

Aug. 30, 1927.

1,640,861

A. F. THOMPSON
GAS BURNER COOK STOVE

Filed Dec. 2, 1926

Fig. 1.

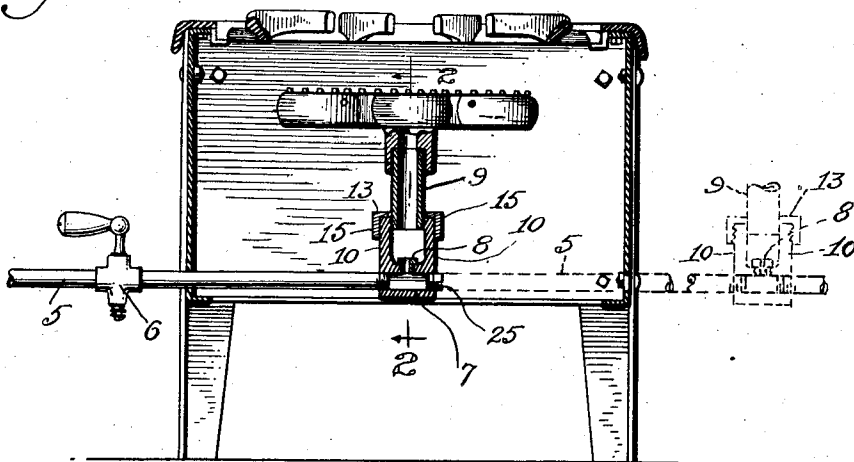


Fig. 2.

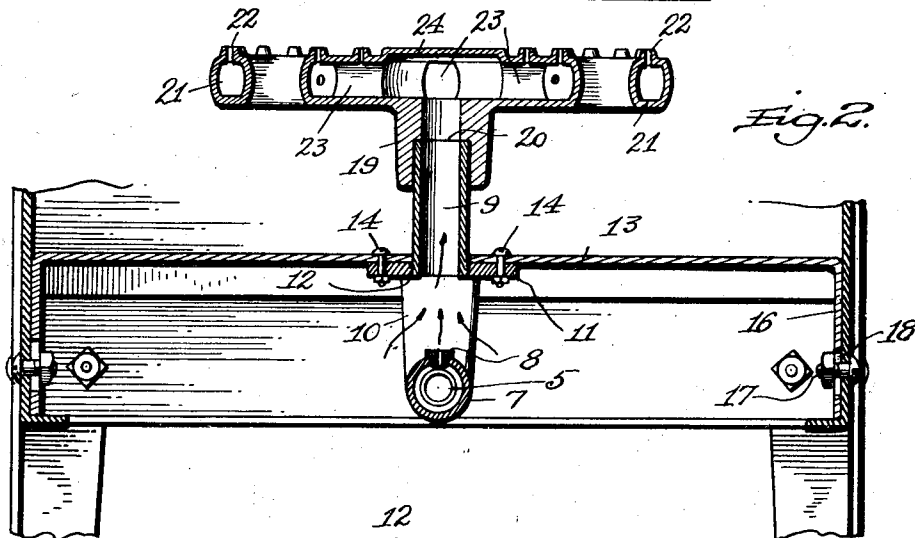


Fig. 4.

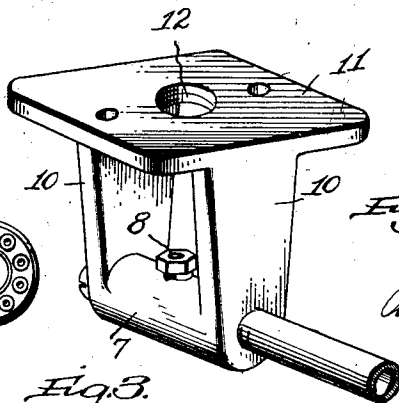
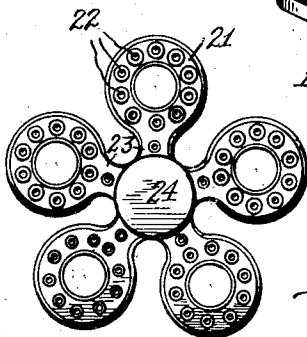


Fig. 3.

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GAS-BURNER COOKSTOVE.

Application filed December 2, 1926. Serial No. 152,152.

This invention relates to that type of stove either cooking or heating, or a gas plate, in which a burner of the gas-jet type is employed, and the object of the invention is to simplify and improve the construction to the end that clogging of the gas-jet will be avoided and also that the parts of the burner may be gotten at conveniently and separated readily for cleaning purposes, as more fully hereinafter set forth.

