

No. 655,145.

Patented July 31, 1900.

W. T. ADAMS.  
CYLINDER LOCK.

(Application filed May 7, 1900.)

(No Model.)

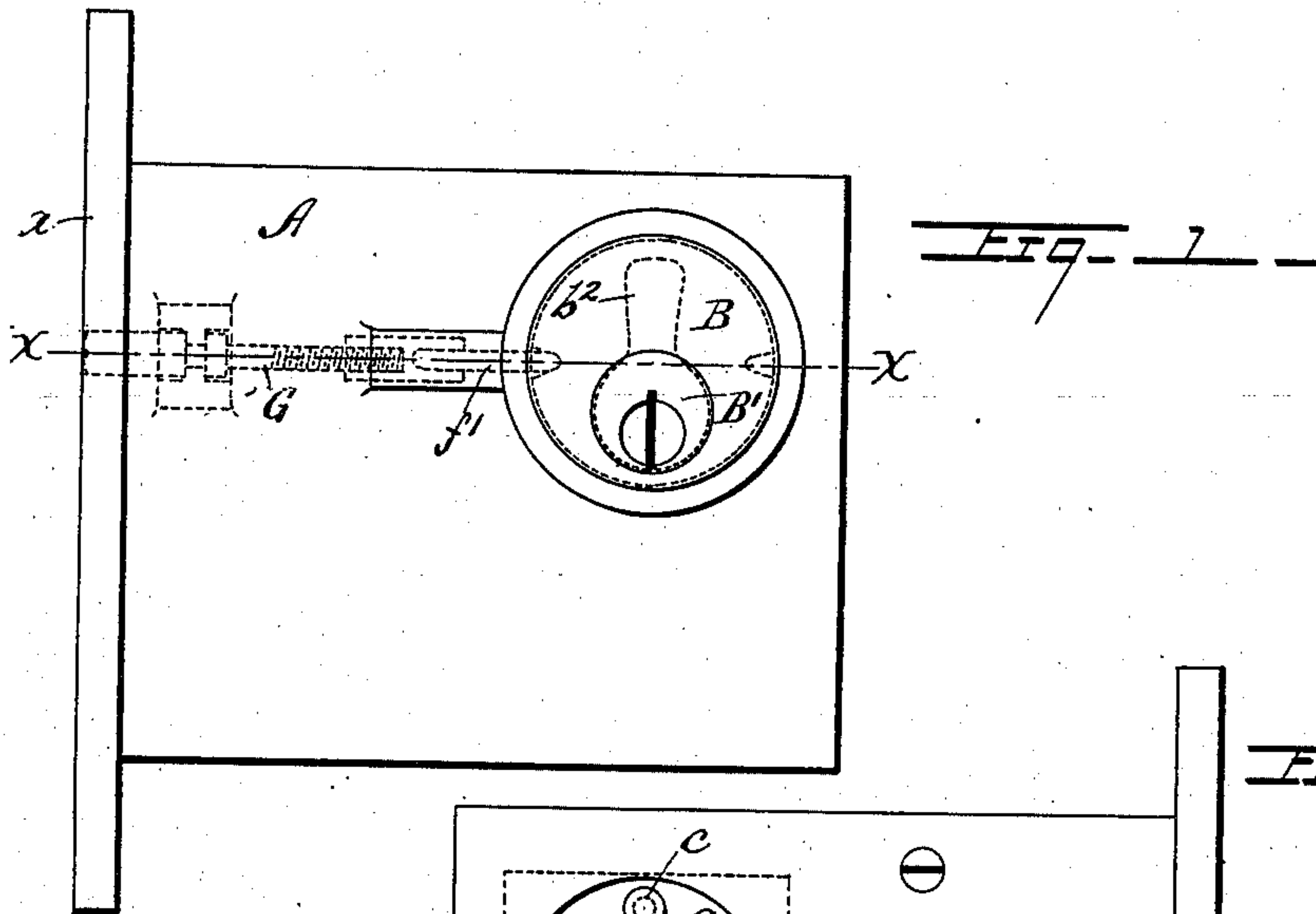


Fig. 1

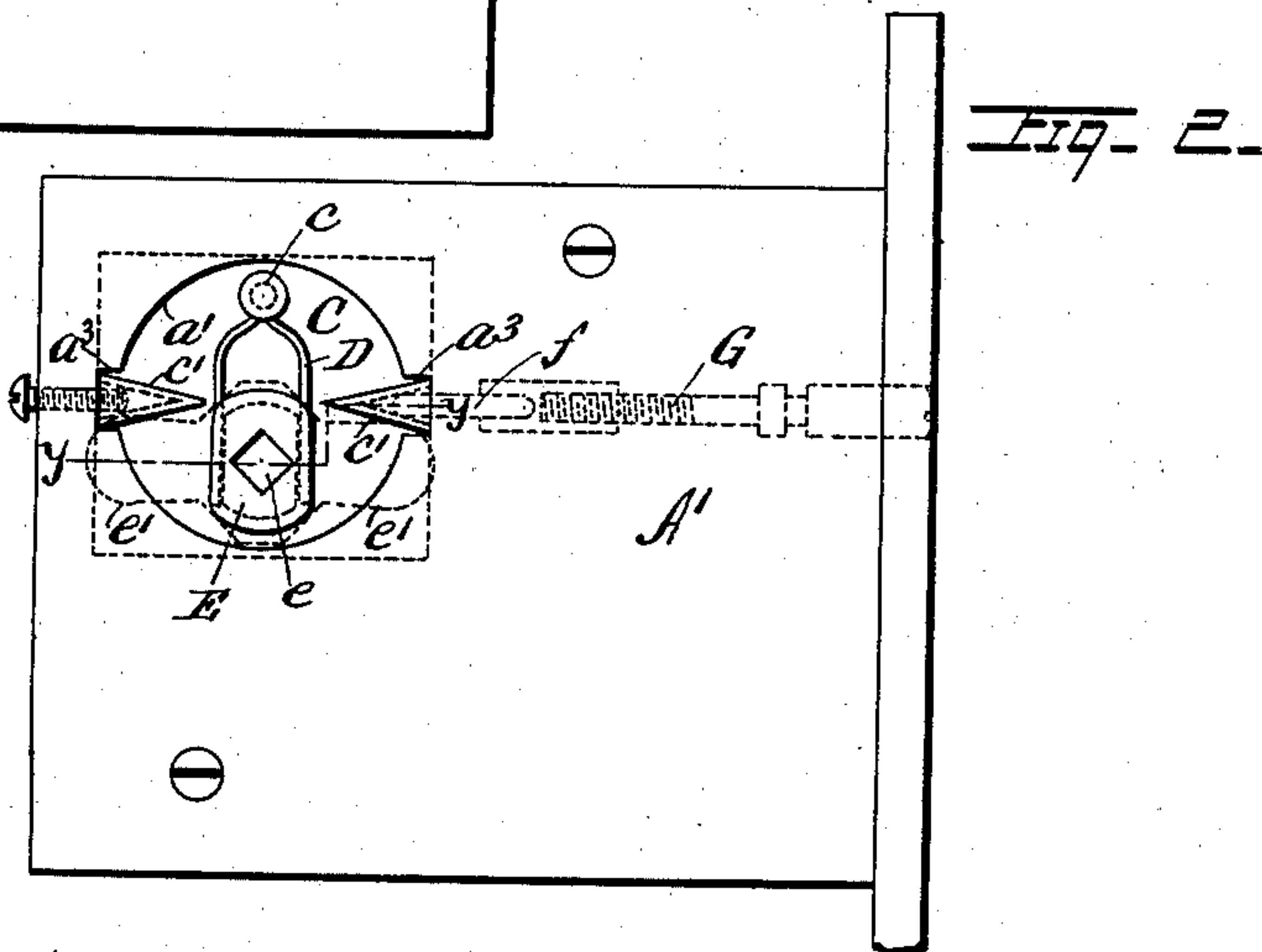


Fig. 2

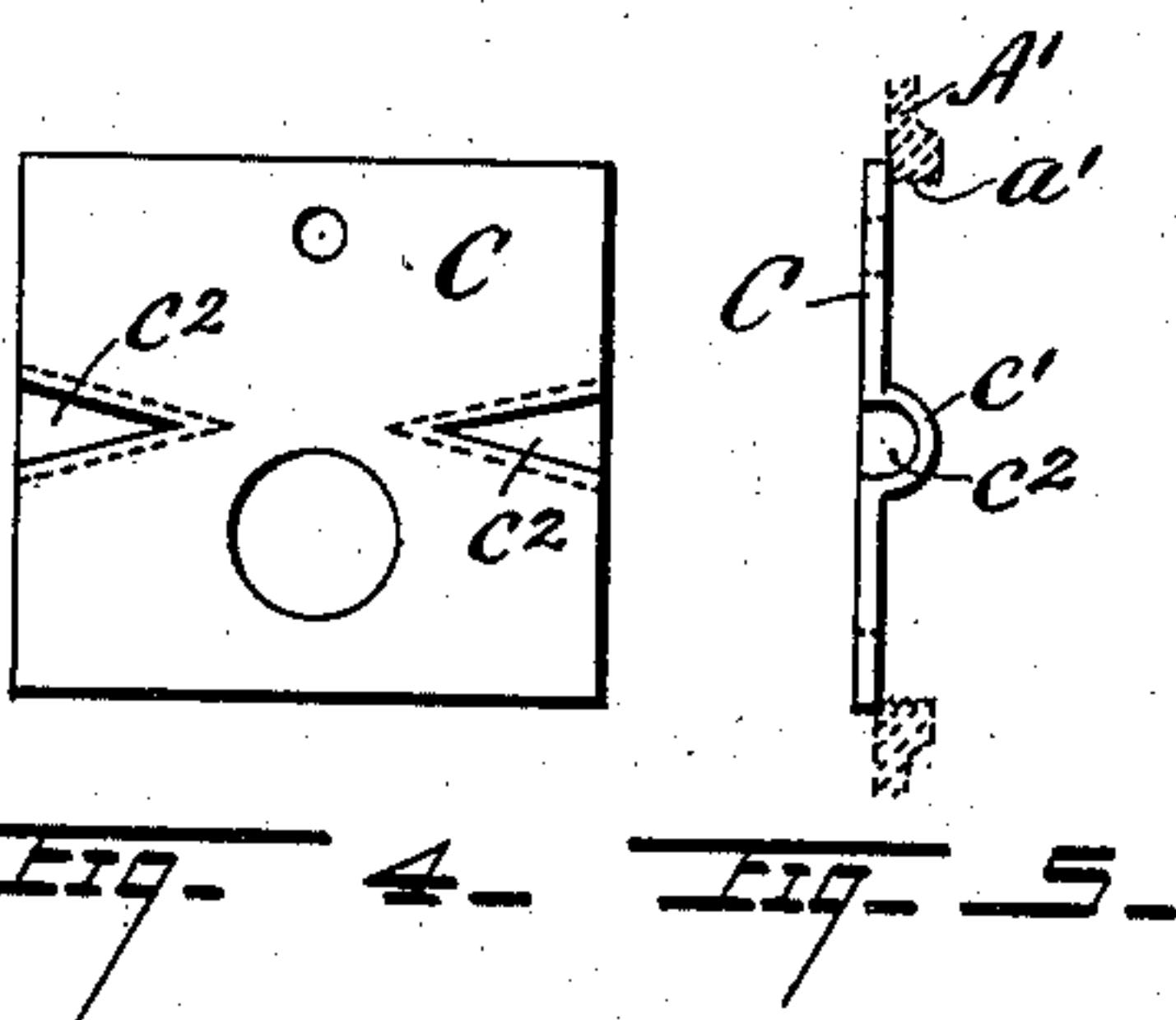


Fig. 4 Fig. 5

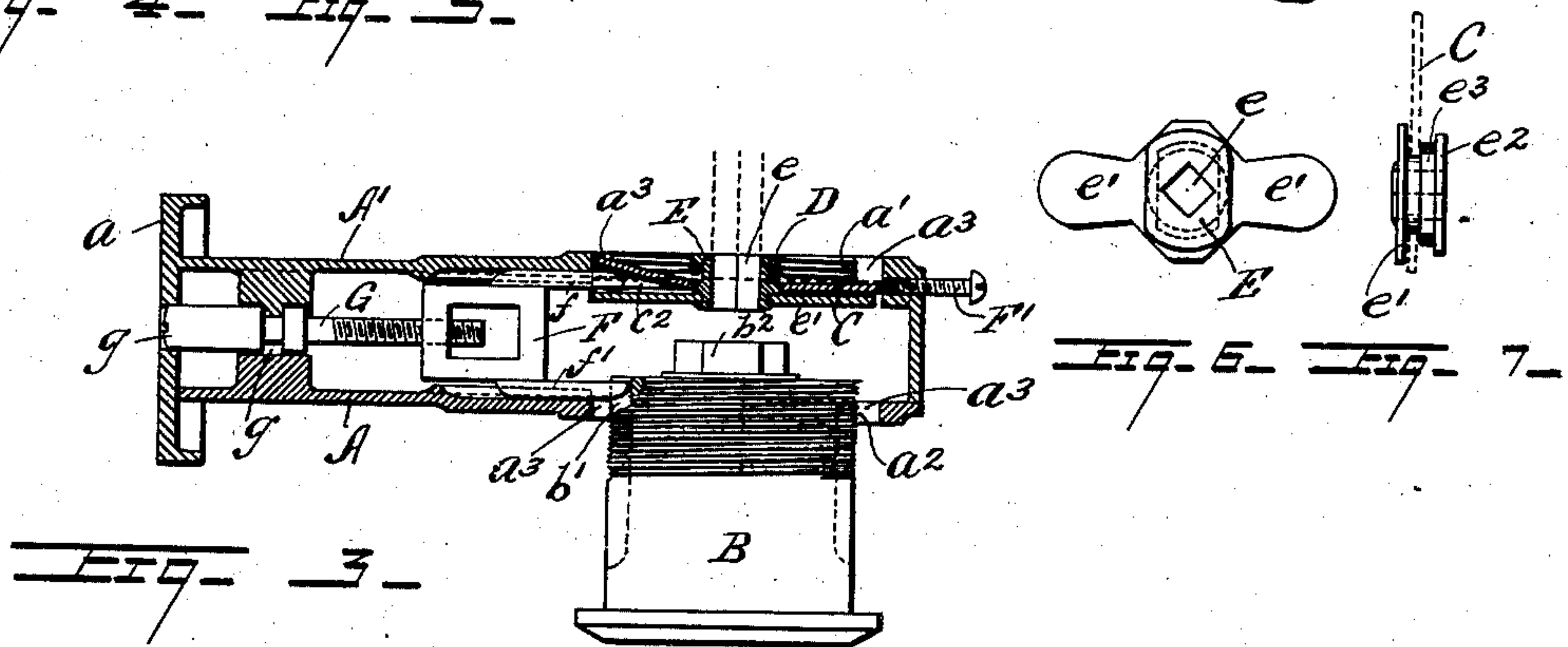


Fig. 3

Fig. 6 Fig. 7

Witnesses  
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# UNITED STATES PATENT OFFICE.

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## CYLINDER-LOCK.

SPECIFICATION forming part of Letters Patent No. 655,145, dated July 31, 1900.

Application filed May 7, 1900. Serial No. 15,718. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM T. ADAMS, a citizen of the United States of America, and a resident of Reading, in the county of Berks and State of Pennsylvania, have invented certain new and useful Improvements in Cylinder-Locks, of which the following is a specification.

