No. 685,076. Patented Oct. 22, 1901.

W. H. WILDER.

OIL STOVE.

(Application filed July 9, 1900.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

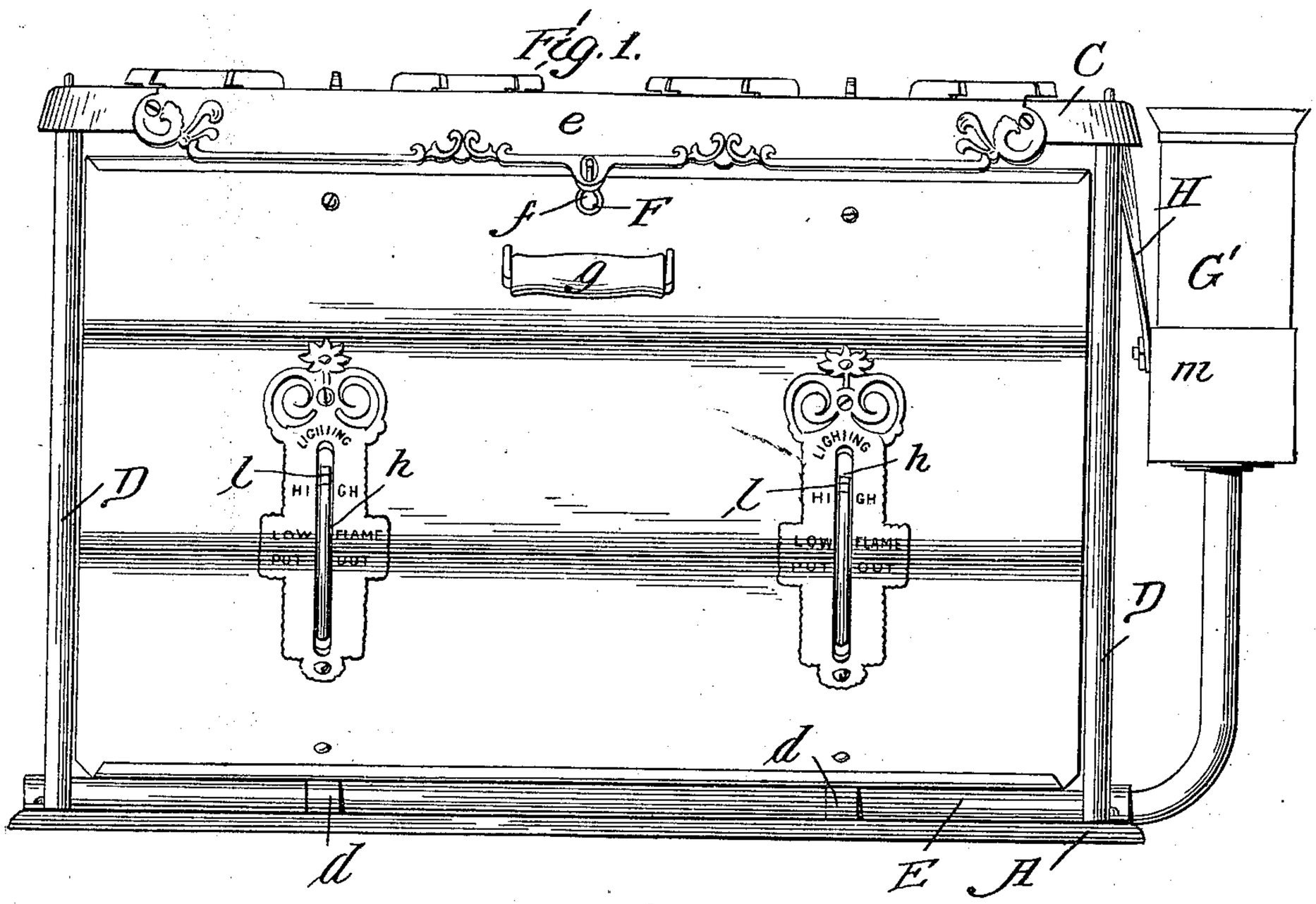
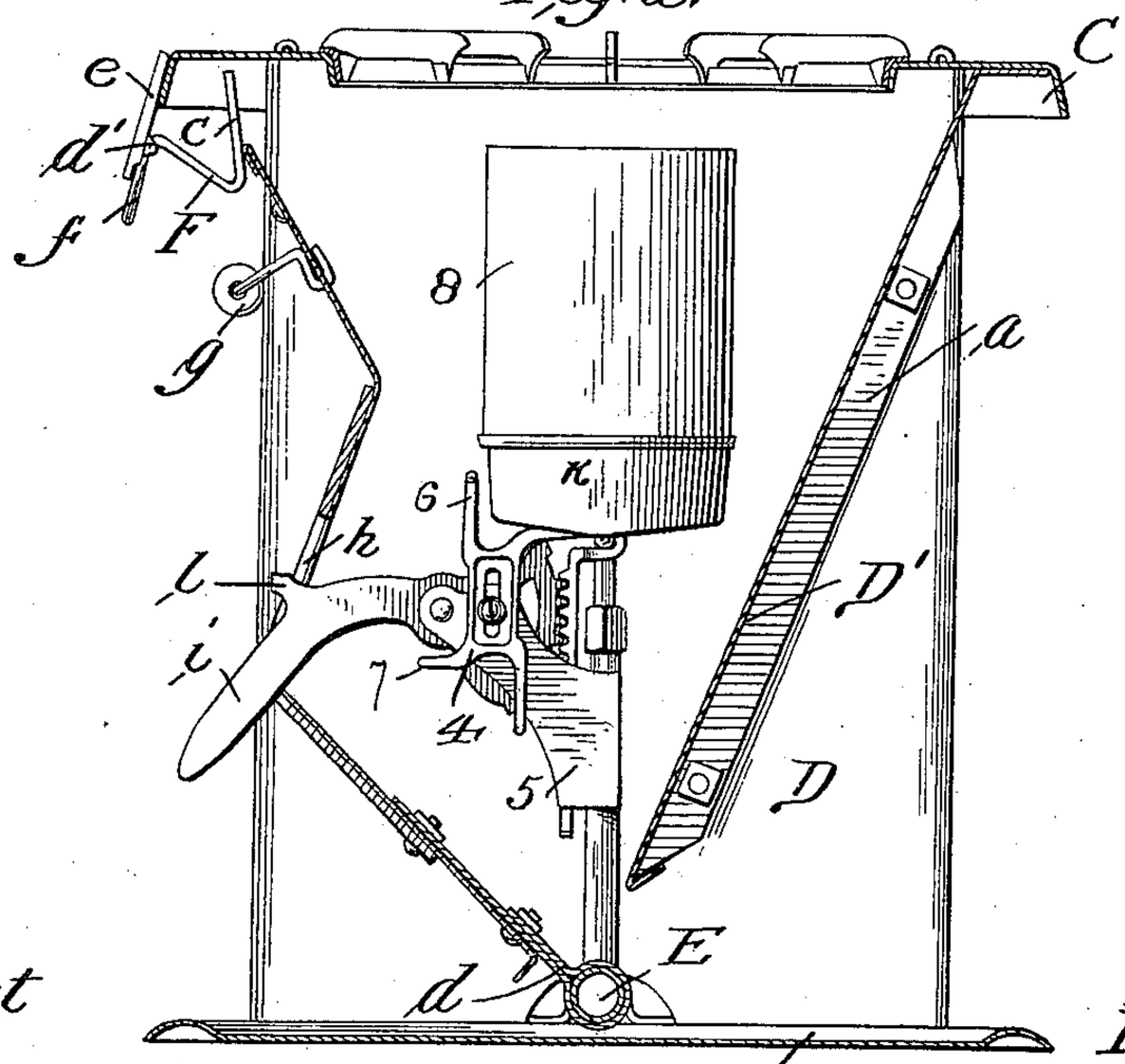


Fig. 2.



Attest

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Fig. 3.

