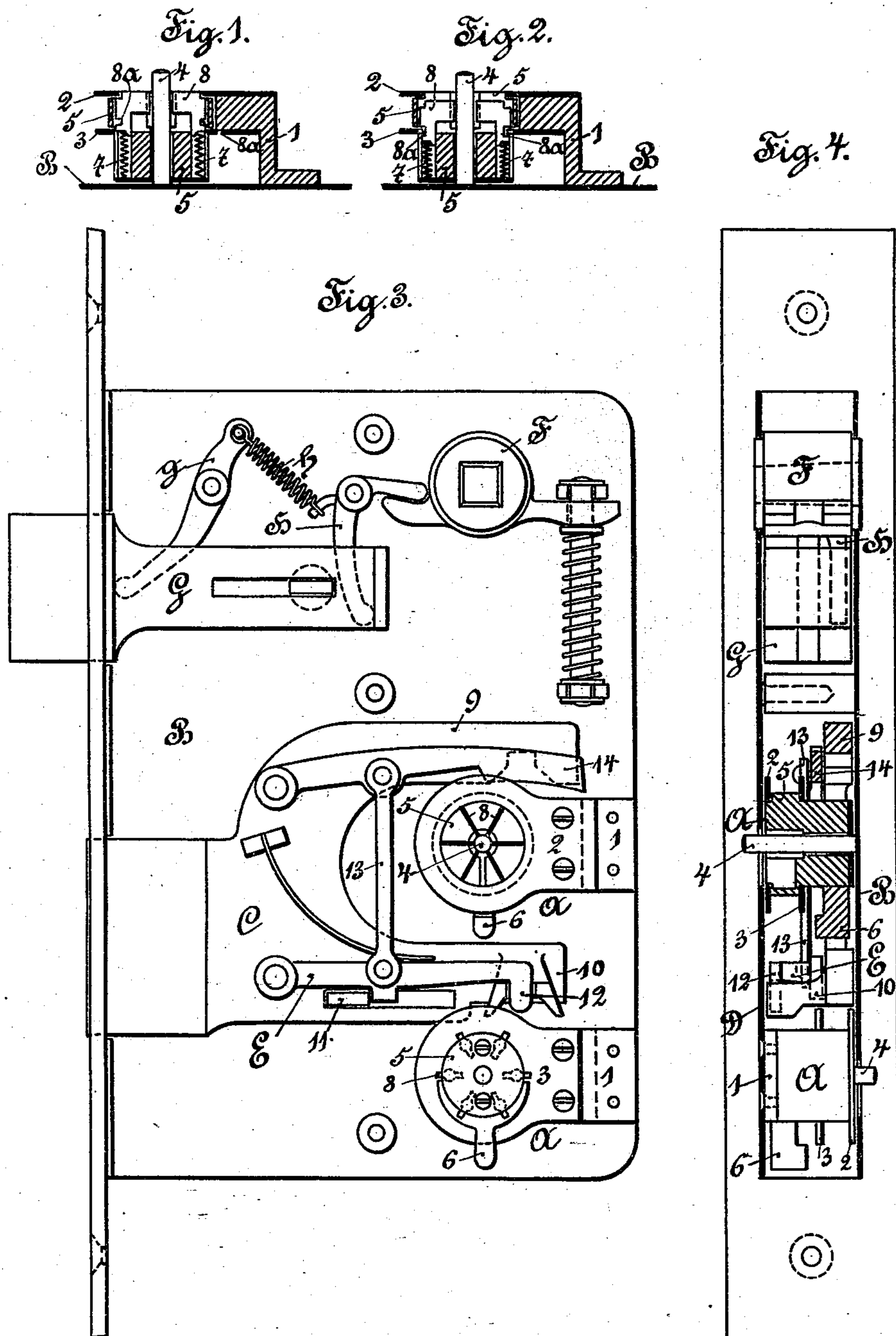


J. A. HAMPEL.
LOCK.

No. 551,632.

Patented Dec. 17, 1895.



Witnesses.

