(No Model.)

2 Sheets—Sheet 1.

# W. C. DIMMOCK.

## STOVE.

No. 599,225. Patented Feb. 15, 1898.

*Fig 1.*

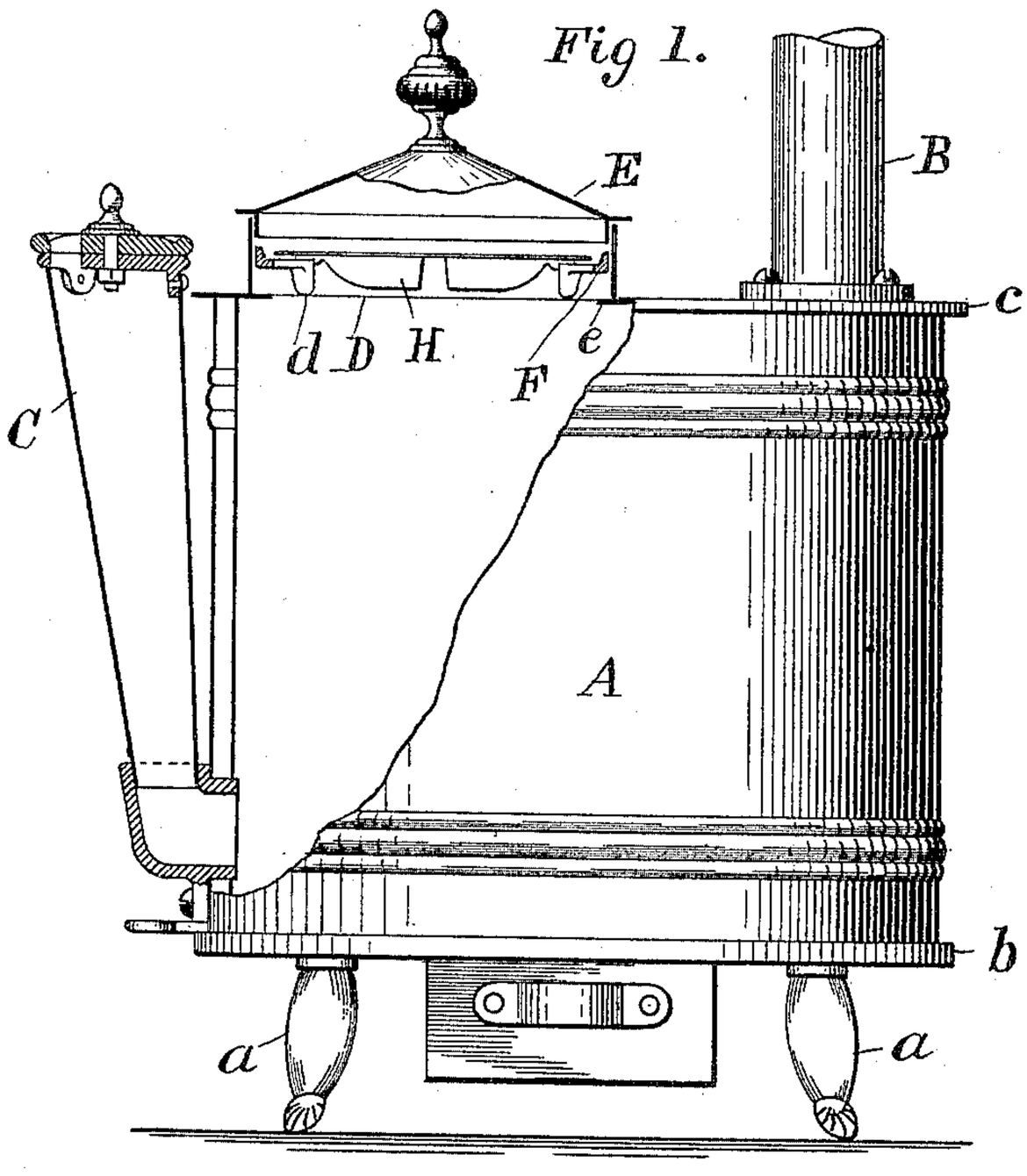
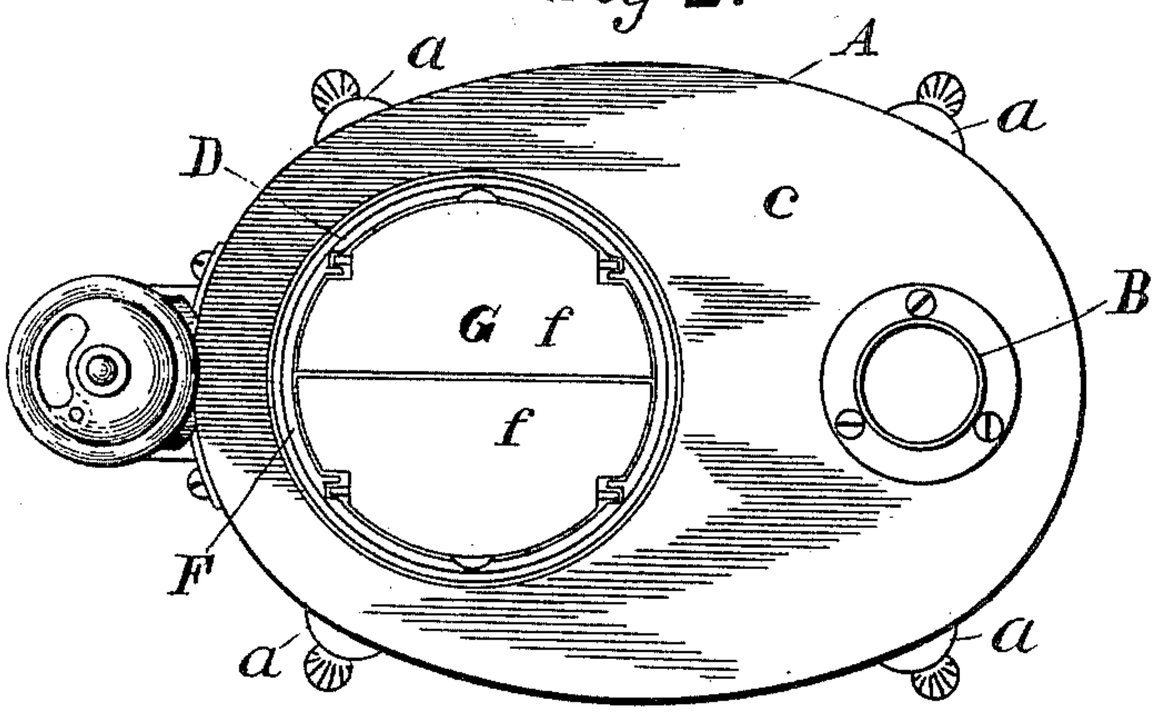



