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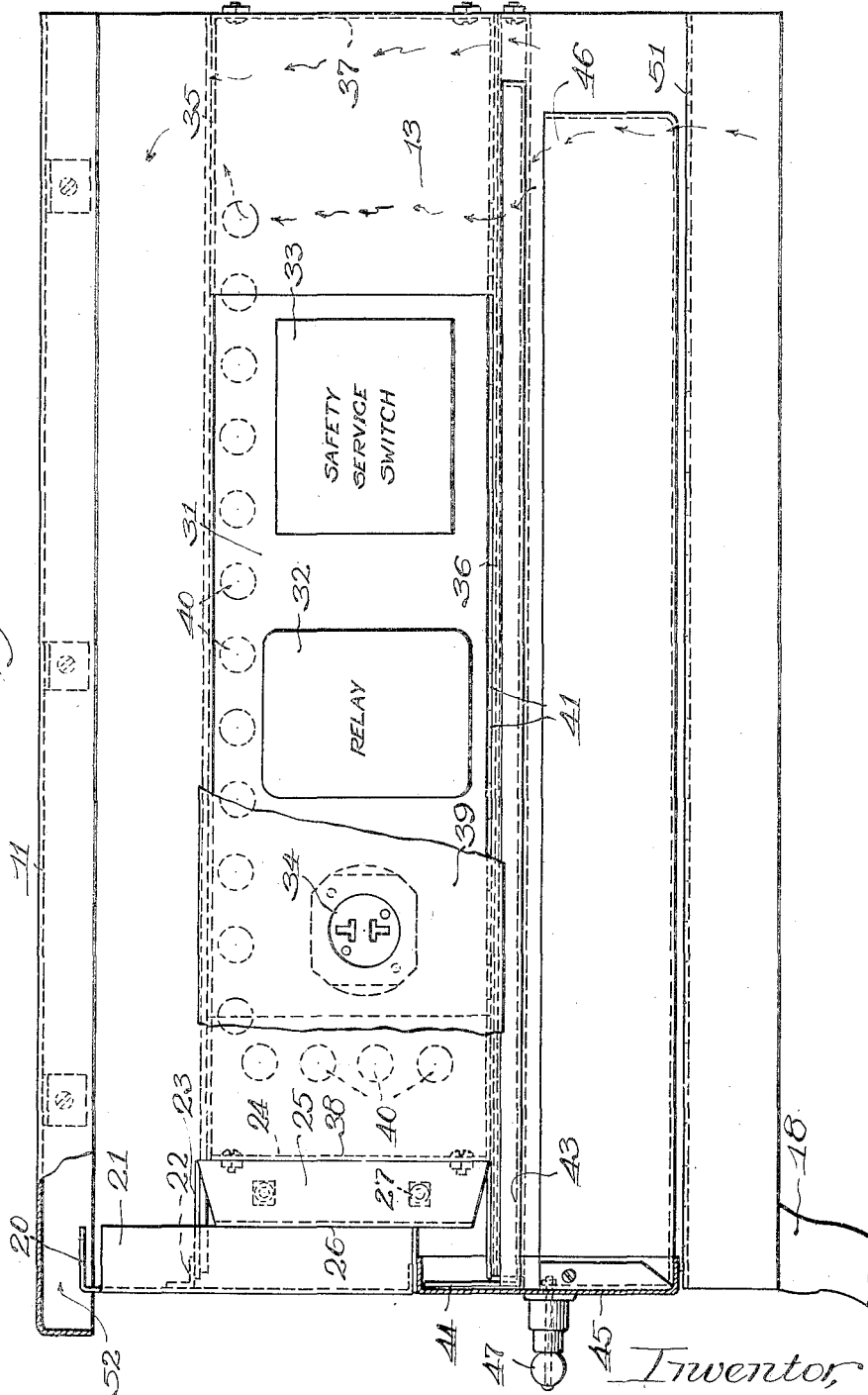
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F. W. ROGERS
RANGE CONSTRUCTION

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2 Sheets-Sheet 2

Fig. 3



Witness:
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UNITED STATES PATENT OFFICE.

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RANGE CONSTRUCTION.

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This invention relates to improvements in range construction. The invention is particularly adapted for use in conjunction with electric ranges and the principal object of the invention is to provide an arrangement for mounting the various switches which regulate the heat of the hot plates and the oven which permits of the ventilation of the switches and the related parts.

A further important object of the invention is to provide a range structure having a concealed slidable drip pan and a utility drawer, the drip pan serving to shield exposed portions of the switch members when the drawer is open.

