

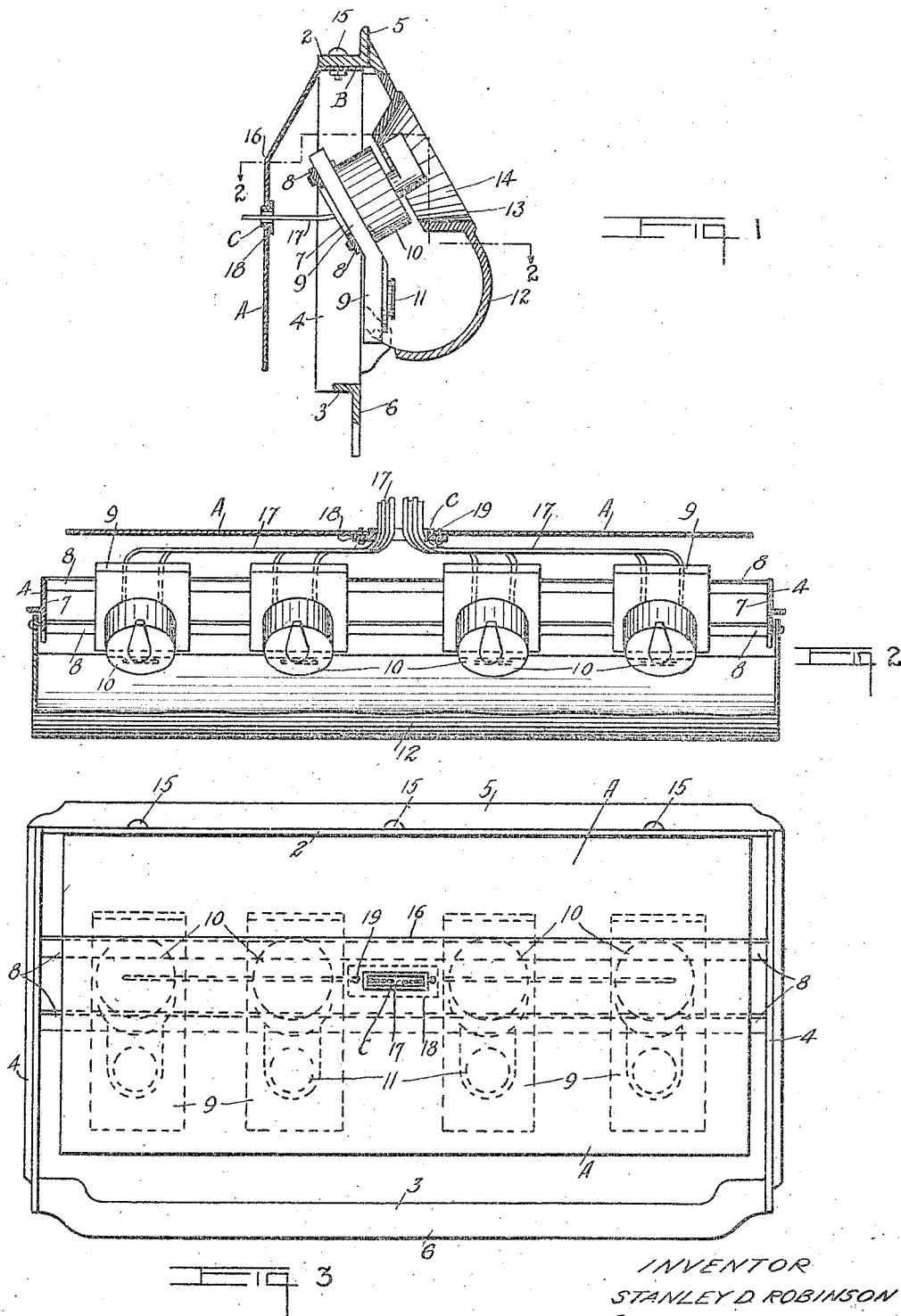
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S. D. ROBINSON

SHIELD FOR WIRING AND SWITCHES OF SWITCH CONTROL FRONTS FOR ELECTRIC RANGES

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UNITED STATES PATENT OFFICE.

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SHIELD FOR WIRING AND SWITCHES OF SWITCH-CONTROL FRONTS FOR ELECTRIC RANGES.

Application filed January 5, 1923. Serial No. 610,362.

To all whom it may concern:

Be it known that STANLEY D. ROBINSON, a subject of the King of Great Britain, residing at Hamilton, in the county of Wentworth and Province of Ontario, Canada, has invented certain new and useful Improvements in Shields for Wiring and Switches of Switch-Control Fronts for Electric Ranges, of which the following is a specification.

My invention relates to improvements in switch control fronts of electric ranges and more particularly to means for the protection of the switches and wiring from possible drippings from the surface of the range, and consists essentially of a sheet metallic shield affixed to the top of the switch control front and extending first at a declivity and then perpendicularly downwardly behind the switches or switch boxes and the lead wires leading thereto, and provided with a centrally located opening through which the lead wires are carried for distribution to the several burners.

