

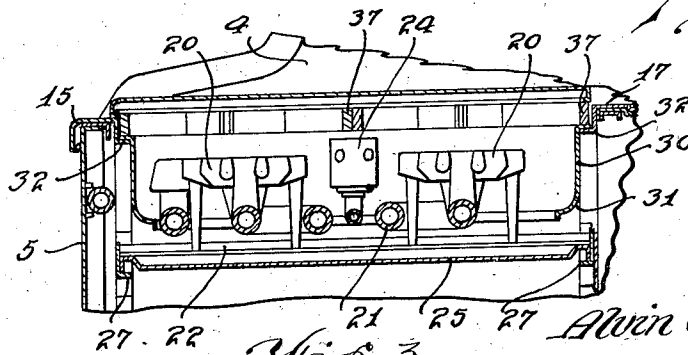
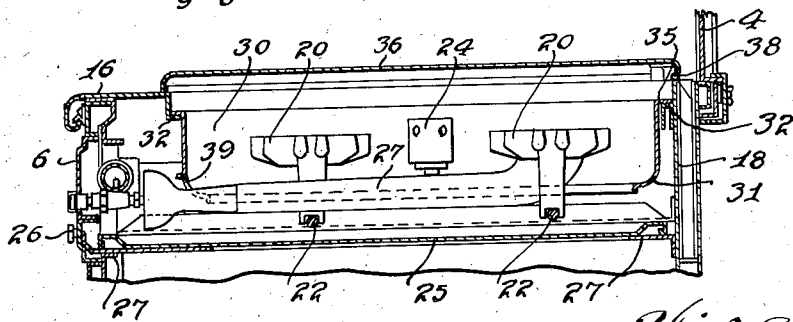
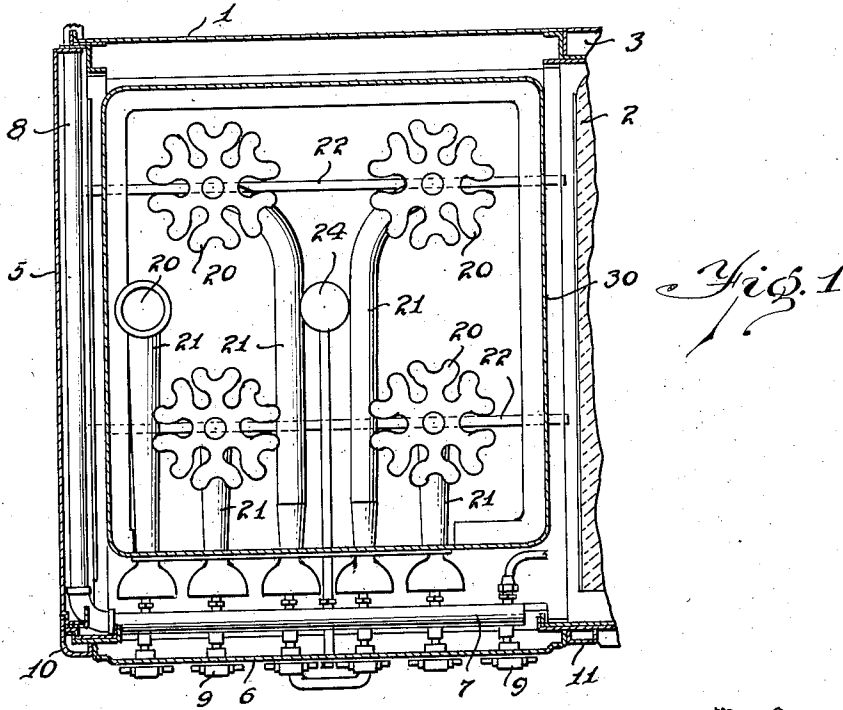
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A. G. SHERMAN

