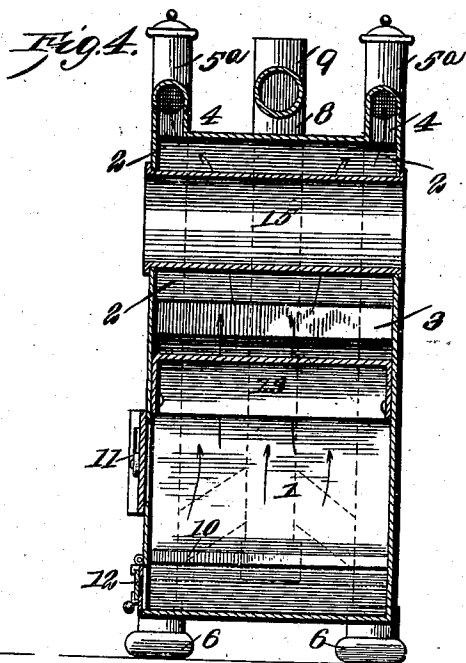
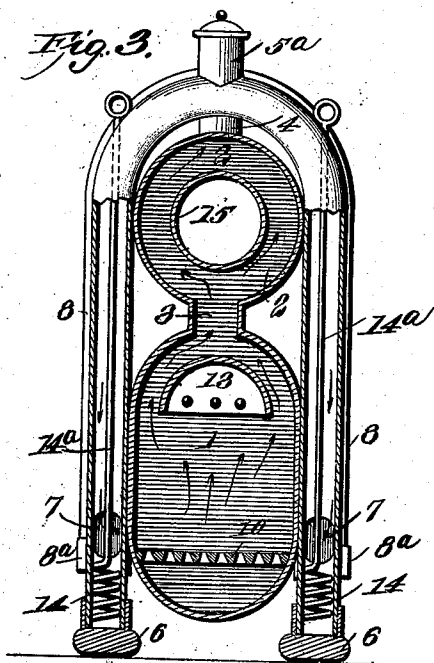
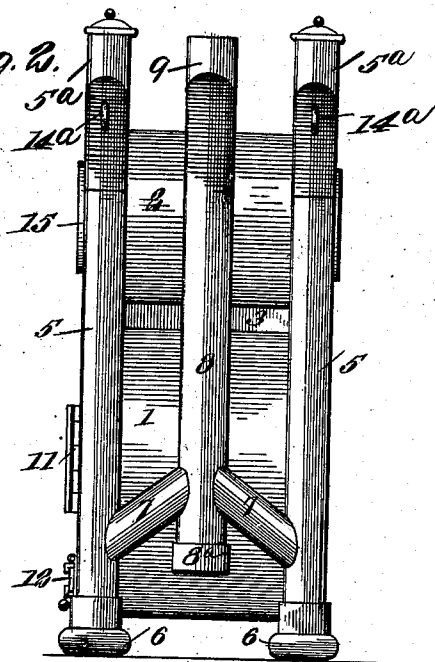
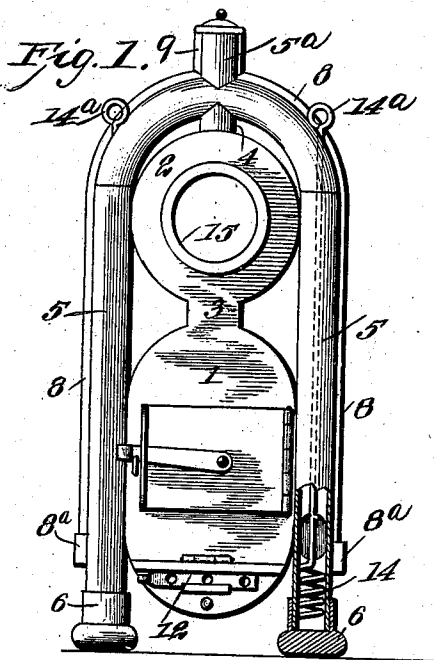


No. 858,285.

PATENTED JUNE 25, 1907.

W. HEUERMANN.
HEATING STOVE.

APPLICATION FILED MAR. 27, 1907.



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WILLIAM HEUERMANN, OF SEDALIA, MISSOURI.

HEATING-STOVE.

No. 858,285.

Specification of Letters Patent.

Patented June 25, 1907.

Application filed March 27, 1907. Serial No. 364,778.

To all whom it may concern:

Be it known that I, WILLIAM HEUERMANN, a citizen of the United States, and a resident of Sedalia, in the county of Pettis and State of Missouri, have invented an Improved Heating-Stove, of which the following is a specification.

