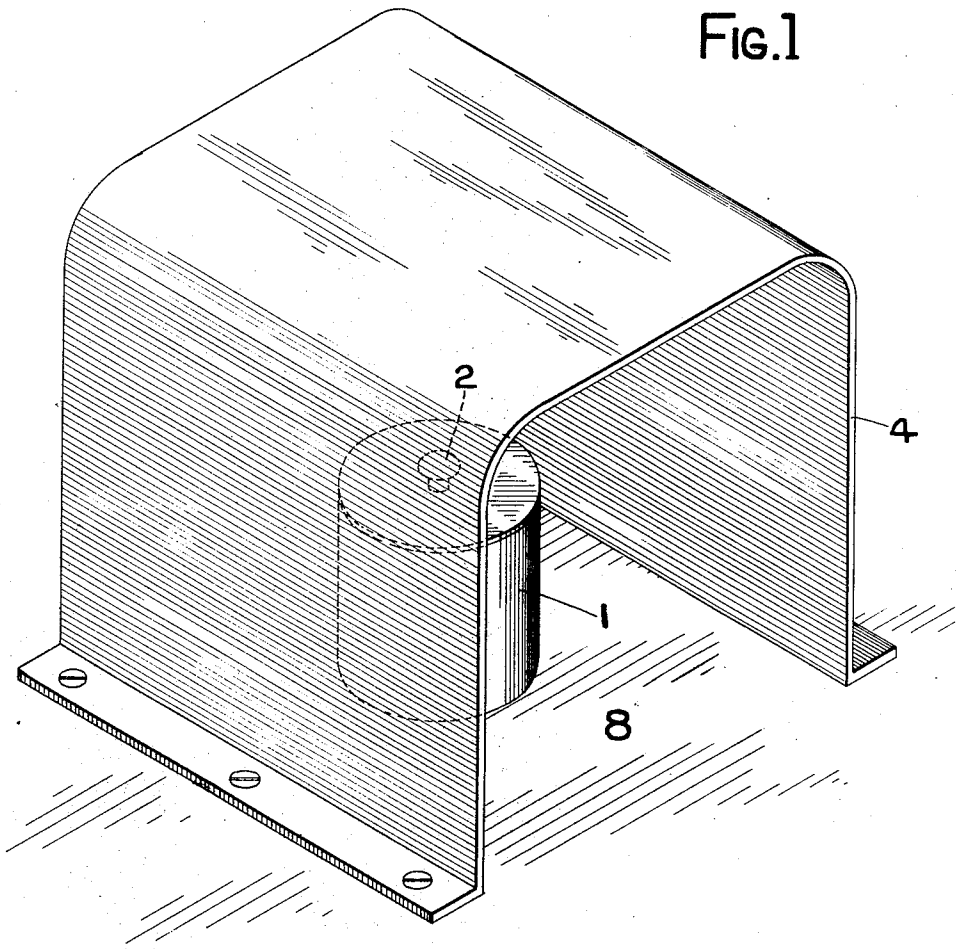
Sept. 23, 1924. 1,509,676

R. B. LAWRENCE

FOOT ACTUATED CIRCUIT CONTROLLING DEVICE

Filed June 21, 1922 2 Sheets-Sheet 1

FIG. 1



INVENTOR

Ruben B. Lawrence

by his attorneys

Byron, Stubbins & Kenealy

Sept. 23, 1924. 1,509,676

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FOOT ACTUATED CIRCUIT CONTROLLING DEVICE

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FIG. 2

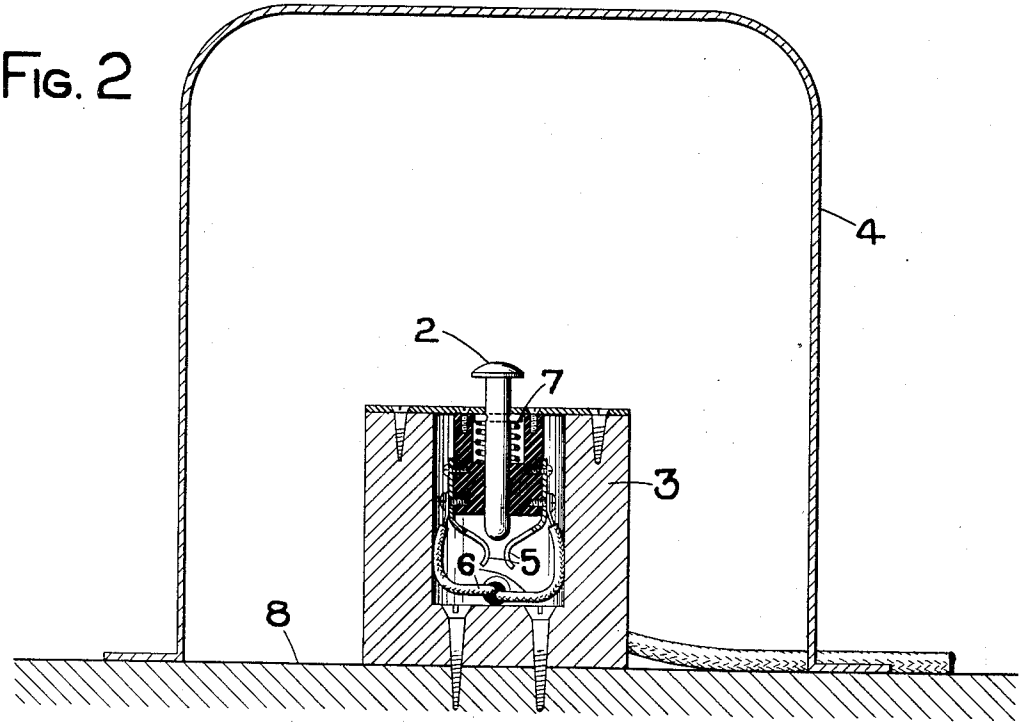
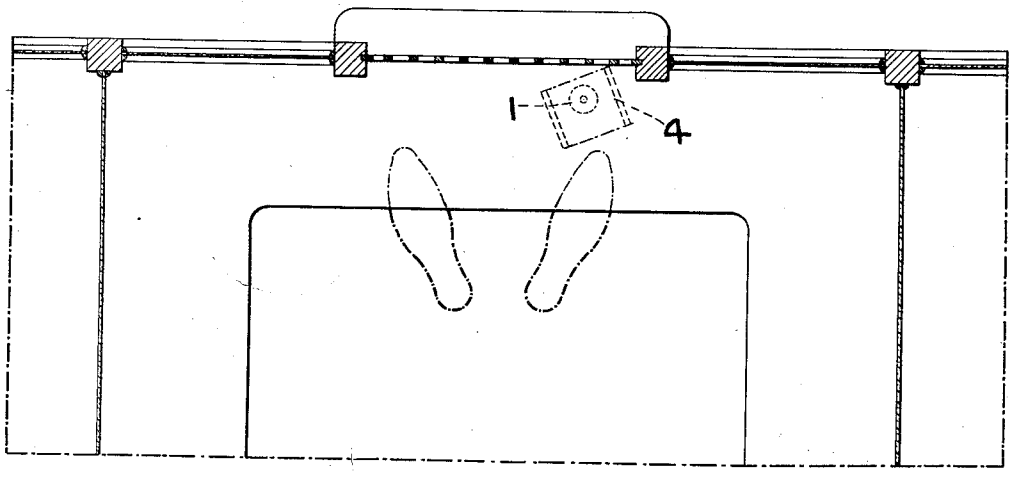


FIG. 3



INVENTOR

Reuben B. Lawrence
by his attorneys
Byrnes, Stubbins & Pennie

Patented Sept. 23, 1924. 1,509,676

UNITED STATES PATENT OFFICE.

RUBEN B. LAWRENCE, OF BELLEVUE, PENNSYLVANIA, ASSIGNOR TO FEDERAL LABORATORIES, INCORPORATED, OF PITTSBURGH, PENNSYLVANIA, A CORPORATION OF DELAWARE.

FOOT-ACTUATED CIRCUIT-CONTROLLING DEVICE.

Application filed June 21, 1922. Serial No. 569,823.

To all whom it may concern:

Be it known that I, RUBEN B. LAWRENCE, a citizen of the United States, residing at Bellevue, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Foot-Actuated Circuit-Controlling Devices, of which the following is a full, clear, and exact description.

