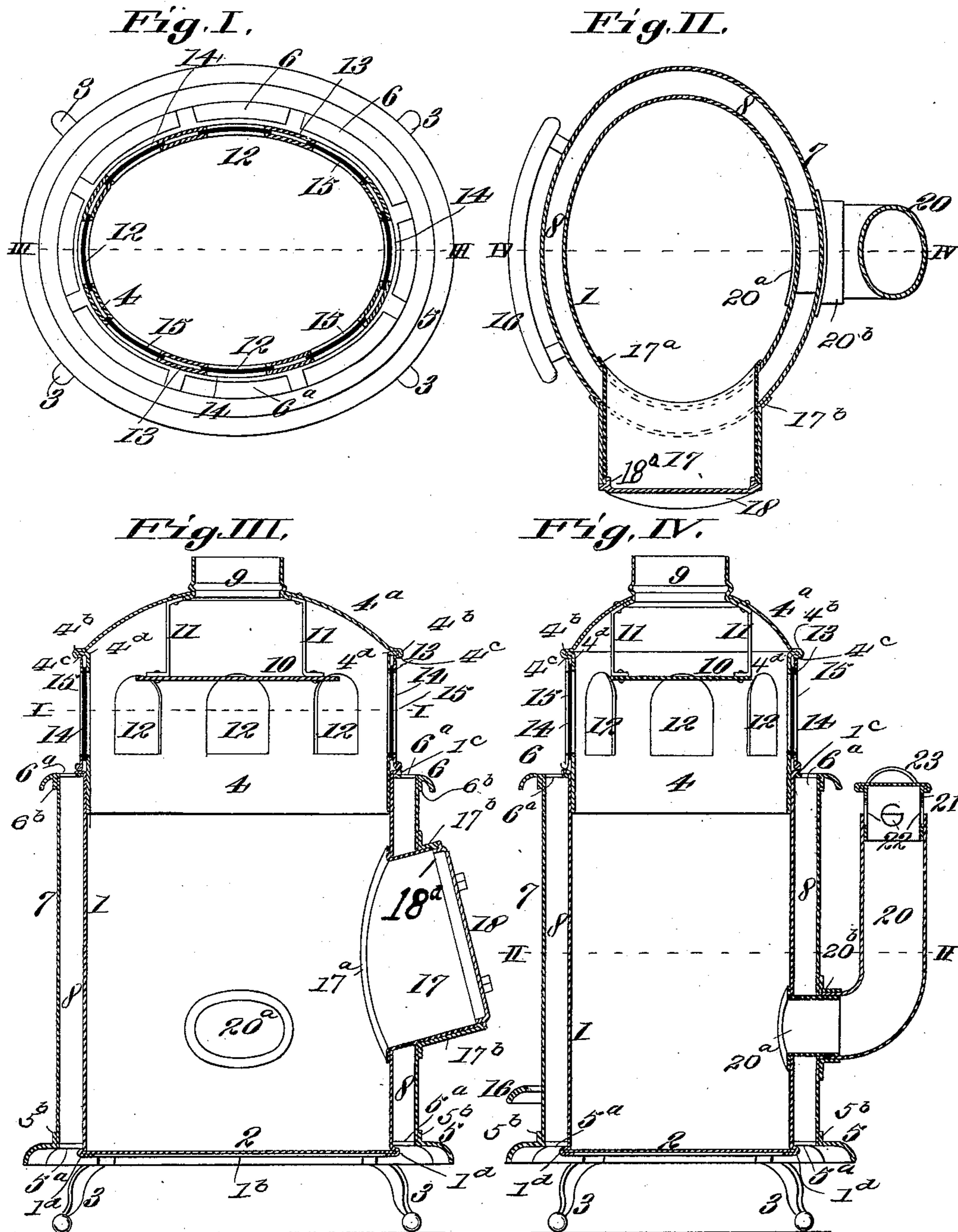


(No Model.)

C. L. FELDWEG.  
HEATING STOVE.

No. 602,001.

Patented Apr. 5, 1898.



Attest:  
E. S. Knight  
Stanley Stoner

Inventor:  
Charles L. Feldweg  
By Wm. H. Port atty.

# UNITED STATES PATENT OFFICE.

CHARLES L. FELDWEG, OF CLAY CITY, ILLINOIS.

## HEATING-STOVE.

SPECIFICATION forming part of Letters Patent No. 602,001, dated April 5, 1898.

Application filed March 27, 1897. Serial No. 629,586. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES L. FELDWEG, a citizen of the United States, residing at Clay City, in the county of Clay and State of Illinois, have invented certain new and useful Improvements in Heating-Stoves, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to that class of heating-stoves in which the construction is mainly or wholly of sheet metal; and my invention consists in features of novelty hereinafter fully described and claimed.

Referring to the drawings, Figure I illustrates a horizontal section, taken through the upper end of the stove, on the line I I, Fig. III. Fig. II illustrates a horizontal section, taken through the body of the stove, on the line II II, Fig. IV. Fig. III illustrates a vertical section taken on the line III III, Fig. I. Fig. IV illustrates a vertical section taken on the line IV IV, Fig. II.

