

J. P. Sherrood,

Latch.

N^o 18,162.

Patented Sep. 8, 1857.

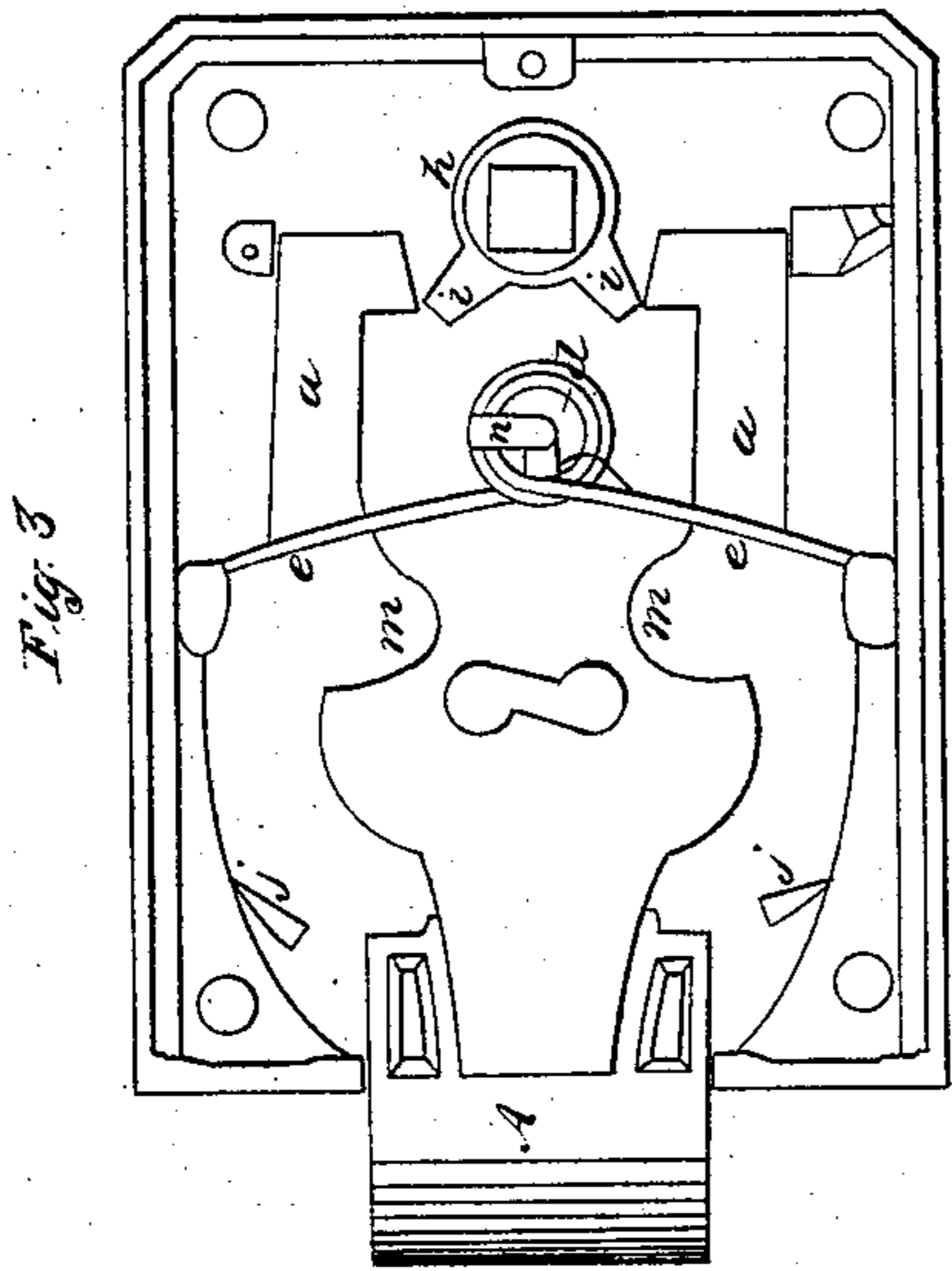


Fig. 5

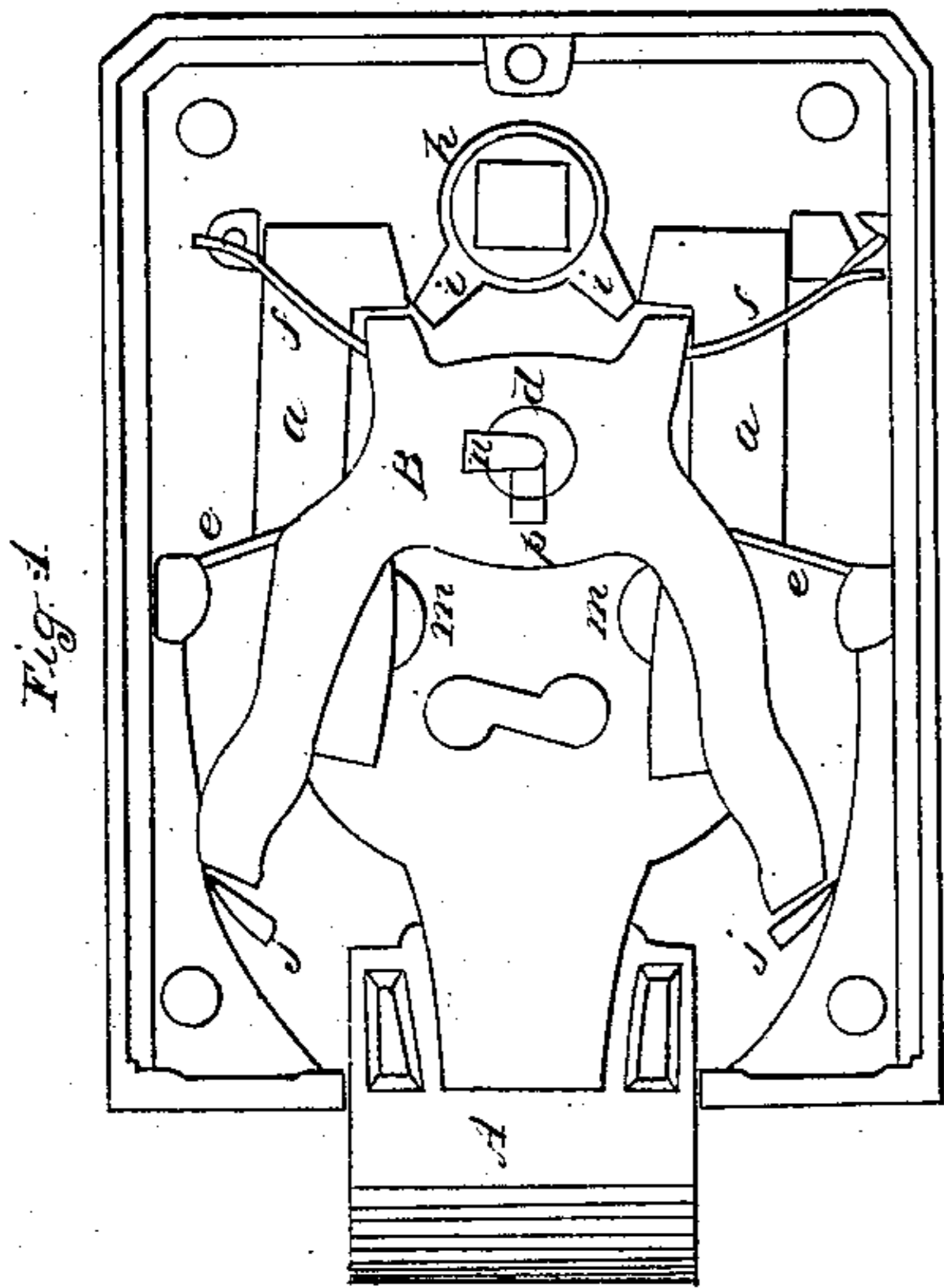
