

No. 751,750.

PATENTED FEB. 9, 1904.

C. G. PERKINS.

INDICATING MEANS FOR SNAP ELECTRIC SWITCHES.

APPLICATION FILED OCT. 29, 1903.

NO MODEL.

Fig. 1

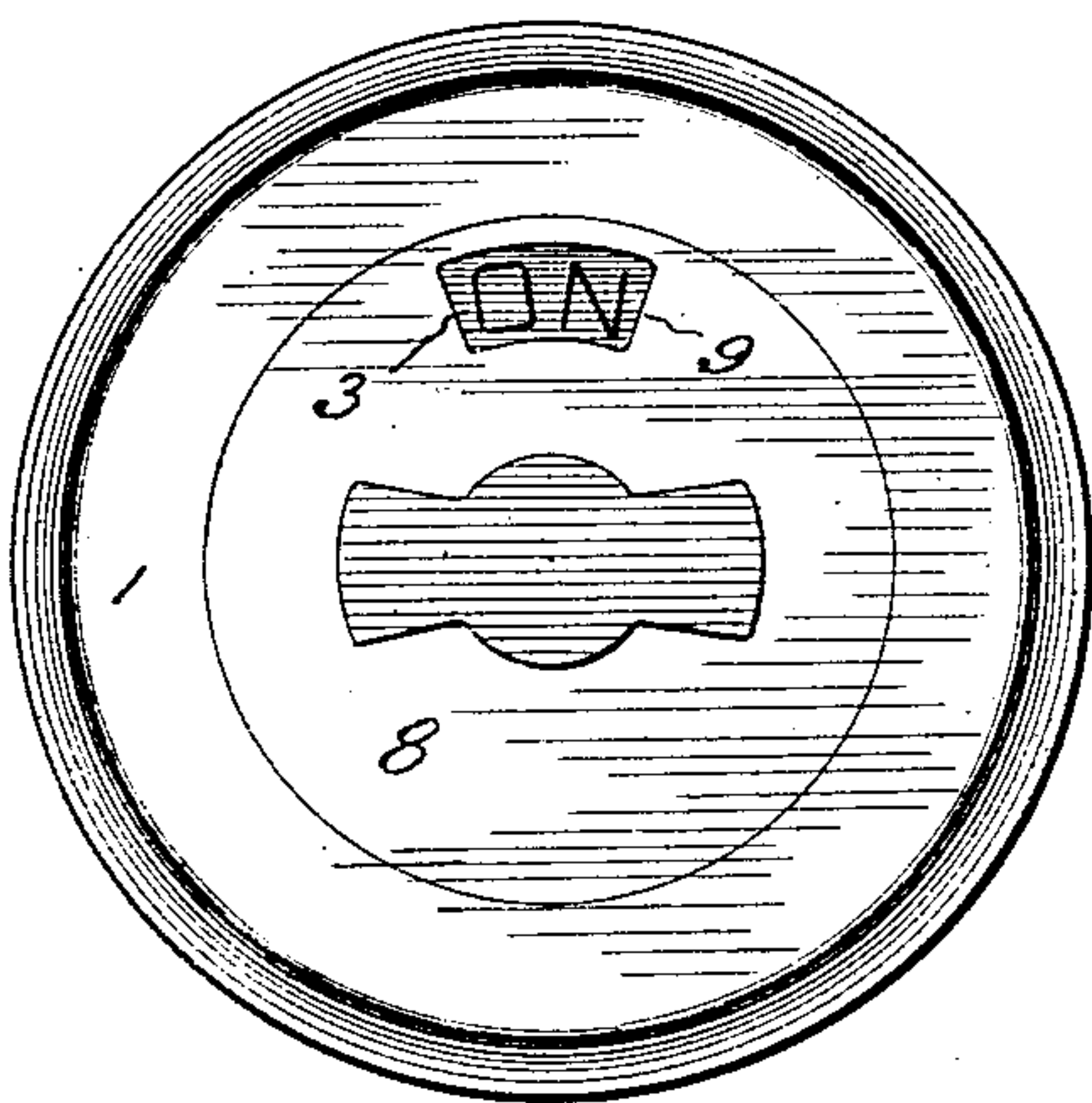


Fig. 2

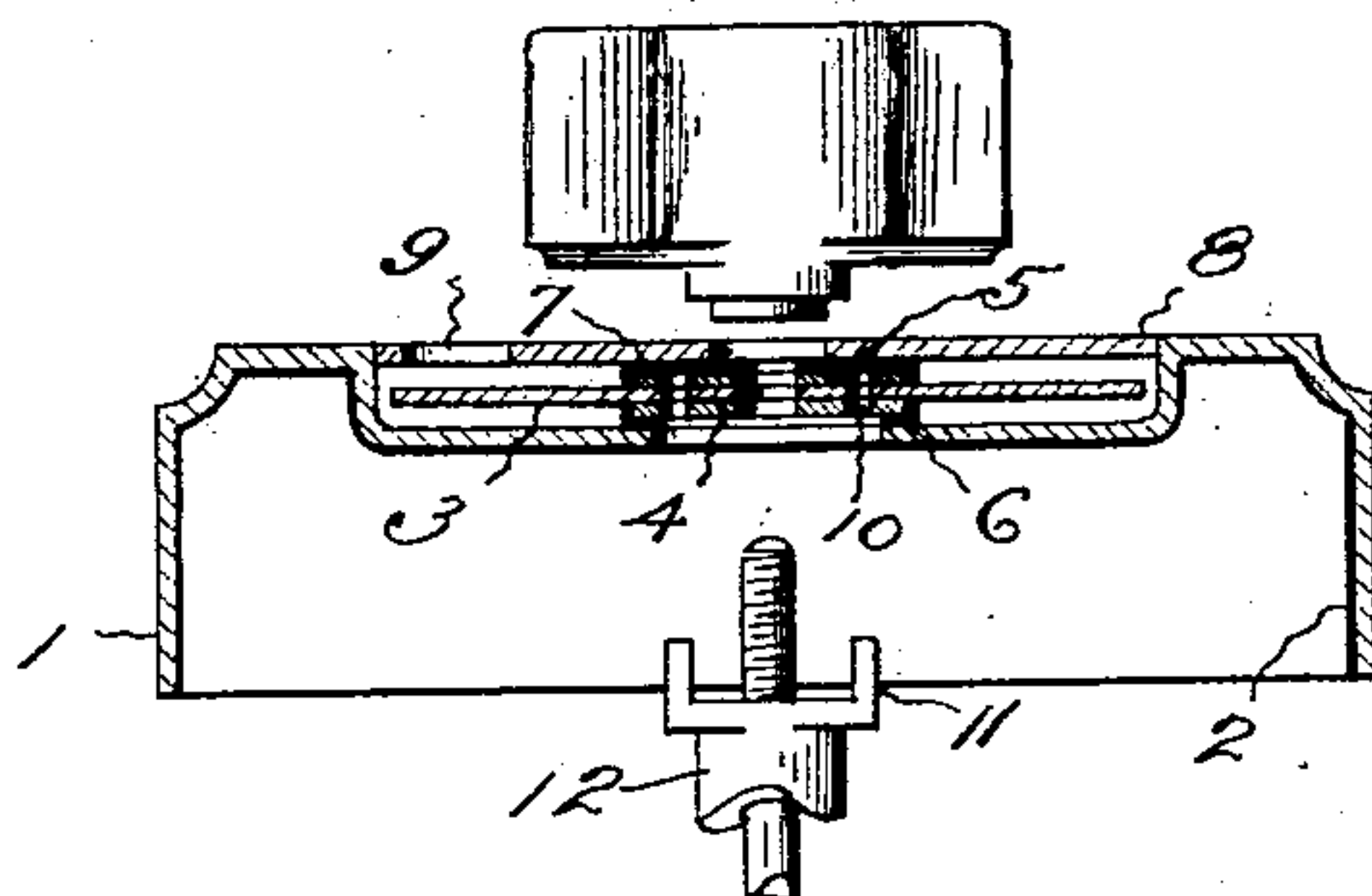


Fig. 3

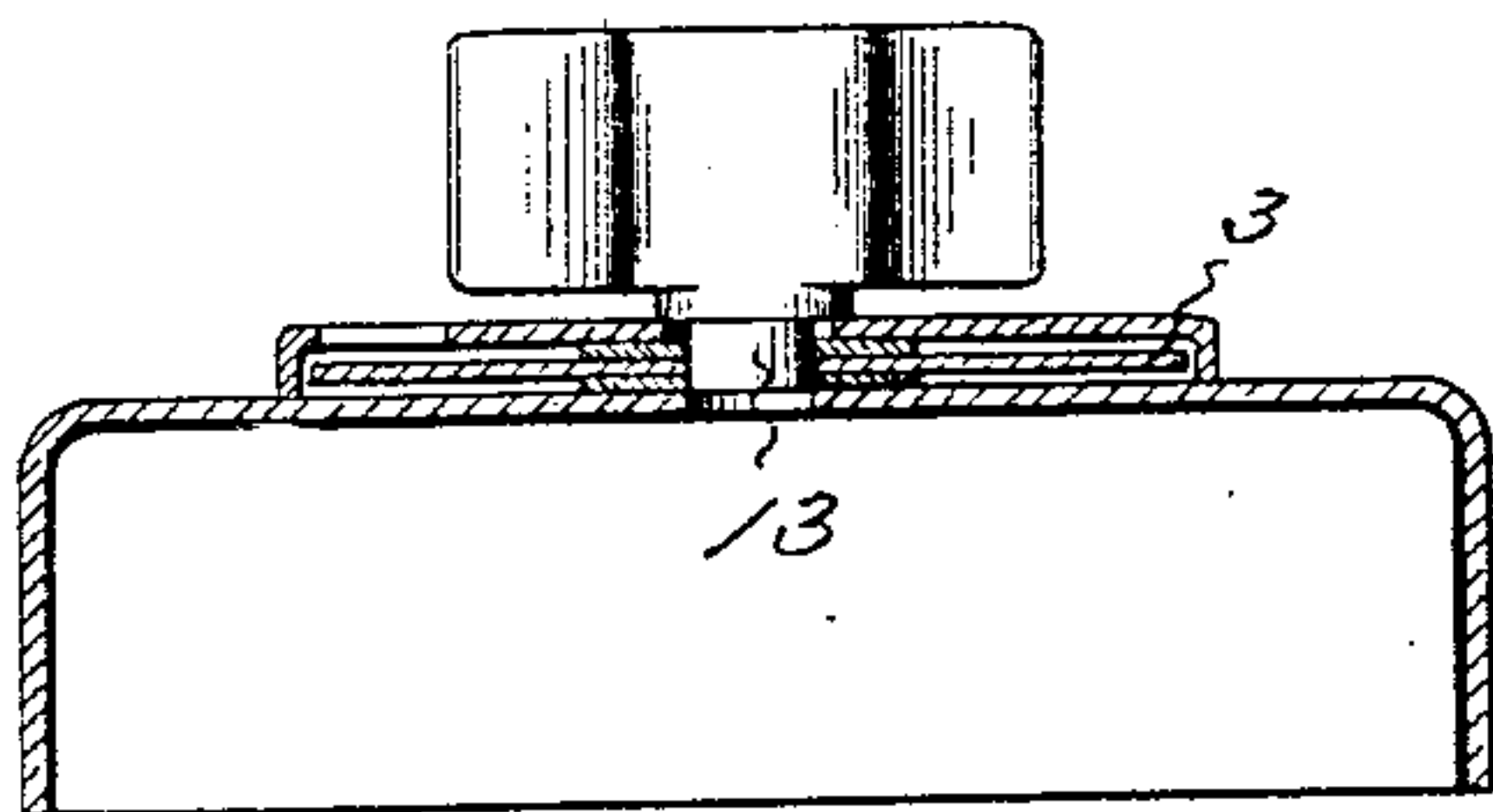


Fig. 4

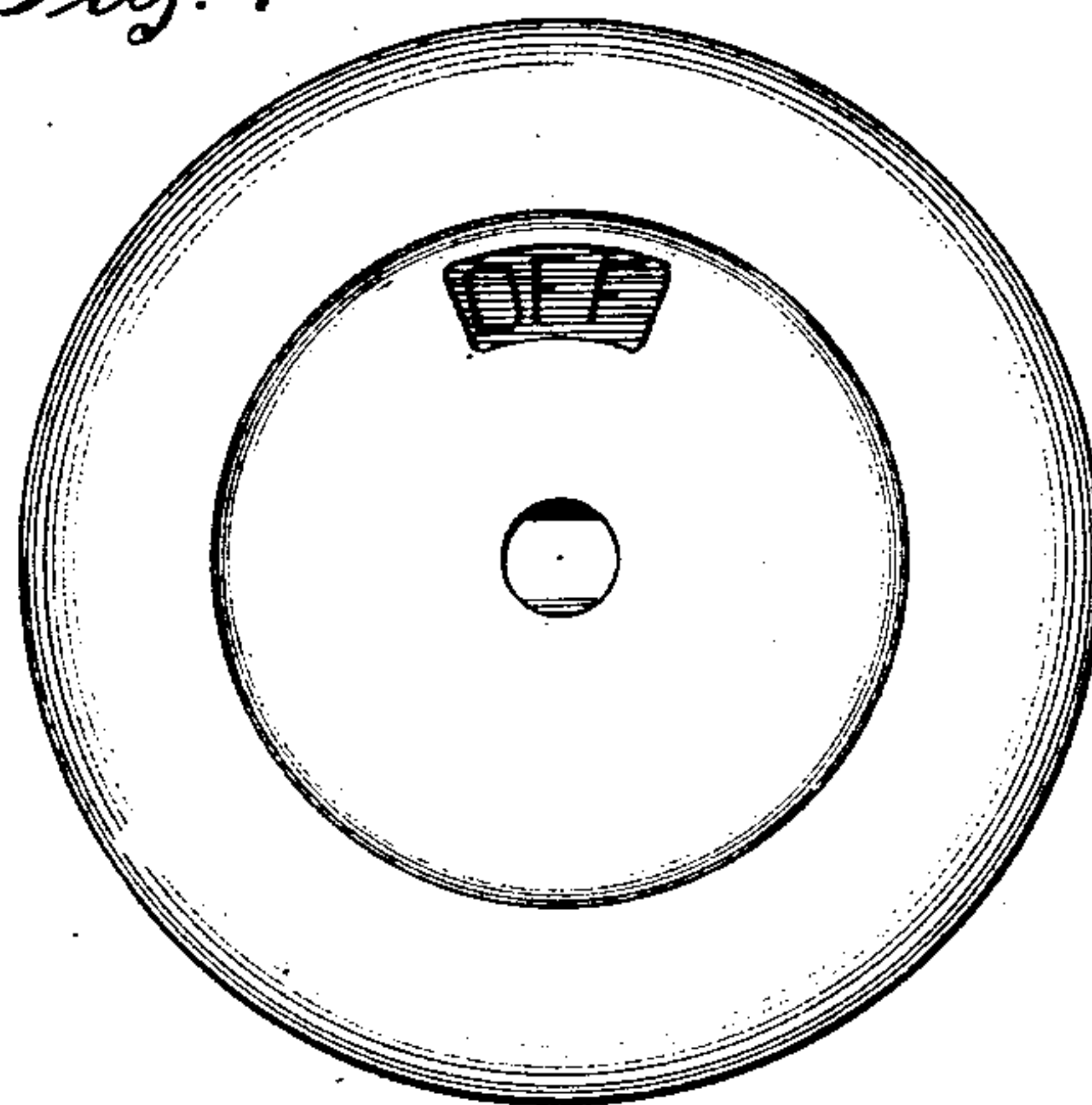
