

No. 652,042.

W. J. RANCK.
GAS STOVE.

Patented June 19, 1900.

(Application filed Jan. 30, 1900.)

(No Model.)

Fig. 1.

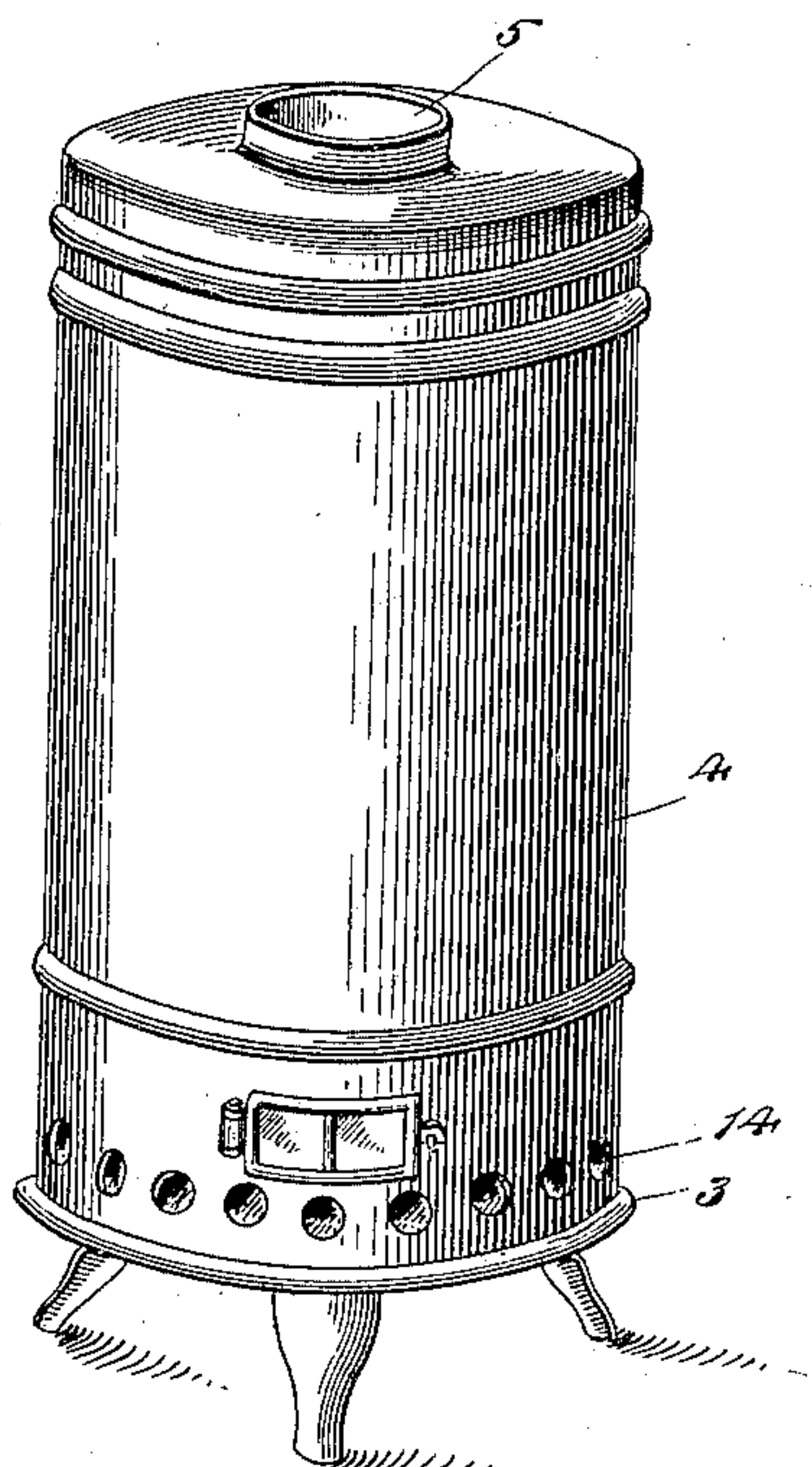