The present invention is particularly adapted to be used in conjunction with the switch control front for which I have applied for Letters Patent, the application for which is entered under Serial Number 608,369, and bears a filing date of December 21, 1922; although it may be used in conjunction with other fronts by affecting slight changes so that different fronts may accommodate it without departing from the scope of the invention.

The principal object of the invention is to provide means for protecting the switches and wiring from drippings which are apt to leak through the burner openings in the top of the range, or through vents in the burners.

Another object is to provide means for collectively conveying all wires leading to and from the switches through a common wire way disposed intermediate of the perpendicular planes of the burners so that the wires may be distributed to the several burners without passing underneath the same.

A further object is to provide a device of the class specified which will be simple, durable, efficient, and inexpensive to manufacture.

These, together with other objects, may be attained by the construction, combination

and arrangement of the parts as will be hereinafter more fully described, illustrated in the accompanying drawing, and pointed out in the claims hereunto appended.

Referring to the drawing:

Figure 1 is a cross-sectional end elevation of a switch control front and protective shield;

Figure 2 is a cross-sectional top view taken on the line 2—2 in Figure 1; and,

Figure 3 is a rear elevation of the switch control front and shield.

Similar reference characters refer to similar parts throughout the several views.

The frame of the device comprises top rail 2, bottom rail 3, and sides 4, the top rail being provided with face flange 5, and the bottom rail with face flange 6. By means of said face flanges, the device is secured to the front of a range in a suitable and convenient position. Cast with the sides 4 of the frame are angularly disposed brackets 7 with which are cast the horizontally disposed longitudinal switch mounting bars 8. Upon the mounting bars are mounted the porcelain switch and fuse bases 9. These bases are formed at an oblique angle in cross-section, the portion for the switches 10 being angularly disposed and parallel with the brackets 7, and the part for the fuses 11 being perpendicular. The frame is provided with a hinged cover 12 having a plurality of ports 13, with flanges 14, registering each with a switch 10.

I now provide a shield in the preferable form of a thin sheet metallic plate A, rectangular at elevation. This plate, or shield, has formed at its upper edge preferably, an integral horizontal supporting flange B which is rigidly secured to the top rail 2 of the frame by bolts 15, although it may be there secured by other suitable means if desired. From the flange B, the plate or shield extends at a declivity to a point 16 which is substantially horizontally opposite to the upper termination of the switch bases 9, where it is bent and extends perpendicularly downwardly and terminates a sufficient distance below the switch assemblies to shield and protect them from the foreign matter above referred to.

In the perpendicular portion of the shield A centrally from its ends is provided a longitudinal slot framed by a refractory in-

5 insulation bushing C which may be porcelain, for example, and through which the lead wires 17 are collectively carried, as well illustrated in Figure 2. This bushing is preferably provided with a peripheral flange 18 facing the inner side of the shield A and secured thereto by bolts 19, for example. The bushing is so arranged that the collection of lead wires 17 is not carried beneath
10 any of the burners of the range.

Various changes in the cross-sectional and elevational contour of the shield may be made, as well as various methods of securing it to the range may be resorted to without
15 departing from the spirit and scope of the invention.

There has thus been produced a simple and efficient device of the class described and for the purpose specified.

20 Having now fully and entirely described my invention, what I claim and desire to secure by Letters Patent, is:—

1. In a device of the class described, the combination with a switch control front including switches and their lead wires, of a protective shield disposed rearwardly of the switch control front and above the switches, and means provided for conveying said lead wires through the shield.
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30 2. In a device of the class described, the combination with a switch control front including switches and their lead wires, of a protective shield disposed rearwardly of the switch control front and above the switches, and means provided for collectively conveying said lead wires through the shield.
35

3. In a device of the class described, the

combination with a switch control front including switches and their lead wires, of a protective shield disposed rearwardly of the switch control front and above the switches and having a slot centrally of its lateral ends through which the lead wires are collectively conveyed for distribution to their terminals.
45

4. In a device of the class described, the combination with a switch control front including switches and their lead wires, of a protective shield disposed rearwardly of the switch control front and above the switches and having a slot centrally of its lateral ends, a bushing of refractory insulation disposed within said slot and through which the lead wires are collectively conveyed for distribution to their terminals.
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5. In a device of the class described, the combination with a switch control front comprising in part a frame and including switches and their lead wires, of a protective shield comprising a plate, an integral flange formed on the uppermost edge of said plate, and secured to the top part of said frame, said plate extending at a declivity and then bent perpendicularly downwardly to the rear of said switches, and means whereby the lead wires are permitted to pass collectively through said plate centrally of its lateral ends.
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In testimony whereof I have affixed my signature.

STANLEY D. ROBINSON.

Witnesses:

H. G. HENDRY,
VERA D. CARLE.