

June 8, 1943.

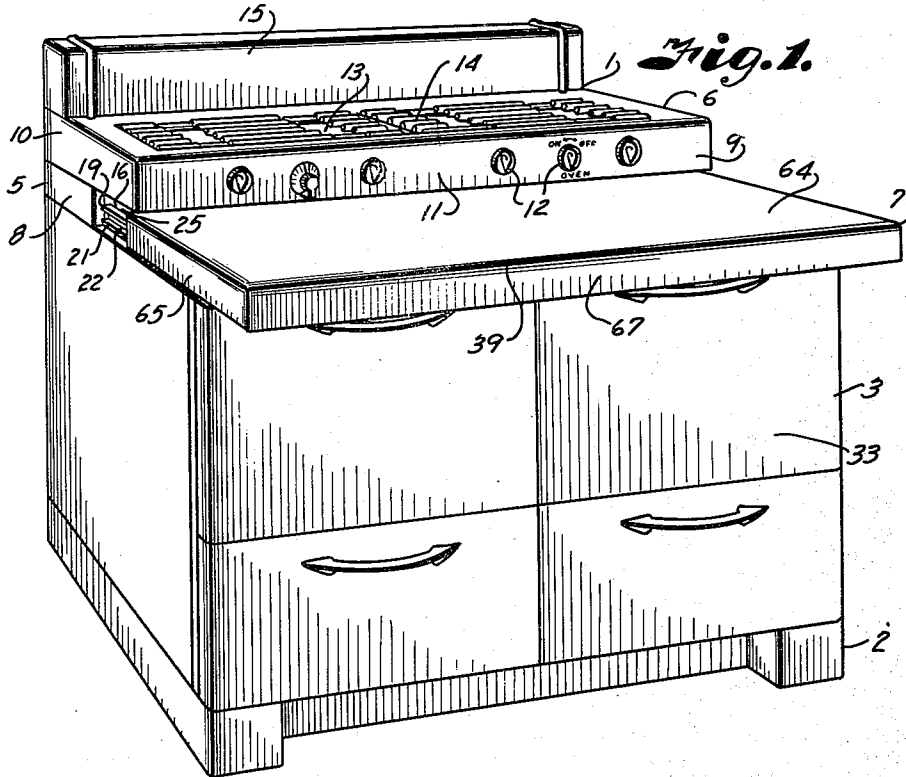
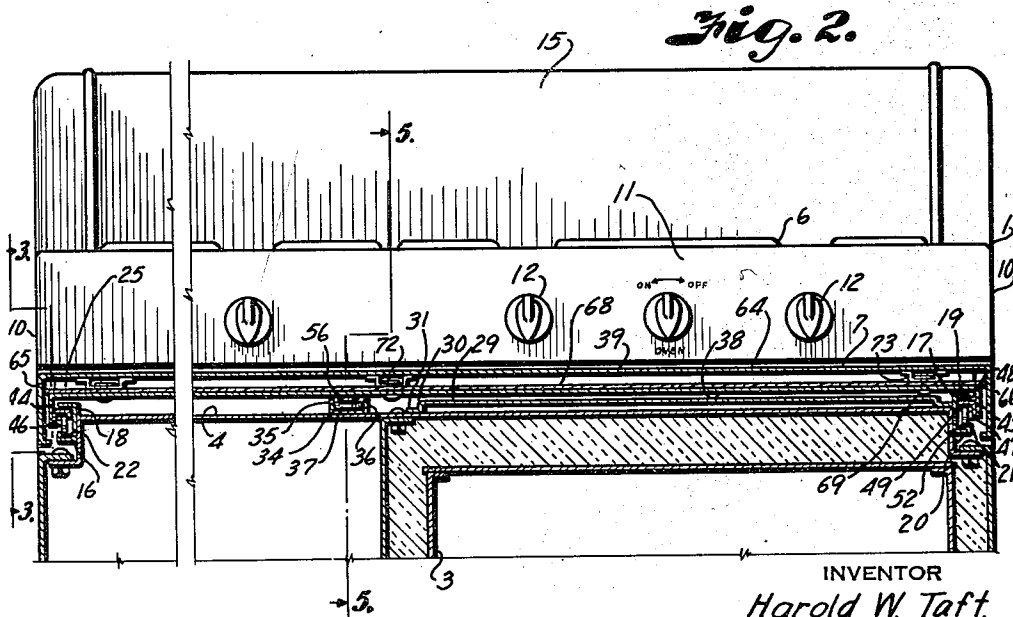
H. W. TAFT

