

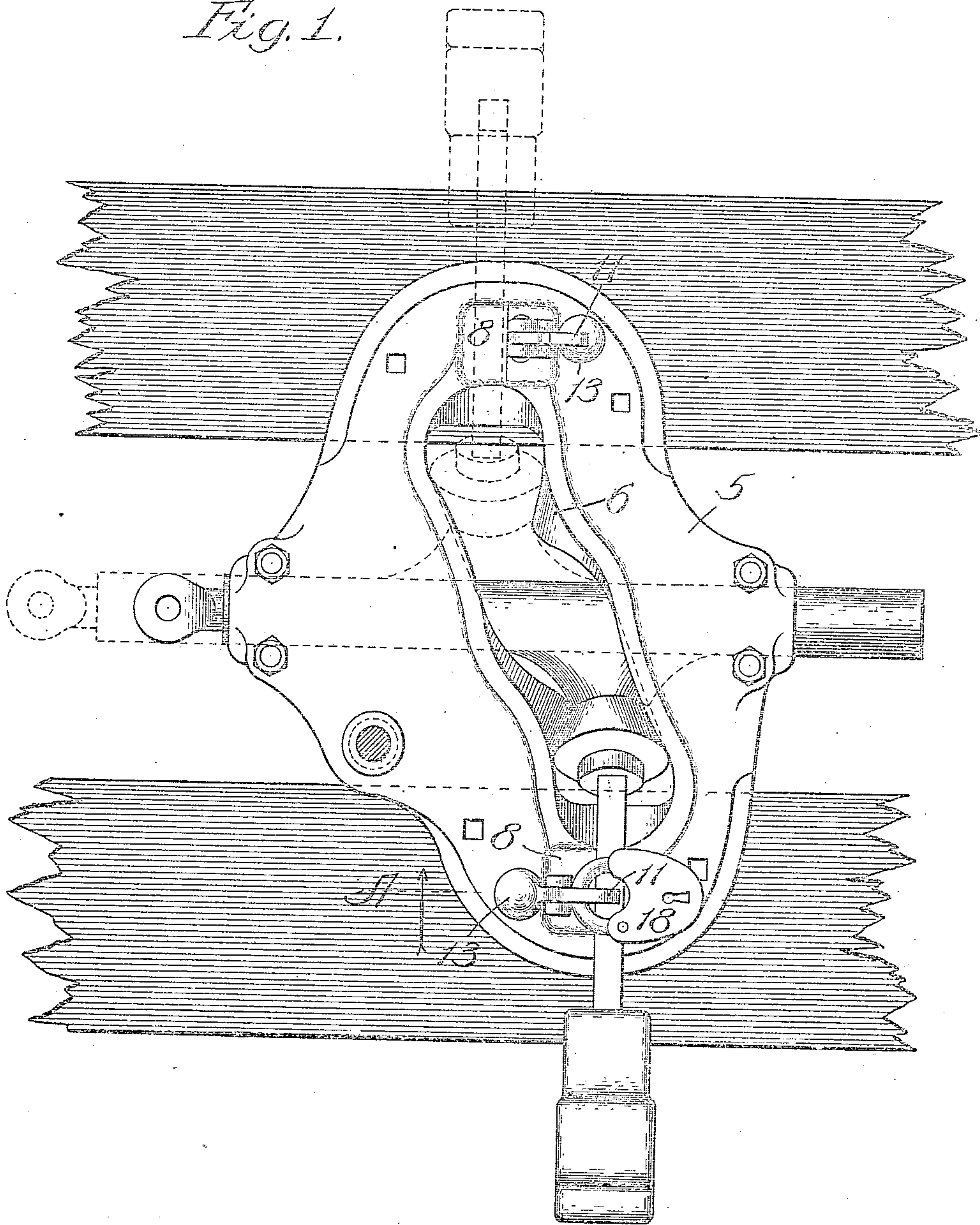
A. A. STROM.
 SWITCH LEVER LOCK.
 APPLICATION FILED DEC. 13, 1909.

953,646.

Patented Mar. 29, 1910.

2 SHEETS—SHEET 1.

Fig. 1.



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 Chas. H. Bull.