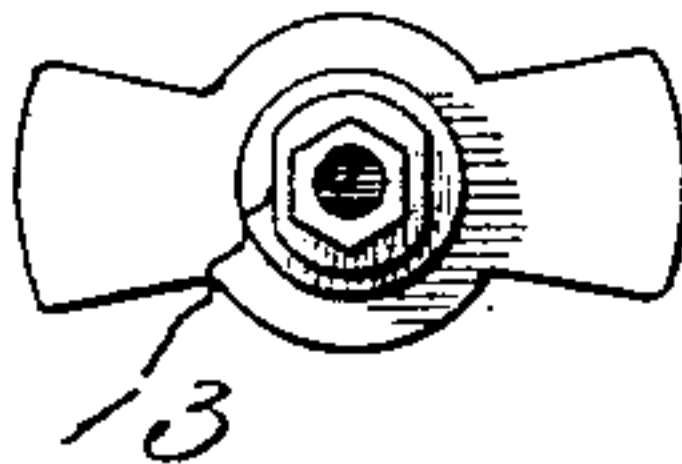


Fig. 5



Witnesses:

Exhel M. Lowe.

C. G. Perkins

Inventor:

Charles G. Perkins
Harry P. Williams
att.

UNITED STATES PATENT OFFICE.

CHARLES G. PERKINS, OF HARTFORD, CONNECTICUT.

INDICATING MEANS FOR SNAP ELECTRIC SWITCHES.

SPECIFICATION forming part of Letters Patent No. 751,750, dated February 9, 1904.