2,321,167

COOKING RANGE

Filed Sept. 11, 1940

4 Sheets-Sheet 1



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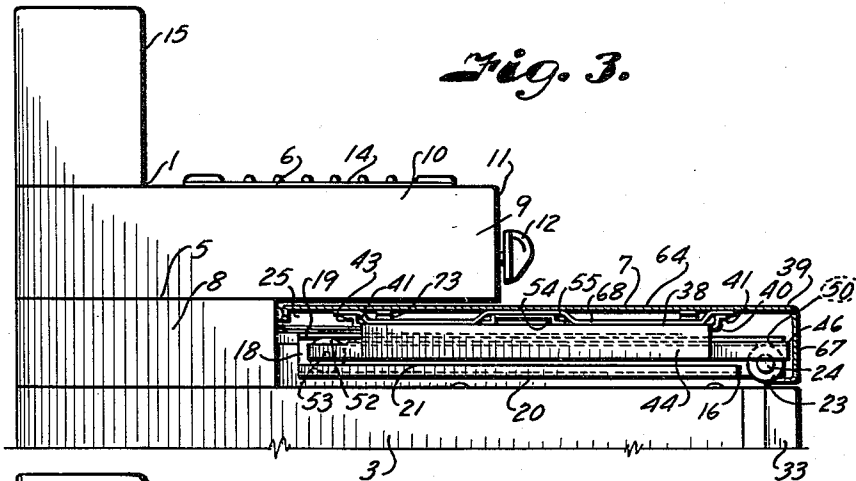
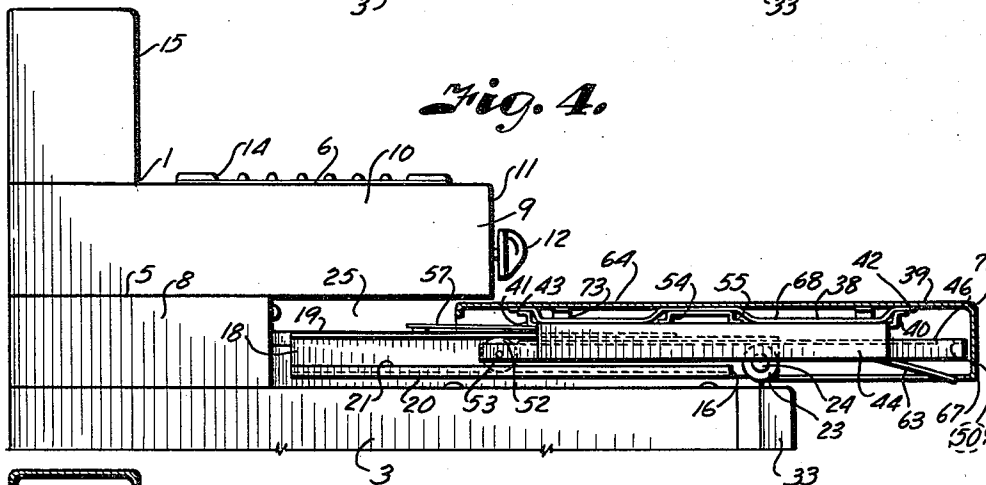
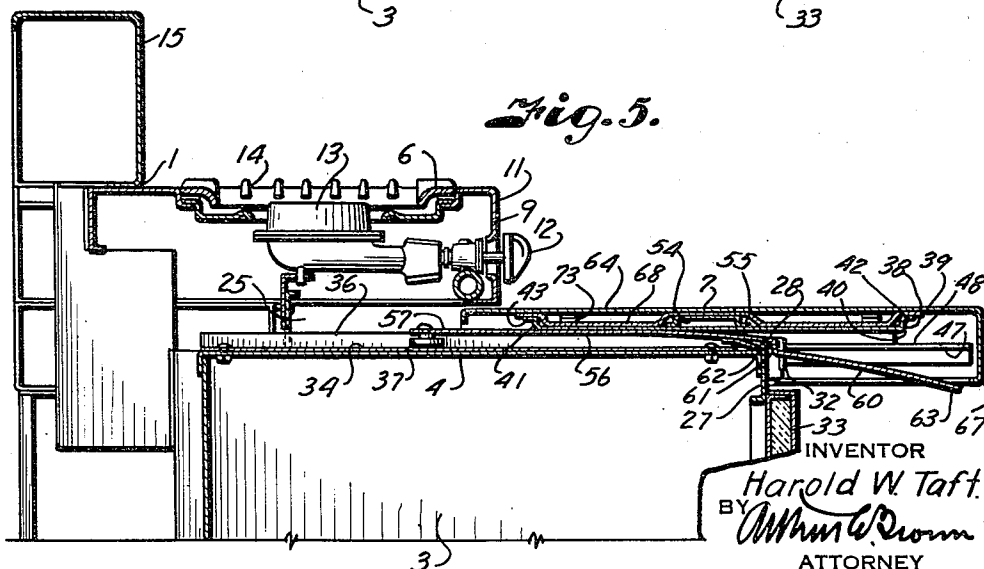
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4 Sheets-Sheet 2



