

Nov. 6, 1928.

1,690,946

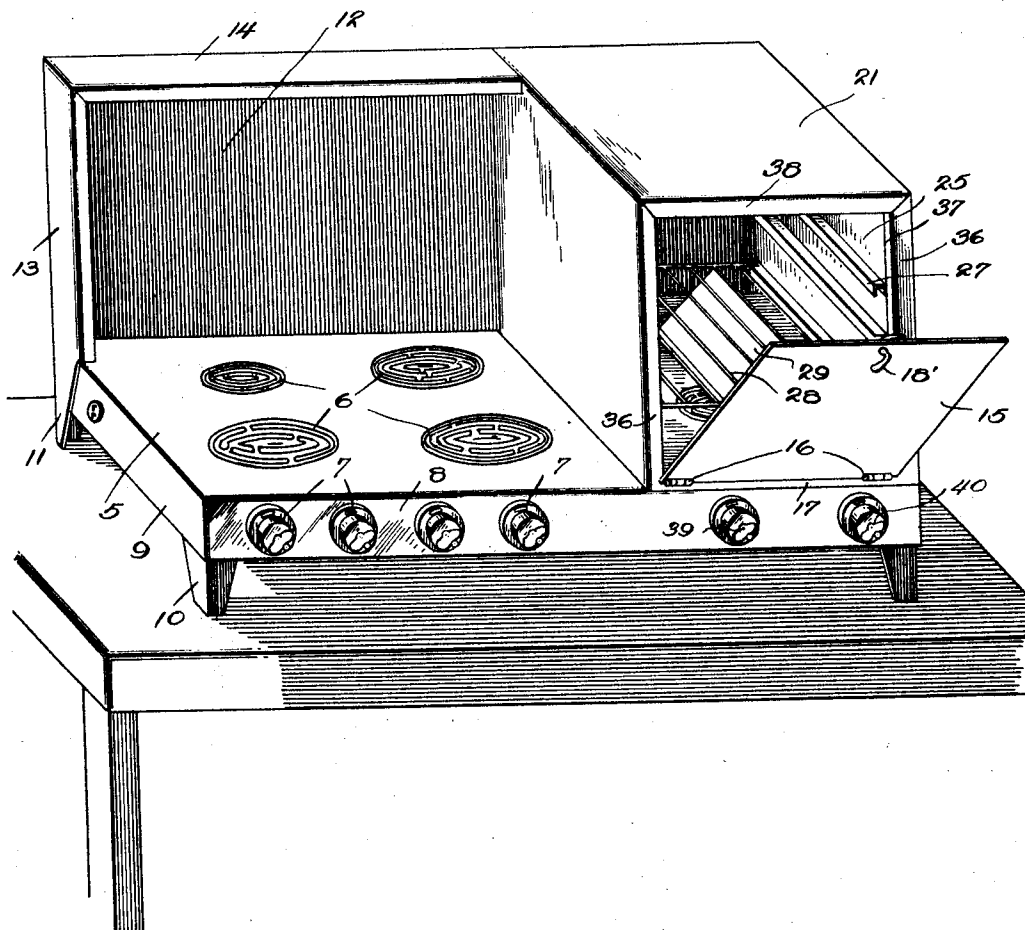
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ELECTRIC RANGE

Filed Feb. 10, 1927

2 Sheets-Sheet 1

Fig. 1.



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2 Sheets-Sheet 2

Fig. 2.

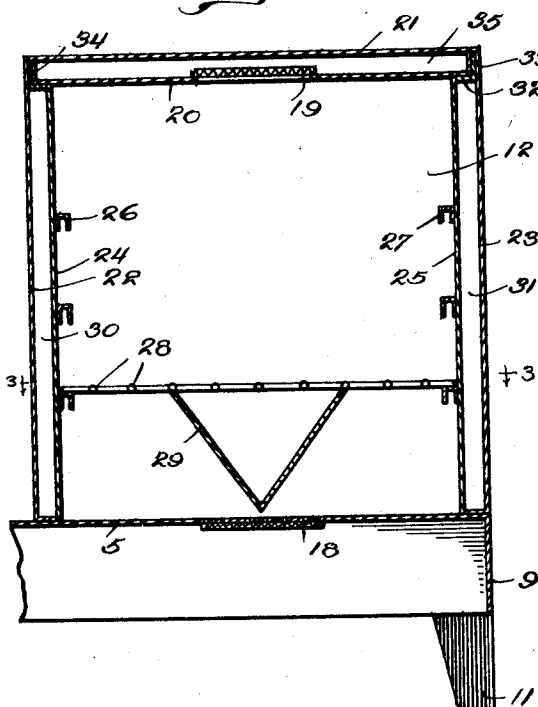


Fig. 3.

