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LIFT-UP RANGE TOP SUPPORT

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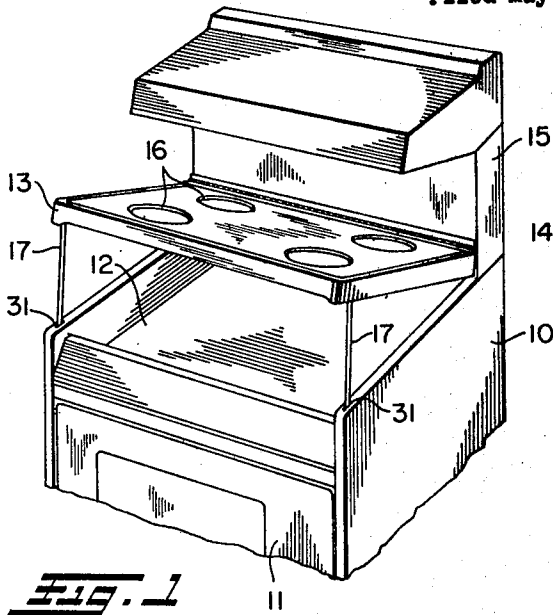


FIG. 1

FIG. 3

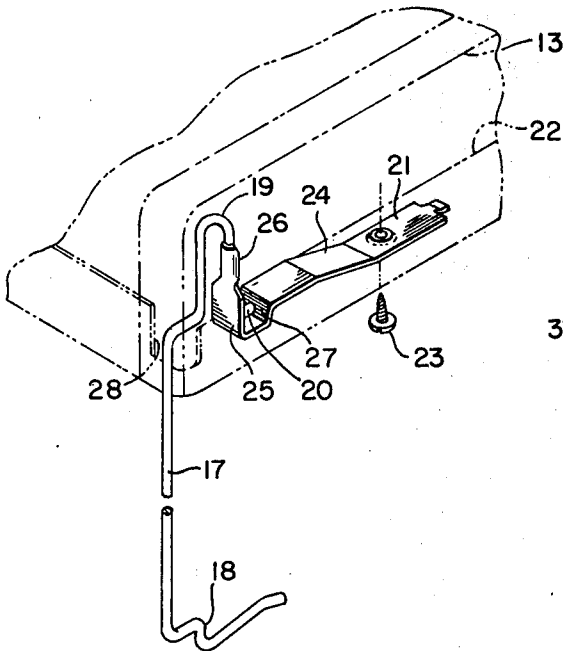
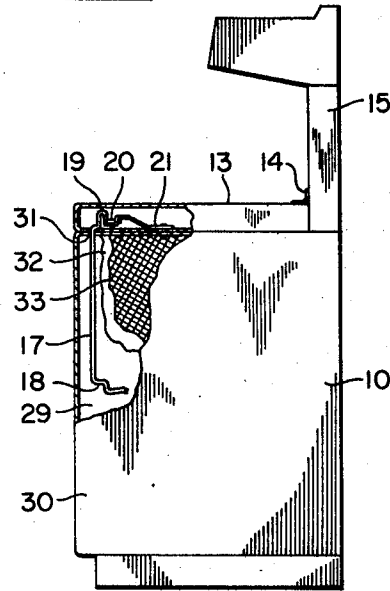


FIG. 2

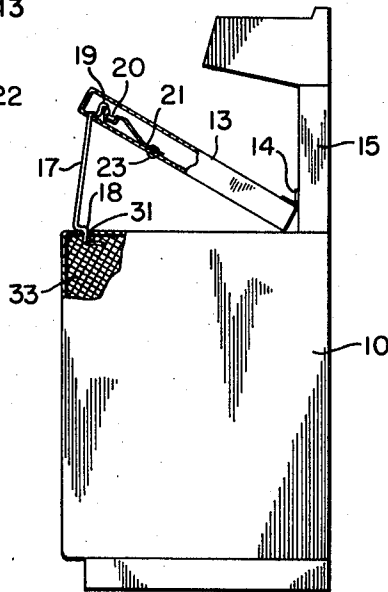


FIG. 4

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LIFT-UP RANGE TOP SUPPORT**Richard E. Payne, Mansfield, Ohio, assignor to The Tappan Company, Mansfield, Ohio, a corporation of Ohio****Filed May 27, 1968, Ser. No. 732,214****Int. Cl. F24c 15/10; B65d 43/16, 43/24****U.S. Cl. 126-211****1 Claim****ABSTRACT OF THE DISCLOSURE**

A range top hinged at the rear and having support rods attached at the front corners by leaf springs which bias the rods forwardly. The rods are normally within the range side walls and have bottom steps which, when the top is lifted, are withdrawn from and snap over the top edges of the side walls to support the top in the open position.

This invention relates, as indicated, to range tops which can be lifted or elevated for access to the interior of the box or housing therebeneath which contains the surface heaters, controls and other components.

Such access is desirable and has been provided in many ranges for repair and replacement and, as a most common experience, for cleaning of the range by the housewife regularly and when spillovers occur at the top apertures, and it is a primary object of the present invention to provide an improved support for holding the top in its open or elevated condition of adjustment.

Lift-up tops are usually hinged along the rear edge and hence swung upwardly to an angle assuring convenience of the access desired, and a further object of the invention is to provide a support for such a top which will automatically and positively snap into the holding condition, so that the housewife is required only to grasp the front edge of the top and raise it to the lifted support position. This is in contrast to the prop rods and the like which have been used for the purpose and must be separately manipulated and adjusted by hand while the top is held by the housewife in the elevated condition.

