

Dec. 12, 1944.

J. M. COOK

2,364,950

RANGE FRAME

Filed July 19, 1941

4 Sheets-Sheet 1

Fig. 1. 28

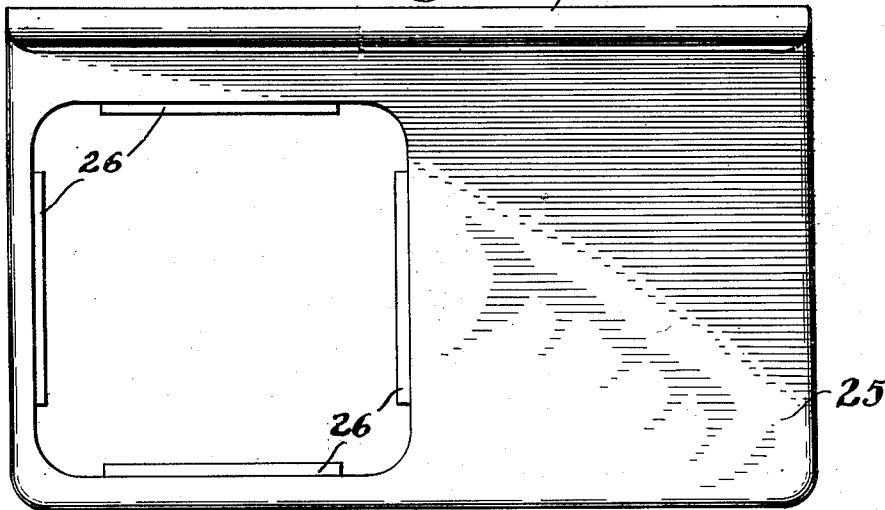
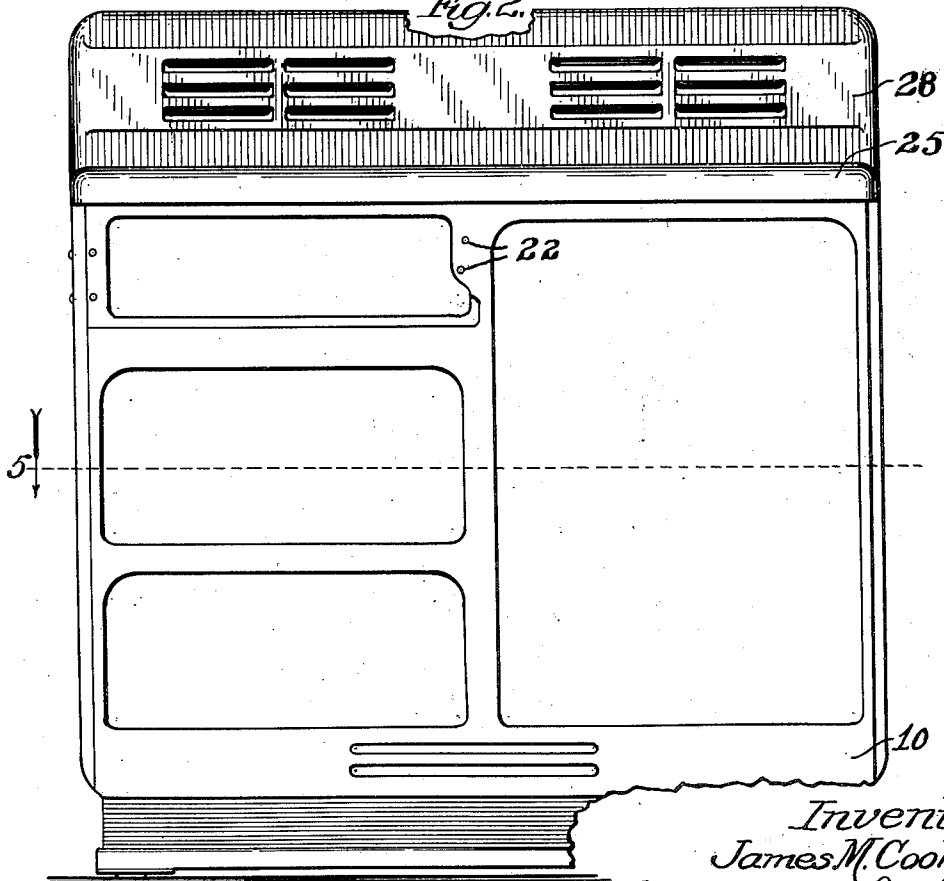


Fig. 2.



