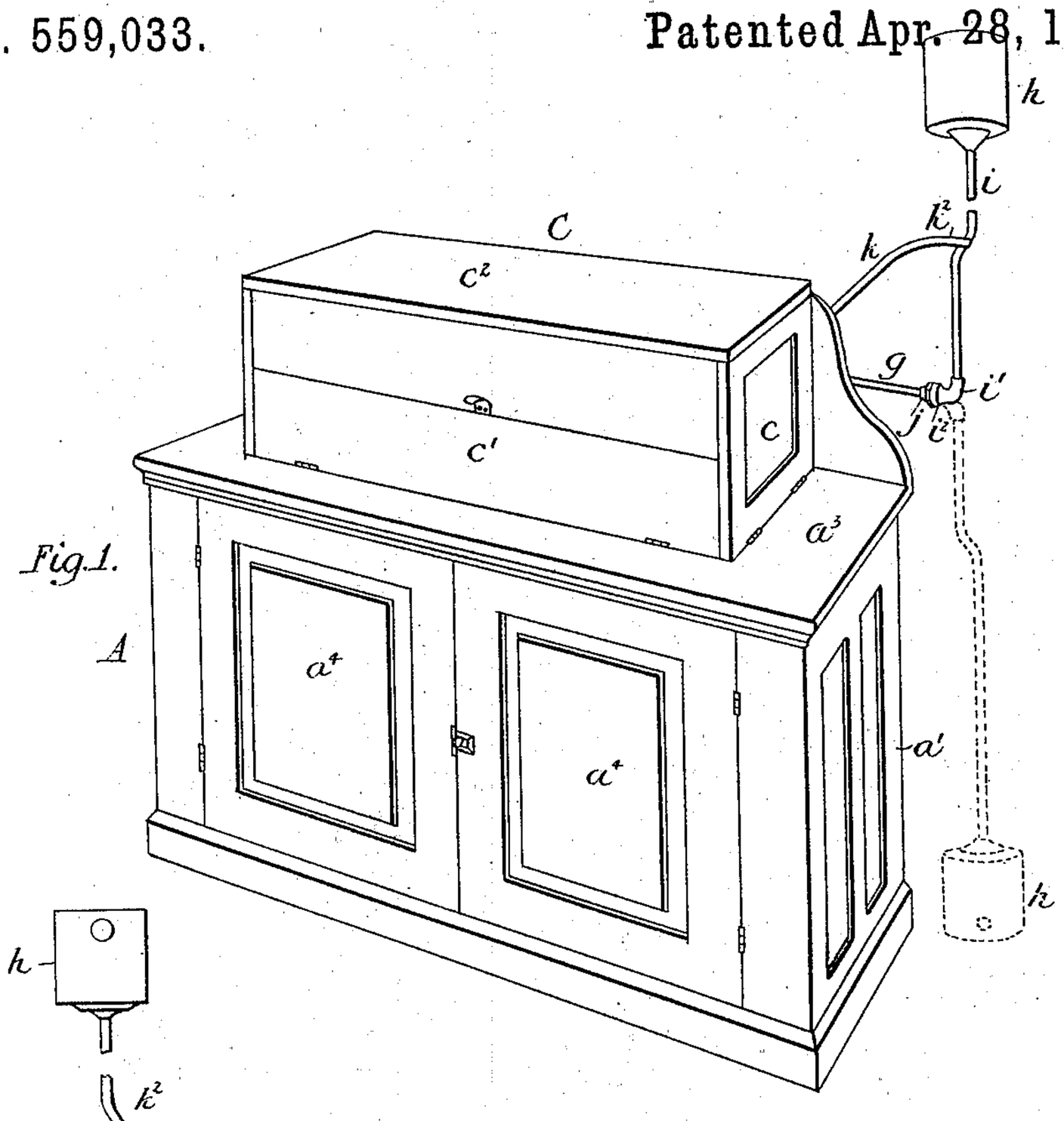