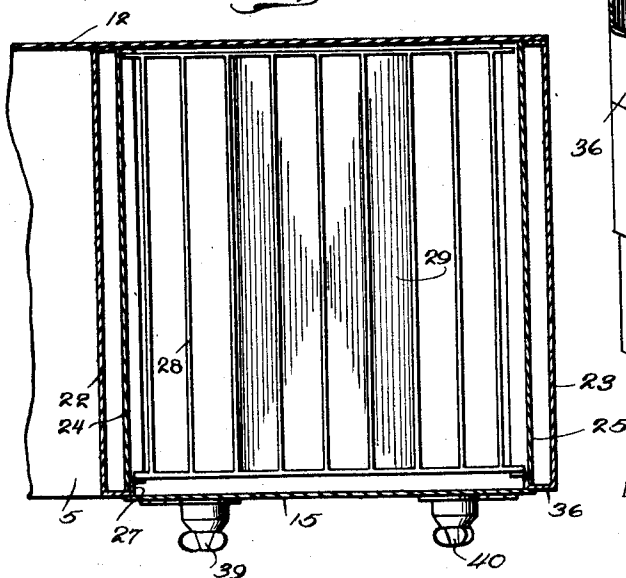
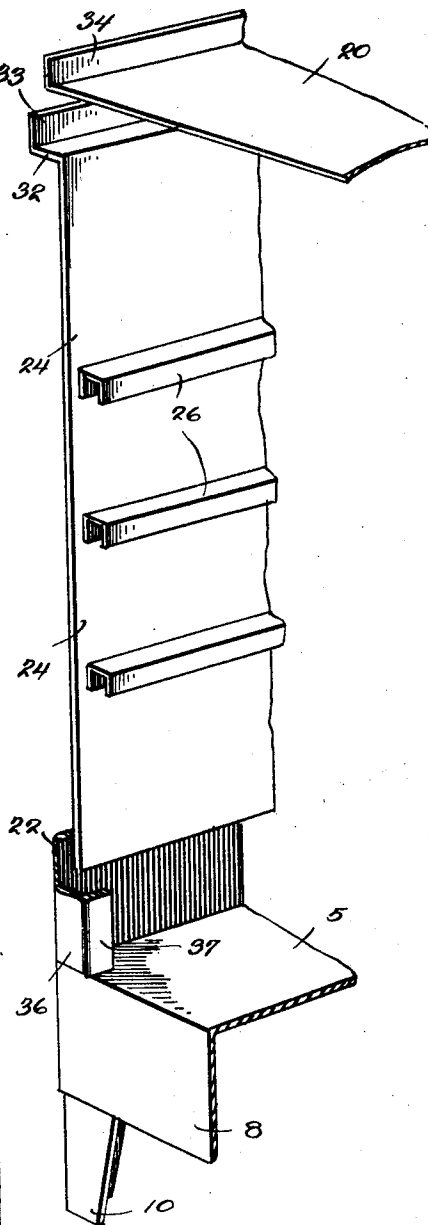


Fig. 4.



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ELECTRIC RANGE.

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The present invention relates to improvements in electric ranges, and has for an object to provide an improved range structure of low price, light weight and low heat radiating properties.

It is another object of the invention to produce an electric range having an improved oven construction of great strength, large capacities and in which provision is made for the uniform distribution of the heat.

With the foregoing and other objects in view, the invention will be more fully described hereinafter, and will be more particularly pointed out in the claim appended hereto.

In the drawings, wherein like symbols refer to like or corresponding parts throughout the several views,

Figure 1 is a perspective view of an improved electric range constructed in accordance with the present invention.

Figure 2 is a vertical section taken through the oven portion.

Figure 3 is a horizontal section taken on the line 3—3 in Figure 2, and

Figure 4 is a fragmentary perspective view, with parts shown in section, of the oven construction.

Referring more particularly to the drawings 5 designates the top of the stove of sheet metal or other appropriate material and 6 represents the burners or heating elements, which may be provided in any appropriate number. The switches 7 are provided to individually control the heating elements. Said switches may be conveniently mounted in the front depending flange 8 which extends across the stove top 5 and across the oven. The end flanges are represented at 9 and both the flanges 8 and 9 may be in one piece with the top 5 and folded downwardly therefrom. These flanges are secured to the front legs 10 as by welding, riveting or the like. The back legs 11 are preferably in one piece with the back wall 12 and the vertical flange 13 thereof. At 14 is indicated the top flange joined with the upper end of the vertical flange 13 and with the oven construction. The oven is provided with a door 15 hinged, for instance, as indicated at 16 to the front bottom flange 17, and provided with a latch 18 to secure the door tightly closed.

