J. G. PETERSON.

ELECTRIC SWITCH HANDLE.

APPLICATION FILED JUNE 15, 1909.

941,534. Patented Nov. 30, 1909.

FIG. 1

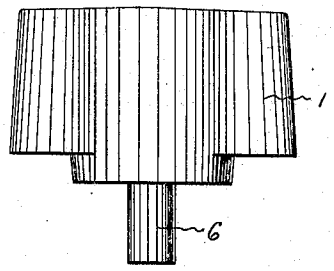


FIG. 4

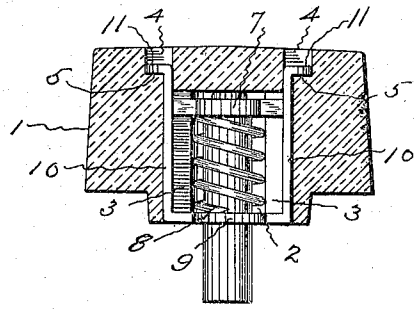


FIG. 2

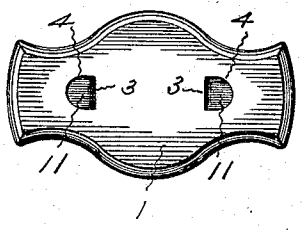


FIG. 5

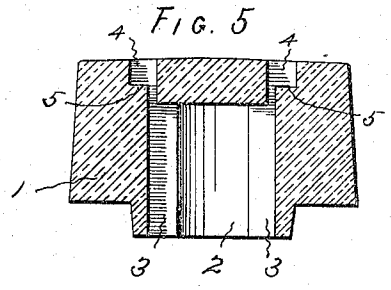
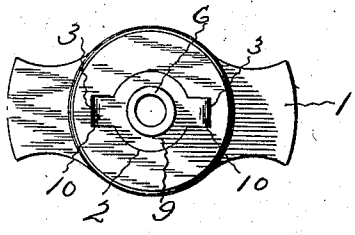


FIG. 3



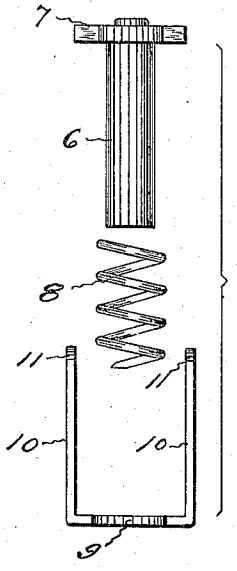


FIG. 6

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JOHANN G. PETERSON, OF HARTFORD, CONNECTICUT, ASSIGNOR TO THE ARROW ELECTRIC COMPANY, OF HARTFORD, CONNECTICUT, A CORPORATION OF CONNECTICUT.

ELECTRIC-SWITCH HANDLE.

941,534. Specification of Letters Patent. Patented Nov. 30, 1909.

Application filed June 15, 1909. Serial No. 502,247.

To all whom it may concern:

Be it known that I, JOHANN GODFREY PETERSON, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented a new and useful Improvement in Electric-Switch Handles, of which the following is a specification.

This invention relates to those turn button handles for rotary snap electric switches, which have yielding stems. Such handles when screwed upon the actuating spindles are utilized for rotating the spindles and for holding the covers or plates tightly in position, regardless of variations in the lengths of the spindles or of inaccuracies in the dimensions of the porcelain bases and other parts of the switches.

The object of this invention is the production of a handle of this nature which is very simple and cheap to construct and is efficient and durable in use.

The invention is particularly applicable to the construction of turn button handles which are made of porcelain and other mineral substances, and it is illustrated and described herein in connection with such a handle, although the invention may be utilized in constructing handles of other materials.

Figure 1 of the accompanying drawings shows a side elevation of a handle which embodies the invention. Fig. 2 shows a top view. Fig. 3 shows a bottom view. Fig. 4 shows a central section. Fig. 5 shows a central section of the body of the handle without the yielding means for attaching it to a switch handle, and Fig. 6 shows the attaching means separated.

The body of the handle 1 may be made of porcelain or other substance, in any desired design and required size. In the handle and opening from the inner face is a central cylindrical socket 2. Extending laterally from opposite sides of this socket are grooves 3. These grooves continue entirely through the handle from the inner to the outer face. In the outer face of the handle at the ends of the grooves are recesses 4 formed so as to provide shoulders 5. The central socket, grooves and recesses are formed in this handle when it is made.

Movable in the central socket of the handle is a metallic stem 6. The inner end of this stem has a head 7, the edges of which project into the grooves, so that while the head and stem are free to move longitudinally in the handle, they are not free to rotate independently of the handle. On the stem and thrusting against the head is a spiral spring 8. The outer end of the stem projects through the end of a yoke 9, which is shaped to fill the end of the opening in the handle. The prongs 10 of the yoke occupy the grooves that extend through the handle at the sides of the central socket, and the tips 11 of the prongs are turned over in the recesses in the outer face of the handle, against the shoulders 5.

In putting the parts together the yoke, with its prongs straight, and with the stem and spring assembled, are placed in the opening in the handle. By means of any convenient tool the yoke is pushed against the spring until the tips of its prongs project beyond the outer surface of the handle. By means of a pair of pliers or other suitable tool, the tips are bent over, after which the yoke is released. The spring then so presses against the yoke as to draw the bent tips of the prongs into the recesses in the outer surface of the handle.

When the stem of this handle is screwed upon a switch spindle, the inner face of the handle presses against the outer surface of the cover, or plate, of the switch, the spring yielding so that the handle will bear against the cover or plate with a yielding force and firmly hold it in place. This handle cannot be maliciously tampered with, as there are no screws to be loosened. If, however, it is desired to take it to pieces for any reason, as for inserting a new spring, the yoke may be pushed into the handle so the prongs will project beyond the outer face, and after the tips of the prongs are straightened, the yoke and stem with the spring can be readily drawn from the opening in the handle.

The parts which make up this handle are very simple to form, readily assembled and the organization is strong, durable and efficient.

The invention claimed is:

1. A switch handle having a socket that extends from the inner face but partly through the handle and openings that extend from the recess to the outer face of the handle, a yoke located in said socket and having its ends extending into and bent over in the openings in the outer face of the

handle, a headed stem movable in the socket and extending through the yoke, and a spring thrusting between the head of the stem and the yoke.

2. A switch handle having a body of insulating material with a socket extending from the inner face into the body and openings through the outer face of the body to the socket, a headed stem movable in the socket, and a yoke located in the socket and having its outer ends bent over in the openings in the outer face of the body.

3. A switch handle having a body of insulating material, said body having a socket opening from the inner surface, grooves on each side of said socket opening through the outer face and recesses in the outer face, a stem with a head movable in the socket and extending into grooves, a yoke occupying the end of the socket and having its prongs occupying the said grooves and their outer ends bent over in the recesses in the outer face of the handle, and a spring arranged between the yoke and the head of the stem.

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