My invention relates particularly to that class of locks in which the key-cylinder and the handle-socket are arranged opposite each other in the sides of the lock frame or case; and it consists in the improved construction and mounting of the handle-socket and in the improved clamping mechanism for interchangeably securing said key-cylinder and handle-socket in opposite positions as required for either right or left hand doors.

The invention is fully described in connection with the accompanying drawings, and the novel features are particularly pointed out in the claims.

Figure 1 is an elevation showing the outer side of the lock or latch case with the key-cylinder secured in position therein. Fig. 2 is a similar view showing the inner side of the lock-case with the handle-socket and plate secured thereto. Fig. 3 is a sectional view taken mainly on the line  $x\ x$  of Fig. 1, the handle-socket plate being cut on the line  $y\ y$  of Fig. 2. - Figs. 4 and 5 are respectively a rear face and side edge view of the handle-socket plate, and Figs. 6 and 7 are separate views of the handle-socket.

A represents the usual lock case or frame, and A' the removable side plate of the same. The interior mechanism, which is not shown, may be the same as is commonly employed in this class of lock and has no special bearing on my present improvements.

B' represents the usual key-cylinder, mounted in the cylindrical case B and provided at its inner end with the roll-back lever or arm  $b^2$  to operate the bolt. The case B is adapted, as usual, to be adjustably and interchangeably secured in either of the similar opposite openings  $a^2$  or  $a'$  in the sides of the lock-case to provide for right or left hand use of the lock.

E represents a handle-socket having an angular opening or recess  $e$  to receive the knob or handle spindle and a roll-back arm

or lever  $e'$  adapted to independently operate the bolt. In my improved construction the handle-socket E is rotatably mounted in a plate C, with the roll-back  $e'$  secured to its inwardly-projecting end, and its outer portion is formed with a collar or flange  $e^2$  and an angular or flattened body  $e^3$ , upon which is arranged to bear a spring D, as shown, in such a manner as to always tend to return the handle-socket and the roll-back  $e'$  to their normal positions.

