

BIBB & ANGEE.
Fireplace Stove.

No. 32,176.

Patented April 30, 1861.

Fig. 2

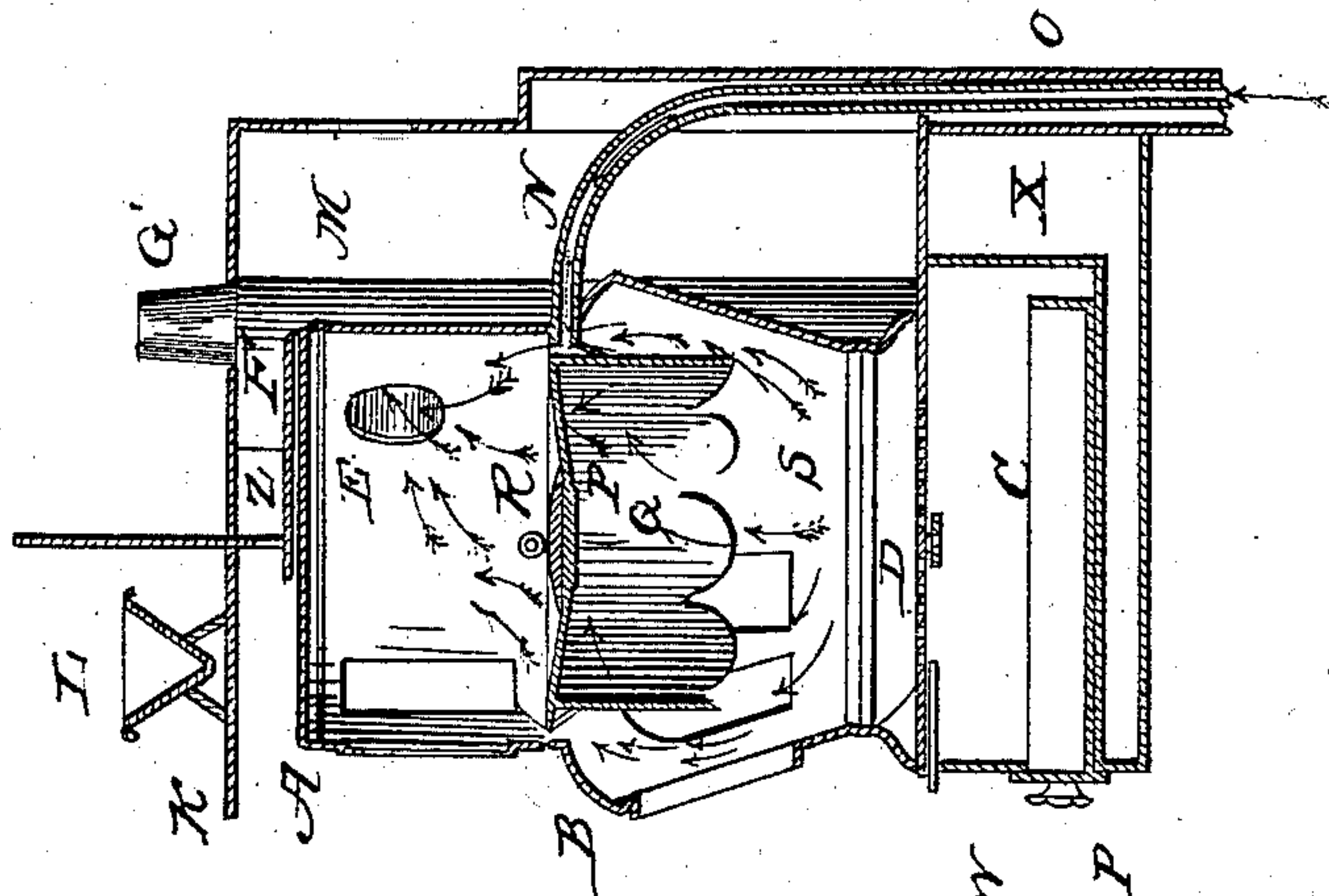


Fig. 3

