

(No Model.)

F. P. HILBURN & G. L. HOEHN.

SWITCH LOCK.

No. 321,107.

Patented June 30, 1885.

Fig. 1

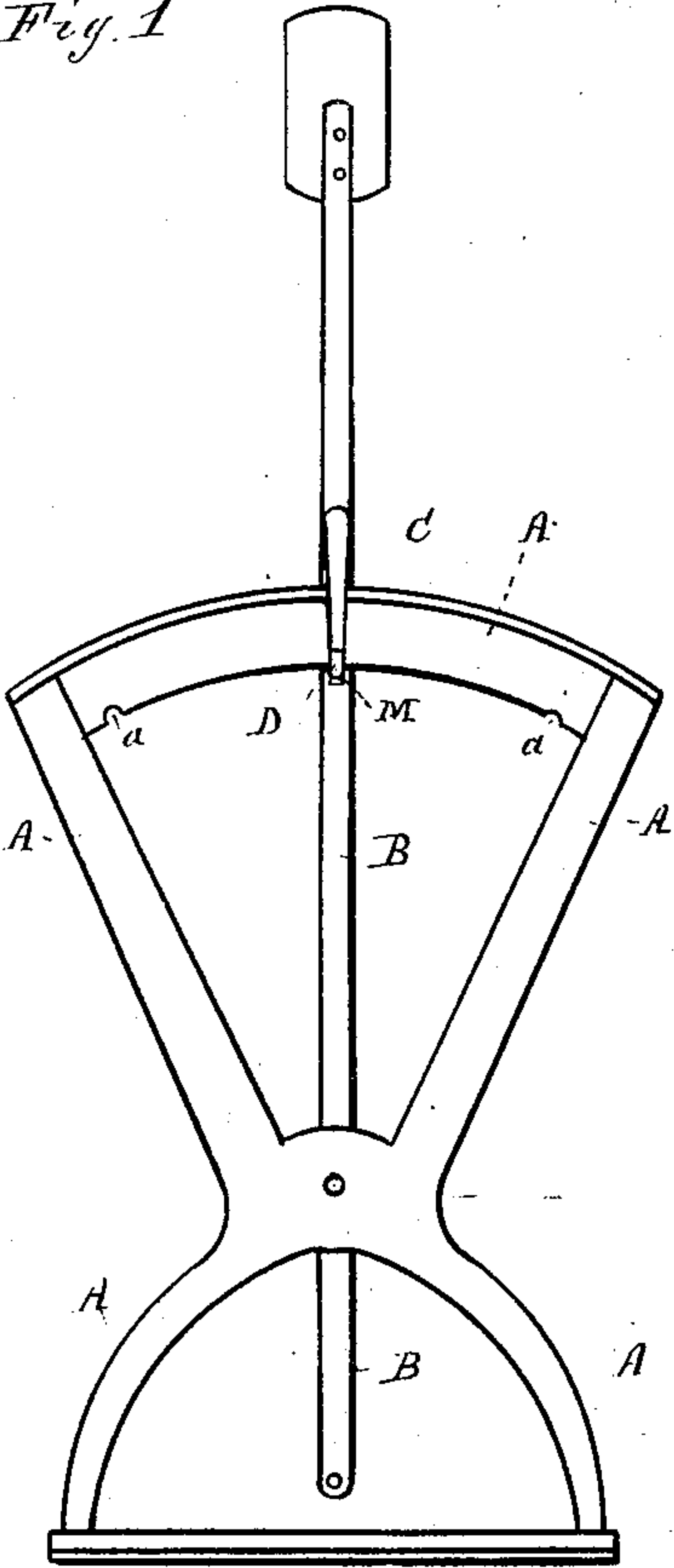


