No. 629,544.

Patented July 25, 1899.

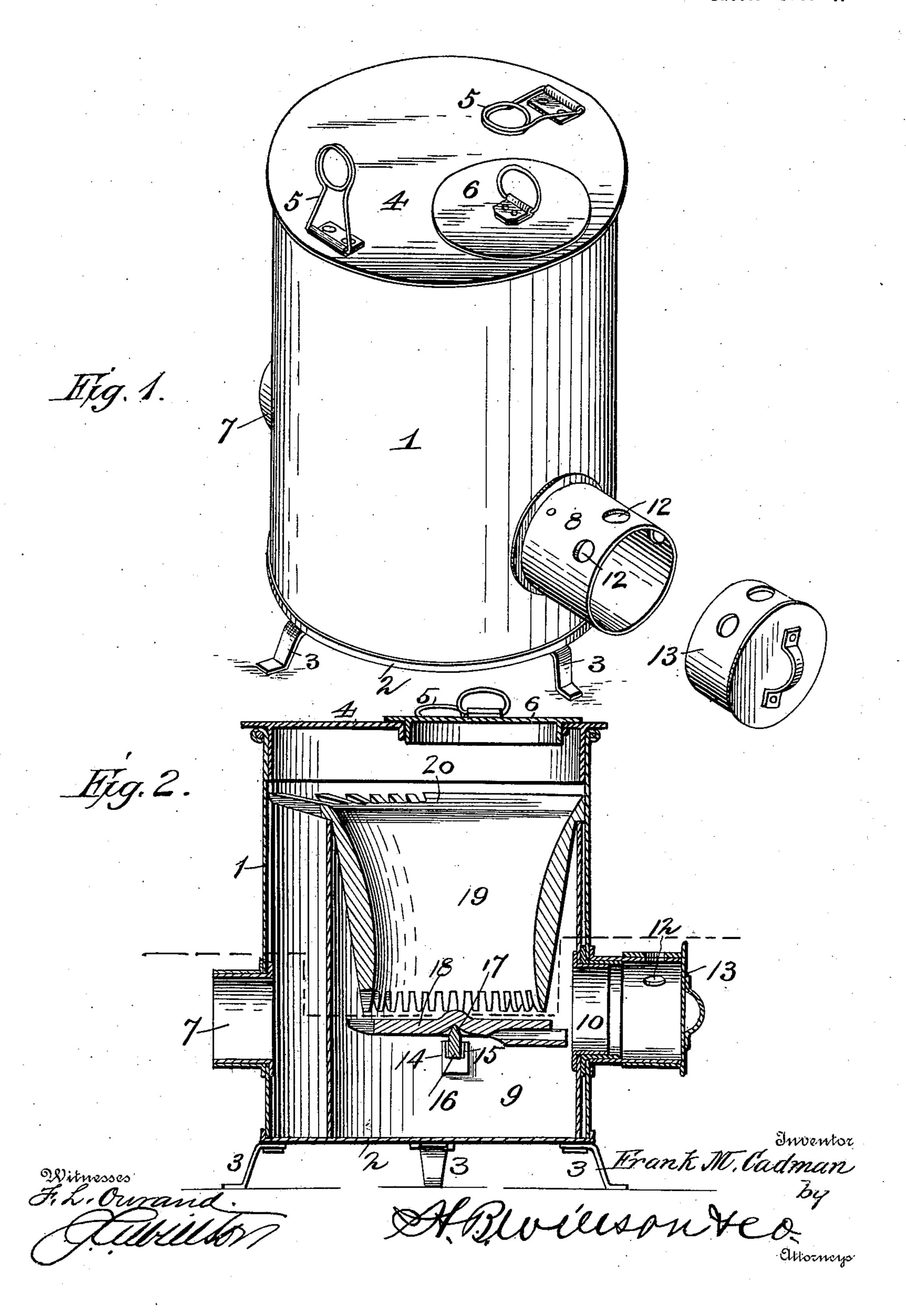
F. M. CADMAN.

