No. 835,278. PATENTED NOV. 6, 1906.

G. W. GOODRIDGE.

HANDLE FOR ELECTRIC SNAP SWITCHES.

APPLICATION FILED NOV. 21, 1905.

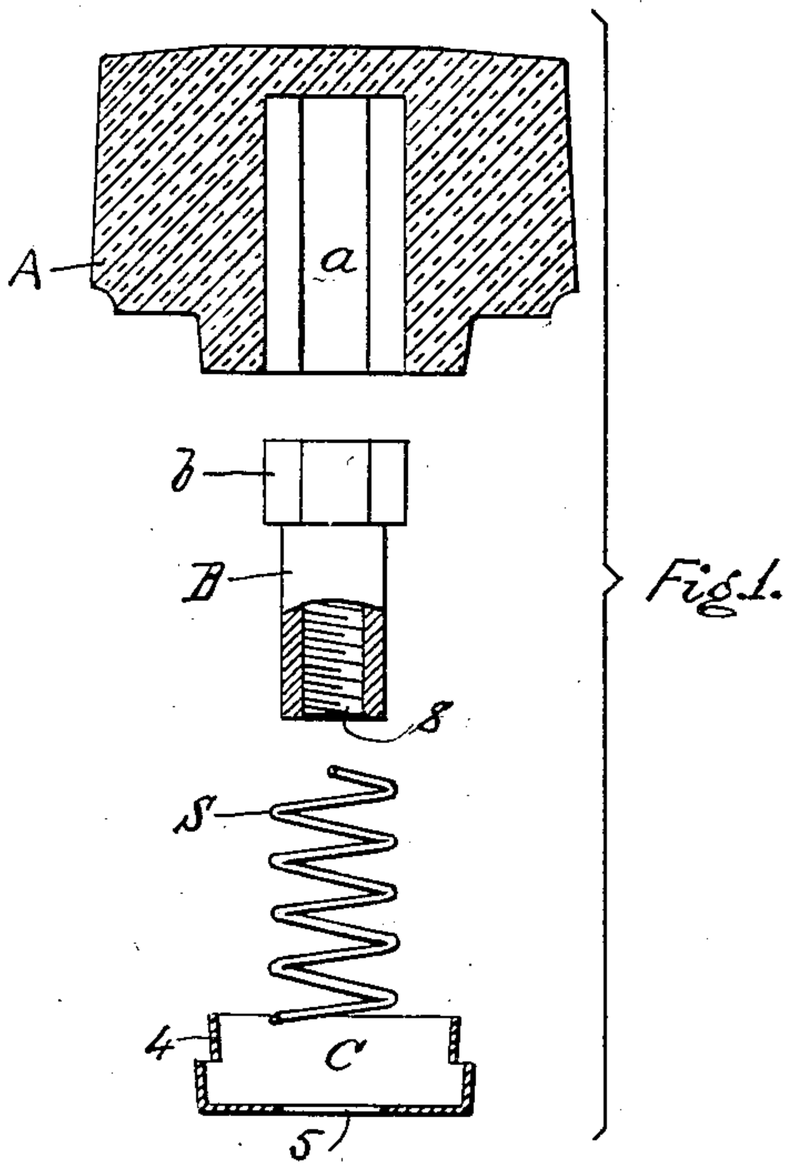
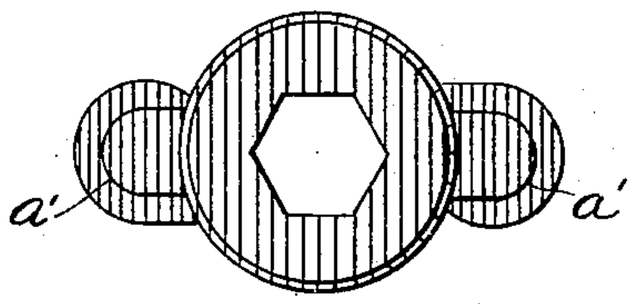


Fig. 1.

Fig. 2.



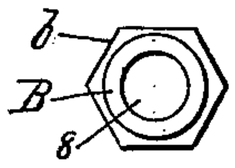


Fig. 3.

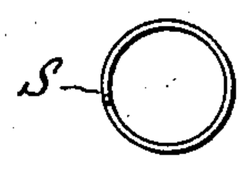


Fig. 4.

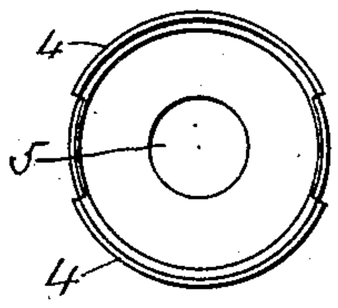


Fig. 5

Fig. 6.

