J. V. MEIGS.

Heating Stove.

No. 44,812. Patented Oct. 25, 1864.

Fig. 1

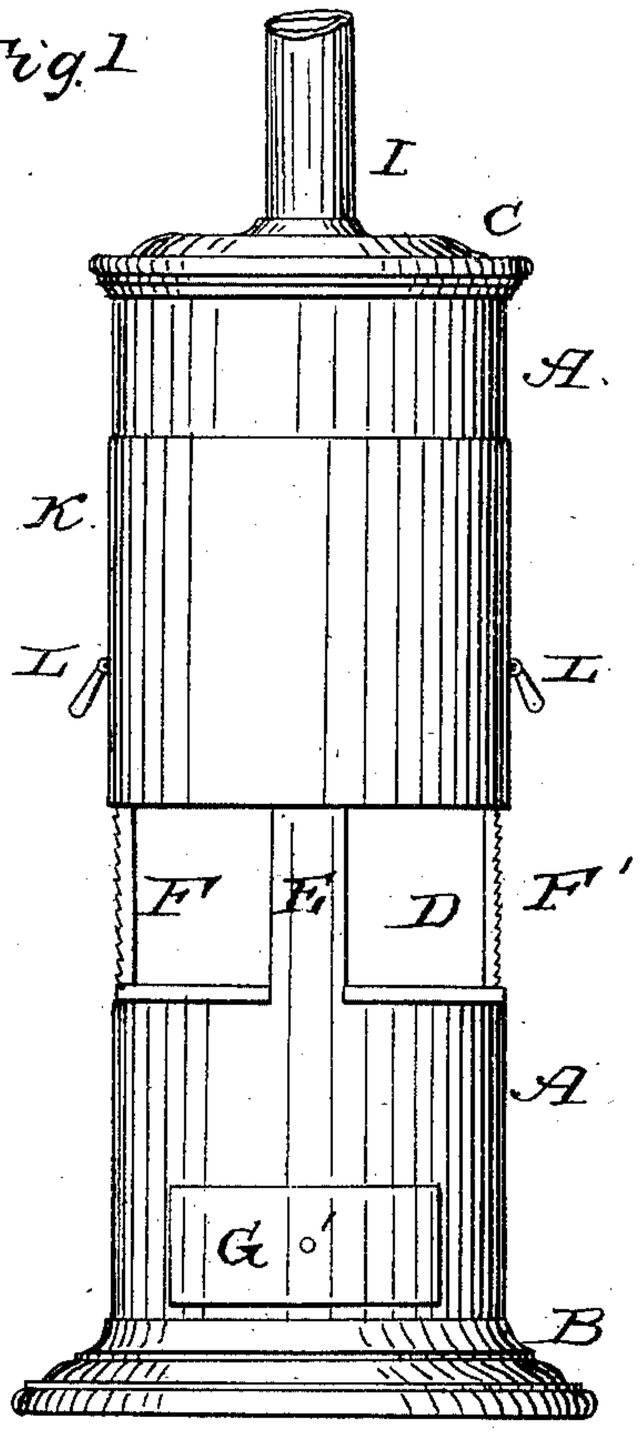


Fig. 2.

