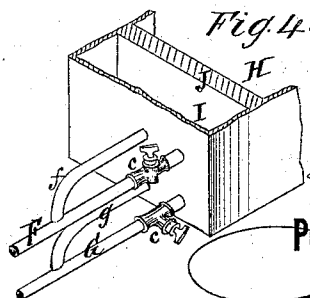
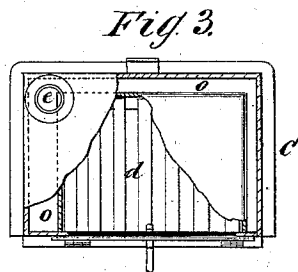
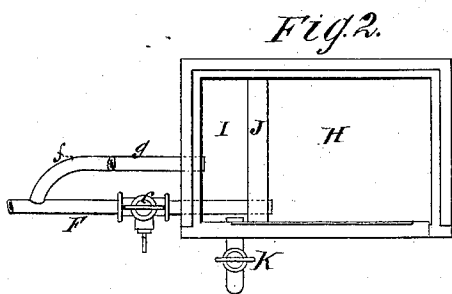
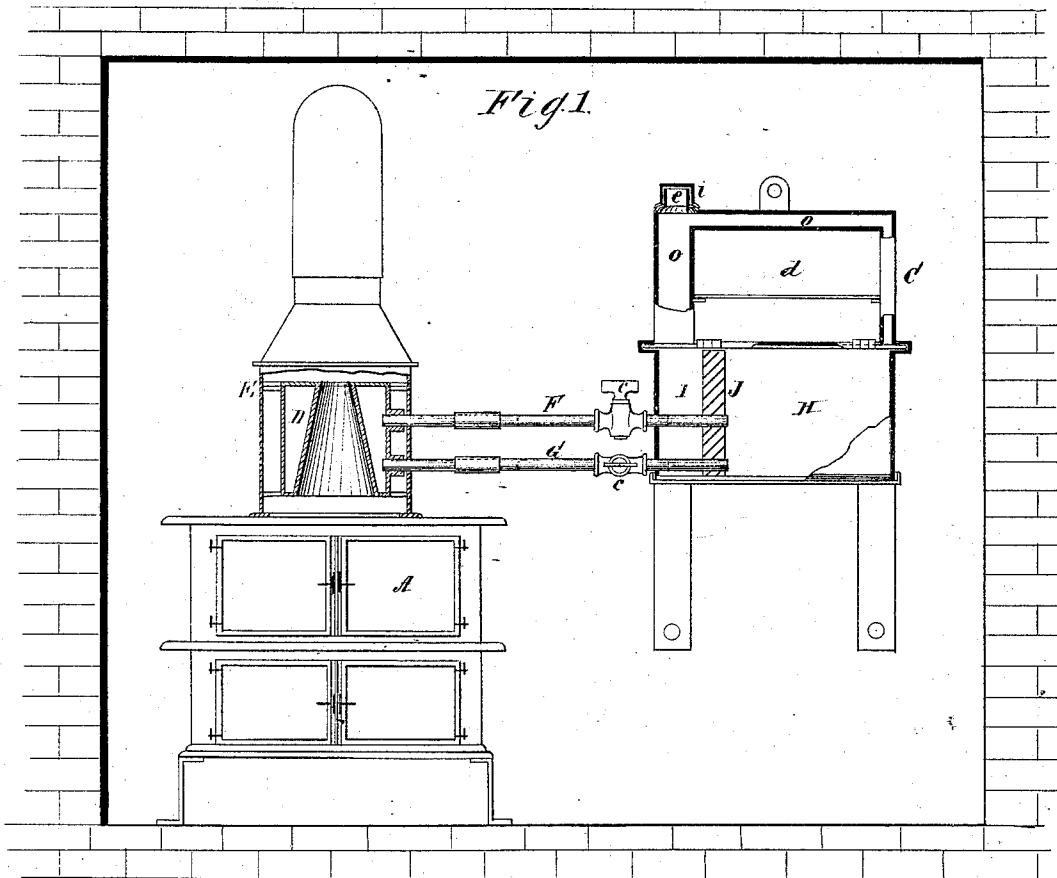


J. O. SHRINER & J. TAYLOR.
Combined Water-Reservoirs and Warming-Closets.
 No. 147,986. Patented Feb. 24, 1874.



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UNITED STATES PATENT OFFICE.

