

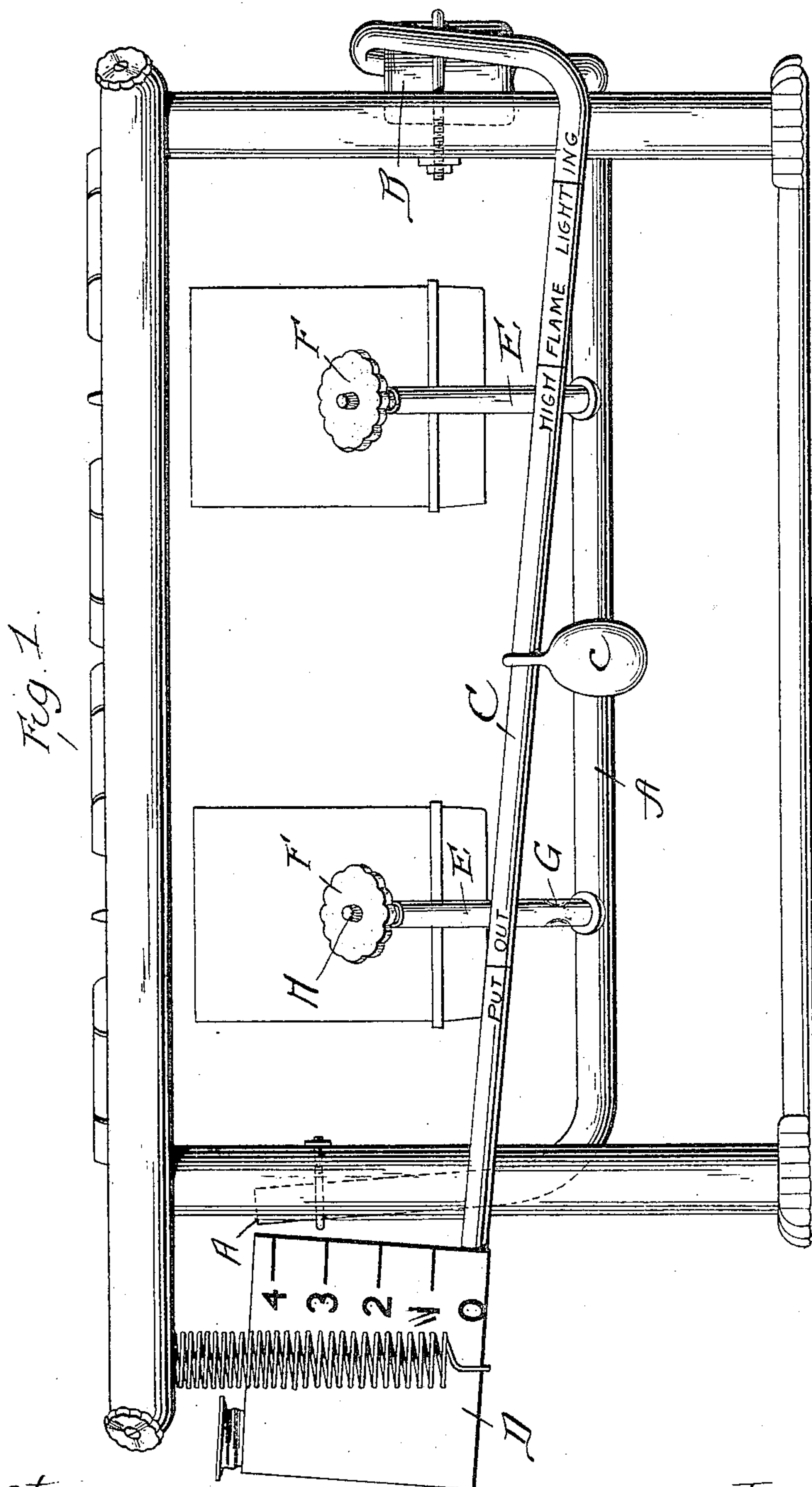
No. 816,201.

