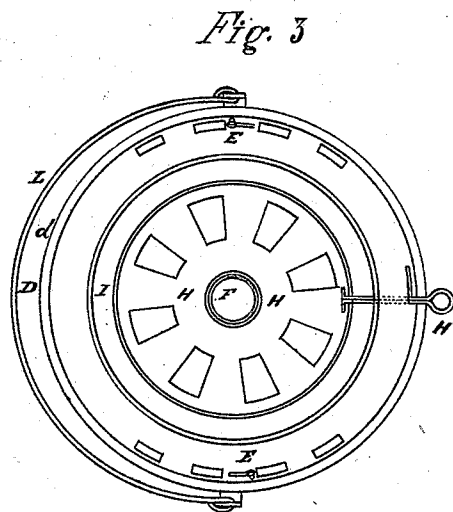
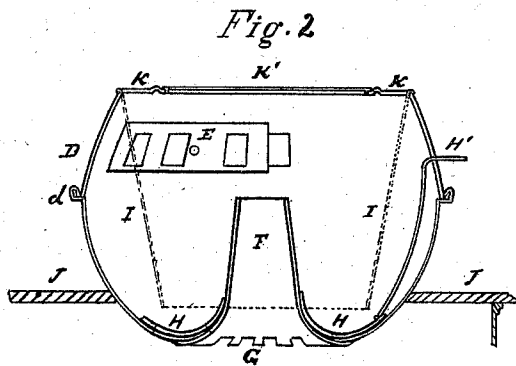
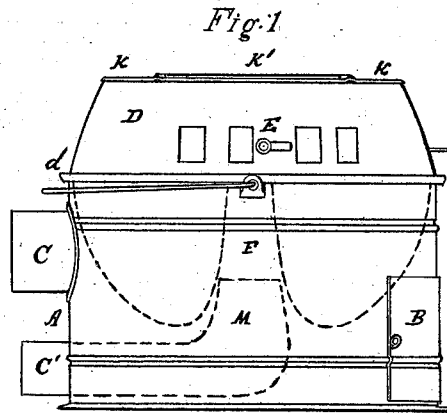


W. A. BARLOW.
Summer Stoves.

No. 140,870.

Patented July 15, 1873.



WITNESSES.

John H. Lawlor
F. F. Warner

INVENTOR.

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WILLIAM A. BARLOW, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN SUMMER STOVES.

Specification forming part of Letters Patent No. **140,870**, dated July 15, 1873; application filed May 19, 1873.

To all whom it may concern:

Be it known that I, WILLIAM A. BARLOW, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Summer Stoves, of which improvements the following is a full, clear, and exact description, which will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawing forming a part of this specification, and in which—

Figure 1 is a side elevation of my improved stove; Fig. 2, a vertical central section of a part of the same arranged upon a stove; and Fig. 3, a top or plan view of the parts shown in Fig. 1.

Like letters of reference indicate like parts.

The object of my invention is to improve the construction and operation of summer stoves; and to that end my invention consists in certain novel features, hereinafter particularly described and set forth, relating to the construction of the stove.

In the drawing, A represents the ash-pot, which is provided with a door, B, and with a smoke or draft flue, C and C'. D is a removable air-chamber, provided with a shoulder, *d*, arranged to suspend the chamber in the ash-pot. The chamber D is so constructed that a considerable space will exist between it and the ash-pot from the shoulder *d* downward, and between it and the bottom of the ash-pot, as indicated by the dotted lines in Fig. 1. E is a damper in the chamber D, and F is a flue communicating with the said chamber and with the ash-pot. The flue F extends to the central part of the chamber, as shown. G is the slotted or grated bottom of the chamber D, and H is a shaker or plate with orifices adapted to register with opening in G, and arranged either over or under the the slotted or grated bottom G, and operated by means of the arm H' attached thereto and extending through a slot in the chamber D. I is a bottomless fire-pot suspended on the rim of the chamber D, and extending nearly to the shaker. A considerable space also exists between the chamber D and the fire-pot, as indicated by the dotted lines in Fig. 2. J rep-

resents the top of an ordinary stove having an opening in its top, and the chamber D and its attachment are represented in Fig. 2 as resting in the opening of the top J, the lid of the opening being removed for that purpose. K is a cover on the part D, and K' is a removable lid covering an opening in the cover K. L is a bail attached to the part D. M is a removable pipe, constructed to fit into the lower mouth of the flue A and into the flue C', as represented by the dotted lines in Fig. 1.

The coal or fuel is arranged in the fire-pot, at a depth not to cover the top of the flue F, and lighted. When the cover K K' is in its place, and the chamber D arranged on the ash-pot, the draft is through the damper E, through the space between the wall of the chamber D and the fire-pot, upward through the fuel, into and through the flue F, and from thence through the ash-pot into the smoke-flue or chimney C; it being understood that the construction and arrangement of the shaker H is such that the opening in the slotted or grated bottom G may be thereby opened or uncovered when the stove is being used. When the handle H' is moved back and forth the fuel is shaken and the ashes drop through the openings in the grate, which are to a greater or less extent uncovered while the shaker is being operated. The surplus ashes in the ash-pot may be removed through the door B. When the chamber D is arranged in the stove in the manner shown in Fig. 2 the draft is the same as already described, excepting that the air, after leaving the flue F, enters the stove, on which the chamber D is arranged.

By arranging the damper E in the upper part of the chamber D, the air which enters the said chamber is heated by contact with the outside of the fire-pot, and thus enters the fire-pot at a comparatively high temperature. By conducting the air upward through the fuel the top of the stove is more readily heated, and heated to a greater degree, than if the draft were downward through the fuel, and the stove is thus made more serviceable for heating sad-irons, &c.

When the pipe M is employed the flue C and the damper E may be closed and the fire-

pot removed, and the door B opened to allow a draft. The draft will then be through the grate and fuel, and through the ash-pot A and pipe M into the flue C', and my device can thus be used as a heating stove.

Having thus described the nature and object of my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The chamber D, provided with a damper, the central flue, and the registered or grated annular bottom G H, all combined to operate in the manner set forth.

2. In combination with the air-chamber D

of the summer stove having the central draft-passage and the annular grated or registered bottom, the bottomless fire-pot I, substantially as shown and described.

3. In a summer stove, the chamber D and central escape-flue F, and annular grated or registered bottom, in combination with the escape-flue M C', substantially as shown and described.

WILLIAM A. BARLOW.

Witnesses:

N. C. GRIDLEY,
F. F. WARNER.