Feb. 22, 1938. H. H. TURNER 2,109,039

STOVE TOP

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Fig. 1.

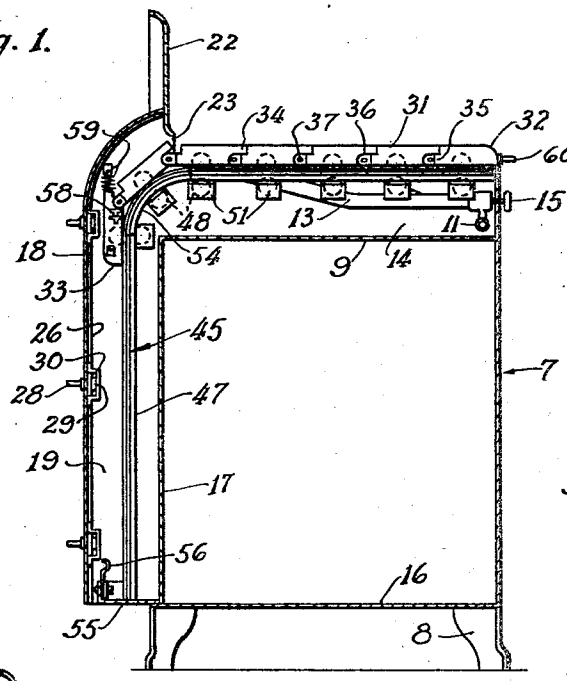


Fig. 7.

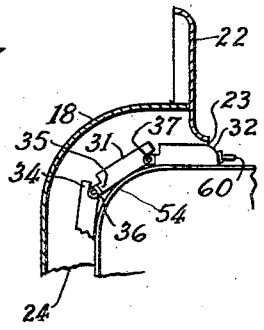


Fig. 2.

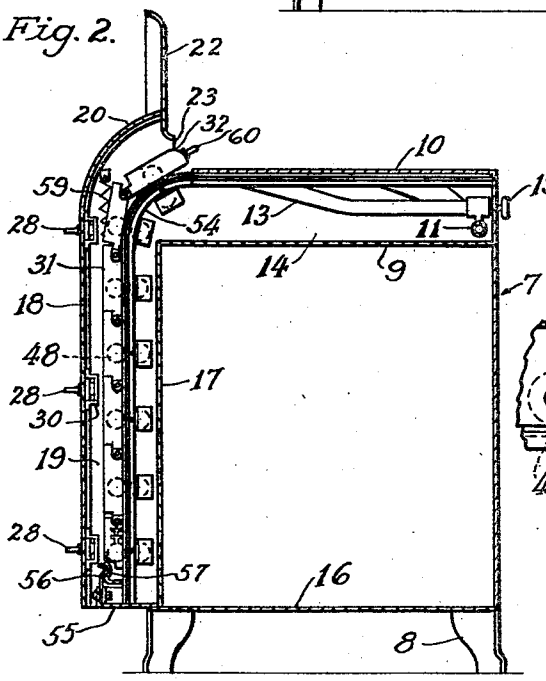
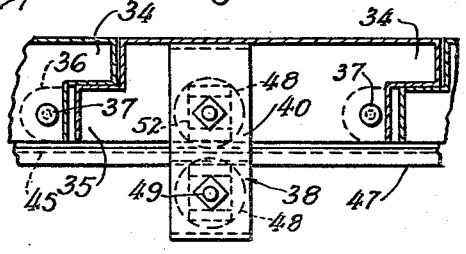


Fig. 3.



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Fig. 4.

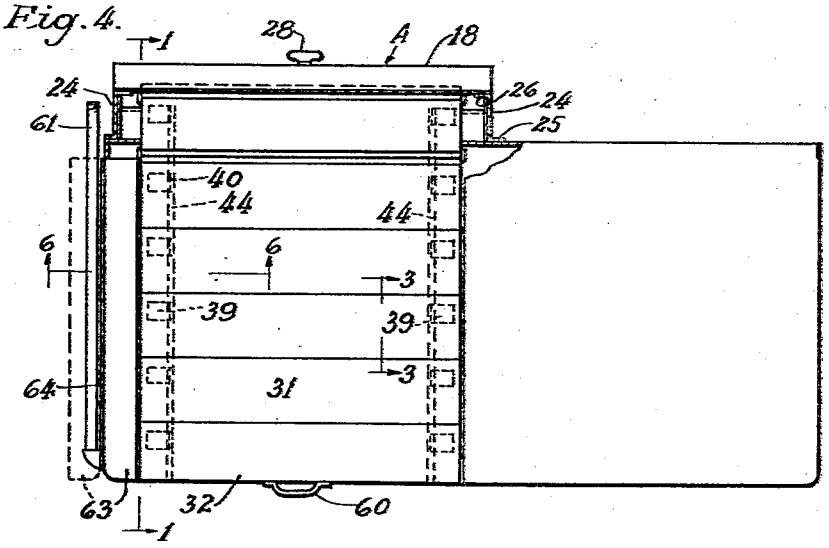


Fig. 5.

