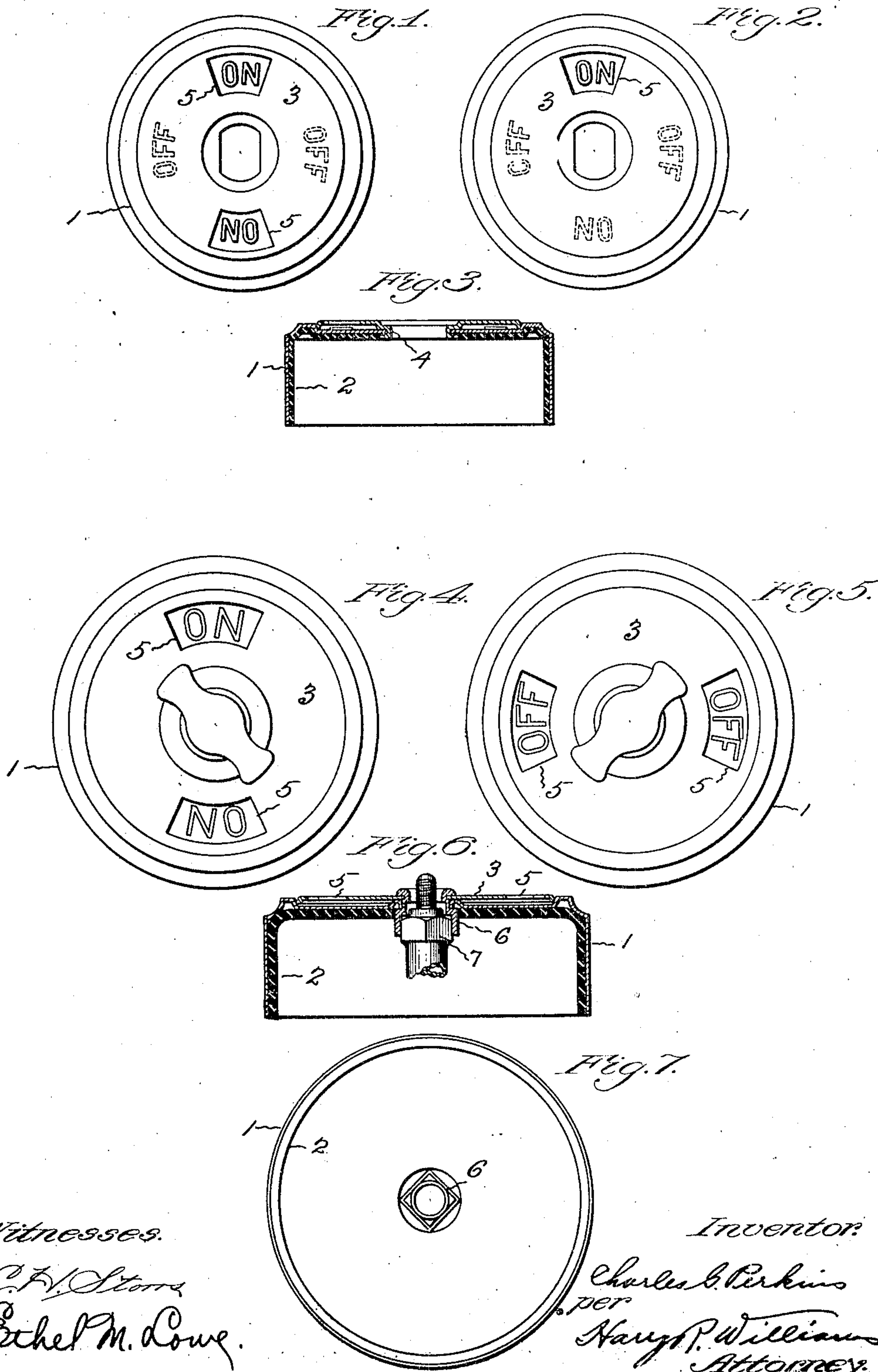


No. 837,498.

PATENTED DEC. 4, 1906.

C. G. PERKINS.
INDICATING ELECTRIC SWITCH COVER.

APPLICATION FILED JAN. 26, 1906.



UNITED STATES PATENT OFFICE.

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INDICATING ELECTRIC-SWITCH COVER.

No. 837,498.

Specification of Letters Patent.

Patented Dec. 4, 1906.

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To all whom it may concern:

Be it known that I, CHARLES G. PERKINS, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented a new and useful Indicating Electric-Switch Cover, of which the following is a specification.

This invention relates to those covers for electric rotary or oscillating snap-switches which have means for indicating the positions of the rotary or oscillating switch-poles and the condition of the circuits.

