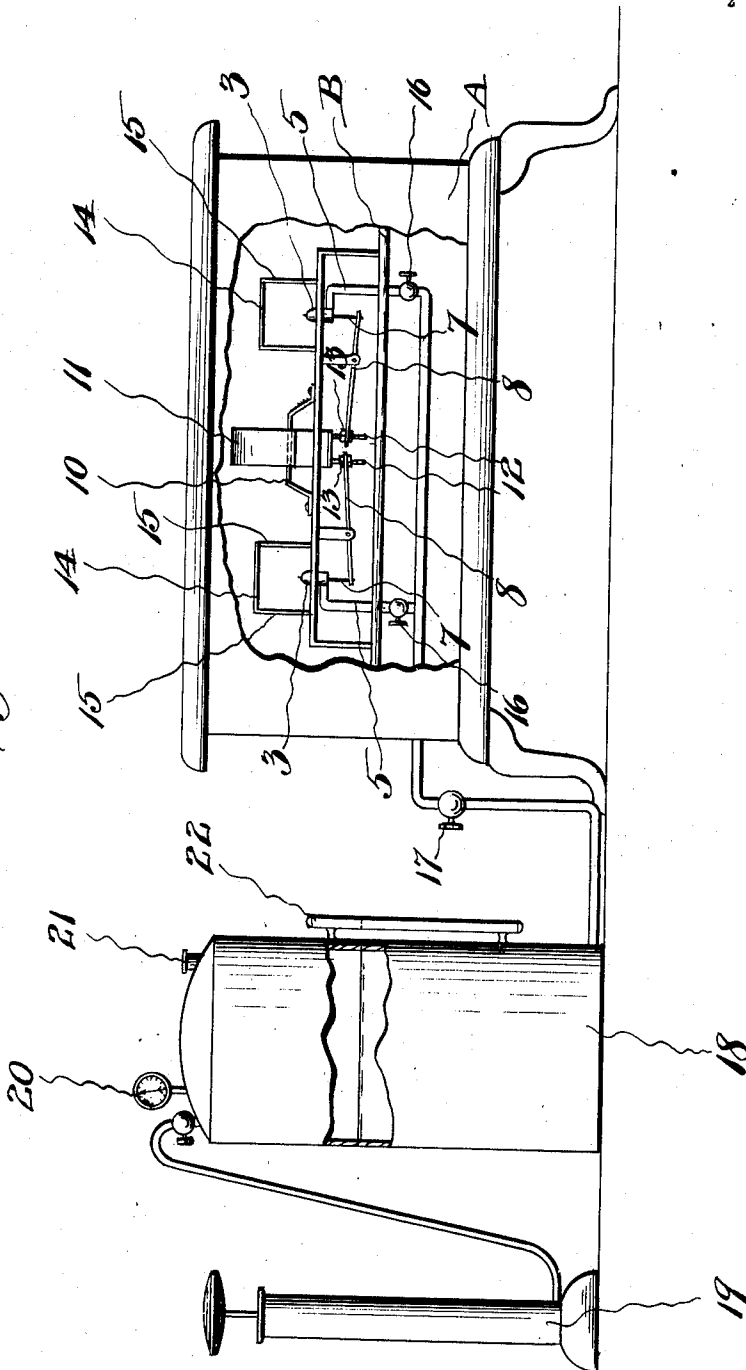


976,482.

Patented Nov. 22, 1910.

2 SHEETS-SHEET 1.

Fig. 1.