In the drawings, 1 designates the inner stove-casing, having a lower outturned and inturned end 1<sup>b</sup> and an upper outturned end 1<sup>c</sup>; 2, the imperforate bottom, supported on the lower end 1<sup>b</sup> of the casing; 3, the feet, and 4 4<sup>a</sup> the removable top.

At the lower end of the casing 1 and fitted thereto over the bead 1<sup>a</sup>, formed by the lower lip 1<sup>b</sup>, is a ring 5, having a vertical flange 5<sup>b</sup>, and fitted to the upper end of the casing is a ring 6, having a pendent flange 6<sup>b</sup>. Located between these rings within the vertical flange and pendent flange, is an outer casing 7, surrounding the casing 1. The ring 5 is provided with openings 5<sup>a</sup>, that admit the entrance of cold air to the chamber 8 between the two casings, and the ring 6 is provided with openings 6<sup>a</sup>, that permit the exit of heated air from said chamber. This arrangement permits of a constant circulation of air and thorough ventilation in connection with the stove.

The lower end 4 of the removable top 4 4<sup>a</sup> slips into the interior of the inner casing 1. The top has a dome-shaped upper end 4<sup>a</sup>, formed with the bead 4<sup>b</sup>, with an inturned flange 4<sup>c</sup> at its lower edge, with a flue-opening 9 located centrally of the dome. 10 is a

horizontal deflector and a spreader-plate hung by straps 11 beneath the flue-opening of the dome. This deflector and spreader-plate deflects the products of combustion in their ascension toward the flue-opening, thus retarding the escape of such products until the gases are thoroughly consumed. The plate also spreads the flame to the stove-casing, thereby causing the full value of the heat of the fire to be radiated from the stove. The lower portion 4 of the top is provided with an outturned flange 4<sup>d</sup>, supported on the inturned flange 4<sup>c</sup>, and with vertical openings 12, and is surrounded by a band 13, in which are openings 14, that are coincident with the openings 12. The band 13 seats on and supports the top, the upper end of the inner casing, and fits beneath the flange 4<sup>c</sup>. Between the band and the main body of the top 4 4<sup>a</sup> and closing the openings 12 and 14 are sheets 15 of mica or some other transparent material that is not readily attacked by fire. This arrangement permits of the fire in the stove shedding illumination into the room in which the stove is contained and permits the fire to be seen, thereby imparting cheerfulness to the room.

16 designates a foot-rest attached to the front of the stove.

Secured to the stove at one end is a doorway 17. This doorway is formed with a securing-flange 17<sup>a</sup> and extends into the interior of the stove and projects outwardly from the exterior and is inclined for the purpose of more readily permitting the insertion of fuel and the removal of ashes. The doorway is secured on the exterior of the stove by a flanged collar 17<sup>b</sup>, which is provided with a door 18, having a latch 19.

20 designates a draft-tube attached to the back of the stove. This tube is secured by an inner flanged tube 20<sup>a</sup> and an outer flanged collar 20<sup>b</sup> and extends outwardly and upwardly and is open at its upper end to receive an inverted-cup damper 21, provided with ports 22 and a handle 23. By regulating this damper inward or outward the air may be admitted to the interior of the stove as slowly or rapidly as may be desired and the draft controlled to a nicety.

By reason of the top 4 4<sup>a</sup> being removable from the stove-casing the simple non-illumi-

nating top may be employed where a more inexpensive stove is desired by the purchaser and user, while it is possible to change the non-illuminating construction should the purchaser at any time desire to make the change to render his stove more attractive.

The inner casing is capable of removal for the purpose of inserting a new one when the old is worn out, it being only necessary to cut the retaining-flanges 1<sup>c</sup>.

In Fig. IV a removable lining 1<sup>a</sup> is provided, which may be lifted from the stove by merely removing the stove-top.

The door 18 is provided with an inwardly-extending flange or rim 18<sup>a</sup>, that fits snugly within the doorway 17, so as to make a practically air-tight joint and prevent smoke or gases from escaping into the room.

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

1. A sheet-metal heating-stove comprising an inner casing formed with an outturned and inturned lower end providing a bead, and with an outturned upper flange, the imperforate bottom supported on the inturned portion of the lower end of the inner casing, the lower ring fitting around the inner casing and seating on the bead, the outer casing supported on the lower ring and providing an air-chamber in connection with the inner casing and the upper ring supported on the outer

casing and supporting the inner casing thereon; substantially as described.

2. A sheet-metal heating-stove comprising an inner casing, the lower ring fitting around the inner casing, the outer casing supported on the lower ring, the upper ring supported on the outer casing and supporting the inner casing thereon, and the removable top consisting of the dome-shaped upper end formed with a bead, with an inturned flange at its lower edge and with a central flue-opening, the lower portion formed with an outturned flange supported on the inturned flange of the upper end, and the surrounding band fitting beneath the inturned flange and supporting the top upon the inner casing; substantially as described.

3. A sheet-metal heating-stove comprising an inner casing, the lower ring fitting around the inner casing, the outer casing supported on the lower ring, the upper ring supported on the outer casing and supporting the inner casing thereon, a tube extending through the casings formed with a flange whereby it is secured to the inner casing, and a flanged collar whereby the tube is secured to the outer casing; substantially as described.

CHARLES L. FELDWEG.

In presence of—

HERMAN N. WILTSEY,  
JOHN WEILER.