Inventor:
James M. Cook,
By Dawson, Combs & Booth,
Att'ys

Dec. 12, 1944.

J. M. COOK

2,364,950

RANGE FRAME

Filed July 19, 1941

4 Sheets-Sheet 2

Fig. 4.

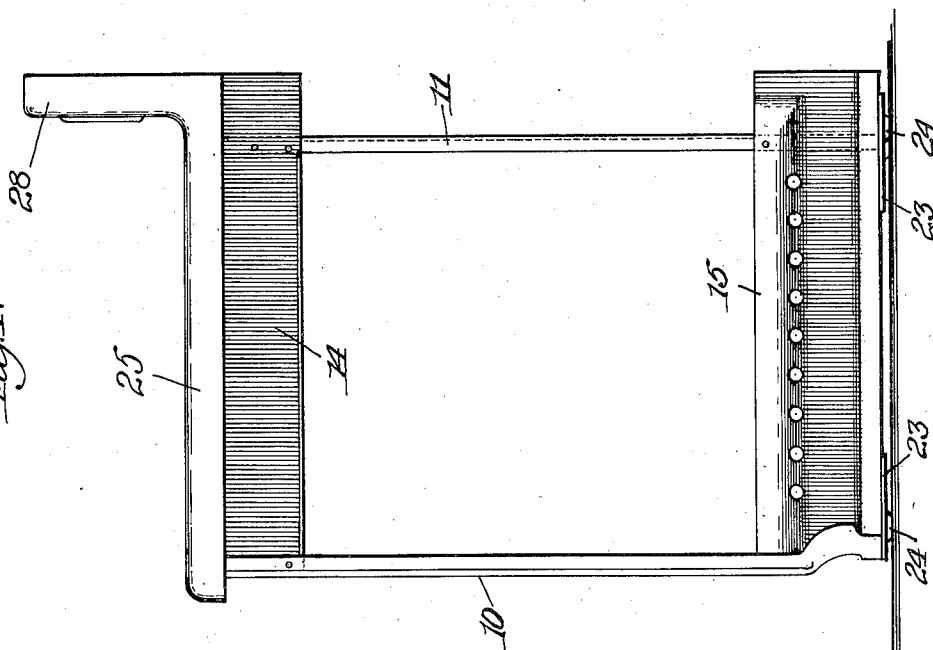
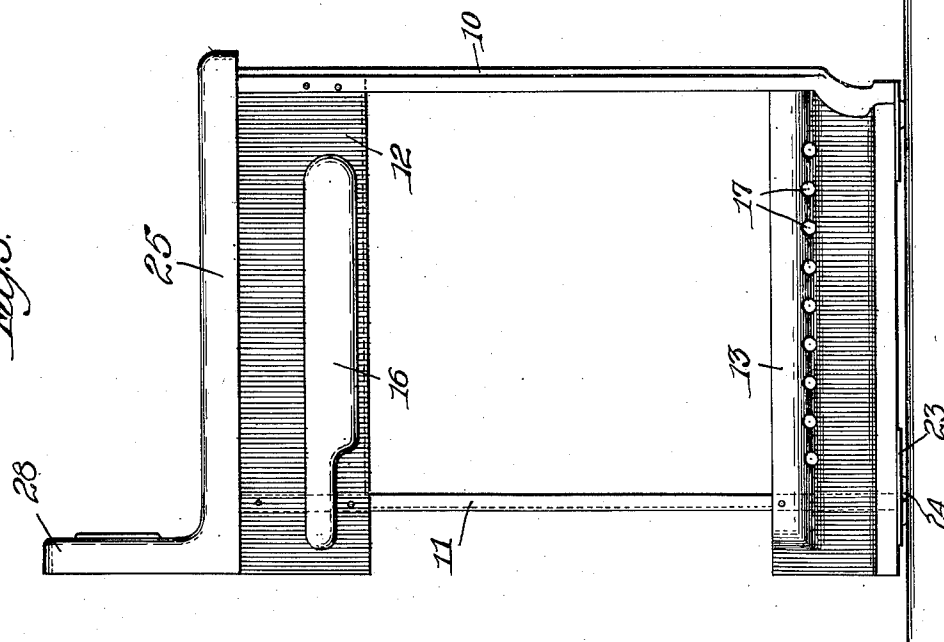


