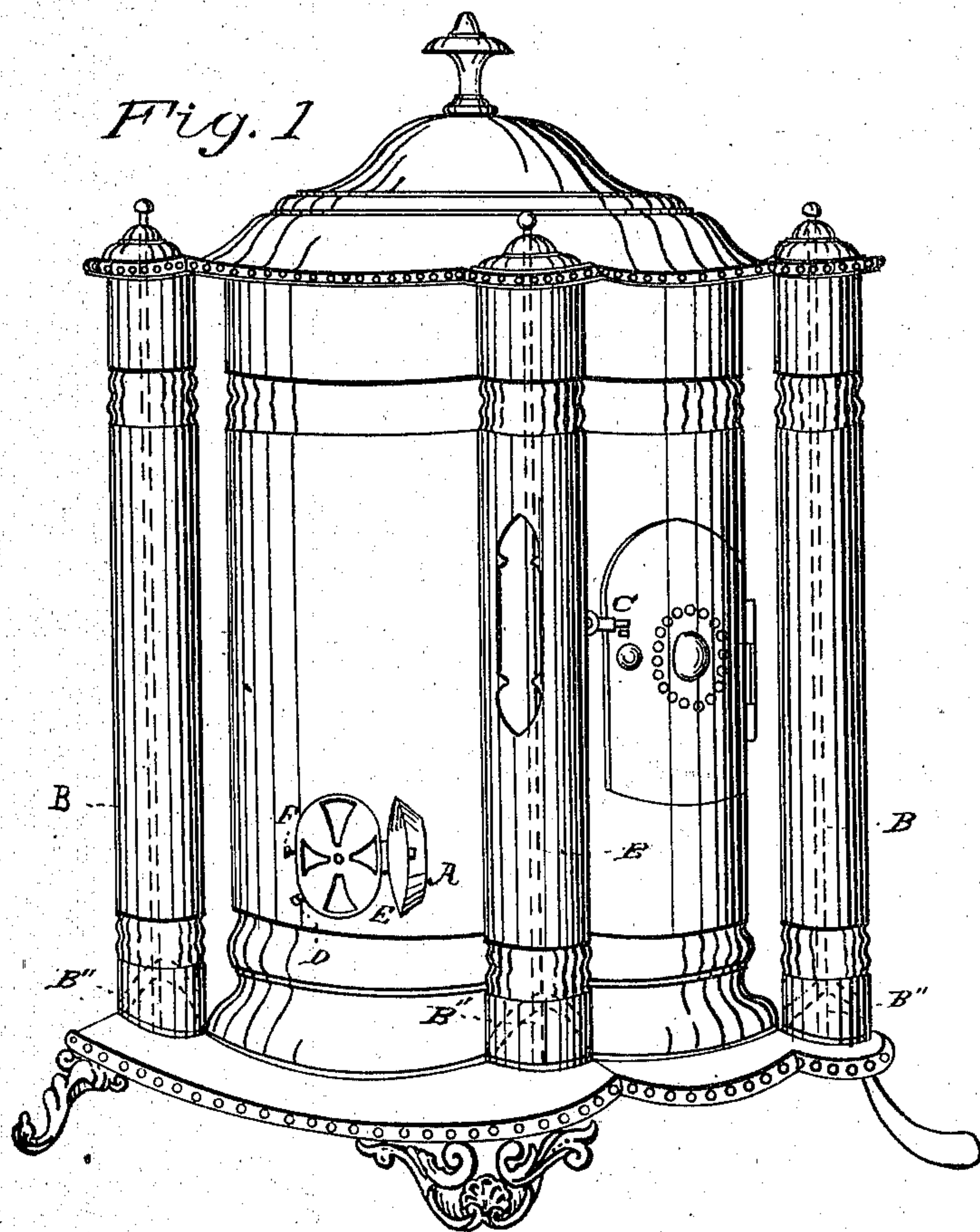
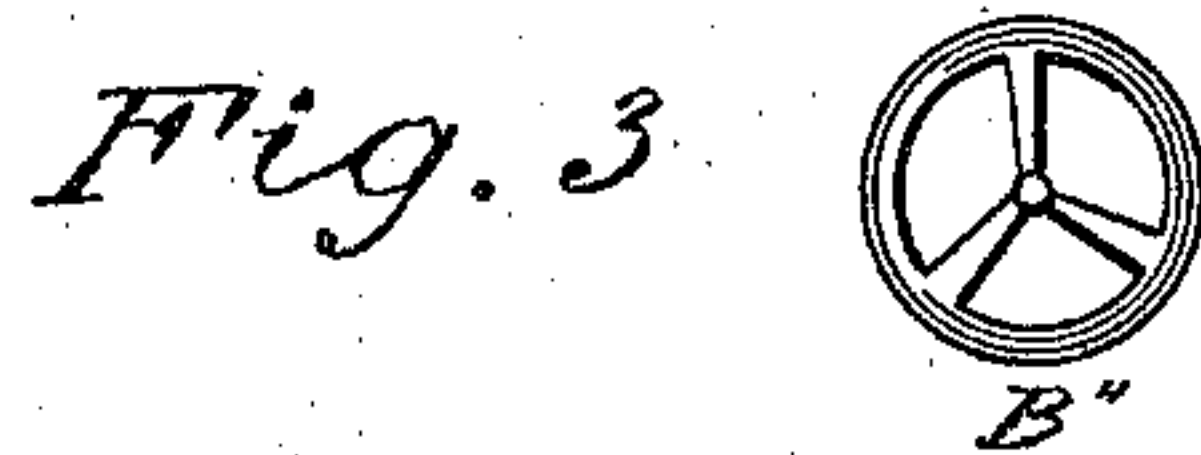