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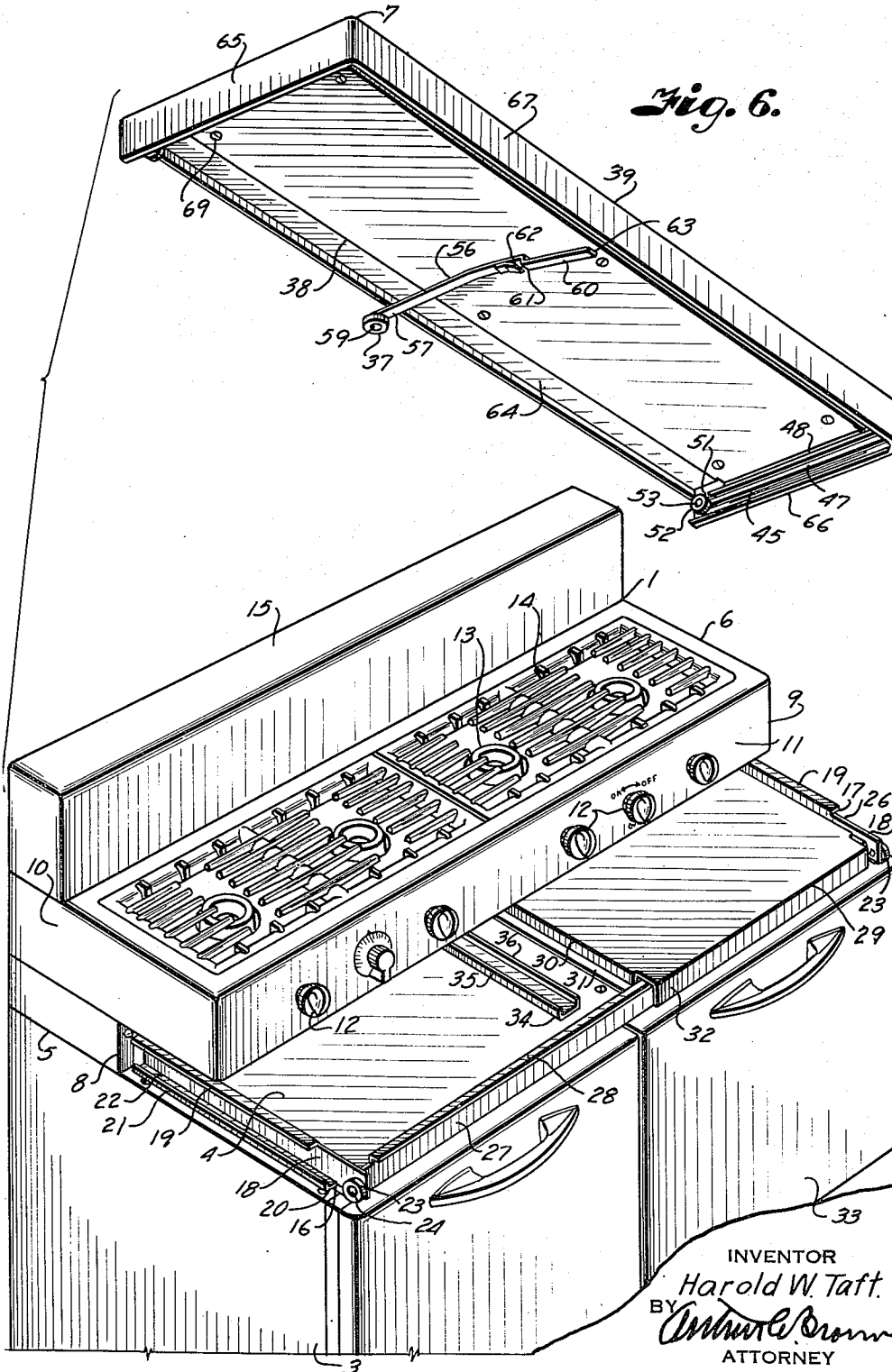
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COOKING RANGE