Fig. 3.



Inventor:
James M. Cook
By Dawson, Combs & Booth,
Attys.

Dec. 12, 1944.

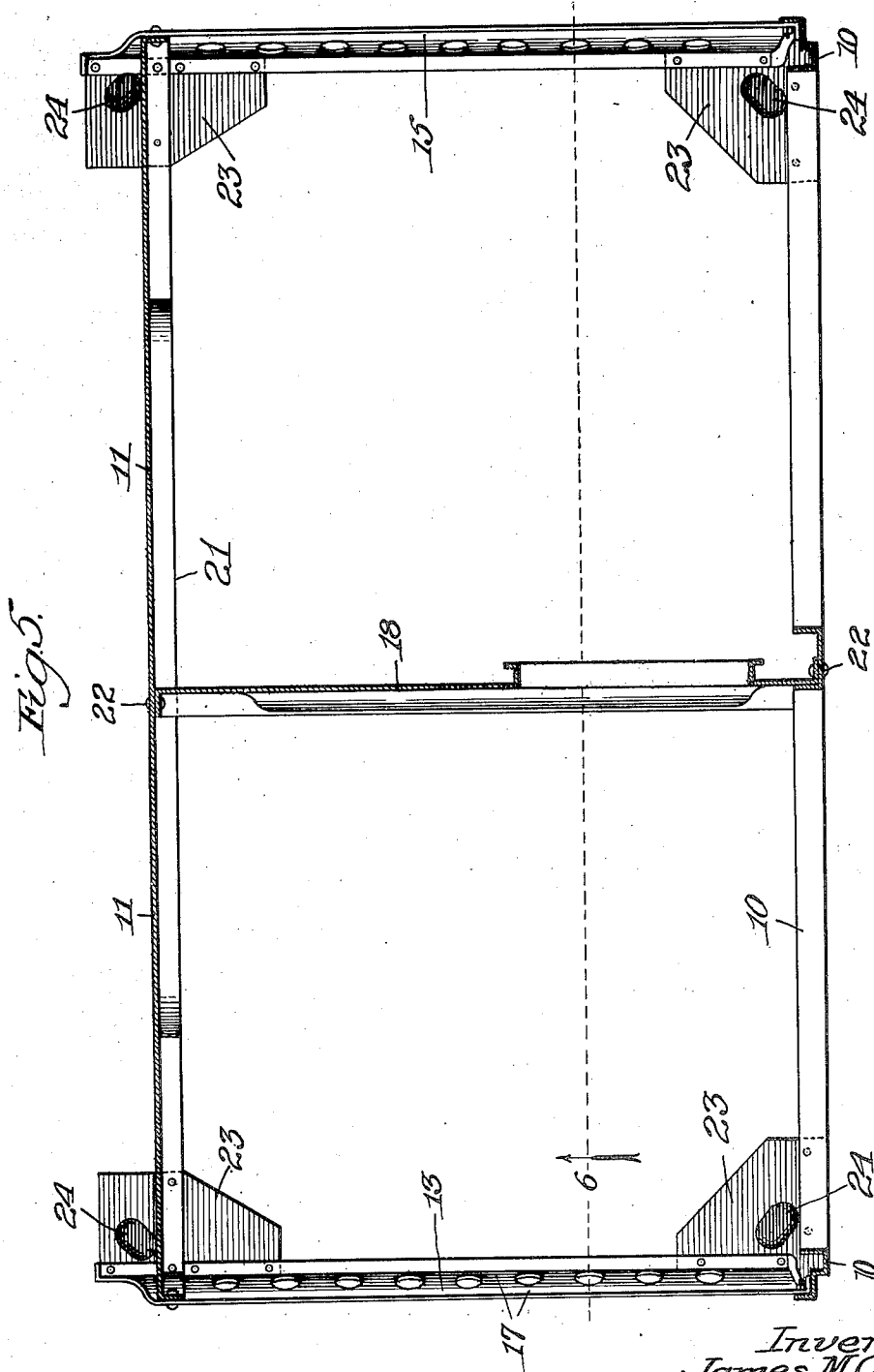
J. M. COOK

2,364,950

RANGE FRAME

Filed July 19, 1941

4 Sheets-Sheet 3



Inventor:
James M. Cook
By Dawson, Combs & Booth,
Attys.

Dec. 12, 1944.

