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CLEANOUT VENTILATOR ATTACHMENT FOR RANGES

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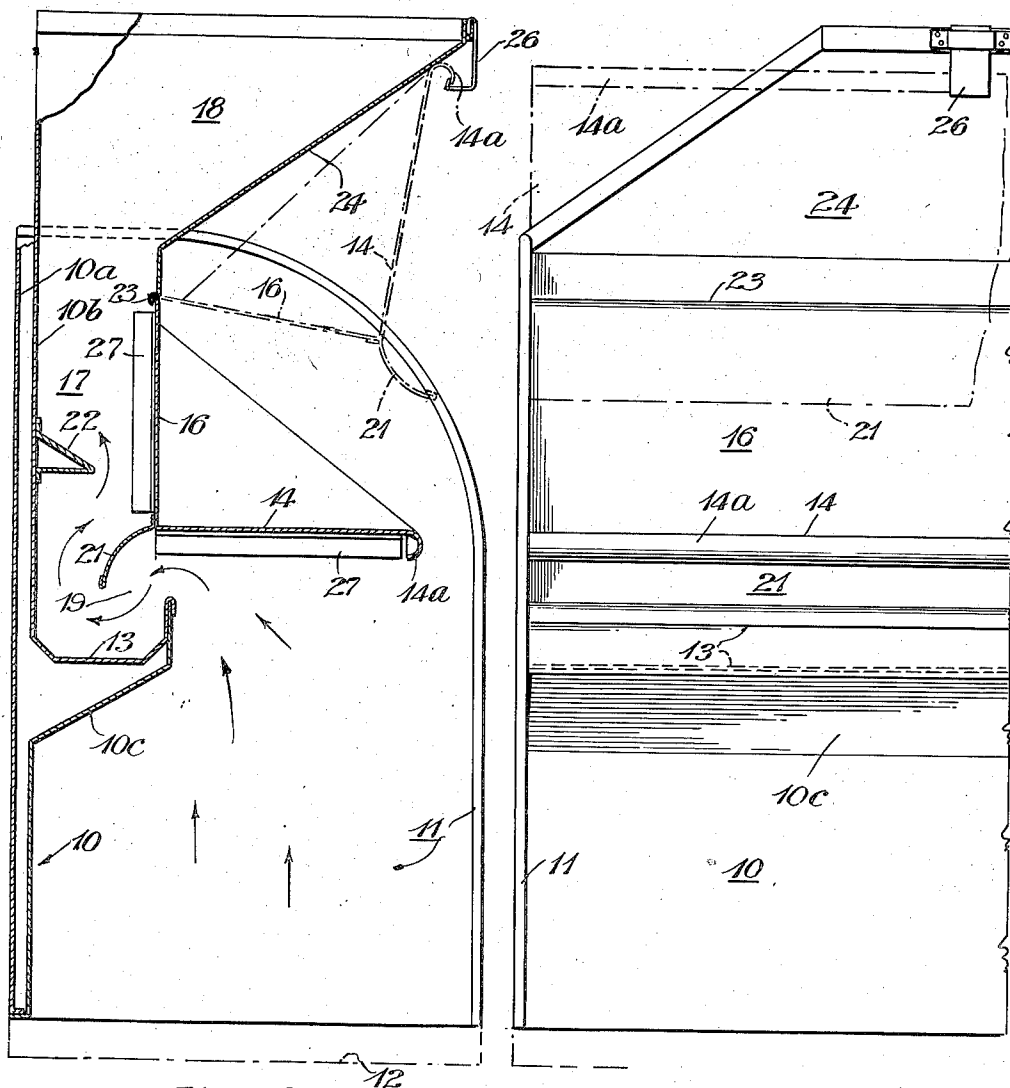


FIG. 2.

FIG. 1.

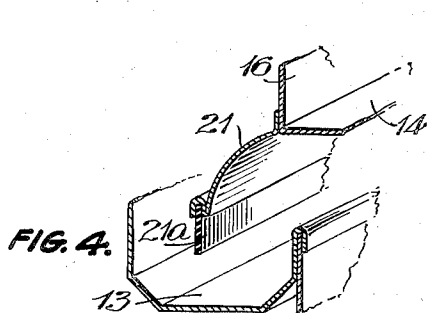


FIG. 4.

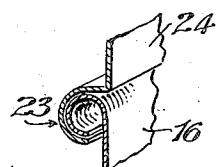


FIG. 3.

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CLEANOUT VENTILATOR ATTACHMENT FOR RANGES

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2 Claims. (Cl. 126-299)

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The present invention relates to ventilator attachments for use on cooking ranges and the like for drawing off the fumes, smoke and grease occasioned by the cooking operation as well as for preventing undue heating of the air in the kitchen. In ventilator attachments of this type the air and other gases above the cooking surface of the range are drawn off by power suction devices such as electrically driven blowers, and in connection with such ventilators it is common to provide means for trapping or extracting the grease.

The present invention has for its purpose the provision of an improved ventilator attachment of the above character which provides for ready access to the interior of the grease trapping structure to enable easy inspection and cleaning of such interior.

