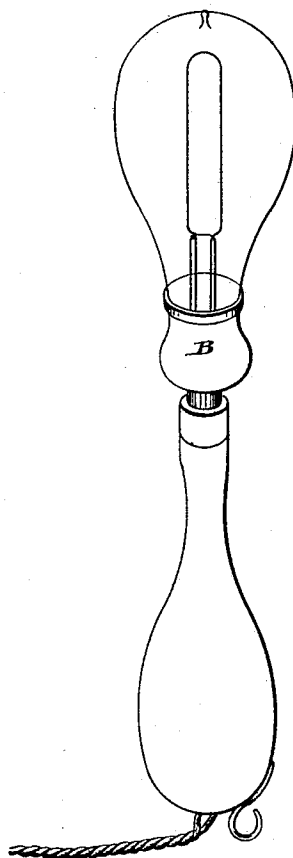
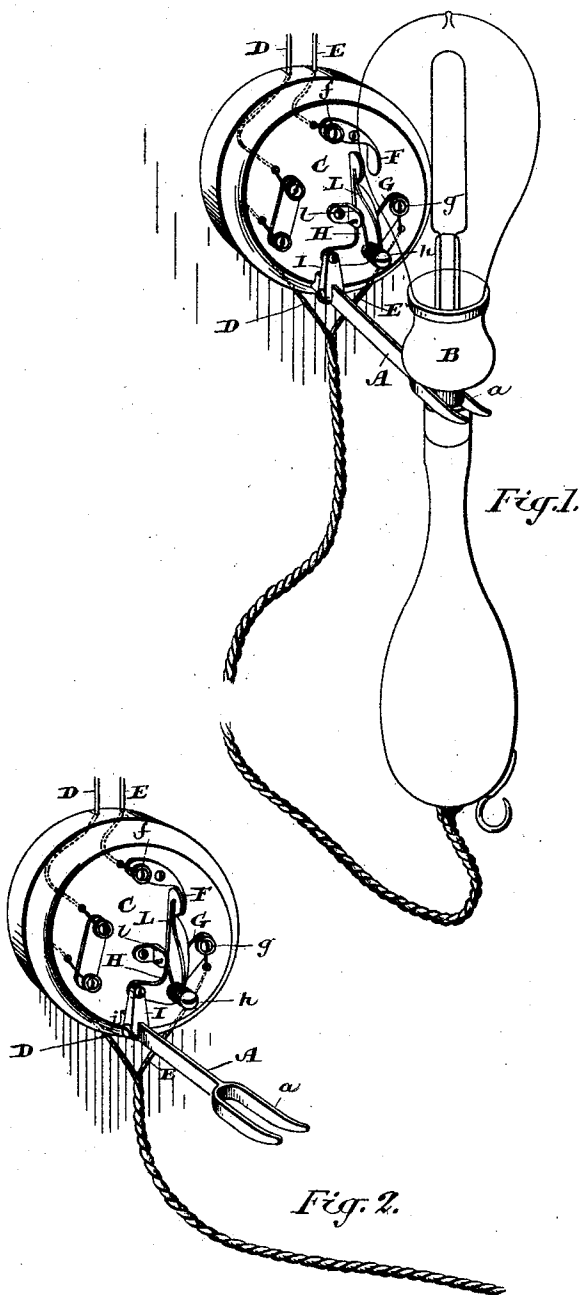


(No Model.)

W. W. SAVAGE.
HOLDER FOR PORTABLE ELECTRIC LAMPS.

No. 452,288.

Patented May 12, 1891.



Witnesses.

Lewis P. Abell

A. B. Monkhouse.

Inventor.

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UNITED STATES PATENT OFFICE.

WILLIAM WALLACE SAVAGE, OF TORONTO, CANADA, ASSIGNOR OF ONE-HALF TO FREDERIC NICHOLS, OF SAME PLACE.

HOLDER FOR PORTABLE ELECTRIC LAMPS.

SPECIFICATION forming part of Letters Patent No. 452,288, dated May 12, 1891.

Application filed February 20, 1891. Serial No. 382,146. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM WALLACE SAVAGE, electrical engineer, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented a certain new and useful Combined Automatic Switch and Holder for Portable Electric Lamps, of which the following is a specification.

A patent has been applied for in the Dominion of Canada under date of February 18, 1891, Serial No. 56,064.

The object of the invention is to design a holder for a portable electric lamp, which, while holding the lamp, will maintain an open circuit, but when the lamp is removed will automatically close the circuit and thereby light the lamp; and it consists, essentially, of a forked lever, the inner end of which is pivoted on the base-plate of the switch, the said lever being connected to a bell-crank, the upper end of which is held from connection with the contact-plate, which completes the circuit by the weight of the lamp held in the forked end of the lever, upon the removal of which lamp, however, a spring arranged for the purpose forces the upper end of the bell-crank into contact with the plate, which completes the circuit, as hereinafter more particularly explained.

Figure 1 is a perspective view showing the lamp in the holder, the cap being removed to show the interior construction of the switch. Fig. 2 is a similar view showing the lamp removed from the holder.

In the drawings like letters of reference indicate corresponding parts.

A is the holder with forked end *a*, designed to hold the portable lamp B; C, the base-plate of the switch; D and E, the wires leading through the switch to the portable lamp B. The wire E extends first to the contact-plate F only, to which it is secured by the binding-screw *f*. The continuation of the wire E extends from the plate G, to which it is secured by the binding-screw *g*, to the portable lamp B. The circuit is thus incomplete between the plates F and G.

H is a bell-crank pivoted on the pin *h*, extending from the plate G.

I is a link connecting the lower end of the bell-crank H to the holding-lever A, which is pivoted at its inner end at *j*. The link I and base-plate C are formed of insulating material.

L is a spring designed to force the upper end of the bell-crank H against the contact-plate F, and *l* is a stop.

Having now described the parts involved in my invention I shall briefly describe their operation.

When the lamp is in position in the holder A, as shown in Fig. 1, the weight of the lamp holds the upper portion of the bell-crank H away from contact with the contact-plate F and against the stop *l*, which serves to support holder with lamp. Upon the lamp B being removed, as shown in Fig. 2, the tension of the spring L immediately forces the upper portion of the bell-crank H against the contact-plate F and the circuit is complete, when the electrical current passing through the wires D and E instantaneously lights the lamp.

Instead of connecting the holding-lever A to the bell-crank H by the link I, I might simplify the construction by making the bell-crank and lever in one piece, forming the forked end in the lower portion of the bell-crank lever.

What I claim as my invention is—

1. The forked lever A, the bell-crank H, pivoted on the pin *h*, extending from the plate G, to which the end of one portion of the wire E is attached, and the spring L, in combination with the contact-plate F, to which the end of the other portion of the wire E is attached, as specified.

2. The forked lever A, pivoted at *j* and connected by the link I to the bell-crank H, which is pivoted on the pin *h*, extending from the plate G, to which the end of one portion of the wire E is attached, and the spring L and stop *l*, in combination with the contact-plate F, to which the end of the other portion of the wire E is attached, as specified.

WILLIAM WALLACE SAVAGE.

Witnesses:

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