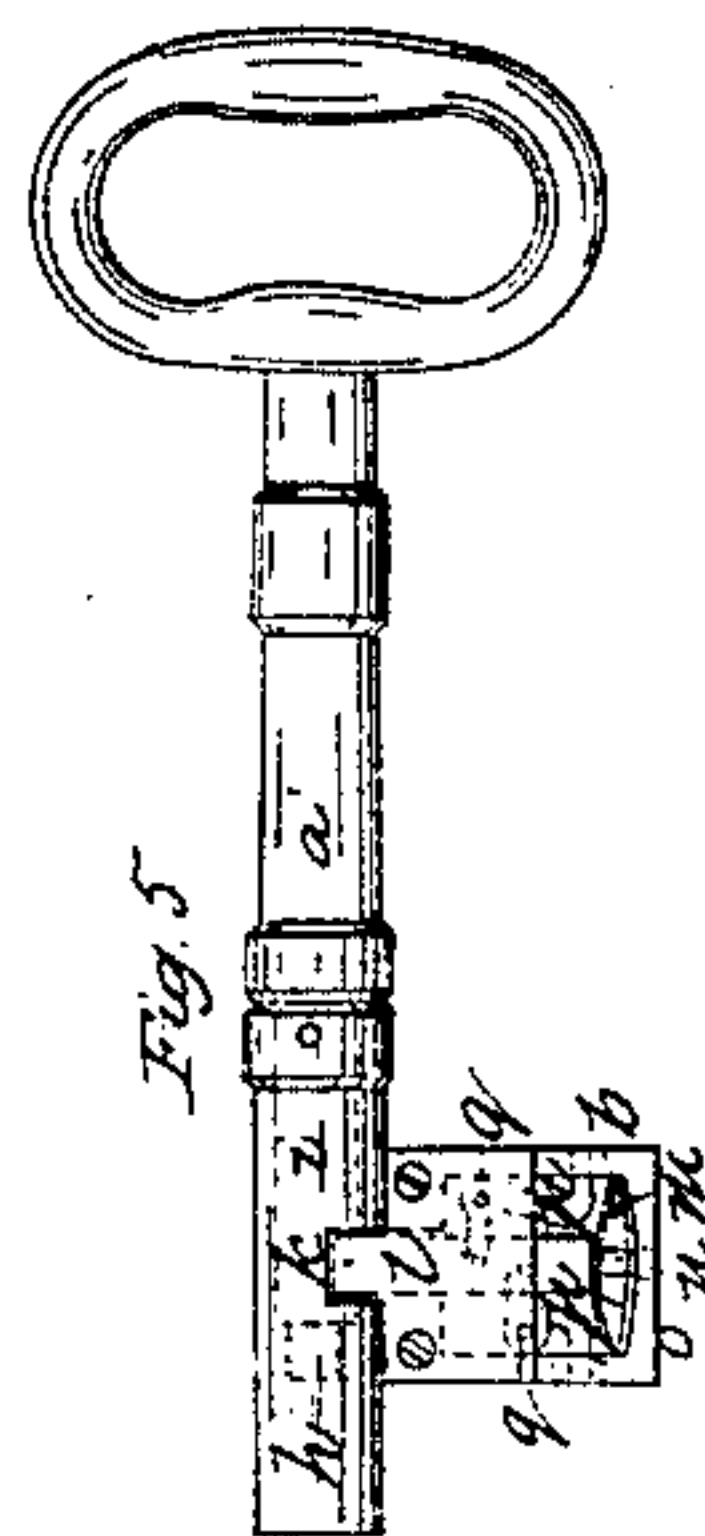
