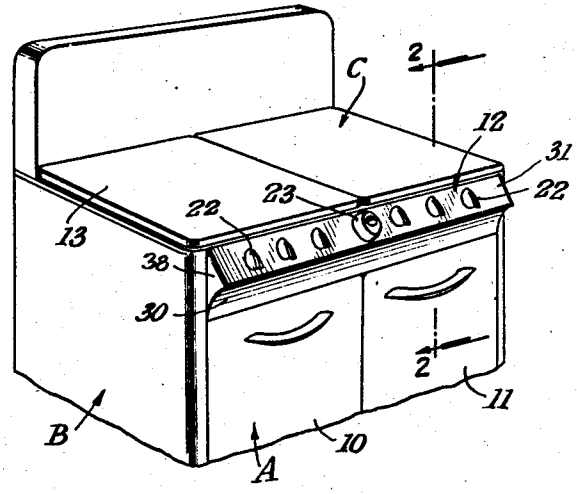
Dec. 8, 1953 D. P. O'KEEFE 2,661,732

GAS STOVE CONTROL PANEL

Filed March 9, 1945

Fig. 1.



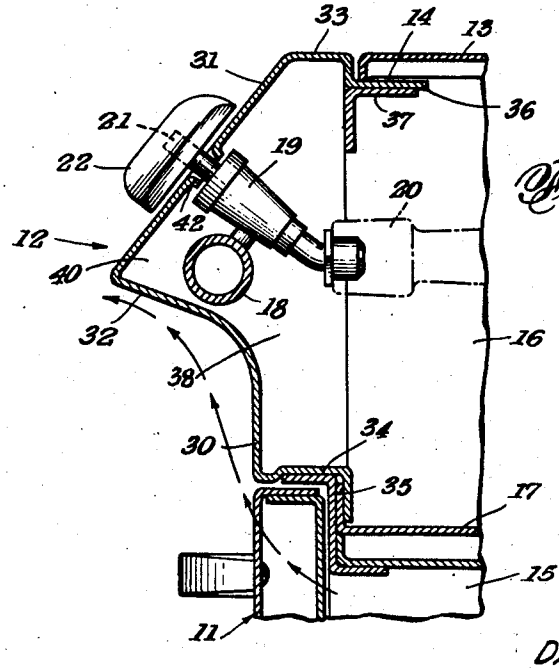


Fig. 2.

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Patented Dec. 8, 1953

2,661,732

UNITED STATES PATENT OFFICE

2,661,732

GAS STOVE CONTROL PANEL

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Application March 9, 1945, Serial No. 581,890

6 Claims. (Cl. 126—39)

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This invention relates to stove construction and has particular reference to features of construction that can be incorporated advantageously in modern cooking stoves or ranges such as are commonly termed console type stoves.

The usual stove or range of the type referred to is a box-like structure including one or more cooking compartments such as broilers or ovens, and a top or upper burner compartment carrying a plurality of burners at the top of the stove. The front of such a stove is usually flat, or substantially so, and is formed for the most part by the doors of the cooking compartments and by a panel at the front of the burner compartment, which panel carries instruments and the various control elements whereby the burners of the stove are controlled and regulated. In practice the doors of the cooking compartments are seldom perfectly tight and whenever the cooking compartments are opened heat escapes, with the result that when the cooking compartments are in use the controls at the panel become so hot, due to the heat escaping up the front of the stove, that they become inconvenient to use and in some cases may even become injured or burned.

It is a general object of my present invention to provide a front for a stove of the general character referred to which is such as to protect the control elements at the panel above the cooking compartments so that they never become unduly overheated.

Another object of this invention is to provide a stove front including a baffle or heat deflecting element between the cooking compartments and the control elements at the panel.

It is a further object of this invention to provide a stove of the general character referred to having a heat deflecting element or baffle at the panel at the upper front portion of the stove immediately below the control members or knobs, which project from the panel, which baffle serves to effectively deflect heat flowing up at the front of the stove so that the control elements are protected therefrom.

Another object of this invention is to provide a novel panel construction for the panel of a stove which carries the control elements of the stove.

The various objects and features of my invention will be fully understood from the following detailed description of a typical preferred form and application of my invention, throughout which description reference is made to the accompanying drawings, in which:

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Fig. 1 is a perspective view of the upper portion of a typical stove showing one form of my present invention applied thereto.

Fig. 2 is an enlarged detailed transverse sectional view of the construction shown in Fig. 1, being a view taken substantially as indicated by line 2—2 on Fig. 1.

