

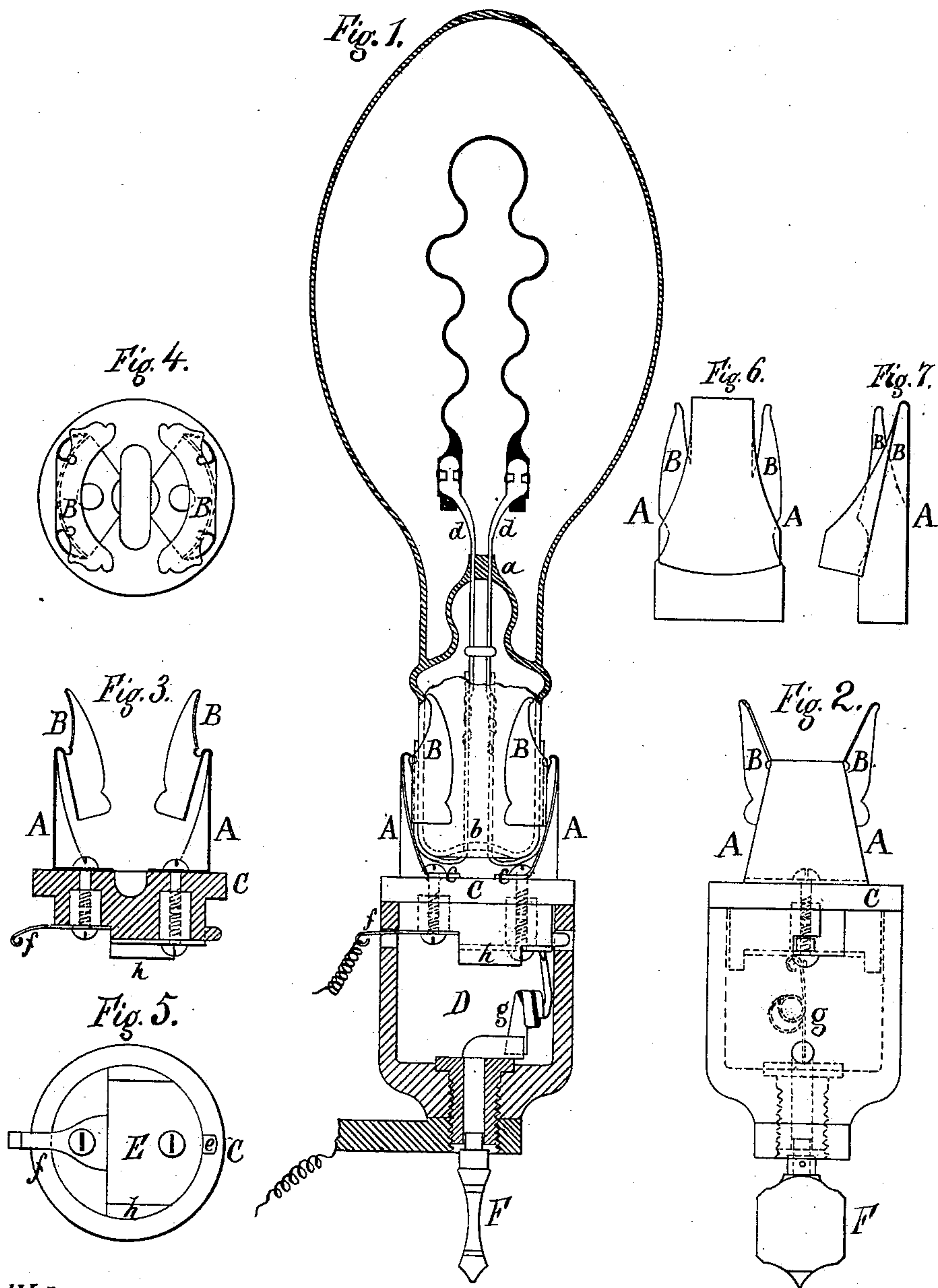
(Model.)

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SWITCH FOR INCANDESCENT LAMPS.

No. 262,470.

Patented Aug. 8, 1882.



Witnesses:-
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UNITED STATES PATENT OFFICE.

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SWITCH FOR INCANDESCENT LAMPS.

SPECIFICATION forming part of Letters Patent No. 262,470, dated August 8, 1882.

Application filed November 1, 1881. (Model.)

To all whom it may concern:

Be it known that I, CHARLES G. PERKINS, of the city of New York, in the county and State of New York, have invented a new and useful Improvement in Switches for Incandescent Lamps; and I hereby declare the following to be a full, clear, concise, and exact description, such as will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawings, which form part of this specification.

