Aug. 18, 1936. P. A. HENTSCHEL 2,051,710

DEFLECTOR FOR GAS STOVES

Filed Jan. 15, 1935

Fig. 1.

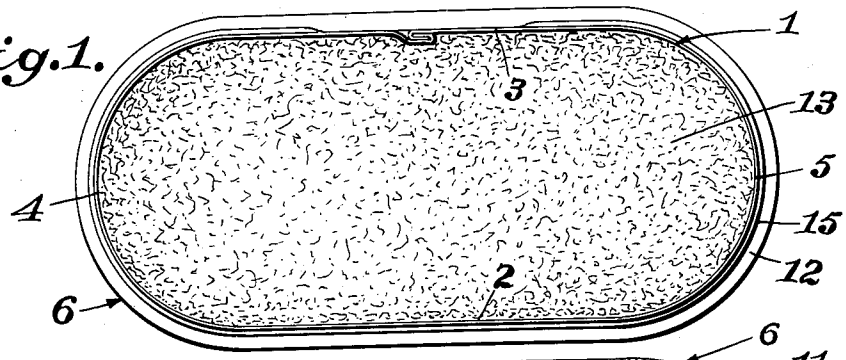


Fig. 3.

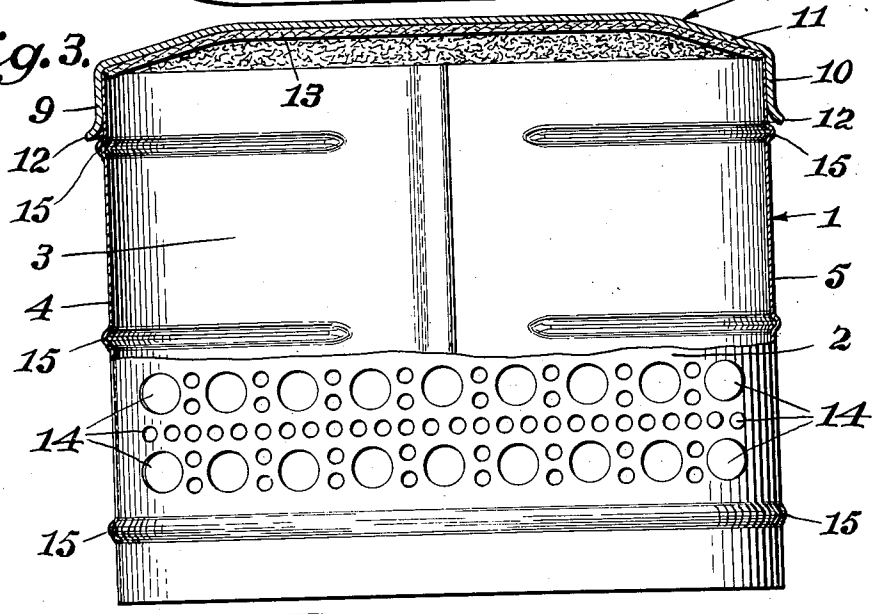
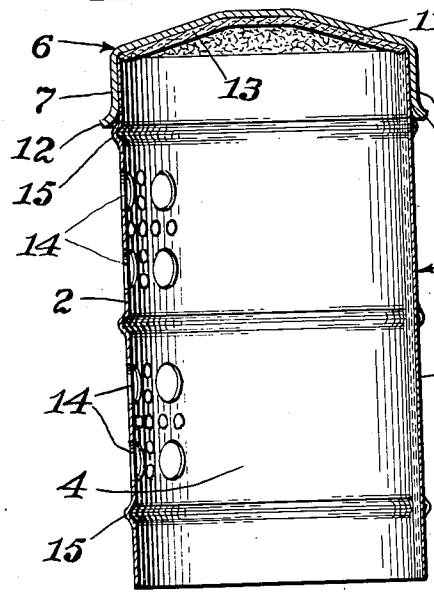


Fig. 2.



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DEFLECTOR FOR GAS STOVES

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Application January 15, 1935, Serial No. 1,940

1 Claim. (Cl. 126—299)

The invention concerns a deflector for the fumes of gas stoves, and consists in the features and combination and arrangement of parts hereinafter described and particularly pointed out in the claim.

In the accompanying drawing

Figure 1 is a bottom plan view.

Fig. 2 is a vertical cross section.

Fig. 3 is in part a vertical longitudinal section.

In carrying out the invention, one object, besides economy of manufacture and simplicity of structure, is to provide a deflector that may be readily applied to the collar of a gas stove, and readily removed and dismembered for cleaning and replacement.