W. H. WILDER.
OIL STOVE.

PATENTED MAR. 27, 1906.

APPLICATION FILED OCT. 31, 1903.

3 SHEETS—SHEET 1.



Attest:
Commander
Edward Sartor

Inventor:
William H. Wilder.
by Wm. Spear & Company
Attys

No. 816,201.

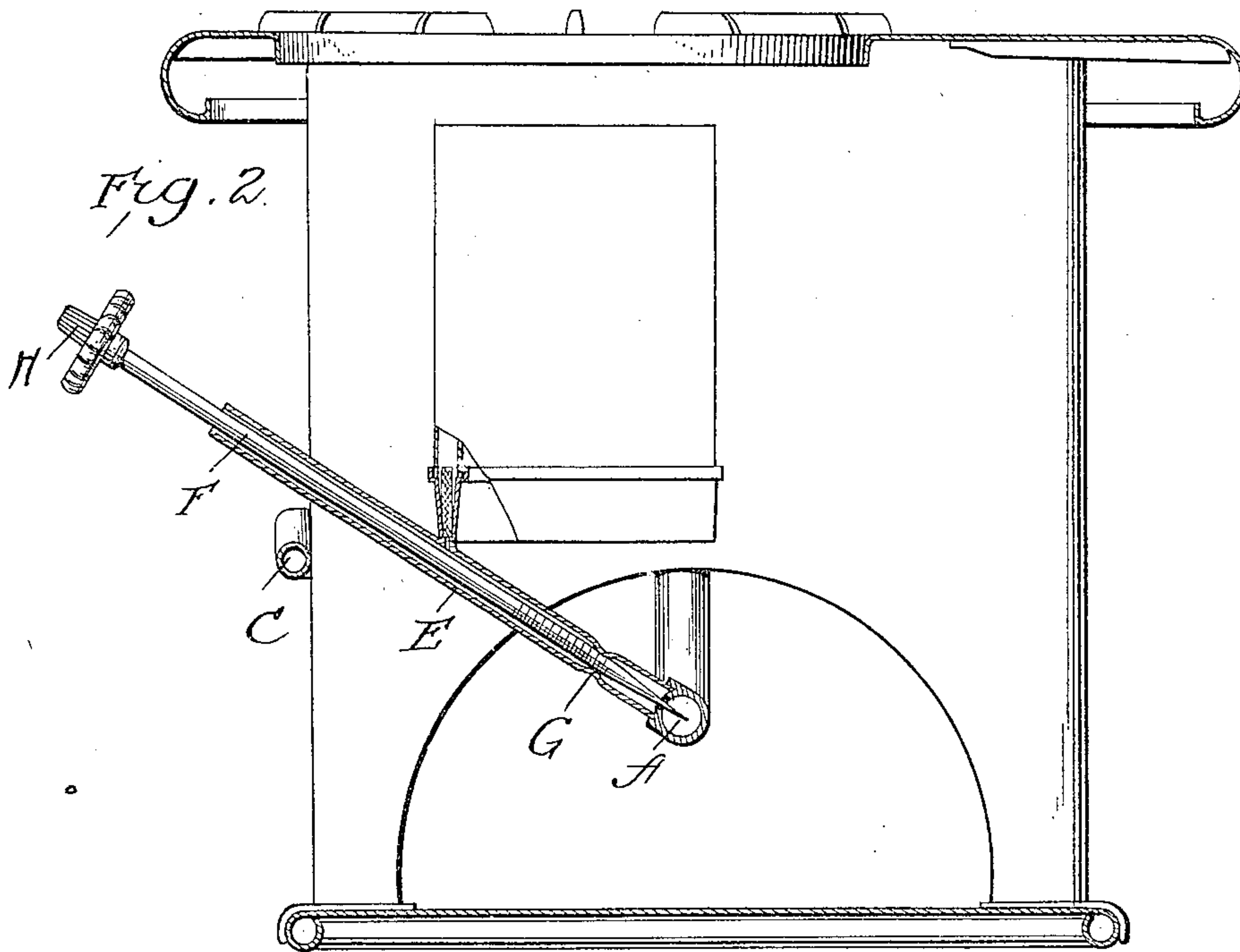
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3 SHEETS—SHEET 2.