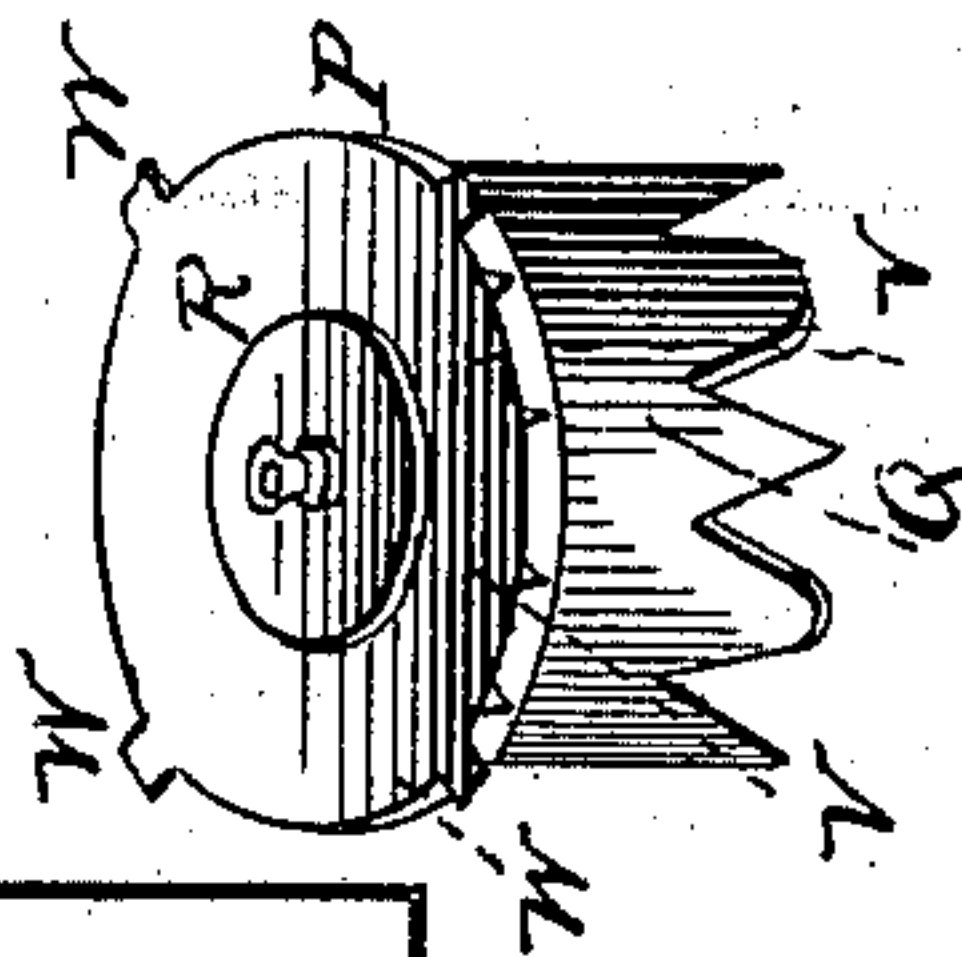
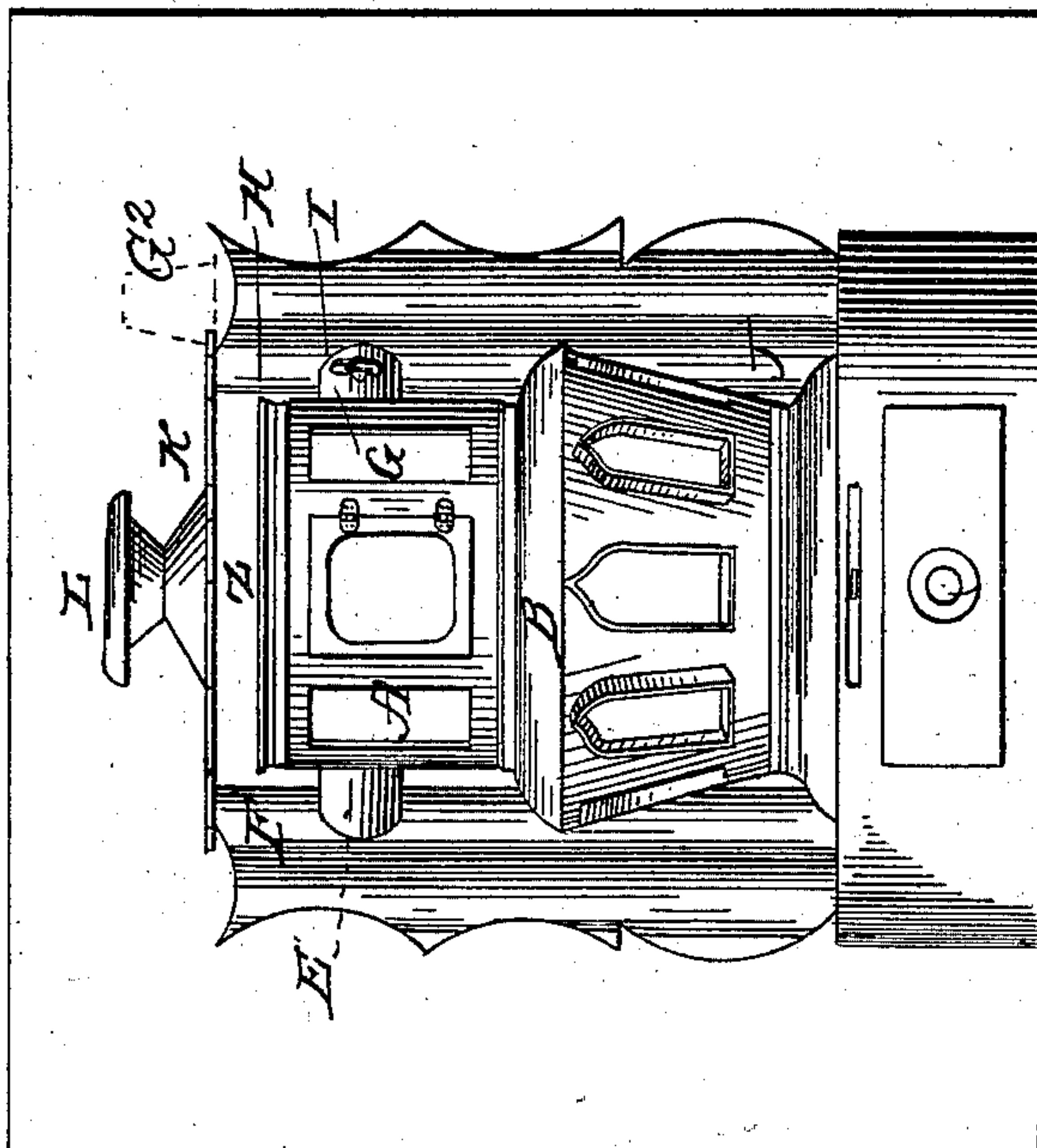