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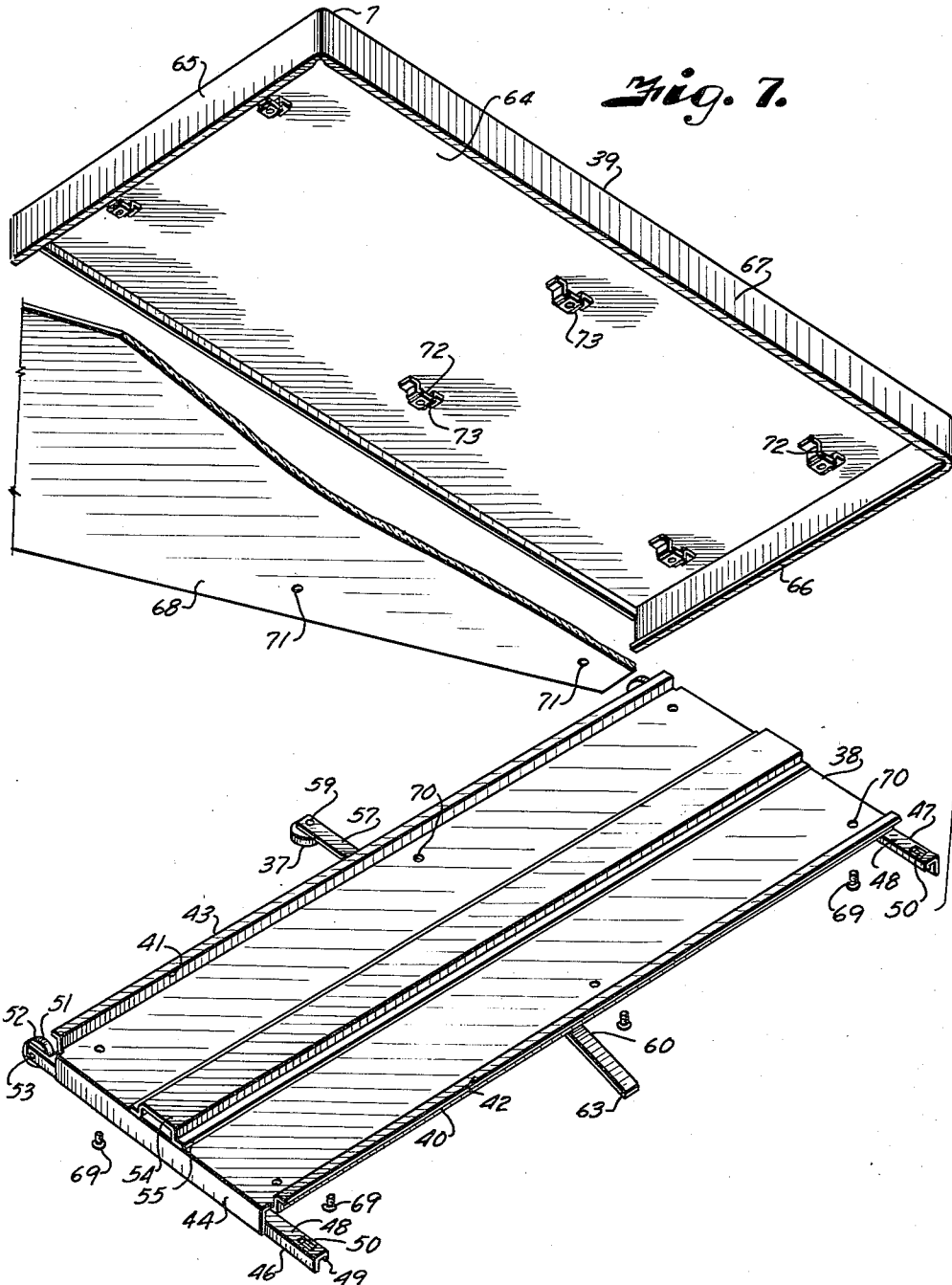
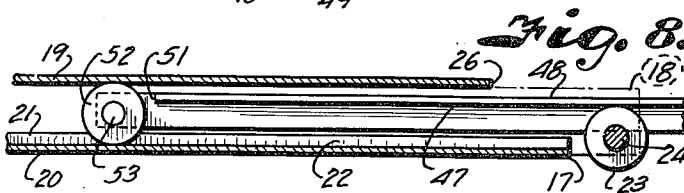
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COOKING RANGE