The object of my invention is to provide a stove having a relatively large heating surface, a long flue or passage for traverse of the heated gaseous products of combustion, and which may be economically constructed and occupies a relatively small space. The stove comprises a combustion chamber and a superposed heating chamber which are connected and supported together from the top of the downwardly extended flues or pipes, the latter thus serving practically in the place of legs or other usual form of support.

The details of construction, arrangement and combination of parts are as hereinafter described and illustrated in the accompanying drawing, in which

Figure 1 is an end view of my improved stove a portion being broken away to show a flue-cleaner. Fig. 2 is a side view. Fig. 3 is mainly a vertical transverse section. Fig. 4 is a vertical central longitudinal section of the stove.

1 indicates an oval combustion chamber, and 2 a cylindrical heating chamber, the same being connected by a flue or passage 3. The top of the heating chamber 2 is provided with two short vertical pipes 4 which connect with the curved top portions of pipes 5 having an inverted U-shape, the legs of the same extending down on each side of the chambers 1, 2, and resting upon the floor, or other horizontal base, so that both chambers 1 and 2 are supported clear of the latter. Removable caps 6 having enlarged heads are applied to the lower ends of the pipes 5, as shown. The latter thus constitute legs or vertical supports for chambers 1, 2. In practice, the sides of the combustion chamber 1 are permanently attached to the pipes 5, in order to hold the latter rigidly in place. The U pipes 5 constitute down-draft flues, and their lower ends communicate by upwardly inclined pipes 7 with the legs 8 of a vertical U-shape up-draft pipe which is arranged between and equidistant from the pipes 5. A collar or short escape pipe 9 is arranged at the curved top of pipe 8, for attachment of a pipe (not shown) leading to a chimney or into the air. Thus unlike pipes 5, the pipe 8 has

no direct connection with the heating chamber 2.

The heating chamber 1 is provided with a grate 10 arranged horizontally and with an end door 11 for introduction of the fuel and another door 12 for removal of ashes. Within said chamber and a short distance below the top passage 3 leading into the heating chamber 2, is located a baffle plate 13, see Fig. 3, the same serving to prevent the direct passage of the heated products of combustion from the lower chamber 1 into the upper one. The latter is traversed from end to end by a large pipe 15, which is arranged concentrically and open at each end. Air has thus free passage through the pipe or drum 15 whereby the heating surface of the chamber 2 is greatly increased, and a receptacle is provided for plates or dishes requiring to be warmed.

The course of products of combustion from chamber 1 is indicated by arrows, it being around and over the baffle-plate 13 through passage 3 into chamber 2, then around pipe 14 and into short pipes 4 and thence down the U pipes 5 to the lower ends of the same, whence they pass by inclined pipes 7 into the up-draft pipe 8.

By the construction of the body of the stove, that is to say, chambers 1, 2, in the manner described, I provide a relatively large heating surface which is greatly extended by arrangement of the down-draft pipes 5, their transverse connections 7 and the up-draft pipes 8, and at the same time the pipes 5 perform the added function of legs or supports for the body of the stove, which is very light and easily portable.

The flues or pipes 5 are provided at the top with short vertical extensions 5^a and removable caps are applied thereto to provide for cleaning the curved upper portions of said pipes. Slidable flue-cleaners 14, consisting of wire coils are arranged in the legs of pipes 5, see Figs. 1 and 3 and having vertical extensions or rods 14^a that project through and above the upper portions of the pipes. It is obvious that caps or hollow feet 6 serve as receptacles of soot and ashes accumulated in the pipes 5, and the same may be detached from time to time, as required to discharge their contents. Removable caps 8^a are also provided for pipes 8. While the chambers 1 and 2 are preferably oval and cylindrical in shape respectively they may, of course, have other forms.

I claim—

1. The improved heating stove comprising a combustion chamber, and a superposed heating chamber, the same having connecting passages and one depending from the other, two pairs of down draft pipes connected with the top of the heating chamber and extending below the combustion chamber so as to serve as legs for the stove proper, and an up-draft pipe connecting with such down-draft pipes, substantially as described.

2. The improved heating stove comprising a heating chamber, a combustion chamber supported from and below said heating chamber, and the two having a connecting passage, a series of inverted U-shape down-draft pipes connected with the top of the heating chamber and extending below the combustion chamber whereby they are adapted to

serve also as legs for the stove proper, a U-shape up-draft pipe arranged between the down-draft pipes and connected with the same as shown and described.

3. In a heating stove the combination with down-draft pipes, and a heating chamber connected with the upper ends of said pipes and supported therefrom, of a combustion chamber attached to and depending from the heating chamber, and a baffle-plate arranged lengthwise in the combustion chamber a short distance below the passage leading into the heating chamber above, as and for the purpose specified.

WILLIAM HEUERMANN.

Witnesses:

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