Fig. 1



Witnesses
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UNITED STATES PATENT OFFICE.

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STOVE.

Specification forming part of Letters Patent No. 32,176, dated April 30, 1861; Reissued June 11, 1872, No. 4,941.

To all whom it may concern:

Be it known that we, B. C. BIBB and H. AUGEE, of the city of Baltimore and State of Maryland, have invented a new and useful Improvement in Fireplace-Stoves; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1, represents a front view, Fig. 2, a vertical central section, and Fig. 3, a perspective view of a detached portion of a stove.

Similar letters of reference, in each of the several figures indicate corresponding parts.

The nature of our invention consists 1st, in the relative arrangement of a pedestal stove, its front half projecting beyond the mantel front into the room, air heating space, hot air columns and conical pipe, in combination with a deflector and urn supporter extending from the mantel front.

It consists 2nd, in a pedestal stove, as hereinafter to be described, a suspended pot combined with a peripheric hollow space, perforations and cold air pipe, all the parts constructed and arranged in relation to each other substantially as hereinafter set forth.

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

The stove consists of a conical pedestal extended toward the top as seen at B, and a cylindric top A.

D, is the grate at the bottom of the pedestal and C, the ash-box below it.

The rear half of the stove is set in the fireplace casing M, and the front half of the stove projects beyond the mantel front, as seen in Fig. 2. This arrangement of the stove causes it to be much more effective toward heating the room than if the whole stove or the greater part of it were set back in the fire place casing. A horizontal plate K, projects from the mantel front, as seen in Fig. 2, above the top of the projecting part of the stove. This projecting plate K, serves the double purpose of supporting the urn L, and of deflecting the heat so as to protect the shelf of the mantel piece from being injured by it.

A plate Z, arranged on top of the rear half of the stove serves as additional heat-

ing surface and prevents the heat of the top part of the stove from immediate contact with the top of the fire-place casing. Without this plate Z, the top of the fire place casing would be heated to a considerable degree and much of the heat would thus escape into the chimney.

Two short pipes E, G, connect the cylindric part A, of the stove with two vertical columns F, H, arranged in the casing M. The top of one of these F, is closed, its lower end communicating with the space X, behind the ash box. The lower end of the other column H, communicates also with the space X, and its upper end extends through the top of the casing M, into the chimney and terminates in a conical pipe G', narrow at the top. The short pipe G is provided with a damper I, and the bottom end of column H, with a slide valve J. When the damper I, is closed and valve J, open, the heat, smoke &c. from the interior of the stove will pass through pipe E, and column F, into space X, and thence through column H, and conical pipe G', into the chimney. But, when the damper I, is open and valve J, closed, the draft will pass from the interior of the stove immediately through pipe G, column H, and pipe G', into the chimney. Thus the circulation of the heat can be regulated.

A pot Q, is suspended by means of flanges W, in the upper part of the pedestal B, leaving a circular open space between its outer periphery and the inner surface of the stove through which space the gases and products of combustion can find their way from the pedestal into the cylindric top part of the stove, as indicated by arrows U, U.

The top of the pot is closed by a plate provided with a hole and cover R, in the center, and is surrounded by a peripheric hollow space P, perforated as seen in Fig. 3, at V. A pipe N leads from this peripheric hollow space through the channel O, out into the open air. The channel O serves to admit fresh air from the outside into the fire place casing, where it comes in contact with the stove and is heated before entering the room.

When the fire is to be started, the pot cover R, is removed so as to cause the draft to be direct. When the fire is fairly burning, the cover R, is replaced. The flames will be deflected by the closed top of the pot

and thus be caused to pass down the inside and up the outside of the pot, and up around the peripheric hollow space P, as indicated by arrows U, U, and the fresh air
 5 issuing from the perforations V, will mingle with the flames and thus be very effective toward increasing the combustion of the partially ignited gases.

The old method of introducing air from
 10 the outside of the stove through perforations made in the periphery of the stove instead of through the space P, and pipe N, as above described, presents the disadvantage that by the strong draft going on through
 15 said perforations, the part of the stove near these perforations is kept comparatively cool. This difficulty is obviated by arranging the space P, around the pot and introducing the fresh air through pipe N, as set
 20 forth.

What we claim as our invention and desire to secure by Letters Patent, is—

1. The relative arrangement of a pedestal

stove A, B, its front half projecting beyond the mantel front into the room, air-heating
 25 space Z, hot air columns F, H, and conical pipe G', in combination with a deflector and urn supporter K, extending from the mantel front, substantially as and for the
 30 purposes set forth.

2. The arrangement of the cold air pipe N, so that it receives its supply from the outside of the building in the manner herein shown and described, in combination with
 35 a peripheric hollow chamber P, having perforations V, and the suspended pot Q; all the parts constructed and arranged in the relation to the combustion chamber and to the hot air chamber of a fire place or pedestal stove as described and represented, for
 40 the purpose set forth.

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Witnesses:

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