*Fig 2.*




-WITNESSES-

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-INVENTOR-

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(No Model.) 2 Sheets—Sheet 2.

# W. C. DIMMOCK.

## STOVE.

No. 599,225. Patented Feb. 15, 1898.

Fig 4.

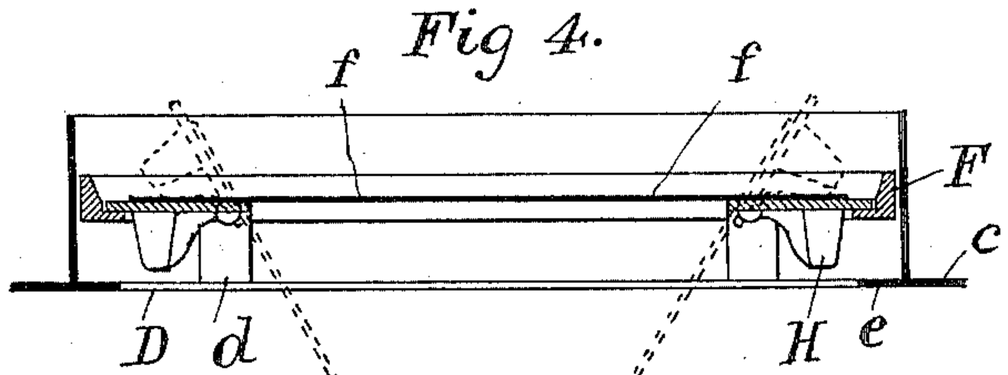



Fig 3.