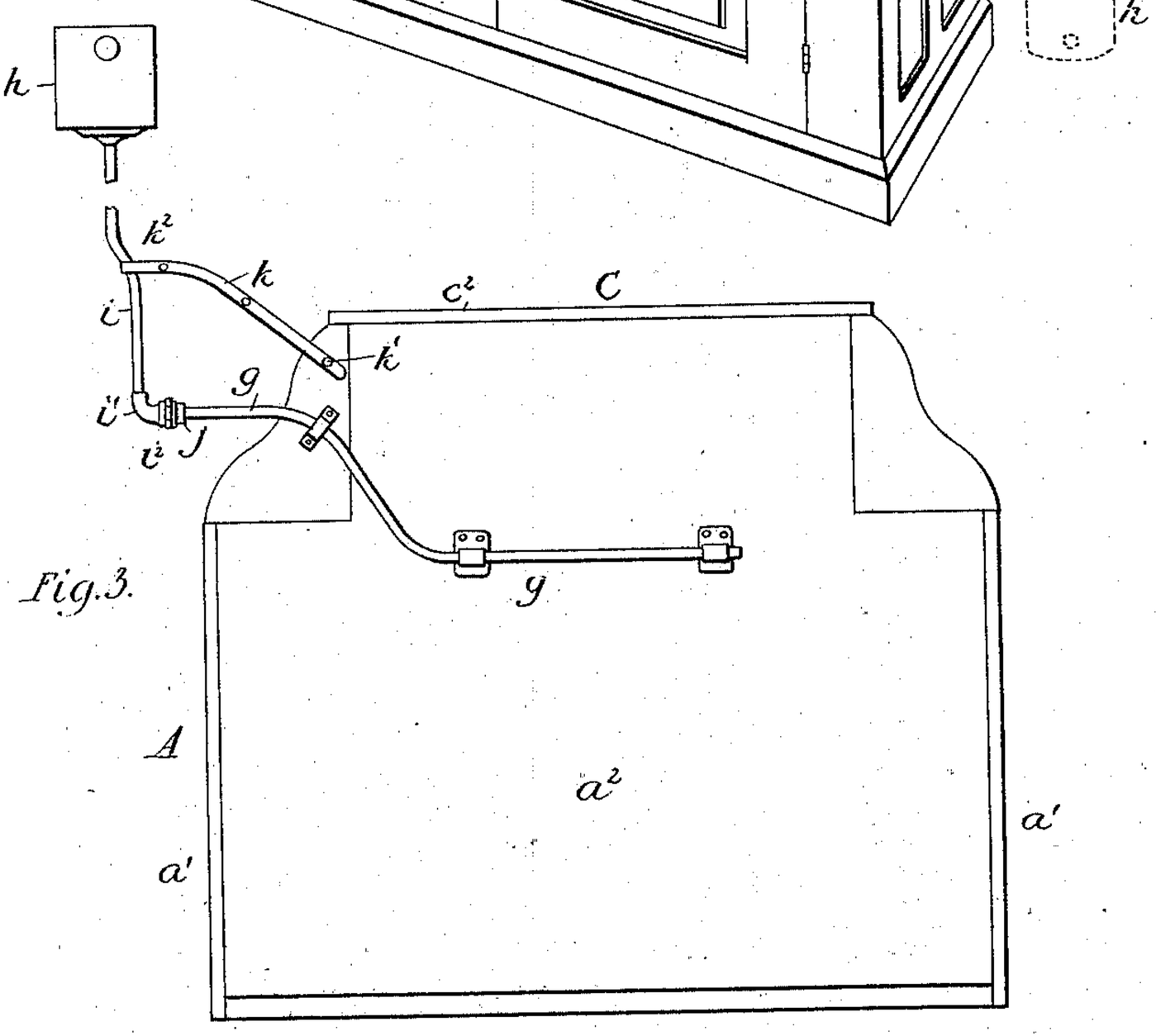
(No Model.) 2 Sheets—Sheet 1.