The chimney portion 1 is made of thin flexible tin.

It is of elongated form when viewed in plan, having its front and rear walls 2 and 3 substantially parallel for a considerable distance with curved end walls 4, 5. At the top of the chimney there is a cover or hood 6 which is made of heavier sheet metal than the chimney in order to provide a member which will hold the upper portion of the chimney in shape despite the flexibility of the thin metal. This hood portion is stamped up into shape with front and back walls 7, 8 substantially parallel and with curved end walls 9, 10. These walls depend from the top wall 11 of the hood, and near the lower edge these walls curve or flare outwardly and terminate in an outwardly directed edge portion 12. The top wall 11 of the hood is of generally arched formation, its central portion being raised in respect to the side and end walls.

This cover or hood is substantially rigid by reason not only of the thickness of the sheet metal of which it is composed, but because of the arched form of the top wall and also because of the outwardly flared lower portions of the side and end walls and the outwardly directed edge portion 12, all of which features add stiffness to the hood. The relative dimensions of the top portion of the chimney and the hood are such that the hood readily can be pressed down onto the top portion of the chimney so that the upper part of the chimney will be received within the hood, with the walls of these two parts engaging each other with sufficient frictional grip that they will be held together. This grip is also due in part to the springy character of the walls of the chimney when shaped to the elongated form shown.

The yielding character of the chimney wall enables the two parts to be quickly assembled, the wall of the chimney readily accommodating itself to the depending wall of the cover, and the latter being stiff and rigid to maintain the shape of the chimney in conformity with the interior of the wall of the hood. No fastening means is necessary between the chimney and the hood or cover besides the frictional grip between them. The flaring lower part of the depending wall of the hood enables the assembly to be quickly made, the yielding wall of the chimney being received at its upper edge by the cover whose flaring wall aids in centering the chimney in respect to the cover. The upper edge of the chimney, when the parts are assembled, reaches to the under side of a sheet of asbestos or other fume absorbent and fireproof material. This sheet is indicated at 13. It is clamped between the upper edge of the chimney and the top plate of the cover.

It may be renewed by simply separating the hood or cover from the chimney and substituting a fresh sheet of material, and the whole device may be readily cleaned by removing it from the stove collar, whereupon its parts can be separated from each other, and, after cleaning, readily reassembled and replaced on the collar.

The chimney has discharge openings 14 in its front wall. Its end wall and back wall are closed, so that all the fumes are discharged forwardly in relation to the stove structure, and away from the wall against which the stove may be positioned.

The cover or hood portion is imperforate as to all of its walls.

The openings through the front wall of the chimney may be of a design character for ornamentation as well as for use in discharging the fumes. The chimney is made desirably out of one piece of thin tin, the edges of which may be joined at the back forming a vertical seam. To give strength, the thin metal may have ribs 15 upset therein near the top, bottom, and middle portions of the wall. These ribs or upset portions of the chimney wall may extend along the front wall around the ends and partly along the back wall.

The upper rib may be adjacent the lower edge of the cover or hood member.

The strengthening ribs do not make the wall of the chimney rigid, but on the contrary, it still has the desirable degree of flexibility to enable it to be readily fitted to the stove collar, and to readily receive the hood or cover member.

The hood portion may be enamelled for appearance sake and in any desired color.

It will be noted that the strengthening ribs in

the chimney are spaced symmetrically. That is to say, there is a rib at both the upper and lower portions of the chimney spaced equally from the edge thereof. This provides a wall portion at each end of the chimney so that in assembling the device either end of the chimney may be received within the downwardly and outwardly flaring walls of the rigid hood portion.

I claim:—

A deflector for the fumes of gas stoves or the like comprising a chimney section of relatively thin yielding material, said chimney being of elongated form in cross-section with rounded end portions and having an outlet in its wall, and a removable cover of substantially rigid material comprising an imperforate top wall with a continuous wall depending from said top wall on all sides thereof, said rigid cover being held to the chimney by the friction grip of the yielding wall of the chimney with the inner side of the rigid depending wall of the cover, said rigid depending wall of the cover being flared outwardly at its lower edge to receive the thin yielding wall of the chimney and shape and guide it into place, said top wall of the rigid cover being of arched form from end to end and side to side, and a sheet of fume arresting material lying against and conforming to the arched form of the inside of the top wall of the cover and with its edge contacting the upper edge portion of the removable chimney section, whereby said material is retained in position while permitting of ready removal for cleaning and replacement.

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