The present invention relates to a device adapted to be actuated by the foot for controlling an electric circuit. The device is so arranged that while it can be readily operated intentionally, it is protected against unintentional contact and accidental operation. The device is particularly intended for use with electric systems for actuating alarms, such as fire alarms, burglar alarms, or devices for preventing robberies, or other systems in which it is important that the system be not operated accidentally. While the device may be otherwise applied, it is intended particularly for use with the robbery preventing system described in my co-pending application Serial No. 563,074, filed May 23, 1922, in which an incapacitating gas is released to prevent the robbery in a bank or similar institution. In such a system, a number of circuit controlling devices are provided, preferably on the floor so that they may be foot operated by the tellers or other employees in case they are commanded to throw up their hands by a robber. It is important, however, that these devices be so protected that there is no danger of their accidental operation.

In the drawings which illustrate the preferred embodiment of the invention—

Figure 1 is a perspective view of the device;

Figure 2 is a vertical section; and

Figure 3 is a horizontal section through a teller's cage taken on a line above the counter and showing in dotted lines the relative positions of the device and the feet of the teller.

Referring to the illustrated embodiment of the invention, the circuit controlling device, indicated generally by the reference numeral 1, is provided with a push button 2 elevated from the floor by a standard 3 and covered by a protecting hood 4. The standard 3 raises the push button sufficiently above the floor so that it will not be hit by the ordinary shuffling movements of the feet. The hood 4 protects the push button from being accidentally stepped on by a descending foot, and is also turned at such an angle, as shown in Figure 3, that the user cannot enter his foot into the hood without turning the toe inwardly into an unnatural position.

The circuit controlling device is illustrated as comprising two contacts 5 insulated from each other and connected with wires 6 of the system. The contacts 5 are bridged by the lower end of the push button 2 to close the circuit. The push button 2 is normally held elevated by a spring 7. It is to be understood, however, that the invention does not reside in the details of the circuit actuating device, but rather in the means for preventing its accidental operation; and that various forms of circuit controlling devices, either circuit openers or circuit closers, may be employed.

The circuit closer, for convenience, is mounted in the standard 3 which stands above the floor 8 two or three inches, or high enough so that the push button is in no danger of being accidentally kicked by a person shuffling his feet on the floor.

The hood 4 is secured to the floor and protects the push button 2 from contact with objects being accidentally dropped on it or a person accidentally putting his foot down. The top of the hood is just high enough above the push button to permit the user to slide his foot into the open end of the hood and step on the push button 2 when he so desires. As shown in Figure 3, the hood 4 is set at such an angle that the teller, whose feet are indicated in dotted lines, must twist his right foot to an unnatural position before he can enter it into the hood. The hood not only protects the device against accidental operation, but also serves as a guiding means so that the user can readily find the push button and operate it in case he is being confronted by a robber and must hold up his hands and keep his attention on the robber.

While the invention has been particularly illustrated and described in connection with alarm and robbery preventing systems, it is to be understood that its application is not so limited but that it may be employed with any foot actuated circuit controlling

device which it is desired to protect against accidental operation.

I claim:

1. A foot actuated circuit controlling device adapted to be operated by the foot of a user normally standing in a substantially definite position relative to the device, and a protective means which requires the turning of the user's foot to an unnatural position to operate the device, substantially as described.

2. A foot actuated circuit controlling device adapted to be operated by the foot of a user normally standing in a substantially definite position relative to the device, and a protecting hood provided with an opening which is at an angle to the normal position of the user's foot and requires him to turn his foot to an unnatural position in order to operate the device, substantially as described.

3. A foot actuated circuit controlling device adapted to be placed upon a floor and having a standard projecting above the floor, a foot engaged actuating member on the standard, and a protecting hood over said member, substantially as described.

4. A foot actuated circuit controlling device adapted to be placed upon a floor and having a standard projecting above the floor, a foot engaged actuating member on the standard, and a protecting hood over the member having an opening into which the user may enter his foot only when the foot is turned to an unnatural position, substantially as described.

5. A foot actuated circuit controlling device comprising an elevating standard, a foot engaged actuating member carried by the standard so as not to be engaged by a shuffling movement of the foot of the user, and a protecting hood over said member, substantially as described.

6. A foot actuated circuit controlling device comprising an elevating standard, a push button in the top of the standard, and a protecting hood over the standard and push button, substantially as described.

7. A foot actuated circuit controlling device adapted to be placed upon a floor and having a standard projecting above the floor and a foot engaged actuating member mounted on the standard so as not to be accidentally engaged by a shuffling movement of the foot of the user, substantially as described.

In testimony whereof I have hereunto set my hand.

RUBEN B. LAWRENCE.