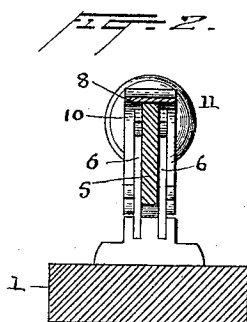
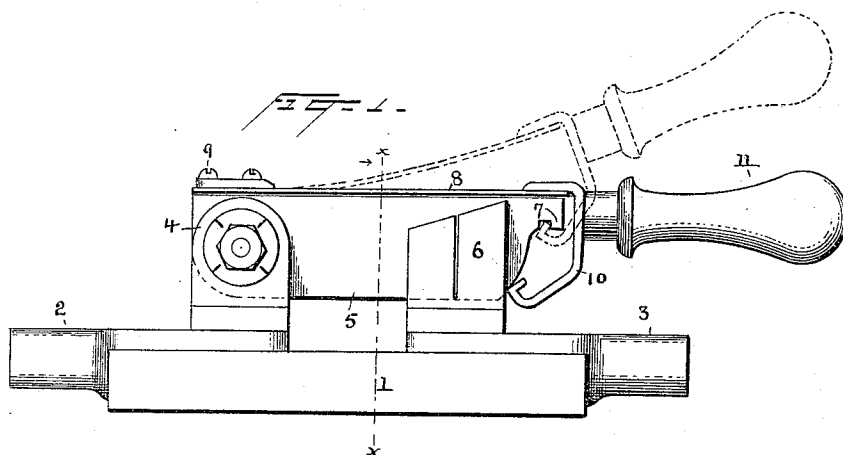


(No Model.)

H. P. BALL.
SNAP SWITCH.

No. 461,560.

Patented Oct. 20, 1891.



Witnesses
Norris A. Clark.
W. F. Oberly.

Inventor
H. P. Ball
By his Attorneys
Lyett Seely.

UNITED STATES PATENT OFFICE.

HENRY PRICE BALL, OF NEW YORK, N. Y., ASSIGNOR TO THE EDISON
GENERAL ELECTRIC COMPANY, OF SAME PLACE.

SNAP-SWITCH.

SPECIFICATION forming part of Letters Patent No. 461,560, dated October 20, 1891.

Application filed March 2, 1891. Serial No. 383,349. (No model.)

To all whom it may concern:

Be it known that I, HENRY PRICE BALL, a citizen of the United States, residing at New York, county and State of New York, have invented a certain new and useful Improvement in Snap-Switches, of which the following is a specification.

The present invention relates to switches adapted to make and break the circuits in which they are placed, the break being accomplished by a sudden or snap movement for the purpose of reducing sparking and consequent injury to the contacts; and the invention consists in the improved switch and in the several combinations hereinafter described and claimed.

In the accompanying drawings, illustrating the invention, Figure 1 is a side view of the switch; and Fig. 2 is a cross-section on the line *x x*, looking in the direction of the arrow.

1 is a base, of slate or other insulating material, on which are mounted two terminals 2 3, to which the circuit-wires may be connected. The terminal 2 is provided with two standards or lugs 4, to which is pivoted the switch-arm 5. The terminal 3 is provided with two springs 6 6, forming a spring-clip for the reception of the free end of the arm or lever 5. The end of said arm is provided with a projection or hook 7. On the top of arm 5 is a plate-spring 8, secured to the arm at the pivoted end by screws 9. The free end of this spring carries a hook 10, extending a considerable distance below the hook 7. The hooks 7 and 10 constitute a means for locking the spring and lever together after the former has been moved a certain distance, so that movement of the lever is not dependent entirely on the tension of the spring. To the spring is also connected a handle 11. It will be seen that the spring is movable independently of the pivoted lever until hooks 7 and 10 come together.

When it is desired to break the circuit

through the switch, the handle 11 is grasped and raised, the first effect being to bend the spring, as indicated by the dotted-line position, putting it under tension until the hook 10 engages with the hook 7. As the handle is moved still farther the arm 5 is positively moved until it is partially withdrawn from the spring-clip, when the tension of the spring 8 is sufficient to suddenly complete the breakage of the circuit.

This switch is very simple and easy to construct and provides efficient means for breaking circuits suddenly, as above described.

Having thus described the invention, what I claim is—

1. The combination, in a switch, of a circuit-terminal, a lever or arm pivoted thereto, a second terminal in the path of said lever, a plate-spring parallel with the lever and connected to said lever near its pivot, and a handle on the spring for operating the switch, substantially as described.

2. The combination, in a switch, of circuit-terminals, a switch-lever adapted to connect and disconnect the same, a spring connected to the lever and to a suitable handle, and a positive lock or engaging device between the spring and lever, and which is brought into operation by a partial movement of the handle, substantially as described.

3. The combination, in a switch, of two circuit-terminals, a lever pivoted to one terminal and adapted to move toward or from the other terminal, said lever having a hook or projection at its free end, a spring having a corresponding device to engage with said hook or projection and movable independently of the lever, and a handle, substantially as described.

This specification signed and witnessed this 25th day of February, 1891.

HENRY PRICE BALL.

Witnesses:

W. S. ANDREWS,
JOHN MCGHIE.