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J. TELLER ET AL

2,116,854

COOKING STOVE OR RANGE

Original Filed Jan. 15, 1932 3 Sheets-Sheet 1

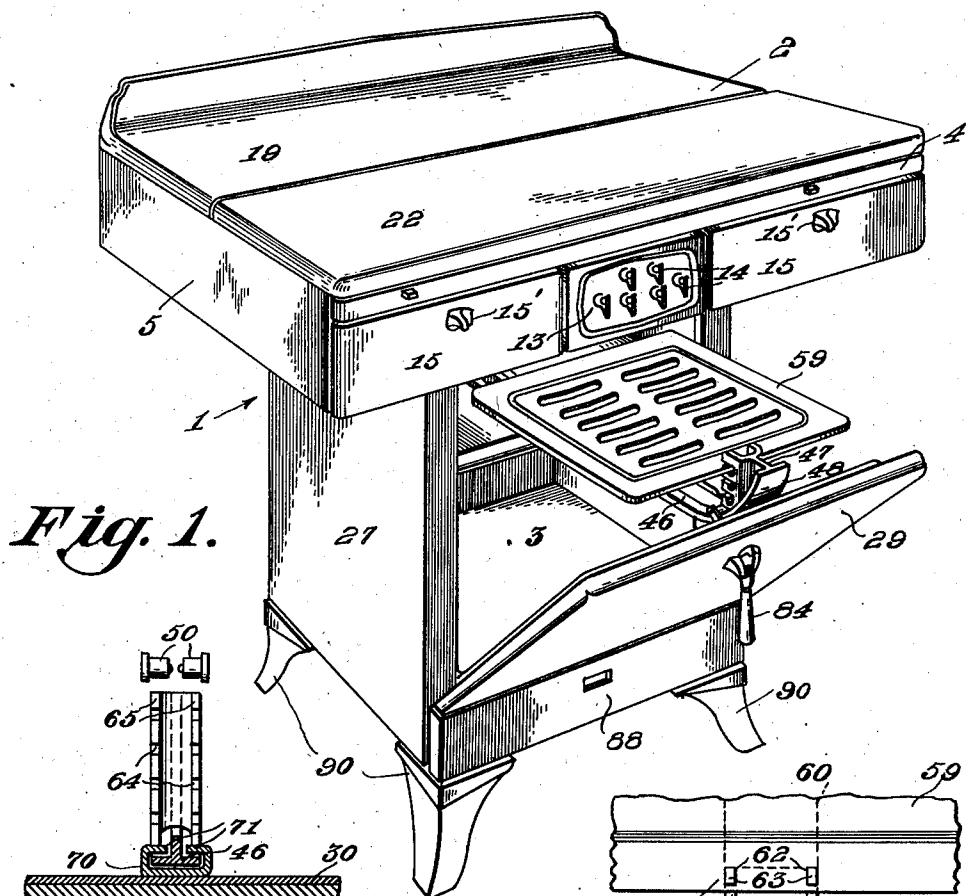


Fig. 1.

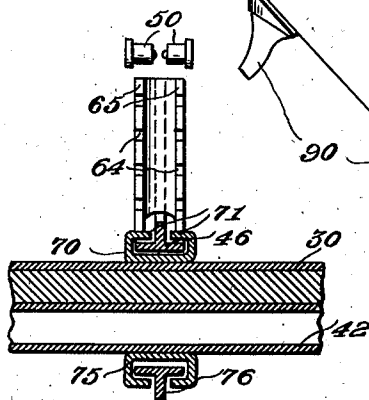


Fig. 6.

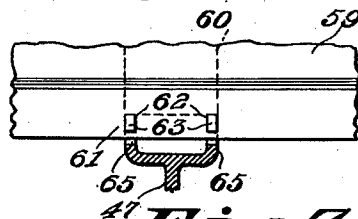


Fig. 7.