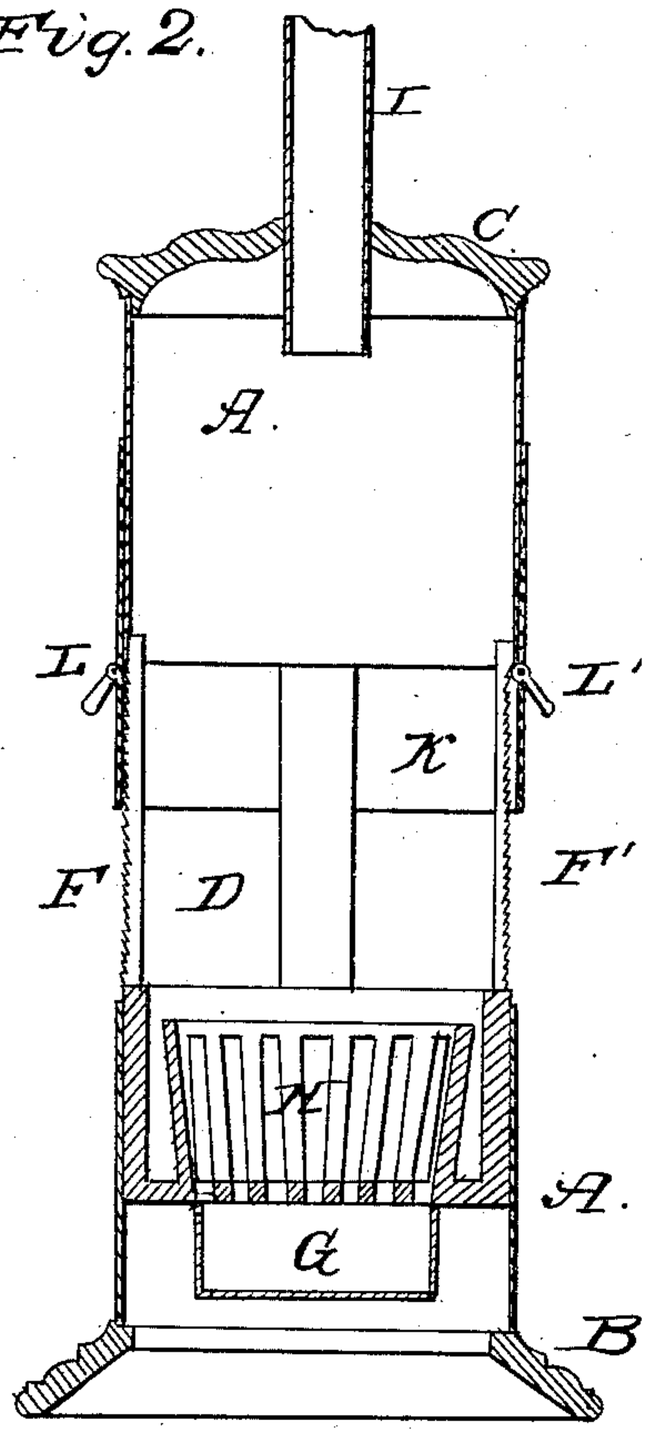


Fig. 3

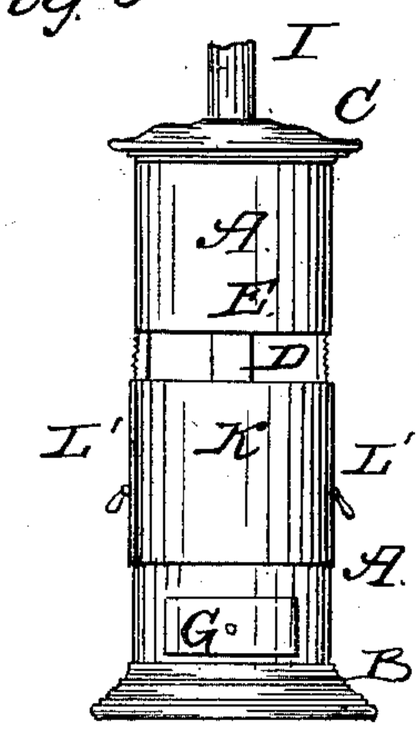
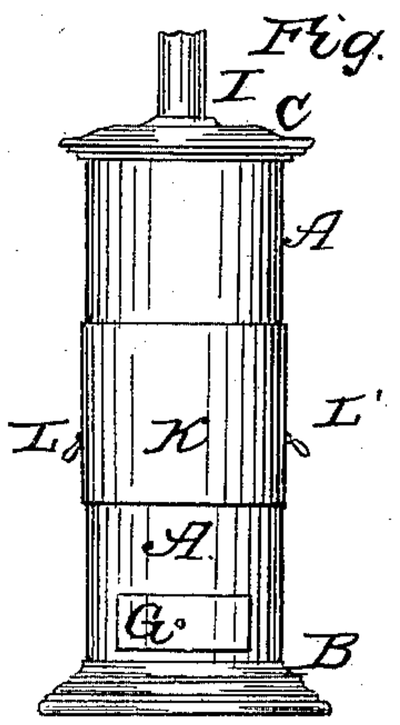


Fig. 4



WITNESSES

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JOSIAH V. MEIGS, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVED COAL OR HEATING STOVE.