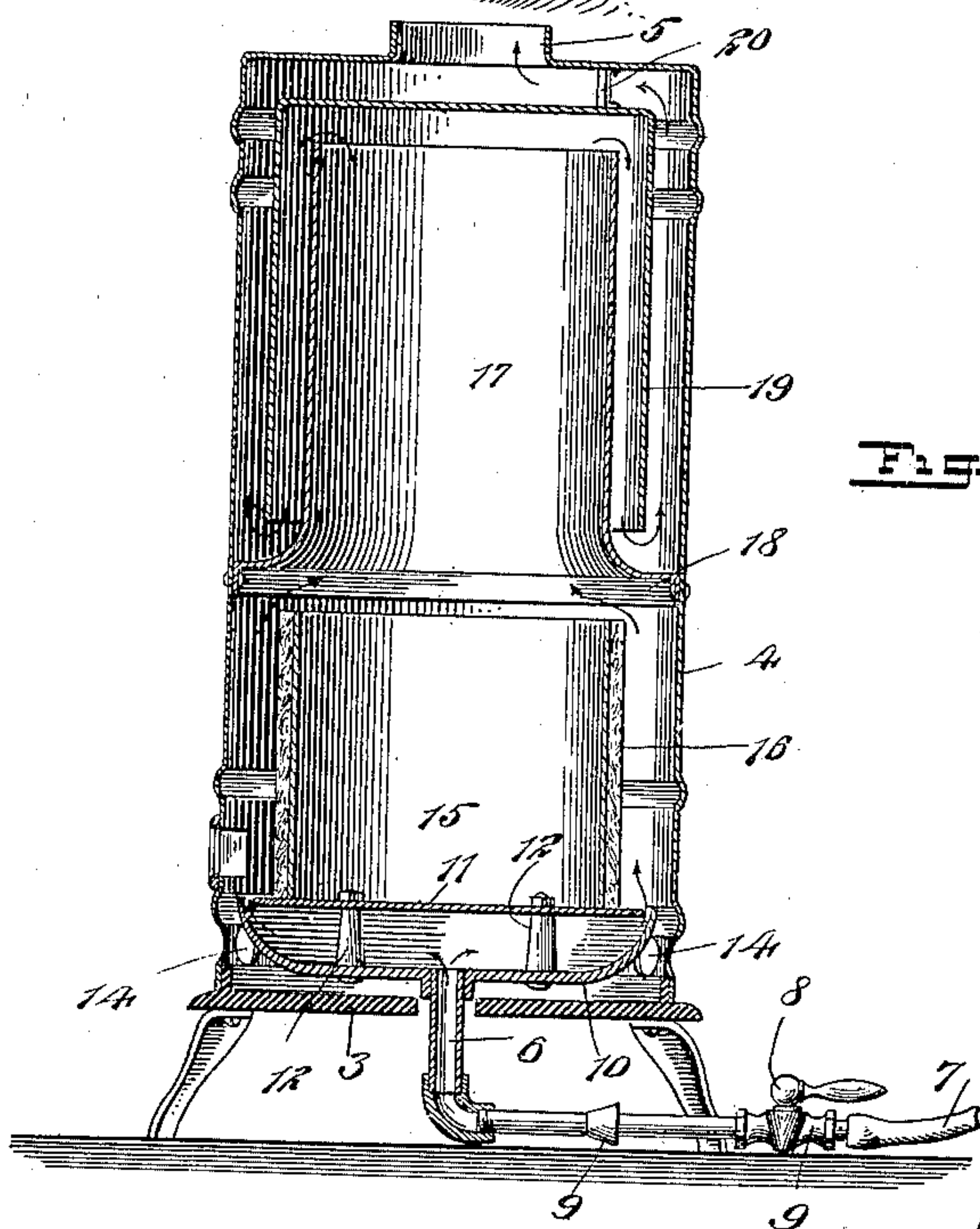


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM J. RANCK, OF COLUMBUS, OHIO.

