S. C. WINGER.

ELECTRIC STOVE.

APPLICATION FILED DEC. 11, 1917.

1,263,181. Patented Apr. 16, 1918.

Fig. 1.

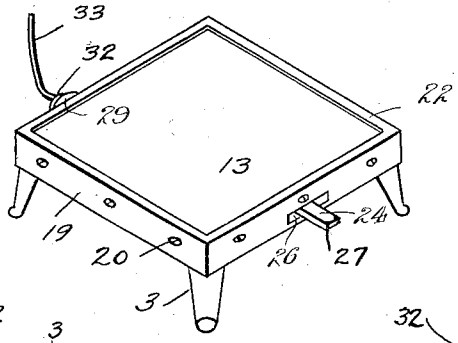


Fig. 2.

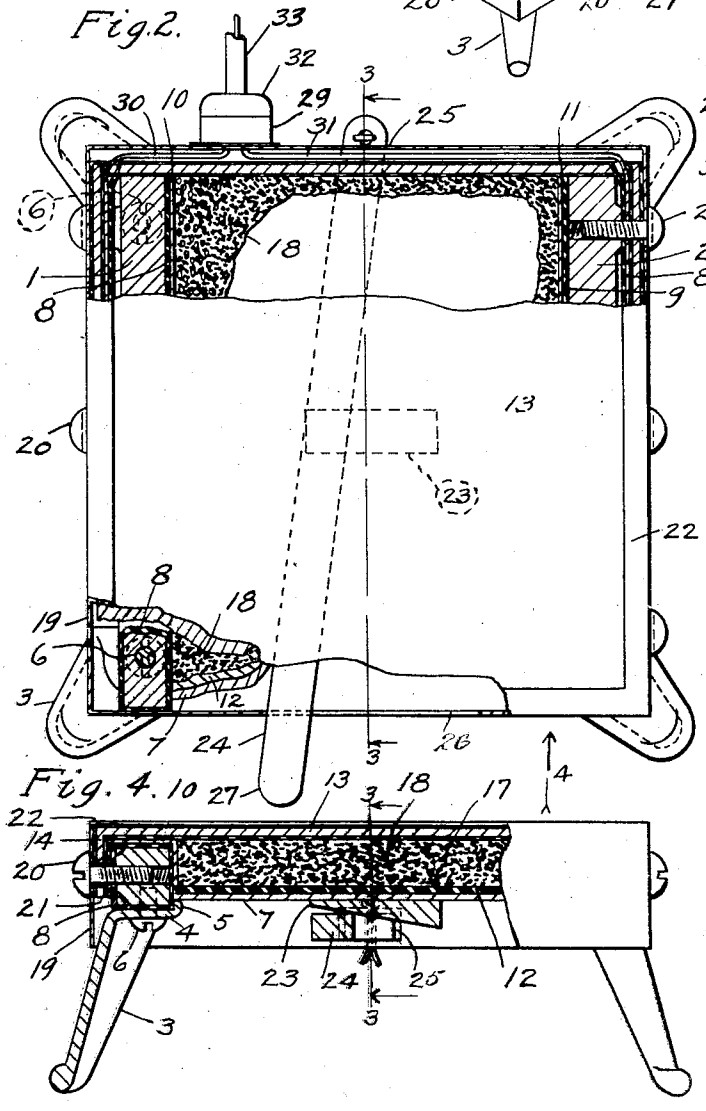
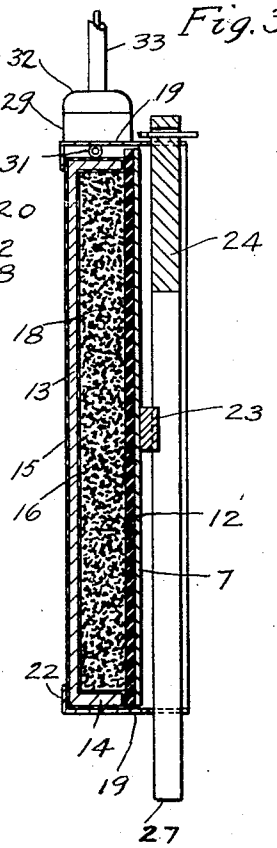


Fig. 3.



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UNITED STATES PATENT OFFICE.

STOVER C. WINGER, OF LOS ANGELES, CALIFORNIA.

ELECTRIC STOVE.

1,263,181. Specification of Letters Patent. Patented Apr. 16, 1918.

Application filed December 11, 1917. Serial No. 206,671.

To all whom it may concern:

Be it known that I, STOVER C. WINGER, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Electric Stoves, of which the following is a specification.

My object is to make an electric stove for cooking, heating, and the like, having simple means for regulating the heat, and my invention consists in the novel features herein shown, described and claimed.

Figure 1 is a perspective of an electric cook stove embodying the principles of my invention.

Fig. 2 is an enlarged top plan view, parts being broken away and shown in section.

Fig. 3 is a vertical sectional detail on the lines 3—3 of Figs. 2 and 4.