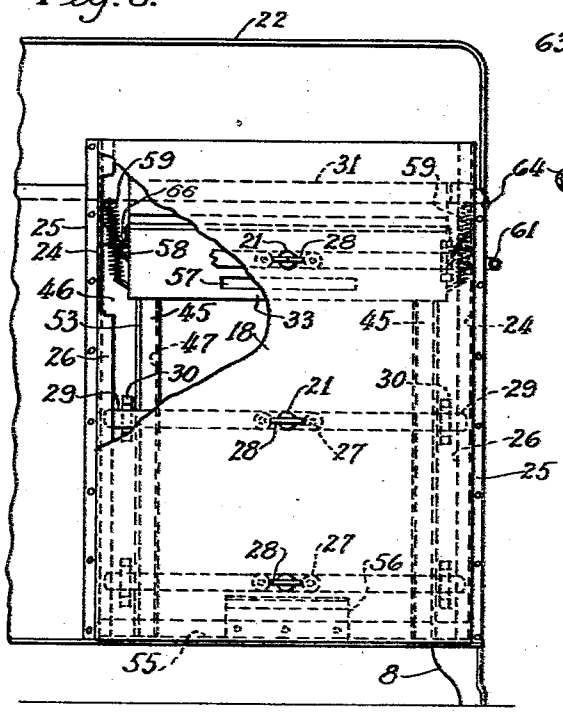
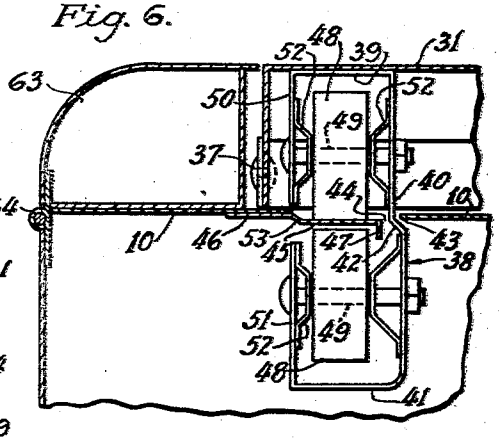


Fig. 6.



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Patented Feb. 22, 1938 2,109,039

UNITED STATES PATENT OFFICE

2,109,039

STOVE TOP

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Application February 10, 1936, Serial No. 63,117

4 Claims. (Cl. 126—214)

My invention relates to tops for gas and electric stoves, and particularly to such tops that may be made to disappear behind or into the body of the stove. Reference is hereby made to my copending application, Serial No. 63,116 filed contemporaneously herewith.

An important object of my present invention is to provide for the burner area of a gas or electric stove, a top or cover that does not have to be lifted when removing it from said burner area.

Another object is to provide a removable top for the burner area of a stove of the character mentioned that will operate on rollers throughout the movement of said top to and from a position covering said burner area.

The invention also comprises novel details of construction and novel combinations and arrangements of parts, which will more fully appear in the course of the following description.

In the drawings, like reference characters designate similar parts in the several views.

Figure 1 is a vertical section of a stove or range, taken on the line 1—1 of Figure 4, showing an embodiment of my invention.

Figure 2 is a sectional view similar to Figure 1, but showing the burner top or cover in a substantially concealed position.

Figure 3 is an enlarged section taken on the line 3—3 of Figure 4.

Figure 4 is a plan view of a stove or range embodying features of my invention.

Figure 5 is a rear view, partly broken away, looking in the direction of the arrow "A" of Figure 4.

Figure 6 is an enlarged section taken on the line 6—6 of Figure 4. Fig. 7 is a vertical section showing a detail.

Referring more in detail to the drawings, the reference numeral 7 refers generally to the body of a gas stove mounted on legs 8. Mounted between a horizontal plate 9 and a grid 10 is a header 11 supplied with gas by a main conduit 61. The header in turn supplies gas to branch pipes 13, for burners (not shown). The burner area of the stove shown is designated by the reference character 14. Valve means 15 control the flow of gas to the burners. An upstanding face member 22 is arranged at the rear edge of the burner area, and has a lower edge 23, under which the top rolls back and forth.

Disposed vertically between bottom 16 of the stove body and the horizontal plate 9 is a partition 17. A removable rear panel 18 is arranged parallel with the partition 17 and together they provide a space 19 therebetween. The rear panel has a curved head 20 and a vertical series of openings 21.

Side plates 24 define the width of the space 19. These side plates are flanged in opposite directions, as best shown in Figure 4. The outwardly bent flange 25 is bolted to the body 7 and the inwardly bent flanges 26 of the two side plates are alined and bent toward each other. Toggles 27 for fastening the rear plate 18 in place are operated by handles 28 whose shanks project through the openings 21. Dogs 29 of the toggles are moved into and out of engagement with the flanges 26, as perhaps best shown at the left in Figure 5. Straps 30 slidably hold the dogs 29 at the inner face of the rear plate 18.

A sectional roller top is provided for the burner area 14 of the stove. The roller top comprises a plurality of hollow, intermediate sections 31, a head section 32 and a tail section 33. Each of the intermediate sections has an overlapping lip 34 at the front edge.

