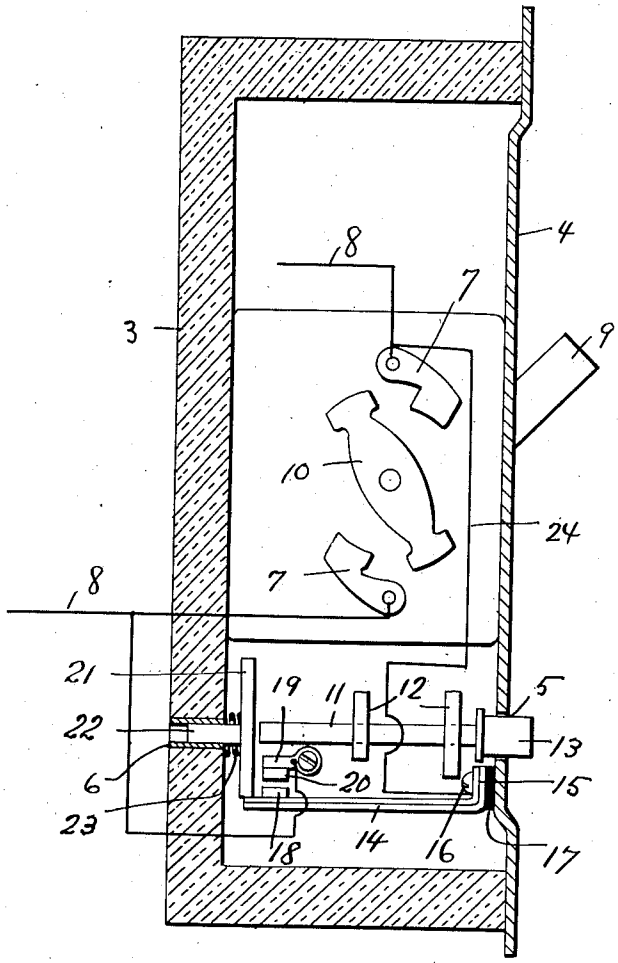
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RETARDED CIRCUIT BREAKER

Filed April 22, 1929



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RETARDED CIRCUIT BREAKER

Application filed April 22, 1929. Serial No. 357,062.

The present invention relates to new and useful improvements in circuit makers and breakers and more particularly to a novel retarded circuit breaker. The present invention is especially adapted for use in electric light circuits so that when a lamp circuit in a given room is to be opened, this novel switch may be actuated with the result that the lamp will not be immediately extinguished, but will give the party operating the switch sufficient time to leave the room, without moving in the darkness.

The principal object of the invention is to provide a circuit braker which will break a circuit at a predetermined time after the actuation of its contacting element.

Another object of the invention is to provide a device of this character, which because of its simple construction can be manufactured at a low cost.

These and other objects of the invention will become apparent to the reader after considering the invention as described and claimed hereinafter.

The single view in the drawing discloses a vertical sectional view through the switch casing and showing the elements in circuit opened position.

Referring to the drawing wherein like reference characters designate like parts, a casing 3 is open at one side and provided with a cover plate 4 having an opening 5 in its lower portion. The casing 3 is of suitable di-electric material and has a bushing 6 disposed within an opening in its back wall.

Within the casing 3 is located a pair of stationary contacts 7—7 for interrupting the commercial current supply line 8. A lever 9 is provided for operating the movable switch element 10 and this foregoing switch mechanism may be regarded as a conventional structure as the following is the gist of the invention.

Located within the lower portion of the casing 3 is a slide rod 11, disposed through a pair of guides 12. The rod 11 is equipped with a push button 13 at one end for slidable disposition through the opening 5 in the cover 4. A strap 14 of suitable thermo-responsive material has one end portion 15 bent upwardly and secured to the cover 4 by a suitable means 16. A spacer 17 of suitable di-electric material separates the thermo element from the metallic cover 4. The contact 18 is provided on the free end of the element. An arm 19 extends from a side wall and also has a contact 20 thereon.

A follower plate 21 has a shank 22 slidably disposed in the bushing 6, while a spring 23 is interposed between the plate 21 and the bushing 6 to normally urge the follower to the position shown in the drawing. A jumper 24 connects one of the stationary contacts 7 to the thermo-element 14, while the other stationary contact 7 is connected to the arm 19.

It will thus be seen that when the lever 9 is moved so that the circuit through the conventional switch is opened, the simultaneous pushing in of the rod 11 will disengage the brake 21 from the element 14, so that the element will clamp inwardly and contact with the arm 19, thus maintaining the circuit closed. However, the heat of the current passing through the thermo responsive element will cause the same to expand and become spaced from the arm 19, the follower 21 then engaging the end portion thereof so as to maintain the same spaced from the arm 19 and the lamp circuit broken until the switch rod 11 is again engaged against the follower plate 21. While the foregoing specification has been in definite terms, it is to be understood that numerous changes in the specific, shape, size and materials may be resorted to, without departing from the spirit or scope of the invention as claimed hereinafter.

Having thus described the invention, what is claimed as new is;

1. A circuit maker and breaker comprising a thermostatic element, a contact on said element, a manually reciprocatory rod, a follower, a stationary contact, said contacts being normally engaged, said follower being adapted to engage said thermostatic element to retain the latter spaced from the stationary contact.

2. A circuit maker and breaker comprising a thermostatic element, a contact on said

element, a manually reciprocatory rod, a follower, a stationary contact, said contacts being normally engaged, said follower being adapted to engage said thermostatic element to retain the latter spaced from the stationary contact, and spring means for engaging said follower so that the same will retain the thermostatic element spaced from the stationary contact.

In testimony whereof I affix my signature.

CAREY P. SWEENY.