

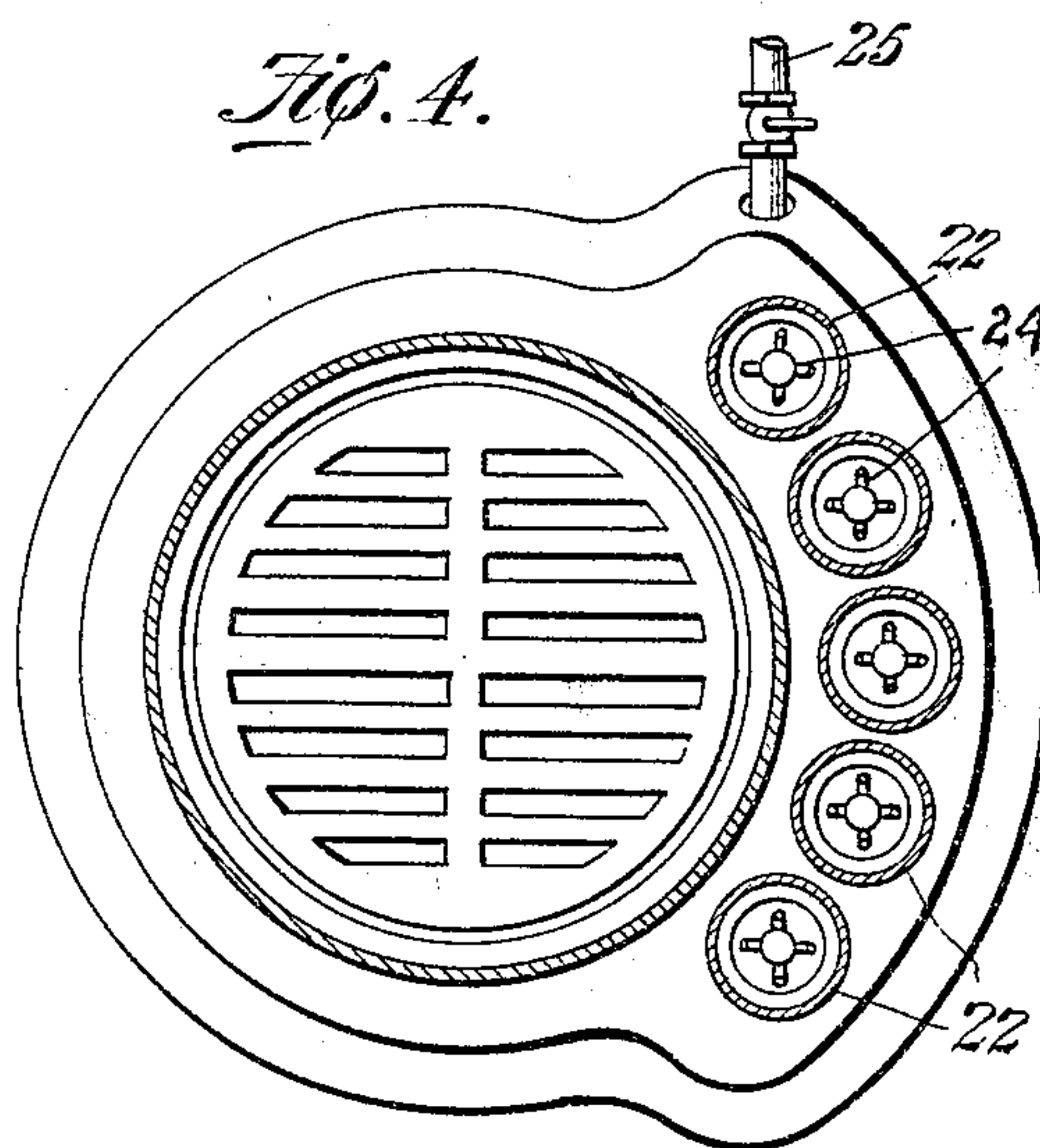