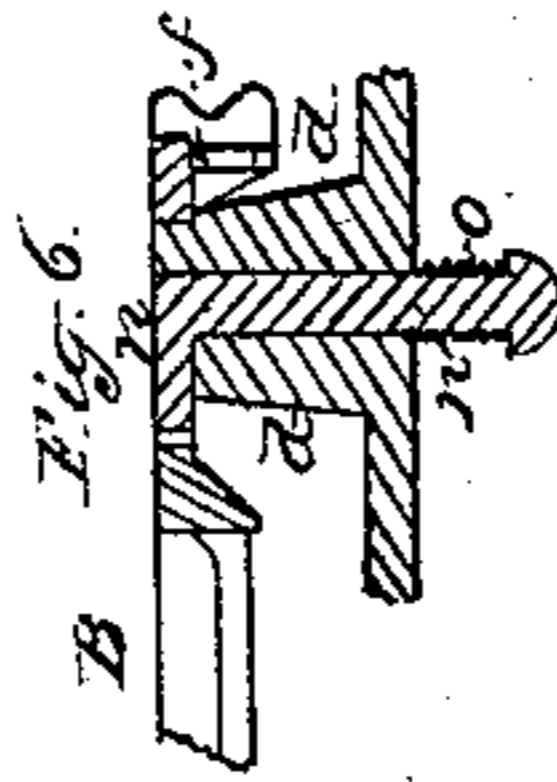
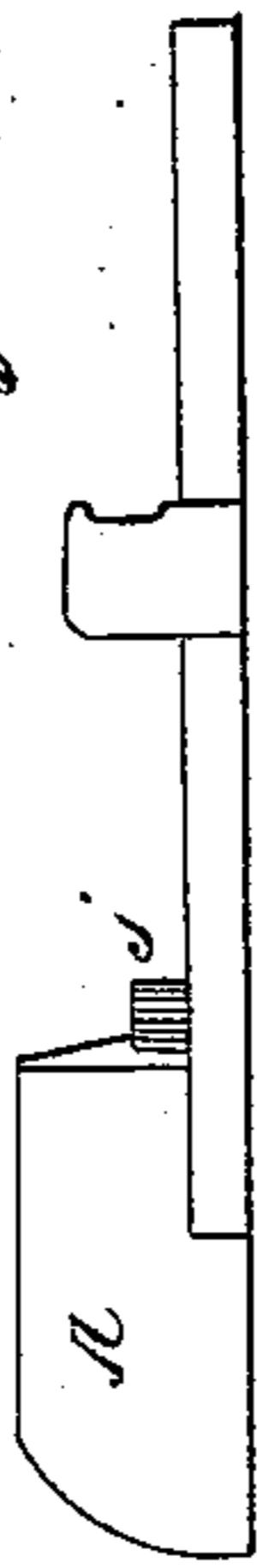


