Sept. 12, 1933. J. H. GRAYSON 1,926,532

HEAT CONTROL DEVICE FOR STOVES

Filed March 11, 1932

Fig. 1

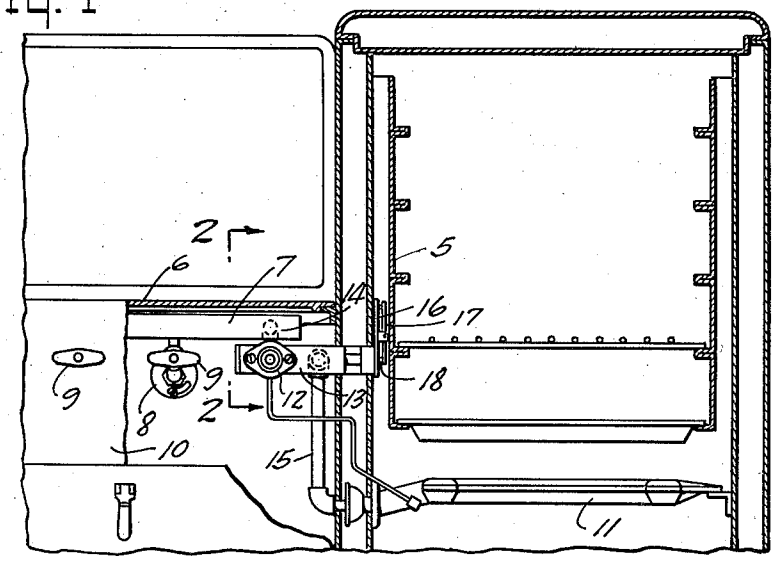


Fig. 2

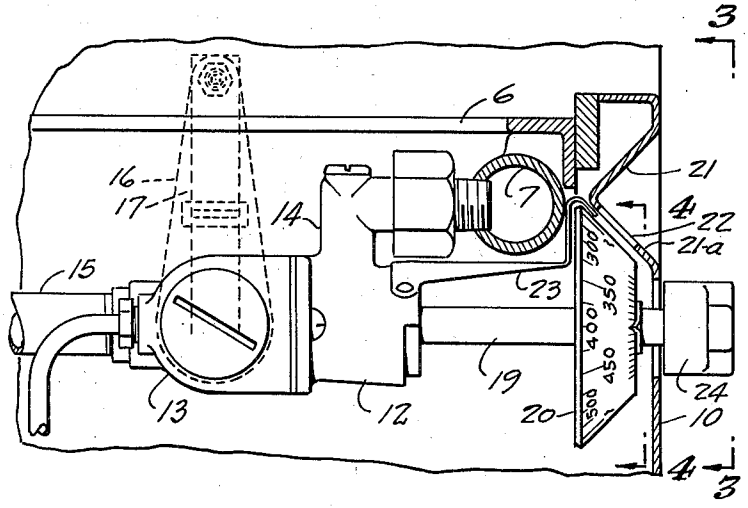


Fig. 3

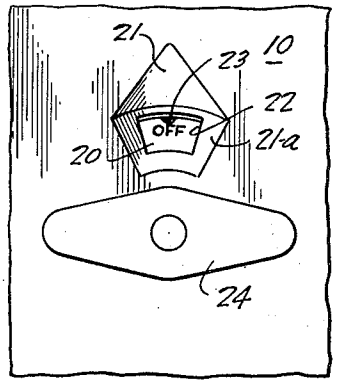
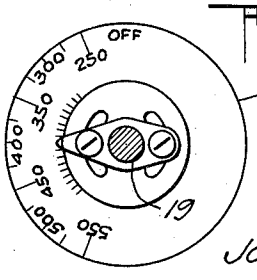


Fig. 4



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HEAT CONTROL DEVICE FOR STOVES

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Application March 11, 1932. Serial No. 598,215

12 Claims. (Cl. 236—15)

This invention relates to an automatic heat regulator for a gas stove and pertains particularly to its mounting thereon. It is desirable in such devices to have a heat regular of compact form adapted to be mounted in a position out of the way and capable of assembly with the stove to produce a simple and ornate appearance.

The objects of this invention are to provide a regulator meeting the above desired requirements and having any or all of the following features: a unit assembly which may be supported on the conventional gas manifold in the usual clearance space beneath the latter; a unit having a control shaft with a knob disposed at the front face of the common manifold cover plate and a concealed dial except for a window in the plate to view graduations.

These objects together with other objects and corresponding accomplishments are obtained by means of the embodiment of my invention illustrated in the accompanying drawing, in which:—

Fig. 1 is a front elevation of a fragment of a gas stove partly in section showing the aggroupment of parts forming and associated with the subject matter of the present invention; Fig. 2 is a section on an enlarged scale as seen on the line 2—2 of Fig. 1 showing the regulator unit in side elevation; Fig. 3 is a fragmental view of the manifold cover plate, regulator handle and dial window as seen on the line 3—3 of Fig. 2; and Fig. 4 is a section as seen on the line 4—4 of Fig. 2.