The construction that I have provided by my present invention is applicable, generally, to stoves or kitchen ranges. However, it is particularly practical and useful in connection with stoves of the type ordinarily known as console type and, therefore, I have throughout the drawings shown it applied to this type stove. It is to be understood that the invention can be applied to stoves of various types or styles and that it can be applied to stoves employing various fuels. For instance, it can be used to advantage on oil stoves, electric stoves and also on gas stoves.

The stove illustrated in the drawing being of typical console type is a box-like structure involving, generally, a front A, sides B, a top C, and various other parts common or incidental to structures of this character. It is characteristic of console type stoves that the front be formed of various parts which are substantially flat and flush one with the other. In accordance with common stove construction I have illustrated the front A formed mainly by two doors 10 and 11 which cover lower or cooking compartments of the stove, there being a panel 12 arranged across the upper portion of the stove immediately above the doors. The stove that I have chosen to illustrate is of common design and has hinged covers 13 forming the top C and these covers fit or recess into the upper edge portion of the panel 12, as shown at 14 in Fig. 2, to form a neat construction at the upper forward corner of the stove. It is to be understood that the invention can be applied with equal advantage to a stove in which the top is fixed so that there are no hinged cover parts.

In the particular stove illustrated there are two lower or cooking compartments and for purpose of example one of these may be considered an oven and the other a broiler, it being understood, however, that the stove may involve but a single cooking compartment which may be either an oven or a broiler, or which may be designed for any other suitable cooking operation. In the drawings the cooking compartment covered by the door 11 is designated by the numeral 15 and may be considered either a broiling compartment or an oven.

Immediately above the cooking compartments there is an upper or burner compartment 16 in the front of which is covered by the panel 12. The compartment 16 accommodates the usual burners (not shown) and may be shaped and proportioned to accommodate the necessary structural elements incidental to the burners. It is to be understood that the interior of the stove can be divided into the various desired compartments through suitable partitions. In the drawing, a partition 17 is shown separating the cooking compartment 15 from the upper or burner compartment 16.

In accordance with common stove construction a gas manifold 18 extends across the front of the stove through the forward portion of the compartment 16. The manifold 18 supplies suitable gas valves or cocks 19 employed to distribute gas to mixing devices 20 which conduct it to burners located in the compartment 16 as desired. In accordance with common stove construction the stems 21 of the cocks 19 project through the panel 12 and carry operating members or knobs 22. The operating knobs being thus located at the front of the panel 12 which is located at the upper portion of the front of the stove are conveniently accessible for operation. In addition to the operating knobs other control elements such as a heat control means 23, or the like, may be provided on the front of the panel 12. When I refer to a control element I mean to include not only knobs for operating gas cocks or for operating electrical controls, but any sort of control member that may be required or desired in a structure of the character under consideration.

In accordance with my present invention I provide a baffle or deflector at the front of the stove between the control elements above described and the lower or cooking compartments. In the preferred form of the invention the deflector that I provide is located at the panel 12. In fact, it may be incorporated in or as a part of the panel, as shown.

The deflector that I have provided is not only at the panel but is formed or incorporated as a part of the panel 12. In this form of the invention the panel is formed to have several distinct portions, namely a lower portion 30, an upper portion 31, and an intermediate portion 32 that joins the upper and lower portions. The particular panel 12 illustrated has a top edge portion 33 which is horizontally disposed and flush with the covers 13 when they are closed and it has a lower, inwardly extending flange 34 which facilitates application of the panel to a frame element 35 of the stove construction. A downwardly offset flange 36 projects from the top edge portion 33 of the panel and serves to connect the panel with a frame member 37 and to form a rest at 14 for the reception of the tops or covers 13.

The lower section of the panel 12 is a flat, vertically disposed part, preferably located to be substantially flush with the front of the doors 10 and 11 which are below it. The upper section of the panel may be a flat, plain part, but instead of being vertically disposed it extends downwardly and outward or forward from the top edge portion 33, and in the design illustrated, it extends downward to a point about midway between the top and bottom edges of the panel.

The middle or intermediate section 32 of the panel joins the lower or projecting edge of the upper section 31 with the upper edge of the lower section 30 and is disposed so that it extends

upwardly and outwardly in the course of connecting these edges. The intermediate section of the panel is the baffle that I have provided and in its preferred form it is made concave, as shown in the drawing, so that it is effective in deflecting heat outwardly as indicated by the arrows in Fig. 1.

The panel 12 may be integrally provided with end walls 38 which provide closures for the compartment 16. These walls may be rounded over to blend into the range side walls B or may be flat as shown and disposed slightly inwardly of said range side walls.