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4 Sheets-Sheet 4



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2,321,167

COOKING RANGE

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Application September 11, 1940, Serial No. 356,368

8 Claims. (Cl. 126—37)

This invention relates to cooking ranges, and has for its principal object to provide a range of this character with a working top offset rearwardly and upwardly with respect to a forwardly positioned working top for promoting safety and convenience in use of the range.

Other objects of the invention are to provide a range with an extendable or projectable working top; to provide the working top with a simple latch means for retaining it in projected position; to provide a roller mounting for the working top for facilitating movement thereof to and from extended position; to provide for insulation of the working top from heat of an oven located therebeneath; to provide a construction wherein the shell of the working top may be covered with baked enamel; and to provide a metal top that is of substantially rigid construction and substantially free of flexure.

Further objects of the invention are to provide a range construction that is of pleasing and novel appearance, and which may be kept in sanitary condition.

In accomplishing these and other objects of the invention, I have provided improved details of structure, the preferred form of which is illustrated in the accompanying drawings, wherein:

Fig. 1 is a perspective view of a cooking range constructed in accordance with the present invention and showing the working top in extended position.

Fig. 2 is a longitudinal vertical section through the top of the range.

Fig. 3 is an end view of the upper portion of the range showing the working top in section and taken on the line 3—3 of Fig. 2, with the working top in retracted position.

Fig. 4 is a similar view showing the working top in extended position.

Fig. 5 is a central cross-section through the upper portion of the range on the line 5—5 of Fig. 2, particularly illustrating the latch for retaining the working top in extended position.

Fig. 6 is a detail perspective view of the upper portion of the range showing the working top removed and in spaced relation therewith.

Fig. 7 is a detail perspective view of the parts of the working top shown in spaced relation, the sheet of insulating material being broken away for convenience of illustration.

Fig. 8 is a detail section through the working top particularly illustrating the roller mounting thereof.

Referring more in detail to the drawings:

I designates a range constructed in accordance with the present invention, and which includes a base section 2 supporting an oven and cabinet section 3 having a substantially flat top 4.

Spaced from the top 4, by a section 5, is a cooking top section 6 of substantially the same width as the oven section, but terminating short of the front of the oven section to provide a space for a working top 7 in the front thereof. The spacing section 5 includes side members 8 terminating short of the front of the cooking top 6 so that the front portion 9 of the cooking top overhangs the space for the working top.

