

(No Model.)

W. J. KEEP.
STOVE.

No. 368,770.

Patented Aug. 23, 1887.

Fig. 1.

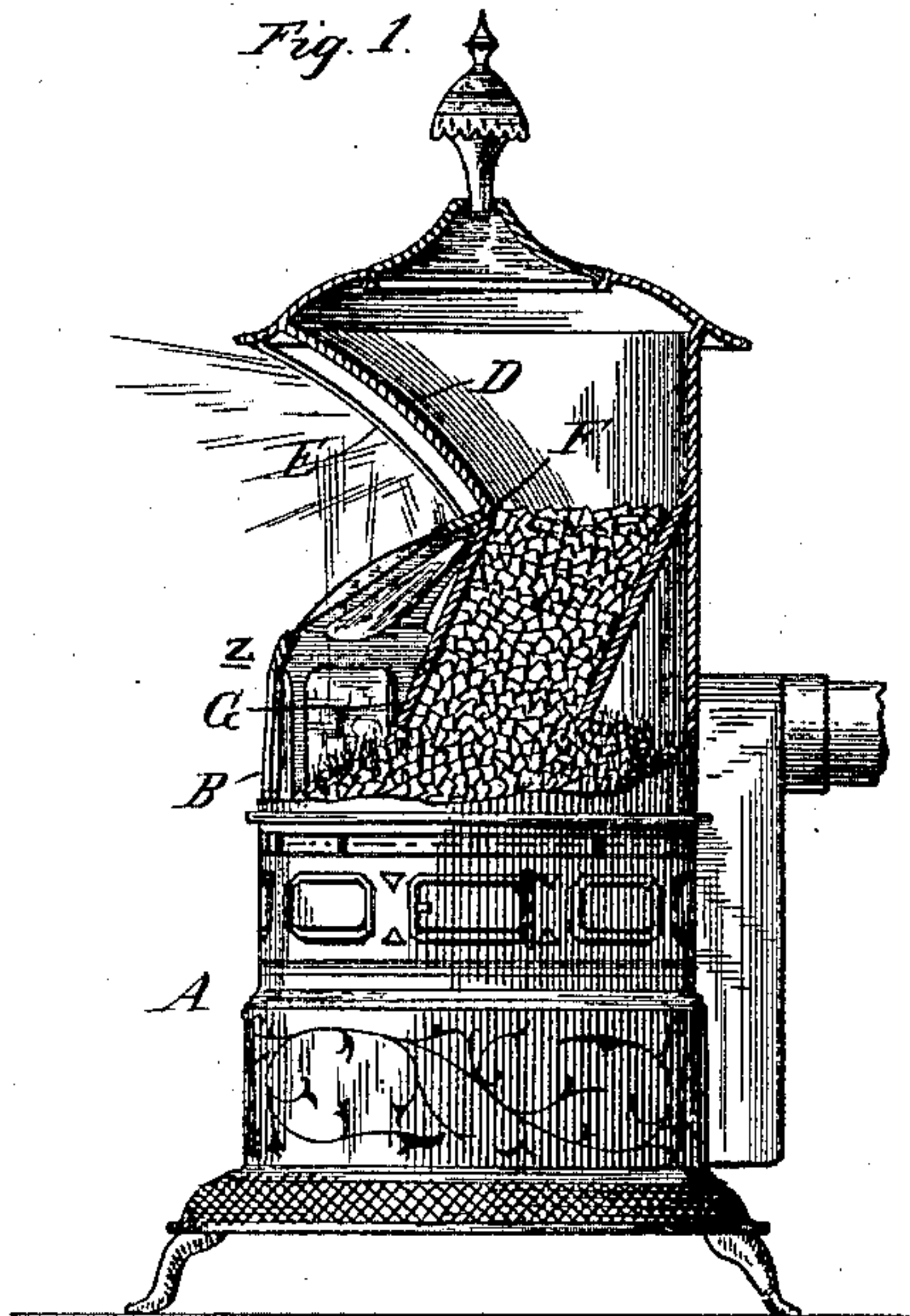


Fig. 2.