GAS-STOVE.

SPECIFICATION forming part of Letters Patent No. 652,042, dated June 19, 1900.

Application filed January 30, 1900. Serial No. 3,322. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. RANCK, a citizen of the United States, and a resident of Columbus, in the county of Franklin and State of Ohio, have invented a new and Improved Gas-Stove, of which the following is a full, clear, and exact description.

This invention relates to a burner and stove adapted especially for use in connection with natural gas.

This specification is the disclosure of one form of my invention, while the claims define the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both views.

Figure 1 is a perspective view of the device, and Fig. 2 is a vertical section thereof.

The stove has a circular base 3, on which is mounted a cylindrical outer casing 4, the top of which has a thimble 5 for connection of a stovepipe therewith, permitting the noxious gases to be carried off. In the base 3 a centrally-disposed opening is formed, through which passes a pipe 6, connected with a supply-pipe 7, which may, if desired, be in the form of a rubber hose. The pipe 6 is commanded by a cock 8 and has a mixer 9 for mixing the gas with air prior to the combustion of the former, as will be understood.

The pipe 6 leads to a burner situated in the bottom of the stove and comprising a bottom dish-shaped member 10, with a top member 11 secured thereon by stay-bolts 12, as shown. The edge of the top 11 is serrated to form gas-outlet orifices, at which points the gas is ignited. Just below the top of the burner the casing 4 is formed with orifices 14, permitting the entry of air into the casing, from which point the air is drawn up the stovepipe, thus ventilating the apartment in which the stove is placed.

On the top 11 of the burner a cylindrical drum 15 is placed. This drum is open at its top and is provided with an asbestos covering 16, as shown. Above the drum 15 a cylindrical radiator-section 17 is situated, such section being open longitudinally and having its lower end flared outward to form a portion 18, fastened to the inner walls of the

casing 4, causing the burning gases and heated air to pass through the radiator-section 17. The radiator-section 17 is enveloped by an outer radiator-section 19, cylindrical in form and having a closed top. This outer radiator-section 19 is rigidly supported in position by hangers 20, only one of which is shown. The radiator-section 19 extends downward toward the portion 18 of the radiator-section 17, so that the gases pass through the section 17, and thence downward outside of the section 17 and inside of the section 19, being discharged at the lower end of the section 19, and thence passing upward outside of such section and from the casing 4 by way of the outlet 5.

The construction described enables me to secure the greater portion of the heating energy of the gas, since the arrangement of the burner insures complete combustion, and the tortuous course which the heated gases are caused to take heats all the parts of the stove and insures the radiation of the heat. The noxious gases are drawn off from the apartment, and a continuous circulation of air is maintained through the stove, thus producing a thoroughly healthful and efficient instrument.

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

1. A gas-stove having a base, an outer casing sustained thereon and having means at its top for carrying off the products of combustion therein, a burner situate on the base within the said casing, a drum mounted on the burner and extending up therefrom, the drum being arranged centrally of the burner-openings to cause the burning gases to pass between the drum and the casing, an inner radiator-section with open ends, the inner radiator-section being arranged in the casing above the drum and having its lower edges flared outward to the walls of the casing and fastened thereto, and an outer radiator-section with a closed upper end, the outer radiator-section inclosing the major portion of the inner radiator-section, for the purpose described.

2. A stove having a base, a uniform cylindrical outer casing sustained thereon and

having means at its top portion to carry off the products of combustion, a cylindrical inner radiator-section located in the top portion of the casing and having open ends, the
5 lower of which is flared outward to meet the walls of the casing to which said end of the inner radiator-section is fastened, and a cylindrical outer radiator-section with a closed upper end, the outer radiator-section inclos-

ing the major portion of the inner radiator-section, for the purpose described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM J. RANCK.

Witnesses:

WILLIAM OUTEALT,
NORA M. SNIDER.