Other objects and advantages of the present invention will become apparent as the following description proceeds.

To the accomplishment of the foregoing and related ends the invention, then, comprises the features hereinafter fully described and particularly pointed out in the claims, the following description and the annexed drawing setting forth in detail a certain illustrative embodiment of the invention, this being indicative, however, of but one of the various ways in which the principle of the invention may be employed.

In said annexed drawing:

FIG. 1 is a fragmented perspective view of a kitchen range having a lift-up top and support for the same in accordance with the present invention;

FIG. 2 is an enlarged perspective of one of two similar supports for the top;

FIG. 3 is a side elevation of the range with the top closed and the side wall broken away to show the support at such side in its retracted or housed condition; and

FIG. 4 is a similar side elevation in which the top is open and the noted support extended in the holding condition.

Referring now to the drawing in detail, since the present improvements concern only the top support for a range having a lift-up top panel or plate, the range proper has been shown only in highly simplified form as comprising a free-standing cabinet 10 in which there is an oven 11 and a top box or housing 12 to contain the usual

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surface heaters, controls and other components, not shown.

The top enclosure 12 is closed by a flanged panel 13 hinged along its top rear edge 14 to a backguard assembly 15 and provided as usual with apertures 16 which will be in register with the surface heaters when the top is in its normal horizontal closed condition. Drip pans and grates will of course be provided at each aperture, and it will be further apparent that the type of heating device utilized is equally not a significant factor in consideration of the present improvements.

The improved support for holding the top panel 13 in the open position, to which it is simply swung on the rear hinging by lifting at the front, comprises basically two rods 17 respectively at the front corner portions of the panel.

Each such rod is formed with a step 18 at its lower end, a top loop 19 which is inwardly offset to the same side as the bottom step, and a short horizontal continuation 20 of such loop, with the step, loop and such continuation in a single plane. Each rod is attached to the top panel by a spring leaf 21 of appreciable length secured at one end to an intumed bottom horizontal flange portion 22 of the panel by a sheet metal screw 23 at a point spaced appreciably inwardly from the front of the panel.

Each such spring extends from its screw attachment forwardly and angularly upwardly as shown at 24 and then horizontally to a rebent end section. The free end 25 of the latter is cut and shaped to open vertical cylindrical form 26 closely to embrace the inboard vertical length of the top loop 19 of the associated rod, and the opposite leg 27 of the section is provided with a hole through which the rod end 20 extends to complete the assembly of the rod and spring.

It will be noted that the length of the spring, and the off-set of the top loop of the rod, locate the main extent of the rod closely behind the panel front, the bottom panel flange at the corner being cut away as shown at 28 to afford this proximity. The free end 26 of the spring which engages about the rod normally is biased to the rear or at an angle convergent to the opposite leg 27 in which the aperture is located.

The range cabinet comprises, at the sides, the usual inner and outer walls 29, 30, and openings 31 are provided to the spaces therebetween at each side near but spaced slightly rearward of the front edges. These openings and spaces accommodate the two support rods depending from the top panel when the latter is closed, with the mounting springs due to their placement relative to the openings 31 and the inclination of their sections 26 normally exerting a forward bias on the rods against the forward edges of the openings. Accordingly, as the top is lifted the rods are extended until the bottom end steps 18 of the same are withdrawn from openings 31 and automatically snap forward to rest on the top edges of the side walls, thereby to hold the top in the propped open position shown in FIG. 4.

The housewife, accordingly, is not required to hold the top up with one hand while using the other to position a rod at one side and then reverse her positioning correspondingly to locate and adjust the rod at the other side, as in the case of freely pivoted rods. The lowering of the top herein disclosed can most conveniently be accomplished by taking hold of the top at the front corners with both hands and simply pressing inwardly against the adjacent top parts of the two rods 17 to free the bottom steps 18 for movement of the rods into the sidewall voids.

It is preferred that the internal spaces in which the rods when lowered are accommodated be clear and free, for example, of the glasswool insulation usually provided

about the oven liner. In the illustrated range, such insulation 32 is held compressed against the inner wall or liner by wire net 33, and the support rods are received in the clearance resulting between the net and the exterior panel or wall of the cabinet at each side.

Other modes of applying the principle of the invention may be employed, change being made as regards the details described, provided the features stated in the following claim or the equivalent of such be employed.

I, therefore, particularly point out and distinctly claim as my invention:

1. In a kitchen range having a top which is hinged at the rear edge for lifting to an open position, support means for holding the top in such position, comprising two rods respectively depending from the front corner regions of the top, each rod extending normally from the closed top downwardly within the range through an opening in the top of the adjacent side wall thereof and being lifted by raising of the top to an angular open position for access to the space therebeneath, said rods being provided with lower end step formation which are withdrawn through the side wall top openings by raising of the top to such open position, and a leaf spring in mounting assembly

at one free end with the upper end of each rod and secured at its other end to the underside of the range top, with the springs exerting bias on the rods such that their step formations when thus withdrawn from such openings by raising of the top automatically snap over the adjacent edge portions of such walls to hold the top propped in such open position, the rods being moved reversely by hand against the spring bias for reinsertion of their step formations in the openings and freeing of the top thereby for lowering to the closed position.

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