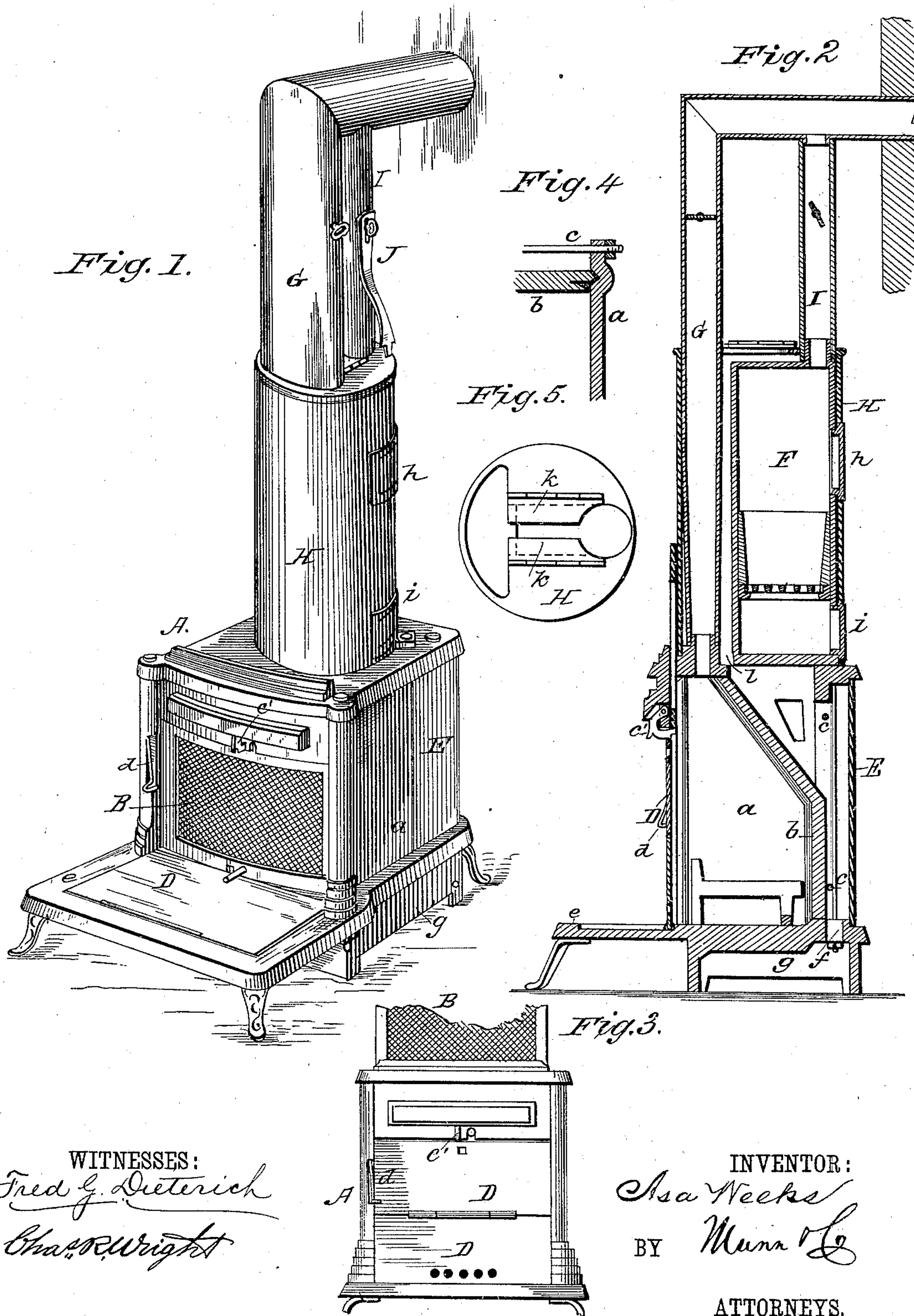


(No Model.)

A. WEEKS.
VENTILATING HEATER.

No. 370,580.

Patented Sept. 27, 1887.



WITNESSES:
Fred G. Dieterich
Chas. Wright

INVENTOR:
Asa Weeks
BY *Munn & Co*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

ASA WEEKS, OF MINNEAPOLIS, MINNESOTA.

VENTILATING-HEATER.

SPECIFICATION forming part of Letters Patent No. 370,580, dated September 27, 1887.

Application filed March 23, 1887. Serial No. 232,186. (No model.)

To all whom it may concern:

Be it known that I, ASA WEEKS, of Minneapolis, in the county of Hennepin and State of Minnesota, have invented a new and useful
5 Improvement in Ventilating-Heaters, of which the following is a specification.

The object of my invention is to increase the heating capacity of stoves, and also to so construct them that they will thoroughly ventilate the room in which they are placed.

The invention consists of an auxiliary stove mounted on a lower stove and surrounded by a jacket.

The invention also consists in a combined
15 open and closed stove, the open stove being provided with a casing or jacket at its rear, and the closed stove mounted on the open stove and provided with a casing or jacket inclosing it and the pipe of the open stove.

20 The invention still further consists in the peculiar construction and novel arrangement of parts, as hereinafter fully described, and pointed out in the claims.

Figure 1 is a perspective view of my improvement with screen down. Fig. 2 is a longitudinal section with the screen elevated and the blower raised. Fig. 3 is a detail front view of the same. Fig. 4 is a sectional view of a portion of the open stove, and Fig. 5 is a
30 plan view of the casing surrounding the closed stove.