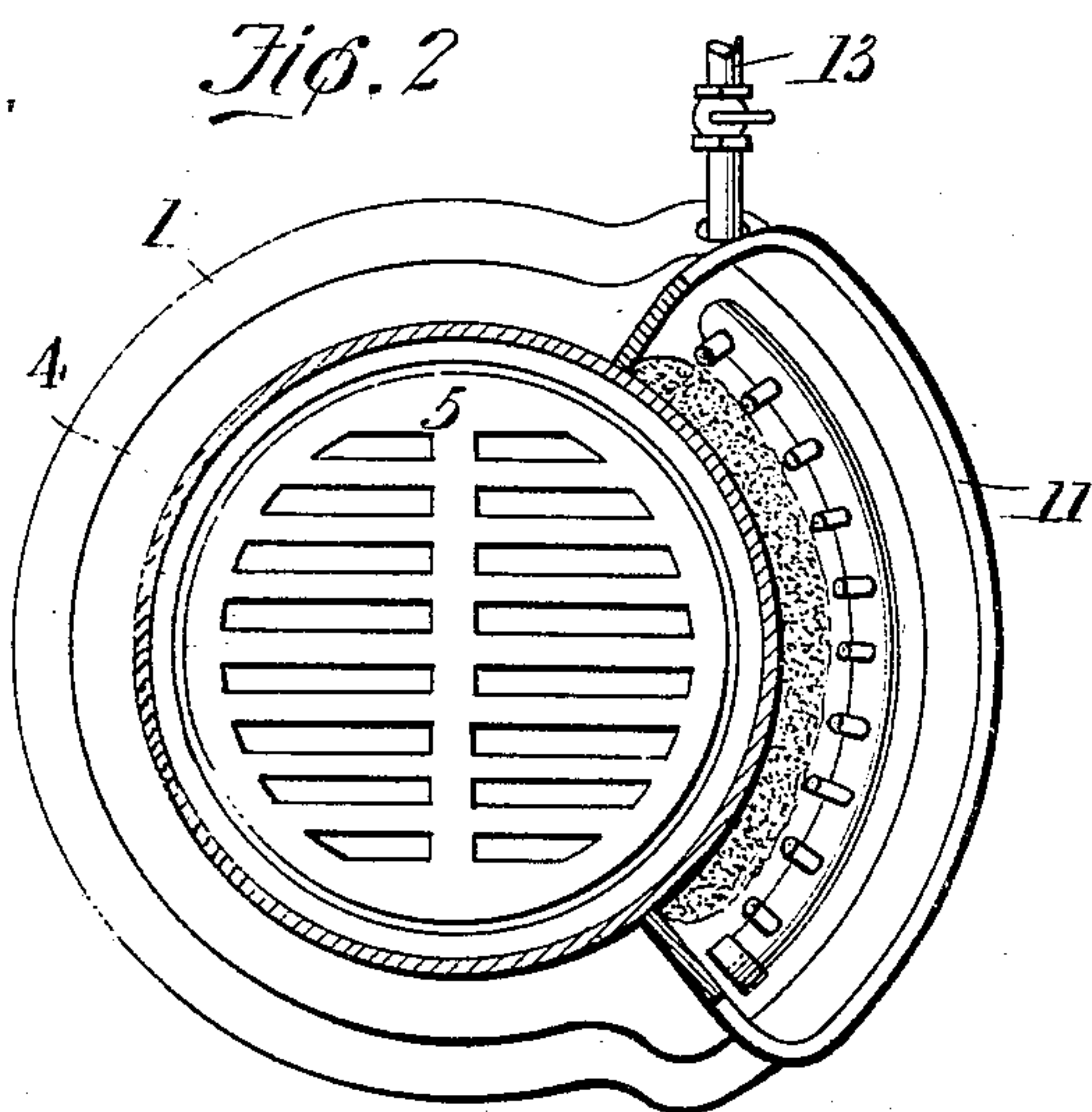