H. K. Boulter

C. H. Horthrup

Inventor:

Joseph A. Hampel,
By H. K. Boulter attorney

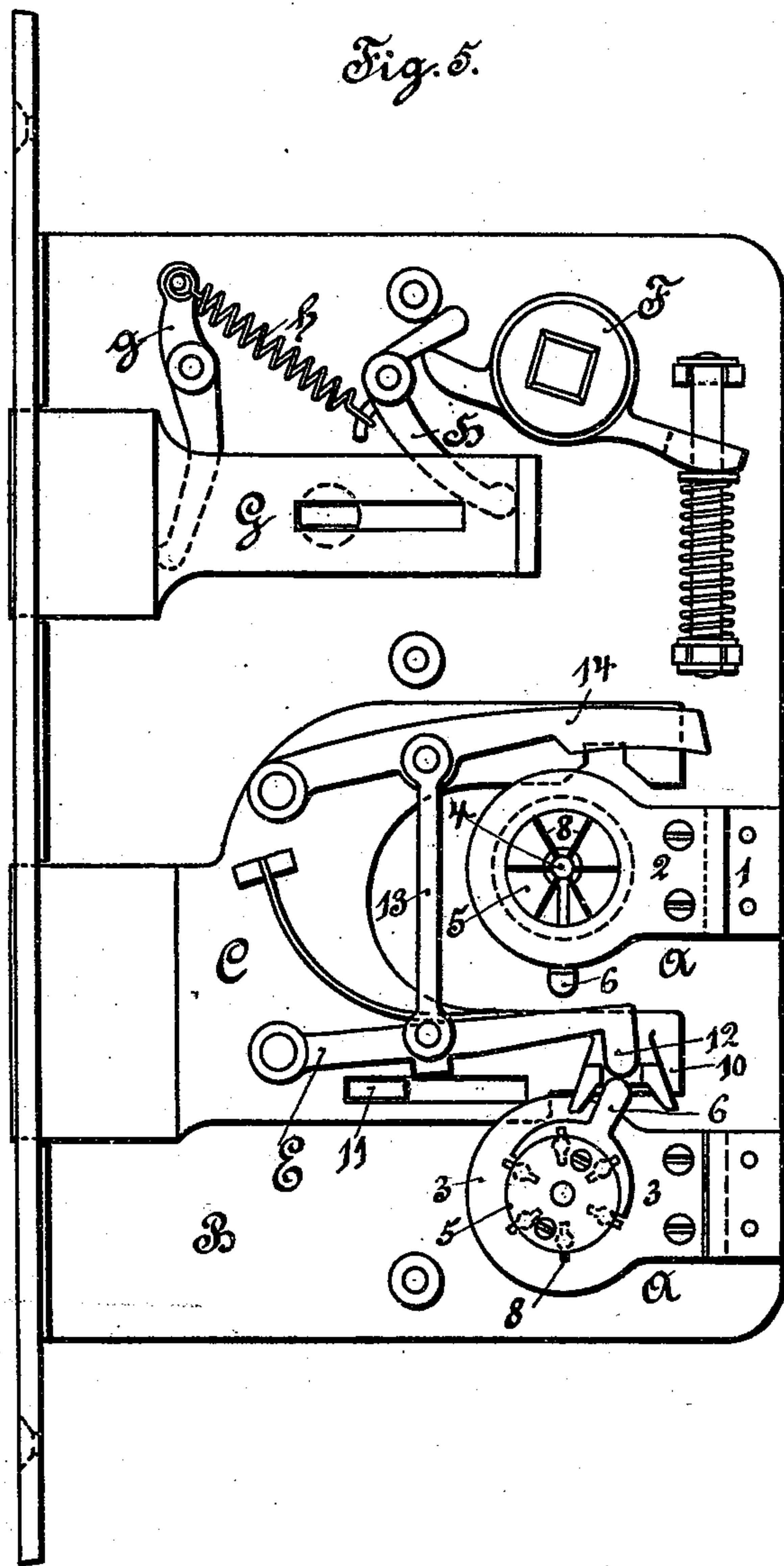
(No Model.)

2 Sheets—Sheet 2.

J. A. HAMPEL.
LOCK.

No. 551,632.

Patented Dec. 17, 1895.



