

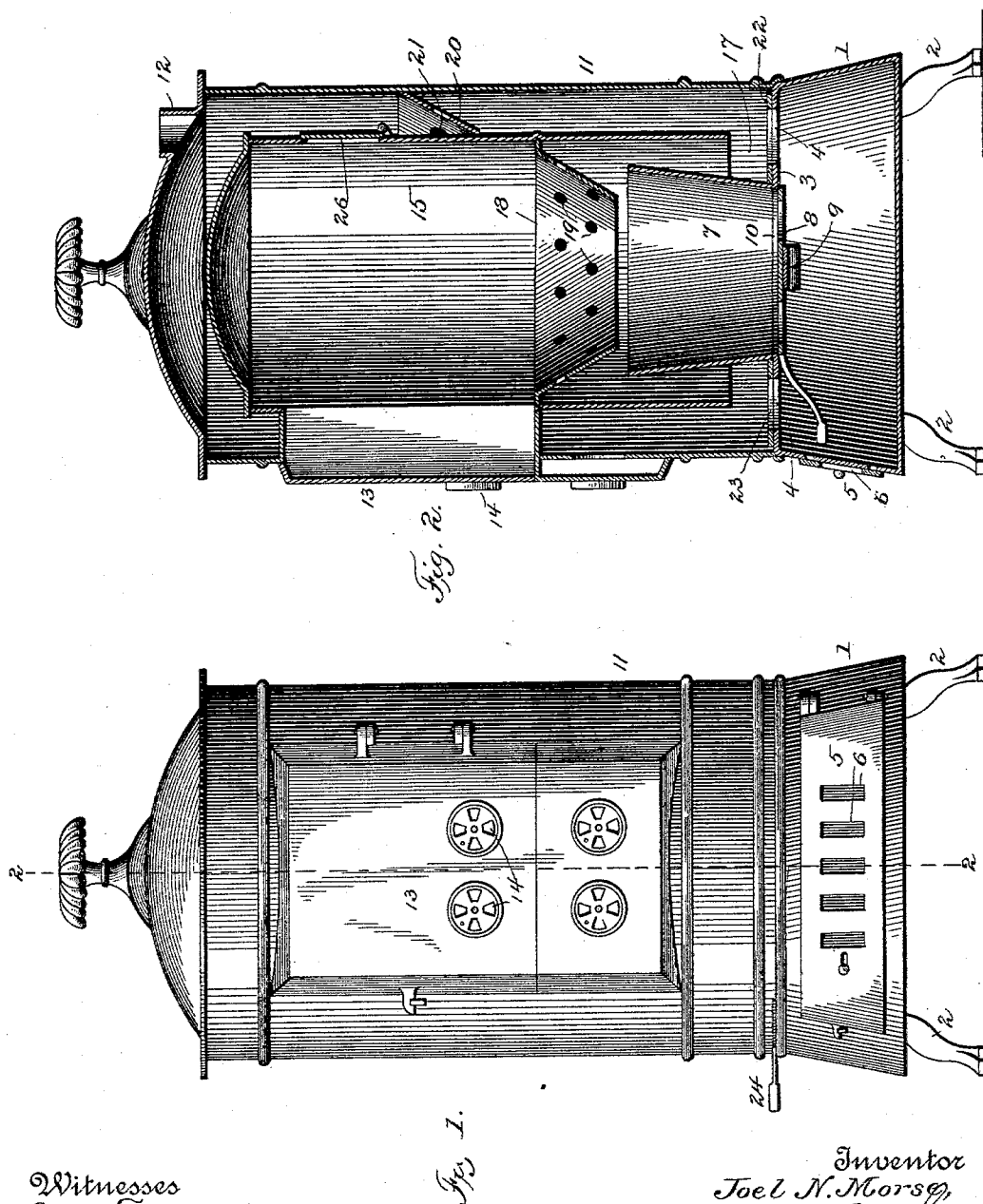
(No Model.)

2 Sheets—Sheet 1.

J. N. MORSE.
STOVE.

No. 603,113.

Patented Apr. 26, 1898.



Witnesses
John Enders, Jr.
Wm W. Deane.

Inventor
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By *R. H. F. Ogilvie*
his Attorney

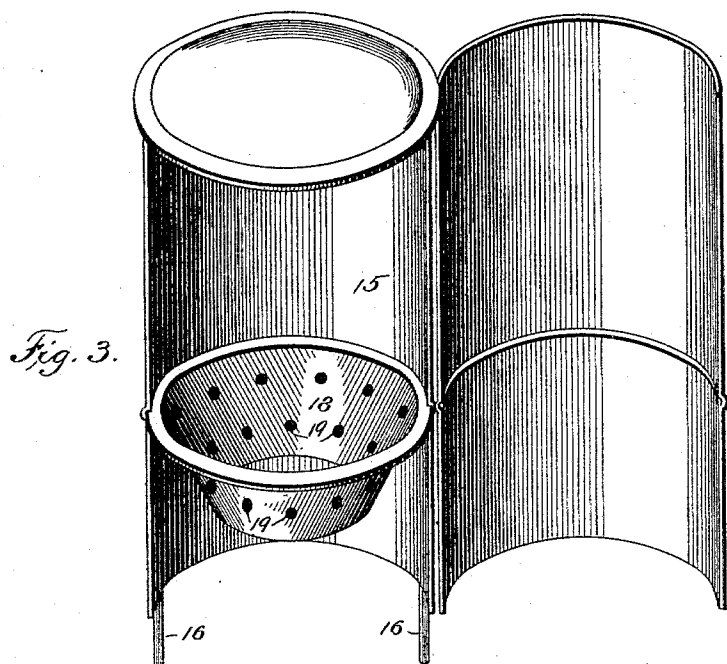
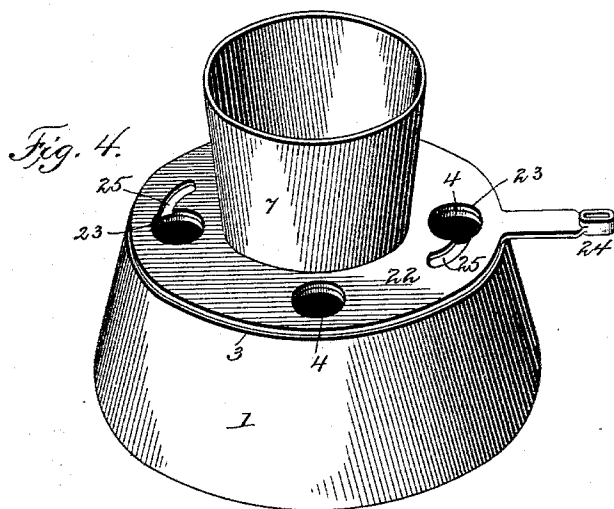
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2 Sheets—Sheet 2.

