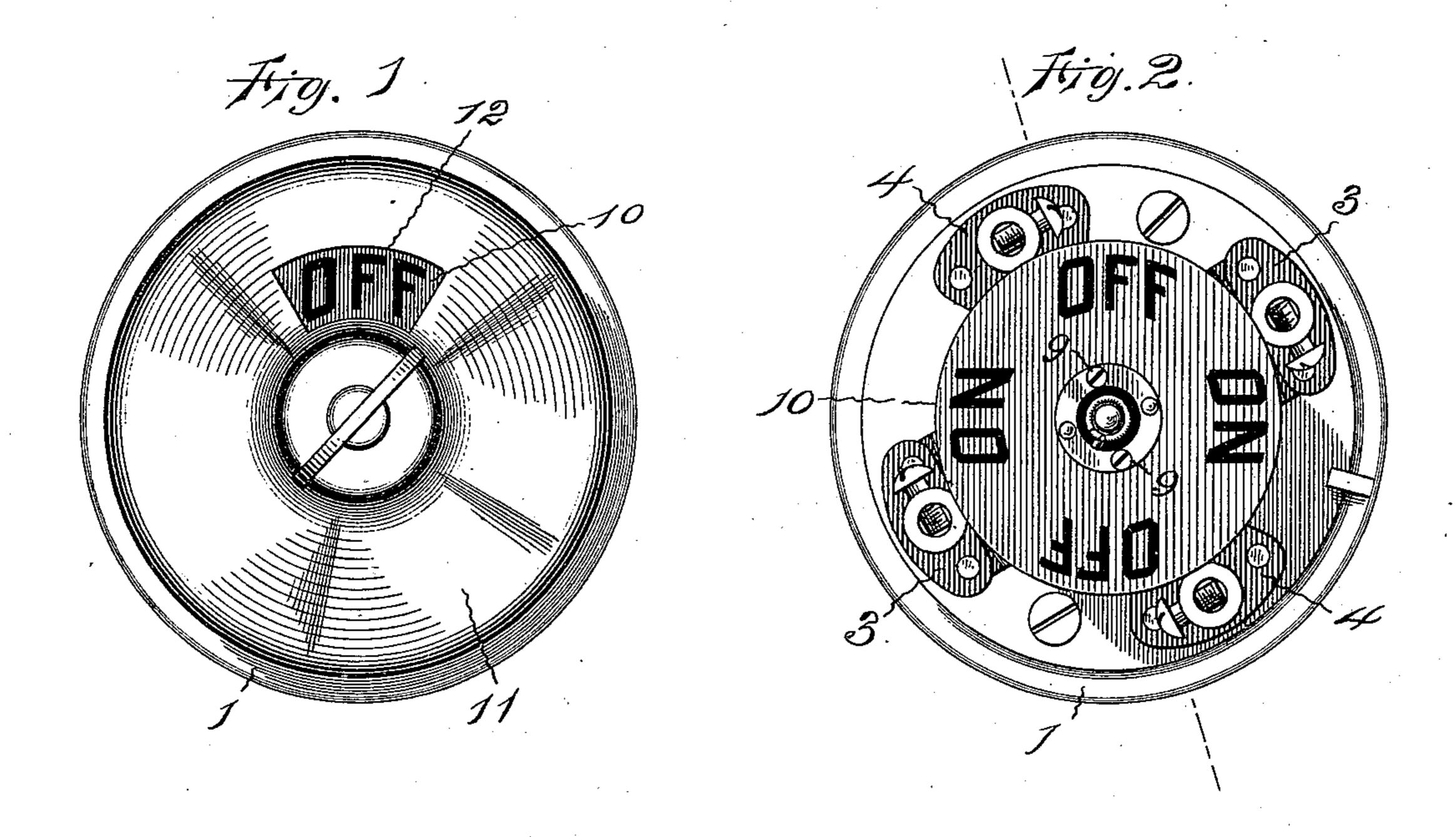