Fig. 4 is a front elevation partly in section looking in the direction indicated by the arrow 4 in Fig. 2.

The frame bars 1 and 2 are substantially square in cross section and extend from end to end along opposite sides of the stove. The legs 3 have attaching plates 4 and flanges 5 fitting upwardly against the bottoms of the ends of the bars 1 and 2, the legs being secured rigidly to the bars by screws 6 inserted through the legs and tapped into the bars. A rectangular sheet metal plate 7 is inserted downwardly and rests upon the flanges 5 to form a bottom for supporting the heating element. Insulations 8 and 9 are formed by bending sheets of asbestos to fit the outer sides, the upper sides, and the inner sides of the bars 1 and 2 from end to end. The copper electrodes 10 and 11 are formed of sheet copper bent to fit the outer sides, the upper sides, and the inner sides of the insulations 8 and 9, the electrodes being cut short on the inner sides. A heavy sheet of asbestos insulation 12 is placed upon the bottom plate 7 and the inner edges of the electrodes rest upon this insulation. The hot plate 13 is a rectangular steel plate bent downwardly along its four edges to form flanges 14, the side ones of the flanges 14 fitting directly against the outer sides of the electrodes 10 and 11, and the steel plate has enamel coating 15 and 16 upon its upper and lower faces to insulate the steel from the electricity. The chamber 17 below the hot plate 13 is filled with a heating element 18 composed of granulated carbon, the carbon being in direct contact with the inner sides of the electrodes 10 and 11 and the lower face of the hot plate 13 resting upon the carbon between the electrodes. A binding 19 extends entirely around the outer faces of the flanges 14 and is secured in place by screws 20 inserted through the binding and the intermediate parts and tapped into the bars 1 and 2, care being taken that the openings 21 through the outer sides of the electrodes are large enough to insulate the electrodes from the screws. A flange 22 extends inwardly all around the stove from the upper edge of the binding 19 over the corners of the hot plate 13, said binding and flange serving to hold the parts all securely together.

A wedge-shaped block 23 is spot-welded to the bottom face of the bottom 7 at its center, the taper of the wedge extending crosswise of the stove. A lever 24 is inserted through the opening 25 in the binding 19 at the back of the stove and extends under the wedge 23 and through a long opening 26 in the binding 19 at the front of the stove, and a handle 27 extends forwardly from the lever, the central portion of the lever bearing upwardly against the beveled face 28 of the wedge, so that when the lever is swung to the left, as in Fig. 2, the bottom 7 may spring downwardly to its normal position thereby appreciably decreasing the pressure upon the carbon granules forming the heating element 18, and when the handle 27 is moved to the right, the lever 24 presses upwardly on the wedge 27 thereby pressing the bottom 7 upwardly and compressing the carbon at the center of the hot plate 13. In this manner the temperature of the hot plate at the center and radiating from the center may be accurately regulated.

The electric socket 29 is attached to the binding 19 at the back side of the stove and the wires 30 and 31 extend from the socket to the ends of the electrodes 10 and 11. The electric plug 32 is removably mounted in the socket 29 and the wires 33 lead from the plug. The circulation of electricity is through the wires 30 and 31 to the electrodes 10 and 11 and through the heating element 18 from one electrode to the other.

The heating element 18 will distribute the heat more or less all over the hot plate 13 between the electrodes, the amount of heat depending upon the current used and

upon the density and volume of the carbon, and under a given voltage and amperage the temperature may be accurately adjusted to the needs by manipulating the handle 27 to regulate the pressure upon the carbon.

The principles of my invention may be applied to cook stoves, as shown and described, and they may also be applied to heaters, toasters, and especially to waffle irons, the idea being that each member or iron will be supplied with a heating element, the two irons being hinged together and brought together face to face as is usual.

While I have shown the preferred construction of my electric stove as now known to me, it will be understood by those skilled in the art that various changes in the combination, construction and arrangement of parts may be made without departing from the spirit of my invention as claimed.

I claim:

1. In a stove, a flexible sheet metal bottom, an insulating box resting upon the bottom, carbon dust filling the insulating box, electrodes extending along opposite sides of the carbon dust, an insulated hot plate resting upon the carbon dust, and means for raising and lowering the center of the bottom plate to regulate the pressure upon the carbon dust.

2. In a stove, a flexible sheet metal bottom, an insulating box resting upon the bottom, carbon dust filling the insulating box, electrodes extending along opposite sides of the carbon dust, an insulated hot plate, resting upon the carbon dust, and means for raising and lowering the center of the bottom plate to regulate the pressure upon the carbon dust and to regulate the pressure of the carbon dust against the hot plate.

3. A flexible bottom, an insulating box resting upon the bottom, electrodes extending along opposite sides of the insulating box, carbon dust filling the box and contacting with the electrodes, an enameled hot plate resting upon the carbon dust, a wedge secured to the bottom plate near its center, and a lever mounted to engage the wedge; so that by manipulating the lever the pressure upon the carbon dust and the pressure of the carbon dust against the hot plate may be regulated.

In testimony whereof I have signed my name to this specification.

STOVER C. WINGER.