

J. M. MERRITT.
STOVE.
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974,290.

Patented Nov. 1, 1910.

Fig. 1.

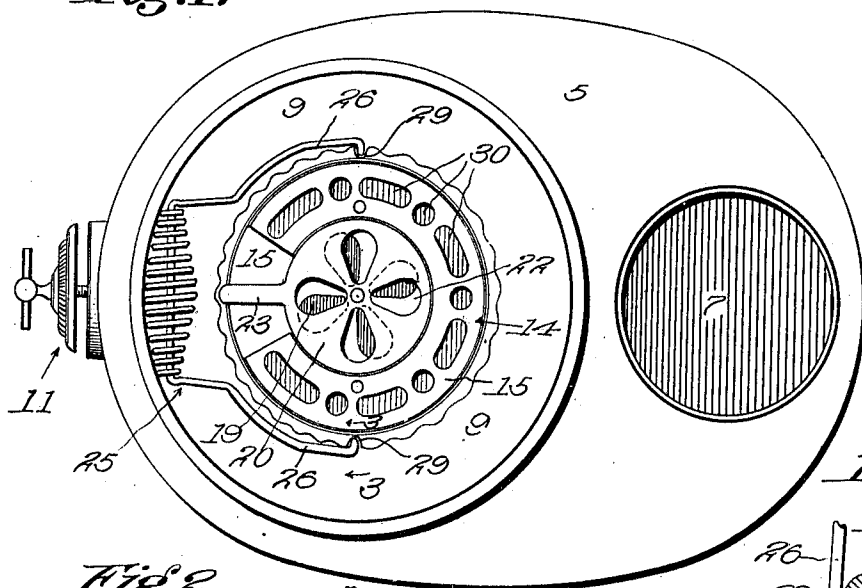


Fig. 2.

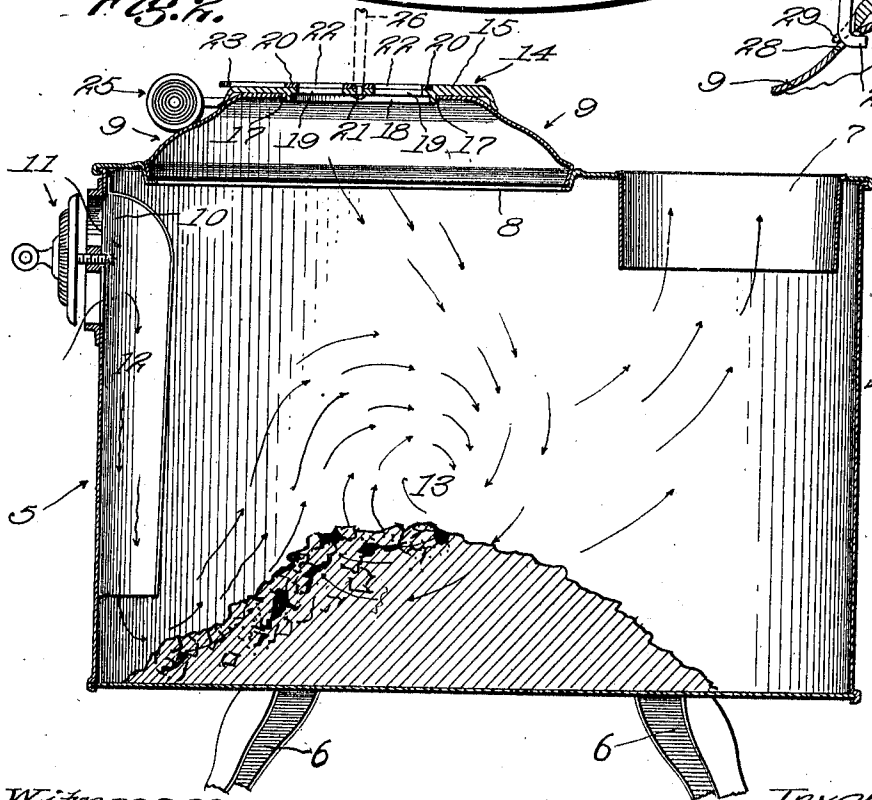
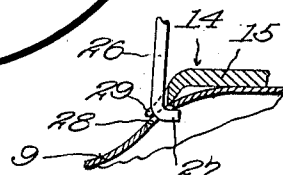


Fig. 3.