Application filed October 29, 1903. Serial No. 178,980. (No model.)

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 certain new and useful Improvements in Indicating Means for Snap Electric Switches, of which the following is a specification.

It has been common to provide the spindle or pole-sleeve of a rotary snap electric switch with a lettered dial for indicating the condition of the circuit. For the purpose of protection and to facilitate attachment and removal such dial has been placed inside of the cover. This necessitates the making of an opening or window through the cover for the purpose of exposing the word or character which indicates the condition of the circuit. Dials fixed to the spindle or pole-sleeve are in the way. They interfere with the fastening of the switch to a support and also with the connection of the wires. If the dials are made removable, it adds to the expense, and then the dials are liable to become misplaced and lost. Furthermore, an opening through the cover for the purpose of exposing the indication allows a large amount of dust, dirt, and moisture to collect in the interior.

The object of this invention is to arrange an indicating-dial which is thoroughly protected, which cannot be misplaced, and which while only one word is exposed at a time does not require any opening through the cover.

To this end the invention resides in an electric-switch cover with a dial movably held on the outside of the cover by a protecting-plate and provided with means whereby when the cover is placed in position the dial will be engaged with the pole-sleeve or with the handle that is turned for the purpose of throwing the poles, so that the dial will be turned when the poles are moved.

Figure 1 of the accompanying drawings shows a plan of a switch provided with the improved indicating means. Fig. 2 shows a diametrical section of a cover provided with an indicating means which embodies this invention, with the upper end of a pole-sleeve and spindle and a handle arranged adjacent to the cover in order to show how the parts

go together. Fig. 3 shows a section of a cover and handle provided with a modified arrangement of indicating means. Fig. 4 shows a plan of this cover, and Fig. 5 shows a bottom view of the handle that is provided for the latter form of indicating means.

The cover 1 may be formed of metal or any other material to any approved shape. This cover if formed of metal is preferably lined with insulating material 2. In a recess in the top of the cover a dial 3 with the suitable indicating words is located. This dial is placed outside of the cover, so that there need be no opening through the cover except for the spindle and stem of the handle. This dial is preferably made of thin material and provided with an annular plate 4 on its under side and an annular plate 5 on its upper side. An insulating-ring 6 is preferably arranged between the lower plate and the outside of the cover, and an insulating-washer 7 is arranged between the upper plate and the under side of a protecting-plate 8, that is secured in the recess in the cover. This protecting-plate is provided with an opening 9, so that only one of the words on the dial is exposed. The plates of the forms shown in the drawings are preferably secured in position so as to be fixed with relation to the covers by means of solder.

Perforations 10 are preferably made through the dial or the plates attached to the dial for the purpose of receiving the lugs 11, that project upwardly from the end of the pole-sleeve 12. When the cover is placed in position on the switch, these lugs extend into the perforations through the dial, so that when the pole-sleeve is rotated the dial will rotate with it.

Instead of having the dial connected with the pole-sleeve the opening through the dial may be formed oblong, as shown in Fig. 4. In this case the stem of the handle 13 is made oblong to fit the opening in the dial, so that when the handle is turned for throwing the poles of the switch the dial will move with the handle.

With this invention the dial cannot be mislaid. It is carried by the cover, so that when the cover is put on the switch the dial is in position and when the cover is removed from the switch the dial is removed also, and yet is not

separated from the cover. This cover has no opening through it for the purpose of exposing the indications on the dial, for the dial is arranged outside of the cover.

5 The invention claimed is—

1. A cover for a rotary snap electric switch with a dial supported by and adapted to be rotated on the outside of the cover, substantially as specified.

10 2. A cover for a rotary snap electric switch with a dial movably held on the outside of the cover, and a protecting-plate with an opening outside of the dial, substantially as specified.

15 3. A cover for a rotary snap electric switch with a dial movably held on the outside of the cover, a protecting-plate outside of the dial

and insulating material separating the cover and the protecting-plate from the dial, substantially as specified.

4. In combination with a pole-sleeve of a rotary snap electric switch having outwardly-extending lugs, a cover adapted to inclose the mechanism, a dial movably held on the outside of the cover and having openings adapted to receive the pole-sleeve lugs, a protecting-plate 25 outside of the dial, and a handle adapted to rotate the pole-sleeve and dial, substantially as specified.

CHARLES G. PERKINS.

Witnesses:

ETHEL M. LOWE,

H. R. WILLIAMS.