COMBINED AIR TIGHT WOOD AND COAL STOVE.

(Application filed Mar. 29, 1899.)

(No Model.)

2 Sheets—Sheet 1.



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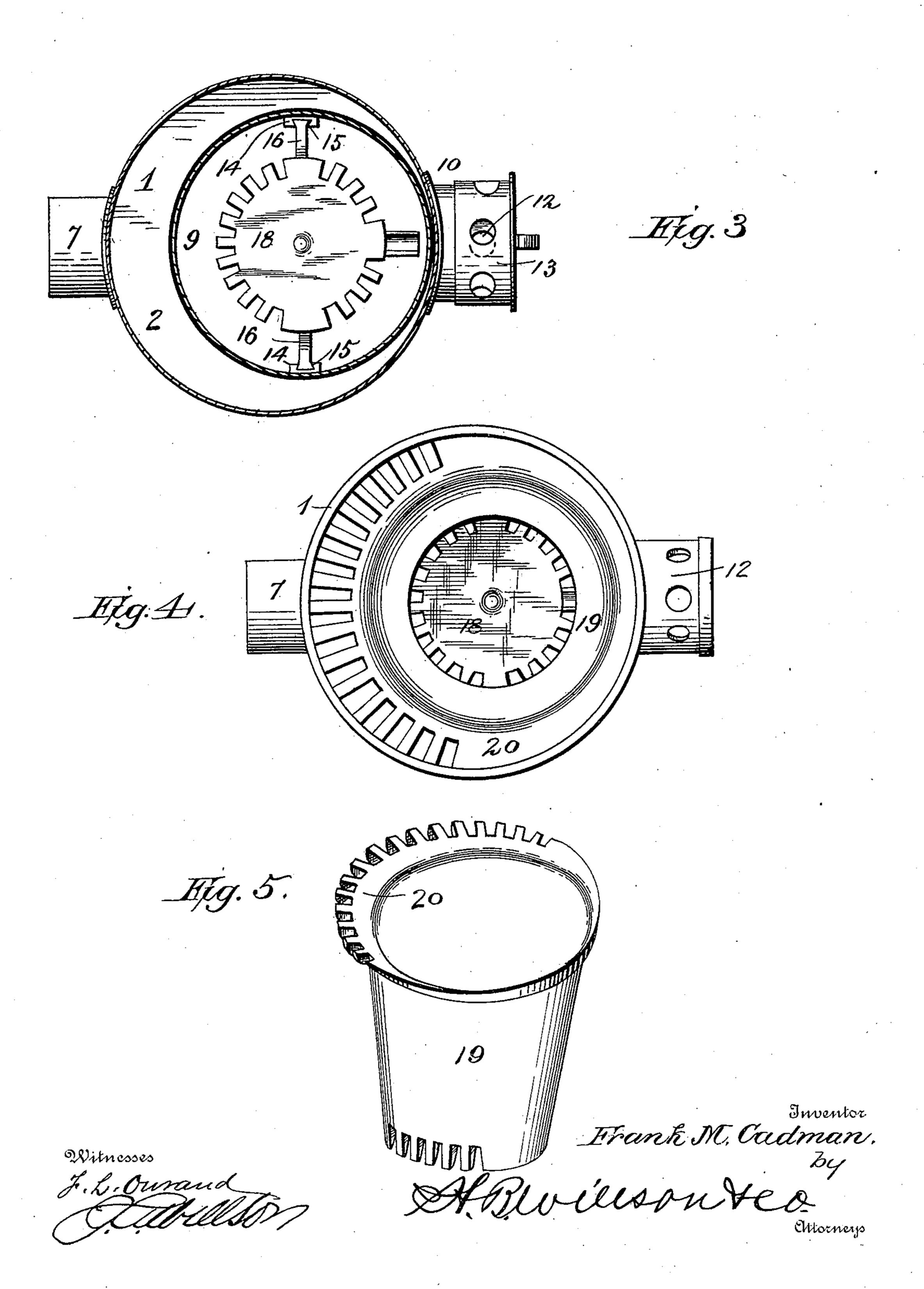
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(No Model/)

2 Sheets—Sheet 2.



United States Patent Office.