Specification forming part of Letters Patent No. **44,812**, dated October 25, 1864.

To all whom it may concern:

Be it known that I, JOSIAH V. MEIGS, of Washington city, in the District of Columbia, have invented a new and useful Improvement in Coal-Burning Stoves; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making part of this specification, and in which—

Figure 1 is a view in elevation of a common stove, to which my invention is applied. Fig. 2 is a vertical central section through the same; and Figs. 3 and 4 are elevations giving views of different conditions of the stove, the changes being due to my invention.

It is the object of my invention to so vary the condition of a coal burning stove that it may be used as an air-tight stove, as one that is open above the fire-pot to receive a downward draft upon the fuel and be an open stove, or as an open stove which permits the air of the apartment in which it is used to have direct contact with the fuel in the fire-pot; and my invention consists in the use of a sliding jacket or sleeve around the body ot the stove, which can be varied in position so as to leave an opening beneath or above the jacket, or close the body of the stove to render it air-tight.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

My invention is equally applicable to either a cylindrically or polygonally shaped stove, and the body of it may be made of cast or sheet metal.

The accompanying drawings represent a common or cylindrical stove, the body A of which is made of sheet-iron, resting on a cast-iron base, B, and having a cast-iron cap, C. The cylinder A is cut away for nearly one-third of its height in the center, as at D, and in circumference so far as to leave straps E only, to preserve a connection between the top and bottom of the stove, and of a proper width to form a sufficient support to the upper portion thereof.

To the inner sides of the top and bottom of cylinder A are secured two vertical ratchet-bars, F F′. The bottom of the cylinder A receives an ash-box, G, and a circular fire-grate, H. The cylinder must be lined with some refractory coating to protect it against becoming red hot from the fuel in combustion in the grate. A smoke-pipe, I, is inserted through the cap so as to pass some distance below the inner surface of the cap, so that the heated products of combustion may reverberate in the top of the cylinder before escaping through the pipe.

It is obvious that the pipe may be inserted at the side of the cylinder near the top when desired. Around the cylinder I place a jacket or sleeve, K, of sheet metal, made to fit neatly and slide smoothly, and wide enough completely to cover the opening D of the cylinder, or that part which is cut away. Upon the two opposite sides of the jacket or sleeve K, and directly over the ratchet-bars, I fasten two pawls, L L′, which turn on pins fastened to brackets, and carry handles of greater weight than the pawls, and so that when at rest the weight of the handles will engage the pawls with the teeth of the ratchet-bars, and thus support the jacket or sleeve K at any desired height. When the position of the jacket or sleeve K is to be changed, it is only necessary to raise the handles of the pawls L L′, and raise or depress the sleeve to the point desired, and when the handles are liberated the pawls will fall into the teeth of the ratchets and hold the jacket securely in position. Thus when it is desired to have an open fire, with slow combustion, the jacket will be depressed to the position shown in Fig. 3, and the combustion will be more or less active as the opening is larger or smaller. When an open fire is desired, with more combustion, the jacket must be raised to the position shown in Figs. 1 and 2, and then it is obvious the degree of draft desired can be secured with precision by regulating the width of the opening, or, in other words, raising the sleeve. When an air-tight stove is desired it is only necessary to depress the jacket, so as to close the opening entirely in the cylinder, as in Fig. 4, and there will then be no draft either above or below the jacket K.

A register in the ash-box may be used to control the combustion and render it more or less active, as desired.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

1. A jacket or sleeve surrounding and sliding upon a stove having a central opening, substantially as described, for the purpose of rendering it an air-tight or an open stove at will, as set forth.

2. The combination of the hinged pawls L L′ with the ratchets and stove, substantially as and for the purpose set forth.

In testimony whereof I have hereunto subscribed my name.

JOE V. MEIGS.

Witnesses:
EDM. F. BROWN,
B. ROBERSON.