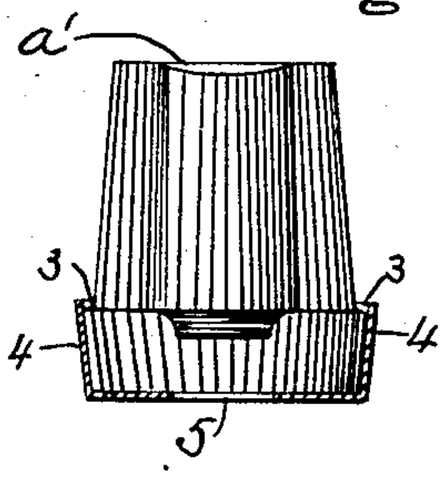
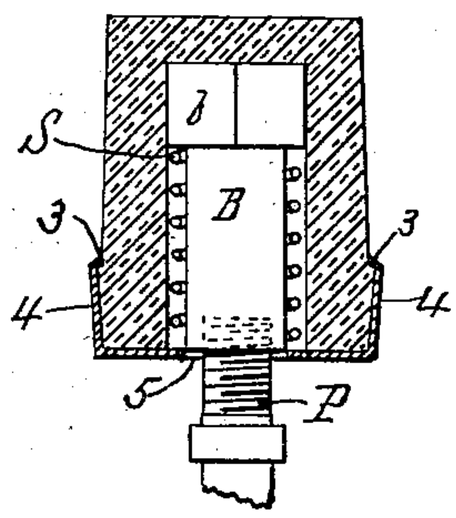


Fig. 7.



WITNESSES

Walter Abbe

Paul A. Blair.

INVENTOR

Gilbert W. Goodridge

BY

Howson and Howson

ATTORNEYS

UNITED STATES PATENT OFFICE.

GILBERT W. GOODRIDGE, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE PERKINS ELECTRIC SWITCH MANUFACTURING COMPANY, OF BRIDGEPORT, CONNECTICUT, A CORPORATION OF CONNECTICUT.

HANDLE FOR ELECTRIC SNAP-SWITCHES.

No. 835,278. Specification of Letters Patent. Patented Nov. 6, 1906.

Application filed November 21, 1905. Serial No. 288,419.

To all whom it may concern:

Be it known that I, GILBERT W. GOODRIDGE, a citizen of the United States of America, and a resident of Bridgeport, in the county of Fairfield, State of Connecticut, have invented certain new and useful Improvements in Handles for Electric Snap-Switches, of which the following is a specification.

My invention relates more particularly to that class of handles or turn-buttons for rotary snap-switches which are secured to and operate the central spindles of the switch mechanisms and at the same time hold the inclosing caps to the base with a yielding pressure.

The object of my invention is to so construct such a handle of a rotary snap-switch that it will be economical and easy to manufacture and assemble, have few parts, and yet be strong and efficient in use.

In the accompanying drawings, Figure 1 is a view of the several parts of my improved switch-handle ready to be assembled, most of the parts being shown in section. Fig. 2 is an inverted plan view of the handle without its parts. Fig. 3 is an inverted plan view of the plunger. Fig. 4 is an end view of the spring. Fig. 5 is a plan view of the cup. Fig. 6 is an end view of the handle with the cup in section before it is secured in place, and Fig. 7 is a a sectional view of the complete handle.

The body A of the handle is preferably molded of suitable insulating material, and it is formed with a polygonal hole *a*, closed at the top of the handle but open at the under side. In this case the hole is shown as of hexagonal section. In this hole is a plunger B, with a head *b* of corresponding section, but of sufficiently reduced diameter below to receive a spiral opening S, on which the under side of the plunger-head *b* may rest, Fig. 7. The handle is formed with the usual wings *a'* *a'* and also with a central hub or projection a^2 around the mouth of the open end of the hole *a*, this projection being such as to leave shoulders 3 3 on opposite sides of the body of the handle, as shown in Figs. 6 and 7. I provide a flanged sheet-metal retaining-cup C to fit over the outside of this hub or projection, the opposite flanges 4 4 of this cup being of sufficient depth to project beyond the shoulders 3, Fig. 7. This cup is provided with a central hole 5 of a size sufficient to permit the reduced end of the plunger to play through it, but otherwise closing the bottom of the hole *a*, so that when the parts are assembled the lower end of the spring will bear on the cup C, whose flanges 4 4 have meantime been bent over the shoulders 3 3 to hold it to the body A, Fig. 7. The plunger has an internally-threaded hole 8 at its lower end, Fig. 1, to receive the upper threaded end of the switch-operating spindle P, Fig. 7.

In the described construction of switch-handle there are only four parts, as shown, and the composition body A can be easily and economically molded, since there is no metallic part to be embedded in it, as is common in this class of handles. The retaining-cup, moreover, being fitted over the projection or hub tends to strengthen it and prevent it from splitting.

I claim as my invention—

1. The combination of the insulating-body of a switch-handle, with a headed plunger and spring therein, and a retaining-cup secured to the outside of the insulating-body.

2. The insulating-body of a switch-handle, and a headed plunger and spring therein, the said body having a bottom projection with shoulders, in combination with a retaining-cup fitting over said projection and flanged over its shoulders.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GILBERT W. GOODRIDGE.

Witnesses:
H. W. GOLDSBOROUGH,
GEO. B. THOMAS.