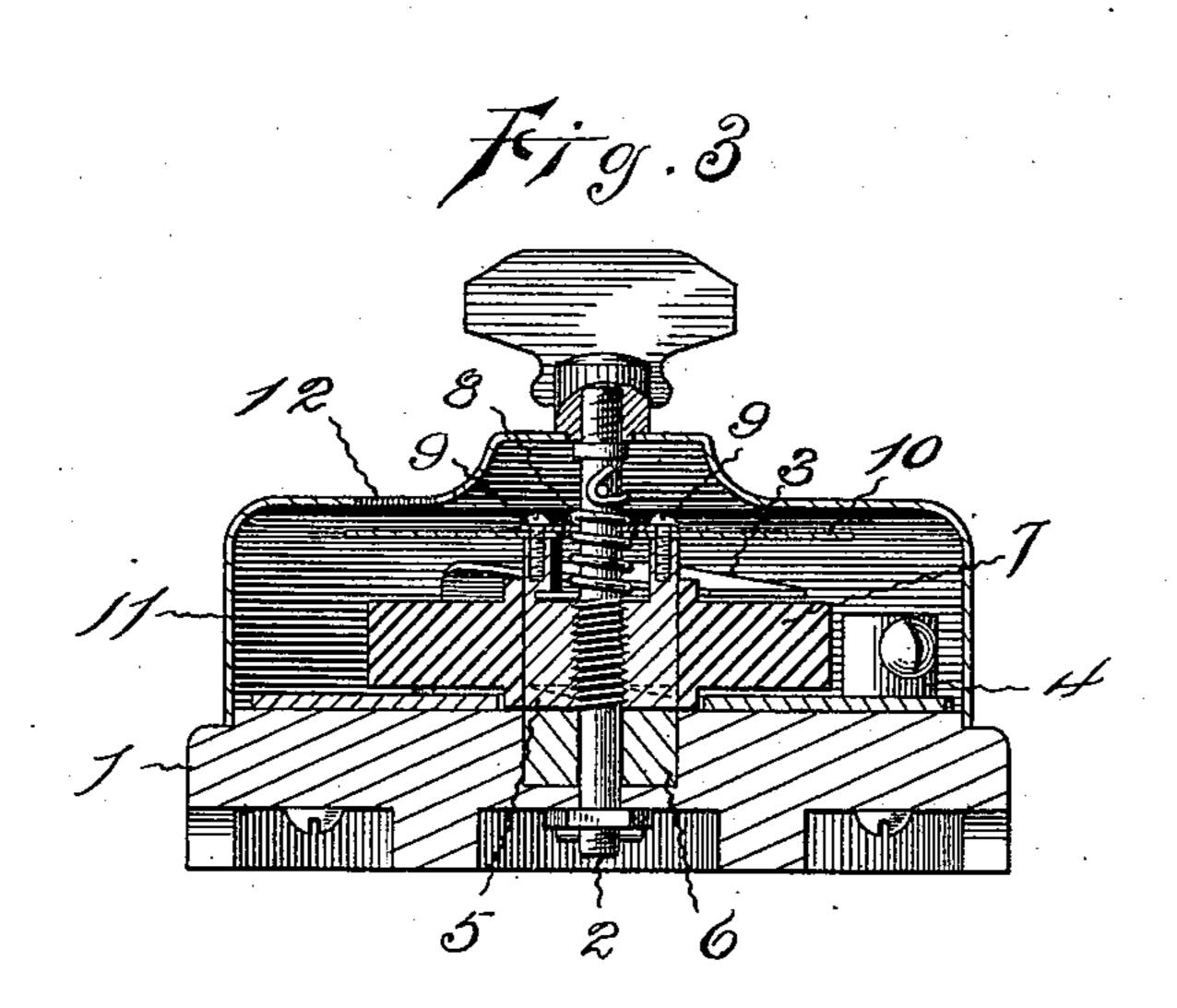
(No Model.)