Witnesses
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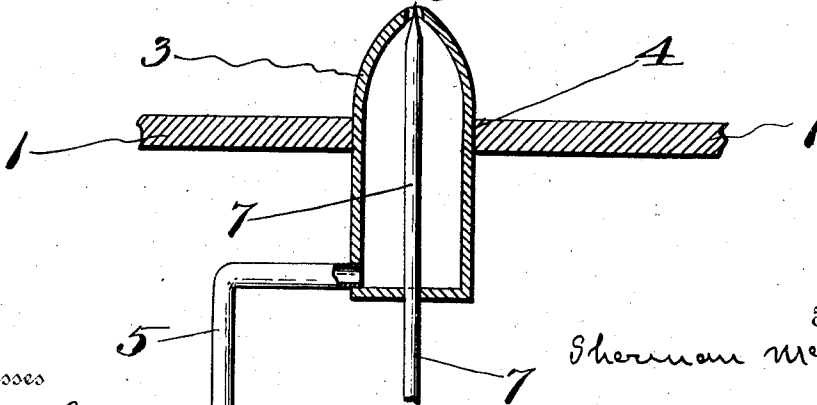
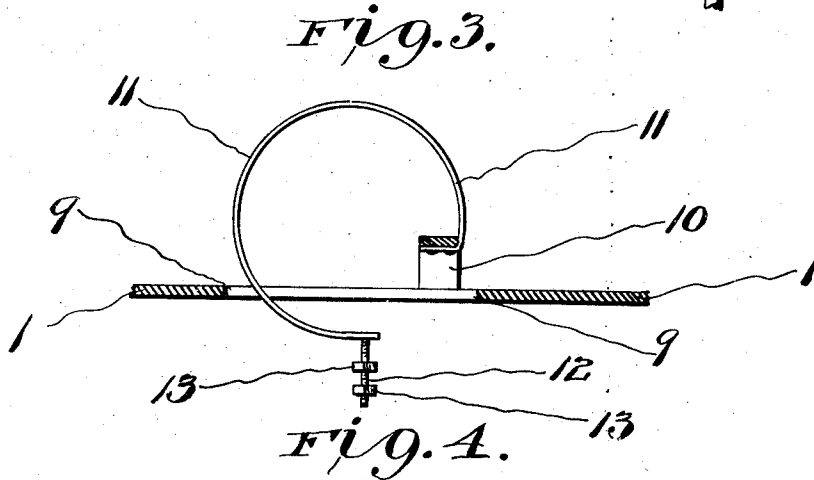
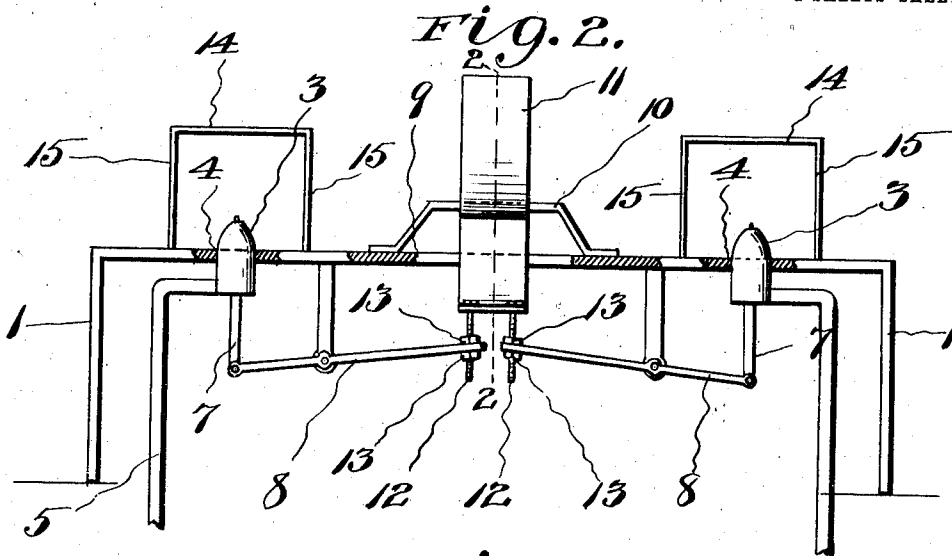
Attorney

S. McNABB.
CRUDE OIL BURNER.
APPLICATION FILED MAR. 21, 1910.

976,482.

Patented Nov. 22, 1910.

