

(No Model.)

D. H. ARMSTRONG.
ELECTRIC SWITCH.

No. 483,704.

Patented Oct. 4, 1892.

Fig. 1.

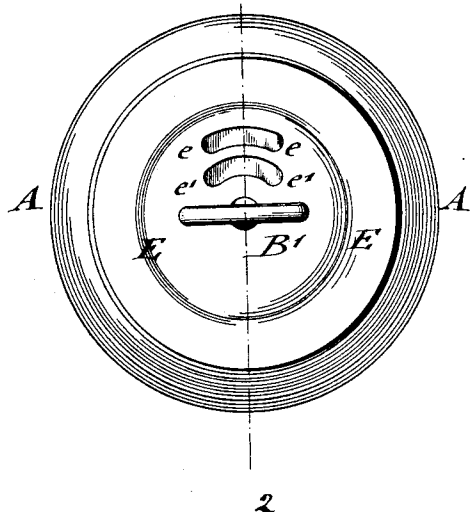


Fig. 2.

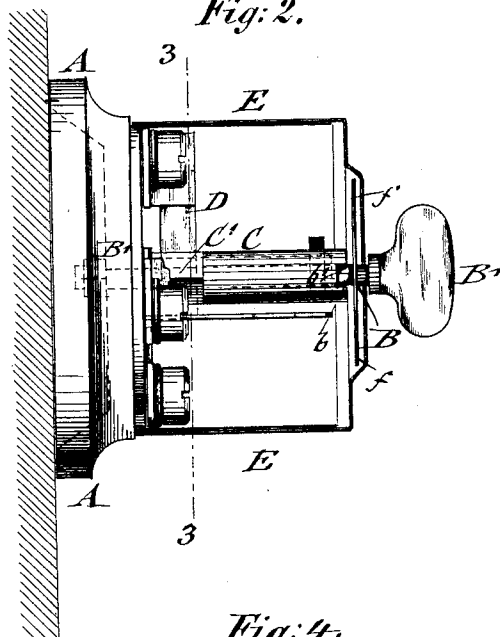


Fig. 3.

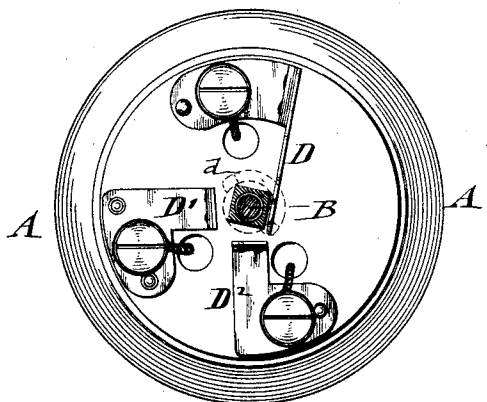


Fig. 4.

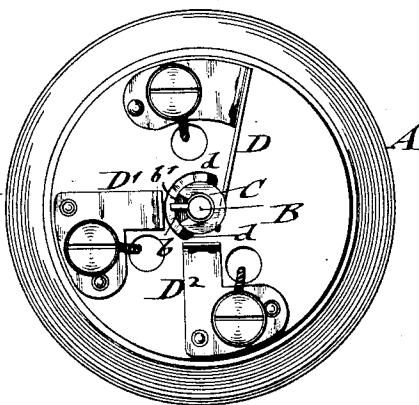
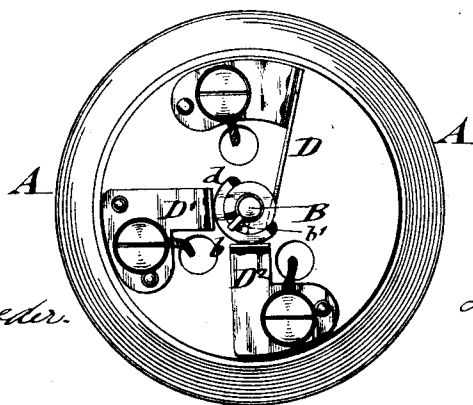


Fig. 5.



WITNESSES:

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DAVID H. ARMSTRONG, OF LONG ISLAND CITY, NEW YORK.

ELECTRIC SWITCH.

SPECIFICATION forming part of Letters Patent No. 483,704, dated October 4, 1892.

