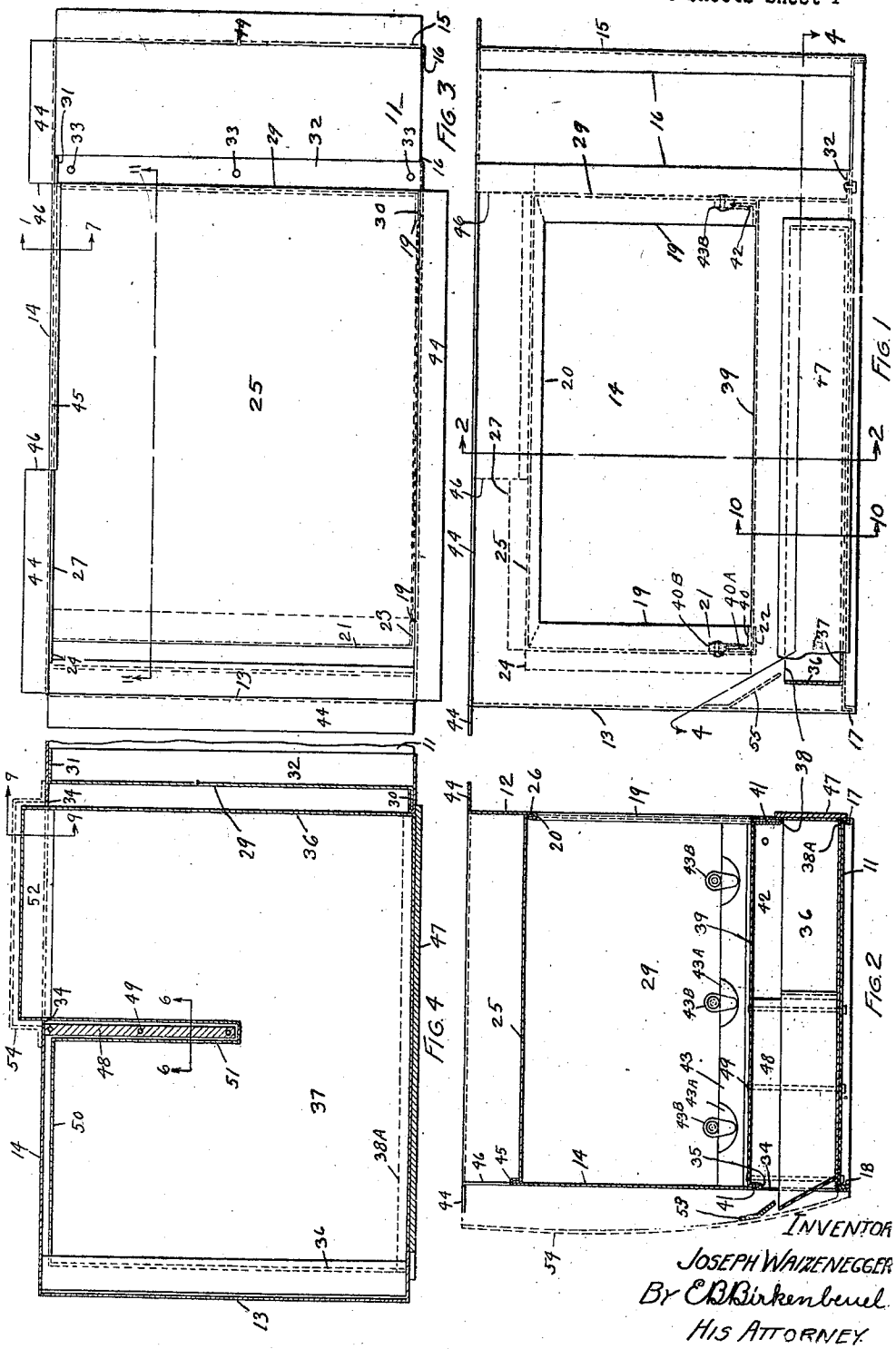
May 6, 1924. 1,492,909

J. WAIZENEGGER

RANGE BODY

Filed June 29 1922 2 Sheets-Sheet 1



INVENTOR
JOSEPH WAIZENEGGER
BY C. B. Birkenbeuel
HIS ATTORNEY

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