2 SHEETS-SHEET 2.



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UNITED STATES PATENT OFFICE.

SHERMAN McNABB, OF PRAGUE, OKLAHOMA.

CRUDE-OIL BURNER.

976,482.

Specification of Letters Patent.

Patented Nov. 22, 1910.

Application filed March 21, 1910. Serial No. 550,733.

To all whom it may concern:

Be it known that I, SHERMAN McNABB, a citizen of the United States, and a resident of Prague, in the county of Lincoln and State of Oklahoma, have invented certain new and useful Improvements in Crude-Oil Burners, of which the following is a specification.

My invention relates to crude-oil burners, and has for its object the provision of a self-regulating oil-burner provided with means for predetermining the degree of heat to be generated by the burner.

The operation is secured by the construction hereinafter described in detail and pointed out in the claim.

In the drawings is illustrated the burner embodying my improvements, in which—

Figure 1 is a fragmental view of a cooking-stove or range showing my burner mounted therein and the oil-supply system connected therewith; Fig. 2, a cross-section of the burner on the line 2 2 of Fig. 1; Fig. 3, an enlarged view in section of one of the burners; and Fig. 4, an enlarged view of the regulator.

In the drawings similar reference characters indicate corresponding parts throughout all of the views.

A indicates a kitchen stove or range of the ordinary type, having the grate B therein, on which my improved burner is supported, and consisting of a base, 1, having supporting-legs 2 resting on the grate.

The burners consist of nipples 3, secured in openings 4 in base 1, and having feed-pipes 5 secured thereto connected with the supply-pipe 6.

7 indicates plungers mounted in nipples 3 and forming needle-valves to control the flow of the oil therethrough, said plungers being secured to one of the arms of levers 8, fulcrumed under base 1.

The middle of the base is cut away, as shown at 9, and 10 indicates an arch member spanning said cut-away portion and having a convolute spring 11 secured thereto at one end, while its other end has rods 12 secured thereto that are adjustably secured to the free ends of levers 8 by means of nuts 13, engaging the threaded ends thereof that inclose the ends of the lever.

In operation the spring 11 expands by the heat of the burner and by pressing downwardly on the levers 8 raise the plungers 7

so as to diminish the flow of oil and when the burner is in operation keeps the temperature generated substantially even. By moving the nuts 13 so as to shorten or lengthen the rods 12 it will be apparent that the temperature generated may be set at any point desired before lighting the burner.

14 indicates plates secured over each nipple 3 by means of legs 15, said plates operating as spreaders to dispense the oil and break it up into fine particles before bursting into flame at the edges of the plates.

Each of the feed-pipes 5 is provided with a valve 16, so that either or both burners may be operated, as desired, and 17 indicates a valve in the supply-pipe to control the flow of the oil to the feed-pipes.

18 indicates the supply-tank, 19 an air-pump for supplying air to the tank under pressure to force the oil therefrom, 20 a pressure-gage, 21 a filling-nozzle, and 22 a liquid-glass to enable the operator to determine the quantity of oil in the tank.

Applicant disclaims originality of the form of thermostat shown and described, but does claim to be the first to combine it with an oil-burner and also the originator of the novel construction of burner shown and described.

Having thus described my invention, what I claim is—

An oil-burner comprising a base supported by legs and adapted to be placed in a kitchen-stove or range, the inside of the base formed with an opening, burner-nipples secured to the base at each side of the opening, plungers slidably mounted in the nipples to control the flow of oil therefrom, levers fulcrumed on the base, one arm of each lever being secured to one of said plungers, an arch member spanning the opening in the base, a convolute spring secured to said arch member, rods secured to said spring and having threaded ends, said rods adjustably secured to the free arms of the levers, and flame-spreader plates secured over each burner-nipple, substantially as shown and described.

In witness whereof, I have hereunto set my hand in presence of two subscribing witnesses.

SHERMAN McNABB.

Witnesses:

J. H. PATTERSON,
J. O. MAYER.