(No Model.)

W. H. CLARK & F. W. COLLINS.

STOVE.

No. 459,183. Patented Sept. 8, 1891.

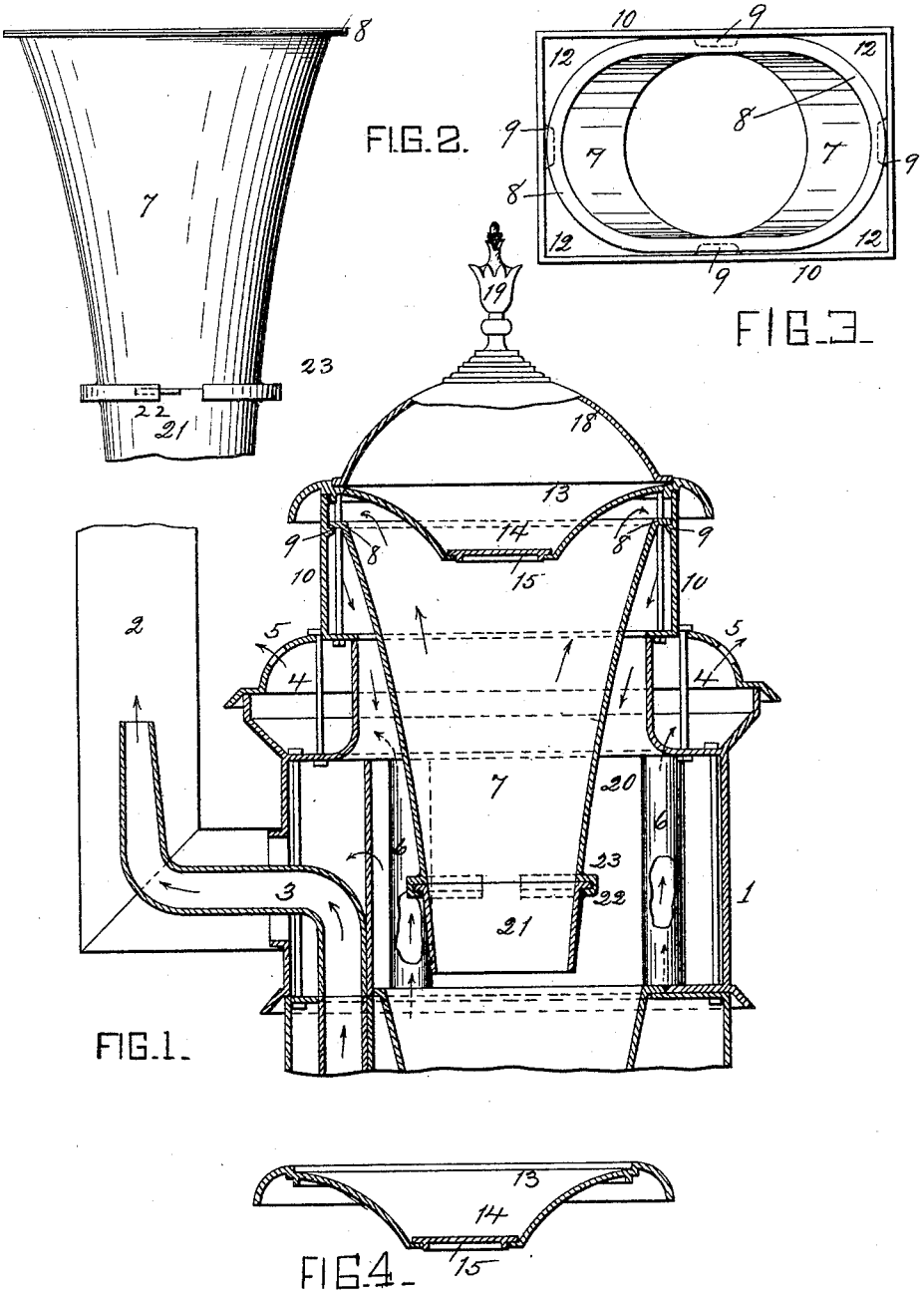

FIG. 1.

FIG. 2.

FIG. 3.