Application filed June 11, 1892. Serial No. 436,326. (No model.)

To all whom it may concern:

Be it known that I, DAVID H. ARMSTRONG, a citizen of the United States, and a resident of Long Island city, Queens county, New York, have invented certain new and useful Improvements in Switches for Electric Circuits, of which the following is a specification.

This invention relates to an improved switch for electric-lighting circuits whereby one switch can be used for connecting at will one or two different circuits, so that the number of switches required for lighting circuits is diminished, the switch being so arranged that the position of the same relatively to the circuits is readily indicated; and the invention consists of a switch for electric-lighting circuits which comprises a center post having a thumb-piece at its outer end, a sleeve on said post provided with a segmental cam, said post being provided with a pin for engaging a recess in said sleeve a contact-spring for the main circuit, forming contact with the square end of the sleeve, and two contact-springs making connections with the additional lighting-circuits and adapted to be placed in contact with the cam on the sleeve, so that either one or both lighting-circuits are switched into circuit with the main circuit, as will be fully described hereinafter, and finally pointed out in the claim.

In the accompanying drawings, Figure 1 represents a front elevation of my improved switch for electric circuits. Fig. 2 is a vertical transverse section of the same on line 2 2, Fig. 1. Fig. 3 is a vertical transverse section on line 3 3, Fig. 2; and Figs. 4 and 5 are front views of the switch, showing it connected, respectively, with one and two lighting-circuits.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents a base, of porcelain or other insulating material, which is screwed to the wall, ceiling, or other suitable point of support. To the base A is attached a center post B, to the outer end of which is applied a thumb-piece B'. The post B can be turned by means of the thumb-piece B' on its axis in either direction, it being provided with a pin *b* that engages a recess *b'* at the end of a sleeve C, which is applied to the post B and made of square cross-section at

the end C' next adjacent to the base A. A contact-spring D is connected with the main line by which the lighting-circuit is supplied and placed in contact with the square end C' of the sleeve C, it remaining in contact with the same into whichever position the sleeve is placed by the turning of the post B. The sleeve C is provided near its outer end with a raised segmental portion or cam *d*, which may be placed in contact with two contact-springs D' D² that are attached to the base A, and which are connected with two separate lighting-circuits. The raised segmental cam *d* is made of sufficient length, so as to form contact with both contact-springs D' D², or to interrupt contact with one or both springs when it is placed in the intermediate position, as shown in dotted lines in Fig. 3.

When it is desired to switch in one lighting-circuit only, the post B and sleeve C are turned on its axis, so that the cam *d* forms contact with either one of the springs D' D², as shown in Fig. 4, while when both lighting-circuits are to be switched into circuit with the main line the post B and sleeve C are turned until the cam *d* is placed in contact with both springs D' D², as shown in Fig. 5.

For cutting out one of the lighting-circuits after both are supplied with the lighting-current the post and sleeve can be turned in either direction to the left or to right, the spring D forming contact in each case with one of the sides of the square end of the sleeve, so as to secure the regular supply of the current. The switch is inclosed by a cylindrical shell E, which is provided with arc-shaped slots *e e'* concentric with the post, through which the indicating words "on" or "off" on a disk *f*, that is attached to the post B back of the face of the shell or casing E, are rendered visible, so that the position of the switch is readily indicated thereby, whether one or the other lighting-circuit, or both, are placed in circuit with the main line. It appears thus that by a simple change in the ordinary switches they can be used for supplying two electric-lighting circuits with current, so that the number of switches required can be considerably diminished and the supervision of the same simplified and facilitated.

Having thus described my invention, I claim as new and desire to secure by Letters Patent--

5 A switch for electric circuits, composed of an insulating-base, a center post having a thumb-piece at the outer end and a square inner end, a sleeve on said post, means for connecting the post with said sleeve, a seg-
10 mental cam on said sleeve, a contact-spring connected with the main line, placed in contact with the square end of the sleeve, and two contact-springs adapted to be moved in

or out of circuit with the cam, so that either one or both lighting-circuits can be placed in circuit with the main line, substantially as 15 set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

DAVID H. ARMSTRONG.

Witnesses:

PAUL GOEPFEL,
CHARLES SCHROEDER.