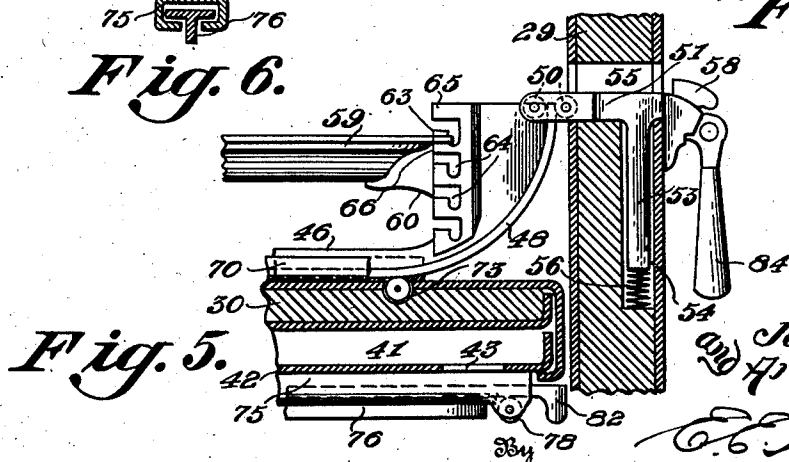


Fig. 5.

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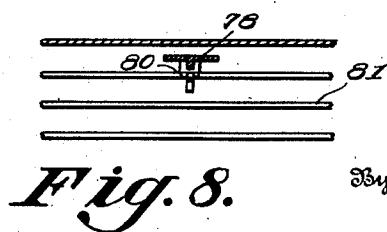
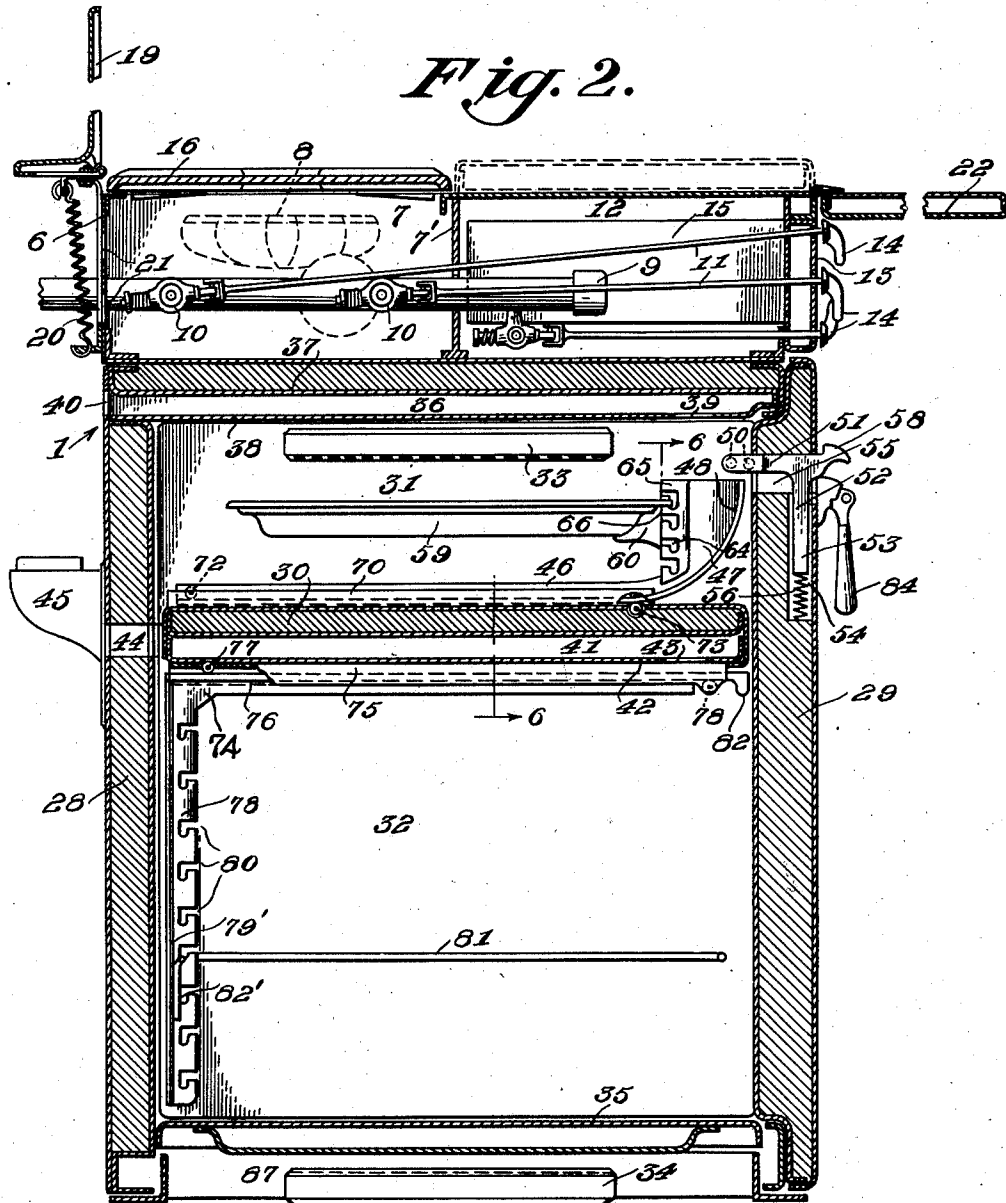
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3 Sheets-Sheet 2