Referring more particularly to the drawing, a fragment of a stove is shown in Fig. 1 having an oven 5 and a gas plate 6 at the side thereof. The gas plate 6 comprises a grate top and below the plate is a gas supply manifold 7 ranging along the front of the stove. The usual gas cocks 8 with handles 9 are provided to control the individual burners for the gas plate. There is a manifold cover plate 10 extending across the front. The oven burner is indicated by 11.

A combination gas supply cock and heat regulator is provided for controlling the flow of gas to the burner 11. This comprises a casing of L form having a leg 12 housing the gas cock plug and a leg 13 housing the automatic valve mechanism. Upstanding from the leg 12 is a branch 14 of L shape adapted to be connected to the gas manifold 7 in the same manner as the conventional connection of the plate burners. The casing is supported by the gas manifold with its body to the rear thereof and in the usual clearance space beneath the gas plate top. A pipe 15 serves for communication of the casing and the burner 11. The leg 13 extends through the wall of the oven and has a plate 16 connected thereto and upon which is mounted a bimetallic thermostatic leaf 17 which acts upon a rod 18 forming a part of the automatic heat control actuating means. A shaft 19 extends forwardly from the leg 12 and controls the gas supply cock and the means for setting the heat regulator temperature.

Shaft 19 extends through the manifold cover plate 10 and secured to the shaft and at the rear of the manifold plate is a dial 20 of drum form having a face which flares. Temperature graduations are marked on the dial. The latter is secured to the shaft so as to be angularly adjustable to provide for correcting the positions of the temperature graduations on the periphery of the dial. There is an indented recess 21 in the manifold cover plate with a wall 21*a* which overhangs the face of the dial. Wall 21*a* is provided with a window 22 for reading the dial temperature graduations. An indicator pointer 23 is mounted on the casing and extends over the dial.

It will be noted that the regulator is of compact form adaptable to being mounted in the clearance space beneath the gas manifold and out of the way with the connection to the gas manifold in the same position as the plate burners. The manifold plate 10 conceals the dial except for the window, the dial being in a position out of the way so that there are no parts projecting in front of the gas manifold except the usual gas cock handles and the control handle 24 for the regulator. The construction is such as to provide a substantially flush manifold plate with parts concealed so that in general the appearance is simple and ornate.

What I claim is:—

1. In a gas stove having a flush front manifold cover plate; a heat regulator comprising a rotatable control shaft extending through said plate, a graduated drum dial secured to said shaft and ranging about the latter and disposed behind said plate, there being a window in said plate to view the graduations on said dial, said window having rearwardly extending reveals.

2. In a gas stove having a burner, a conventional gas supply manifold and a flush front manifold cover plate for the gas cocks on said manifold; a heat regulator connected to said manifold and burner to provide for communication between the latter; said heat regulator comprising a rotatable control shaft projecting forwardly of said manifold, a graduated drum dial secured to said shaft and ranging about the latter adjacent its forward end and disposed at the rear of said plate, said shaft extending through said plate,

there being a window in said plate for viewing the graduations on said dial, said window having rearwardly extending reveals.

3. In a gas stove having a burner, a conventional gas supply manifold and a flush front manifold cover plate for the gas cocks on said manifold; a heat regulator connected to said manifold and burner to provide for communication therebetween; said heat regulator comprising a rotatable control shaft projecting forwardly of said manifold, a drum like graduated dial secured to said shaft and ranging about the latter and concealed by said plate, said shaft extending through said plate, there being a rearwardly indented recess in said plate with a wall thereof overhanging the face of said dial and a window therein for viewing the graduations on said dial.

4. In a gas stove having a conventional gas supply manifold and a burner to be controlled; a heat regulator unit comprising a casing connected to said manifold and burner to provide for communication between the latter; said casing being connected to said manifold to be supported therefrom, a rotatable control shaft extending into and from said casing, a manifold cover plate for gas cocks on said manifold, a graduated dial secured to said shaft and ranging about the latter adjacent its forward end and disposed at the rear of said plate, said shaft extending through said plate and having an operating handle at the front face of the plate, there being a window in said plate for viewing the graduations on said dial, said window having rearwardly extending reveals.

5. In a gas stove having a conventional gas supply manifold with a clearance space beneath said manifold and a burner to be controlled; a heat regulator unit comprising a casing disposed in said clearance space and connected to said manifold and burner to provide for communication between the latter; said casing being connected to said manifold to be supported therefrom in dependent position, a rotatable control shaft extending into and from said last casing, a flush front manifold cover plate for gas cocks on said manifold, a drum like graduated dial secured to said shaft and ranging about the latter adjacent its forward end and disposed at the rear of said plate, said shaft extending through said plate and having an operating handle at the front face of the plate, there being a rearwardly indented recess in said plate with a wall thereof overhanging the face of said dial and a window thereon for viewing the graduations on said dial.