J. N. MORSE.
STOVE.

No. 603,113.

Patented Apr. 26, 1898.



Witnesses
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UNITED STATES PATENT OFFICE.

JOEL N. MORSE, OF ONEIDA, KANSAS.

STOVE.

SPECIFICATION forming part of Letters Patent No. 603,113, dated April 26, 1898.

Application filed June 4, 1897. Serial No. 639,377. (No model.)

To all whom it may concern:

Be it known that I, JOEL N. MORSE, a citizen of the United States, residing at Oneida, in the county of Nemaha and State of Kansas, have invented certain new and useful Improvements in Stoves; and I do hereby 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 heating-stoves; and its object is to provide improved means for regulating the draft thereof, so as to increase or decrease the heat.

The invention consists in the novel construction and combination of parts herein-after fully described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of a stove constructed in accordance with my invention. Fig. 2 is a central longitudinal section of the same. Fig. 3 is a detail elevation of the hinged sectional drum, showing the same open. Fig. 4 is a detail perspective view of the fire-pot and the rotatable plate with openings and slots therein.

In the said drawings the reference-numeral 1 designates the base of the stove, supported by legs 2 and provided with a top plate 3, formed with a series of holes or openings 4. The numeral 5 designates the door of said base, provided with draft-openings 6. The numeral 7 designates the fire-pot, provided with a grate 8, pivoted to a plate 9, spanning the circular opening 10 in said plate 3. Above the said base is an outer drum or shell 11, provided with stovepipe-flange 12, a fuel-door 13, and draft-openings 14. Located within this drum is an inner cylinder or drum 15, supported by depending legs 16, resting on the plate 3. This drum is closed at the top and open at the bottom and consists of two semi-cylindrical sections hinged together and formed intermediate the ends with horizontal grooves or depressions 15^a, with which engages a flange 15^b at the upper end of an open ring 18, formed with a number of perforations 19. There is a space 17 between the said drums 11 and 15. Between said drums 11 and 15 there is located a ring-diaphragm 20, provided with perforations 21.

Located on the top of plate 3 and surrounding the fire-pot is a ring 22 with holes 23,

adapted to register with the holes or openings on said plate and provided with a handle 24, projecting through the drum 11, by which it may be turned. This ring is formed with curved slots 25 for the passage of the posts 16. The numeral 26 designates a damper at the upper end of drum 15.

In practice when the stove is operating under direct draft, with the damper 26 opened, the products of combustion will ascend into the main combustion-chamber and at the same time air from the bottom of the stove will pass through the perforations 19, so as to insure complete combustion in said chamber. The smoke and other gases will then escape at the upper end of the smoke-flue. When the stove is operating under indirect draft, with the damper 26 closed, smoke and other gases from the main combustion-chamber will pass through the perforations 19 and will circulate around the fire-box and then escape through the smoke-flue. By this means the outer drum will become highly heated, radiating the heat into the room. The ring 22 is a dust or soot ring.

The object of the ring-diaphragm 20 is to retard the heated air in its upward movement, so as to highly heat the lower part of drum 11.

The purpose of making the drum 15 in two sections hinged to each other is to allow them to be opened for removing and replacing the ring 18 when desired.

Having thus fully described my invention, what I claim is—

1. In a heating-stove, the combination with the base, the top formed with holes or openings, the fire-box and the grate, of the outer drum seated on said base, the inner drum consisting of the semicircular hinged sections formed with interior grooves or depressions intermediate the ends, the perforated open ring having a flange engaging with said grooves or depressions, the damper and the depending posts at the lower end of said inner drum resting on the top of the base, substantially as described.

2. In a heating-stove, the combination with the base, the top with openings therein, the fire-pot, the rotatable grate, and the ring on said plate formed with corresponding holes and curved slots, of the outer drum seated

on said base, the inner drum consisting of the
semicircular hinged sections formed with in-
terior grooves or depressions intermediate the
ends, the open ring having openings therein
5 and provided with a flange engaging with said
grooves, the depending, supporting posts, and
the perforated ring-diaphragm between said
drums, substantially as described.

3. In a heating-stove, the combination with
10 the base, the top plate having holes or open-

ings therein, the fire-pot and grate, of the
outer drum or shell the inner drum, the posts
at the lower end thereof and the perforated
openings, substantially as described.

In testimony whereof I affix my signature 15
in presence of two witnesses.

JOEL N. MORSE.

Witnesses:

H. L. WIKOFF,

F. W. FUNK.