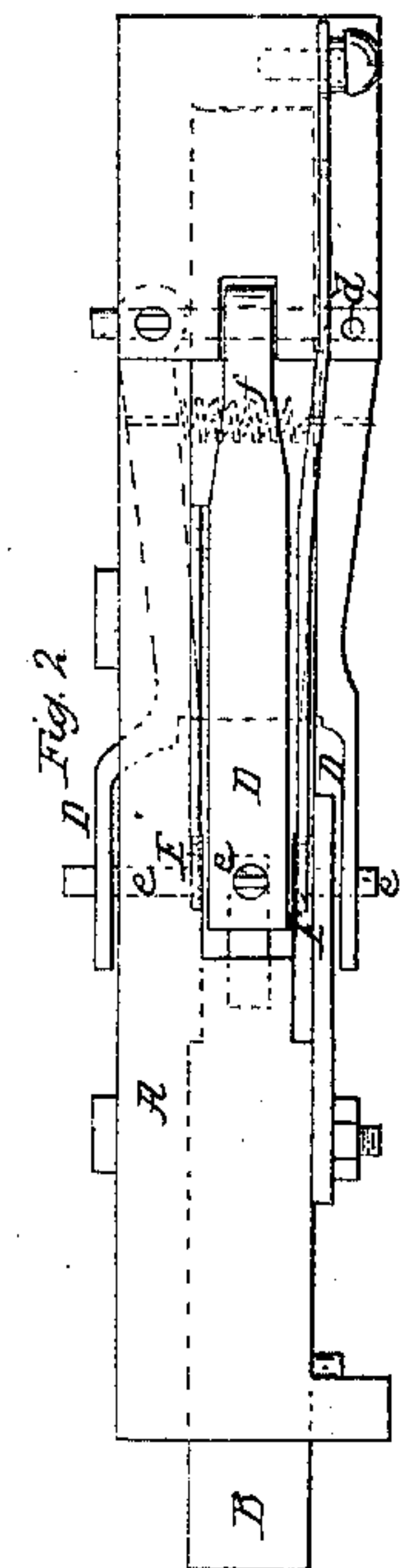
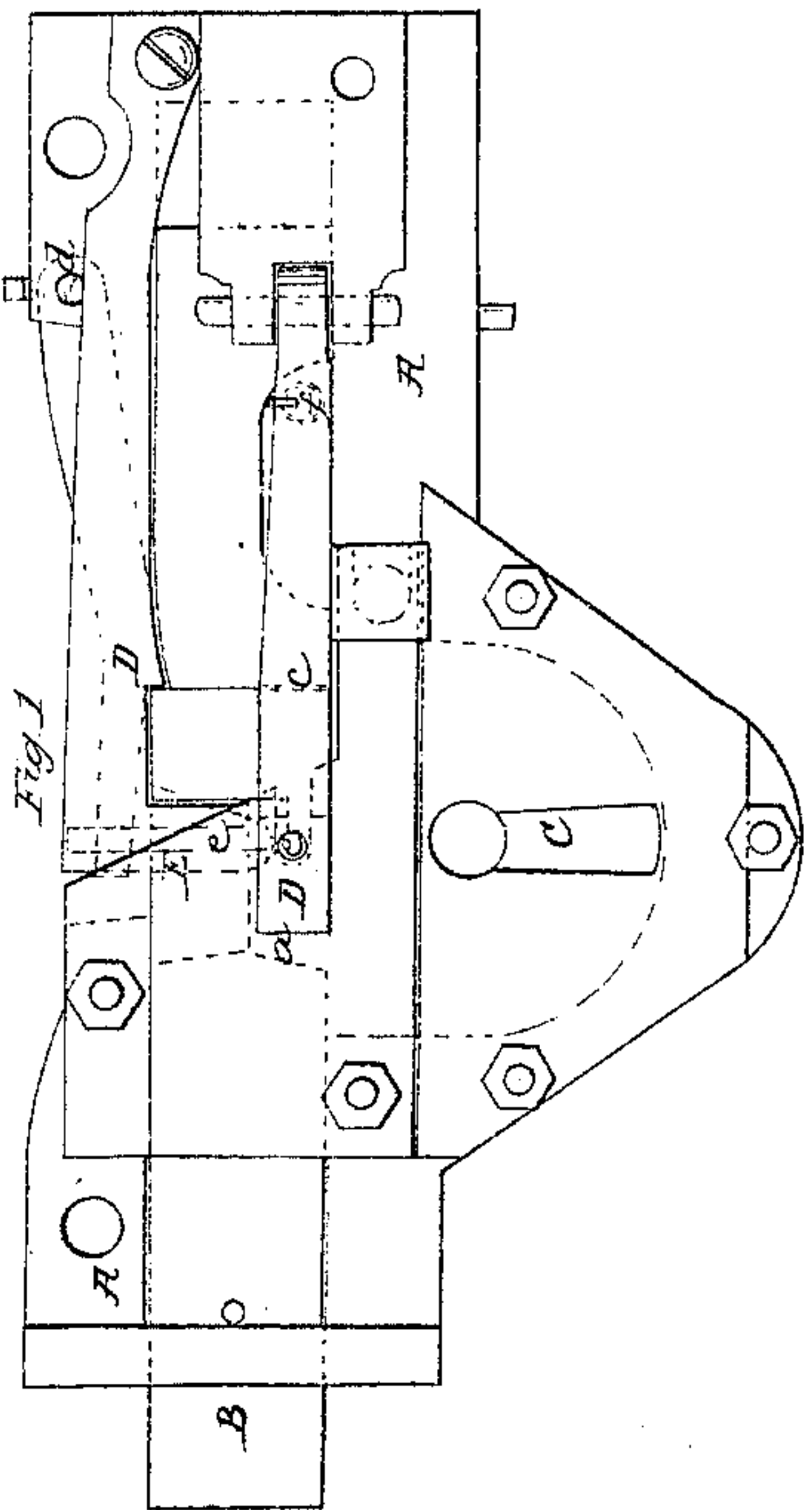