attest;
Companion
Edward Sartor

Inventor:
William H. Wilder.
By: Ellis Spear Company
Attys.

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3 SHEETS—SHEET 3.

Fig 3

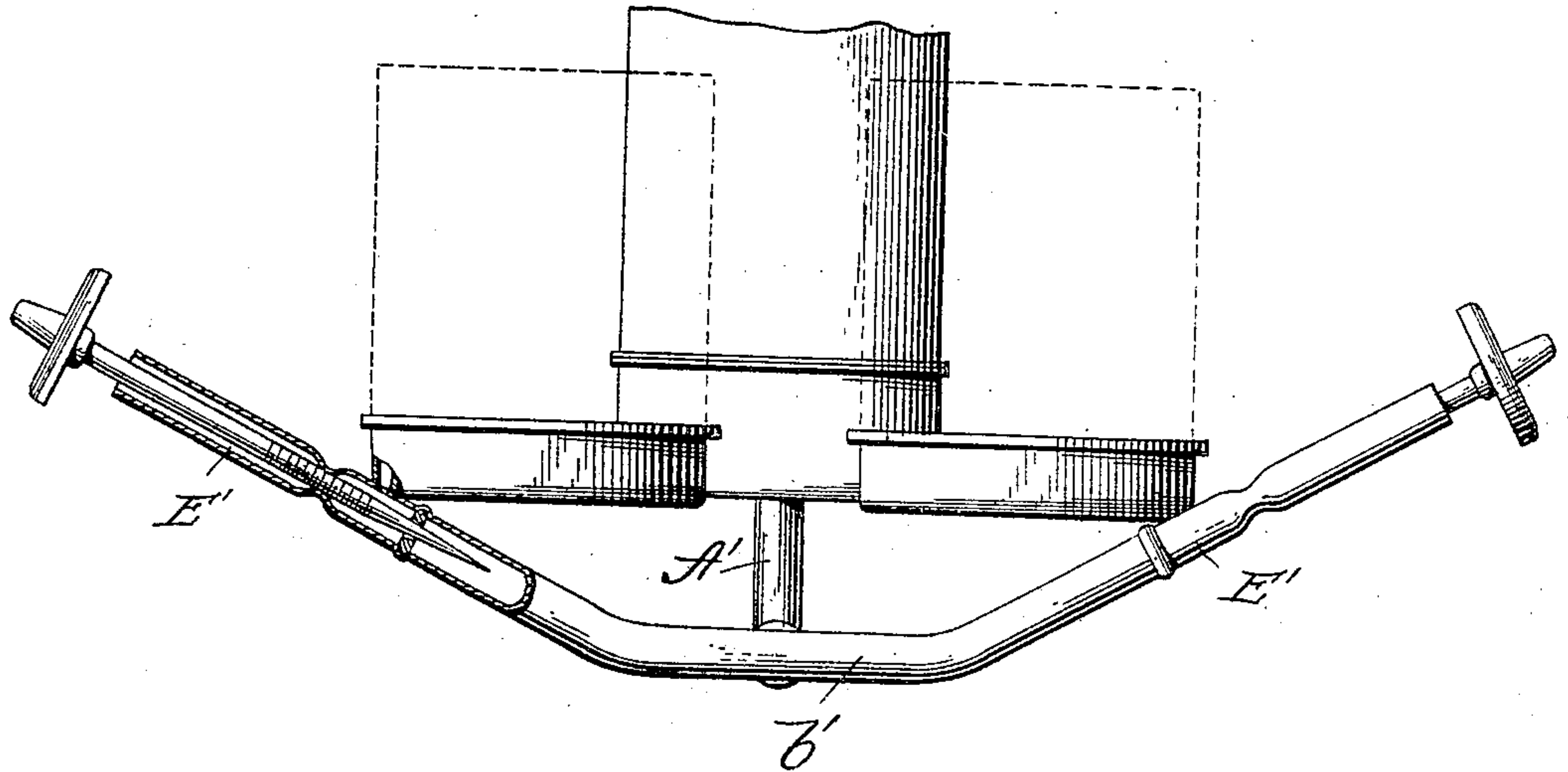
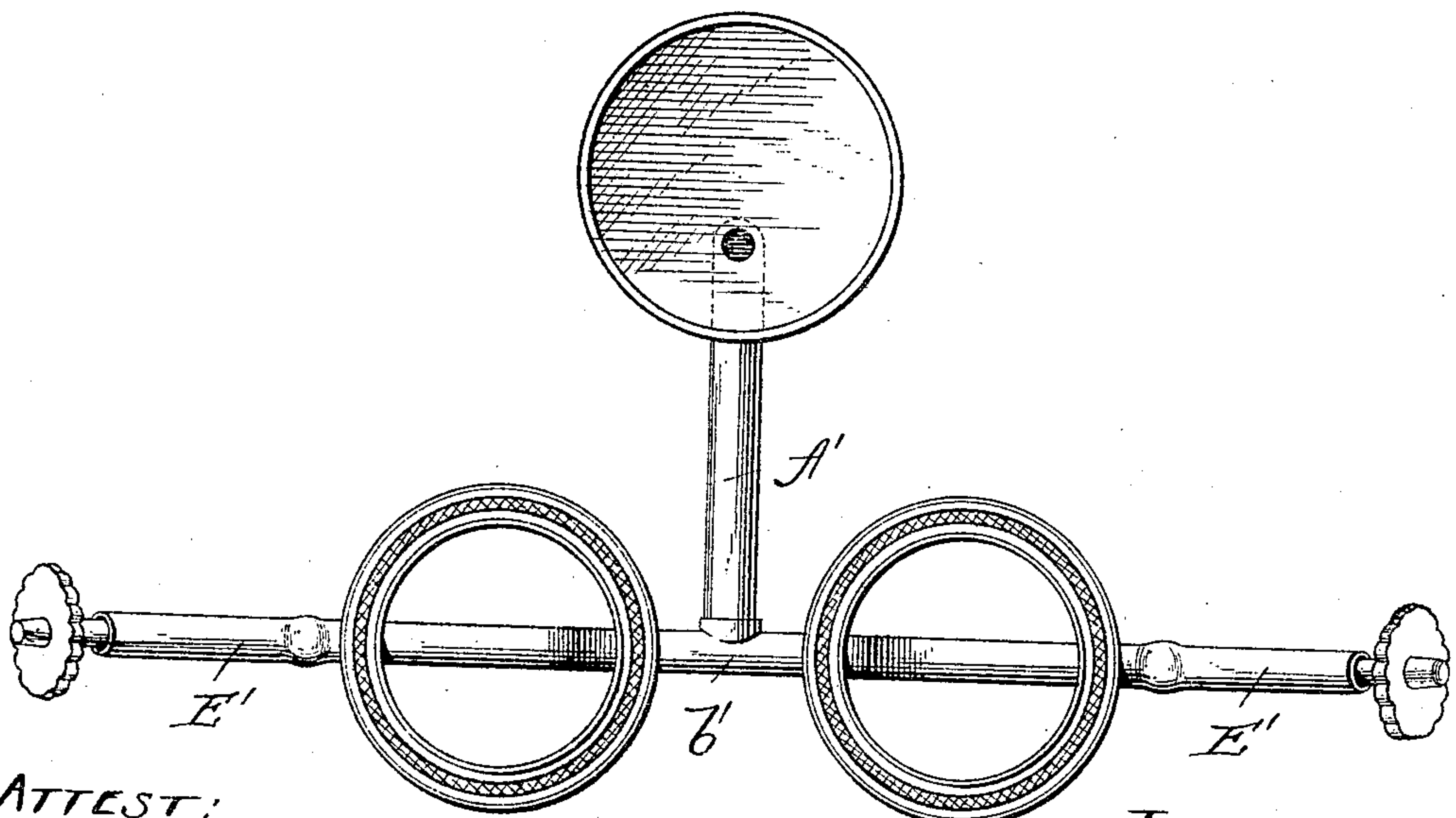