The section 6 includes ends 10 in the plane of the side members 8 and connected at their front ends by a panel 11. The panel 11 carries the various controls 12 for regulating fuel supply to the burners 13 of the cooking top and oven and broiler sections of the range. The burners 13 of the cooking top are arranged in a line series extending across the width of the range and are covered by grids 14. Supported on the rear portion of the cooking top is a back panel section 15 that covers the oven vent and enhances the appearance of the range.

The top 4 has the end edges thereof spaced inwardly from extended planes of the sides of the cabinet section to form rabbet-like recesses in substantial registry with the end members 8 of the spacing section to accommodate substantially channel-shaped tracks 16 and 17. The tracks include web portions 18 arranged vertically and secured to the vertical portions of the rabbet-like recesses. The tracks extend from front to back of the space supporting the working top 7. Extending laterally from the webs 18 are upper and lower flanges 19 and 20, the lower flanges 20 being provided with upturned lips 21 which cooperate with the webs 18 to provide roller guide tracks 22. The lower flanges 20 terminate short of the forward ends of the web portions 18 and carry rollers 23 that are journaled on studs 24 extending from the face of the web portions 18 on the sides thereof having the flanges 19 and 20 as clearly shown in Fig. 6. The upper flanges 19 are located slightly below the overhang 9 of the cooking top to provide a space 25 therebetween and terminate short of the front ends of the lower flanges to provide spaces 26 to the rear of the rollers 23 to permit insertion of the working top rollers later described. The forward ends of the guide tracks are connected by a longitudinal bar 27 also positioned in a rabbet-like recess formed by inwardly spacing the front edge of the top from the front of the cabinet section. The bar 27 has a forwardly extending flange 28 on the upper edge thereof.

Mounted on the portion of the top 4, directly over the oven space, is a shield 29 having depending sides 30 terminating in footing flanges 31 suitably attached to the top 4. The forward edge of the shield 29 projects over the flange 28 and terminates in a downwardly extending

flange 32 projecting over the top of the oven so that when the door 33 of the oven is opened, the heat escaping from the oven is deflected from the working top.

Fixed substantially in the center of the range, on the top 4, is a channel member 34 extending parallel with the tracks 16 and 17 and having upwardly directed flanges 35 and 36 to be engaged by a roller 37 on the working top to maintain parallel relationship of the working top with respect to the guide tracks and prevent lateral shifting movement thereof relatively to the ends of the range.

The working top 7 includes a carriage 38 on which an outer shell 39 is attached. The carriage 38 is formed of sheet metal and has upwardly flanged front and rear edges 40 and 41 terminating in laterally extending lips 42 and 43. The sheet of metal is of sufficient length to extend across the guide tracks 16 and 17, and has downwardly extending flanges 44 and 45 to the inner faces of which are attached angles 46 and 47, the angles being arranged so that the horizontal webs 48 thereof extend inwardly in downwardly spaced relation with the body portions of the sheet and enter the guide tracks between the upper and lower flanges thereof as clearly shown in Fig. 2. The inner edges of the horizontal flanges of the angles terminate in downwardly extending lips 49 to provide guides for the carriage relatively to the rollers 23. The forward ends of the angles project beyond the front flanges and are provided with substantially rectangular shaped openings 50 to engage the peripheries of the rollers 23 when the carriage is in retracted position, as later described. The opposite ends of the angles project beyond the rear flange 45 and the horizontal leg portions are notched, as at 51, to accommodate rollers 52 which are journaled on studs 53 projecting inwardly of the vertical flanges of the angles so that the rollers 52 are adapted to engage the facing sides of the flanges 19 and 20 when the rollers are passed through the spaces 26, previously described, in which position the horizontal flanges of the angles are supported on the rollers 23.

