

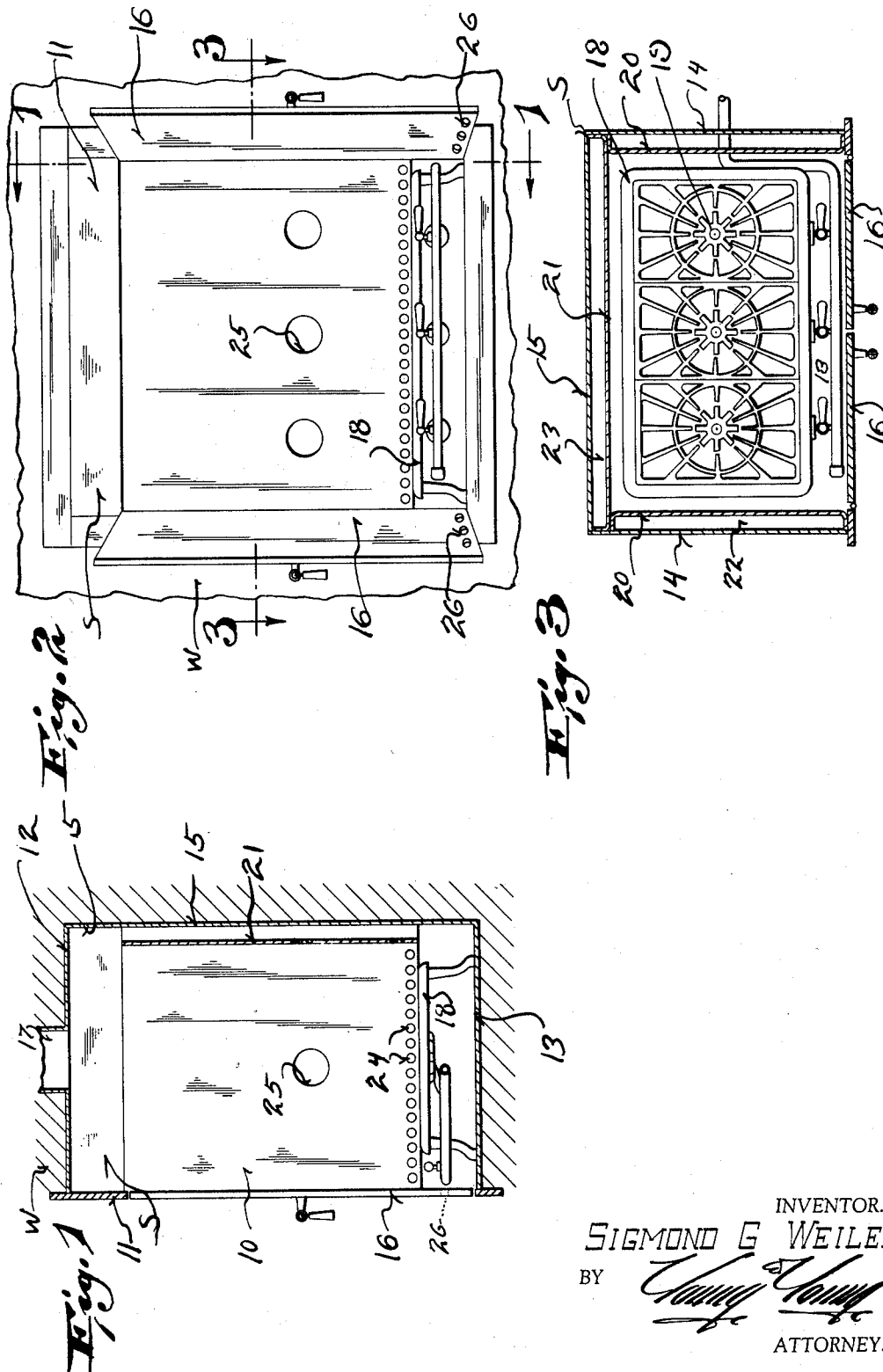
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BUILT-IN COOKING STOVE

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BUILT-IN COOKING STOVE

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1 Claim. (Cl. 126—37)

This invention relates to domestic cooking stoves, and more particularly to a cooking range which can be built into a partition wall.

One of the primary objects of my invention is to generally improve the construction of the stove illustrated in my pending application, Serial #477,411, so as to render the same very efficient in use and to positively preclude the entrance of all cooking odors within the room.

In the manufacture of built-in cooking stoves and the adoption thereof by the public generally, certain problems were met with, which necessitated considerable thought and ingenuity to overcome. Some of the major problems were to provide means for reducing the active width of the stove and to provide an efficient means for creating a draft around the stove burners, so as to carry all cooking odors from the stove casing and to provide an adequate means for insuring the proper supply of air for supporting combustion to the cooking burners when the doors of the stove casing were in their closed position.

It is, therefore, another salient object of my invention to provide a stove of the built-in type, which will effectively eliminate all of the above set out objections and one in which the complete stove will be of a compact arrangement, and which can be readily handled by a builder and quickly set in proper position within a partition wall.