Fig. 4



ATTEST:
A. Middleton
Edward Sartor

INVENTOR
WILLIAM H. WILDER.

By *J. M. Spear Company*
ATTY'S.

UNITED STATES PATENT OFFICE.

WILLIAM H. WILDER, OF GARDNER, MASSACHUSETTS.

OIL-STOVE.

No. 816,201.

Specification of Letters Patent.

Patented March 27, 1906.

Application filed October 31, 1903. Serial No. 179,344.

To all whom it may concern:

Be it known that I, WILLIAM H. WILDER, a citizen of the United States, residing at Gardner, Massachusetts, have invented certain new and useful Improvements in Oil-Stoves, of which the following is a specification.

My invention relates to oil-stoves of the class heretofore patented by me and known as "free-level" type of stove, or, in other words, the type of stove using a burner-bowl having an oil-bottom or a supply of oil maintained therein during the normal action of the stove as distinguished from the ordinary wick-stoves or from what are known as "vapor-stoves."

My present invention aims to simplify the construction and provide for the ready cleansing of the parts from all sediment or other impurities liable to interfere with the perfect working of the stove.

I have represented my invention with that particular type of stove where the burner-bowls are fixed in relation to the oil-reservoir and where a valve is included in the connection, and while I do not limit myself to any particular type of reservoir I have shown one of the type illustrated in an application filed by me in the United States Patent Office on the 2d day of January, 1902, Serial No. 88,220. It is possible to use this form of reservoir with the fixed bowls by reason of the fact that the ascertained oil-level is below that of the top of the burner-bowls, so that there is no liability of overflow, and the valves simply check the inflow of oil, and thus regulate its admission.

In the accompanying drawings, Figure 1 shows one embodiment of my present invention. Fig. 2 is a section of the same, taken through a burner-bowl, the main pipe, and the auxiliary supply-pipe. Figs. 3 and 4 show a modification in elevation and plan, respectively.

The main supply-pipe is shown at A, and it may be directly connected to a reservoir of the maintained oil-level type, or, as shown, the pipe may receive its supply from a cup B, which in turn is supplied through a pipe C, connected to the balanced reservoir D and operating as described in my former application referred to. Extending obliquely from this main supply-pipe A are auxiliary supply-pipes E, one for each burner, and to these oblique pipes are suitably secured the burner-bowls, having a single connection

therewith and extending outwardly therefrom in a horizontal plane.

The oil passes from the reservoir through the pipe A and up through the auxiliary supply-pipes E into the burner-bowls. The connection is exceedingly simple, and as the burner-bowls are brazed in place I have found that no other support is necessary for the bowls, and they are fully capable of sustaining the weight of the combustion-tubes which they support. The connection between the bowl and the supply-pipe is direct, and there is no liability of the opening becoming clogged, as the flow of oil will keep the passage clear. The auxiliary supply-pipe is open at its upper end and serves to support a valve F, which extends down through the pipe, being threaded therein in the contracted portion near the lower end of the auxiliary pipe, this contracted portion being formed by pressing the pipes together at two or three points, as at G. The valve-stem is threaded above its lower end to engage the threads formed upon the contracted portion of the supply-pipe, while the lower end of the stem, which is made conical, finds a corresponding seat in the upper crust of the pipe A, thus controlling the flow of oil from the main pipe A to the auxiliary supply-pipe E.