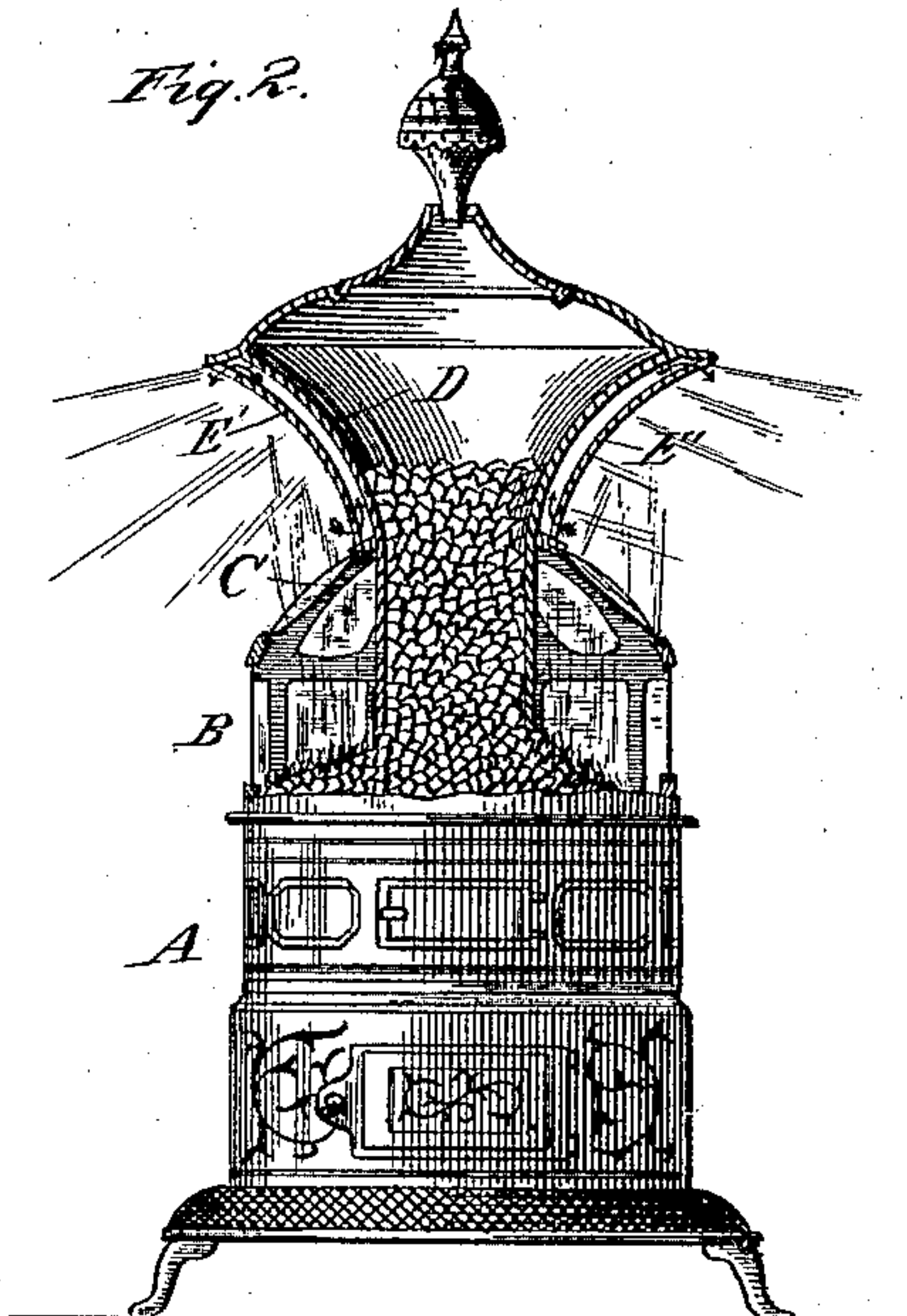


Fig. 3.