M. KNAPP.

CABINET STOVE.

No. 559,033. Patented Apr. 28, 1896.





Witnesses

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Inventor

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his Attorney

(No Model.)

2 Sheets—Sheet 2.

M. KNAPP.

CABINET STOVE.

No. 559,033.

Patented Apr. 28, 1896.

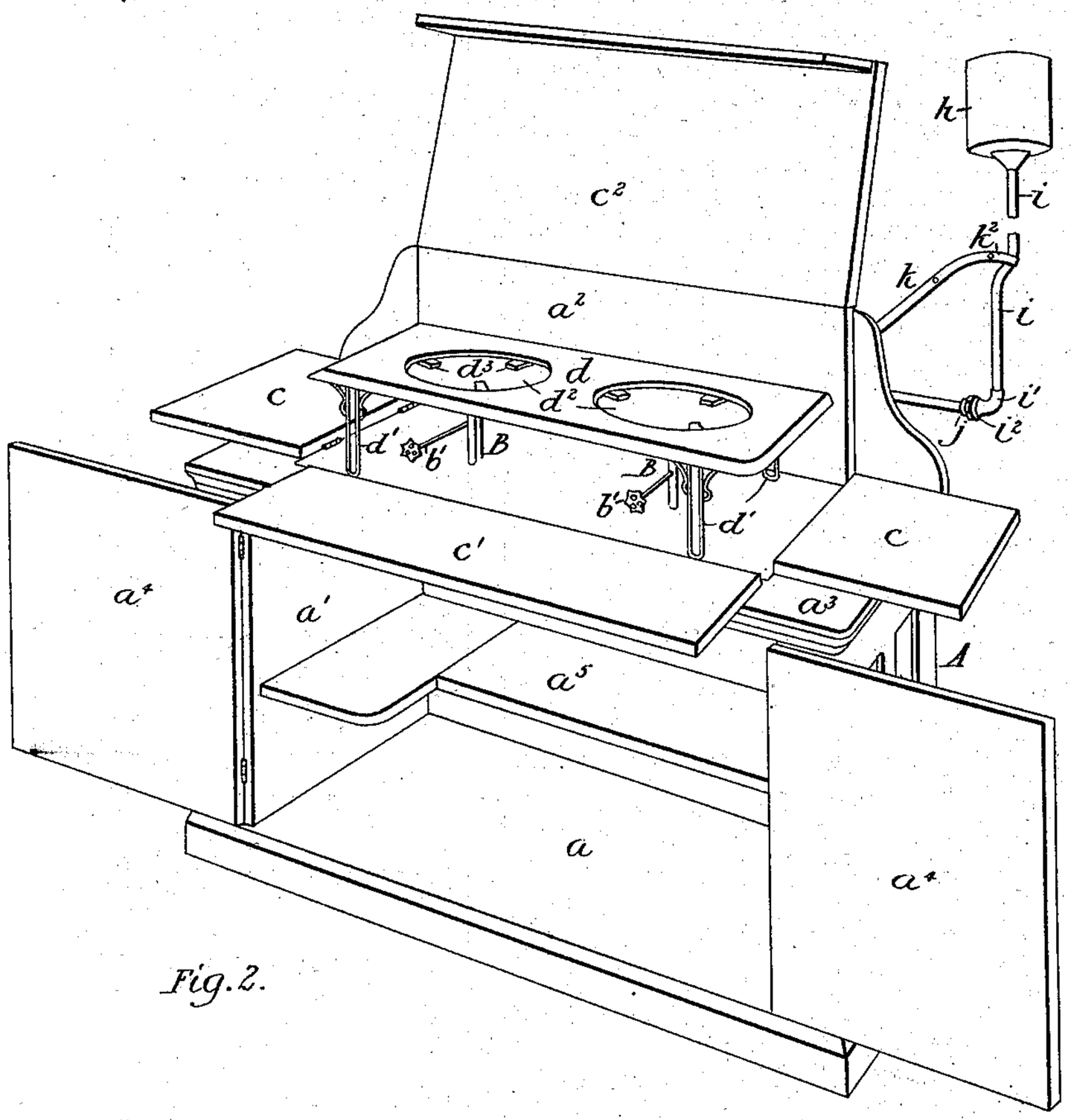

Fig. 2.