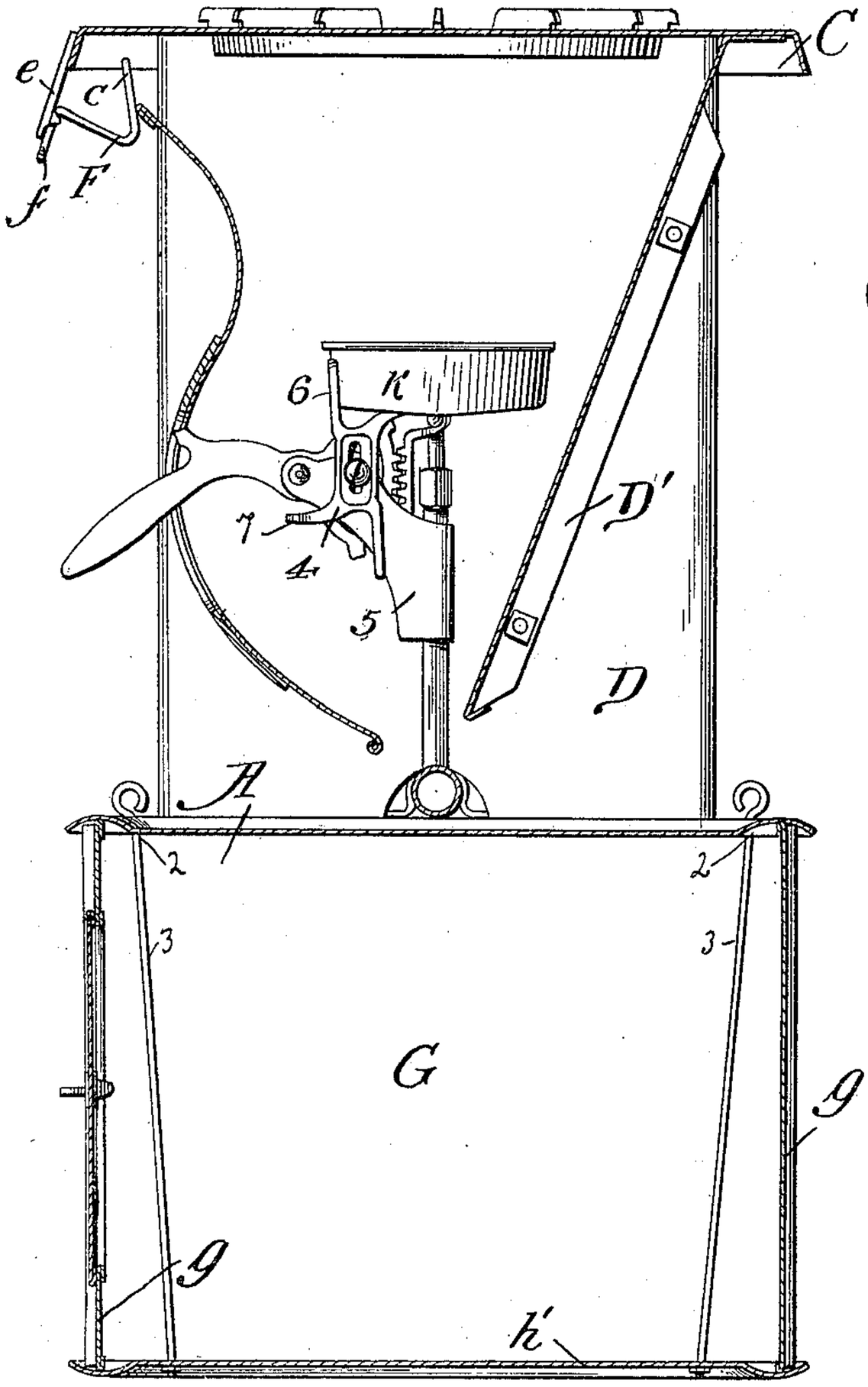
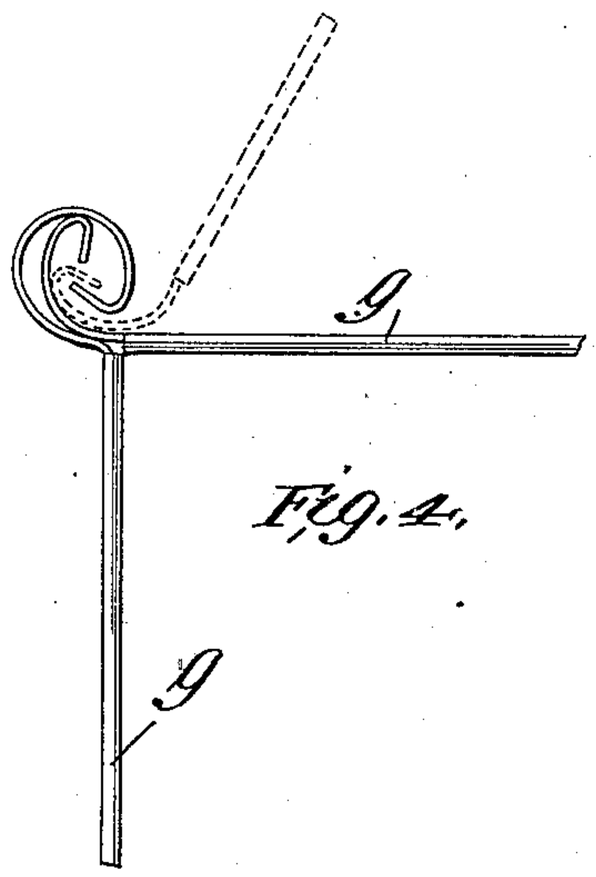