The above and other objects of the invention will be apparent from the following description of a preferred embodiment of the invention, as illustrated in the accompanying drawings, in which:

Figure 1 is a partial front elevation of a ventilator attachment embodying the invention.

Figure 2 is a vertical sectional view through the attachment.

Figure 3 is a fragmentary sectional view of the hinge or pivot construction.

Figure 4 is a fragmentary sectional view of a modified trough and baffle construction.

Referring to the drawings, the ventilator attachment includes a generally rectangular open front frame structure including a back wall 10, and respective side plates 11 extending outwardly therefrom above the cooking surface 12 of the range indicated schematically in Figure 2. As illustrated, the back wall 10 includes a rear section 10a which may be integral with the side plates 11 and an interior back wall 10b is spaced therefrom and formed at the bottom as a grease trough 13. From the outer or front lip of the trough 13 a second back wall portion 10c extends downwardly and is joined suitably to the wall portion 10a. Projecting forwardly from above the trough 13 and extending between the two side plates 11 is a horizontal shelf 14 which may be formed integrally with a front wall section 16 of a passage 17 to form a cleaning door unit. The passage 17 leads upwardly from below the shelf 14 into an enlarged grease trapping chamber 18 from which a suitable conduit (not shown) extends to the point of disposal of the fumes. The entrant end of the passage 17 is formed by a transverse slot 19 formed between the rear edge

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of the shelf 14 and the forward edge of the trough 13.

Baffle means are provided to form a tortuous path of flow of the fumes and grease laden air from above the stove to aid in extraction of grease. An arcuate baffle 21, which may be suitably attached as by welding to the door unit formed by the shelf 14 and the wall section 16 extends downwardly and rearwardly toward the center of the trough 13. A V-shaped baffle 22 is secured on the wall 10b and spaced upwardly from the arcuate baffle 21. As shown, these baffles provide a tortuous flow of the air entering the lower end of the passage so that certain particles of grease and other matter entrained with the gases are thrown therefrom through centrifugal action against the rear wall of the passage. Also it is to be noted that the trough 13 underlies the respective front and rear walls of the passage 17 to catch any grease dripping therefrom.

To provide for easy access to the passage and baffle structure for cleaning, the door unit formed by the shelf 14 and the wall section 16 is provided with a hinge or pivot mounting 23 at the lower part of the front wall 24 of the chamber 14. The hinge 23 may be formed by rolling the end edges of the adjacent wall portions 24 and 16 to form a greaseproof hinge. In the normal closed position of the door the shelf 14 and the wall portion 16 engage respective sets of stop angles 27 on the respective side walls 11. A suitable hook 26 is secured centrally of the wall 24 at the upper edge thereof for engagement by the curved forward edge 14a of the shelf 14 in the open position of the door unit as shown in dotted lines in Figure 2.

From the above description it will be seen that by raising the door unit comprising the shelf 14 and the wall section 16 from the angle stops 27 against which they normally rest and latching the door unit in open position as shown in phantom lines in Figure 2, the entire interior surface of the passage 17 including the surfaces of the baffles 21 and 22, the interior of the trough 13, etc. are completely accessible for cleaning to remove any grease which may have been deposited on the walls or which has drained into the trough 13.

As shown in Figure 2, the baffle 21 clears the forward wall of the trough 13 upon movement of the door unit between its closed and open positions. Figure 4 shows a modified baffle construction having a resilient edge or extension 21a of suitable synthetic rubber which overlaps vertically the forward wall of the trough 13 to form

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an air block when the trough becomes too full of grease. The extension 21a yields in passing the forward wall of the trough during movement of the door unit.

While I have shown and described a preferred embodiment of the invention, it will be understood that the invention is capable of variation and modification from the form shown so that its scope should be limited only by the scope of the claims appended hereto.

I claim:

1. A ventilator attachment for a range including a frame structure having a back wall extending upwardly from the rear of the cooking surface of the range and respective side plates extending forwardly from the back wall, a shelf mounted on said frame between said side plates and above the cooking surface, a grease trough extending along said back wall and located below said shelf to form a slot therebetween, a transverse wall section connected to and extending upwardly from said shelf to form therewith a door unit, means including said frame structure and said wall section forming a passageway leading from said slot between said shelf and said trough and extending upwardly through said structure for exhaust of fumes and gases, a depending baffle supported by said door unit and extending into said passageway and toward said trough, and pivot means supporting said door unit adjacent an edge thereof for swinging movement thereof between its normal closed position and an open position providing access to said passageway, said trough and said baffle for inspection and cleaning, the location of said pivot with respect to said baffle and said trough providing a path of movement of said baffle to clear

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said trough during said swinging movement of said door unit.

2. A ventilator attachment for a range including a frame structure for encompassing the rear and sides of the cooking surface of a range and including a horizontal shelf adjacent the front of the structure and extending between the sides thereof, a grease trough mounted on said structure below said shelf, a wall section extending between the sides of said structure and connected to said shelf, said shelf and said wall section being movably mounted on said structure as a cleaning door unit, means including said structure and said wall section forming a passageway through said structure, means including said shelf and said trough providing an inlet slot for said passageway, and a baffle on said door unit projecting into said passageway and downwardly toward said trough.

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