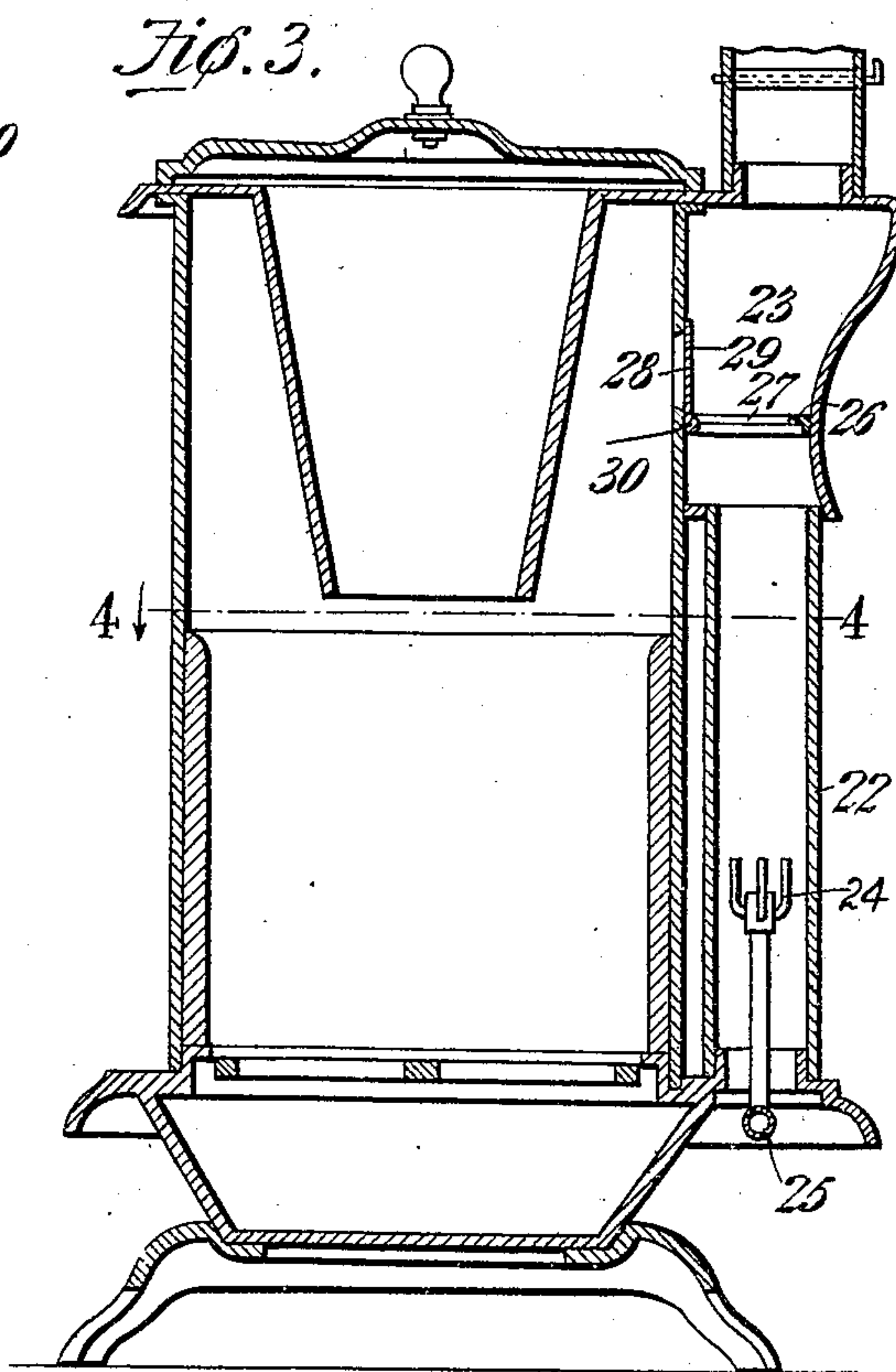