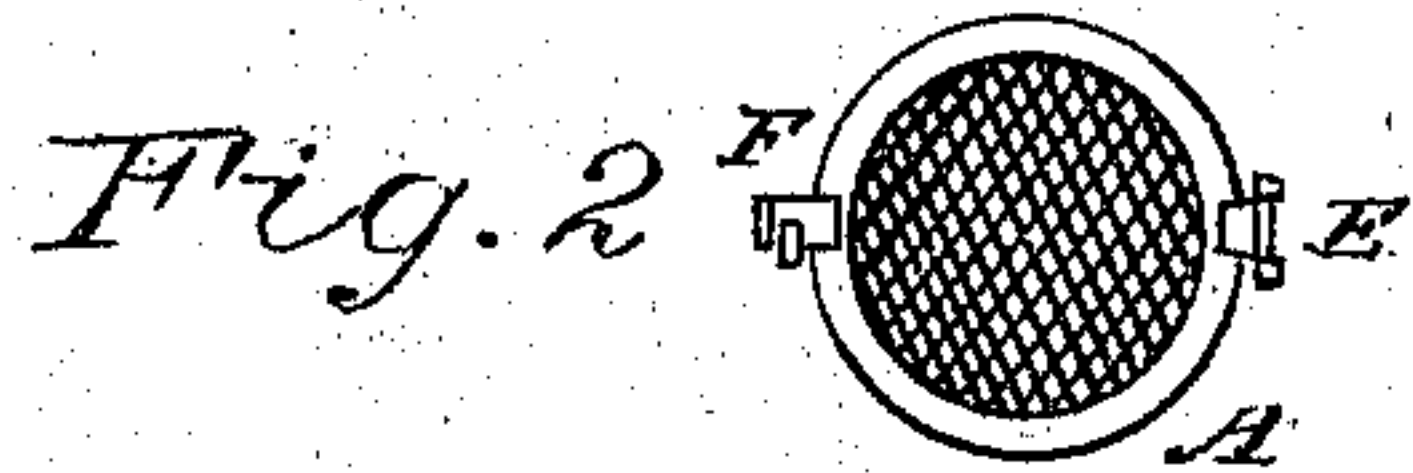