Inventor:
 Axel H. Strom.
 By Seymour H. Lee, Chittenden & Miles
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2 SHEETS—SHEET 2.

Fig. 2.

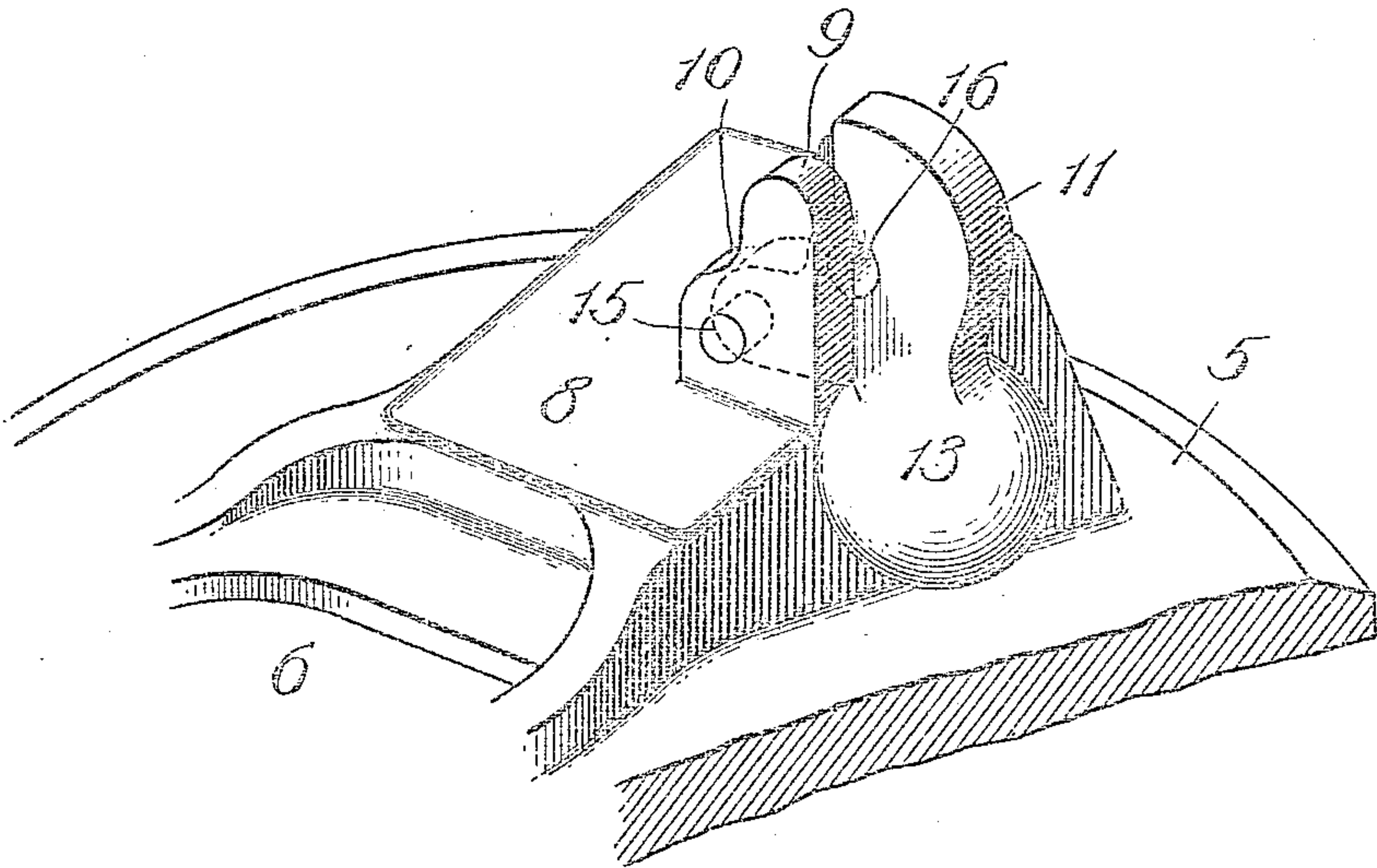


Fig. 3.