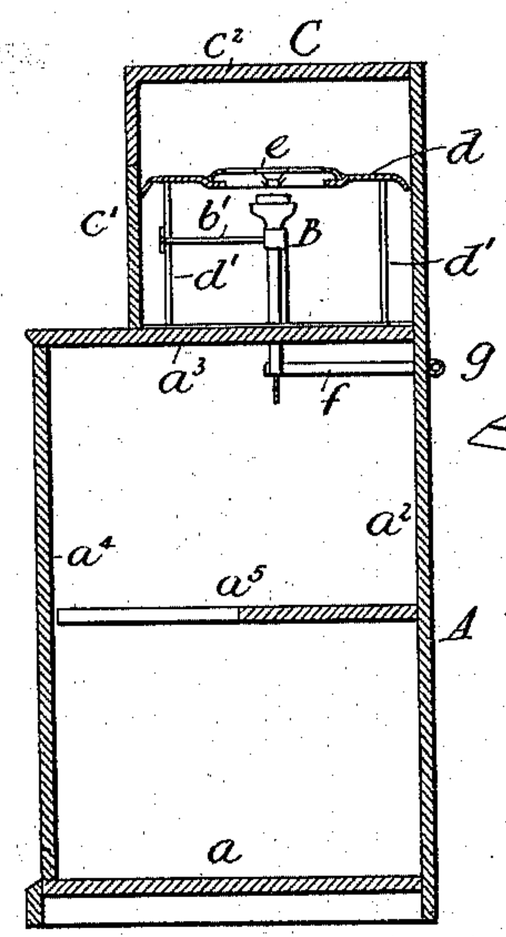

Fig. 4.

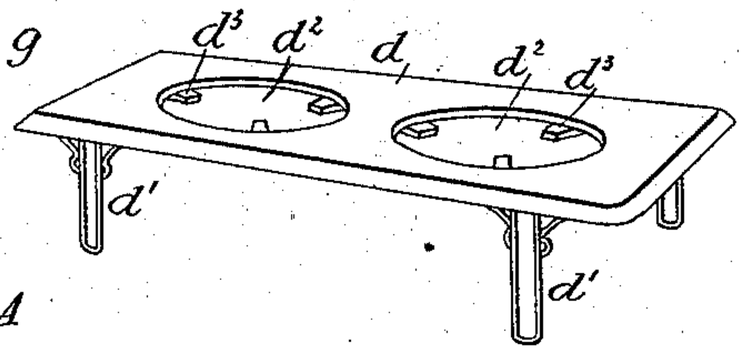

Fig. 5.

Witnesses

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UNITED STATES PATENT OFFICE.

MILES KNAPP, OF DES MOINES, IOWA.

CABINET-STOVE.

SPECIFICATION forming part of Letters Patent No. 559,033, dated April 28, 1896.

Application filed August 6, 1895. Serial No. 558,370. (No model.)

To all whom it may concern:

Be it known that I, MILES KNAPP, a citizen of the United States, residing at Des Moines, in the county of Polk and State of Iowa, have invented certain new and useful Improvements in Cabinet-Stoves; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in stoves of that type which are employed for cooking purposes, and contemplates the production of a simple and economically-constructed cooking-stove possessing advantages in point of effectiveness, durability, and safety in use, and added to these the construction employed provides a pleasing and tasteful effect, which will enable the locating of the stoves in rooms other than the kitchen.

The nature of my invention will appear from a reading of the following description when taken in connection with the accompanying drawings, in which—

Figure 1 is a perspective view of my improved stove when closed. Fig. 2 is a perspective view of the stove when open for use. Fig. 3 is a rear elevation. Fig. 4 is a vertical sectional view, and Fig. 5 is a perspective view of the detachable stove-plate.

In carrying out my invention I construct the stove in cabinet form with the body A, the burners B, and the top C, the latter being made in hinged sections, whereby the burners can, when not in use, be entirely concealed from view. The body is composed of the base a, the sides a' a', the back a^2, and the top a^3, and at the front I provide two hinged doors a^4 a^4, by which access to the interior is had, and a^5 is a shelf in said body, which serves, with the base a, as a ready means for holding a number of articles—as, for instance, the cooking utensils employed. The back a^2 is extended beyond the top a^3 to form the back of the top C, which has two hinged side pieces c c, a hinged front piece c', and a cover c^2, hinged to the upper side of the back. In practice I prefer to construct the body and top of wood, and when this material is employed the top a^3 of the body and the inner sides of the top C are covered with sheet-tin or equivalent material to protect such parts from the heat of the burners. These parts may, however, be constructed of sheet steel or iron or other material. The parts of the top C are shown open in Fig. 2, but may be closed, as shown in Fig. 1, and thereby conceal the identity of the piece of furniture, and this added to the high rate of ornamentation which the body and top can receive enables the stove to be placed in living-rooms.

An important advantage, due to the inclosing of the burners, is that the dissipation of heat by radiation is prevented to a large extent, thereby enhancing the effectiveness of the stove. Moreover, a high temperature can be maintained for a comparatively long time after the burners are extinguished by closing the top, and cooked articles can be thereby kept warm and bread raised when placed within the inclosing body.

