Oct. 20, 1931. L. S. KAUFFMAN 1,828,666

OVEN FLUE OUTLET

Filed April 3, 1930

Fig. 1

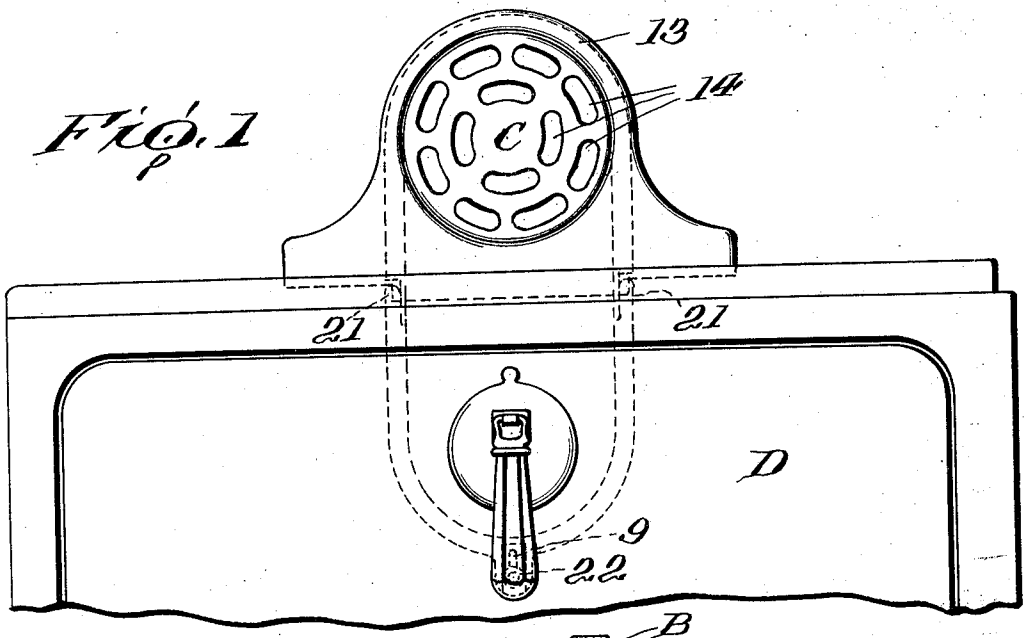
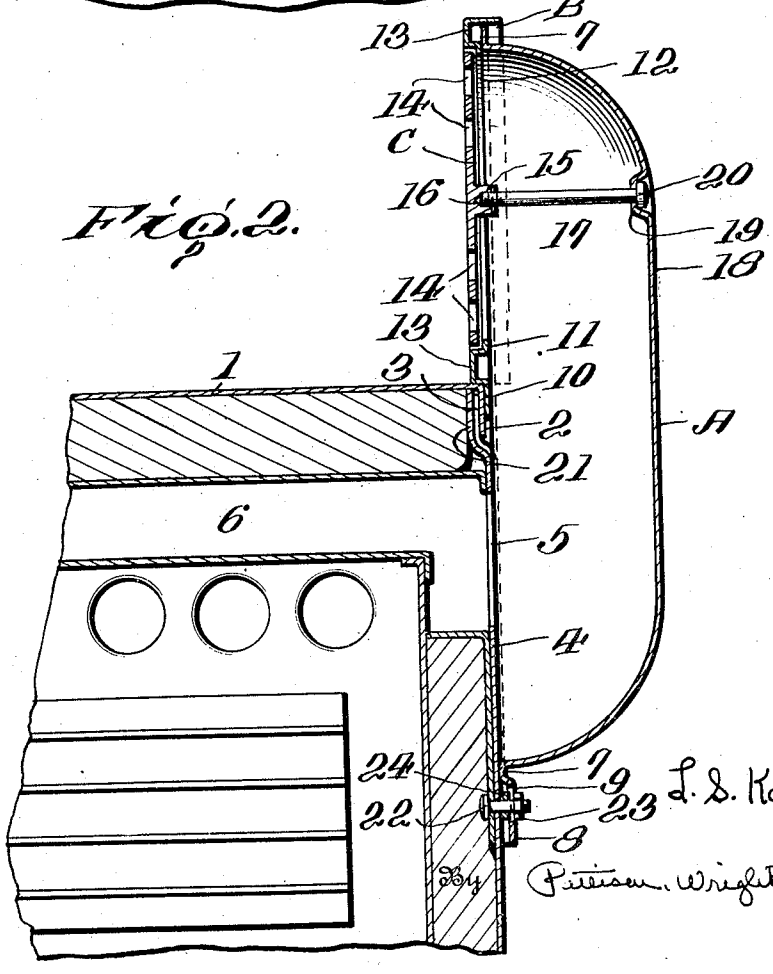



Fig. 2.




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# UNITED STATES PATENT OFFICE

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## OVEN FLUE OUTLET

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This invention relates to improvements in oven flue outlets, particularly for use in connection with gas ranges and might be termed a flue gas deflector, as the purpose of the device is to deflect the flue gases which escape from the oven in a forwardly direction to protect the kitchen walls from being marred by these gases where the flue outlet of the oven is not connected with a flue pipe.