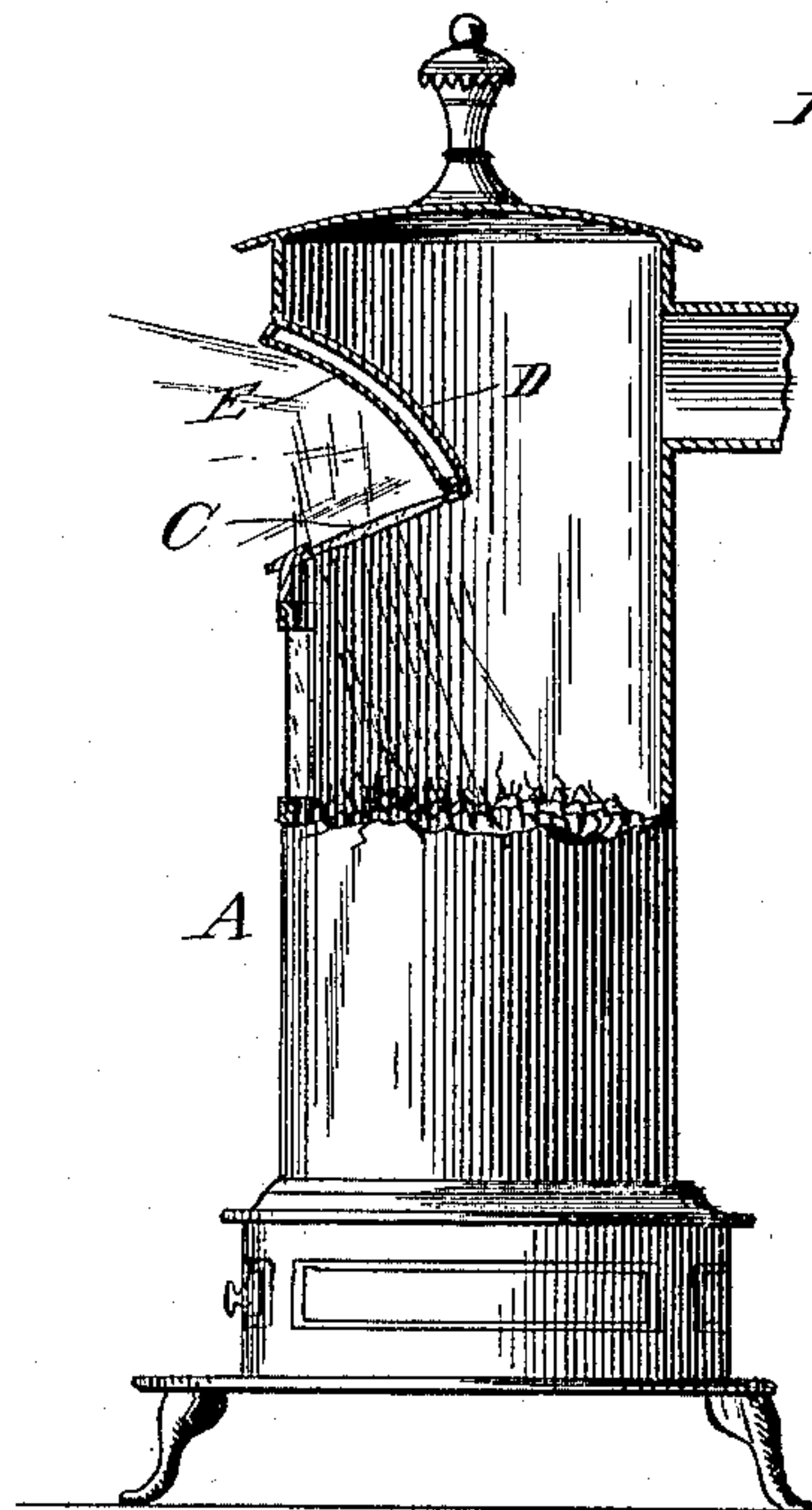


Fig. 4.