S. D. VOSE.
Heating Stove.

No. 97,732.

Patented Dec. 7, 1869.



Witnesses
Jas. N. Adams
Jm. G. Rogers

Inventor
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SAMUEL D. VOSE, OF MILWAUKEE, WISCONSIN.

Letters Patent No. 97,732, dated December 7, 1869.

COAL-STOVE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, SAMUEL D. VOSE, of the city and county of Milwaukee, in the State of Wisconsin, have invented new and useful Improvements in Constructing Stoves; and I do hereby declare the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The improvements I claim may be properly considered as appendages to common forms of construction.

The nature of my invention consists in providing a new method to catch sparks, in providing a new mode of cleaning upright flues, and in providing a new method of securing fuel-doors.

These methods are hereafter described.

Figure 1 represents a perspective view of a stove, with the several appendages shown.

Figure 2 is a front view of a screen-door.

Figure 3 is a plan of the ring-part of the flue, cleaned.

Letter A refers to the protection-door.

Letter B refers to the flue-cleaner.

Letter C refers to the safety-button.

Stoves with upright flues are in very general use, and for heating-purposes, especially in the use of wood fuel, are much approved, but the liability of small pipes to clog up has been a very serious objection, and this difficulty has hitherto been obviated only by taking the pipes out and cleaning them, or by placing loose covers on the top of the flue, into which some sort of scraper could be inserted.

The first remedy involves taking the stove apart, which needs skill and time, and is a great trouble.

In the other case, the liability of several small covers, loose on the top of a stove, to be misplaced or lost, the liability of so many crevices to smoke or to impair the draught, and the inconvenience of keeping and using a special scraper, and the want of finish which such covers betray in the general appearance of the stove, make this custom quite objectionable.

I have overcome all these difficulties, by attaching to a metal ring, of wire or cast-iron, which just-fits the inside of the flue, a wire rod, which projects through a hole in the top of the stove, just large enough to admit the wire, and on the upper end of which is affixed a small knob or handle.

By simply taking hold of this knob, and lifting it up, and letting it fall down again to its place, the soot and ashes are removed at once, the refuse falling through the ring, and discharging into the ash-chamber below.

This is an almost instantaneous process, is quite thorough, and can be performed at any moment, whether the fire be burning or not.

The improvement for catching sparks is accomplished by the use of a door, made of wire, or made by using a metal frame with a wire covering.

This door is hinged in front of the register or draught-damper, in such a way that when the wire door is open or shut, it does not interfere with the operating of the damper.

This door may be so hung, that if desirable, it may be slipped out of the hinge and removed entirely, to be replaced when wanted.

This protection-door is hinged at E, and fastens with a catch at F.

The handle of the register-damper D works in a narrow slot, in the lower edge of the door.

The door does not require to be opened, except for the removing of sparks which may accumulate, or for the purpose of igniting the fire at the front register.

Damage to carpets, and risk of fire, are wholly obviated by this simple means.

I do not claim the use of the wire itself, for protection, but simply the manner of using it.

The safety-button C is simply a small button of metal, riveted to the door-frame, capable of being turned over upon the door, and securely fastening it.

This button is not designed to be in constant use, or to supersede the ordinary turn-key, or common latch.

This button has two uses, one of which is to prevent the door from opening and losing any of the contents of the stove during transportation.

The other use is the safeguard it affords against the opening of the fuel-door, from any accidental cause, during night, or in the absence of users during the day.

To open a fuel-door, when hot, with facility, and to have the door fit the opening snugly, only a small drop for the latch is practicable; or, if a turn-key be used, by constant turning, it soon becomes liable to turn wholly round, or springs, or bends, and becomes partially or wholly inoperative, so that wood, falling asunder, or a jar on the floor, will often cause the door to fly open, which is a dangerous evil.

This button, riveted so as to make three-fourths of a revolution, when turned over, and resting on a small ledge or stop, effectually does away with the evil spoken of.

I do not claim any new device in this button, used by itself, or in the ordinary way of buttoning-dampers or ash-traps, only when conjoined with the ordinary way of fastening doors, as an extra safeguard.

What I claim, and desire to secure by Letters Patent, is herewith set forth:

1. The local ring-scraper, for cleaning the upright flues of stoves, when constructed and operated substantially as herein set forth and described.

2. The combination of a wire shield or door, A, with a draught-register, when said door is constructed and affixed as above described, and for the purpose of catching sparks.

3. The combination of a safety-button, C, when used in connection with a separate latch or turn-key, for the purposes of safety, as above described.

SAMUEL D. VOSE.

Witnesses:

JAS. N. ADAMS,
WM. G. ROGERS.