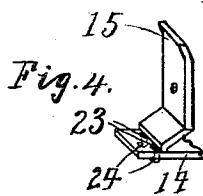
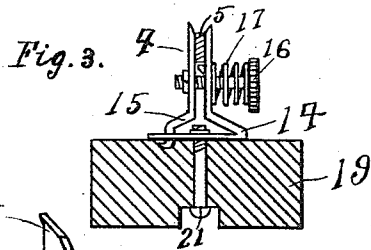
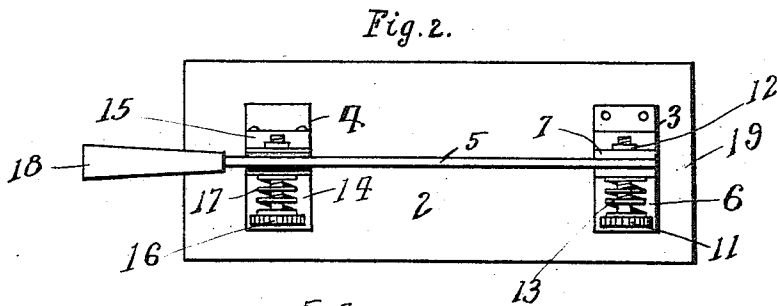
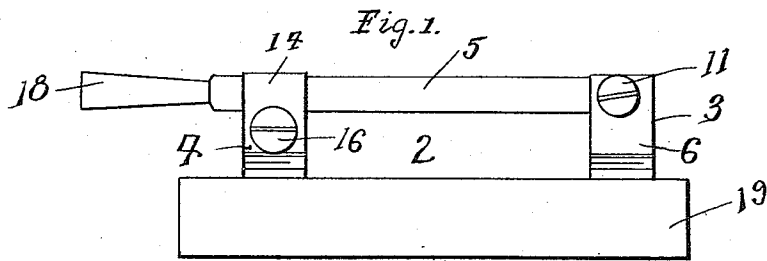


F. E. SUMMERS.
ELECTRIC SWITCH.
APPLICATION FILED JUNE 24, 1915.

1,265,697.

Patented May 7, 1918.



Inventor
Frank O. Summers.

UNITED STATES PATENT OFFICE.

FRANK E. SUMMERS, OF NEAR MEMPHIS, MISSOURI.

ELECTRIC SWITCH.

1,265,697.

Specification of Letters Patent.

Patented May 7, 1918.

Application filed June 24, 1915. Serial No. 36,144.

To all whom it may concern:

Be it known that I, FRANK E. SUMMERS, a citizen of the United States, residing near Memphis, in the county of Scotland and State of Missouri, have invented new and useful Improvements in Electric Switches, of which the following is a specification.

This invention relates to circuit closers and more particularly to switches and has for an object to provide a device of this character which will be simple and inexpensive and efficient in construction and positive in its operation.

With the above and other objects in view my invention consists in the arrangement and details of construction disclosed in the drawings and specification, and then more particularly pointed out in the appended claim.

In the drawings wherein similar reference characters designate similar parts throughout the respective views:

Figure 1 is a side elevation of a switch embodying my improvement.

Fig. 2 is a top plan view thereof;

Fig. 3 is an elevation of one of the contact members, the base plate being in section, and

Fig. 4 is a perspective view of my invention.

In the drawings, which are merely illustrative of my invention, a base plate or block 19 is made of insulating material. Upon it are secured two electric contact members associated with a knife switch 5, which is pivoted by the bolt 11 upon a bracket 3, having a bent foot 6 attached to the base plate. The bracket 3 is composed of two sections each formed with the upright contacting wall 7, a screw bolt 11 connecting the contact walls 7. A nut 12 is screwed upon the threaded bolt and is adapted to bear against one of the walls 7 while a spring 13 is coiled around this bolt and bears against one of the walls 7 and also against the head of the bolt. The spring 13 applies pressure against the walls 7 to effect good contact with the switch blade 5.

The block 19 is formed on its under side with a recess in which is received the head of a fastener bolt, which bolt secures upon the block the flat base portion of a bracket or contact arm 14 which is provided with an upstanding wall through which passes a bolt 16. This bolt also projects through the up-

right wall of a metallic contact arm 15 formed with an outwardly inclined portion having a shoulder foot portion parallel with its axis. This shoulder foot portion of the contact arm 15 is formed with a pair of integral hooks 24 between the opposite edges of said arm, which hooks depend into openings 23 formed in the extension of the base portion of the bracket 14, the block 19 being cut away so as to accommodate these hooks. The spring 17 encircles the bolt 16 and bears against the head of this bolt and against the upright wall of the bracket or arm 14, while there is a nut threaded on the bolt and engaging the upright wall of the arm 15. The shoulder foot portion of the arm 15 seats upon the base portion of the arm 14 and this is clearly shown in Fig. 4. It will be seen that the arm 15 is free to slide back as the hooks 24 have slight play in the openings 23 mentioned above and said sliding occurs as the knife 5 is projected between the upright walls of the arms 14 and 15, causing the arm 15 to yield and move laterally and causing the spring 17 to be placed under tension. When the knife is withdrawn from the members 14 and 15 the member 15 will be drawn back by the spring 17. It will thus be seen that the contact arm 15 is supported both upon the bolt 16 and upon the base portion of the arm 14 because the shoulder foot portion of the arm 15 slidably engages the base portion of the contact member 14.

Numerous modifications may be resorted to in practice without departing in principle from the details of construction disclosed herein.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

In a device of the class described, in combination, an insulator block, a contact arm consisting of a flat base portion secured to said block and an upright portion, a movable contact arm consisting of a main upright portion, an intermediate inclined portion and a shoulder foot portion parallel to the main upright portion, a pair of integral hooks formed dependingly upon the shoulder foot portion of said movable contact arm, the base portion of the fixed contact arm being formed with openings in which said hooks project so as to have slight play, a bolt passing through the up-

right portions of both contact arms and adapted to hold the shoulder foot portion of the movable contact arm in frictional engagement with one base portion of the 5 first-named contact arm, said bolt having a head, a spring coiled around said bolt and engaging said bolt head and said upright portion of the fixed contact arm, a nut on said bolt, and a knife blade pressing between said contact arms so as to cause said 10 shoulder foot portion to slide as said hooks move within said last-named openings against the tension of said spring.

FRANK E. SUMMERS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."