2,037,828

BURNER BOX FOR COOKING STOVES

Original Filed Aug. 31, 1931 2 Sheets-Sheet 1



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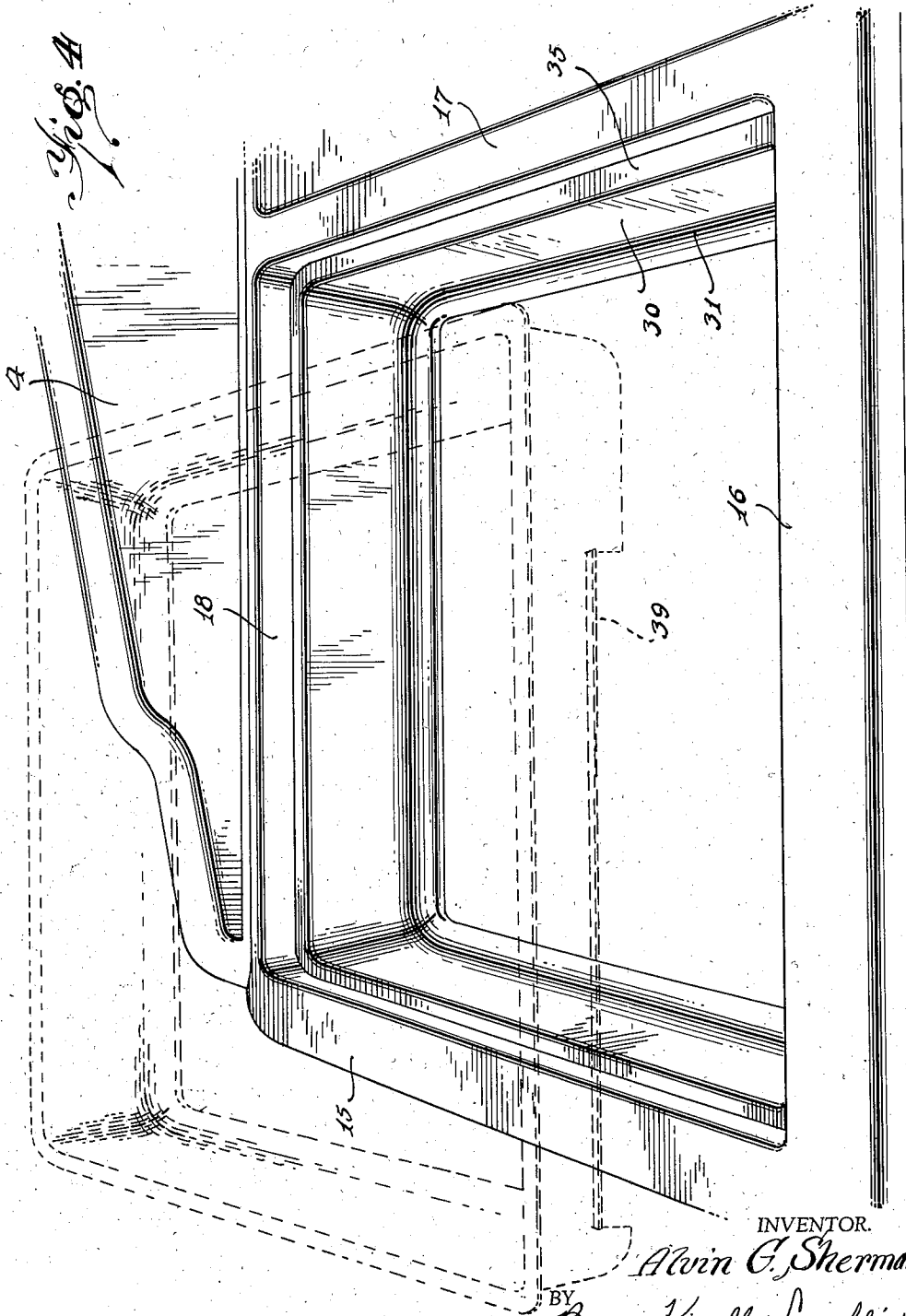
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UNITED STATES PATENT OFFICE

2,037,828

BURNER BOX FOR COOKING STOVES

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Original application August 31, 1931, Serial No. 560,390. Divided and this application December 23, 1932, Serial No. 648,529

3 Claims. (Cl. 126-39)

This invention relates to a burner box structure for cooking stoves. The invention is directed particularly to cooking stoves of the type employing burners whether they be gas burners or electrically heated elements although the present application utilizes a gas stove structure for disclosure purposes.