The object of the invention is the production of a very simple and cheap indicating switch-cover having no opening through it except the central opening for the operating-spindle and handle-stem that is screwed onto the spindle, but having circuit-indicating characters on the outside and a shutter so formed and attached to the cover over the characters that when the cover is placed on a switch and the handle is applied the shutter will be rotated or oscillated when the handle is turned and conceal and expose the necessary characters to show the condition of the circuit.

Each of the embodiments of the invention illustrated by the accompanying drawings has a sheet-metal exterior shell and a lining of insulating material. Applied to the outer surface of the top of the shell at the proper localities are circuit-indicating words, and over the words is a shutter which has openings at such places that it will conceal and expose the necessary characters to give the correct reading. This shutter is loosely held in place by a hub which extends through and is expanded on the inside of the center of the shell and which has an opening of such shape that it fits the stem of the handle or the end of the pole-sleeve, so as to be rotated or oscillated when the handle is turned and the poles are thrown.

Figure 1 of the views shows a plan of one form of cover that embodies the invention. Fig. 2 shows a plan of the same cover with a different-shaped shutter. Fig. 3 shows a central section of the latter cover. Fig. 4 shows a plan of a modified construction with the shutter in one position. Fig. 5 shows a plan of this form with the shutter in another position. Fig. 6 shows a central section of the cover that is shown in Figs. 4

and 5 with the handle omitted, and Fig. 7 is a view looking into this last form of cover.

The shell 1 is stamped to any approved design and size from common sheet metal in the usual way. This shell may be provided with a common insulating-lining 2. The words "On" and "Off" or circuit-indicating characters of like import may be stamped so as to appear raised on the top of or may be otherwise applied to the outer surface of the top of the shell. Above these words is the shutter 3. This shutter is usually stamped from light metal; but it may be made from insulating material. A hub 4 is preferably turned down when the central opening is punched in the shutter. The edge of the hub is over on the inside of the edge of the central opening through the top of the shell, as shown in Fig. 3, for loosely holding the shutter and shell together. The opening through the shutter-hub may be angular or oblong, so that it will fit the angular or oblong shank of the switch-operating handle. The shutter may be provided with one or more openings 5 for exposing the indicating characters. A cover formed in this manner need have only two parts—the shell and the movable shutter—which are secured so as to produce a single article complete in itself and always ready to be applied to a switch, so as to protect the parts and indicate the positions of the poles, and consequently the condition of the circuit or circuits.

In the form of the invention shown in Figs. 4, 5, 6, and 7 the hub 6 is formed of a separate piece and is fastened to the shutter by turning over its upper end. The hub is expanded on the inside of the central opening through the shell, so as to loosely connect the shutter and the shell. The hub in this form extends into the interior and has a rectangular or oblong opening that is adapted to fit the angular end of the handle-spindle sleeve 7, as shown in Fig. 6.

When the form of cover first described is on a switch and the handle is screwed upon the spindle, the shank of the handle extends into the opening in the hub, so that as the handle is turned for throwing the poles the shutter will be turned to conceal and expose the several characters which indicate the positions of the movable poles and the condition of the circuit or circuits in the interior.

When the form of cover last described is placed upon a switch and the handle is screwed upon the spindle, the hub fits the handle-spindle sleeve, so that as the handle is turned and the poles are thrown the shutter will be turned to conceal and expose the several characters which indicate the positions of the poles.

In both forms illustrated when the handles are in place there are no openings through the cover and the lining, and consequently the liability of the entrance of dust, dirt, and moisture into the interior is eliminated. Both forms of cover are complete in themselves, and when placed on switches they assume such positions that when the handles are screwed on and turned the shutters move to expose the proper characters to correctly indicate the conditions.

The invention claimed is—

1. An electric-switch cover consisting of a metallic shell and an insulating-lining, each having a central opening but no other opening, circuit-indicating characters on the outer surface of the shell, a shutter movable close to the outside of the shell over the indicating characters, having a central opening and an

observation-opening and adapted to expose and conceal the indicating characters according to the condition of the circuit in the interior, and means loosely securing the shutter to the cover, substantially as specified.

2. An electric-switch cover consisting of a metallic shell and an insulating-lining, each having a central opening but no other opening, circuit-indicating characters on the outer surface of the shell, a shutter movable close to the outside of the shell over the indicating characters, and having a central opening and an observation-opening and adapted to expose and conceal the indicating characters according to the conditions of the circuit in the interior, and a hub extending from the shutter into the interior of the shell and loosely securing the shutter to the shell and having an irregular-shaped opening whereby through the hub the shutter is turned when the handle is turned, substantially as specified.

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Witnesses:

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