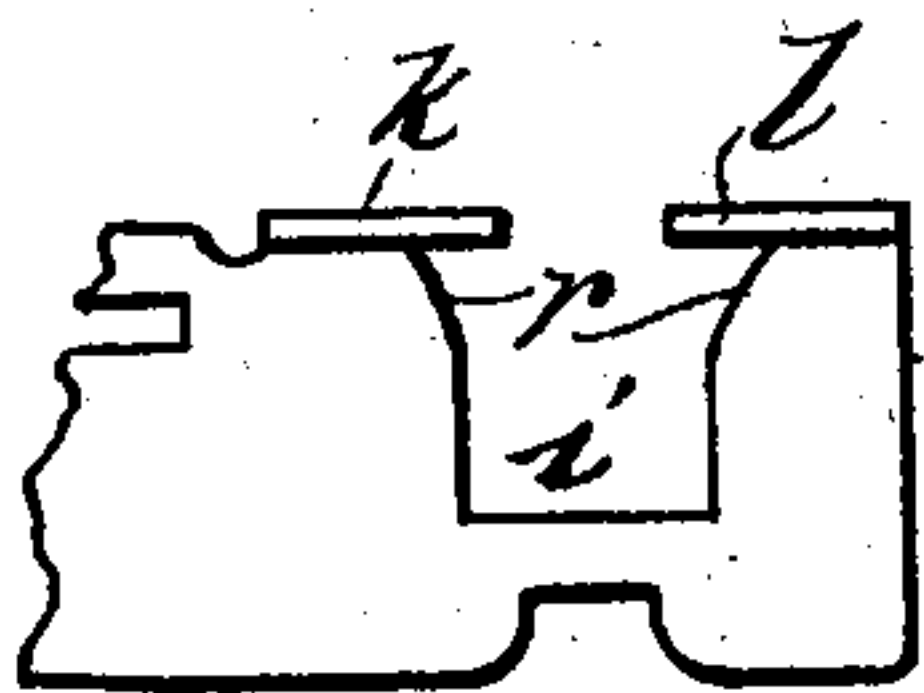
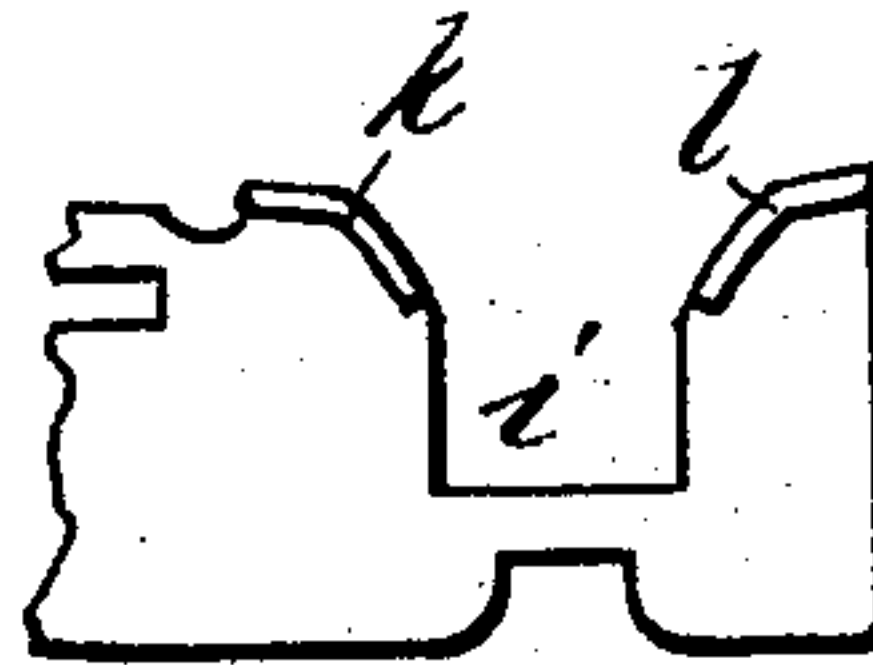


Fig. 5.



Witnesses:
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UNITED STATES PATENT OFFICE.

ALBERT MEYERS, OF LYONS, IOWA, ASSIGNOR TO UNITED STATES STEEL LOCK COMPANY, OF LYONS, IOWA, A CORPORATION OF IOWA.

LOCK.

SPECIFICATION forming part of Letters Patent No. 758,676, dated May 3, 1904.

Application filed July 21, 1902. Serial No. 116,313. (No model.)

To all whom it may concern:

Be it known that I, ALBERT MEYERS, a citizen of the United States, residing at Lyons, in the county of Clinton and State of Iowa, have invented certain new and useful Improvements in Locks, of which the following is a specification.

