

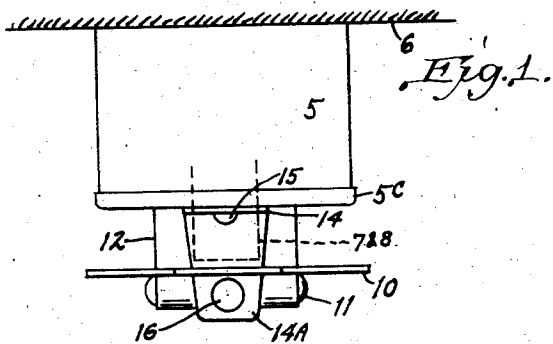
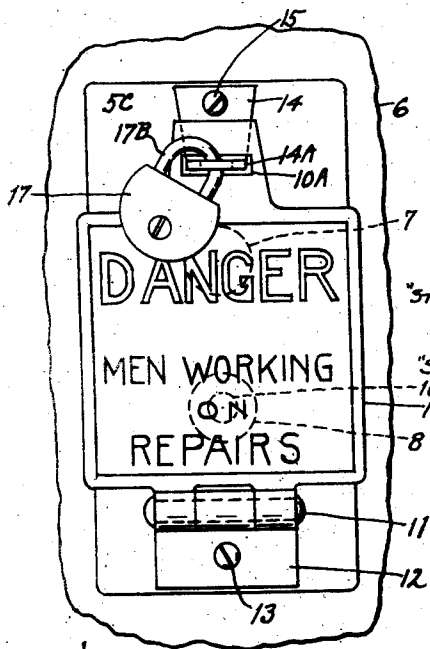
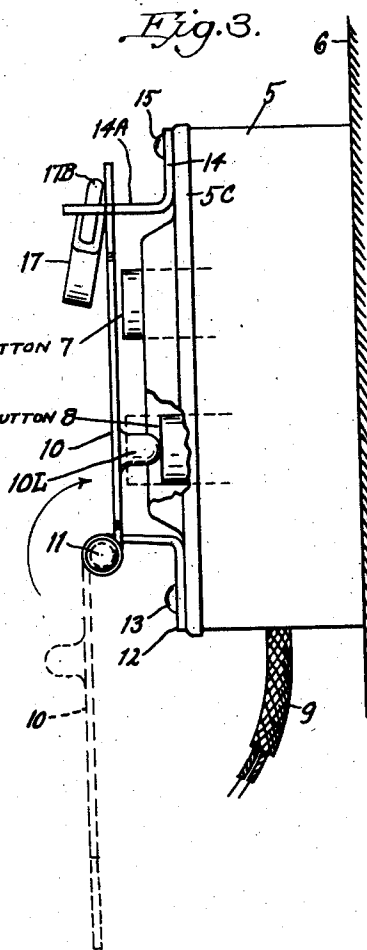
April 14, 1931.

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1,801,228

SAFETY APPLIANCE FOR PUSH BUTTON STATIONS

Filed Oct. 4, 1928



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UNITED STATES PATENT OFFICE

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SAFETY APPLIANCE FOR PUSH-BUTTON STATIONS

Application filed October 4, 1928. Serial No. 310,316.

My invention relates to a safety device for electrically operated machinery and the main object is to provide a simple, positive and inexpensive device particularly adaptable for so-called push button stations such as used in industrial plants, as hereinafter fully described and as illustrated in the accompanying drawing, in which,—

Fig. 1 is a top view of a push button station and my device applied thereto and in position shutting off current.

Fig. 2 is a front elevation of Fig. 1 with a pad-lock added.

Fig. 3 is a right hand side elevation of Fig. 2, showing also the switch actuating plate of my device in inoperative position in dotted lines.

Referring to the drawing by reference numerals, 5 designates the housing of a well known so-called push button station suitably fixed on a wall 6 or other fixed element. Said station is provided with two exposed push buttons 7 and 8 designated respectively for "start" and "stop". Pressing of button 7 will close circuit from a source of electric current (not shown) to a motor (not shown) by any suitable circuit control means within housing 5, through a cable 9 and inversely pressing of button 8 will open the circuit and stop the motor. Both buttons are normally pressed outwardly and positioned in a common plane.

As shown, the station box 5 is a vertically elongated closure with the buttons 7—8 in vertically spaced positions and protruding normally outwardly and forward from the face plate or cap 5C of the box.

My device comprises mainly a plate 10 hinged as at 11 at its lower part to a bracket 12 suitably fixed as at 13 to the lower part of box 5, and adapted to be swung on a vertical plane as from the hanging position shown dotted (Fig. 3) to the full line position shown in all the figures. 10L is a fixed or integral lug on plate 10, so positioned as to

swing into contact with and press the "stop" button 8 when the plate is swung to vertical position over its hinge 11. Simultaneously the free upper end of the plate, being provided with an aperture 10A, slips over the horizontal arm 14A of an angle bracket 14 fixed as at 15 to the upper part of the cap 5C. Said arm 14A has an aperture 16 into which an operator may engage the bolt 17B of a padlock 17 to thus hold the plate locked in vertical position and with its lug 10L pressing button 8 and opening circuit within the station 5 and consequently, of course, causing cessation of any motor connected therewith. Thus it is impossible to start the motor and any machinery connected with it until the operator removes the padlock and permits plate 7 to be dropped down, when the "stop" button is released and the "start" button is accessible. It is well known in various industries that repair men and others are exposed to injuries by machinery being started in motion by others not knowing such parties are making repairs or adjustments and it is obvious that my device eliminates these conditions. It would of course be compulsory for an operator to use my locking and circuit opening means when a certain machine is stopped and during the said inoperativeness of a machine no one but the said operator could again start operation.

Both faces of the plate may have certain predetermined warnings or wording printed or affixed, such as the words "Danger" and "Men working on repairs" exposed when the device is in locked position and on the other face of the plate may be placed suitable wording such as "Safety first" in bright, easily read colors.

I claim:

A safety control device for an electric switch for starting and stopping electrically operated apparatus and said switch having independent stop and start push-buttons; said device comprising a plate hinged in

proximity to the one of said buttons arranged
to open the electric circuit, a fixed lug on the
plate positioned to engage and press said cir-
cuit opening button when the plate is swung
5 toward it upwardly, the free end part of said
plate outwardly of said lug arranged to be
positioned close to the face of the other but-
ton of the switch when the first described
button is pressed by the lug and means for
10 locking said plate fixed in said circuit open-
ing position.

In testimony whereof I affix my signature.
HENRY E. EDHLUND.

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