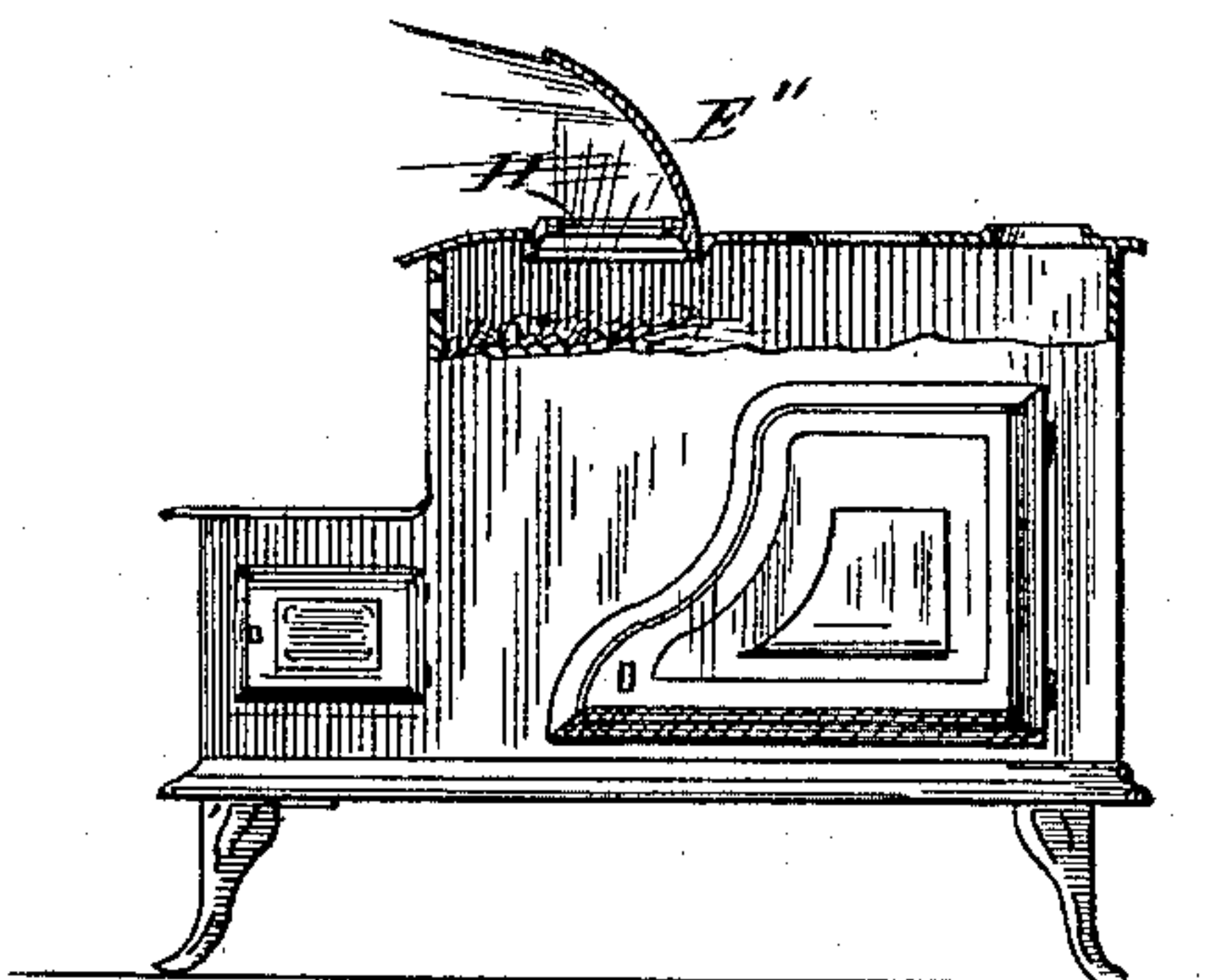