Fig. 2

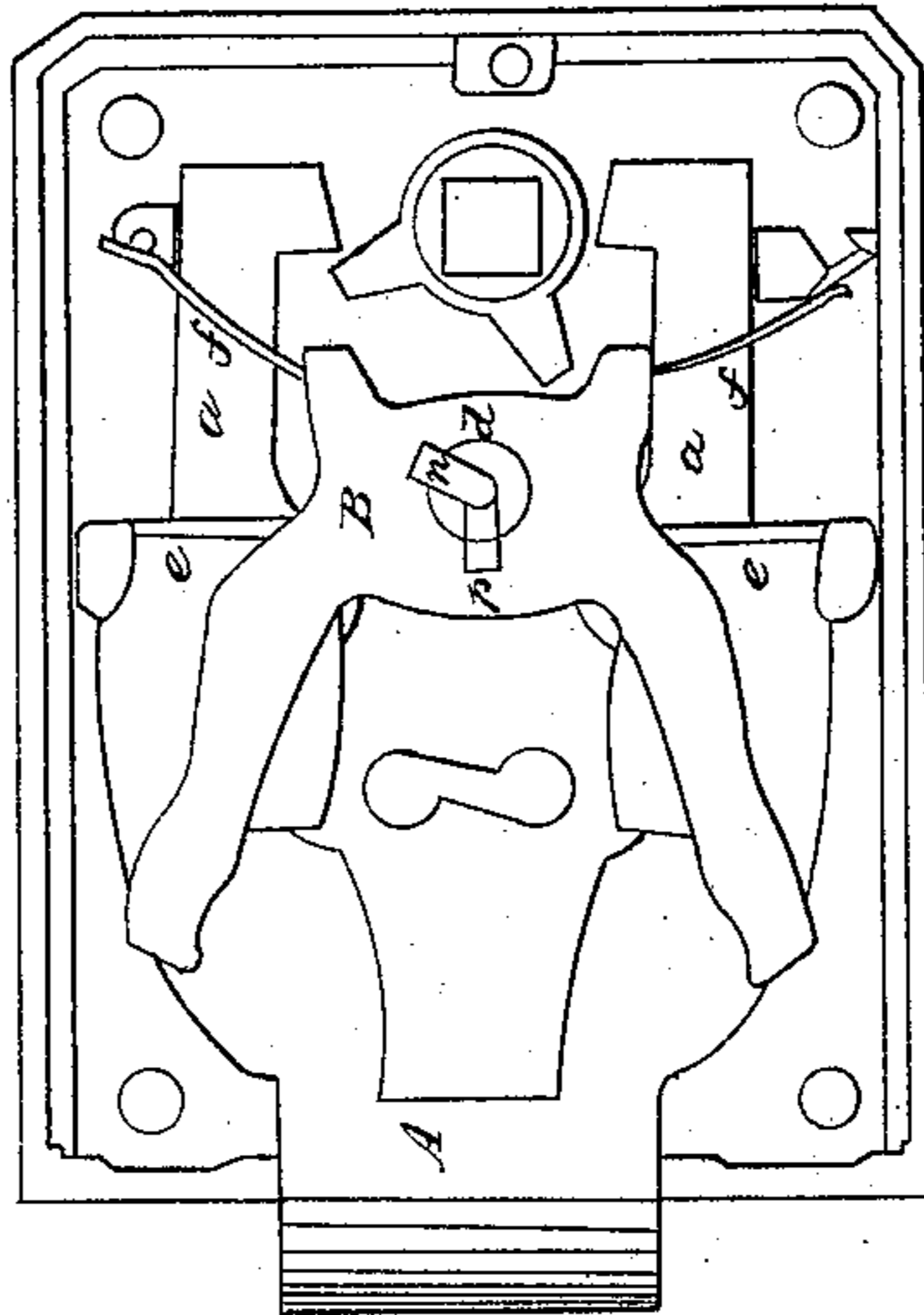
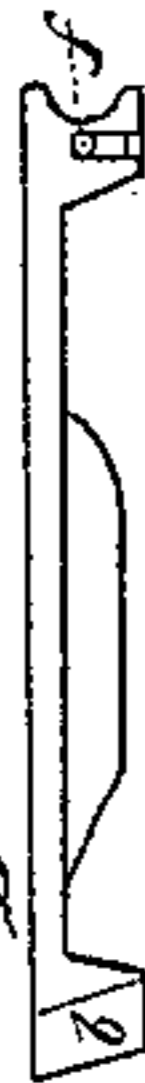


Fig. 4



UNITED STATES PATENT OFFICE.

JOHN P. SHERWOOD, OF FORT EDWARD, NEW YORK.

LOCK.

Specification of Letters Patent No. 18,162, dated September 8, 1857.

To all whom it may concern:

Be it known that I, JOHN P. SHERWOOD, of Fort Edward, in the county of Washington and State of New York, have invented a new and Improved Door-Lock; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, Figures 1 and 2 being views of the interior portion of the lock; Fig. 3, a view of the same after the tumbler B has been removed; Figs. 4 and 5, edge views of the bolt A and tumbler B detached from the lock, and Fig. 6 a section in the line *y y* of Fig. 1.

