J. C. RUNDBACK.

FOOT OPERATED SWITCH.

APPLICATION FILED APR. 5, 1919.

1,355,573.

Patented Oct. 12, 1920.

Fig. 1

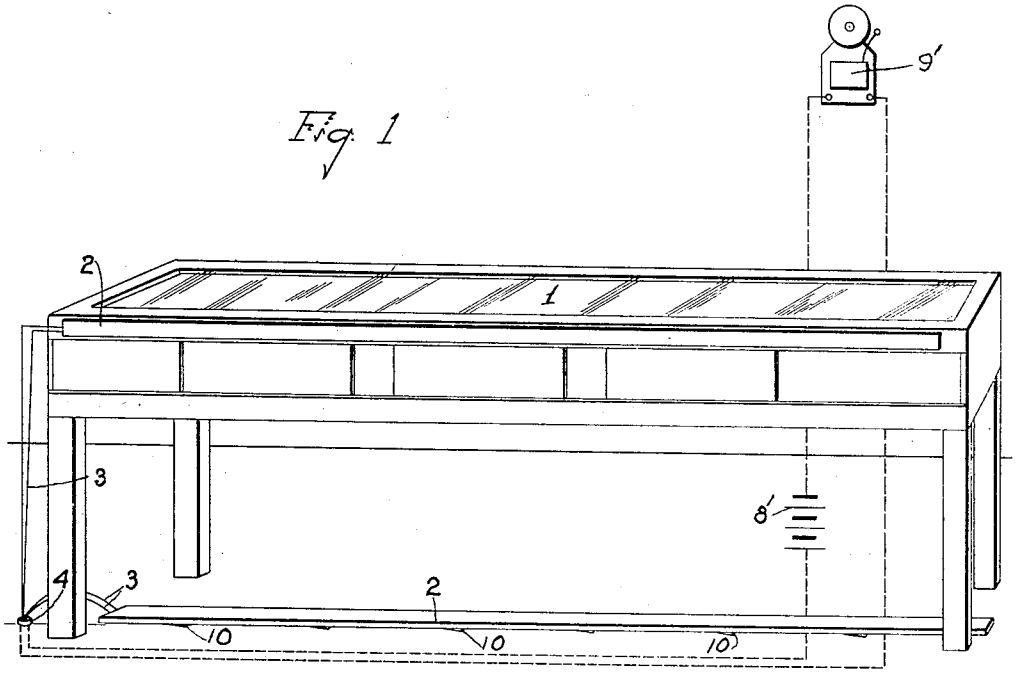


Fig. 2

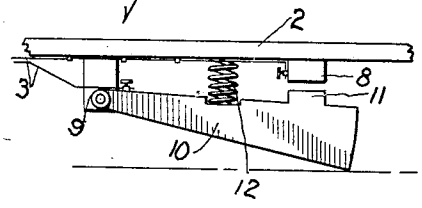


Fig. 3

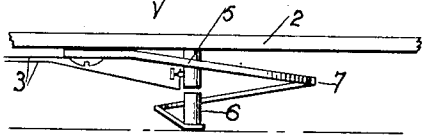
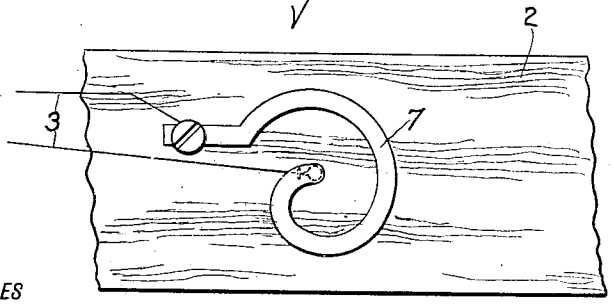


Fig. 4



WITNESSES

Robert Burns

J. H. Wright

INVENTOR

JOHN C. RUNDBACK

BY

ATTORNEYS

UNITED STATES PATENT OFFICE.

JOHN C. RUNDBACK, OF NEW YORK, N. Y.

FOOT-OPERATED SWITCH.

1,355,573. Specification of Letters Patent. Patented Oct. 12, 1920.