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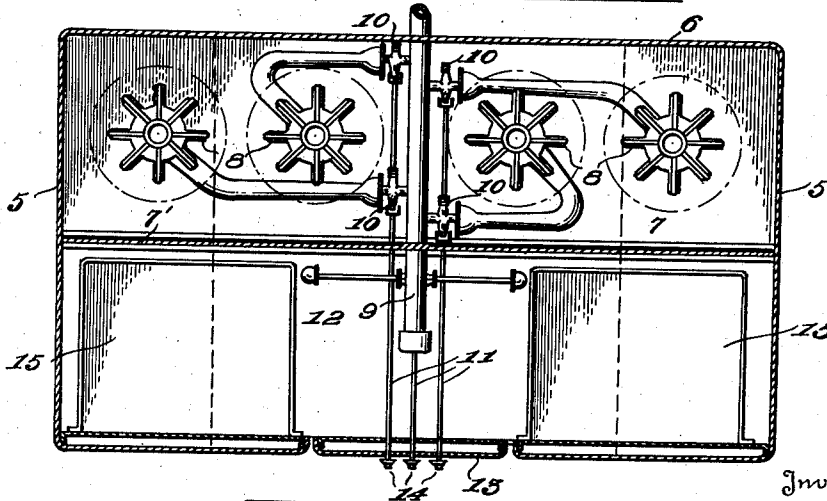
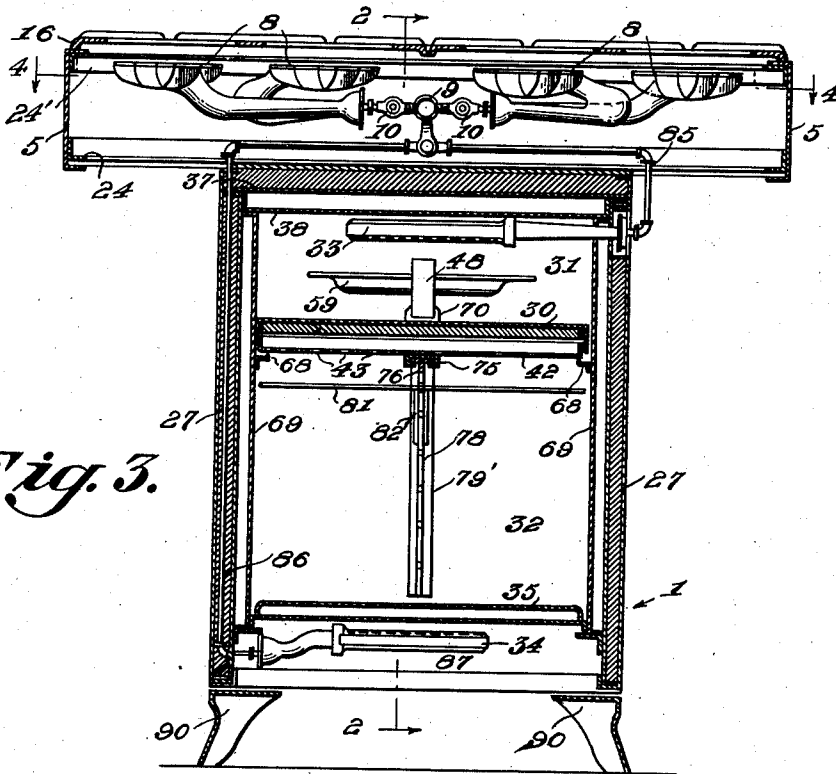
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COOKING STOVE OR RANGE

