Nov. 3, 1936. E. F. KENNEDY 2,059,735

STOVE OR RANGE

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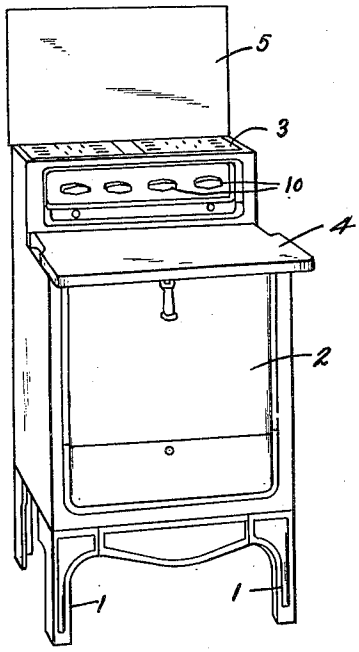
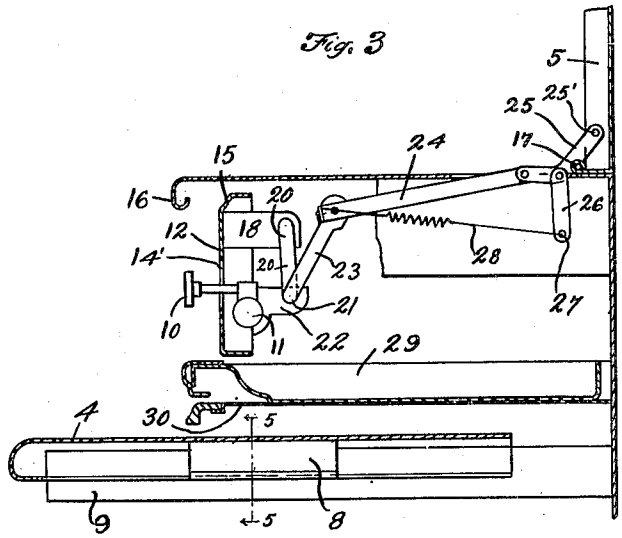


Fig. 1

Fig. 3



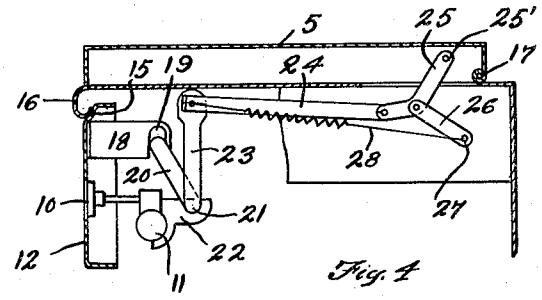


Fig. 4

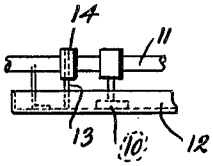


Fig. 6

Fig. 2

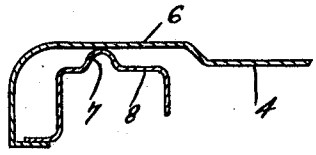


Fig. 5

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STOVE OR RANGE

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3 Claims. (Cl. 126—42)

The present invention relating as indicated to stoves or ranges, has more particular reference to a novel construction for a domestic cooking stove of the console or cabinet type having various new and distinctive features of arrangement and operation. One object of my invention is to provide a unique arrangement of the oven and burner sections, whereby there is provided a space immediately in front of the burner section serving as a table surface for the reception of various cooking utensils. Another object is to make such table surface extensible whereby it may be decreased or expanded at the will of the operator. Another object is to provide a cover member for the open burner section, which may be moved into a position to conceal such burner section when not in use. A still further object is to provide a panel plate for the operating valve handles which is alternately movable into a position exposing said handles for cooking operations, and into a position locking the handles against movement when the stove is not in use. Another object is to provide a mechanism coordinating movement of such burner section cover and valve handle panel plate, whereby the valve handles will be locked against movement when the burner section cover is in lowered position. Additional objects and advantages will become apparent during the following description. To the accomplishment of the foregoing and related ends, said invention, then, consists of the means hereinafter fully described and particularly pointed out in the claims.