Other objects relate to various features of construction and arrangement of parts which will be apparent from a consideration of the following specification and accompanying drawings, wherein:

Fig. 1 is a plan view of the cooking portion of a range partly broken away for the purpose of clearness.

Fig. 2 is a broken front elevation of the portion shown in Fig. 1.

Fig. 3 is a broken side elevation thereof.

In the drawings, only the cooking portion of the range is shown, it being understood that it is usual to have also an oven associated therewith, a fragment of which is indicated as 10 in Fig. 2. The construction of the oven forms no part of the present invention, but secured to one wall thereof is the cooking top 11 which is provided with burners 12, shown conventionally in Fig. 1. The top may be spot welded or otherwise secured to the adjacent wall of the oven. The range is provided with a side wall 13 which is secured to the lower side of the top 11 by means of suitable clips 14 which may be welded to the top 11, bolts 15, or the like, passing through the clips and the side wall 13 for securing the top and wall together. The rear wall 16 is similarly attached to the top 11, which walls together with the oven 10 form an enclosure on three sides.

A base 17 is provided, and has attached thereto conventional supporting legs 18, only one being shown in the drawings. Extending transversely at the front of the range is a switch panel 19 provided with an upper rearwardly extending flange 20 and rearwardly extending end flanges 21. The switch panel is secured to the oven wall 10

of the range as by welding and to a flange of the U-shaped post 10^a.

On the inner face of the switch panel is secured an angle supporting member 22 to which is secured the upper horizontal flange 23 of the switch box 24. The box is formed of sheet metal and has forwardly projecting end flanges 25 each of which is provided with a vertical flange 26 against which bears the rear of the adjacent flange 21 of the switch panel 19. Of the end flanges 25 one is secured to the side wall 10 of the oven and the other end is secured to the post 10^a or the like, for rigidly supporting the box. In the box 24 are mounted the switches which control the hot plates 12 and the burners of the oven, not shown, one switch being indicated as 28 in Fig. 2. The construction of the switches forms, per se, no part of the present improvements but they preferably are of the form illustrated and carry conventional fuses 29 in their lower portions. The switches will correspond in number to the number of burners to be regulated.

On the outer surface of the switch panel 19 are mounted the switch operating members 30 which by means of short shafts, not shown, the switches 28 can be operated. As is indicated in Fig. 2, the lower portion of the switch panel 19 covers the upper portion of the switch mechanism but exposes the lower portions of the switches which carry the fuses 29.

Extending along the inner surface of the side wall 13 is a relay box 31 in which is mounted a relay 32, the main control switch 33 and a plug-in receptacle 34. As neither of these elements, per se, form any portion of the present invention, they are shown diagrammatically. The box 31 is of sheet metal and is provided with horizontal upper and lower flanges 35, 36, respectively, and rearwardly extending end flanges 37 and 38. Flange 37 may be bolted to the rear wall 16 of the range structure while flange 38 is bolted to the back of the switch box adjacent the right hand end thereof as viewed in Fig. 1. The relay box is thus firmly supported in position.

A removable panel is provided in the wall 13 to expose the relay and main control switch, the plug-in receptacle 34 being available through an opening in the panel 39 when it is desired to plug in some other

apparatus such as an electric iron or the like. The relay box 31 is provided with ventilating openings 40 in the back thereof and other openings 41 in the flange 36 for permitting air to flow up through the box for ventilating the same.

The upper flange 35 and the back wall of the box preferably are provided with heat insulating material such as asbestos, to protect the same against the heat of the burners 12.

Secured to the side walls of the structure are horizontally disposed tracks 42 which slidably support a drip pan 43 having a vertically extending front flange 44. The flange 44, as will be seen in Fig. 3, is housed within the front 45 of the utility drawer 46 which extends beneath the drip pan. The end 45 is provided with a handle 47 whereby the same can be moved to and from closed position.

The drawer 46 slides on the inner vertical flanges of the two channel slides 46^a which are secured to the bottom 48 of the casing. The drawer is spaced from the oven wall 10 and side wall 13 as shown in Fig. 2. The portions of the bottom 48 outwardly of the sides of the drawer are provided with ventilating apertures 49 which permit air to pass upwardly past the drawer into the casing for ventilating purposes. The air also passes upwardly through the ventilating openings in the relay box 31.

When the drawer 46 is pulled open the panel 44 of the drip pan protects the fuses 29 against injury when articles are placed in the drawer or removed therefrom as will be seen. The pan, however, can be slid outwardly to provide access to the fuses when desired and for cleaning the pan.

