R. C. HULL.

ELECTRIC SWITCH.

APPLICATION FILED DEC. 4, 1912.

1,095,279.

Patented May 5, 1914.

FIG. 1.

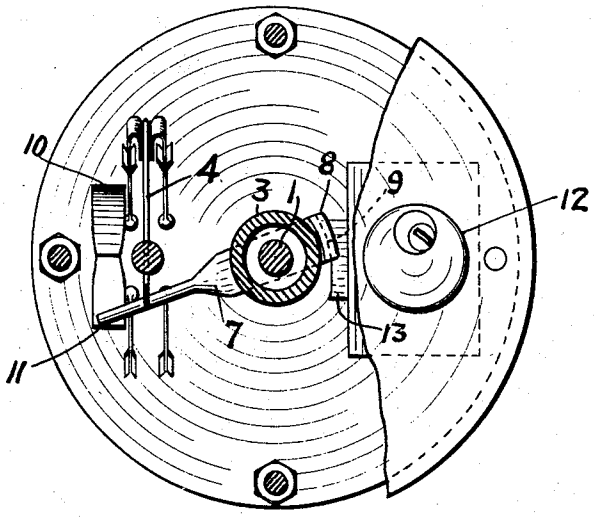


FIG. 2.

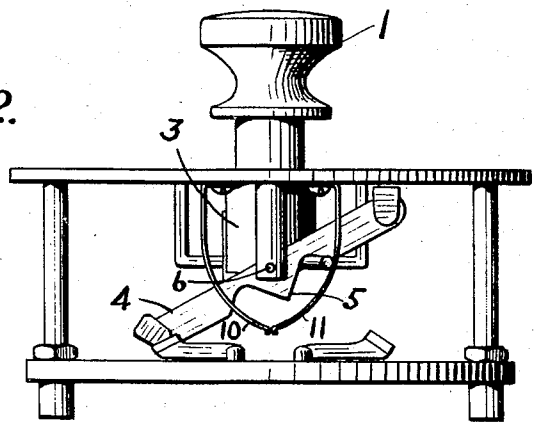
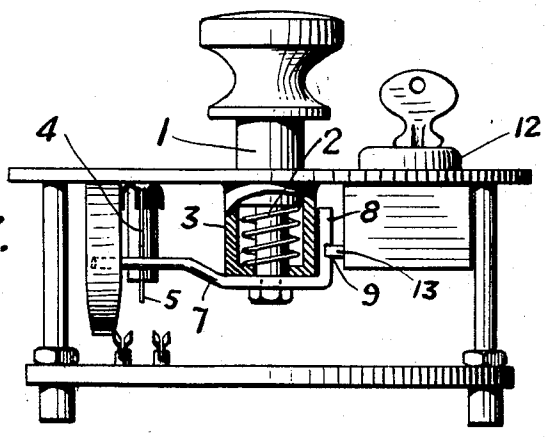


FIG. 3.



WITNESSES:

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ELECTRIC SWITCH.

1,095,279. Specification of Letters Patent. Patented May 5, 1914.

Application filed December 4, 1912. Serial No. 734,808.

To all whom it may concern:

Be it known that I, ROBERT C. HULL, a citizen of the United States, residing at Germantown, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Electric Switches, of which the following is a specification.

The principal objects of the present invention are to provide simple, comparatively inexpensive and reliable push mechanism for operating a switch arm, and to combine such mechanism with a lock in such manner that it can be locked and unlocked in either position of the arm.

The invention will be claimed at the end hereof, but will be first described in connection with the embodiment of it chosen among other embodiments for illustration in the accompanying drawings, in which—

Figure 1, is a top or plan view of a switch with parts broken away embodying features of the invention. Fig. 2, is a front view, and Fig. 3, is a side view, partly in section.

In the drawings 1 is a spring retracted push stud. As shown in the drawings the spring 2, mounted in the sleeve 3, encircling a reduced portion of the stud 1 and bearing at one end on the stud and at the other end on an inturned flange on the sleeve, is a means for retracting the stud.

4, is a contact arm pivoted intermediate of its ends and provided with a generally V-shaped cam 5, alined with the pivot 6.

7, is a finger arranged crosswise of the stud and pivotally connected with the end of the stud. This finger is provided with a heel 8 having a notch 9.

10 and 11 are side guide fingers for passing the finger 7 across the cam.

12, is a lock provided with a bolt 13 for engaging the notch 9 in either position of the finger. The guides may or may not be yielding or springy.

Assuming the bolt 9 to be withdrawn and the parts in the position shown in Fig. 2, when the stud 1 is depressed the finger 7 is also depressed and is guided by the spring or member 11 across, that is, to the left of the V-shaped cam 5. Upon release of the stud 1 its spring 2 throws the stud back to its initial position, that is upward and in rising the finger tips the contact arm 4 so that its right hand end makes contact. When the stud is again pushed the spring or member 10 throws the finger across the point of the cam 5 and when the stud is released the parts return to the position shown in Fig. 2. The notch 9 is of the form and plan of the part of a circle, so that the bolt can be made to engage the heel 8 in any position thereof, that is whether turned in one direction or the other.

What I claim is:

1. A switch comprising the combination of a spring retracted push stud, a contact arm pivoted intermediate of its ends and provided with a cam alined with the pivot, a finger arranged crosswise of the stud and pivotally connected therewith, and side guides for passing the finger across the cam, substantially as described.

2. A switch comprising the combination of a spring retracted push stud, a contact arm pivoted intermediate of its ends and provided with a cam alined with the pivot, a finger arranged crosswise of the stud and pivotally connected therewith, and guides for passing the finger across the cam, substantially as described.

In testimony whereof I have hereunto signed my name.

R. C. HULL.

Witnesses:
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