A shoulder 35 at the back edge of each section supports the overlapping lip of the next following section, and rearwardly projecting tabs 36 are pivoted to the next rearward section, as shown at 37, to permit the sectional top to round a curve.

Mounted within each roller top section and adjacent opposite ends are roller carriages 38 that are substantially oblong in elevation. Upper cross arm 39 of each carriage is welded, or otherwise fastened, to the horizontal inner surface of each section. One vertical leg 40 of each carriage is continuous from the upper cross arm 39 to a lower cross arm 41. If desired the leg 40 may be offset at 42. Legs 50 and 51 of the carriage 38 are in vertical alinment and respectively depend from the upper cross arm 39 and upstand on the lower cross arm 41.

The grid 10 has longitudinal slots 44 that extend from substantially the front of the stove to the rear of the grid. A track 45, provided in each of the slots 44 is arranged between the alined, vertical legs 50 and 51 of the roller carriage. The tracks extend longitudinally of the slots and are fastened to the under side of the grid 10 by means of rims 46. Flanges 47 extend along an edge of the track 45. The offsets 42 are arranged in the space between the flanges 47 and edges 43 of the slots 44, to assist in maintaining the roller carriages, and hence the roller top, on the track.

Upper and lower rollers 48 are supported on spindles 49. Brackets 52 on the inner faces of the legs 40, 50 and 51 center the rollers with

respect to the track 45. It will be noted that the upper and lower rollers 48 run on opposite faces of the track. Flange 47 limits lateral movement of the lower roller 48 to the right, and an offset 53 limits lateral movement of the upper roller 48 to the left, as shown in Figure 6.

The track is curved, as shown at 54, and extends downward into the space 19 to a floor 55. Mounted on the floor 55 is a spring detent or catch 56. The tail section 33 of the roller top is grooved, as shown at 57, for engagement with the spring catch 56, when the roller top is lowered to the bottom of the space 19. Stops 58 are provided on the tail section 33 for limiting upward movement of the roller top, by engagement with abutments 66.

To resiliently oppose downward movement of the roller top, helical springs 59 are provided at either side of the roller top. One end of each helical spring is connected with the relatively stationary side plate 24, and the other end is connected with the tail section 33.

In the construction shown, the roller top does not cover the entire width of the burner area (in order that the top may be enclosed within the space 19). To completely cover said area, a complementary section 63 is employed. It is hinged to the stove body at 64. When the roller top is lowered into the space 19, the section 63 may be swung around its hinge to the broken line position shown in Figure 4.

In the operation of the present invention, the roller top is moved from the closed position shown in Figure 1 to the open position shown in Figure 2. A handle 60 is provided on the head section 32 for such manipulation.

When the roller top is moving from the closed to the open position, tension is being placed in the helical springs 59, which tension assists in raising the top again. At the bottom of the movement of the roller top, the spring catch or detent 56 resiliently engages the groove 57, thus holding the top in the open position against the tension of the helical springs, until released by manual movement of the top. The stops 58 limit the closing movement of the top.

Throughout the opening and closing movements of the top, the rollers 48 follow the track 45.

Access to the space 19 is afforded by the removable panel 18. Turning of the handles 28 unlocks the panel 18 for removal and locks the panel again when it is replaced.

While I have illustrated and described what I now regard as the preferred embodiment of my invention, the construction is, of course, subject to modifications without departing from the spirit of my invention. I, therefore, do not wish to restrict myself to the particular form of construction illustrated and described, but desire to avail myself of all modifications which may fall within the scope of the appended claims.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. In a gas or electric stove having a burner or heater area, a top disposed in a closed position over said area, a track extending along and away from said area, upon which track the top may be moved from said position, and a roller carriage under the top, comprising a substantially oblong frame having vertically spaced legs, the track extending into said space between the legs, rollers mounted on the legs, within said frame, and disposed to roll on opposite sides of the track, to maintain the top on the track.

2. In a gas or electric stove having a burner or heater area, a track leading along and away from said area, a top comprising hollow sections hinged to one another, the top movable on said track from a closed position over the burner or heater area to an open position with respect to said area, and roller carriages mounted within the hollow portions of the sections, and having rollers within said hollow portions, movable on the track.

3. In a gas or electric stove having a burner or heater area, a track leading along and away from said area, a flange on the track, a top comprising elements hinged to one another, the top being movable on said track from a closed position over the burner or heater area to an open position with respect to said area, and roller carriages mounted on the sections, rollers on the carriages arranged to roll on opposite sides of the track, to limit relative movement of the sections in one plane, and the flange on the track limiting movement of the sections in opposite directions in a plane at right angles to the first-mentioned plane.

4. In a gas or electric stove having a burner or heater area, a track leading along and away from said area, a flange on the track, a top movable on said track from a closed position over said area to an open position with respect to said area, roller carriages mounted on the sections, the top being disposed to move along one side of the track, and rollers on the carriages arranged to move along the opposite side of the track, the flange being arranged to prevent lateral movement of the rollers in one direction and to prevent lateral movement of the carriages in the opposite direction.

HOWARD H. TURNER.