F. M. MOLBY.

GAS BROODER STOVE.

APPLICATION FILED APR. 28, 1921.

1,410,532. Patented Mar. 21, 1922.

FIG. 1.

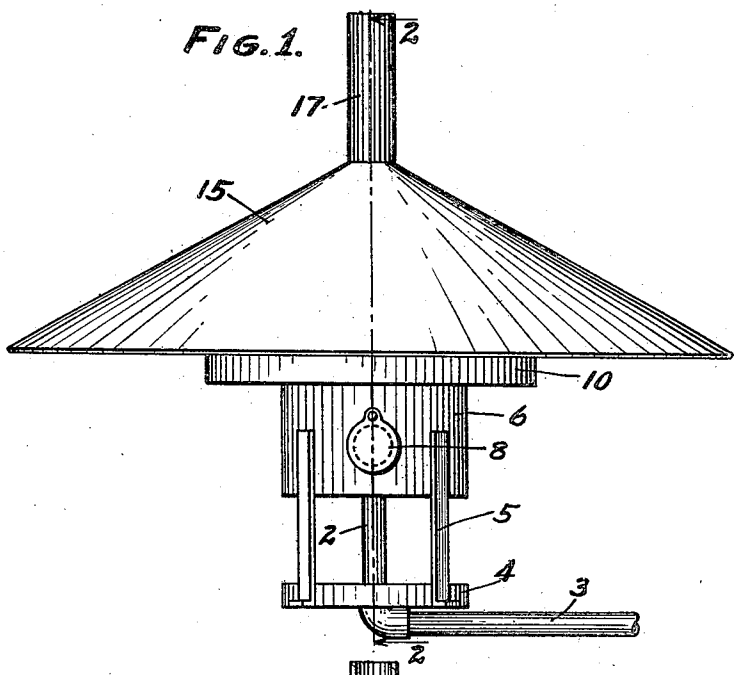
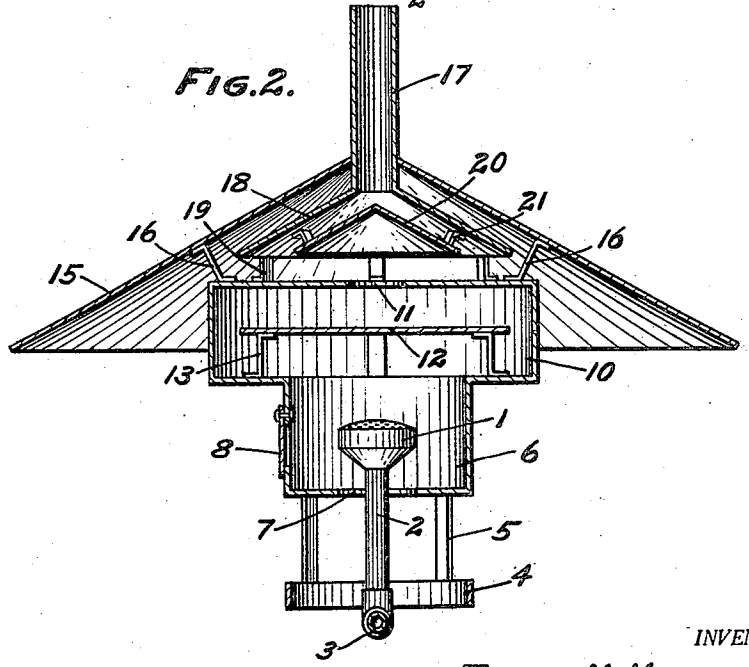


FIG. 2.



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GAS BROODER STOVE.

1,410,532. Specification of Letters Patent. Patented Mar. 21, 1922.

Application filed April 28, 1921. Serial No. 465,155.

To all whom it may concern:

Be it known that I, FRANK M. MOLBY, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Gas Brooder Stoves, of which the following is a specification.

This invention is a stove particularly adapted to be used for brooders and so arranged as to adapt the stove for use with a gas burner.