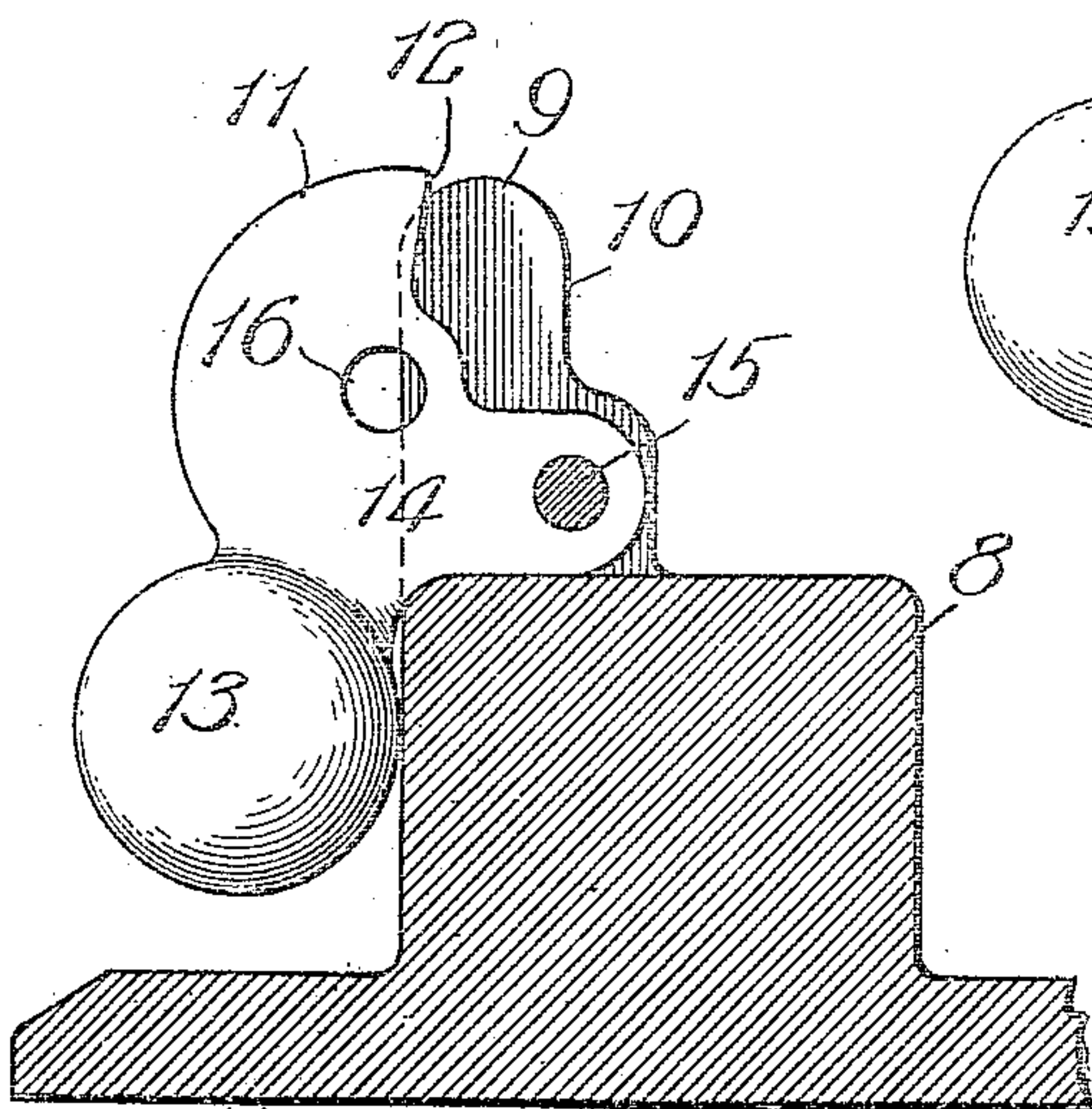