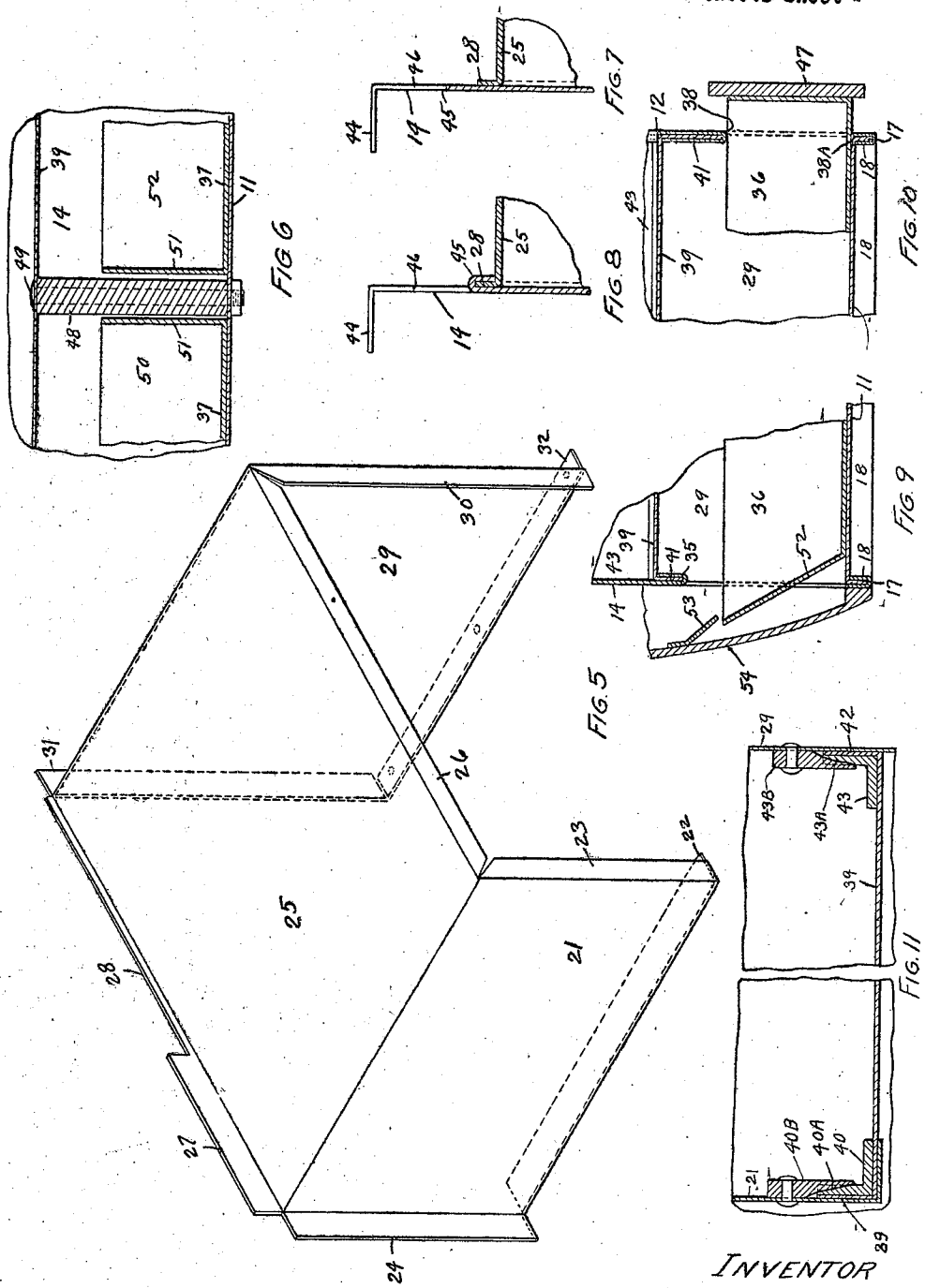
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RANGE BODY

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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE.