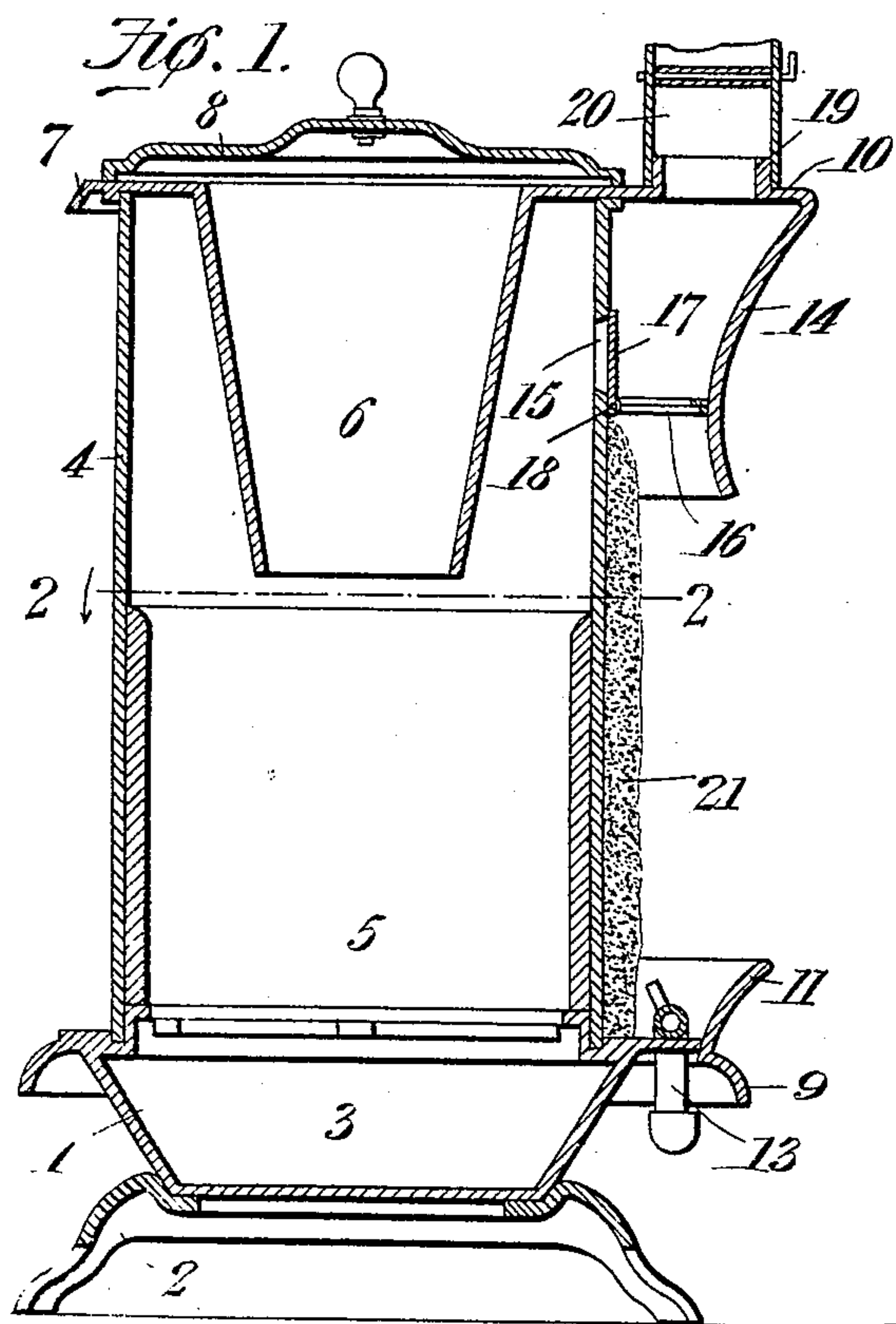
No. 773,799.