Figure 1 is a sectional view of an incandescent lamp having my switch connected therewith. Fig. 2 is a sectional view cut through the center of the switch and switch-box. Fig. 3 is a sectional view of the socket into which the neck of the lamp fits. Fig. 4 is a view showing the top of the switch when the disk or cover of the switch-box is removed. Fig. 5 is a bottom view of the disk or switch-box cover. Figs. 6 and 7 are views showing the two sides of the socket into which the neck of the lamp fits.

The object of my invention is to make a switch for incandescent lamps for the purpose of putting the same in or out of circuit, and to provide a socket or holder for the lamp.

In Fig. 1 the switch is shown in connection with the lamp. Two pieces, A A, are stamped of springy metal—such as German silver—and of a size to form a socket into which the neck of the lamp will fit. These pieces have two cuts or slits running about half way down and tapering toward each other. The piece A between the slits is turned down, so as to be connected with the disk C or cover of the switch-box, and also supports the remainder, which forms one of the sides of the socket B B, which have ear-shaped projections, and into this socket the neck of the lamp fits. The lower ends of the pieces A A may have flanges c c, connecting with the cover C of the switch-box, or may be secured to separate pieces, which are attached thereto. One form of the pieces B B, which are separated from each other, is shown in Fig. 2 and another form in Fig. 3.

The under side of the disk or cover C of the switch-box D is shown in Fig. 5. This cover is of a circular form, having a small projection, e, molded thereon at one side and a small

metal spring, f, on the opposite side, which fit into notches molded into the top of the box D, which contains the contact mechanism. The spring f is fixed in its place by the same screw which passes up through one of the perforations in the disk-cover for the purpose of securing one of the side pieces A to the disk. The projection e and spring f are shown in Figs. 1, 3, and 5. On the under side of this disk or cover are two small non-conducting lugs, h h, molded thereon. Between these two lugs h h the contact-plate E is placed and secured to the under side of the disk by a screw or pin in such a way as to connect it with one of the pieces A, secured to the upper side thereof, as above described.

For the purpose of making a complete circuit there is within the switch-box D a German-silver tapering spring, g, twisted in the middle one or more times, so as to make it more springy. The tapering end of the spring g is turned in the opposite direction to its broader end, the latter being fixed into a slit in that part of the switch-handle F which runs up through the base of the box, as shown in Figs. 1 and 2.

The spring f is in connection with one pole of an electrical source and that part of the contact-spring g which is fixed to the handle F at the base of the box is in electrical contact with the other pole. That part of the switch-handle F which enters the switch-box from beneath, and into which the contact-spring g is fixed, is turned at right angles to the remainder, in order to cause the contact-spring to snap onto the contact-plate after it has passed one of the lugs h h, and thereby prevent injury to the contact-spring.

The cylinder switch-box D has on its opposite sides at the top slots or open spaces running nearly one-quarter of an inch downward, and then partly around the box in form of bayonet-grooves.

When the disk or cover C is placed so that the projection e on one side and the spring f on the opposite side will fit into the grooves or slots it is then pressed down and slightly turned, so that the projection and spring will fit into the grooves and secure the disk to the switch-box, as it were, by bayonet-joints.

When it is desired to put the lamp in circuit

the neck of the bulb is placed within the socket, and each of the carbon terminal wires extending outside the neck of the lamp and turned up at each side of the neck touches one of the
5 pieces A A, and the handle *f* is turned until the contact-spring *g* passes over the broad end of one of the lugs and snaps onto the contact-plate E. When it is desired to put the lamp
10 out of circuit, this is done by turning the handle F in the same or in the opposite direction until the spring *g* passes along the contact-plate inside the lugs, so that when it arrives at the end of the contact-plate it snaps off
15 quickly, the object being to prevent as little spark as possible following the contact-spring as it is used for putting the lamp in or out of circuit.

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

1. A switch for incandescent lamps, consisting of a spring, *g*, secured to the handle F, in combination with the switch-box D, the lid of which has two lugs, *h h*, between which is a
25 contact-plate, E, for the purpose of putting the

lamp in or out of circuit, substantially as described.

2. In a switch for incandescent lamps, the combination of the lid C of the switch-box, and the pieces A A, secured to the upper side of the
30 same, with the contact-plate E and spring *g*, said spring being secured to the handle F, and so constructed that by turning the handle it will describe an arc around the under side of the lid C and be made to snap on or off the con-
35 tact-plate E, substantially as described.

3. The switch-box D, having two bayonet-grooves in the opposite sides of the top thereof, in combination with the disk or cover C, hav-
40 ing the projection *e* on one side and the metallic spring *f* on the opposite side, which fit into the grooves at the top of the switch-box for the purpose of securing the lid to the same, and so arranged as to form a means of electri-
45 cal connection with the contact-spring *g*, substantially as described.

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