FRANK M. CADMAN, OF SOLDIER, KANSAS.

COMBINED AIR-TIGHT WOOD AND COAL STOVE.

SPECIFICATION forming part of Letters Patent No. 629,544, dated July 25, 1899.

Application filed March 29, 1899. Serial No. 710, 966. (No model.)

To all whom it may concern:

Be it known that I, Frank M. Cadman, a citizen of the United States, residing at Soldier, in the county of Jackson and State of Kansas, have invented certain new and useful Improvements in a Combined Air-Tight Wood and Coal Stove; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a combined airtight wood and coal stove; and the object is to simplify and improve the construction and increase the efficiency of a stove of this character.

To this end the invention consists in the construction, combination, and arrangement of the several elements of the device, as will be hereinafter more fully described, and particularly pointed out in the claim.

In the accompanying drawings the same reference characters indicate the same parts of the invention.

Figure 1 is a perspective view of a combination stove embodying my invention. Fig. 2 is a vertical section of the same. Fig. 3 is a horizontal section. Fig. 4 is a top plan view with the cover removed, and Fig. 5 is a perspective view of the fire-pot removed from the stove.

1 denotes a sheet-iron cylinder provided with a closed bottom 2, supported upon suitable legs 3, and 4 denotes the removable cover, provided with the hinged handles 5 5 and a removable cap 6.

7 denotes the smoke-pipe, which communicates with the cylinder 1, and 8 the draft-in-let flue, which opens into the cylindrical sheet-iron fire-box 9, arranged eccentric with the cylinder 1 and fixed in place by means of a flanged sleeve 10, secured within the flue 8, which passes through the contiguous walls of the two cylinders 1 and 9.

12 12 denote radial draft-openings formed in the upper half of the flue, and 13 a cap having a sliding engagement with the flue to regulate the amount of air admitted to the flue or to close the same entirely.

14 14 denote brackets fixed on the inside of the fire-box 9, and their upper ends are provided with dovetail recesses 15 to receive the correspondingly-formed ends of the supporting-bar 16, which is cast with a vertical coneshaped pivot-stud 17 and on which is mounted the cast-iron disk 18, which is formed with an 55 imperforate body, a serrated periphery, and a radial socket to receive a shaking-tool which may be inserted at times through the flue 8 to shake the ashes down.

19 denotes the cast-iron fire-pot, conical in 66 form and provided at its upper end with an eccentric flange 20, which rests upon the upper edge of the fire-box 9 to support the fire-pot and its contents in position. The flange 20 is concentric with the cylinder 1, and the 65 fire-pot is concentric with the fire-box 9, one half of the flange being imperforate and the other or larger portion being serrated to form draft-passages.

The accompanying drawings show my in-70 vention in the best form now known to me; but many changes in the details might be made within the skill of a good mechanic without departing from the spirit of my invention as set forth in the claim at the end of this 75 specification.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The cylinder 1 provided with the smoke-80 pipe 7 and draft-flue 10 13, the cover and the cap; in combination with the cylindrical fire-box 9 arranged eccentric with said cylinder 1 and resting on the stove-bottom and the fire-pot 19, arranged concentric within said box 85 and supported by a flange resting on the box and having a serrated eccentric portion to conform to the space between said cylinder and box, substantially as shown and described.

In testimony whereof I have hereunto set 90 my hand in presence of two subscribing witnesses.

FRANK M. CADMAN.

Witnesses:

J. H. RILEY, P. L. TOLIN.