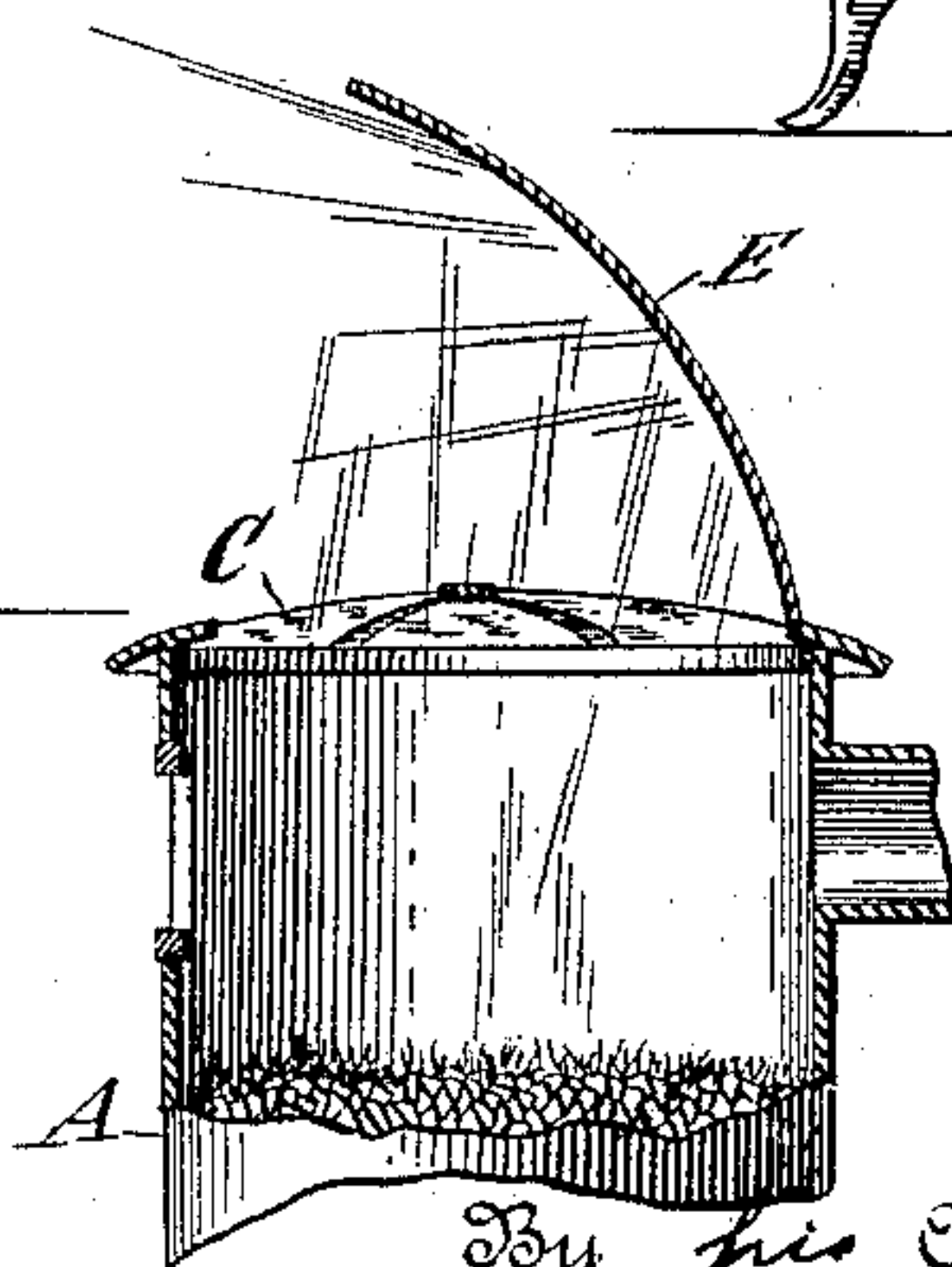