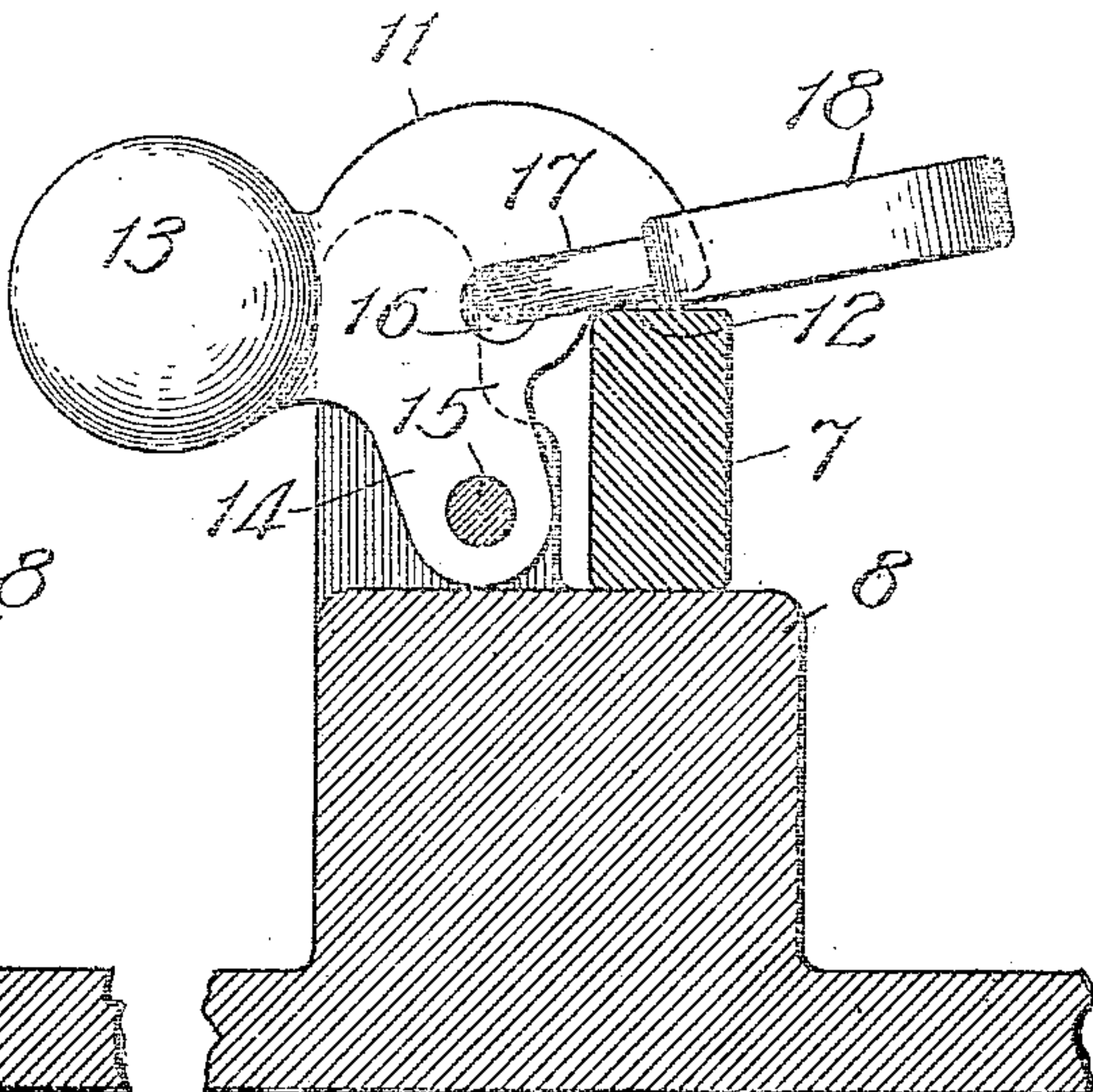