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3 Sheets-Sheet 3



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2,116,854

COOKING STOVE OR RANGE

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Original application January 15, 1932, Serial No. 586,912. Divided and this application October 20, 1934, Serial No. 749,282

2 Claims. (Cl. 126—41)

This invention is a division of our original application for Cooking stove or range, Serial No. 586,912, filed January 15, 1932, which is now Patent No. 2,013,931, issued September 10, 1935, and relates generally to gas or electric cooking apparatus and particularly to a combination oven, broiler and table-top and straight line range or stove and is designed to provide a construction in which a maximum cooking space and work top area are provided in association with a relatively smaller low oven and low broiler.

An important feature resides in the particular construction of the combined oven and broiler compartments, whereby they are closed by a single door, constructed to control and operate at will, the sliding movements of a broiler pan carrying support when said door is opened and closed.

Another feature resides in the particular broiler pan supporting mechanism and the means associated with it, whereby it may be anti-frictionally and slidably mounted either for hand or automatic operation.

Another feature resides in the construction of a rack carrying sliding support for cooking vessels within the low oven and whereby said rack may be antifrictionally mounted for easy operation into and out of the low oven.

A further important feature is that of the particular arrangement of the broiler compartment immediately over the low oven compartment, whereby the person using the range need not be compelled to stoop or bend over to examine or otherwise handle or have access to the broiler pan, the construction being such that the broiler compartment is approximately on the waist level of the operator. To our knowledge the prior practice has been to arrange the broiler either at the top of a high-type oven or below the same.

In the accompanying drawings,

Figure 1 is a perspective view of the range with the top entirely closed, but showing the oven and broiler compartment door open and the broiler pan and support moved outwardly by the said door;

Figure 2 is a vertical section through the range, substantially on the line 2—2 of Figure 3, looking in the direction of the arrows;

Figure 3 is a vertical sectional view taken through the range at right angles to Figure 2.

Figure 4 is a horizontal sectional view on substantially the line 3—3 of Figure 3;

Figure 5 is a view partly in section and partly in elevation showing in detail the construction of

parts of the broiler pan pull-out rack and the cooperating elements upon the door;

Figure 6 is a vertical sectional view taken on the line 6—6 of Figure 2, looking in the direction of the arrows;

Figure 7 is a detail view of the supporting end of the broiler pan, and

Figure 8 is a detail view of the supporting end of the oven rack.

Referring now to the drawings by numerals of reference, 1 indicates generally the stove or range, the combined cooking and table-top at 2, and the low oven at 3.

With particular reference to Figures 1 and 2, we have shown the main body portion of the range, which includes the said low oven as supporting the cooking and table-top 2, the latter being of an elongated rectangular form and including a front portion, generally indicated at 4, side plate members 5 and a rear plate member 6.