Fig. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM J. KEEP, OF DETROIT, MICHIGAN.

STOVE.

SPECIFICATION forming part of Letters Patent No. 368,770, dated August 23, 1887.

Application filed December 17, 1886. Serial No. 221,874. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. KEEP, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented a certain new and useful Improvement in Stoves, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

Figure 1 represents a magazine-stove constructed according to my improvement, partly in section; Fig. 2, a similar view of a modification; Fig. 3, an elevation of a cylinder stove constructed according to my improvement, and Fig. 4 represents a portion of a cook-stove provided with my improvement. Fig. 5 represents a portion of another form of cylinder stove.

This improvement relates more particularly to that class of stoves provided with reflectors to deflect light and heat; and the invention consists, mainly, in the attachment to stoves of a reflector in such a position that the heat or light will first pass through the walls of the stove to a reflector or reflectors, and in certain details of construction and arrangement of parts, whereby the beforesaid main feature is carried out, as more fully hereinafter described, and then definitely pointed out in the claims.

In carrying out my invention I prefer to use a stove such as is shown in Fig. 1. The lower part, A, of this stove up to the point marked *a* may be of any approved pattern, as it is only above this point that my invention begins, and I shall therefore not give any description of this part, as it is unnecessary.

Above the part A, I have the usual mica doors, as shown at B, and above that again is an inturned section, C, preferably slightly convex, although it may be flat, if desired, and either inclined or horizontal, and having openings filled with mica. Above this inturned section is an overhanging section, D, in front of which is a reflector, E, preferably set a slight distance away from the same, so as to leave an air-space between the two to prevent the reflector becoming heated and discolored. This may simply be an air-space, as shown in Fig. 1, or it may have an opening at top and bottom, as shown in Fig. 2, to form a flue which will keep the reflector still cooler.

I prefer to extend the inturned section C nearly or quite to the center of the stove, so as to obtain as large an amount of aperture for the mica lights as possible. To do this the front wall of the magazine is carried back at the point where the mica diaphragm meets it, as shown at F, and then extended forward again at G, so as to deliver its coal in the center of the fire-pot.

In some cases, in addition to the reflector in front, as shown in Fig. 1, I extend the inturned section C around on each side, as shown in Fig. 2, and place reflectors E' at the sides, as shown, which may be arranged on two, three, or all four sides, as preferred.

I do not limit myself to magazine-stoves such as are shown in Figs. 1 and 2; but the reflecting principle may be carried out in many other ways, which will be obvious to stove-manufacturers. For instance, in an ordinary cylinder stove the door may or may not be filled with mica at all, but may be an ordinary metal door and a mica cover, C, run in over the fire, as shown in Fig. 3, and the curved overhanging plate D extended forward to connect with the front wall of the stove; or I may provide a stove of cylindrical or other form with a top having openings for mica extending nearly or entirely over the top and set a reflector on the back of said top, as shown in Fig. 5.

The same feature may be applied to a cook-stove by providing in lieu of the ordinary covers others provided with mica-filled openings, as shown at H, and securing thereto a reflector, E''.

Instead of the face of the section C being curved, it is obvious that it may be made with a plane surface, if desired.

It is also obvious that transparent or translucent materials other than mica may sometimes be used in lieu thereof, and I should consider any such transparent or translucent materials as equivalents for the mica referred to in the specification and the following claims.

I deem it important that the mica be placed between the reflector and the fire, as by this means the reflector is kept clean and bright much longer, requires less cleaning, and is in less danger of injury by the heat of the fire.

Having thus shown what I at present consider the preferable ways of carrying out my

invention, but without intending to limit myself thereto, I claim as new—

1. The combination, in a stove, of an opening over the fire-pot, through which the heat and light can radiate upward into the room, a reflector arranged over such opening to deflect the heat-rays, and having its upper edge overhanging and projecting forward over the major part of the opening, and a screen of mica or equivalent material to prevent the discoloration or injury of the reflector by smoke and gas, substantially as described.

2. The combination, in a stove, of a vertical section, as A B, inclosing the fire-pot, an inturned section, C, arranged over the fire-pot, a reflector, E, arranged above said inturned section, and mica interposed between the fire and reflector, substantially as described.

3. The combination, in a stove, of a vertical section, an inturned section, C, having mica-filled openings, an overhanging section, D, and a reflector set in front of said overhanging section, and with a space between the two, substantially as described.

4. The combination, in a stove, of a vertical section, an inturned section, C, having openings filled with mica, an overhanging section, D, and a reflector set in front of said section D, having an air-flue between section D and the reflector to keep the reflector from discoloration, substantially as described.

5. The combination, in a stove, of a vertical section, an inturned section, C, having openings filled with mica, and multiple reflectors, as E' E', arranged to diffuse and spread the rays of light and heat in various directions, substantially as described.

6. The combination, in a stove, of a fire-pot, a substantially vertical section surrounding the said fire-pot, an inturned section extending over the fire-pot to near the center thereof and provided with mica openings, and an overhanging section running from the inturned section to the front of the stove, and the whole adapted to serve with a reflector arranged over the fire-pot, substantially as described.

7. The combination, in a stove, of a substantially vertical section surrounding the fire-pot, an inturned section having mica-filled openings extending over the fire-pot to near the center thereof, and an overhanging section running from the inturned section to the front of the stove, and the whole adapted to serve with a reflector arranged over the fire-pot, substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses, this 15th day of December, 1886.

WILLIAM J. KEEP.

Witnesses:

WILLIAM H. SEXTON,
JOHN M. DWYER.