Fig. 4.



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UNITED STATES PATENT OFFICE.

AXEL A. STROM, OF AUSTIN, ILLINOIS, ASSIGNOR TO PETTIBONE, MULLIKEN & COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

SWITCH-LEVER LOCK.

953,646.

Specification of Letters Patent.

Patented Mar. 29, 1910.

Application filed December 13, 1909. Serial No. 532,947.

To all whom it may concern:

Be it known that I, AXEL A. STROM, a citizen of the United States, residing at Austin, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Switch-Lever Locks, of which the following is a specification.

My invention relates to an improvement in the class of locks used for obstructing the throw-lever of a low or "ground" switch-stand against accidental rise when the lever is at the end of its throw, the obstructing member of the device being in the form of a pivotal abutment adapted to assume by gravity, as its normal position, that out of the path of movement of the lever and requiring to be turned manually into that path to obstruct the lever and to be locked to retain it in the obstructing position.

In the accompanying drawings, Figure 1 shows a switch-stand by a plan view, equipped with my improved lock at each end of the throw of the operating lever; Fig. 2 is a perspective view showing a portion of the switch-stand on which the lock is provided, and Figs. 3 and 4 are enlarged sections on line A, Fig. 1, respectively showing the lock in its inoperative and operative condition.

The switch-stand shown in the drawings for illustration of my present improvement, which, however, is applicable to any switch-stand in the class referred to, forms the subject of United States Letters Patent No. 934,852, granted to me September 21, 1909, in which the casing 5 containing the switch-operating mechanism adapted to be connected with a switch through the medium of a switch-bar, is provided in its crown-portion with a cam-slot 6 in which the operating-lever 7 works to actuate the mechanism within the casing, with which it is suitably connected, to throw the switch.

One of my improved locks for the operating lever is provided at or adjacent to each end of its throw, and is preferably, as shown, formed integral with the casing 5 on an inclined lever-seat or stop 8 at the end of the cam-slot. The lock-device comprises a pair of similar parallel ears 9, 9 rising from a seat 8 integral with which they may be cast and presenting, at the side adjacent to the path of the lever, an offset-face or shoulder 10. The metal abutment 11 is of general pawl-shape, in its preferred form, to present

at its forward or lever-engaging end a lip 12, the opposite end 13 being of general ball-shape to render that end relatively heavy; and between the ends extends an arm 14 to enter between the ears or standards 9 for there pivoting the abutment by a pin 15. Near the angle formed by the lip 12 and arm 14 a hole 16 is provided to receive a lock-bolt, such as the shackle 17 of a pad-lock 18.

The position which the abutment tends to assume by the manner of pivoting it is that represented most clearly in Figs. 2 and 3, with the heavier end 13 lowermost and stopped by the adjacent side of a seating-lug, thus with the end 11 withdrawn from the path of the lever 7. To obstruct the lever against rising, after being turned to an end of its throw to bear against a seat 8, the abutment is turned on its pivotal support, by raising the end 13, to extend the lip 12 across the operating-lever, thereby bringing the hole 16 in front of the standard-faces 10 and adapting it to receive a padlock shackle 17, which by bearing against these faces locks the abutment in its lever-obstructing position and against turning back to its normal or inoperative position under the gravity of the end 13, which, however, it does upon withdrawing the shackle to permit the lever 7 to be thrown.

What I claim as new and desire to secure by Letters Patent is—

1. A switch-lever lock comprising a pair of standards, an abutment having a lever-obstructing lip thereon, an arm pivoted between said standards, and a pad-lock shackle-receiving hole through the abutment so positioned with relation to the vertical plane of the standards as to clear the edges thereof when the lever-obstructing lip of the abutment is in engagement with the lever and to cause the pad-lock shackle threaded through said hole to abut against the standards and to lock the lever in place.

2. A switch-lever lock comprising a pair of standards, an abutment having a lever-obstructing lip on one side thereof and a weight on its opposite side, an arm intermediate of said lip and weight and pivoted between the standards, and a pad-lock shackle-receiving hole through the abutment so positioned with relation to the vertical plane of the standards as to clear the edges thereof when the lever-obstructing lip of the

abutment is in engagement with the lever and to cause the pad-lock shackle threaded through said hole to abut against the standards and to lock the lever in place.

- 5 3. In combination with a switch-stand, a lever-lock comprising a pair of standards mounted on the casing of the stand adjacent to the end of the path of the throw of the operating-lever, an abutment having a lever-
10 obstructing lip on one side thereof, an arm pivoted between said standards, and a pad-lock-shackle-receiving hole so positioned

with relation to the vertical plane of the standards as to clear the edges of the same when the lever-obstructing lip of the abut- 15
ment is in engagement with the lever and to cause the pad-lock-shackle threaded through said hole to abut against the standards to lock the lever in place.

AXEL A. STROM.

In presence of—

J. G. ANDERSON,
R. A. SCHAEFER.