A further important object of my invention is the provision of a set-in wall cooking stove having a novel arrangement of flue chambers on the side and rear thereof, whereby not only will the walls of the stove casing be kept in a cooled condition, but whereby a draft will be created around the stove burners, so as to effectively carry all cooking odors from the casing and exteriorly of a room and to prevent any back draft in a room when the entrance doors of the stove casing are open.

A still further object of my invention is to provide a novel set-in wall cooking stove, which will be durable and efficient in use, one that will be simple and easy to manufacture; one which can be placed upon the market at a small cost and one which will present a pleasing and attractive appearance.

With these and other objects in view, the invention consists in the novel construction, arrangement and formation of parts, as will be hereinafter more specifically described, claimed and illustrated in the accompanying drawing, in which:

Figure 1 is a transverse section through the

complete cooking stove, showing the same set in a partition wall, the section being taken substantially on the line 1—1 of Figure 2, looking in the direction of the arrows;

Figure 2 is a front elevation of my improved stove showing the same set in a partition wall, with the doors of the stove casing in their open position, and;

Figure 3 is a horizontal section through the stove taken on the line 3—3 of Figure 2, looking in the direction of the arrows, the doors for the stove casing, in this view being in their closed position.

Referring to the drawing in detail, wherein similar reference characters designate corresponding parts throughout the several views, the letter S generally indicates my improved cooking stove and W a wall within which the stove is set.

The wall W can be considered as a partition wall of a kitchen and the wall during the building thereof, or after the building thereof is provided with a recess 5 in which my stove S is snugly fitted. The stove S embodies a casing 10 which may include a front frame 11 carrying the top and bottom walls 12 and 13 and the side walls 14 to which is attached the rear wall 15. The walls 12, 13, 14 and 15 can be constructed from sheet metal suitably enameled or otherwise treated so as to present a pleasing and attractive appearance to the eye. The front frame or wall 11 carries the hinged doors 16 by means of which entrance can be gained to the interior of the casing. Connected with the top wall of the casing is the flue outlet pipe 17 which preferably angles to one side for communicating with a flue or chimney.

Fitted within the casing is the stove unit proper 18, which can either be a gas range, as shown, or an electric range. In all events, all of the burners 19 of the stove are arranged in longitudinal alignment, so that the active width of the stove and consequently the stove casing, will be reduced. This renders the complete stove particularly susceptible for use in partition walls of substantially ordinary thickness.

As clearly shown, in the drawing, the side walls 14 and the rear wall 15 carry partition plates 20 and 21, respectively, and these partition plates terminate short of the top and bottom walls 12 and 13 of the casing. By referring to Figures 1 and 2, it will be noticed that the lower edges of the partition walls 20 and 21 terminate directly at the top face of the stove unit 18. The partition plates 20 and 21 are arranged in relative close proximity to the side walls 14 and the rear

wall 15 and form flue chambers 22 and 23 therewith. The extreme lower edges of the partition plates 20 and 21 are provided with rows of ventilating openings 24, and these openings are arranged directly above the stove unit 18 and the burners 19 thereof. At a point substantially equal distance the upper and lower ends of the partition walls, enlarged ventilating openings 25 are formed in said partition wall.

The closure doors 16 adjacent to their lower edges are provided with air inlet openings 26 and these openings are disposed slightly below the burners 19 of the stove, as can be clearly seen by referring to Figures 1 and 2. These openings 26 form an efficient means for supplying air to the burners, when the doors 16 are in their closed position and when illuminating gas is used as fuel.

The partition plates 20 and 21 form an effective means for preventing the overheating of the side walls 14 and the rear wall 15, and also insure the forming of a proper draft around the stove casing, so that all odors will be drawn up the flue pipe 17.

In a former construction, where the flue or partition plates 20 and 21 were not provided, and while the stove was in use, upon the opening of the doors of the stove casing, there was a tendency of a back draft forming in the stove and the puffing out from the stove casing, of the objectionable food odors and products of combustion. This is entirely eliminated by the construction of the stove shown and set out above.

While I have shown the openings 26 formed directly in the stove casing doors, it is to be understood that a stationary panel can be arranged below the doors and provided with the air inlet openings. From the foregoing description, it can be seen that I have provided an exceptionally simple and efficient built-in cooking range for partition walls of which all danger of the overheating of the wall is eliminated and in which efficient means is provided for carrying off all odors from the stove into a flue, whether the casing doors are in an open or closed position.

Changes in details may be made without departing from the spirit or scope of this invention, but what I claim as new is:

The combination with the wall of a room having a recess therein, of a fire-proof cabinet for a cooking range including a completely closed casing snugly fitted in said recess, said casing having entrance doors and being flush with the outer face of the wall of the room, said casing having air inlet openings communicating with the atmosphere and arranged below said burners, a flue pipe communicating with the upper end of the casing, and partition flue plates carried by the side and rear walls of the casing and arranged in close proximity thereto defining flue chambers therewith, said plates terminating adjacent to and slightly above the air inlet openings and short of the top of the casing and below the flue pipes, whereby a draft will be had in said flue chambers.

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