These members 4, 5 and 6 provide compartments 7 and 12, the former of which houses burners 8 connected with a transverse centrally disposed manifold 9, the valves 10 for which are controlled through the medium of operating rods 11, which extend through the forward compartment 12 and through a panel 13, where they are operated by handles 14 in a manner fully described in our copending application, Serial Number 570,675, filed October 23, 1931. The rear compartment 7 which houses the burners and associated parts may be separated from the forward compartment by a central longitudinal partition 17 of the nature described in said application.

The forward compartment may contain drawers 15 suitably mounted in any preferred and conventional manner and may serve to receive kitchen utensils or other appliances, said drawers having handles 15'.

The combined cooking and table-top includes a rear longitudinal grid section 16 arranged above the burners, said grid section being preferably cast in sections for convenience of removal when necessary to have access to the said burners or their compartment and a forward longitudinal working or table-top plane or flat surface section. The grid section is capable of being covered when not in use by a hinged cover 18, mounted at the upper edge of the rear plate member 6, said cover being counter-balanced by a tension spring 20. The rear burner compartment is suitably ventilated for cooling purposes by providing the rear plate 6 with openings 21.

At its front edge, the forward longitudinal work or table top section is provided with a hinged leaf 22, said leaf being coextensive in width and length to that of the work section which at times it is adapted to cover as shown in Figure 1.

One of the principal features of the present invention relates to a construction in which the combined cooking and table-top is considerably wider than the low supporting oven, so that the former extends laterally upon each side of the side walls of the oven, as clearly illustrated by several of the figures, and particularly in Figure 3, in which the lower edges of the walls defining the combined top are provided with rectangular angle iron frames 24 and 24' through which it is suitably mounted upon the body of the low oven. The construction and arrangement affords a maximum cooking and working top surface with an oven body relatively smaller in width.

Referring now to the low oven construction, it will be observed that it is provided with side and rear insulated walls 27 and 28 respectively, and a front downwardly swinging insulated door 29, the oven being divided by a horizontal floor partition 30 into an upper broiler compartment 31 and a lower oven compartment 32, the broiler burner being shown at 33 and the oven burner at 34, the latter being arranged below the bottom 35 of the low oven structure. The broiler compartment is ventilated by a duct 36 formed between an insulated top plate 37 and a false top plate 38, communication with the broiler compartment being afforded by an opening 39 in the forward portion of said plate 38 and with the atmosphere through openings 40 in the back of the oven body. Similarly, the oven compartment is ventilated through a duct 41 formed between the bottom of the floor partition 30 and a spaced plate 42, the fumes and gases given off during cooking being passed through openings 43 in said plate 42 and to the atmosphere through an opening 44 leading to the filter 45.

Arranged within the broiler compartment is a broiler pan supporting device comprising a slidable bar 46 in the form of an inverted T, said bar being formed at its front end with a pan supporting bracket 47, said bracket having a forwardly and upwardly extending arcuate or curvilinear flanged guide member 48, which is adaptable under certain conditions for cooperation with the guide rollers 50 mounted upon the inner end of the arm 51 of a vertically movable broiler pan "pull-out" device 52.

The broiler "pull-out" device is provided with a vertical guide post 53 which slides within a recess 54 in the swinging door and is limited in its reciprocatory motion to the extent of the width of the slot 55 in said door. In normal position, through pressure of the coiled compression spring 56, housed in the lower end of the recess 54, the "pull-out" device will be maintained at the upper end of the slot 55, and the guide rollers out of engagement with the flanges of the curvilinear guide member 48 and at such time the door 29 may be opened without pulling out the broiler pan support and access may be had to the lower oven compartment in the usual manner.

When it is desired to pull the broiler pan support and with it the pan, out of the broiler compartment 31, the operator, by pressing downwardly upon a thumb-piece 58 or similar member rigid with the "pull-out" device 52, causes engagement of the guide rollers 50 with the

flanges 48; then, swinging the door downwardly will result in the rollers following down the flanges and pulling out the broiler pan support, much in the manner of the operation set forth in our copending application Serial Number 570,875, filed October 23, 1931, which is now Patent No. 1,974,222, issued September 18, 1934.