Extending longitudinally of the carriage, intermediate the edge flanges 40 and 41, is a reinforcing channel 54 of substantially the same height as the edge flanges and which is secured to the body portion of the carriage by outwardly flanged feet 55. Mounted on the under side of the carriage, in registry with the guide channel 34, is a bar 56 having a rearwardly projecting end 57 carrying a roller 37 mounted on a stud 59 and arranged so that the opposite sides of the roller are adapted to substantially engage the flanges 35 and 36 of the guide channel. The opposite end of the bar is free of the carriage and forms a spring latch 60, having an offset forming a stop shoulder 61 cooperating with a stop 62 that is spaced therefrom a distance substantially equal to the width of the flange 28, whereby the latch is adapted to drop over the flange 28 when the working top is in projected position, as shown in Fig. 5. The forward end of the bar terminates in a handle 63, by which the latch is adapted to be released so that the working top may be moved from projecting position.

The working top proper comprises the shell 39 having the full width of the cabinet section and includes a horizontal top 64, depending ends 65 and 66 coextensive with the front and back

depth of the shell and located in the plane of the outer faces of the side members 8 and the sides of the cabinet section, and a front or apron 67. The depending sides substantially conform in depth to the spacing section 5 so as to, in effect, form a continuation thereof, as shown in Fig. 1. They are, however, adapted to move under the projecting portion of the cooking top when in retracted position whereby the front or apron 67 aligns with the front of the range. Inserted between the shell and the carriage is a sheet of insulating material 68 that is retained in position by fastening devices 69 extending through openings 70 in the carriage, registering openings 71 in the insulation and into threaded nuts 72 carried by brackets 73 that are attached to the under face of the top portion of the shield, as shown in Fig. 7.

In applying the assembled working top to the range, the rollers 52, which are journaled on the projecting rear ends of the angles 46 and 47, are passed through the spaces 26 so that they enter between the upper and lower flanges of the guide tracks. The forward edge of the cooking top assembly is then lowered to substantially horizontal alignment with the range so that the horizontal flanges of the angles rest upon the rollers 23. In this position the roller 37 engages between the side flanges of the guide channel and the working top may be moved into retracted position so that the rear portion thereof engages under the projecting portion of the cooking top and the front apron 67 aligns with the front of the range, as clearly shown in Fig. 3. In this position, the openings 50 engage the rollers 23 to, in effect, form friction latches for retaining the working top in its retracted position.

When the working top is to be projected for use, the sides thereof are engaged by the hands so that it may be withdrawn forwardly of the projecting portion of the cooking top. The handle portion 63 of the latch bar 56 bears directly upon the flange 28 so that when the top is in completely projected position, the latch drops thereover with the offset portion 61 engaging the front edge of the fixed flange and the stop 62 engaging the rear edge to retain the working top in projected position. In this position the top is retained from retractive movement and is securely supported so that various cooking preparations may be performed on the working top. The top, when projected, also forms a guard to prevent too close approach relatively to the flame of the cooking top. The top also serves as a guard to prevent children from reaching the burner top or playing with the burner controls.

The offset relationship of the center roller 37 relatively to the other rollers facilitates movement of the working top and at the same time maintains parallel relationship so as to prevent binding of the carriage with respect to the guide tracks. The top may be returned to retracted position by raising on the handle portion of the latch so that the offset thereof may slide over the top of the fixed flange, after which sufficient pressure is applied to move the carriage rearwardly of the tracks.

In case it is desired to remove the working top, this may be readily effected by withdrawing the top and holding the latch lever so that it is prevented from engaging the fixed flange at the front of the range. The top may then be withdrawn to the point where the rollers carried thereby are in position to be withdrawn through

the openings at the forward ends of the guide tracks. When thus removed, the top of the range, including the working top, is accessible for cleaning and therefore may be readily kept in sanitary condition.

Mounting of the enamel shell on the top of the carriage provides a rigid construction and the insulation deadens the sound when articles are placed on the working top. The insulation also resists yielding movement of the top under pressure applied thereto.

What I claim and desire to secure by Letters Patent is:

1. A range including, a cabinet section having an oven therein, a working top slidably supported on the cabinet section and projectable forwardly of the oven, and a shield between the working top and the oven and having a portion projecting forwardly of the oven to deflect heated gases escaping from the oven when a door of the oven is open and the working top is projected forwardly of said oven.