Fig. 4.



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UNITED STATES PATENT OFFICE.

WILLIAM H. WILDER, OF GARDNER, MASSACHUSETTS.

OIL-STOVE.

SPECIFICATION forming part of Letters Patent No. 685,076, dated October 22, 1901.

Application filed July 9, 1900. Serial No. 23,026. (No model.)

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, and is a modification of the stove shown in an application filed by me April 18, 1899, Serial No. 713,494. In the present case I have changed the form of cabinet and improved the details.

In the drawings, Figure 1 is a front elevation of a stove embodying my improvement, while Fig. 2 is a section taken laterally through the center of the same. Fig. 3 shows another form of front, while Fig. 4 shows a collapsible base for the stove.

The stove is of that type in which a reservoir having a maintained oil-level is used and in which the burners are movable vertically across or in relation to an oil-level to raise or lower the oil in the burner, and thus secure different degrees of flame and heat, the stove being put out by elevating the burner above the oil-level.

In the application referred to the cabinet consisted of vertical walls and a door on the front, and while the cabinet was found to be effective to prevent undue draft reaching the flame it presented a space for the collection of oil in case of any accidental overflow or spilling, and to this extent was objectionable, not to careful housekeepers, but to persons likely to be careless. I have aimed in the present construction to obviate this completely by exposing the bottom plate of the stove, while at the same time securing all the advantages of the cabinet features. To this end I use a base-plate A, to which I secure end plates D and a top plate C in the ordinary way, these being substantially like the corresponding parts in my application aforesaid. Instead, however, of having vertical front and rear walls I extend the rear wall at an angle, as shown at D′, securing this wall to the end plates by flanges *a*, bolted to the end walls. The lower edge of the rear wall terminates above the bottom A, thus leaving the entire rear face of the bottom exposed and permitting it to be readily cleansed without the removal of the cabinet. The front wall is of angular shape and is pivoted at its lower end to the pipe-line E by straps or hinges *d*. This construction exposes the entire front half of the base-plate, and thus it will be readily seen that any dripping, leakage, or spilling will be observed either at the front or rear and can be removed without difficulty. The front wall constitutes the door and is held in place by a pivoted latch F, having the angular bend *c*, against which the upper edge of the door rests. The latch is pivoted at *d′* on the front flange *e*, and when it is desired to open the door it is only necessary to push inward on the ring *f* of the latch, and this allows the door to be swung downwardly by grasping the handle *g*. The door is provided with slots *h* in line with the levers *i* for operating the burners *k*, and around these slots are located the legends for showing the different positions of the burner through the indicator *l*, carried by the lever *i*.

