H. W. COVERT.

CAM FOR THROWING BOLT IN LOCKS.

No. 21,655. Patented Oct. 5, 1858.

Fig. 2

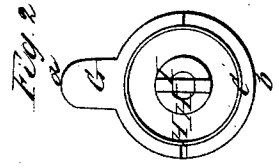


Fig. 4

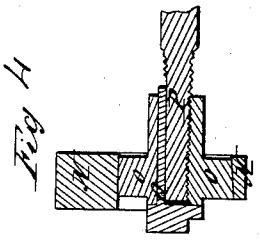


Fig. 1

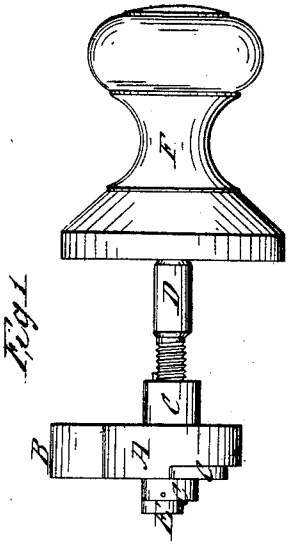
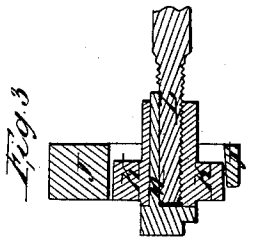


Fig. 3



Witnesses

Martin Briggs

A. D. Cranston

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UNITED STATES PATENT OFFICE.

HENRY W. COVERT, OF ROCHESTER, NEW YORK.

CAM FOR THROWING BOLTS IN LOCKS.

Specification of Letters Patent No. 21,655, dated October 5, 1858.

To all whom it may concern:

Be it known that I, HENRY W. COVERT, of Rochester, in the county of Monroe, in the State of New York, have made a new and useful Improvement in the Cam for Throwing the Bolt to Locks; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and letters of reference marked thereon.

The nature of my invention consists in constructing the cam for throwing the bolts to locks, (and more particularly combination locks) with a movable cone or wedge shaped center, and the rim or socket to be reamed out to fit the center, and the center being fastened to and forming a part of the spindle to which the knob is attached, the knob can be turned or wrenched and no damage will be done to the lock, and at the same time when the cone or center is pulled forward into the socket or rim, there is friction enough to throw the bolt forward and backward.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation by referring to the annexed drawings, in which—

Figure 1 shows a side elevation of my cam with a knob attached. Fig. 2 shows an end elevation of my cam. Fig. 3 shows a section of the cam through *a b* Fig. 2 and a part of the spindle. Fig. 4 shows a section of the cam through *a b*, Fig. 2, and part of the spindle, with the center drawn forward into the socket.

A, Fig. 1, shows the side of the cam.

B, Fig. 1, shows the point on which the bolt to the lock bears.

C C C, Fig. 1, shows a part of the cone or center.

D, Fig. 1, shows the spindle.

E, Fig. 1, shows the head of a key which fastens the center to the spindle.

F, Fig. 1, shows the knob.

G G, Fig. 2, show the socket or rim of the cam shown A Fig. 1.

H H, Fig. 2, shows the end of the center, a part of which is shown C C C Fig. 1.

I, Fig. 2, shows the end of the head of the key shown E Fig. 1.

J J, Fig. 3, show a section of the socket or outer rim of the cam shown G G, Fig. 2 and A Fig. 1.

K K, Fig. 3, show a section of the cone or center shown H H, Fig. 2, and the parts marked C Fig. 1.

L, Fig. 3, shows a section of a part of the spindle shown D Fig. 1.

M, Fig. 3, shows a section of the key which fastens the center K K to the spindle L, and the head of which is shown I, Fig. 2, and E, Fig. 1.

N N, Fig. 4, shows the section of the socket or outer rim of the cam shown J J, Fig. 3.

O O, Fig. 4, show the section of the cone or center drawn forward into the socket so as to fill, and a section of which is also shown K K, Fig. 3.

P, Fig. 4, shows the section of a part of the spindle shown L, Fig. 3.

Q, Fig. 4, shows a section of a key which fastens the center to the spindle and a section of which is shown M, Fig. 3.

Now it will be seen that when the center is back in the position shown in the section K K Fig. 3, the tumblers to a combination lock can be worked without the socket, or cam proper being moved, and it will also be seen that when the center is drawn forward to the position shown by the section O O, Fig. 4, the center is brought to a bearing, and the friction caused by the turning of the knob is sufficient to move the bolt to the lock backward and forward, and at the same time if there should be a severe turn or wrench of the knob, there can be no damage done to the lock as the friction of the center in the socket is not so great but that the center would turn before any damage could be done, and this I consider one great advantage of my cam for throwing the bolt of a lock, over all others now in use.

Having thus described the construction and operation of my invention, I do not claim the cone and socket or friction joint, but

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

The combination of the cone or wedge shaped center, with the socket or outer rim to form a cam for throwing the bolt to a lock substantially as herein described and represented.

HENRY W. COVERT.

Witnesses:

MARTIN BRIGGS,

H. D. SCRANTOM.