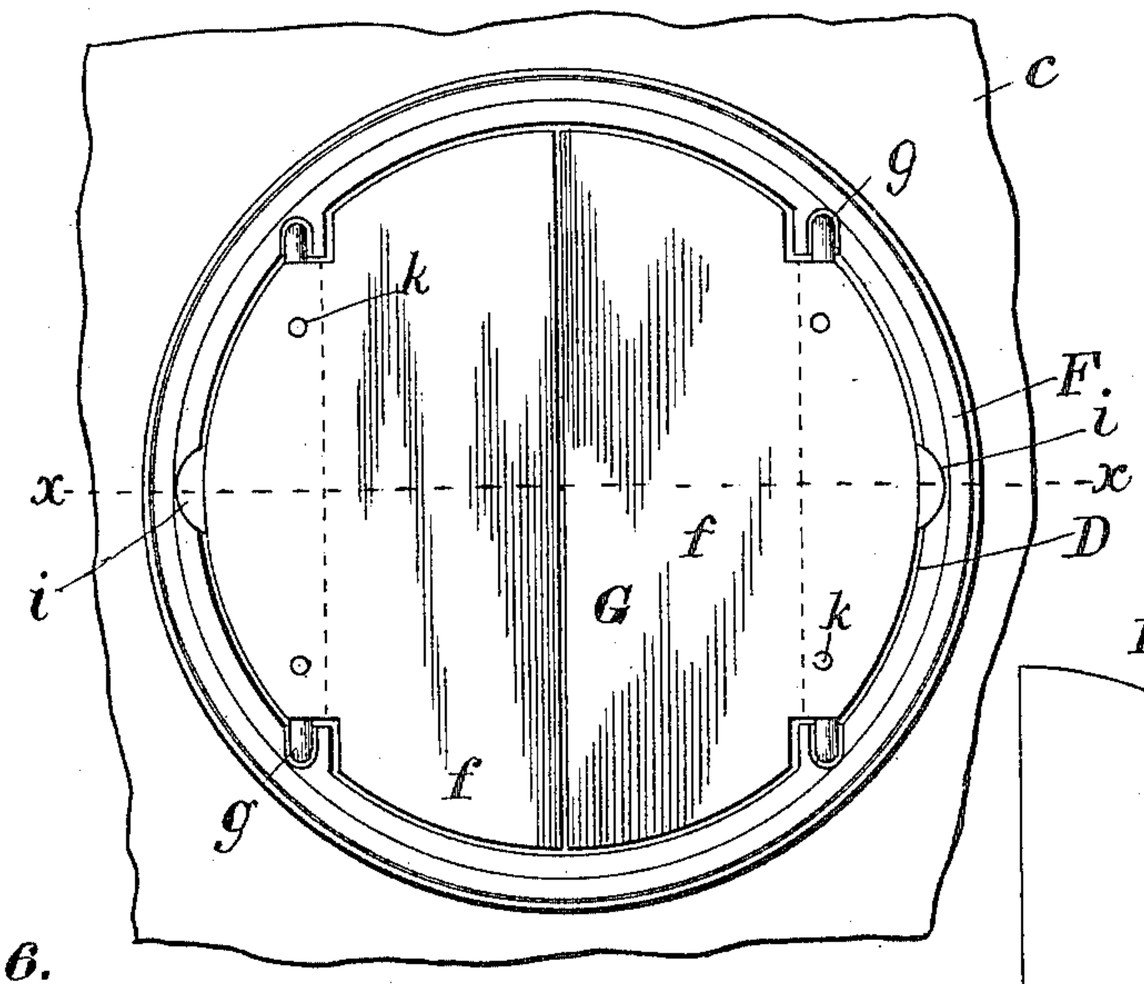



Fig 7.

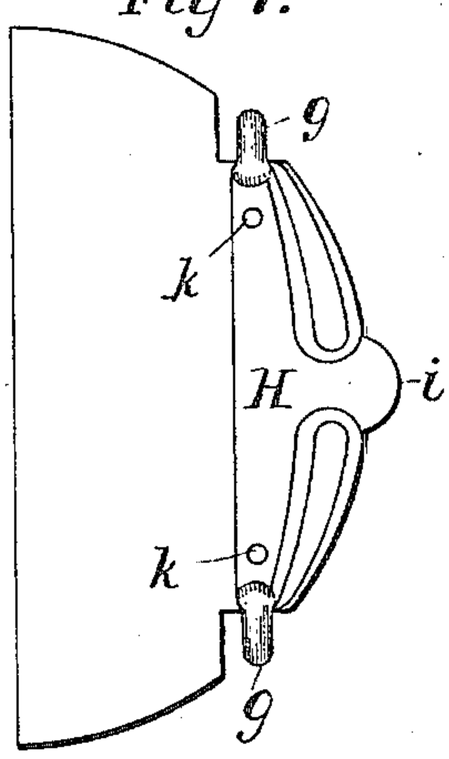



Fig 6.