My invention relates to locks, and especially to the construction of bolt-tails employed in cylinder-locks which are adapted for use in either right or left hand doors.

In cylinder-locks the cylinder in which the key-plug turns to protract and retract the bolt is usually adapted to be mounted upon either side of the lock-case, which generally is mortised into a door, whereby the lock may be employed with either a right or a left hand door, by seating the cylinder in that side of the case representing the outside of the door. In this class of devices it is desirable to provide means whereby the cam or the key itself, as the case may be, will engage the bolt-tail when the cylinder is mounted upon either side of the case, and the simplest way of accomplishing this result is to provide the bolt-tail with legs which extend substantially across the inside width of the case, so as to take the cam or key at any point within the case. In such locks as heretofore constructed these legs have been made separate from the tail when the latter was constructed of wrought or sheet metal and have been attached thereto by suitable means, such as riveting.

The object of my invention is to provide a bolt-tail of wrought or sheet metal having integral legs for operating the bolt from the key-cylinder on either side of the case.

With this object in view my invention consists in the matters hereinafter described, and particularly pointed out in the appended claims.

In the accompanying drawings, which form a part of this specification, and which illustrate the preferred manner of producing my invention, Figure 1 is a side view of part of a lock-case with the cap removed, showing the bolt-tail of my invention mounted therein, together with a key-cylinder therefor. Fig. 2 is a vertical sectional view of part of a lock-case

provided with the bolt-tail of Fig. 1. Fig. 3 is a detail plan view of the talon end of a blank used to form my improved bolt-tail. Fig. 4 is a detail view of the parts of Fig. 3, showing one of the steps for forming the legs; and Fig. 5 is a detail view showing the legs when bent to their final and preferred form.

In the drawings the reference-letters *a* and *b* represent the base and cap, respectively, of a suitable lock-case for cylinder-locks provided with the usual front face or face-plate *c* and in which the constituent elements of the interior mechanism are assembled in any suitable manner. As the present invention is concerned only with the bolt-tail, the other elements of the interior mechanism, except the key-cylinder, are not shown. The body and the cap are provided, respectively, with seats *d* and *e* to receive a suitable key-cylinder *f*, of any well-known construction, which may be seated upon either side of the lock-case in order to meet the requirements of use with either a right or a left hand door. The cylinder *f* is provided with any suitable tumbler or pin mechanism cooperating with the key in any well-known manner whereby the cam may be operated to protract and retract the bolt.

The bolt *h* is provided with a tail of wrought or sheet metal which may have a suitable talon *i* to receive the cam *g* when the cylinder is mounted on the case on the side against which the tail lies. In order to provide for operating the tail when the cylinder is mounted on either side of the case, suitable legs *k* and *l* are provided adjacent to the talon and extending approximately across the inside width of the case to take the cam at any point, as clearly shown in Fig. 2. I provide these legs by blanking the talon end of the tail in any suitable form and preferably as illustrated in Fig. 3. The blank is provided with two parallel projections extending above the top edge of the tail, one on each side of the talon, and of the length necessary to provide legs of suitable size when bent to form. The opening between the projections is an extension of the talon, and the inner edges are provided with V-shaped notches *m* and *n*, whose

apices are in the line upon which the projections forming the legs are subsequently bent. After the blank is struck, preferably in the form described, the projections are bent to
5 substantially a right angle with the body of the tail approximately upon the line of the apices of the notches, as clearly shown in Fig. 4, and the projections are bent along their lengths upon the lines *o* and *p* until the angular portions *q* and *r* of the respective edges
10 are in line, as shown in Figs. 1 and 5. It is of course understood that the bends upon the lines *o* and *p* may be made either before or after the projections are bent to the position of
15 Fig. 4. When the legs are finally shaped, they will extend substantially across the inside width of the case, whereby the cam will coöperate with them to protract and retract the bolt when the cylinder is located on either
20 side of the case, and the angular faces will form extended bearing-surfaces for the cam.

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

1. A bolt-tail of wrought metal having a talon provided with angular edge portions, 25 and integral legs formed by bending a projection on either side of the talon to substantially a right angle with the tail and providing the legs with angular faces.

2. In combination with a lock-case having 30 alined apertures in the opposite sides thereof, a bolt mounted in the casing and having a tail of wrought metal provided with a talon and integral angular legs on the sides thereof, the said legs extending between the sides of the 35 casing and being located under the apertures.

In testimony whereof I affix my signature in presence of two witnesses.

ALBERT MEYERS.

Witnesses:

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