A popular stove structure at the present time comprises the use of porcelain enamel sections plates and other various elements fabricated into the stove structure. In such structures it was desirable that many of the parts be readily accessible so that they may be wiped clean or washed as the occasion requires in order to preserve the attractive appearance of the stove. The present invention is directed particularly towards the provision of a burner box composed of one or more parts so placed with respect to the surrounding stove structure that it may be easily maintained in a clean and sanitary condition. More particularly, the burner box comprises one or more parts which may be of porcelain enamel and which may be readily removable. The burner box surrounds the burners and usually there are two or more burners in a stove of the type referred to. The grate, which is positioned over the burners for the purpose of supporting articles or containers, may also be readily removable for access to the box structure. In this connection the stove may employ supporting devices which may support both the burner box and the grate. This application is a division of application Serial No. 560,390 filed August 31, 1931.

In the accompanying drawings:

Fig. 1 is a view showing the burners of the gas stove in plan and illustrating certain of the stove panels and parts and the burner box in section.

Fig. 2 is a sectional view taken through the burner box.

Fig. 3 is a sectional view taken through the burner box at right angles to that of Fig. 2.

Fig. 4 is a perspective view of the burner box with the burners removed and illustrating in dotted lines the removability of the burner box.

By referring to Fig. 1 it will be noted that the portion of the stove to the rear of the burners, and which constitutes a part of the back of the stove, is provided by a suitable panel 1, and the stove may have an oven disposed to one side of the burners, the insulation for which is shown at 2. The wall structure to the rear of the oven is illustrated at 3. A plate or panel 4 may extend upwardly at the rear of the stove. The present invention is applicable to a stove of the cabinet type wherein the top surface of the oven and of

the grating or cover over the burners are substantially in the same horizontal plane; also the invention is applicable to a stove in which the oven is positioned above the burners and grate either in whole or in part.

One end of the stove may be constituted by the panel 5, and the front of the stove adjacent the burners may be provided by a panel 6. This panel 6 may house the usual gas manifold 7 which is connected to a gas supply pipe 8, and valve controls 9 may be exposed over the surface of the panel 6. A corner strip is illustrated at 10, and a spacer strip or moulding is illustrated at 11, one on each end of the panel 6. It is not deemed necessary to describe the structural pieces at the corners and at other places for uniting the panels and strips as this structure is subject to large variation insofar as the present invention is concerned.

The burner box may be bounded by a panel or strip 15 at the upper end edge of the stove, a similar panel 16 at the front, and a panel or moulding like formation 17 at one side. The rear of the burner box in general may be defined by a panel 18, and the parts 15, 16, 17, and 18 may comprise a one-piece construction or may be fabricated from separate pieces.

A number of burners are shown at 20, some are shaped differently than others, each having a burner pipe leading thereto, as illustrated at 21. Burner supporting devices are illustrated at 22 upon which the burners may rest, as illustrated in Fig. 3. A pilot light type of lighter is illustrated at 24. Positioned below the burners is the usual drip pan or tray 25 which is preferably removable from the front of the stove as by means of a handle 26, and this drip pan or tray may be supported on ledges 27.

