

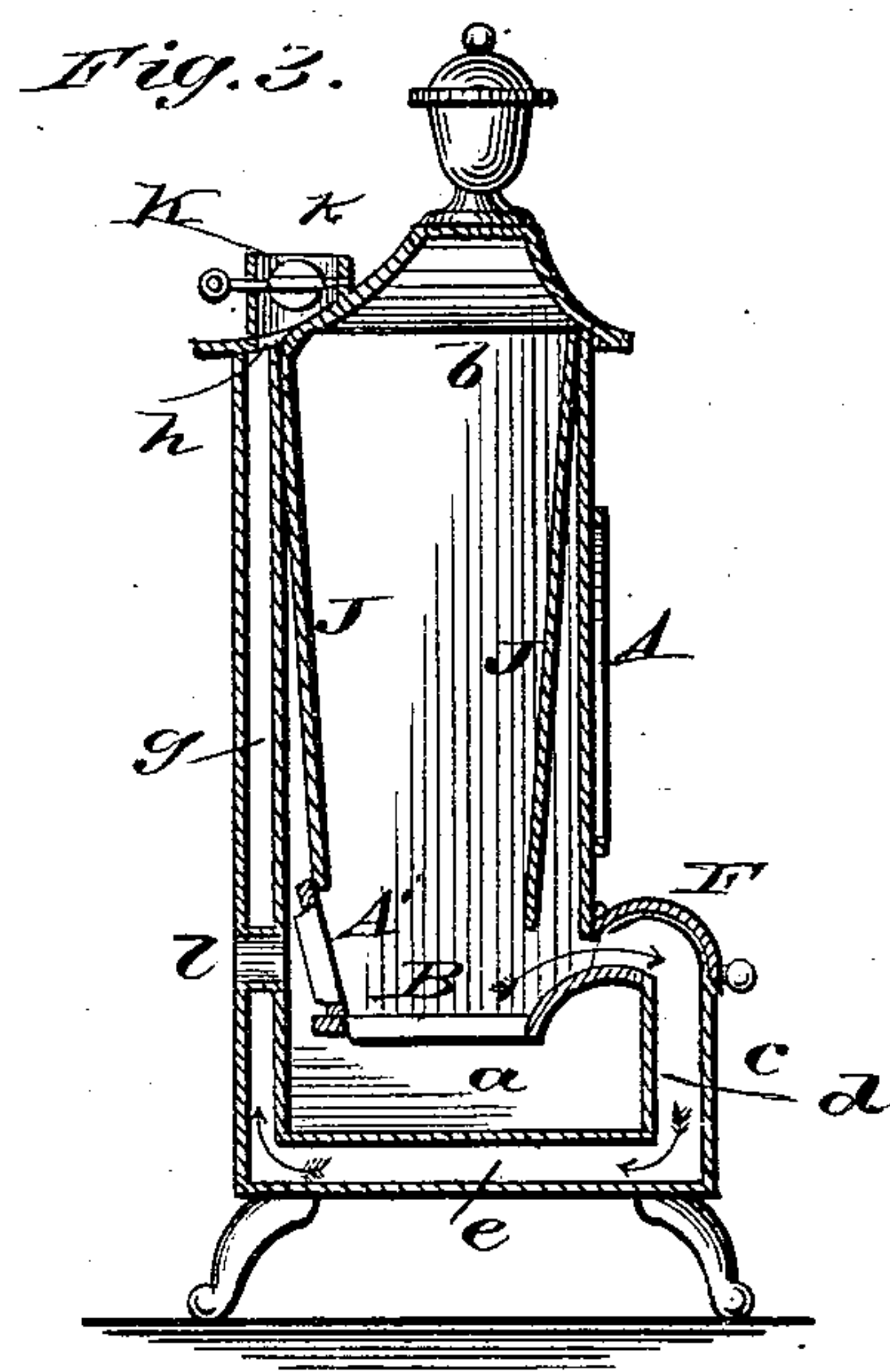
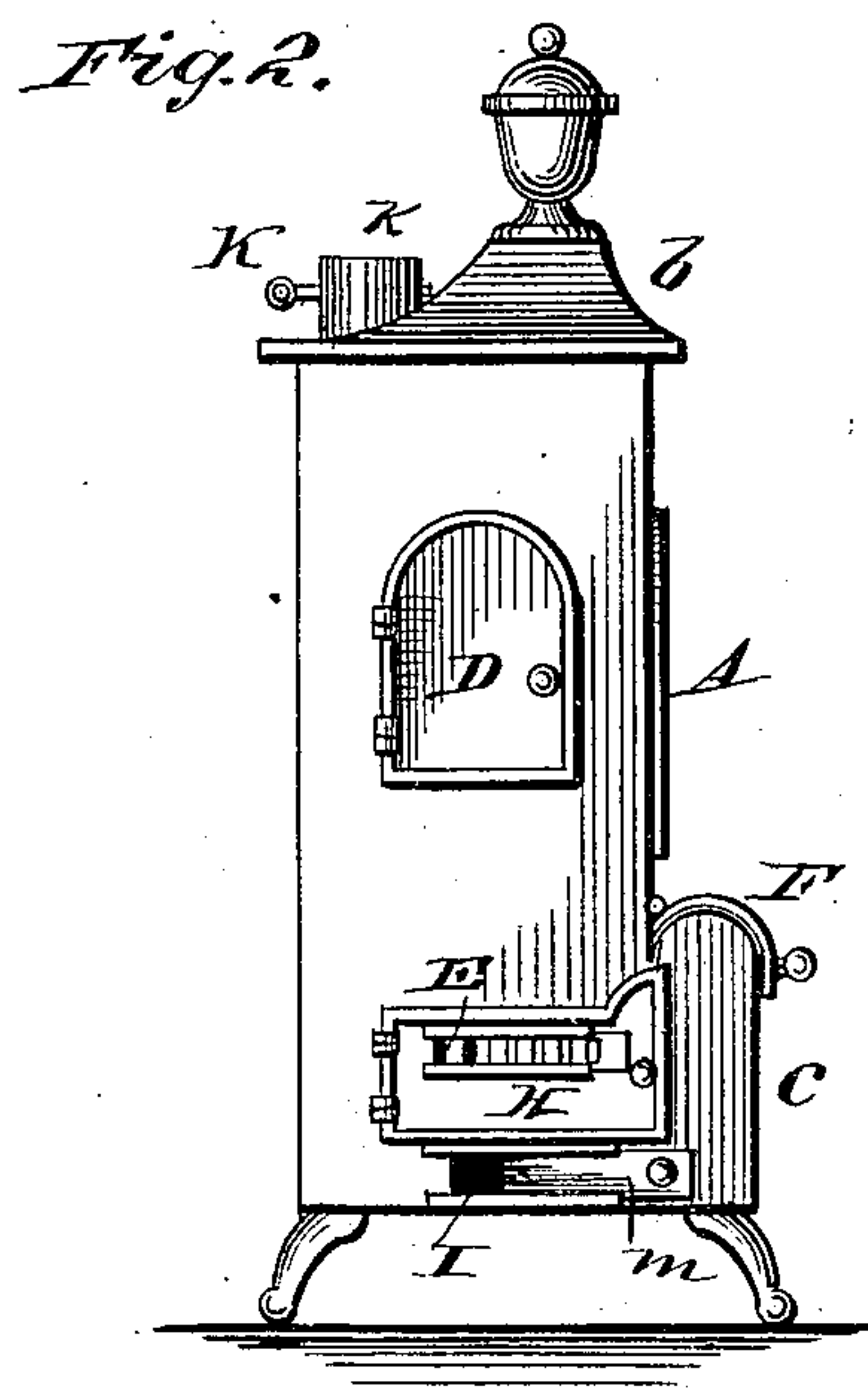