The annexed drawing and the following description set forth in detail certain mechanism embodying the invention, such disclosed means constituting, however, but one of various mechanical forms in which the principle of the invention may be used.

In said annexed drawing:

Fig. 1 is a front perspective view of the general assembly of the stove constructed according to the principle of my invention; Fig. 2 is an enlarged fragmentary perspective view with parts broken away, illustrating the construction of the burner section cover and valve handle panel plate operating mechanism; Fig. 3 is a side elevational sectional view of the construction of the upper portion of the stove illustrated in Fig. 1; Fig. 4 is a view similar to Fig. 3, but showing the burner section cover plate in lowered position; Fig. 5 is an enlarged sectional view taken substantially along the line 5—5 of Fig. 3; Fig. 6 is a fragmentary top plan view of the valve handle panel plate construction.

Now directing attention more particularly to the drawing, the general assembly of my stove consists of the supporting legs 1 mounting the frame of the stove and the oven section indicated generally by the numeral 2. Immediately above the oven section 2 and spaced rearwardly from the front thereof is the open burner section 3. In that portion of the stove between the front of the burner section 3 and oven section 2 is found the horizontally slidable table surface 4. A hinged cover plate 5 is provided for the purpose of covering and concealing the top of the open burners 3 when they are not in use.

The slidable table surface 4 which has the raised marginal edge 6 is supported upon the raised bead 7 in the channel member 8. The channel member 8 is, in turn, mounted upon the upper frame 9 of the oven section 2. The purpose of supporting the slidable table top 4 upon the raised bead 7 is to provide a sliding contact surface which will result in minimum frictional resistance in order to permit ease of movement of the table top 4. It will thus be seen that the positioning of the extensible table top 4 at a point immediately above the oven section 2 and contiguous to the burner section 3 provides a working surface available during cooking operation which obviates the inconvenience of transferring cooking utensils, food receptacles, and the like, to an additional table further removed from the scene of operations. It should be further noted that the burner elements of the open burner section 3 are disposed in a single row extending laterally across the width of the stove. By virtue of this construction it is unnecessary for the operator to reach across an open burner and run the risk of a severe burn.

The operating handles 10 for the fuel control valves which are mounted upon the manifold or stringer pipe 11, extend along the front face of the burner section 3. The burner elements which it has not been deemed expedient to illustrate herein, inasmuch as they may be of any standard construction and well known in the art, are disposed rearwardly of the stringer pipe 11. A panel plate 12 which, as shown in Fig. 6, is carried at each end by a horizontally extending rod 13 slidable in the cylindrical casting 14, has a plurality of openings 14' which are adapted to fit over the valve handles 10 when the latter are in closed position. It will be noted that the upper marginal edge 15 of the panel plate 12 is slightly indented in order to register with the inturned edge of the downwardly depending flange 16 of the front edge of the burner section

3. It will thus be seen that when the panel plate 12 is moved to its innermost position, as shown in Figs. 2 and 3, that the valve handles 10 are then completely exposed and free to rotate in order that the operator may control their position at will. However, when the panel plate 12 occupies its farthest forward position, as shown in Fig. 4, and wherein the valve handles 10 must be in closed position, it will be seen that the apertures 14' so surround the valve handles 10 as to prevent access to them and lock them against rotation.