Similar letters of reference indicate corresponding parts in all the figures.

Referring to the drawings, A represents an
35 open stove for either wood or coal. The sides *a* and back *b* of the stove may be formed of a single casting, if desired; or it may be formed of separate pieces, as shown in the drawings, the parts being held together by rods *c*. When
40 made of two pieces, care should be taken that the parts fit tightly. For this purpose I prefer to form the edges of the back *b* with a groove and fill the same with cement, as shown in Fig. 4. Sliding in ways in the top and
45 sides of the front of the stove A, I arrange a screen, B, for preventing the escape of sparks into the room. The screen is held raised by means of a catch, *c'*, pivoted to the stove and engaging the lower edge of the screen when
50 raised.

The hearth *e* of the stove is recessed, and to

it is hinged the blower D, which is made in two sections, hinged together and adapted to fold, when not in use, in the recess of the hearth. The blower D is provided with draft-
55 apertures in its lower part, and is held in vertical position by means of a spring-catch, *d*, secured to the side of the stove and adapted to spring over the edge of the blower when raised.

The bottom of the stove projects beyond the back *b*, and in grooves formed therein is secured a casing or jacket, E; or the jacket can be secured in any other suitable manner. The part of the bottom behind the back and within
65 the casing E is provided with an aperture, *f*, and to the under side of the bottom is secured an air-conduit, *g*. The conduit extends down to the floor, and under circumstances as hereinafter described will have its opposite sides
70 cut away, as shown.

On the stove A, I mount the stove F, the top of the stove A serving as the bottom of the stove F. The stove F is provided with the door *h*, for supplying fuel to it, and with the
75 door *i*, for permitting the removal of ashes, as usual. Surrounding the stove F and the pipe G of the stove A is the casing or jacket H. The casing or jacket H is provided with openings in its sides corresponding to the doors *h i*
80 of the stove F, to permit opening the said doors.

The top of the casing or jacket H is provided with openings in its upper end, to permit the passage of the pipe G of the stove A
85 and the pipe I of the stove F. The upper end of the said casing is also provided with an opening which is partially closed by hinged covers *k*. This opening may, if desired, be separate and distinct from the opening through
90 which the pipe I passes; or it may be an extension of the said opening, as shown in the drawings. The pipe G of the stove A extends into the chimney, and the pipe I of the stove F is connected with the under side of the pipe
95 G. The top of the stove A is provided with orifices *l* within the casing or jacket H.

In a stove constructed as above described, when arranged over a cold-air pipe, the air entering said cold-air pipe will pass through
100 the conduit *g* up between the casing or jacket E and the stove A, thence up through the cas-

ing H and out through the opening in the top into the room, and thence down into the stove A and into the chimney through pipe G.

Instead of arranging the stove over a cold-
 5 air pipe, the air may be taken from the room, in which event the opposite sides of the conduit *g* will be cut away to permit the air in the room to enter the same. It will thus be
 10 seen that the air, being compelled to pass around the stove F and the pipe G of the stove A, will be thoroughly heated before escaping into the room, and that there will be a constant circulation of the air, thereby affording an ef-
 15 fectual ventilator.

The stoves can both be used at the same time, or either of them, as may be found desirable.

By opening the covers *k* articles may be heated on the top of the stove F.

J is a lifter for operating the screen and
 20 blower, having a slot in one end.

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

1. The combination, with a stove, of an aux-
 25 iliary stove mounted thereon, and a casing surrounding the auxiliary stove, substantially as herein shown and described.

2. The combination, with a stove and its pipe, of an auxiliary stove mounted thereon,
 30 and a casing surrounding the auxiliary stove and the pipe of the lower stove, and having an opening in its upper portion, substantially as herein shown and described.

3. The combination, with an open stove hav-
 35 ing an air-space at its back, of a closed stove on the open stove, and a casing surrounding the closed stove and pipe of the open stove and communicating with the air-space at the
 40 back of the open stove, substantially as shown and described.

4. The combination, with an open stove hav-
 ing an extended and apertured rear bottom portion and an apertured top and a jacket on the extended bottom portion, of a closed stove
 45 on the top of the open stove, and a jacket or casing surrounding the closed stove and pipe of the open stove, and provided with apertures for the passage of the pipes of both stoves, substantially as herein shown and described.

5. The combination, with an open stove hav-
 50 ing an apertured top and provided with an air-conduit on its bottom and back and a closed stove on the open stove, of a casing surrounding the closed stove and the pipe of the open stove, and provided with an aperture
 55 in its top partially closed by hinged covers, substantially as herein shown and described.

6. The combination, with a stove having apertured top, an air-space at its back, and an air-conduit in its bottom, of an auxiliary stove
 60 mounted thereon and a jacket surrounding the auxiliary stove and the pipe of the lower stove, and provided with openings for the passage of the stove-pipes and for escape of heated
 65 air into the room, substantially as herein shown and described.

7. The combination, with an open stove hav-
 ing a recessed hearth, of a sectional and hinged
 70 blower adapted to fold in the recessed hearth when not in use, substantially as herein shown and described.

8. The combination, with an open stove hav-
 ing a recessed hearth, of a sectional and hinged
 75 blower and the spring-catch *a*, for locking the same in a vertical position, substantially as herein shown and described.

ASA WEEKS.

Witnesses:

H. E. BROWN,
 F. E. SAWYER.