6. In a gas stove having an oven, a conventional gas supply manifold disposed at one side of the oven and ranging laterally thereof with a clearance space beneath said manifold and a burner for said oven; a heat regulator unit comprising a casing disposed in said clearance space and connected to said manifold and burner to provide for communication between the latter; said casing being connected to said manifold to be supported therefrom, a rotatable control shaft extending into and from said casing, a flush front manifold cover plate for gas cocks on said manifold, a graduated dial secured to said shaft and ranging about the latter adjacent its forward end and disposed at the rear of said plate, said shaft extending through said plate and having an operating handle at the front face of the plate, there being a window for viewing the graduations on said dial.

7. In a gas stove having an oven, a conventional gas supply manifold disposed at one side of the oven and ranging laterally thereof with a clearance space beneath said manifold and a burner for said oven; a heat regulator unit comprising a casing disposed in said clearance space and connected to said manifold and burner to provide for communication between the latter; said casing being connected to said manifold to be supported therefrom in dependent position, a rotatable control shaft extending into and from said casing, a flush front manifold cover plate for gas cocks on said manifold, a drum like graduated dial secured to said shaft and ranging about the latter adjacent its forward end and disposed at the rear of said plate, said shaft extending through said plate and having an operating handle at the front face of the plate, there being a rearwardly indented recess in said plate with a wall thereof overhanging the face of said dial and a window thereon for viewing the graduations on said dial.

8. In a gas stove having an oven, a gas supply manifold disposed at one side of the oven and ranging laterally thereof with a clearance space beneath said manifold and a burner for said oven; a heat regulator unit comprising a casing disposed in said clearance space and connected to said manifold and burner to provide for communication between the latter; said casing being of substantially L shape being secured to said manifold to be supported therefrom in dependent position, one leg of said casing extending through the side of the oven, the other leg extending laterally of said manifold, a rotatable control shaft extending into and from said last mentioned leg, a manifold cover plate for gas cocks on said manifold, a graduated dial secured to said shaft and ranging about the latter adjacent its forward end and disposed at the rear of said plate, said shaft extending through said plate and having an operating handle at the front face of the plate, there being a window in said plate for viewing the graduations on said dial.

9. In a gas stove having an oven, a gas supply manifold disposed at one side of the oven and ranging laterally thereof with a clearance space beneath said manifold and a burner for said oven; a heat regulator unit comprising a casing disposed in said clearance space and connected to said manifold and burner to provide for communication between the latter; said casing being of substantially L shape having an upstanding L branch on one leg connected to said manifold to support said casing therefrom in dependent position with the other leg extending through the side of the oven, the leg having said branch extending laterally of said manifold, a rotatable control shaft extending into and from said last mentioned leg, a manifold cover plate for gas cocks on said manifold, a graduated dial secured to said shaft and ranging about the latter adjacent its forward end and disposed at the rear of said plate, said shaft extending through said plate and having an operating handle at the front face of the plate, there being a window in said plate for viewing the graduations on said dial.

10. In a gas stove having an oven, a gas supply manifold disposed at one side of the oven and ranging laterally thereof with a clearance space beneath said manifold and a burner for said oven; a heat regulator unit comprising a casing disposed in said clearance space and connected to said manifold and burner to provide for communication between the latter; said casing being of substantially L shape having an upstanding L branch on one leg connected to said manifold to support said casing therefrom in dependent position with

the other leg extending through the side of the oven, the leg having said branch extending laterally of said manifold, a rotatable control shaft extending into and from said last mentioned leg, a manifold cover plate for gas cocks on said manifold, a drum like graduated dial secured to said shaft and ranging about the latter adjacent its forward end and disposed at the rear of said plate, said shaft extending through said plate and having an operating handle at the front face of the plate, there being a rearwardly indented recess in said plate with a wall thereof overhanging the face of said dial and a window therein for viewing the graduations on said dial.

11. In a gas stove having a gas supply manifold with a clearance space beneath said manifold and a burner to be controlled; a heat regulator unit comprising a casing disposed in said clearance space and connected to said manifold and burner to provide for communication between the latter; said casing being of substantially L shape having an upstanding L branch connected to said manifold to support said casing therefrom in dependent position, one leg extending laterally of said manifold, a rotatable control shaft extending into and from said leg, a manifold cover plate for gas cocks on said manifold, a graduated dial secured to said shaft and ranging about the latter adjacent its forward end and disposed at the rear of said plate, said shaft extending through said plate and having an operating handle at the front face of the plate, there being a window in said plate for viewing the graduations on said dial.

12. In a gas stove a gas supply manifold with a clearance space beneath said manifold and a burner to be controlled; a heat regulator unit comprising a casing disposed in said clearance space and connected to said manifold and burner to provide for communication between the latter; said casing being of substantially L shape having an upstanding L branch on one leg connected to said manifold to support said casing therefrom in dependent position, the leg having said branch extending laterally of said manifold, a rotatable control shaft extending into and from said last mentioned leg, a manifold cover plate for gas cocks on said manifold, a drum like graduated dial secured to said shaft and ranging about the latter adjacent its forward end and disposed at the rear of said plate, said shaft extending through said plate and having an operating handle at the front face of the plate, there being a rearwardly indented recess in said plate with a wall thereof overhanging the face of said dial and a window therein for viewing the graduations on said dial.

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