The construction described allows me to very readily adjust the parts in relation to each other in the simplest manner. After the burner has been adjusted it may be found that the indicator *l* does not point to the proper legend on the face of the movable front or door, and it may be necessary to adjust the door in relation to the indicator so that it will point to the proper legend at the proper time. As the door or front is pivoted near the center of the bottom of the stove and moves in the arc of a circle from this point, it will be seen that as the front or door moves inwardly or outwardly the legends on its face are varied in their relation to the indicator, and the proper adjustment of the door can be secured for its normal position by bending the latch F, so as to cause the door normally to be supported by the end of the latch nearer to or farther from the interior of the stove. The upper edge of the door rests upon the bend *c* and is supported by it, and thus the whole adjustment can be instantly effected by bending the part *c* more or less.

In Fig. 3 I have shown a modification of the front of the stove, where instead of forming the front plate or door with a series of angular bends it is formed on the line of a compound curve, making a swell front. In this form the indicator always holds the same relation to the front of the stove, as the door moves on the arc of a circle, and the swell is

practically on the arc of the operating-lever, and thus the indicator in the limit of the movement of the lever is uniform in its projection through the slot in the door.

The warming-oven is shown at G. It is composed of four side plates *g*, each having a tubular end, formed by curling the metal, the curled ends being adapted to fit one within the other, and thus the four plates constituting the body of the oven and forming the support for the stove proper are very securely held together without other fastening means. The four plates may rest upon a base-plate *h'*, while the base-plate A of the stove proper rests upon the top of the oven, and wires with threads and nuts pass through between the bottom plate *h'* and the base-plate of the stove proper, thus securing the parts together.

In order to prevent any danger of heating of the oil in the reservoir G', I locate a shield H, secured at one end to the oil-chamber *m* and at its upper end to the frame of the stove, and this presents between the oil and the burner a thickness of metal with an air-space on each side in addition to the wall of the cabinet and the wall of the reservoir.

I do not limit myself to the particular shape of the front and rear walls of the stove, as these may assume ornamental configurations to add to the appearance of the stove.

In order to prevent the accumulation of oil in the base-plate A, where there would be more or less danger of ignition from the careless handling of a match in starting the stove, I utilize the openings 2, through which the rods 3 pass, to drain the base-plate A into the chamber below.

As shown in Figs. 2 and 3 and as also disclosed in my application referred to, I support a combined indicator and tilter 4 on a bracket 5. This is made symmetrical and reversible and has a projection 6, indicating the height of the oil in the bowl, and a second projection 7, adapted to tilt the combustion-chamber 8 for igniting purposes.

What I claim is—

1. In an oil-stove, a base-plate, a cabinet having walls, the front and rear walls being supported above the base-plate and inclined inwardly and downwardly so as to expose the said base-plate for cleaning purposes, substantially as described.

2. In an oil-stove, a cabinet comprising end walls, a rear wall and a front wall extending inwardly and downwardly toward the center of the stove and pivoted above the bottom thereof.

3. In an oil-stove, a cabinet comprising end walls, a rear wall, a door and an indicator co-operating with said door to indicate the position of the burner and means for adjusting the door to bring the parts in proper relation.

4. In an oil-stove, a cabinet comprising end walls, a rear wall and a movable front wall, a burner, a lever therefor coöperating with an indicator on the front wall to show the position of the burner and a latch for holding the door in place, said latch being adjustable so as to bring about a proper relation of the parts, substantially as described.

5. An oil-stove comprising a vertically-movable burner with a lever operating the same and a door moving on the arc of a circle having a bulged or extended central portion slotted to allow the lever to project therethrough said door carrying legends coöperating with the lever to show the position of the burner, substantially as described.

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

WILLIAM H. WILDER.

Witnesses:
H. M. GATES,
C. H. STOCKWELL.