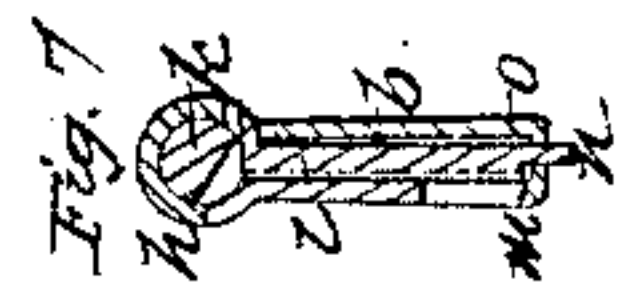
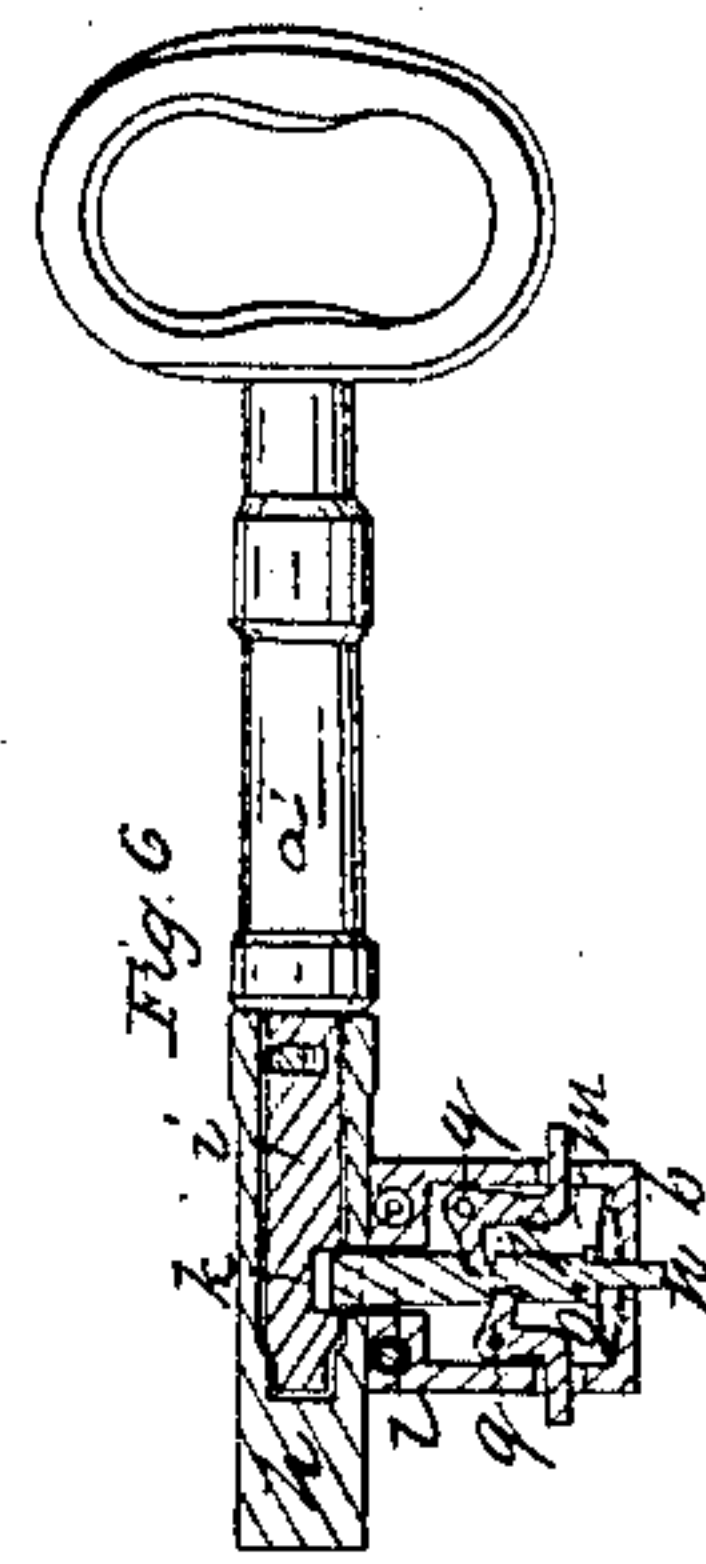
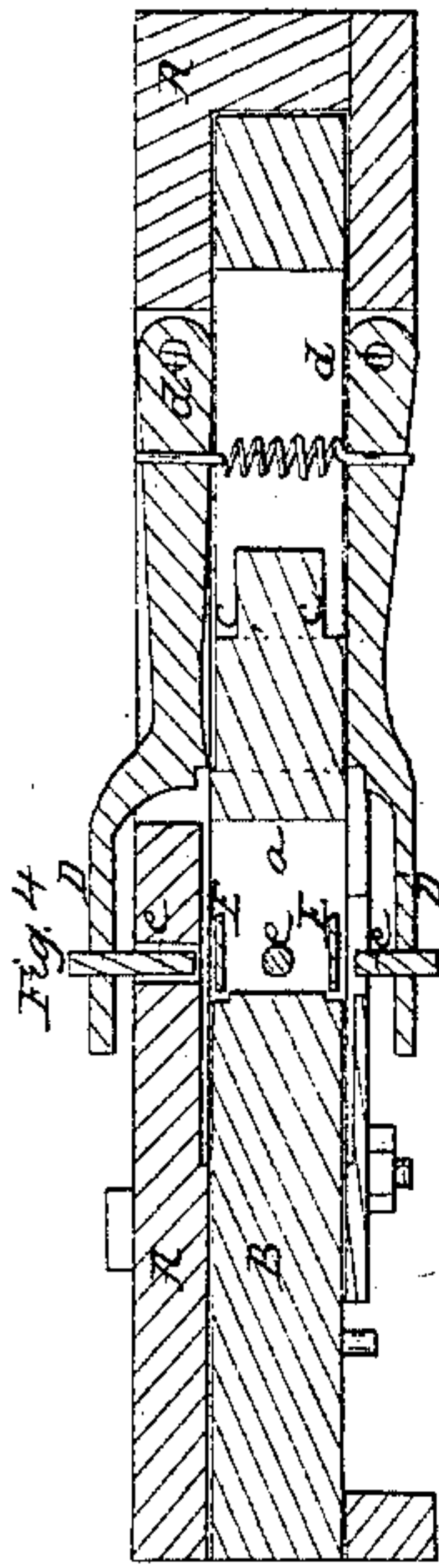