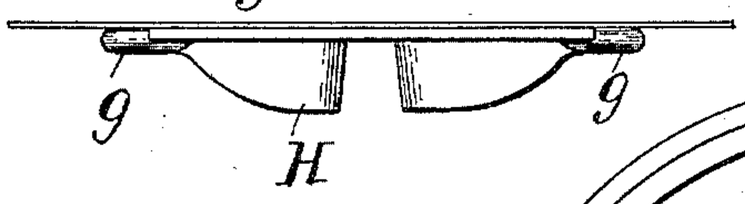
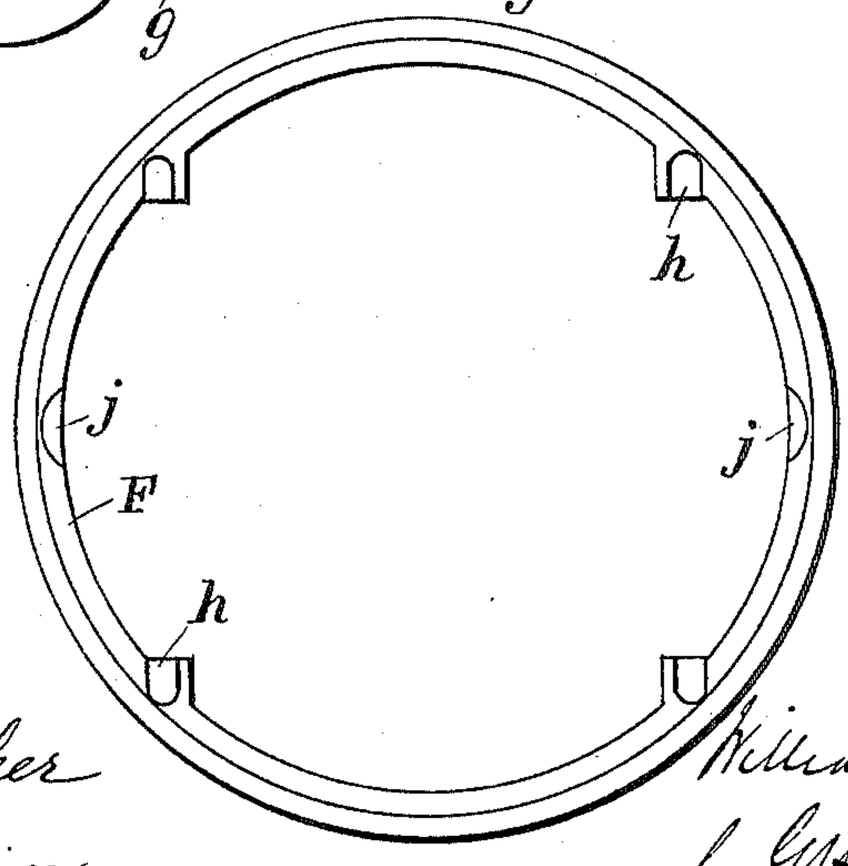



Fig 5.




-WITNESSES-

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# UNITED STATES PATENT OFFICE.

WILLIAM C. DIMMOCK, OF BALTIMORE, MARYLAND.

## STOVE.

SPECIFICATION forming part of Letters Patent No. 599,225, dated February 15, 1898.

Application filed October 11, 1897. Serial No. 654,817. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM C. DIMMOCK, of the city of Baltimore, and State of Maryland, have invented certain Improvements in Stoves, of which the following is a specification.