2. A range including, a cabinet section having an oven at one side thereof, a working top slidably supported on the cabinet section and projectable forwardly of the oven, a shield between the working top and the oven and having a portion projecting forwardly of the oven to deflect heated gases escaping from the oven when a door of the oven is open and the working top is projected forwardly of said oven, and a depending flange on the projecting portion of the shield.

3. A range including, a cabinet section having an oven at one side, and provided with a top extending over said oven, said top having inwardly spaced edges extending across the front and at the sides of the cabinet section to form rabbit-like recesses, guides fixed in the rabbit-like recesses at the sides of the cabinet section, spacing means aligning with rear ends of the guides, a cooking top carried on the spacing means and having a portion extending over said top of the cabinet section, a working top including a carriage reciprocally supported on said guides and slidable over the oven and under said extending portion of the cooking top, and a shell covering the carriage and having a depending front and side flanges covering said rabbit-like recesses.

4. A range including, a cabinet section having an oven and provided with a top extending over said oven, said top having inwardly spaced edges extending across the front and sides of the cabinet section to form rabbit-like recesses, guides fixed within the rabbit-like recesses at the sides of the cabinet section, spacing means aligning with rear end of the guides, a cooking top carried on the spacing means and having a portion extending over said top of the cabinet section, a working top reciprocally supported on said guides, a depending front and side flanges on the working top covering said rabbit-like recesses, and a shield between the oven and said working top and having a portion extending over the front rabbit-like recess and provided with a depending flange to deflect heated gases which escape from the oven away from said working top.

5. A range including, a cabinet section having an oven at one side and provided with a top extending over said oven, said top having edges inset from extended planes of the outer faces

of the sides of the cabinet section to form rabbit-like recesses at said sides, guides fixed within said rabbit-like recesses, spacing means aligning with rear ends of the guides, a cooking top carried on the spacing means and having a portion extending over said top of the cabinet section, a working top including a carriage reciprocally supported on said guides and slidable under the extending portion of said cooking top and over the oven, a shell covering the carriage and having a depending front and side flanges covering said rabbit-like recesses, a shield located over the oven and under the working top and having a portion provided with a depending flange to deflect heated gases which escape from the oven away from said working top, a guide carried on the cabinet section top alongside the shield, and means on the carriage engaging the last named guide to co-operate with the guides in said rabbit-like recesses for mounting the working top.

6. A range including a cabinet section having an oven and provided with a top extending over the oven, guides on sides of the top, spacing means aligning with rear ends of the guides and forming upward continuations of sides of said cabinet, a cooking top supported on the spacing means and having a portion extending over the top of the cabinet section, a working top including a carriage reciprocally supported on said guides and slidable over the oven and under said extending portion of the cooking top, and a shell covering the carriage and having depending front and side flanges covering said guides.

7. A range including a cabinet section having an oven and provided with a top extending over the oven, guides on sides of the top, an intermediate guide carried by the cabinet section, a working top including a carriage reciprocally supported on said guides and slidable over the oven and under said extending portion of the cooking top when the front of said carriage substantially registers with the front of said cabinet section, and a shell covering the carriage and having depending front and side flanges covering said guides.

8. A range including, a cabinet section having substantially plane-like outer side and front faces and having an oven at one side and provided with a top extending over said oven, said top having edges inset from extended planes of said outer side and front faces of the cabinet section to form rabbit-like recesses, guides fixed within the rabbit-like recesses at the sides of the cabinet section, spacing means substantially aligning with the rear ends of the guides, a cooking top carried on the spacing means and having a portion extending over said top of the cabinet section, a working top including a carriage reciprocally supported on said guides to slide under the extending portion of the cooking top and over the oven, a shell covering the carriage and having depending front and side flanges substantially located in plane with said plane-like outer side and front faces in covering relation with the rabbit-like recesses, and a shield between the oven and said working top and having a portion extending over the front rabbit-like recess and provided with a depending flange to deflect heated gases which escape from the oven away from said working top.

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