PATENTED NOV. 1, 1904.

A. A. LITTLE.  
HEATING STOVE.

APPLICATION FILED MAR. 7, 1904.

NO MODEL.



Witnesses  
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# UNITED STATES PATENT OFFICE.

ALBERT A. LITTLE, OF INDEPENDENCE, KANSAS.

## HEATING-STOVE.

SPECIFICATION forming part of Letters Patent No. 773,799, dated November 1, 1904.

Application filed March 7, 1904. Serial No. 197,023. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT A. LITTLE, a citizen of the United States, residing at Independence, in the county of Montgomery and State of Kansas, have invented a new and useful Heating-Stove, of which the following is a specification.

This invention relates to stoves, and more particularly to heating-stoves; and it has for its primary object to construct a stove, heater, or device for the consumption of fuel which shall be adapted to consume both solid fuel and fuel in a gaseous or vaporous form.

With this end in view the present invention consists in the combination, with a heating-stove of ordinary or well-known construction, of a device for the consumption of gas or vapor, the same being connected exteriorly with and forming a permanent part of the stove structure.

The invention further consists in the improved construction, arrangement, and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is an elevation, partly in section, of a heating-stove embodying my invention. Fig. 2 is a horizontal sectional view of the same, taken on the line 2 2 in Fig. 1. Fig. 3 is an elevation, partly in section, illustrating a modification. Fig. 4 is a horizontal sectional view taken on the line 4 4 in Fig. 3.

Corresponding parts in the several figures are indicated by similar numerals of reference.

In carrying out my invention a stove structure of any desired construction may be employed. In the several figures of the drawings has been shown a base 1, supported upon a leg-frame 2 and having an ash-pit 3. 4 designates the drum or casing of the stove; 5, the fire-pot; 6, the magazine; 7, the top plate, and 8 the top.

In the several forms of my invention the base and the top plate have been laterally extended, as shown at 9 and 10, respectively, to afford room between them for the auxiliary heating apparatus which is provided for the consumption of gas or vapor. This in Figs. 1 and 2 has been illustrated as taking the

form of an open fireplace, the extension 9 of the base being provided with a flange 11, forming a trough in which is disposed a suitably-constructed burner, which is connected by a valved pipe 13 with the source of supply of gas or liquid fuel, as the case may be. The extension 10 of the cap serves to support a header 14, which is open at the bottom for the reception of the products of combustion rising from the burner and which is connected with the interior of the stove-casing by an opening 15, which is adjacent the opening 16 in the bottom of the header. 17 designates a damper which is mounted upon a shaft 18, exteriorly accessible, whereby the said damper may be adjusted to close either one of the openings 15 16, according to the requirements of the time. The extension 10 of the top plate which forms the top of the header has an opening surrounded by a collar 19 for the attachment of a pipe 20, through which the products of combustion may be carried to the final point of exit. 21 designates a layer of asbestos or other suitable refractory material, which is supported upon the base of the stove and which constitutes the back of the open fireplace.

Under the modification illustrated in Figs. 3 and 4 a radiator is substituted for the open fireplace shown in Figs. 1 and 2. In this case each of the radiator-tubes 22, supported upon the base, is connected with a header 23, the top of which is formed by the lateral extension 10 of the top plate of the stove. Each of the said radiator-tubes contains a burner 24, connected with a valved pipe 25, which is connected with the source of fuel-supply. In this case the header 23 has been shown as provided with a diaphragm 26, having a single opening 27 adjacent an opening 28 in the stove-casing, a damper 29 being provided by means of which either of said openings may be temporarily closed, said damper being mounted upon a rod 30, which is exteriorly accessible.

The operation of the invention will be readily understood from the foregoing description, taken in connection with the drawings hereto annexed. When the stove is used for the consumption of solid fuel, the damper will be ad-