As a safety measure, it is of utmost importance that the fuel valves be closed when the burner section cover 5 is in lowered position. This latter coordination of movement is effected by virtue of the presently described mechanism best illustrated in Figs. 2, 3 and 4. The burner section cover plate 5 is horizontally supported to the rear top frame of the stove by means of a suitable hinge 17. The valve handle panel plate 12 is horizontally movable in the supporting means already described and shown in Fig. 6. A pair of rearwardly extending brackets 18, only one of which has been shown for the purposes of convenience of illustration, are secured to the inner face of the panel plate 12, and have the downwardly extending slots 19 adapted to receive the rod 20. The rod 20 which extends substantially along the length of the panel plate 12 is downwardly offset on each end in order to provide the fixed pivot point portion 21 which is carried by the bracket or casting 22 secured to the stringer pipe 11. The end of the bar 20 is bent upwardly into the lever arm 23 which is connected to one end of the toggle link mechanism concealed in the side partition of the burner section frame. The toggle link mechanism consists of the relatively long arm 24 pivotally connected to the offset link 25. The link 25, in turn, connects on its other end to the pin 25' in the burner section cover plate 5. The link arm 26 forms a connection between the point of offset in the arm 25 and the fixed pivot pin 27 attached to the inner side panel of the burner section frame. A tension spring 28 leads from the point of connection of the arms 23 and 24 and the fixed pivot pin 27. The force of the tension spring 28 is therefore adapted to urge the toggle link mechanism toward a position of collapse, or to move the panel plate 12 and the cover plate 5 toward the open position shown in Fig. 3. Furthermore, inasmuch as the tension spring 28 is mounted substantially across the dead center of the toggle link mechanism, it will be seen that the resultant force tending to urge the parts to their opened position will be at its minimum in the closed position, as shown at Fig. 4, and at its maximum at the open position, as shown in Fig. 3, thereby tending to aid in the rearward movement of the panel plate 12 as well as to aid in the upward movement or lifting of the weight of the cover plate 5 and to retain the latter in open position.

A removable drip pan 29 is positioned immediately below the burner section 3 and supported upon the horizontal panel 30.

It will thus be seen that the principle of my invention provides a unique and attractive type of stove construction possessing novel features of safety and efficiency.

Other modes of applying the principle of my invention may be employed instead of the one explained, change being made as regards the mechanism herein disclosed, provided the means stated by any of the following claims or the equivalent of such stated means be employed.

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

1. A stove or range comprising the combination of a burner section, a hinged cover plate adapted to overlie the top of said burner section, a plurality of fuel control operating handles of non-circular contour disposed in the front side of said burner section, a movable panel plate normally disposed in the front horizontal face of said burner section and inwardly movable past said handles to expose and free the latter for rotation, said panel plate having similar shaped openings adapted to fit over said handles and lock them against rotation, and actuating mechanism cooperating the movement of said cover plate with the movement of said panel plate whereby said cover plate is movable to closed position only when said panel plate is movable to outward position and when said handles are in off position.

2. A stove or range comprising the combination of a burner section, a hinged cover plate adapted to overlie the top of said burner section, a plurality of fuel control operating handles of non-circular contour disposed in the front side of said burner section, a movable panel plate normally disposed in the front horizontal face of said burner section and inwardly movable past said handles to expose and free the latter for rotation, said panel plate having similarly shaped openings adapted to fit over said handles and lock them against rotation, a toggle link mechanism connected to said panel plate and the frame of said stove, a connecting arm extending from the toggle joint of said mechanism to said cover plate, and spring means tending to collapse said toggle mechanism and counteract the downward movement of said cover plate whereby said cover plate is movable to closed position only when said panel plate is movable to outward position and when said handles are in off position.

3. A stove or range comprising the combination of a burner section, a hinged cover plate adapted to overlie the top of said burner section, a plurality of fuel-control operating handles of non-circular contour disposed in the front side of said burner section, a panel plate normally disposed in the front horizontal face of said burner section and inwardly movable past said handles to expose the latter for operation, said panel plate having similarly shaped openings adapted to fit over said handles only when the latter are in off position, and link mechanism connecting the inward and outward movement of said panel plate to the opening and closing movement, respectively, of said cover plate.

EMMETT F. KENNEDY.