P. A. HUDDLESTON.

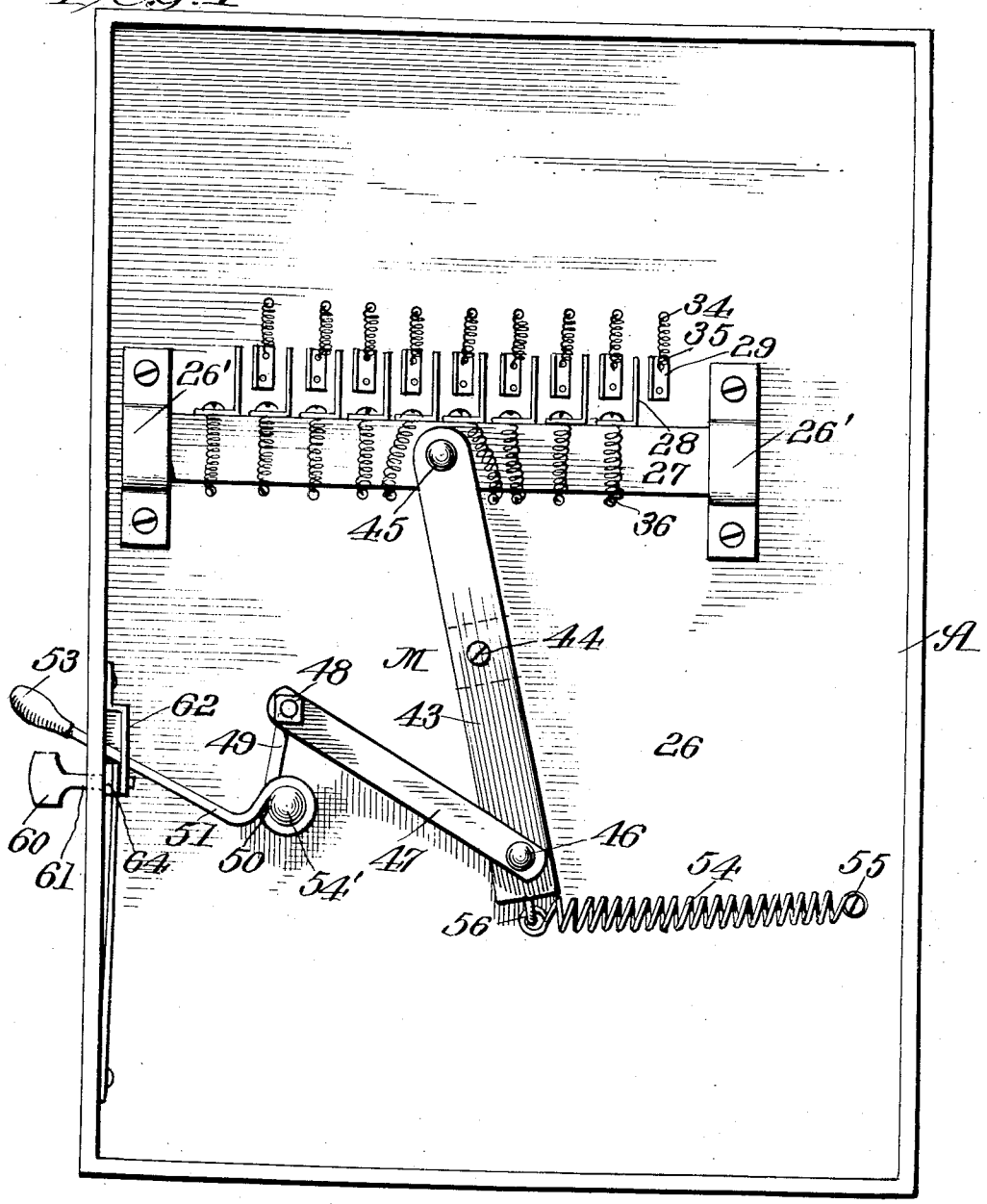
ELECTRIC SWITCH.

APPLICATION FILED JAN. 23, 1913.

1,162,361.

Patented Nov. 30, 1915.

Fig. 1



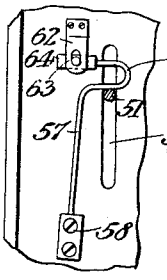


Fig. 2.

Witnesses:

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ELECTRIC SWITCH.

1,162,361. Specification of Letters Patent. Patented Nov. 30, 1915.

Application filed January 23, 1913. Serial No. 743,853.