JOSEPH WAIZENEGGER, OF PORTLAND, OREGON, ASSIGNOR OF ONE-THIRD TO HERBERT K. OLMSTED, OF PORTLAND, OREGON.

RANGE BODY.

Application filed June 29, 1922. Serial No. 571,754.

To all whom it may concern:

Be it hereby known that I, JOSEPH WAIZENEGGER, a citizen of the United States, and a resident of Portland, in the county of Multnomah and State of Oregon, have invented a new and useful Range Body, of which the following is a specification.

This invention relates more particularly to the manufacture of bodies for stoves and ranges.

The objects of my invention are chiefly as follows:

First. The construction of a range body with the expenditure of a minimum of labor.

Second. The construction of an unusually rigid and substantial range body.

Third. The construction of a range body which can be easily cleaned.

Fourth. The elimination of rivets and spot welding.

Fifth. The production of tight joints and the elimination of buckling.

Sixth. To facilitate the replacement of the oven when rusted out.

Seventh. To reduce the amount of rusting in spots caused principally by rivets and welds.

Eighth. The saving of electric current ordinarily used in welding.

I accomplish these results in the manner set forth in the following specification and illustrated in the accompanying drawings, in which I have illustrated only the sheet metal body of a range and eliminated such cast iron parts as grates, doors, dampers, etc. which are now in common use and are not attached to the body until it is completed. I have suggested in dotted lines the shape of the oven flue usually placed at the back of the stove and which is preferably a casting. This flue is illustrated in order that it will be apparent how the soot from this flue finds its way into the cleanout box.

The drawings include the following figures. Figure 1 is a front elevation of a range body with a portion of the front of the cleanout box cut away. Figure 2 is a vertical section along the line 2—2 in Fig. 1. Figure 3 is a plan of Fig. 1. Figure 4 is a horizontal section along the line 4—4 in Fig. 1. Figure 5 is a perspective of the top and sides of the oven ready for assembling. Figure 6 is a vertical section along the line 6—6 in Fig. 4. Figure 7 is a vertical section along the line 7—7 in Fig. 3 before locking the oven top and sides into place. Figure 8 is a view similar to Fig. 7 but showing the locking operation completed. Figure 9 is a vertical section along the line 9—9 in Fig. 4. Figure 10 is a vertical section along the line 10—10 in Fig. 1. Figure 11 is an enlarged section along the line 11—11 in Fig. 3.

Similar numbers of reference refer to the same or similar parts throughout the several views.

Referring in detail to the drawings, I have constructed my device of a floor 11 around whose sides are built the front 12, the left side 13, the back 14 and the right side 15. These four sides are constructed of one sheet of metal whose ends 16 are cut in the front 12 to receive the usual grates, fire door, ash door and draught slides which are preferably cast and attached with stove bolts as is now the custom. These parts are not shown as they are independent of the range body and are not attached thereto until after same is completed. I shall confine my illustrations and explanations to the new features that I have embraced in my invention and their relation to the usual range body.

It will be observed that the outer edges of the floor 11 are down-turned at 17 and that the members 12, 13, 14 and 15 are up-turned along the edges 18, thereby forming a rigid union between the side walls and the floor of the range body. In the front 12 I have cut an opening for the oven door whose sides 19 and top 20 are in-turned and folded back toward the inside of the front 12.

The oven side 21 has an inturned foot 22, an inturned edge 23 and an out-turned edge 24. The oven top 25 has a down-turned edge 26 and an upturned rear edge 27 the portion 28 of which is cut away for the oven damper.

The oven side 29 has an inturned front edge 30, and out-turned rear edge 31 and an out-turned foot 32 which may be secured to the floor 11 by means of the bolts 33. The oven sides 21 and 29 and the top 25, in the form shown in Figure 5, are placed in position by slipping same downwardly between the front 12 and the back 14 so that the edges 23, 26 and 30 pass between the front 12 and the inturned edges 19 and 20.