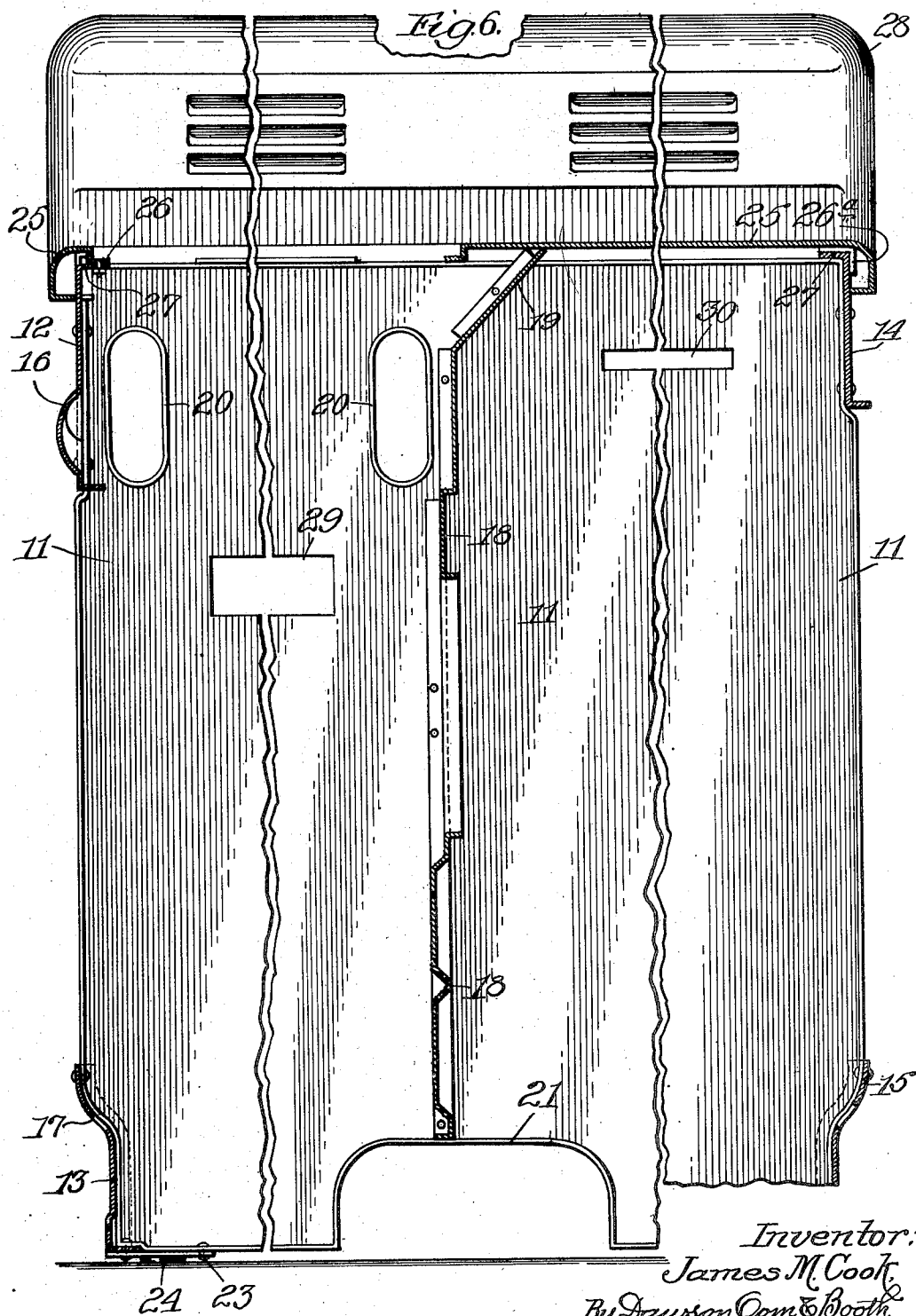
J. M. COOK

2,364,950

RANGE FRAME

Filed July 19, 1941

4 Sheets-Sheet 4



Inventor:
James M. Cook,
By Dawson, Com & Booth,
Attys

UNITED STATES PATENT OFFICE

2,364,950

RANGE FRAME

James M. Cook, La Grange, Ill., assignor to
Cribben and Sexton Company, Chicago, Ill., a
corporation of Illinois

Application July 19, 1941, Serial No. 403,187

4 Claims. (Cl. 126—37)

This invention relates to a range structure.

In the forming of range frames that extend to the floor, it is customary to form sides and front from one piece of metal which necessitates one type of finish. In other ranges, the frame of the range is separate from the base which adds to the expense. In still other types of construction, the end panels extend all the way to the floor, which necessitates a white porcelain enameled part carrying the stresses of a frame. This causes excessive chippage of the white finished porcelain enamel.

An object of the present invention is to provide a method of assembly which enables a range frame to be formed of panels which may be separately enameled or treated and then brought together to form a sturdy unit. A further object is to provide a structure wherein the base in front and rear is formed integral with the range frame, the front and rear panels being extended to provide an integral base portion. A further object is to provide a structure wherein the various panels may be separately enameled with the same or different colors and then subsequently brought together in a sturdy union by simple and inexpensive means. Other specific objects and advantages will appear as the specification proceeds.

The invention is illustrated in a preferred embodiment, by the accompanying drawings, in which—