This invention relates to certain improvements in what are commonly known as "air-tight" stoves—that is to say, stoves having no grate and in which the fuel, generally wood, is introduced thereto through an opening at the top, which is covered by a removable hood. Where wood is used as fuel, the feed-opening must necessarily be of considerable size, and when it is uncovered for the introduction of fuel the draft is so interfered with that the smoke instead of passing through the stovepipe to the chimney escapes through the feed-opening to the room. In Letters Patent No. 557,775, granted to me on the 7th day of April, 1896, I show and describe a certain device whereby the escape of smoke to the room is prevented. Such device, briefly described, consists in a yielding trap-door, which is placed within the feed-opening and normally closed, but which is opened by the weight of the wood in the act of feeding. The yielding trap-door shown and described in the said Letters Patent is fixed within the feed-opening and cannot be bodily removed therefrom, and this construction is open to the objection that should the hand be inserted through the feed-opening in starting the fire or for any other purpose it cannot be easily withdrawn, the trap-door automatically closing upon the hand and wrist. It also prevents the withdrawal of a piece of wood should it be too long or too thick to allow of its passage entirely through the door to the bottom of the stove. In the present invention I obviate this defect by placing in the feed-opening a supporting-ring for the trap-door and hanging the door on the upper surface of the ring in such manner that it may be lifted out of the stove, the supporting-ring being left in place.

The present invention therefore consists, first, in seating the trap-door on a ring which is held within the feed-opening, and, secondly, in making the door liftable from the ring, as hereinafter described.

In the further description of the said invention which follows reference is made to the accompanying drawings, forming a part hereof, and in which—

Figure 1 is an exterior side view of the stove embodying the present improvement with portions thereof torn away to show the interior. Fig. 2 is a top view of Fig. 1. Fig. 3 is an enlarged top view of the invention. Fig. 4 is a cross-section of Fig. 3, taken on the dotted line *x x*. Fig. 5 is an enlarged top view of the supporting-ring alone. Fig. 6 is an enlarged edge view of one section of the trap-door as seen from the center thereof. Fig. 7 is an enlarged under side view of one section of the door.

Referring now to the drawings, A is the body of the stove, having the legs *a*. The body is unprovided with a grate, and the bottom plate *b* has a hole therein covered by a sliding plate, (not shown,) and an ash-drawer underneath.

B is the stovepipe, and C the draft-pipe, which opens into the stove, near the bottom thereof, as shown in Fig. 1.

The feed-opening in the top plate *c* is denoted by D, and the removable covering-hood by E.

F is a ring adapted to fit closely within the feed-opening D, provided with legs *d*, which rest on the flange *e*, formed by the annular projection of the top plate of the stove within the feed-opening. The object of the legs *d* is to elevate the supporting-ring to allow of the operation of the trap-door G, hereinafter described.

The trap-door G consists of two sheet-metal semicircular plates *f*, which together have a diameter slightly less than that of the interior of the supporting-ring. To the under side of each of these semicircular plates *f* is secured a casting H, which forms not only the pintles *g*, which rest in depressions *h* in the supporting-ring, but also a counterbalancing-weight, which, in connection with a stop *i*, extending beyond the circumference of the casting and resting in a depression *j* in the supporting-ring, serves to retain the plate in a horizontal position, as shown particularly in Figs. 3 and 4. The castings H are attached to the semicircular plates by means of rivets *k*. The supporting-ring F may be secured within the feed-opening or merely laid there-

in as described. The supporting-ring being elevated on legs the door is free to swing, the castings passing over the flange *e*, as shown by the dotted lines in Fig. 4.

From the foregoing description it will be understood that either or both of the trap-door sections may be lifted out of the feed-opening and clear of the supporting-ring. Consequently if the hand should be caught by the door the sections will only be lifted from their seats in the withdrawal of the hand.

I claim as my invention—

1. In a stove, the top wall or plate thereof having a feed-opening, combined with a door-supporting ring within the said opening, and a liftable trap-door supported by and within the ring, substantially as specified.

2. In a stove, the top wall or plate thereof having a feed-opening, combined with a ring within the said opening, provided with pintle depressions in its upper surface, and a trap-door formed of two semicircular plates with castings secured to their under side, the said castings having pintles adapted to rest in the depressions in the said ring, substantially as specified.

3. In a stove, the top wall or plate thereof having a feed-opening, combined with a trap-door formed of two semicircular plates, each having a casting secured to its under side which consists of a counterbalancing-weight and two pintles, the said pintles resting in depressions formed in the upper surface of the supporting-ring, substantially as specified.

4. In a stove, the top wall or plate thereof having a feed-opening, combined with a ring seated in the said opening, and a trap-door in two semicircular sections, each having a casting secured to its under side, the said castings comprising a counterbalancing-weight, two pintles, and a stop to prevent the door from rising at the center above a horizontal position, substantially as specified.

WILLIAM C. DIMMOCK.

Witnesses:
WM. B. BOGART,
R. W. MULLOY.