Witnesses:

H. K. Boulter

C. J. Northrup

Inventor:

Joseph A. Hampel,
By W. E. Boulter,
attorney

UNITED STATES PATENT OFFICE.

JOSEF AUGUST HAMPEL, OF SIEGMAR, GERMANY.

LOCK.

SPECIFICATION forming part of Letters Patent No. 551,632, dated December 17, 1895.

Application filed December 6, 1894. Serial No. 530,959. (No model.)

To all whom it may concern:

Be it known that I, JOSEF AUGUST HAMPEL, a subject of the Emperor of Germany, residing at Siegmars, near Chemnitz, Germany, have invented certain new and useful Improvements in Locks, of which the following is a specification.

My invention has relation to locks of that character known as "Bramah" locks, the primary object being to so construct and arrange the lock mechanism and simplify the same that it will be much more compact, occupying much less space than the ordinary construction of lock mechanism, and this without weakening any of the individual parts of the mechanism.

A further object is to permit the lock to be opened and closed from both sides of the lock; and with the above and other objects in view my invention consists in the novel construction, arrangement, and combination of parts, as hereinafter fully described, illustrated in the drawings, and pointed out in the appended claim.

In the drawings, Figures 1 and 2 are longitudinal sectional views of the ward mechanism. Fig. 3 is an elevation of the entire lock; Fig. 4, a vertical transverse section; and Fig. 5, a view similar to Fig. 3, showing the bolt G as retracted within the lock-case.

A indicates the ward mechanism, which in this instance is arranged within the lock-case B, instead of within a separate case, as hitherto. The angle-pieces 1 are secured to the back plate of the lock, and to each of which pieces are secured the two flat disks 2 and 3.

5 indicates the closing-cylinders, which rotate upon lock-pins 4, secured to the lock-plate and provided each with the closing projection 6. Mounted in radial grooves or slits in each cylinder are a series of tumblers 8 of thin steel sheets, said tumblers being adapted to be moved axially and being acted upon by springs 7, bearing upon one end thereof. The tumblers are provided at various points in their height with notches 8^a, which will be opposite the notches in ring 3 whenever the tumblers are depressed by the barrel of the key, in the usual manner.

C indicates the door-lock whose inner end is forked, the member 9 being arranged close to the plate B, while the other member 10 is bent and lies close to the cover-plate of the lock.

In proximity to each key-bearing (formed by each member of the fork) is arranged one of the mechanisms above described, one being secured to the back plate and the other to the cover-plate of the lock. As soon as one of these mechanisms is operated by the key the projection 6 enters the key-bearing, whereby the bolt C is moved.

A tumbler E is secured to the member 10 and has a nose 12, which projects into the keyway of member 10, and said nose is adapted to be operated by the projection 6 of the adjacent mechanism. If the upper mechanism is operated the tumbler E will also be raised by reason of the rod 13, which is connected at one end to the tumbler E and at the opposite end to the lever 14, which lies in the path of the keyway of member 9. When raised by projection 6 the lever 14 effects the raising of the tumblers E out of the upper ward A.

In the arrangement seen clearly in the upper part of Figs. 3 and 5 the nut F presses back sliding bolt G by an intermediate reversing device H, the spring h at the same time shooting the bolt by means of lever g.

The lock described may be used as a right or left hand lock by simply turning the bolts around.

What I claim is—

The combination with the case, of a bolt forked at its inner end forming two members having each a key-bearing toward the inner end, a mechanism for each member arranged adjacent thereto and each comprising a bearing pin, a cylinder mounted thereon and having a closing projection 6, radially movable spring controlled tumblers in said cylinder and having notches, the rings 2 and 3, the latter having notches adapted to be opposite the notches in the tumblers when the latter are depressed, a tumbler pivoted at one end to one member and its opposite end adapted to be operated by the projection 6, of the adjacent mechanism, a lever pivoted at one end to the other member, and a link joining the lever and tumbler for simultaneous movement.

In testimony whereof I have hereto set my hand in the presence of the two subscribing witnesses.

JOSEF AUGUST HAMPEL.

Witnesses:

GAETANO AMADEI,
EUGEN NABEL.