In the drawing—

Fig. 1 is a vertical sectional view of a stove constructed in accordance with my invention;

Fig. 2 is a similar view of the burner somewhat enlarged;

Fig. 3 is a detail plan of the burner proper;

Fig. 4 is a detail perspective view of the gas-jetting device.

The gas is supplied by means of a tube 5 having a valve 6, said tube being threaded into one end of a jet-tube 7 carrying a jet-nipple 8 directed upwardly to jet the gas into the mixing-tube 9. The jet-tube 7 is provided with upstanding integral arms 10 which are integrally connected with a base-plate 11 provided with a central threaded hole 12, down into which the mixer-tube 9 is removably screwed.

The jet-tube hanger is fastened to a horizontal bar 13 attached to the side walls of the stove-frame, the attaching means being bolts or rivets 14 or other means such as welding or slip joint. This bar 13 is provided with longitudinal flanges 15 which embrace the base-plate 11 and the hanger-arms 10, thus providing a rigid support for the jet-tube 7 which in turn supports the inner end of the gas-tube 5. The bar 13 is desirably made of sheet-metal, with its ends turned down to form depending flanges 16 which are clamped to the side wall of the stove by bolts 17, slots 18 being provided in the depending flanges 16 for the purpose of vertically adjusting the bar 13 together with its attached parts. This bar 13 not only carries the mixing-tube and the jet-tube, but also supports the burner proper, which is mounted on top of the mixing-tube 9.

The burner proper consists of a centrally depending nipple 19 adapted to slip down over the smooth top-end of the mixing-tube 9, an internal shoulder 20 being provided in the nipple to strike against the upper-end of

the mixing-tube. In this way, the burner may be readily removed from the top-end of the mixing-tube, and the mixing-tube in turn may be readily unscrewed from the base-plate 11 for convenience in cleaning the jet-nozzle 8. This is an especially big advantage in view of the fact that it is practically impossible to prevent accumulations of gas deposits, lint, etc. from clogging up the jet. Also, this particular construction of jet-tube is advantageous in that any foreign matters that fall down through the mixing-tube 9 or alight upon the upper-surface of the jet-tube 7 are free to fall away from the burner because of the open spaces between the two depending arms 10. These open spaces of course permit the necessary supply of air for mixing with the jet as it enters the mixer-tube.

The burner consists of a horizontal mixing-chamber into which the passage through nipple 19 discharges centrally. It consists of a plurality of arms, five being shown in the present instance, forming a sort of rosette. Each arm is in the form of a hollow ring 21 provided with the usual burner-tips 22 and connected to a central chamber by means of short radial tubes 23. The burner-nipples 22 are arranged in a circle around each ring, and one or more are arranged in the connecting tubes 23, whereby a multiplicity of flames are provided for throughout the upper surface of the burner, except at the center where an imperforate plate 24 is arranged centrally over the exit from the mixer-tube. The mixed air and gas strike the plate 24 and the mixture is deflected outwardly through the radial tubes 23 in a substantially uniform manner. The central imperforate plate 24 serves as a cover for the top of the mixing-tube, to thus prevent foreign matters falling down through the mixing-tube to the gas-jet-nozzle, this being especially advantageous in thus preventing boiling-over liquids from splashing or running down into the mixer-tube.

A feature of advantage in my present type of gas-jet device is that the opposite end of the tube 7 is adapted to be connected to an extension gas-pipe leading to one or more additional burners, as shown in dotted lines in Fig. 1, located in the same stove or in an adjacent stove. To enable this to be done, I close this end of the tube 7 with a screw-plug 25 tapped into the end of the

tube 7 and adapted to be removed whenever the extension-pipe is to be connected to the tube 7.

What I claim is:

- 5 1. A stove of the character set forth consisting of a casing, a bar adjustably mounted therein and provided with depending flanges at its edges, a base-plate attached to the bottom of said bar, within said flanges, this
10 base-plate being provided with a pair of depending separated arms carrying at their lower ends a gas-jetting tube, a gas-supply tube connected to said gas-jetting tube, a mixer-tube screwed down into said base-
15 plate, and a removable burner mounted on the upper end of said mixer-tube.

2. A stove of the character set forth con-

sisting of a casing, a supporting-bar mounted therein, a casting having a base plate secured to said bar and a pair of depending 20 separated arms connected at their lower edges by an integral tube, said base-plate being provided with a threaded hole and said tube being provided with a jet-nipple on its upper side directed toward said 25 hole, a supply pipe connected to one end of said tube, a removable mixer-tube screwed into the hole in the base-plate, and a movable burner mounted on top of said mixer-tube. 30

In testimony whereof I hereunto affix my signature.

AUGUSTUS F. THOMPSON.