Figure 1 is a top plan view of a range equipped with a frame embodying my invention; Fig. 2, a front elevational view; Fig. 3, an elevation on the lefthand side of the range showing the frame structure to which the side panel may be attached; Fig. 4, an end elevation on the righthand side of the frame showing the frame ready to receive the side or end panel; Fig. 5, a transverse sectional view, the section being taken as indicated at line 5 of Fig. 2; and Fig. 6, a broken vertical sectional view, the section being taken as indicated at line 6 of Fig. 5.

In the illustration given, 10 designates a front panel which may be porcelain enameled. It will be noted that the front panel extends downwardly substantially to the floor upon which the range rests, the lower portion of the panel 10 providing an integral base portion. 11 designates the rear panel or back of the range, which also may be lacquered or enameled separately. The panels 10 and 11 are joined together by a top end support 12 and a lower end support 13 on the one side, and on the other side by a top end sup-

port 14 and a lower end support 15. The supports 13 and 15 are identical, except one is for the right side and one for the left. The support 12 is wider than the support 14 and is provided with a folded-outwardly portion 16 to provide greater room within the burner compartment for receiving pipes, etc. The supports 13 and 15 are provided with ventilation openings 17 which permit air to enter for the oven burners, etc. Extending between the front and rear panels 10 and 11 is a central partition 18 which may be inclined laterally at 19, as shown in Fig. 6, to provide space for the burner unit. The rear panel 11 may be provided with suitable openings 20 for the entrance of pipes, etc. Also, the rear panel 11 may be cut away at 21 to provide an arch or air inlet in the central back portion of the range.