More particularly the stove structure includes a drum upon a suitable support and carrying a gas burner and a canopy arranged over said drum so as to deflect the heat downwardly to the floor. A discharge pipe extends from the canopy and is provided for the fumes from the gas burner. The drum carrying the burner opens into the canopy over the same, and suitable baffle plates are provided so as to cause the products of combustion to pass in a circuitous course from the burner to the discharge pipe and thereby make possible the obtaining of the maximum heating effect by the stove and also preventing the possibility of a back draft through the discharge pipe extinguishing the burner.

The invention will be readily understood from the following description of the accompanying drawing, in which:

Figure 1 is a side elevation of a stove constructed in accordance with the invention.

Fig. 2 is a vertical section on the line 2—2 of Fig. 1.

The burner of the stove may be of any usual construction and is shown at 1 supported by a fuel pipe 2 terminating in the lateral extension 3 of said pipe leading to a fuel supply.

A supporting standard is received around pipe 2, and preferably includes an annular base 4 having the upwardly extending legs 5. These legs support a drum 6 received around burner 1 and having an enlarged base opening 7 through which pipe 2 extends, and also provides for the entrance of sufficient air into the drum to support combustion. The side of the drum may be provided with a suitable window opening 8 of isinglass, or the like, and said window is preferably a pivoted window structure in order that it may be readily swung open for lighting the burner.

The drum 6 above burner 1 terminates in an enlarged drum 10 forming a heat chamber, and the top of drum 10 is provided with an axial opening 11 through which the products of combustion escape. In order to provide for a circuitous course of said products of combustion through drum 10, a baffle plate 12 is provided in drum 10 between opening 11 and the drum 6, and as a consequence the heat from burner 1 must pass around said baffle plate during its progress toward the opening 11. The baffle plate may be supported upon suitable legs 13.

A canopy 15 is supported above drum 10 as by the legs 16, and said canopy extends downwardly around the drum, as clearly shown in the drawing, and so as to deflect the heat passing outwardly through opening 11 downwardly to the floor.

A discharge pipe 17 for the fumes from the burner projects axially beyond canopy 15 and preferably extends a short distance within the canopy so as to terminate in an enlargement 18 adapted to collect the fumes escaping through opening 11 and direct the same through the discharge pipe. Enlargement 18 may be supported by legs 19 from the drum 10.

The fumes passing through opening 11 are caused to travel in a circuitous course to pipe 17 as by means of a conical baffle 20 arranged within enlargement 18 and supported therefrom as by legs 21. This baffle is in alinement with opening 11 and the discharge pipe, and will thereby not only form means for causing the products of combustion to travel in an indirect route, but will also prevent down draft through pipe 17 passing directly to the drum of the burner and thence to the burner.

It will be noted that the construction, as thus described, provides a stove which is readily adaptable for a gas burner, since necessary baffle means are provided for preventing extinguishing of the burner by a down draft, and at the same time the baffle means will cause the products of combustion to pass indirectly through the stove in order that the maximum heat may be obtained therefrom. By employing a gas burner in connection with the stove, the baffle means, as thus described, may be utilized without the liability of accumulations of soot and the like clogging the stove.

The assembled structure provides a compact and simplified arrangement, and one

which may be inexpensively manufactured so as to produce a stove particularly adapted for use in a brooder.

Various changes may be made without departing from the spirit of the invention as claimed.

What is claimed is:

A gas brooder stove comprising a vertical gas pipe, a burner upon the upper end of the gas pipe, an annular base around the lower end of the gas pipe, legs extending upwardly from the annular base, a drum mounted upon the legs and having an open upper end and a closed lower end with a central opening around the gas pipe, a window construction in one side of the drum for viewing and lighting the burner and an enlarged drum mounted upon the first drum and having a central opening in its top, a baffle plate centrally mounted in the second drum, a conical canopy mounted above the second drum with its lower edge below the center of the second drum, a discharge pipe extending through the center of the canopy, a conical enlargement upon the lower end of the discharge pipe inside of the canopy, and a conical baffle within the enlargement and directly over the central opening in the top of the second drum.

In testimony whereof I have signed my name to this specification.

FRANK M. MOLBY.