Fig. 2

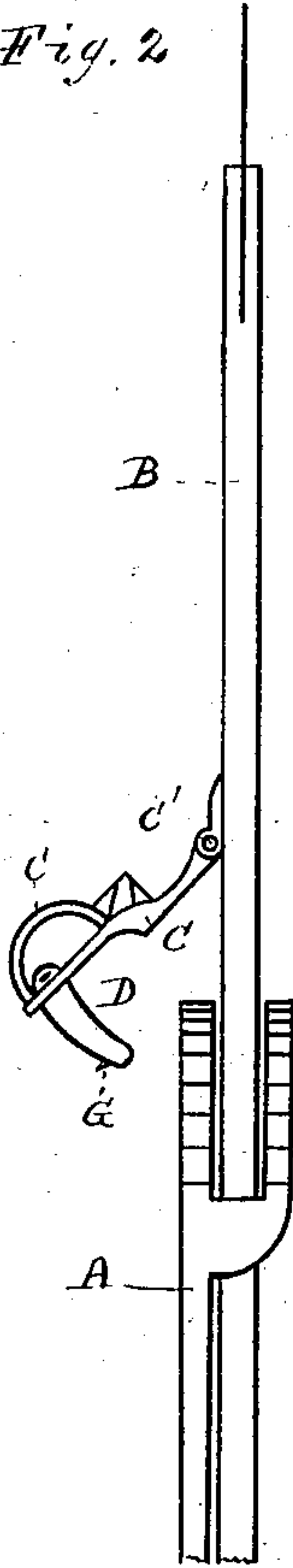


Fig. 3

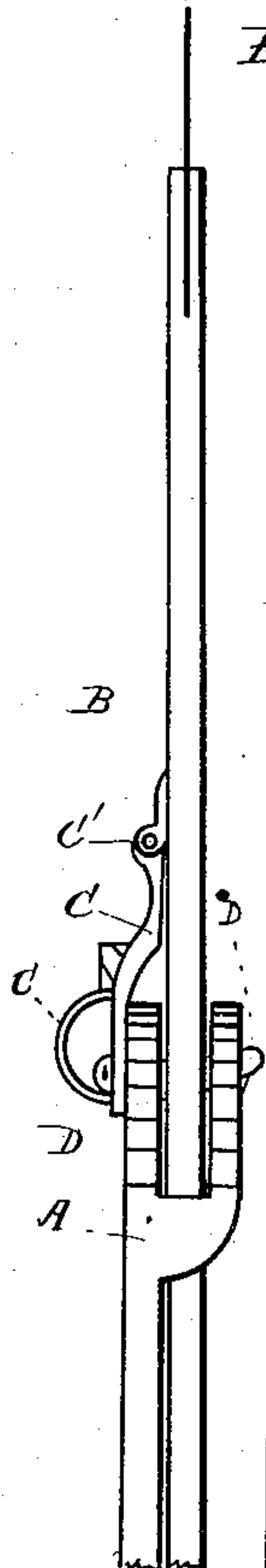


Fig. 5

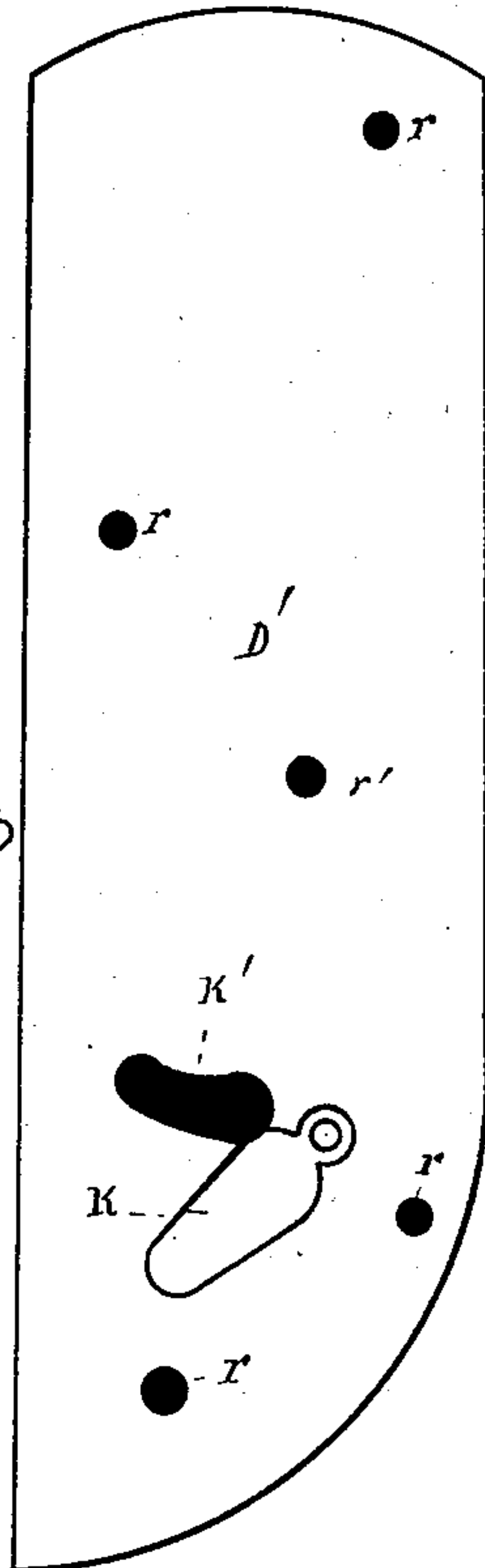