In the back 14 I have provided the opening 34 whose upper edge 35 is inturned. Be-

low the oven door I have placed a large shallow ash box whose sides 36 and bottom 37 slide in an opening below the oven door. The upper edge 38 is inturned toward the front 12 and the bottom edge 38^A is inturned upon the floor 11.

An oven floor 39 rests on the foot 22 and is upturned along the side 21. It is secured to the side 21 by means of the angle clamp 40 which has bevelled places 40^A along its upper edge adapted to receive the swivel clamps 40^B riveted to the side walls 21. The front and rear edges 41 of the oven floor lock between the edges 35 and 38. The right hand side of the bottom 39 has an upturned edge 42 which touches the side wall 29. An angle clamp 43 similar to clamp 40 is provided with the bevelled places 43^A along its upper edge adapted to receive the swivel clamps 43^B which are riveted to the wall 29. The edges 44 on the back wall are outturned for the purpose of securing the top of the stove to the body.

After the oven sides 21, 25 and 29 are in place, the edge 45 which forms the bottom of the damper opening 46 in the back 12 is turned inwardly and locked over the edge 28, which operation holds the oven top 25 in place. It is preferable to turn the edge 45 downwardly before assembling so that all the assembler needs to do is to spring the top 25 downwardly until the edge 28 hooks under the edge 45 to which the top 25 is permitted to come back to its former straight position.

I have provided a front 47 for the ash box which is preferably of greater dimensions than is the opening for the ash box. The rear of the ash box is slotted to receive the wall 48 through which the oven floor 39 is united to the floor 11 by means of the bolts 49. The wall 48 causes a uniform distribution of heat under the floor 39. The rear wall 50 of the ash box is carried around the wall 48 as a double wall 51 which runs back to the sloping wall 52 which projects under the wing 53 on the inside of the oven flue 54. A similar wing 55 is provided on the inside of the wall 13 and causes the cleanings from the top and side of the oven to fall into the ash box.

It will be understood that with this construction if the sides, the top or bottom of the oven rust out it is not necessary to throw away the entire body or repair same with unsightly patches. All that is required is to unlock the oven parts by springing the top 25 downwardly and away from the edge 45 and removing the bolts 33 in the foot 30 and the bolts 49, which permits the entire oven to be lifted out and a new one put into place.

I am aware that many different forms of range bodies have been constructed in the past, I therefore do not claim my invention broadly but only within the limits set forth in the followings claims:

1. A range body having a removable oven, said oven having a top and two sides, one side of which extends to the floor and is attached thereto and the other side extends to the oven floor and then turns towards the inside of the oven; a floor for said oven supported by said inturned portion of the last mentioned side wall and by the opposite side of said oven, the front and rear edges of said floor turning downwardly, and the front and rear outside walls having upturned portions adapted to lock inside of the downturned portions of said floor.

2. A range body having the front edges of the top and sides of the oven inturned and the upper and side edges of the oven door opening turned behind said inturned edges in a manner to secure said oven sides to the front wall.

3. A range body having a vertically slidable oven joined to the oven front by crimping the oven edges inwardly and the sides and top of the oven door opening outwardly and upwardly, and means for locking said oven against upward movement, consisting of crimping the metal from the damper opening at the back of the oven downwardly over an upturned flange at the back edge of the oven top.

4. The combination of a range body and oven having a flue strip extending backwardly from near the middle of said oven with a soot box under said oven and slotted to receive said flue strip, a portion of said box extending into the oven flue, said flue having a deflector for guiding soot from said flue into said soot box, and a second deflector for guiding soot from the top and side of said oven into the soot box.

5. A range body having its bottom joined to its sides and its oven joined to its front and rear walls by crimping the adjacent parts in opposite directions and locking said crimped portions together.

6. A range body having an oven flue at its rear side, a flue strip from the middle of the oven to the back of said body between the oven floor and the body bottom, a slotted soot box adapted to receive said flue strip, and means for guiding soot from said oven and oven flue into said ash box.

JOSEPH WAIZENEGGER.