The roll-back levers  $e'$  of the handle-socket and  $b^2$  of the key-cylinder, it will be understood, are arranged to act independently on the lock-bolt in interchangeably-opposite positions. The handle-socket plate C may be formed of sheet metal and is of somewhat-larger size than the case-openings  $a'$   $a^2$  and adapted to have a marginal or overlapping bearing against the inner face of either side of the lock-case, while the outwardly-projecting body  $e^2$   $e^3$  of the handle-socket and the spring D for same extend into the case side opening  $a'$  or  $a^2$  without, however, projecting beyond the outer face of the case side, so as to in any way affect the mortising of the lock into the edge of a door.

In order to conveniently secure the handle-socket plate and also the key-cylinder case in reversibly-opposite positions, I provide said plate preferably with two outer lugs or projections  $c'$   $c'$ , pressed therein so as to form oppositely-inclined edgewise recesses  $c^2$   $c^2$ , open at the rear of the plate. These lugs or projections are adapted, as shown, to enter corresponding peripheral recesses or extensions  $a^3$   $a^3$  of either opening  $a'$   $a^2$ , thus fixedly locating the plate in proper position in the opening. It is further necessary, however, to clamp the plate against the inner face of the case side, and this I accomplish, preferably, by means of a clamping device F, adapted also to simultaneously secure the key-cylinder case B in the opposite side opening, said device being capable of movement in opposite directions by means of a suitably-mounted engaging screw G, having its notched end  $g$  extended through the face-plate  $a$  of the lock-case and being provided, as shown, with two fingers  $f$  and  $f'$ , adapted to engage the plate C and case B, respectively, the latter having a longitudinal groove  $b'$ , as usual, into which



said finger  $f'$  extends, while the other finger  $f$  bears against the inclined rear wall of edge-wise recess  $c^2$  in the plate, thus pressing the latter outward against the case side and rigidly clamping the same. The screw  $F'$  (shown in engagement with the opposite recess  $c^2$  of the plate) coöperates with the device  $F$  in firmly clamping the plate in position.

What I claim is—

1. The combination with a lock or latch case having similar openings through opposite sides, and a key-cylinder case adapted to be secured in either of said openings, of a handle-socket plate of larger size than said openings having a handle-socket rotatably mounted therein and a spring secured to the outer face thereof and arranged to bear upon the outwardly-projecting angular body of said handle-socket, and means for interchangeably securing said plate against the inner face of either side of the case, with said spring and the projecting portion of the handle-socket extending into the opening substantially as set forth.
2. The combination with a lock or latch case having similar openings through opposite sides, and a key-cylinder case adapted to be secured in either of said openings, of a handle-socket plate of larger size than said opening having a handle-socket rotatably mounted therein and adapted to bear against the inner face of either side of the case, and means for simultaneously securing or releasing both the key-cylinder case and handle-socket plate in interchangeably opposite positions in the case, substantially as set forth.
3. The combination with a lock or latch case having similar openings through opposite sides, and a key-cylinder case adapted to be secured in either of said openings, of a

handle-socket plate having a lug or projection on the outer face adapted to engage a peripheral recess or way formed in each of said openings, a single clamping device suitably mounted in the lock-case and adapted to engage both the key-cylinder case and the handle-socket plate in their interchangeable positions so as to simultaneously clamp or release the same, and an exteriorly-extended screw for operating said clamping device, substantially as set forth.

4. The combination with a lock or latch case having similar openings through opposite sides, and a key-cylinder case adapted to be secured in either of said openings, of an interchangeable handle-socket plate of larger size than said openings located between the case sides and carrying a rotatable handle-socket, and clamping means adapted to press the overlapping portion of said interiorly-located plate outward against the inner face of either side of the case, substantially as set forth.

5. The combination with a lock or latch case having similar openings through opposite sides, and a key-cylinder case adapted to be secured in either of said openings, of a handle-socket plate of larger size than said openings having edgewise recesses  $c^2$  and suitably-mounted clamping devices adapted to enter said recesses and wedge said plate against the inner face of the case side, substantially as set forth.

Signed by me at Reading, Pennsylvania, this 4th day of May, 1900.

WILLIAM T. ADAMS.

Witnesses:

GEO. E. TYSON,  
ADAM L. OTTERBEIN.