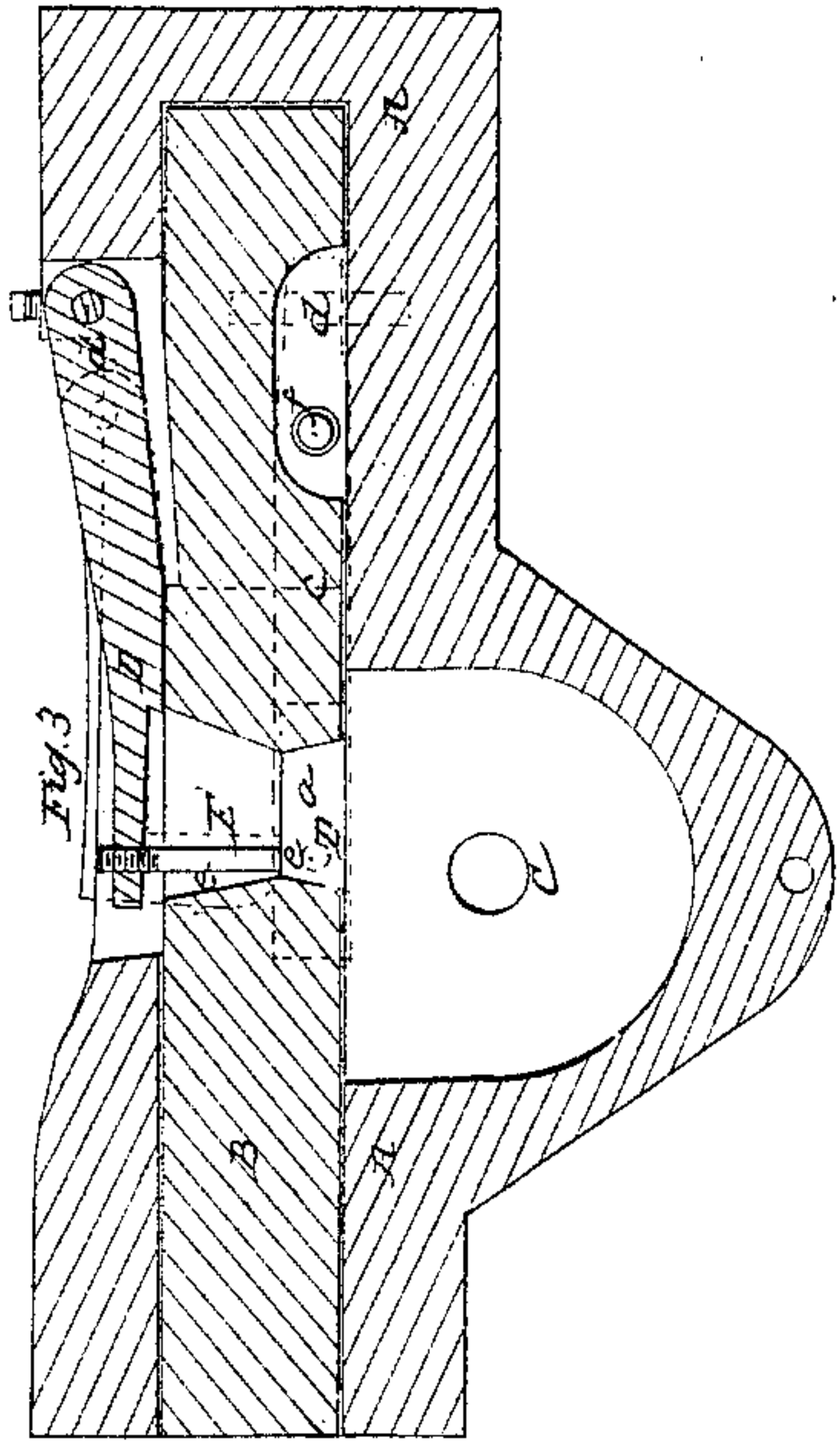