Fig. 4

D

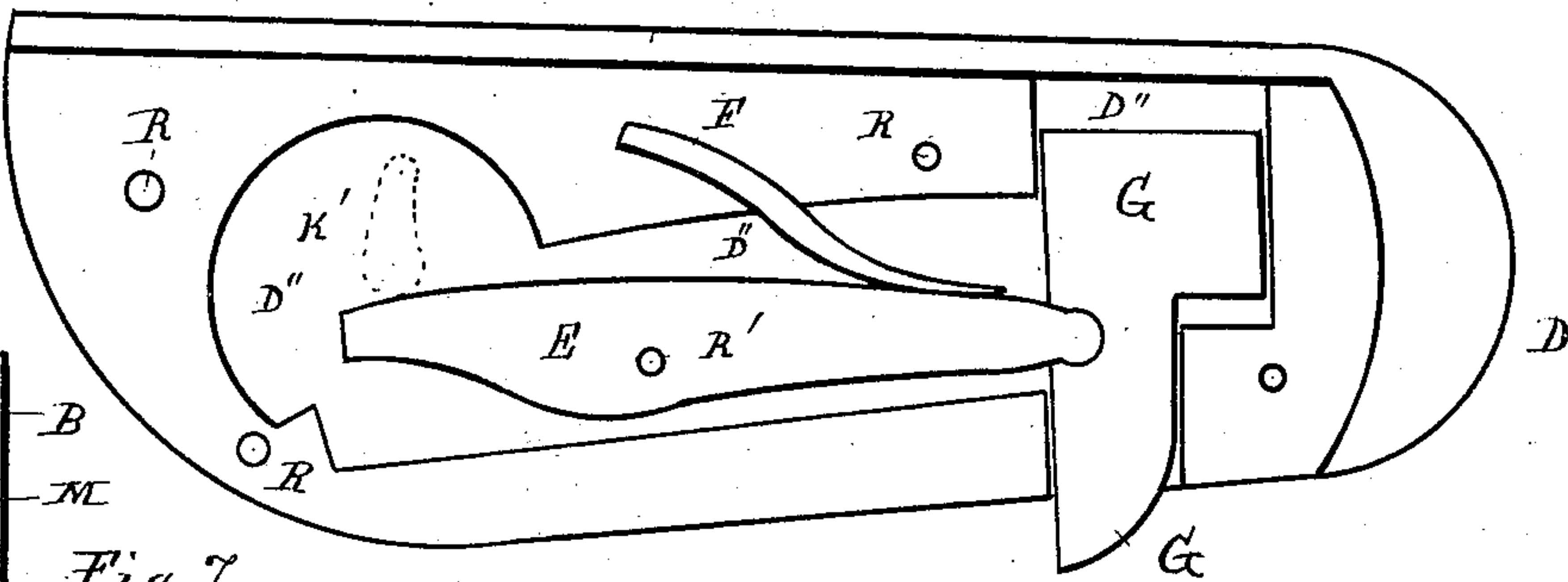


Fig. 6

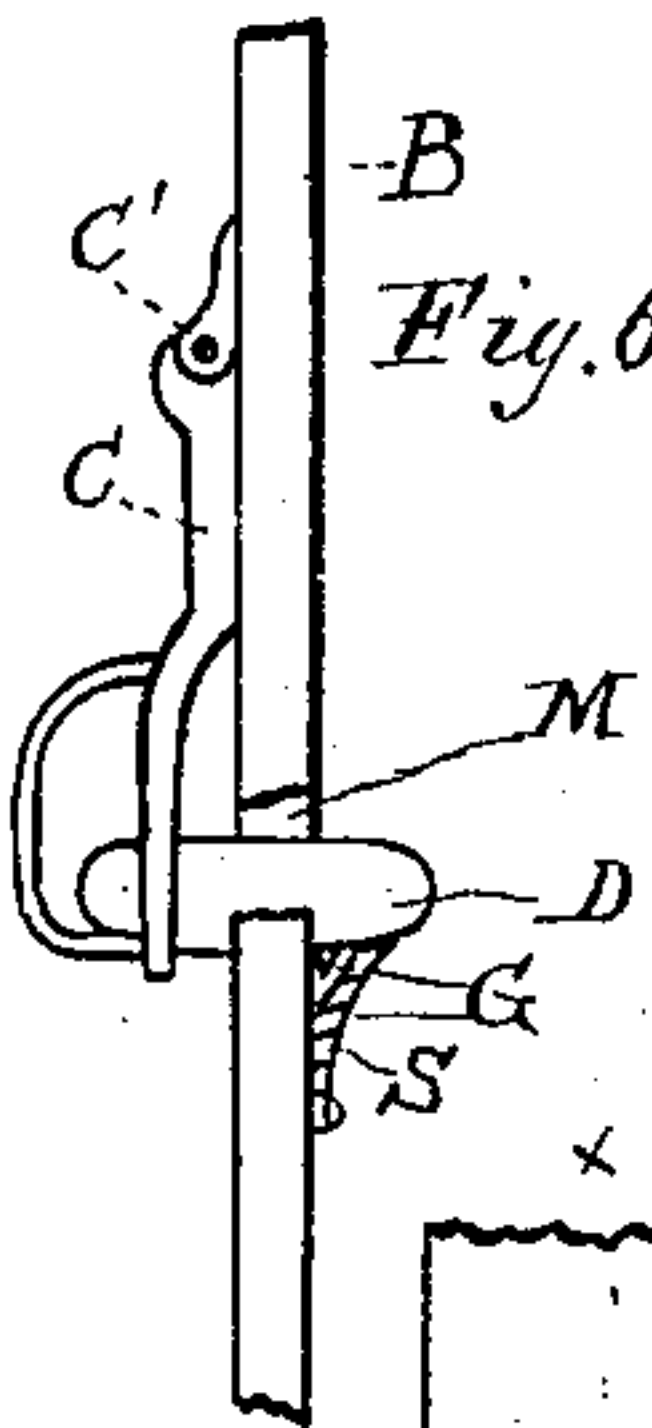
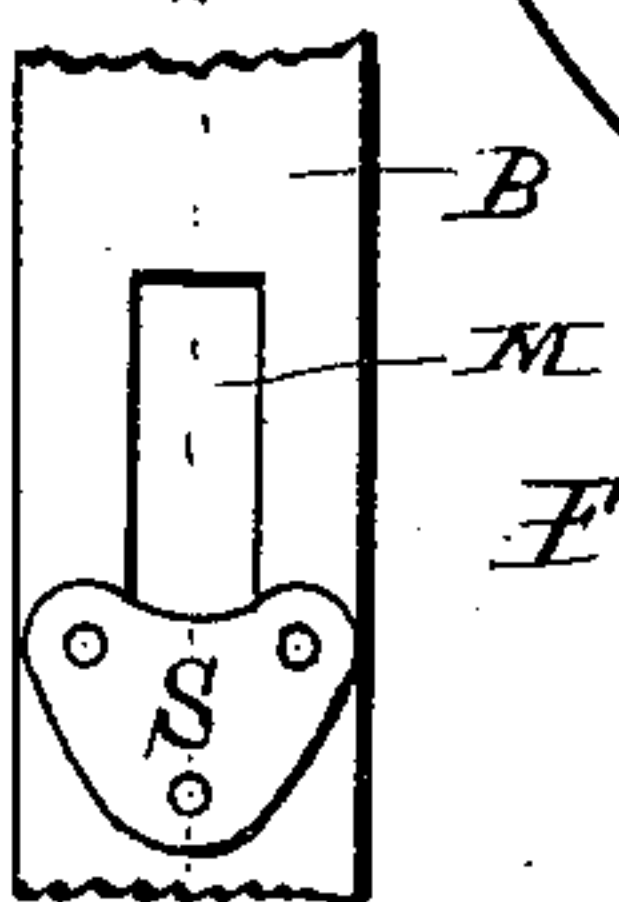


Fig. 7



WITNESSES

Morton Tolmin
Edwin L. Bradford

INVENTOR

Frank P. Hilburn
George L. Hoehn
W. P. Leonard

Attorney

UNITED STATES PATENT OFFICE.