In the drawings I have shown a stove employing two burners; but it is evident that a greater or less number can be employed. The burners are of the ordinary type, and a detailed description thereof is not necessary. At the top of the burners is a stove-plate d, which is flanged at the edges and supported by the legs d' d', which are bolted thereto and which rest on the top of the body part of the stove. In the plate are openings d^2 d^2, one for each burner, arranged concentrically, and each of said openings receives a grate e, which rests on lugs d^3 d^3, cast integral with the plate. The height of the plate is sufficient to bring the grates into close proximity with the burners; but the back of the body extends above said plate and grates in order that receptacles may be readily placed on the stove-plate before the cover is lowered. There is also sufficient room below the plate and between the burners to accommodate a receptacle, and the heat at this point is sufficiently high to warm cooked articles, as the inclosing of the plate and burners causes an equal diffusion of heat coming from the accumulations in the burners, the top plate, and the grates.

The facilities for storing heat and preventing loss by radiation render it possible to use the stove in the outer air, and when the sides and front are raised to carry on the cooking

without danger of the flame being diverted or extinguished by heavy drafts of air.

The stove-plate, it will be noted, covers the entire area formed by the sides, back, and front, and hence is capable of accumulating a large body of heat and of retaining it for a comparatively long time after the burners are extinguished. The heat received by this plate also when the sides and front are closed raises the temperature of the space below it, and articles of food may be thereby kept warm in this space during cooking operations. The valve-handles *b' b'* of the burners extend beyond the latter sufficiently to afford easy access and manipulation.

All of the movable parts of the cabinet are provided with fastening devices for maintaining their closed positions.

The burners are supplied with gasolene or the like from separate pipes *f*, which extend from the burners through the back of the body, where they are connected by means of T-couplings with the service-pipe *g*. This pipe *g* is curved or bent to bring the outer end well up or near the top of the stove, and said outer end is terminated slightly beyond one end of the body.

h is the tank or reservoir for containing the fluid to be consumed, which is normally elevated above the stovepipe by a pipe *i*, which opens into its base, and said pipe has at its lower end an elbow *i'*, which terminates in one of the members i^2 of a pivot-joint, which is secured to the other member *j*, carried by the service-pipe. By reason of this joint the tank may assume the normal or vertical position shown in full lines in the drawings, or may be moved downward with the joint as a pivot to the position shown in dotted lines in Fig. 1.

For supporting the tank when in its vertical position I employ an arm *k*, the inner end of which is pivoted to the back of the body at *k'*, and the outer end k^2 is bifurcated and arranged to clamp the pipe *i* when the arm is moved to the position shown in full lines in Fig. 3.

It will be understood that when the stove is in use the tank is in its elevated position, and when the burners are extinguished the tank is in its lowered position. Many advantages exist by employing this arrangement, first of which is the absolute safety insured both when lighting and extinguishing the burners and in refilling the tank. The lowering of the tank drains the pipes and burners entirely, and consequently there is no generation of gas after the burners are extinguished. There is also with this arrangement no possibility of leakage when not in use, and all waste by evaporation is prevented, and, moreover, the stove is thereby free from objectionable odors. The inlet to the tank is made on the side near the top, so that when the tank is lowered for refilling said opening is uppermost, and this arrangement greatly facilitates the refilling operation.

By my invention I am enabled to produce at a comparatively small expense a cabinet-stove of great efficiency and economy, and one that is very tasteful and ornamental in appearance. The safeguards employed also enable the operations of lighting, extinguishing, and the recharging of the reservoir free from danger, and the construction of the body is such as that all of the utensils and the stove-plate and burners may be hidden from view when the stove is not in use.

I claim as my invention—

1. A cabinet-stove comprising in its construction a casing having folding sides and top, and a divided front, the upper portion of which is carried by the top, and the lower portion of which is folding, a grate supported within said casing at or near the line of division of said front, and filling the horizontal area of said casing, and thereby providing two compartments, the burners arranged in the lower compartment and the fluid-tank located without the casing and having pipe connection with the burner all substantially as set forth.

2. A cabinet-stove comprising in its construction an upper casing having a rigid back and hinged sides and top, and a front in two portions, the upper one of which is carried by said top, and the lower is folding, a grate within said casing forming a horizontal partition for dividing the same into two compartments, said grate being supported by legs on a level with the upper end of the lower portion, the burners in the lower compartment, the invertible tank having pipe connection with the burners, and a lower casing forming a support for said upper casing, all substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

MILES KNAPP.

Witnesses:
O. L. F. BROWNE,
J. E. BUNTING.