While I have shown the burner-bowl located between the two extremities of the valve, it will be understood that this is not so except when the flow of oil is upwardly through the auxiliary supply-pipe from the main line-pipe, and it is of course possible to secure the same result by elevating the main supply-pipe and feeding the oil downwardly through the auxiliary pipe to the burner.

In order to facilitate and increase the rapidity of action with which the valve may be turned, I arrange centrally of the handle a projection H, which is roughened on its periphery, and thus after the valve has been started the operator may grasp the roughened projection and thus turn the valve-stem very rapidly.

The left-hand end of the pipe A is open and is extended upwardly above the level of the burners and is thus free from overflow, and it may be used by tilting the stove to flow the oil entirely through the pipe from the cup B out through the open end, thus thoroughly freeing the pipe from sediment or other accumulations.

The construction throughout is designed to

effect a thorough and rapid cleansing of the stove from any accumulations, and it will be seen that by taking out the valves wire may be run through from end to end of the auxiliary supply-pipe and from end to end of the main line-pipe. The main line-pipe A with its burners may readily adjusted, as it will be seen that both ends of the pipe are adjustably connected to the stove-frame.

10 In Figs. 3 and 4 I have shown a modification, a reservoir D' of a fixed type being arranged at the rear of the stove, with the auxiliary supply-pipes E' forming a right angular connection with the main supply-pipe A', 15 which in this case is centrally arranged. The burner-bowls are supported, as in Figs. 1 and 2, and the valves are actuated as in the form first described. By placing the auxiliary supply-pipes opposite each other and practically forming a continuation one with the 20 other, as at b', the valves may be removed and a wire run through one auxiliary pipe and out through the other, thus entirely freeing the passage from any sediment. A wire 25 may also be passed through the pipe A', leading from the reservoir to the tube E'. In the use of a spring or balanced reservoir, as shown, I have found it desirable at times to use a weight to still further regulate the 30 height of the oil in the burners, and I conveniently accomplish this by a weight c on the pipe C between the reservoir and the cup B, the weight being fitted so as to be capable of being moved from one end of the pipe to the 35 other, and the pipe may be suitably marked to indicate to the user the position of the weight in the different conditions desired.

What I claim is—

1. In an oil-stove, in combination a burner- 40 bowl, means for supplying fuel, an oblique pipe leading to the burner-bowl and connect-

ed at its lower end to the fuel-supply means, a valve carried by the oblique pipe, said oblique pipe having the burner-bowl mounted directly thereon and communicating directly therewith at a point above the seat of the valve, an end of said oblique pipe being above the top of the bowl, substantially as described.

2. In an oil-stove, and in combination, a burner-bowl, means for supplying fuel, an oblique pipe leading to the burner-bowl and connected at its lower end to the fuel-supply means, a valve carried by the oblique pipe, said oblique pipe at a point above the valve-seat being directly connected to the burner-bowl at one side of the bottom thereof, communicating directly therewith and extending beyond the point of direct connection with the said burner-bowl, substantially as described. 60

3. In an oil-stove, the combination of burners suitably supported, a movable balanced reservoir having a maintained oil-level, and means for changing the position of the reservoir and its oil-level bodily relatively to the burners. 65

4. In an oil-stove, the combination of a burner, a balanced reservoir, and a movable weight for varying the normal position of the reservoir. 70

5. In an oil-stove, the combination of a burner, a balanced reservoir having a discharge-pipe C and a sliding weight mounted on said pipe for varying the normal position of the reservoir. 75

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM H. WILDER.

Witnesses:

HARRY H. MEALS,

CLIFFORD H. STOCKWELL.