The broiler pan, shown at 59, is provided upon one end with a bracket 60, rigid therewith, and comprising a portion 61 having openings 62 which receive the hooks 63 of one of a series of vertically disposed notched or recessed portions 64 formed in a pair of parallel vertical plates 65, preferably integral with the web of the bracket 47. The brace 66 of the bracket serves to support the pan in horizontal position by resting against the edges of said plates 65.

Obviously, the pan may be placed at the desired vertical elevation with respect to the broiler burner 33 by simply tilting said pan upwardly upon its support and then lifting it off and placing it upon the lower or upper of the vertical series of hooks 63.

It may be here remarked that the horizontal floor partition 30, which includes the spaced plate 42, is supported upon rails 68 on the inner side plates 69 of the oven side walls 27.

To guide the slidable bar 46, which supports the broiler pan carrying bracket 47, we provide on the surface of the floor 30 of the broiler compartment, a channel trackway 70 having opposed inwardly directed flanges 71, which overhang the lateral flanges of the T-bar, the latter at its rear end being provided with anti-friction rollers 72 which move in the channel trackway. Journaled in the floor 30, toward its forward end and having its periphery lying within the trackway, is an anti-friction bearing roller 73, which with the rollers 72 permit the rack to be moved into and out of the oven without frictional engagement with stationary parts of the structure.

A very similar arrangement is employed for supporting a slidable hanging rack carrier 74 for the low oven compartment 32. Mounted upon the inner plate 42 and extending centrally thereof in the direction of the depth of the oven, as in the case of the broiler compartment, is a channel trackway 75, the rack carrier comprising a T-shaped bar 76, slidable therein. The slide bar, at its rear end, is provided with an anti-friction roller 77, while the trackway at its forward end is provided with a pair of anti-friction rollers 78 for the purpose of allowing the hanging rack to be easily moved into and out of the oven compartment.

The slidable bar 76 is provided at its rear end with a depending rigid T-shaped rack carrier 79 and has a vertical series of recesses 80, each in the form of a bayonet slot for the purpose of supporting at the desired elevation within the oven compartment one or more cooking utensil holding racks 81. Each rack at its rear is provided with downward extensions 82', which, when the rack is in position on the depending carrier 79, rest against the rear vertical flanges 79' thereof and thereby braces the rack so that it is maintained horizontally. The bar 76 is also provided at its forward end with a finger hold or other suitable device 82, whereby it and the rack carrier and racks may be moved out of the oven when the door is open.

It will thus be seen that with the arrangement shown, we have combined within a single main compartment, a broiler compartment and an oven

compartments, both of which are closed by a single swinging door and which door is provided with means cooperating with one of said compartments, whereby at the will of the operator, a broiler pan may or may not be withdrawn when said door is opened, the door thus serving not only as a closure for both of said compartments at one and the same time but also functioning as a selective mechanism whereby said broiler pan is pulled forward from its compartment. The door 29 is provided with any conventional form of handle 84.

The broiler burner 33 is connected with the manifold 9 through suitable piping 85, while the oven compartment burner 34 is connected with said manifold by piping 86. The oven burner 34 is arranged within a bottom compartment 87 to which access may be had through a removable panel 88, the entire range structure being supported by appropriate legs 90.

What we claim is:

1. In a cooking range, an oven, a broiler compartment above said oven and separated therefrom by a partition, a broiler pan support movably disposed within said broiler compartment, a single door for said oven and said broiler compartment, and means supported by said door for moving said broiler pan support out of said broiler compartment when said door is opened.

2. In a cooking range, an oven, a broiler compartment above said oven and separated therefrom by a partition, a broiler pan support slidably mounted within said broiler compartment, a single door for said oven and said broiler compartment, and normally inactive means supported by said door for selectively engaging said broiler pan support for sliding same out of said broiler compartment when said door is opened.

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