C. G. PERKINS. ELECTRIC SWITCH.

No. 563,407.

Patented July 7, 1896.





Ivventor:

Witnesses: 6.J. Hydr.

Charles J. erknin, by Harry P. Willeauer & ally.

United States Patent Office.

CHARLES G. PERKINS, OF HARTFORD, CONNECTICUT, ASSIGNOR TO THE PERKINS ELECTRIC SWITCH MANUFACTURING COMPANY, OF SAME PLACE.

ELECTRIC SWITCH.

SPECIFICATION forming part of Letters Patent No. 563,407, dated July 7, 1896.

Application filed April 1, 1896. Serial No. 585,745. (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 Electric Switches, of which the following is a specification.

The invention relates to those electric switches that have a rotary handle-spindle bearing parts that are adapted during the course of rotation of the spindle and parts to connect and disconnect the various pairs of poles of the switch for closing and opening the circuit through the wires connected with the switch.

The object of the invention is to provide a switch of this class with simple and cheap means whereby the condition of the circuit is at all times plainly indicated in an attractive manner.

The invention resides in an electric switch having a base supporting a rotary handle-spindle and a perforated cap or cover, the base bearing a number of stationary conducting-poles and a temporary block-locking device, and the spindle bearing the impulse means, the parts with the conducting-pole connecting and disconnecting pieces, and a rotary lettered disk, the lettering of which registers with the perforation through the cap after each turn of the handle-spindle and consequent movement of the rotating parts, as more particularly hereinafter described, and pointed out in the claim.

Referring to the accompanying drawings, Figure 1 is a plan of a switch embodying the invention. Fig. 2 is a plan with the handle and cap removed, and Fig. 3 is a central section on the plane indicated by the broken line of Fig. 2.

The invention is shown and described as embodied in an electric switch constructed as set forth in United States Patent No. 517,100, dated March 27, 1894, to which patent reference is made for a more detailed description of the operating parts referred to in the specification if such is desired.

In the views shown herewith, 1 indicates the base of such a switch, which is usually a circular disk of wood, porcelain, or other suit-

able insulating material. Loosely supported at the center of the base is a rotary spindle 2, having any desired form of handle, and fixed about the spindle on the upper face of the base are the stationary poles 3 and 4, 55 to which the circuit-wires are adapted to be connected. The spindle is threaded for a portion of its length and upon this threaded portion is fitted a nut 5. Below this rotary nut and secured in the face of the base is the 60 locking-nut 6. Loosely connected with the rotating nut 5 is the rotary block 7 of insulating material that bears the conducting-pole connecting and disconnecting pieces. The impulse-spring 8 has one end connected with 65 the spindle and the other end connected with the rotary nut 5. When the handle is turned and the spindle rotated, the nut 5 rides up the thread until it unlocks itself from the locking-nut below and then the spring, which 70 is made tense by the rotation of the handle, throws the nut which carries the block bearing the pole connecting and disconnecting pieces with it, as fully described in the patent above referred to.

Held by rivets or screws 9 to the top of the rotary nut 5, so as to rotate with the nut and block, is a thin light disk 10, and on the upper face of this disk are lettered the words "Off" and "On." These words alternate with 80 each other and there are as many words or indications as there are different movements of the block bearing the connecting or disconnecting pieces in making one revolution around the spindle.

Over the top of the base and inclosing the operating parts is a cap or cover 11. The cap has a perforation 12, and this perforation is so located that when the rotating nut and block bearing the conducting connecting and 90 disconnecting pieces are moved the different words lettered upon the disk which the nut supports and which rotates close to the inside of the top of the cap will come to rest beneath the perforation in position to be readily observed.

By means of the use of the parts shown and described a cheap, efficient, and durable electric switch is produced which at all times effectively and attractively indicates the con- 100 dition of the circuit in which the switch is placed.

I claim as my invention—

In an electric switch in combination, a base 5 of insulating material supporting stationary conducting-contacts and spring-brushes, a cap with a central perforation and a single segmental perforation, and a rotary spindle that extends through the cap from the inside 10 to the outside, said spindle outside of the cap bearing a handle by means of which it can be rotated and within the cap supporting a threaded nut, a block of insulating material loosely connected with the nut and rotating 15 therewith, said block bearing conductingpieces that are adapted to connect and dis- H. R. WILLIAMS.

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connect the contacts and brushes as the block rotates, a spring with one end connected with the spindle and the other end with the nut, and a lettered disk secured to the upper end 20 of the nut adjacent to the inside of the cap so that the lettering will rotate directly with the block bearing the connecting and disconnecting pieces and indicate absolutely through the perforation in the cap after each 25 movement of the nut and block the position of the connecting and disconnecting pieces, substantially as specified. CHARLES G. PERKINS.

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Witnesses: W. H. POWELL,