The burner box proper may and preferably does consist of a unitary element, composed of an integral piece of material such as porcelain enamel ware, or of a number of pieces fabricated into a unitary piece, and the same is generally indicated at 30. It is designed to be positioned so as to surround the burners and constitute a burner box, and its lower portion may be flared or curved inwardly as at 31, so as to bring its lower edges within the confines of the tray 25. For the purpose of supporting the burner box suitable ledges or supporting shoulders 32 may be provided. Some of these ledges may be integrally formed with other elements, as for example, the border panels 15, 16, and 17, while one of the ledges may be a separate piece positioned near the rear panel 18. However, the particular manner in which the

supporting ledge is provided is subject to variation. The burner box at its upper edge may have an outwardly extending part or parts such as a peripheral flange 35 which is adapted to rest upon the ledges 32. If desired, a cover 36 may be provided for covering the burner box structure. This may be removable when it is desired to use any one of the burners. The cover 36, instead of being entirely removable, may be connected as by means of a hinge or pintle 38 so that it may be swung out of the way. The cover 36 is particularly preferable in a so-called cabinet type of stove where the top surface of the oven lies generally in the same plane as the top surface or grate of the burner box. The grate over the burner is illustrated at 37, and this advantageously is supported by the ledges 32. The grate may be rested upon the peripheral flange 35 of the burner box 30, as illustrated in Figs. 2 and 3.

Fig. 4 shows the burner box in dotted lines, illustrating the same removed from its operative position. One wall of the burner box, such as in the present instance the forward wall, is cut away or notched as illustrated at 39. This notch is preferably properly positioned for the purpose of accommodating the burner pipes 21. Fig. 2 illustrates how the burner pipes are accommodated by the notch 39.

The structure, as will have been noted by the above description, embodying the support for the burner box and the grate, and the burner box structure, comprises a relatively simple arrangement. In case it is desired to clean the burner box and other adjacent parts, the grate may be easily lifted out of position assuming, of course, that the cover 36 has been previously moved to inoperative position, and then the burner box proper may be lifted out of its operative position, as illustrated in Fig. 4. This may be done without disturbing the burners. The burner box 30 may then be easily cleansed. Furthermore, the removing of the burner box proper makes more accessible other burner box structure and interior parts around and adjacent the burners.

I claim:

1. In a cooking stove structure having a plurality of separate burners, a box structure surrounding the burners, an open grate over the burners exposing the burners and structure below the same to view and a tray below the burners for catching dropped material, said box structure having inwardly extending ledges; and a bottomless burner box proper adapted to be inserted into the said box structure through the top thereof to surround the several burners, the walls of the

burner box proper immediately surrounding the burners and permitting unrestricted flow of air past said burners, the upper edges of the walls having outwardly extending members adapted to rest upon the inwardly extending ledges, the said walls of the burner box proper having lower portions which lie above and within the outer edges of the said tray whereby to direct material into the tray.

2. In a cooking stove structure having a plurality of separate burners, a box structure surrounding the burners, an open grate over the burners exposing the burners and structure below the same to view and a tray below the burners for catching dropped material, said box structure having inwardly extending ledges; a bottomless burner box proper comprising walls for immediately surrounding all the burners and adapted to be removed from the box structure without removing said burners and permitting unrestricted flow of air past said burners, said walls having outwardly extending flanges adapted to rest upon the said inwardly extending ledges, said walls being fashioned to curve inwardly so that their lower edges lie within the area of the tray and define an opening at the bottom of the burner box proper of smaller dimensions than the opening at the top thereof, said flanges being adapted to lie underneath the grate, and one wall of the burner box proper being cut away to provide an elongated recess for the accommodation of burner pipes leading into the said burner box proper.

3. In a cooking stove the combination of a burner box structure, inwardly extending ledges thereon, a plurality of separate burners therein, burner pipes leading into the box structure, a burner box proper having side walls for immediately surrounding the burners and being open at top and bottom and permitting unrestricted flow of air past said burners, the top of the said walls having outwardly extending flanges disposed upon the inwardly extending ledges, a tray underneath the burners, the bottom edges of said walls lying within the area of the tray for directing dropped material therinto, one wall of the burner box proper being cut away to form an elongated notch for the accommodation of the burner pipes, and a grate resting upon said inwardly extending ledges above the burner box proper and exposing the burners and the burner box proper to view, said burner box proper serving to conceal the walls of the said box structure and being readily removable through the top of the said box structure without removing said burners.

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