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To all whom it may concern:

Be it known that I, JOHN C. RUNDBACK, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Foot-Operated Switch, of which the following is a full, clear, and exact description.

It is a well-known fact that the general reason for the failure of store keepers, such as jewelry merchants, to give warning through an alarm system, when the store is "held up," is due to the fact that the alarm button is usually located in the rear of the counter and unless the person held up can reach down with his hands and press such button, providing that he is directly in front of the same, no possibility of sounding the alarm exists.

To overcome this defect of present alarm systems, I have devised a new form of switch which may be conveniently and unnoticeably operated by any person in the rear of the counter, even although such person's hands may be held above his head; I wish it understood, however, that I may connect the switch to a circuit leading to a police precinct, a visible warning, and so on, without in the least departing from the scope of this invention.

I further aim to construct a device of this nature which shall be entirely removable, so that the same may be lifted from the floor, for the purpose of cleaning the latter, the switch having its lead wires preferably connected to an inconspicuous floor plug.

Reference is had to the accompanying drawings, in which—

Figure 1 is an elevational view of the rear part of a counter, showing my improved switch applied thereto in two separate positions;

Fig. 2 is a side elevational view of one of the specific forms of the switches which I employ;

Fig. 3 is a view similar to Fig. 2, disclosing still another form; and

Fig. 4 is a plan view of Fig. 3.

In these various views the reference numeral 1 designates a counter to the rear face of which is slidably secured, by any approved method, a strip 2 from which extend lead wires 3 connected with a floor plug 4.

The strip 2 has secured to its underside a number of contacts 5 at equidistant points, which contacts connect with one of the wires 3. Mounted below the contact 5 and spaced therefrom is a second contact 6 which is retained in applied position by means of the coil spring 7, similar in every respect to the conventional bell switch, this spring 7 being connected to the other lead 3, which connects with any suitable source of electrical energy, indicated at 8′, supplying current to any suitable alarm, as shown at 9′, for operating the same.

In operation it will now be seen that all that it is necessary for the person held up to do, when the strip 2 is slidably secured to the counter 1, is for him to lean against such strip at any point of its entire length, whereupon the contacts 5 and 6 of one of the switches will close and sound the alarm 9. This operation will be absolutely positive, in view of the fact that no matter where the strip 2 is pressed by the body of the operator he is bound to create a closing of the circuit by virtue of the fact that quite a number of switches are spaced between it and the strip 2.

Preferably, however, I apply the strip 2 to the floor, the same merely resting upon the upper surface of the floor, upon which it may be held up-right by any suitable arrangement, the weight of the strip being supported by the lower contact members, as has been clearly indicated. This strip is also connected to the floor plug 4 by the lead wires 3. By way of example, I have illustrated, as applied to this strip 2, a slightly different form of switch from that illustrated in Fig. 3, which switch may be used to great advantage. Briefly, this switch includes a contact point 8, connected to one of the wires 3, and a base block 9, to which is pivoted a switch arm 10, whose contact point 11 is normally held spaced from the contact 8 by means of the spring 12 interposed between the underside of the strip 2 and the upper face of the switch 10.

It will now be readily apparent that the strip 2 may be touched by the foot at any place, and the light moving forward of the foot will hardly be noticed by a thief, who would be watching the salesman's hands. Immediately upon any portion of the strip 2 being touched, the tension of either of the springs 7 or 12 is such that the pressure upon the strip 2 will overcome the same, and, consequently, the contacts 8 and 11, or 5 and 6, will come into engagement one with

the other and complete the circuit, which may sound any convenient form of alarm.

It will be noted that this device differentiates entirely from previously known devices in that my invention particularly aims to provide a switch which comprises a continuous strip of material extending behind the entire length of the counter, so that no matter where the salesman may be standing, he is instantly enabled to touch either of the strips 2 with his body or foot and set into operation an alarm.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

A switch, including a strip of material extending along the entire length of a counter and to the rear of the same, and individual switches secured to the under side of such strip, such switches including contact points held normally spaced from one another by means of springs, the lower contact member being adapted to support the strip and upper contact member.

JOHN C. RUNDBACK.