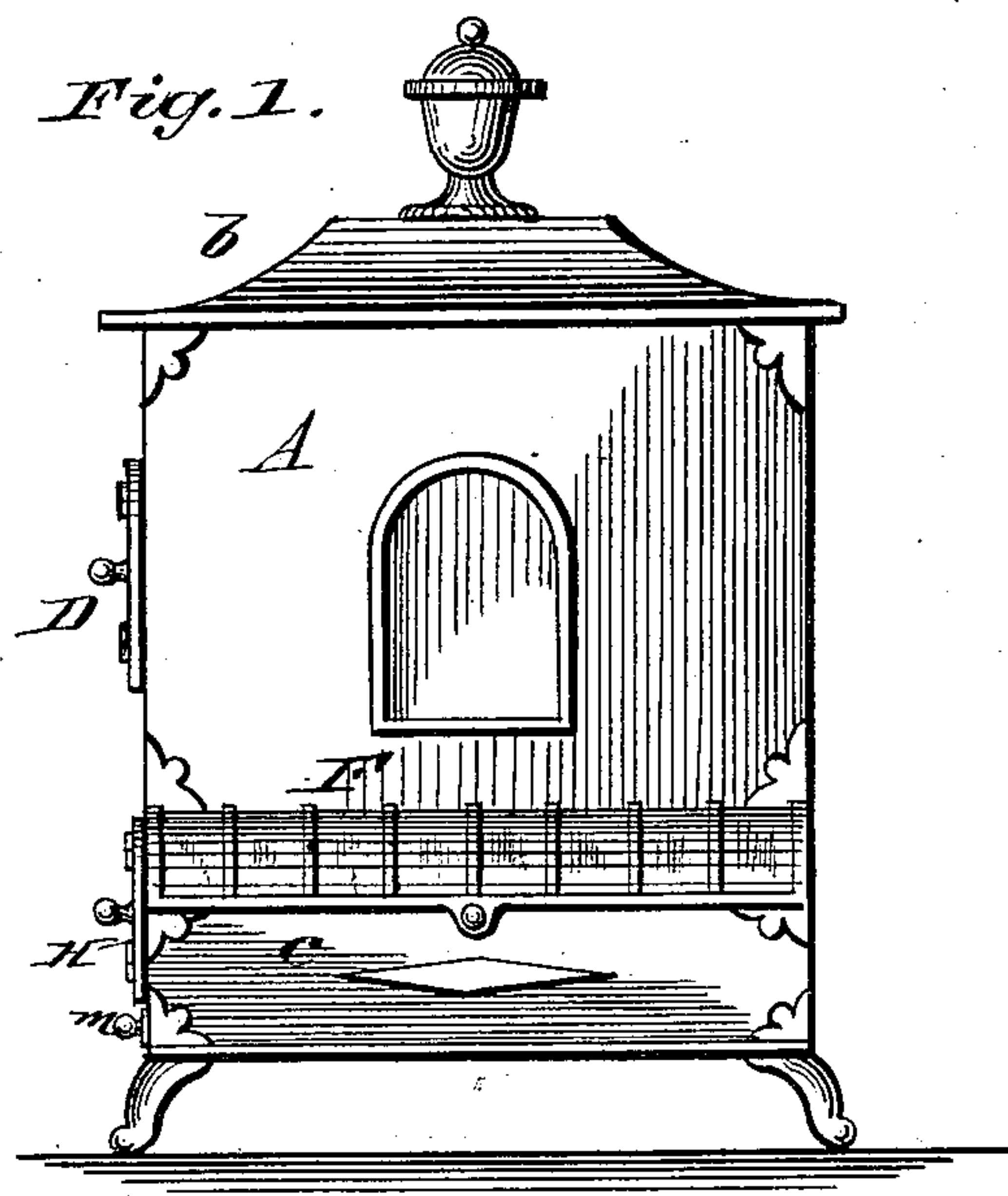
(No Model.)