Witnesses
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Inventor
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UNITED STATES PATENT OFFICE.

JAMES M. MERRITT, OF LOS ANGELES, CALIFORNIA, ASSIGNOR TO HOFFMAN HARDWARE COMPANY, OF LOS ANGELES, CALIFORNIA, A CORPORATION OF CALIFORNIA.

STOVE.

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To all whom it may concern:

Be it known that I, JAMES M. MERRITT, 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 Stoves, of which the following is a specification.

This invention relates to improvements in sheet iron stoves, and it consists particularly in the combination of certain features to produce a more efficient and convenient arrangement, as will hereinafter appear.

One of the features of the combination is a flat damper member for the top of the rounded lid or cover, this damper member allowing a draft through the lid and also being flat for the placement of any article thereon.

In the accompanying drawings, Figure 1 is a plan view of a stove equipped with my device. Fig. 2 is a longitudinal vertical section thereof. Fig. 3 is an enlarged detail section taken on line 3—3 of Fig. 1.

In the drawings 5 designates the body of a stove of usual construction, the body being supported on legs 6 and having opening 7 in its top near its rear end for the escape of the gases of combustion through the pipe ordinarily supplied. A second and larger opening 8 is located at the front of the stove and cover 9 is adapted to completely close this opening. At the front of the stove an opening 10 is controlled by a screw damper 11, this damper being of ordinary construction. Leading from opening 10 is a downwardly extending flue 12 which terminates near the bottom of the front of the stove, the draft passing down through this flue as is indicated by the arrows. A damper top 14 is provided for cover 9 and consists of a circular plate 15 which fits down upon the top of cover 9, the central and upper part of the cover being provided with a circular aperture 17 through which a flange 18 on plate 15 projects. Inside of flange 18 plate 15 is provided with a set of draft openings 19. A rotating or otherwise movable member 20 is secured to plate 15, as by rivet 21, this member 20 also having a set of draft openings 22 which may be thrown into and out of register with openings 19 by means of handle 23. By this means the amount of draft through the cover may be completely controlled. As a means for lifting the cover, a swinging handle 25 is provided, this handle

having a bail 26 which is secured to the cover at each end by being turned in, as at 27, through an aperture 28 in cover 9. This aperture is so arranged that the bail rubs against the edge of plate 15, the bail being constructed to spring inwardly against the plate. At points immediately above openings 28 grooves 29 are cut in the edge of member 15 so that, when the bail is in a vertical position, as shown in dotted lines in Fig. 2, it may spring into grooves 29 and be thus held in its vertical position.

The damper may be made in any configuration and design as is desired. In the present design plate 15 is perforated as at 30 for the purpose of lightening the casting and for rendering it more artistic than a plane surface would be. This and other features may be varied to suit any particular case.

It will be seen that the draft induced by the combination of the two draft openings will be something similar to that indicated by the arrows in Fig. 2. The air and gases inside the stove will be set into a spiral or circular motion which will cause complete combustion with a minimum of draft passing out through opening 7. Thus not so much heat as is usually the case will pass out of the stove and be lost so far as all practical purposes are concerned. The spiral motion allows the air to more intimately come into contact with the fuel and thereby effects complete combustion with a minimum amount of air.

From the immediately foregoing, and from the following claim, my invention is seen to consist in the combination of the devices to produce a down draft from the front top of the stove and to produce a hot air draft from the front bottom of the stove, together with the features of construction which assist the combination in making a stove of practical utility and high efficiency.

Having described my invention, I claim:—

A stove construction, comprising a hollow body having a draft outlet at its rear upper end, an opening in its top near the front, and a draft inlet in its front near the top, a draft tube leading from the draft inlet downwardly on the inside of the body to a point near the bottom, a damper controlling the draft inlet, a bell shaped cover adapted to close the opening in the top of the body, the cover having a flat top and an opening in the center thereof, a stationary recessed

plate mounted on the top of the cover and having draft apertures therein, and a movable plate mounted on the stationary plate in its recess and having apertures therein
5 for registration with the apertures in the stationary plate, the upper surfaces of both plates being flat and in the same plane.

In witness that I claim the foregoing I have hereunto subscribed my name this 8th day of January 1910.

JAMES M. MERRITT.

Witnesses:

JAMES T. BARKELEW,
ELWOOD H. BARKELEW.