Instead of welding the various parts together, I find that an effective assembly can be obtained by riveting the members 12, 13, 14 and 15, as indicated, to lateral flanges of the panels 10 and 11. Also, the partition wall 18 is secured to the front and rear panels 10 and 11 by rivets 22, as shown more clearly in Fig. 5. To complete and square up the frame, I secure bottom gussets 23 by rivets to the bottoms of the front and rear walls and also to the bottom braces for supports 13 and 15. The gussets are preferably provided with downwardly embossed portions 24 forming smooth bearings upon which the range may be moved upon the floor.

It will be noted that the front and rear panels and the lower end braces 13 and 15 are all brought together in squared relation by the gussets and the operation is very expeditious and secure through the use of rivets. It will be understood that bolts may be employed instead of rivets at points throughout the frame.

The top of the range may be secured to the frame by any suitable means. In the illustration given, the top wall 25 is provided with an inwardly-extending flange 26 which is secured to a top flange 27 of the end support or brace 12 on the one side. On the other side, the top 25 is provided on its underside with an angle bar support 26^a which rests upon the flange 27 of the brace or end support 14. The top 25 is formed of one piece and constitutes a part of the range frame.

Any suitable openings for flues may be provided in the rear panel 11. In the illustration given, the opening 29 is provided on the one side and the opening 30 is provided on another side, both leading to suitable flues of well-known construction (not shown).

In the operation of assembling the structure, the front panel 10 is separately enameled, and the rear panel or back 11 is separately finished. The two sheet metal members are then brought together and riveted to the end bracing members or supports 12, 13, 14 and 15. The partition wall 18 is riveted in place between the two panels. The panels and supports are squared by means of flat gusset strips 23 which are riveted in position as illustrated. The frame is now ready for further assembly, as desired. The top may be placed in position and secured as shown, and side panels may be hung to the frame as shown.

The frame itself, although formed of sheet metal parts, is brought together and secured into an extremely sturdy unit in a very brief time. All exterior panels forming a part of the frame or carried thereby are separately enameled before being brought together. Should one panel be marred, it can be refinished before being joined to the main structure. The front wall or panel 10 of the structure extends substantially all the way to the floor, forming in its lower portion the base support. The back panel 11 may likewise be extended to the floor. Thus, the frame provides an integral base formed by the front and rear panels.

While in the foregoing specification, I have set forth certain details of structure and certain steps as desirable, it will be understood that considerable variation may be made therein by those skilled in the art without departing from the spirit of my invention.

I claim:

1. A range frame of the character described, comprising front and rear panels, side supports extending between the front and rear panels at the bottom and top, said side supports in the bottom of the panels constituting bottom supports, said bottom supports and said panels being provided with horizontal flanges at the bottom thereof, means providing a heater compartment between said panels, gusset plates at the bottom

of said bottom supports and said panels at the corner junctions thereof, means for securing said panels to said bottom supports and also said gusset plates to the flanges of said panels and bottom supports.

2. A range frame of the character described, comprising means providing a burner compartment, a flue outlet for said compartment, a cooking top above said compartment, front and rear enameled panels both extending substantially to the floor upon which the range rests, side supports extending between the front and rear panels at the bottom and top, gusset plates at the bottom of said panels and bottom supports at the corner junctions thereof, said panels and said supports being provided with bottom flanges, and fastening connections of a class consisting of rivets and bolts securing the flanges of said panels and said bottom supports to said gussets.

3. A range frame of the character described, comprising means providing a burner compartment, a flue outlet from said compartment, a cooking top above said compartment, front and rear enameled panels both extending substantially to the floor upon which the range rests, said panels being provided with end flanges, side supports extending between the front and rear panels at the bottom, and fastening connections of a class consisting of rivets and bolts connecting said side supports to the flanges of said panels.

4. A range frame of the character described, comprising front and rear panels, a side support extending between the front and rear panels at the bottom thereof, said support and said panels being provided with horizontal flanges at the bottom thereof, means providing a heater compartment between said panels, a gusset plate at the bottom of said frame and at a corner thereof, and means for securing said gusset plate to the flange of one of said panels and to the flange of said support to thereby secure together said gusset plate panel and support.

JAMES M. COOK.