As shown in Figs. 1 and 3, the top 11 of the range structure extends forwardly of the switch panel 19, thus providing a space 52 for the access of air as will be seen. The switch panel 19 may be provided with a lens 53 in back of which may be mounted the customary tell-tale lamp 54. Conductors from the switches pass through suitable openings in the switch box such as indicated at 55, and others not shown.

The wiring of the apparatus not being pertinent to the present improvements, has been omitted for the purpose of simplicity.

Although I have shown and described certain features of my improvements for the purpose of illustration, it will be apparent that various changes may be made therein without departing from the spirit of the invention as defined by the appended claims.

What I claim is:

1. A range structure comprising a switch panel, a switch box mounted rearwardly thereof, said box being provided with switches shielded by said panel, fuse sockets in said box for said switches, said sockets

being disposed at a level beneath the lower edge of said panel, a drip pan slidably supported by the range structure and being provided with an upturned flange adapted to shield said fuse sockets, and a slidable drawer beneath said pan, said drawer having a front portion overlying and concealing said upturned flange of said pan when the drawer is closed.

2. A range structure comprising a top, heating elements associated therewith, a front switch panel, a switch box at the rear of said panel having switches therein provided with shafts operable by switch handles mounted on the face of said panel for regulating said heating elements, fuse sockets in said switch box disposed beneath the level of the lower edge of said panel, a slidable drip pan having an upturned flange adapted to shield said fuse sockets when the pan is in normal position and providing access to said sockets when the pan is withdrawn, and a slidable drawer beneath said pan, said drawer having a front portion which overlies and conceals said pan flange when the drawer is closed, said drawer being spaced from the side walls of said structure to provide ventilation passages.

3. The combination with a range having a cooking top provided with heating elements and side and rear walls forming a casing, of a switch panel at the front of said casing having switch handles mounted on the face of said panel, a switch box in said casing at the rear of said panel and extending beneath the level of the lower edge thereof, said box having switches therein operable by said handles for controlling said heating elements, a slidable drip pan beneath said box, said pan having a front flange adapted to shield the lower portion of said box when said pan is in normal position and providing access to said box when the pan is withdrawn, a slidable drawer in said casing beneath said pan, said drawer having a front concealing said pan flange when the drawer is closed, and a second box above said drawer on an adjacent side of the casing for housing a main switch and a relay, said second box having ventilating openings therein, said casing being provided with ventilating apertures to admit air to said second box and to the interior of said casing.

4. The combination with a range having a cooking top provided with heating elements and side and rear walls forming a casing, of a switch panel at the front of said casing having switch handles mounted on the face of said panel, a switch box in said casing at the rear of said panel and extending beneath the level of the lower edge thereof, said box having switches therein operable by said handles for controlling said heating elements, a slidable drip pan beneath said box, said pan

having a front flange adapted to shield the lower portion of said box when said pan is in normal position and providing access to said box when the pan is withdrawn, a slid-
 5 able drawer in said casing beneath said pan, said drawer having a front concealing said pan flange when the drawer is closed, and a second box above said drawer on an adjacent side of the casing for housing a main
 10 switch and a relay, said second box having ventilating openings therein, said casing being provided with ventilating apertures to admit air to said second box and to the interior of said casing, said second box being
 15 provided with heat insulating material.

5. A range having a cooking portion provided with a top having heating elements and a bottom side and rear walls forming a casing, a switch panel in the front of said
 20 casing, a switch box within the casing at the rear thereof, said box having a rear panel upon which the switches are mounted, said box having end flanges adapted to be secured to the side walls of said casing, a
 25 second box within said casing one end of which is secured to the rear wall of said casing and the opposite end to the rear panel of said first named box, said side wall of said casing having an opening therein and
 30 a removable cover to provide access to said second box, a slidable drip pan in said cas-

ing beneath said boxes, said pan having a front flange forming a shield overlying the lower portion of said first box, and a drawer
 in said casing beneath said pan, said drawer 35 having a front which conceals said front flange of said pan when the drawer is closed, said bottom having ventilating openings along the sides thereof, said drawer being spaced from the side walls of the casing to
 40 permit the passage of air through said openings.

6. A range comprising a cooking portion provided with a top, bottom, back and side walls, a switch panel in the upper front
 45 thereof, a switch box at the rear of said panel, said box having end flanges adapted to be secured to the side walls of said casing, a second switch box in said casing adjacent one side wall secured at one end to said first
 50 box and at the other end to the rear wall of said casing, said bottom of the casing having ventilating openings therein adjacent the side walls of said casing, and a drawer having its sides spaced inwardly of
 55 said side walls clear of said openings to permit circulation of air through the interior of said casing.

In testimony whereof, I have subscribed my name.

FREDERICK W. ROGERS.