FRANK P. HILBURN AND GEORGE L. HOEHN, OF MOUNT VERNON, INDIANA.

SWITCH-LOCK.

SPECIFICATION forming part of Letters Patent No. 321,107, dated June 30, 1885.

Application filed May 13, 1884. (No model.)

To all whom it may concern:

Be it known that we, FRANK P. HILBURN and GEORGE L. HOEHN, citizens of the United States, residing at Mount Vernon, in the county of Posey and State of Indiana, have invented certain new and useful Improvements in Switch-Locks, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in switch-locks, the objects of which are to save time in opening and shutting switches and to lock the switch automatically when closed, thereby preventing its being changed, except by the proper persons, employed by the railroad company for that purpose. These objects are attained by the mechanism illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is an elevation of a switch-stand provided with our improvement. Fig. 2 is a view showing part of a switch-stand, with the lever unlocked. Fig. 3 is a similar view showing the lever locked. Fig. 4 shows the construction of the interior of the lock, the cover having been removed. Fig. 5 shows the cover of the lock detached therefrom. Fig. 6 is a detached view showing the plate S in section; also the lock and part of the lever B, a portion of which is broken away in order to show the position of the slot M. Fig. 7 is a detached view of a part of lever B, and shows the slot M, as well as the position of the plate S secured thereto by means of three rivets.

The letter A indicates the switch-stand. B is the lever; C, the lock-handle; D, the lock, consisting of two metal plates, one of which is suitably recessed at D' to receive the operating devices, hereinafter described. D' is the cover of the lock, and is provided with a key-hole K' and key-hole cover K, pivoted thereto, which may or may not be provided with a spring to keep it closed when the key is not in the key-hole K'. E is a lever which vibrates on the pivot R', one end of which enters a recess in the bolt G, which, when the key is turned, forces the bolt G back, and thereby unlocks the switch-lever,

but when the key is removed from the lock the bolt G is forced in an outward direction by the spring F, which bears against the back of the lever E and forces it in the direction of the arrow.

The cover D' is provided with suitable openings, *r*, to receive the screws or rivets R, by means of which the lock-plate D is secured to its cover D'; also a hole, *r'*, for the passage of the outer end of the rivet R'.

The handle C may form a part of the lock D, or it may be attached thereto in any convenient or suitable manner. It is intended to make the handle C and the plates D D' of brass and the remainder of the lock of steel or other suitable material. The handle C is secured to the lever B by the hinged joint C', which permits the handle with its lock to be turned in the position shown in Fig. 2 when the switch is unlocked, or in the position shown in Fig. 3 when locked.

The plug or lock D passes through a slot, M, in the lever B; also through suitable openings in the switch-stand A. The bolt G engages with the bottom of the slot M, which locks the plug D and prevents it from being withdrawn from the slot M until the key has been inserted in the lock, and has also been turned in the proper direction. In order to prevent the bolt G from being tampered with by unauthorized parties, a plate of metal, S, as shown in Figs. 6 and 7, is secured to the lever B, just over the lower part of the slot M, which entirely covers the bolt G and conceals it from view when the switch is locked.

There is a saving in time in opening and shutting switches when this lock is used, because it is locked automatically whenever the plug is pushed home through the slot M, except when the key is left in the key-hole and has been turned in the proper direction. In this case the switch can be moved as often as desired without locking until the key is removed.

Having described our invention, what we desire to secure by Letters Patent, and claim, is—

1. The combination of the lever B and han-

dle C, having hinge C', with the plug D, having bolt G, adapted to engage with a slot in the lever B, as described and for the purposes set forth.

- 5 2. The combination of handle C, plates D D', rivets R, and spring F, with lever E, adapted to vibrate on pivot R', and bolt G, as described and for the purposes set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

FRANK P. HILBURN.
GEORGE L. HOEHN.

Witnesses:

W. R. WEEVER,
C. W. LICHTENBERGER.