To all whom it may concern:

Be it known that I, PLEASANT A. HUDDLESTON, a citizen of the United States, residing at Oklahoma city, in the county of Oklahoma, State of Oklahoma, have invented certain new and useful Improvements in Electric Switches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to electric switches, and has particular application to multiple switches adapted to be employed in connection with electric lighting and alarm systems, although it is not limited in its useful application to this particular purpose.

In carrying out the present invention, it is my purpose to provide a simple, efficient and reliable multiple electric switch which may be readily and economically installed and operated for the purpose of opening and closing simultaneously a plurality of electric circuits.

With the above recited objects and others of a similar nature in view my invention consists in the construction, combination and arrangement of parts set forth in and falling within the scope of the appended claim.

In the accompanying drawings: Figure 1 is a view in elevation of a multiple switch embodying my invention. Fig. 2 is a similar view in detail of a portion of one of the walls of the casing of the switch board, and showing the lock for the switch.

Referring now to the accompanying drawings in detail, the letter A indicates the casing for the switch with the cover removed, and 26 designates the base-board. Mounted on this base-board are two spaced brackets 26′ which slidingly support the bar 27, carrying the upright contact plates 28. Each of these contact plates 28 is adapted to be moved into and out of engagement with a companion stationary contact plate 29 fastened to the board 26, the plates 28, of course, being brought into engagement with the plates 29 when the bar 27 is shifted in one direction, and moved out of contact with these plates 29 when the bar 27 is shifted in the opposite direction. Connected with each of the contact plates 28 is a conductor wire 36, while a similar conductor wire 34 is connected at 35 to each of the stationary contact plates 29. These conductors 36 and 34 are for carrying the current, of course, and the present invention has to do with the simultaneous making and breaking of the circuits of these conductors at the switch board. For the purpose of shifting the bar 27 to move the contacts 28 into and out of engagement with the stationary contacts 29, I provide an arm 43, which is centrally pivoted at 44 to the board 26, one end of the arm being connected by a pivot 45 to the bar 27, while the opposite end of the arm is pivoted at 46 to one end of the link bar 47, the other end of the link bar being connected at 48 to the extension 49 of the coil 50 of the operating lever 51, which lever extends through the slot 52 in the side of the casing, and is provided with an operating handle 53. A coil spring 54 is fastened to the casing at 55, and to the arm 43 at 56, and normally tends to throw the sliding bar 27 in a direction to hold the contact plates 28 away from the contact plates 29. When it is desired to move the contact plates 28 into engagement with the contact plates 29 and thus electrically connect the conductor wires 36 with the conductor wires 34, the operator depresses the handle 53 so that through the lever 51, which is pivotally mounted on the stud 54′, the link 47 and the arm 43 are shifted to slide the bar 27 to simultaneously bring all the contacts 28 into engagement with their companion stationary contacts 29. To lock the operating lever 51 in switch closing position, I preferably employ the locking mechanism shown herein, and which includes an arm 57 fastened at 58 to the side wall of the casing and terminating in a U-shaped head 59 adapted, when the arm is forced inward across the face of the slot 52 to bear against the lever 51, whether the latter be above the arm as shown in Fig. 1, when the switch is open, or below the arm, as shown in Fig. 2, where such lever is illustrated as depressed to switch closing position. To operate this locking arm, I provide a key 60, the shank 61 of which extends through the side of the casing and finds a bearing in the bracket 62, the end of the shank extending through an aperture 63 in the bracket. This key shank carries a block 64, preferably oblong in form, so that when it is turned transversely, as shown in Fig. 2, it forces the head 59 of the locking arm across the slot in the path of the lever 51. But when the block is turned so that it lies lengthwise of

the bracket, the locking arm 57 will spring out of the path of the slot 52 and the lever 51 is free to be operated. Thus it will be seen that by means of this lock the switch may be held either in open or closed position.

What I claim is:

A multiple switch including a base-board, a series of spaced fixed contacts fastened to the board and adapted to have electric conductors connected therewith, parallel brackets mounted on the board, a bar sliding in said brackets, a series of spaced contacts fixed upon the bar and movable therewith into and out of engagement with the first series of contacts, said second series of contacts being adapted to have electric conductors connected therewith, a lever pivotally mounted intermediate its ends on the base-board and having one end connected to the sliding bar, a spring having one end connected with the other end of the lever, the other end of said spring being connected to a fixed object, a bell crank lever pivoted to the base-board, a link connecting one end of the bell-crank lever with the first-mentioned lever, a handle on the opposite end of the bell-crank lever, and a locking device arranged to releasably hold the handle-provided arm of the bell crank lever in open and closed positions.

In testimony whereof, I affix my signature, in the presence of two witnesses.

PLEASANT A. HUDDLESTON.

Witnesses:

FRANCIS BOYLE,

K. B. CAVANAGH.