At the present time, it is quite a common practice to allow the flue gases from the oven of the gas range to escape into the kitchen rather than to connect the oven outlet with a flue pipe leading to a point outside of the house, and it has been the common practice to let these flue gases escape in a vertical direction with the result that the kitchen walls become stained and marred from the passage of the oven gases along the surface of the walls.

The present invention has been conceived to overcome this objection which is present in the flue constructions commonly used and the present invention has also been conceived so as to provide a flue gas outlet or deflector which is more pleasing in appearance than those now known and in use and, additionally, to provide a device which is readily and quickly attachable to the oven of the range in a simple manner.

Accordingly, the primary object of the invention is the provision of a novel oven flue outlet or oven flue gas deflector.

A further object of the invention is the provision of a device of the character described which is pleasing in appearance.

A still further object of the invention is the provision of a device of the character described which is simple and cheap of manufacture, quickly and easily attachable to a range oven and a device which is highly efficient in operation.

Other specific features and improvements and novel results of the invention will appear from the following description, taken in conjunction with the accompanying drawings.

In the drawings:

Figure 1 is a view in front elevation of a range oven having attached thereto the improved oven outlet flue.

Figure 2 is a fragmentary vertical sectional view through the upper rear end of a range oven showing the attachment of the improved flue outlet.

In its preferred form, the outlet flue or deflector is made in three pieces, two of which are sheet-metal stampings, while one is a casting. The sheet metal stampings are indicated at A and B, and the casting at C.

The oven as an entirety is designated at D.

The oven shown is one of more-or-less conventional type in that the oven top 1 has at its rear edge a depending flange 2, which telescopes or receives behind it the upper edge 3 of the rear oven wall 4, which wall is provided with an outlet opening 5 in connection with the flue arrangement 6 of the interior of the oven.

The stamping A is a dished oval shaped member having at its open side a peripheral outwardly bent flange 7, which flange at the bottom of the member is provided with an elongated depressed or dished extension 8 having therein an opening 9.

The stamping or member B, at its bottom, presents an elongated straight line flat portion 10. Centrally of the member it is provided with a depressed portion 11 forming the peripheral edge of an opening 12, with the result that the depressed portion 11 is surrounded by a U-shaped bulge 13.

The casting C is of circular form and of a diameter to properly fit within the depressed portion 11 of the member B, and as it is provided with a plurality of openings 14, this casting constitutes a grid for the enlarged opening 12 of the ring B. Centrally of its rear face, the casting or grid C is provided

with a lug 15, having an interiorly screw-threaded opening 16.

The ring B and the grid C are secured to the upper end of the oval dished shaped member A, by means of a long bolt 17, which passes through the rear of the back wall 18 of the member A and is threaded into the lug 15, of the grid. The rear wall 18 of the member A is formed with the depression 19 to receive the head 20 of the securing bolt 17.

Intermediate of its length, the flange 7 of the deflector member A is provided with two tongues 21, which are offset from the flange and extend in vertical parallel relation in respect thereto.

The member A is attached to the oven by inserting the tongues 21 upwardly between the depending flange 2 of the oven top and the upper edge 3 of the rear wall of the oven and then securing the bottom of the member A to the rear wall of the oven by means of a bolt 22 and the nut 23. It will be seen that the bolt 22 always remains in place by reason of the lock nut 24, which lock nut is received within the dished portion of the flange extension 8.

With the parts secured and positioned as above described, it will be seen that the bulged portion 13, rests upon the oven top at its rear edge with the elongated portion 10 of the ring B paralleling and engaging the outer surface of the depending flange 2 of the oven top, thus aiding in the support of the entire device.

With the device secured in the manner described, the flue outlet 5 in the rear wall of the oven is in communication with the interior of the dished oval shaped deflector and conveyor A, and the conveyor A is closed throughout the greater portion of its length by the rear wall of the oven to form in conjunction therewith a pipe.

It will be further seen that as the flue gases pass up the conveyor, they will be discharged forwardly through the grid openings 14, over the oven top, and thus directed away from the walls of the kitchen.

The device is very simple and cheap of construction and is made in only three parts and furthermore, it is quickly and easily assembled and attached to the oven range. When the deflector is in place, it is held securely against displacement and provides an efficient oven flue and oven flue gas deflector. By reason of the bulge 13, the stamping or annular ring B is supported throughout its length upon the rear edge of the oven top.

Having thus described my invention what I claim and desire to secure by Letters Patent is:

A range having a flue outlet in its rear vertical wall, of an outside flue having its inner side flat vertically and fitting against the said rear vertical wall of the range substantially half its length, the lower vertical flat portion having a horizontal opening communicating with the said flue opening and its upper flat portion extending above the said wall substantially in a vertical line with the rear vertical wall of the range and the said extension having an opening, the parts operating as specified.

In testimony whereof I hereunto affix my signature.

LESTER S. KAUFFMAN.