JOHN O. SHRINER AND JOHN TAYLOR, OF NEWCASTLE, INDIANA.

IMPROVEMENT IN COMBINED WATER-RESERVOIRS AND WARMING-CLOSETS.

Specification forming part of Letters Patent No. **147,986**, dated February 24, 1874; application filed February 2, 1874.

To all whom it may concern:

Be it known that we, JOHN O. SHRINER and JOHN TAYLOR, of Newcastle, in the county of Henry and State of Indiana, have invented a new and Improved Water-Heater, Reservoir, and Warming-Closet for Cook-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 drawing forming a part of this specification, in which—

Figure 1 is a sectional elevation of the apparatus arranged in connection with a stove. Fig. 2 is a plan view of the reservoir. Fig. 3 is a partly-sectional top view of the warming-closet. Fig. 4 is a detail view, showing the arrangement of main and branch pipes with the reservoir.

The object of the invention is to provide for household use an attachment for the ordinary cook-stove, which is adapted for heating a large or small quantity of water, by means of a reservoir and a hollow cylinder placed in the stove-pipe or drum, the two being connected by branched circulating-pipes arranged in a peculiar manner. The invention also includes a warming-closet, which is arranged to slide on the reservoir, as hereinafter described.

In the drawing, A indicates the stove; H I, the water-reservoir, which is supported on brackets; C, the warming-closet, placed on the reservoir; and D, a heater, located within the drum or enlargement E of the stove-pipe, and connected with the reservoir by pipes F and G, having branches *f g*. The heater is formed of a cylindrical outer part and conical or tapered inner portion. The products of combustion pass around and through the heater, and are partly arrested, retarded, or deflected by the conical part, so that the heat is fully utilized. The pipes F and G connect with the heater D, respectively, near the top and bottom, and both pass into the larger compartment H of the reservoir, through the smaller compartment I and vertical transverse partition J. Their branches *f* and *g* lead only into the smaller compartment. Between the junction of said branch pipes and the side or end of the reservoir the pipes F G are provided with cocks *c c*. Thus, if the cocks are

open, and the reservoir be supplied with water, it will circulate from the heater, through both the pipes and branches and compartments of the reservoir. If, however, the cocks be reversed, the circulation will be cut off from the larger compartment H of the reservoir. Hence, the cocks will be opened or closed according as it is desired to heat a large or small quantity of water by utilizing the heat in both compartments, or in one of them only. The smaller compartment I has a discharge-cock, K. The warming-closet C has the usual form of compartment *d*, for containing dishes or edibles requiring either to be heated or kept hot. A space, *o*, is left between the compartment *d* and the closet proper, on the top, bottom, and one or more sides. Water is introduced to the reservoir below, through the tube *e* in the top of the closet, the same having a loose cap, *i*, which allows escape of steam. The closet is attached to the reservoir by a flange-connection, whereby it may be slid forward when it is desired to obtain hot water from the reservoir, or for other purposes. The two may, however, be rigidly connected or formed as one vessel, if preferred.

We do not claim the combination of a warming-closet and reservoir; but

What we claim is—

1. Warming-closet C and the water-reservoir H, connected with a heating apparatus, the former being supported on the latter, and connected thereto by flanges, as shown, whereby it may be slid forward to uncover more or less of the open top of the reservoir, as specified.

2. The combination of the warming-closet provided with opening or tube *e*, and having a space, *o*, on the sides of its compartment *d*, and the open-top reservoir, as shown and described.

3. The combination, with a heater, D, of pipes F G, cocks *c c*, and branches *f g* with the compartments H I of the reservoir, as shown and described.

JOHN O. SHRINER.
JOHN TAYLOR.

Witnesses to both signatures:

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