The oven is heated by the lower heating element 18 and the upper heating element 19. The lower heating element 18 may be carried in the stove top 5; while the upper heating

element 19 is carried by an upper plate 20 spaced below the top 21 of the oven. The back of the oven is constituted by the back wall 12 of the stove.

Upon the stove top 5 are erected the oven sides comprising the outer side walls or plates 22 and 23 and the inner spaced walls or plates 24 and 25. These inner plates or walls are provided with ledges or racks 26 and 27 for slidably supporting grills or partitions 28 in which the utensils containing the food to be cooked are placed. One such grill or partition 28 is provided with the V-shaped deflector 29. This deflector is arranged with its base upwardly and its legs secured to the under side of the grill or partition 28, while its apex projects downwardly toward the lower heating element 18. The rising heat waves encounter the sloping walls of the deflector 29 and are diverted equally to opposite sides of the oven, whereby uniform distribution is had of such heat waves.

Both inner and outer side walls are preferably spaced apart to provide dead air or insulating chambers 30 and 31 therebetween. Where aluminum is used, and this material is recommended, a single wall thickness may be used on account of the low radiating properties of the aluminum. It is preferred that all parts of the oven be made from aluminum to avoid the rapid dissipation of the heat. The side walls are erected upon the stove top 5 and may be welded or otherwise secured thereto.

These walls may be also welded to the back wall 12 of the stove. The inner walls or plates 24 and 25 are modified at their upper constructions to provide the outwardly turned shoulders 32, as shown in Figure 4. Outwardly of the shoulders 32 are provided upstanding flanges 33. The plate or top 20 is of a width to seat upon the shoulders 32 and at its ends is provided with upstanding flanges 34 adapted to lie within and against the flanges 33. These flanges may be simply fitted together, welded or otherwise attached. The top 21 is placed with its edges in contact with the upper edges of the flanges 33 and 34 and is by the flanges and the upper edges of the outer side walls 22 and 23 supported in spaced relation above the false top plate 20, forming with the latter a dead air or insulating chamber 35. The edges of the top 21 may be welded or otherwise secured to the adjacent parts which support it.

The outer side walls 22 and 23 are further

modified, as shown in Figure 4, by bending the same to form the front panels 36. These panels are bent inwardly from the outer side walls. Along their inner edges the panels
5 are provided with the flanges 37 which are bent inwardly of the oven. These flanges, as shown in Figures 3 and 4 rest against the inner forward portions of the inner side plates 24 and 25 and are welded or otherwise secured
10 thereto.

As shown in Figure 1, the top 21 of the oven is also provided with a forwardly and downwardly depending flange 38, which combines with the side panels 36 to form the
15 front opening of the oven and to enclose the front portion of the top insulating chamber 35.

The heating elements 18 and 19 for the oven are preferably round and provided with
20 their own separate switches 39 and 40 upon the front of the stove and provision is made for three heat intensities, namely high, medium and low. Toasting, broiling and such cooking can be done successfully with the
25 upper element alone. Other cooking usually requires at least some heat from the upper element, but ordinarily not as much as from the lower element.

The construction of the oven is such that,
30 when the door is closed, no screw heads or rivet heads will show on the front, top, sides, with the exception of the back and these may also be eliminated. The door 15 may be swung from the bottom or side. It is preferably made entirely from aluminum sheets.
35

Due to the construction of the inner side walls, which are also rack supports, and the adjacent oven members, every part is accessible and easily renewed or repaired
40 without entirely dismantling the range.

It is obvious that various changes and modifications may be made in the details of construction and design of the above specifically described embodiment of this invention without departing from the spirit thereof, such
45 changes and modifications being restricted only by the scope of the following claim.

What is claimed is:—

An oven structure for electric stoves comprising a base plate, a rear wall, a front door,
50 outer side walls erected on the base plate and being in the same vertical plane from top to bottom, inner side walls set upon the base inwardly from the outer side walls and having out-turned shoulders at their upper ends
55 spaced below the upper ends of the outer side walls, said shoulders extending over to the outer side walls, said inner side walls also having up-turned flanges at the outer edges
60 of the shoulders extending in contact with the uppermost portions of the outer side walls, said shoulders terminating at their upper ends flush with the upper edges of the outer side walls, a lower top plate seated upon said
65 shoulders and having up-turned flanges extending within and in contact with the first mentioned flanges and having the upper ends thereof terminating flush with the upper
70 ends of the first mentioned flanges and outer side walls, an upper top plate spaced above the lower top plate and seated upon the upper edges of the flanges and outer side walls and secured thereto, said outer side walls having
75 at their forward edges inwardly bent front panels spanning the space between the inner and outer side walls, said panels having in-turned flanges embracing the inner faces of the inner side walls.

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