In practice the panel that I have just described may be built up or fabricated in any suitable manner. However, I prefer to form it of a single body or sheet of material, preferably sheet metal, so that it is entirely free of seams or joints. This construction or formation of the panel is particularly advantageous since such part of the stove is commonly coated with vitreous enamel and such covering is often difficult to apply to jointed constructions.

With the panel 12 formed as I have described, there is a cavity or chamber 40 formed in the panel from its rear side, and in the preferred construction the manifold above described is located in this cavity. With this arrangement it is a simple matter to arrange the cocks 19 in an angular position on the manifold 18 so that the stems 21 project upwardly and outwardly through suitable openings 42 in the upper section 31 of the panel, so that they are perpendicular to the upper section of the panel. The knobs or control elements 22 applied to the projecting stems 21, being at the sloping face of the upper section 31 of the panel, are effectively protected against heat flowing up the front of the stove as they are clearly out of the path of the heat, the path of the heat having been effectively deflected by the intermediate or baffle section 32 of the panel.

Having described only a typical preferred form and application of my invention, I do not wish to be limited or restricted to the specific details herein set forth, but wish to reserve to myself any variations or modifications that may appear to those skilled in the art and fall within the scope of the following claims.

Having described my invention, I claim:

1. A stove including a cooking compartment having a front opening, a door at the front of the stove normally closing the opening, a fixed upwardly and inwardly extending panel at the front of the stove above the door, a control element at the front of the panel, and a fixed heat deflector between the top of the opening and said panel in the path of heat flowing up from the opening at the front of the stove and directing such heat forward and away from the stove and clear of the control element, the deflector being curved upward and forward to have a concave heat directing surface and the forward portion of the panel being contiguous with the forward portion of the deflector and forming an acute angle therewith.

2. A control panel for the front of a stove having a control element, a cooking compartment open at the front of the stove, and a door normally closing the compartment including, a substantially flat fixed upwardly and inwardly extending portion at the front of the stove above the door mounting the control element, and a fixed heat deflector between the opening and said upwardly and inwardly extending portion of the panel in the path of heat flowing up from the

opening at the front of the stove and directing such heat forward and away from the stove and clear of the control element, the deflector being curved upward and forward to have a concave heat directing face and the forward upper edge of the deflector being faced upward and forward of the stove and contiguous with the forward lower edge of the said upwardly and inwardly extending portion of the panel.

3. A stove including, a cooking compartment having an access opening at the front of the stove, a door at the front of the stove closing the opening, a downwardly and outwardly fixed panel at the front of the stove above the door, a control element at the front of the panel, and a fixed concave heat deflector above the door and projecting forward of the door when the door is closed, the deflector being between the opening and said panel in the path of heat flowing from the compartment through the opening and directing such heat forward and away from the stove and clear of the control element, the panel and deflector joining to establish a forwardly facing sharp corner, the stove being free of structure forward of said corner for free flow of heat away from the stove.

4. A stove including a cooking compartment, a door at the front of the stove closing the compartment, a fixed panel at the front of the stove above the door in the path of heat flowing up from the compartment at the front of the stove and having a substantially flat upwardly and inwardly extending upper portion, and a control element at the front of the upper portion of the panel, the panel having a lower portion joined to the upper portion and having a concave part projecting upward and forward below said upper portion forming a heat deflector, the lower portion having an upwardly and forwardly facing edge which joins the lower outer edge of the upper portion of the panel forming an acute angle therewith.

5. A stove including a cooking compartment, a door at the front of the stove closing the compartment, a fixed panel at the front of the stove above and forward of the door in the path of

heat flowing up from the compartment at the front of the stove, and a control element at the front of the panel, the panel having a substantially flat lower vertically disposed section extending upwardly from the said compartment, a substantially flat upper downwardly and forwardly pitched section at which the said element is located, and an intermediate section having a heat directing concave portion extending upward and outward, said intermediate section extending from the upper edge of the lower section to join the lower edge of the upper section and form a forwardly facing sharp corner therewith, the stove being free of structure forward of said corner.

6. A stove including a cooking compartment, a door at the front of the stove closing the compartment, a fixed panel at the front of the stove above the door and forward of the compartment, and a control element at the front of the panel, the panel being formed of a continuous sheet of material having a substantially flat lower vertically disposed section extending upwardly from the compartment, an upper substantially flat downwardly and forwardly pitched section at which the said element is located and a substantially concave intermediate section extending upward and outward from the lower section to the lower edge of the upper section.

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