J. W. KOCHER.

STOVE.

No. 282,735.

Patented Aug. 7, 1883.



Witnesses:
Philip C. Masi
E. L. Bates.

Inventor:
J. W. Kocher,
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UNITED STATES PATENT OFFICE.

JOHN W. KOCHER, OF BRISTOW, IOWA.

STOVE.

SPECIFICATION forming part of Letters Patent No. 282,735, dated August 7, 1883.

Application filed February 24, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. KOCHER, a citizen of the United States, residing at Bristow, in the county of Butler and State of Iowa, have invented certain new and useful Improvements in Stoves; 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a front view of my stove. Fig. 2 is a side view of the same, and Fig. 3 is a vertical sectional view.

This invention has relation to stoves; and it consists in the construction and novel arrangement of devices, as hereinafter set forth, and particularly pointed out in the appended claims.

The object of this invention is to provide a stove wherein the main draft is forward, directly through the coal, then downward in front, backward along the bottom, and upward in rear to the smoke-pipe.

In the accompanying drawings, illustrating this invention, the letter A designates the main wall of the stove, having an opening extending transversely in the rear wall providing access for the air to the rear grating, A', which extends along this opening.

B represents the bottom grate, through which the ashes pass to an ash-box in a chamber, a, below. The lining-walls J of the fire-box are inclined upward and outward to the top b of the stove, and coal is fed into the fire-box through an end door, D.

In front the lower portion of the stove projects, forming an offset, c, the upper portion of which is covered by a door-frame, F, carrying mica lights. The upper end of this offset is opposite the rear grating, and in the offset is formed a descending flue, d, which communicates with a horizontal flue, e, in the bottom of the stove, extending back and opening into the lower end of the ascending back flue, g, which leads to the opening h through the smoke-pipe flange k. In this opening is pro-

vided a damper, K. The draft-opening l in the rear wall extends through the back flue, so that the air has free access to the grate A.

H represents a door in the lower portion of the end of the stove, whereby the ash-chamber is closed. In this door, or above it, is provided a side inlet, E, for side draft under the bottom grate. The side draft is controlled by means of a register-slide in the opening E.

The draft passes directly forward from the opening l, through the rear grating A', and through the coal, and then downward, carrying the products of combustion, through the descending flue d, the bottom flue, e, and the ascending flue g, to the smoke-pipe connected to the flange k at the top of the stove.

As the mica door F is arranged at the top or upper portion of the descending flue d, the products of combustion are inflamed when they pass downward in rear of the lights therein, so that the stove, when in operation, presents a bright and cheerful appearance.

In the end of the stove an opening is made at I, communicating with the horizontal flue e, and serves to provide access thereto for cleaning. This opening is closed by a slide, m.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. In a stove, the combination, with a fire-box having a grating opening to the rear above the fire-grate, of a front descending flue having its mouth opposite said grating, and communicating at its lower end with a bottom horizontal flue, which in turn communicates with a rear ascending flue leading to the smoke-pipe, substantially as specified.

2. In a stove, the back grating, A', rear flue, g, bottom flue, e, and front flue, d, in the offset c, having a mica-carrying door, F, in its upper portion, substantially as specified.

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

JOHN W. KOCHER.

Witnesses:

L. L. HATCH,
T. M. EARLY.