FIG. 4.

Witnesses
J. G. Lepper.
T. W. Johnson.

Inventors
W. H. Clark
F. W. Collins
By their Attorney.
W. A. Bartlett

UNITED STATES PATENT OFFICE.

WILLIAM H. CLARK AND FRANK W. COLLINS, OF CORTLAND, NEW YORK.

STOVE.

SPECIFICATION forming part of Letters Patent No. 459,183, dated September 8, 1891.

Application filed June 23, 1890. Renewed July 29, 1891. Serial No. 401,129. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM H. CLARK and FRANK W. COLLINS, residing at Cortland, in the county of Cortland and State of New York, have invented certain new and useful Improvements in Stoves, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to magazine-stoves, especially heating-stoves.

The object of the invention is to improve the construction of the magazine and connections.

Figure 1 of the drawings is a central vertical section of the upper portion of a magazine-stove of the kind known as "ventilating-stoves." Fig. 2 is a side elevation of magazine detached. Fig. 3 is a plan of top section of stove, showing magazine applied. Fig. 4 is a section of the top plate of stove.

The numeral 1 indicates the outer casing or shell of a stove. The stove-pipe 2 has an inner flue or foul-air pipe 3 of the character shown in our patent, No. 430,923, of June 24, 1890. The upper part of the stove has a heated-air chamber 4, which receives hot air through pipes 6. Hot air escapes from this chamber through opening 5 in the room.

The magazine or reservoir 7 is a hollow tapering vessel with a top flange 8, extending outwardly. This flange 8 is supported on lugs 9, which extend inward from the side plates of the top section 10 of the stove. The magazine 7 is preferably of elliptical shape at its upper end and the top section 10 of the stove is practically rectangular. The magazine-flange 8 will rest on the lugs 9, which are about central of the plane sides of the stove. The corners of the top section will thus have rectangular passages 12 over the top of the magazine.

The top plate 13 of the stove has a central funnel 14, extending down into the magazine, and provided with a cover 15. This cover is below the top of the magazine. Consequently the gases rising in the magazine will tend to rise above the lower portion of funnel 14 and will pass over the top of the magazine 7 and down passages 12 at the corners of the stove to the combustion-chamber 20, where the gases will be burned. The top plate 13 is secured to the top section of the stove by rods 17, passing down between the magazine 7 and the stove-casing 10. The joint between the top plate 13 and the top section or casing 10 of the stove is made tight by putty. Thus the escape of gas is prevented.

The stove may have any usual cover 18, provided with an urn or ornamental finish 19.

As the magazine 7 when once in the stove cannot be removed because of the top plate 13, and as the bottom of the magazine is likely to burn out long before the body portion, the end of the magazine is provided with a removable fire-ring 21, which has an outwardly-extending broken flange or pair of ears 22.

The magazine 7 has a flange 23 at its lower end, which extends outward, then down, and then turns in, forming a sort of angular hook cut away at two or more points to pass the ears of the fire-ring. The ears of the fire-ring are passed through the cut-away openings in the flange 23 and the ring is then turned partway round, when the fire-ring is securely locked to the magazine by the flanges or ears 22 of the fire-ring entering above the inturned hooks 23 of the magazine. The advantages of this construction are that the sunken funnel in the top plate of the stove serves both as a funnel and a guide to the gases. The magazine may be permanent in the stove, and yet that part which is liable to wear or burn out can be readily replaced. The top joint of the stove, where gases are most liable to escape, can be permanently packed, and the entire construction is strong and convenient.

What I claim is—

1. In a magazine-stove, the top plate of the stove having a central funnel integral therewith and extending down into the magazine, a cover in said funnel below the top of the magazine, and a magazine in a sepa-

rate piece from the funnel and extending up outside the same and suitably supported on the stove, substantially as described.

2. The combination, with the top section of the stove of about rectangular form and an elliptical magazine supported below the top thereof, so as to have passages at the corners, of a stove-top secured to the top section and extending over the sides of the magazine, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

WILLIAM H. CLARK.
FRANK W. COLLINS.

Witnesses:
JOHN W. SUGGETT,
S. S. KNOX.