T. K. Webster, Lock.

N^o 18,654.

Patented Nov. 17, 1857.



UNITED STATES PATENT OFFICE.

THOMAS K. WEBSTER, OF LAWRENCE, MASSACHUSETTS.

KEY FOR DOOR-LOCKS.

Specification of Letters Patent No. 18,654, dated November 17, 1857.

To all whom it may concern:

Be it known that I, THOMAS K. WEBSTER, of Lawrence, in the county of Essex and State of Massachusetts, have invented an Improved Lock Mechanism for Doors, Bank-Safes, &c.; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, of which—

Figure 1 denotes a side view of the lock; Fig. 2, a top view of the same; Fig. 3, a vertical, central and longitudinal section of it; Fig. 4, a horizontal section of it taken through the lateral bolt latches; Fig. 5, a side view of the key; Fig. 6, a horizontal and longitudinal section of the said key; Fig. 7, a transverse section of the key taken through the middle of its bit.

In these drawings, A, is the frame or case, and, B, the main bolt of the lock, the latter being adapted to the former so as to be capable of sliding back and forth in the former in the usual way.

The key hole is exhibited at, C, the bolt above the said key hole being furnished with a key recess, *a*, for the bit, *b*, of the key to work in while the key may be in the act of throwing the bolt. Back of the said key recess, the bolt is provided with a shoulder, *c*, to each of three or any other suitable number of lever latches D, D, D, arranged against three sides of the bolt respectively and turning on pins or fulcra *d*, *d*, applied to or arranged in the case A, as shown in the drawings. From each of these lever latches, D, a pin *e*, extends inward toward the interior of the lock case and over the key hole, as shown in the drawings; each side lever latch being furnished with a spring, *f*, for drawing it in close contact with the bolt. The key is constructed with its shank, *a*, and bit, *b*, in two separate parts, the latter being applied to the former so as to turn laterally on it, or in other words, a portion *h*, of the shank is made tubular, has the bit, *b*, extended from it, and turns on a journal, *i*, projecting from the main part of the shank, as shown in Fig. 6. On this journal is a cam, *k*, see Fig. 7, such cam, when the shank is being rotated, being made to operate against a slide, *l*, which is arranged within the bit, *b*, and supported against a spring, *m*, as shown in Fig. 6.

The said slider has a projection, *n*, extended from it and through the spring and end of the bit chamber, *o*, such chamber being made in the bit and for the purpose of containing the slider, its spring and two lever bits, *p*, *p*, arranged within it, as shown in Fig. 6. These lever bits turn on fulcra, *q*, *q*, and are so jointed to or connected with the slider as to be moved by it in such manner that by the movement of the slider in one direction or toward its spring, the lever bits shall be moved into positions as shown in Fig. 6. Such a movement of the slider at the same time will force the projection, *n*, beyond the bit, as shown in said Fig. 6. These lever bits and the projection, *n*, which is an equivalent for one of them, are to operate respectively against the pins, *c*, *c*, of the latches, D, D, when the key is in the lock and is being turned backward for the purpose of throwing back the main bolt.

If we suppose the main bolt to be thrown forward and to be held in such position by the latches D, D, and it is desirable to unlock the bolt, we have only to insert the key into the lock and turn it around therein until its bit meets the rear side of the key recess, *a*, when by continuing to press the bit against the side of the said key recess the main portion of the shank of the key will be turned in such manner as to cause the lever bit, *p*, *p*, and the projection, *n*, to be forced beyond the bit and against the pins, *e*, sufficiently to move them and the latches D, D, far enough away from the shoulder of the bolt to allow the bolt to be thrown backward by the key during the further rearward rotary movement of the latter. By turning the key in the reverse direction, the bolt may be thrown forward. If necessary, the main bolt may have tumbler latches E, E, to be raised by the action of the bit directly against them while the key is being turned.

A lock constructed in the above described manner cannot easily be picked and will be found to operate to excellent advantage.

I claim—

The mode of making the key, that is, with its shank and bit in two parts applied together and combined with and containing lever bits *p*, *p*, a cam *k*, slider *l* and spring, *m*, or the equivalents therefor, such lever

bits while the key is being turned back in
the lock being made to actuate or force out-
ward the latch levers D, D, applied to the
bolt and its case and combined and operat-
5 ing therewith as specified, the main bolt
being constructed substantially as explained.

In testimony whereof I have hereunto set

my signature this fourth day of September,
A. D. 1857.

THOS. K. WEBSTER.

Witnesses:

BENJAMIN GRIFFIN,
WILLIAM D. JOPLIN.