Similar letters indicate like parts in each drawing.

My invention consists in giving the bolt A, and the tumbler B, of a lock such a shape, that when the tumbler B, is in its normal position, the spring *e*, will project the bolt A, a sufficient distance for latching purposes and enable it to be readily thrown back again by the knob-shank; and when the outer ends of the legs of said tumbler are thrown either up or down by the key a sufficient distance to detach them from the teeth *j, j*, on the side of the bolt, the spring *e*, will further project the bolt outward into the locking position shown in Fig. 1, and beyond the reach of the arms *i, i*, on the knob-shank-follower *h*; and the moment that the key is turned a sufficient distance in the lock the spring *f*, will throw the tumbler into its normal position again, when the teeth *b*, which project from the under side of the extremities of the legs of said tumbler, will act against the inner sides of the teeth *j, j*, on the side of the bolt, and prevent said bolt from being withdrawn until the tumbler is again vibrated by the key.

The key-hole is of such a shape that the key may be inserted into it either side up. When the key is turned in the lock, it first strikes against one of the legs of the tumbler B, and vibrates the tumbler to such a degree as to throw its teeth *b, b*, clear of the teeth *j, j*, on the bolt, and the instant that this is accomplished, the key strikes against one of the projections *m*, from the inner edge of one of the legs *a*, of the bolt, and throws back said bolt into the position shown in Fig. 2; at which moment the key ceases to act upon the tumbler and allows it to spring back into its normal position—shown in Fig. 2—when it will keep the said bolt in its

latching position and within reach of the legs *i, i*, in the knob-shank-follower *h*, until it is again vibrated by the key.

The tumbler B, works upon a tubular pivot *d*, which projects from the back of the lock case. A shank *n*, which has a right-angular arm at its inner end, is inserted within the tubular pivot *d*, and is drawn outward by means of the spring *o*. A notch *p*, is formed in the left-hand side of the aperture in the tumbler, and a notch of corresponding width is formed in one side of the inner end of the tubular pivot *d*. When the tumbler is in the normal position represented in Figs. 1, and 2, the said notches in the tumbler and in the inner end of the pivot *d*, are exactly opposite each other. And when the tumbler is in this position, by taking hold of the knob on the outer end of the shank *n*, and turning it to the proper position, the right angular arms on the inner end of said shank will be drawn into the aforesaid notches in the tumbler and the tubular pivot, and will retain the tumbler in said position until the shank is forced inward and turned to the right or left a sufficient distance to carry the retaining arm on its inner end beyond the reach of said notches. When the said tumbler is thus secured in its normal position, the key cannot be turned within the lock for the purpose of throwing the bolt into a locked position, nor for the purpose of unlocking the said bolt after it has been thrown into a locked position.

What I claim as my invention and desire to secure by Letters Patent, is—

1. The improvement in locks produced by so shaping and arranging the bolt A, and the tumbler B, of a lock that the said tumbler is enabled to retain the bolt within reach of the arms *i, i*, on the knob-shank-follower, when it is used as a spring-latch-bolt, and also retain the said bolt in a position beyond the reach of said arms, when it is thrown outward, by the key, into a position to serve as a lock-bolt, substantially as herein set forth.

2. I do not claim the use of a dead-latch operating directly on the locking bolt to prevent it from being locked or unlocked by the key, as that device is well known, but I do claim as the second feature of my invention, the combination of the lever-shank *n*, with the tubular pivot *d*, and the tumbler B, in such a manner that it may be made to firmly

lock the tumbler in such a position as to protect the bolt from any action of the key and thereby prevent the locking or unlocking of the bolt in the manner substantially
5 as herein set forth.

The above specification of my new and useful improvement in door locks, signed

and witnessed this eighth day of June A. D. 1857.

J. P. SHERWOOD.

Witnesses:

A. DULLER WAIT,
JAMES L. REYNOLDS.