

(No Model.)

A. BERGHOLD.
FIREPLACE WATER HEATER.

No. 500,554.

Patented July 4, 1893.

Fig. 1.

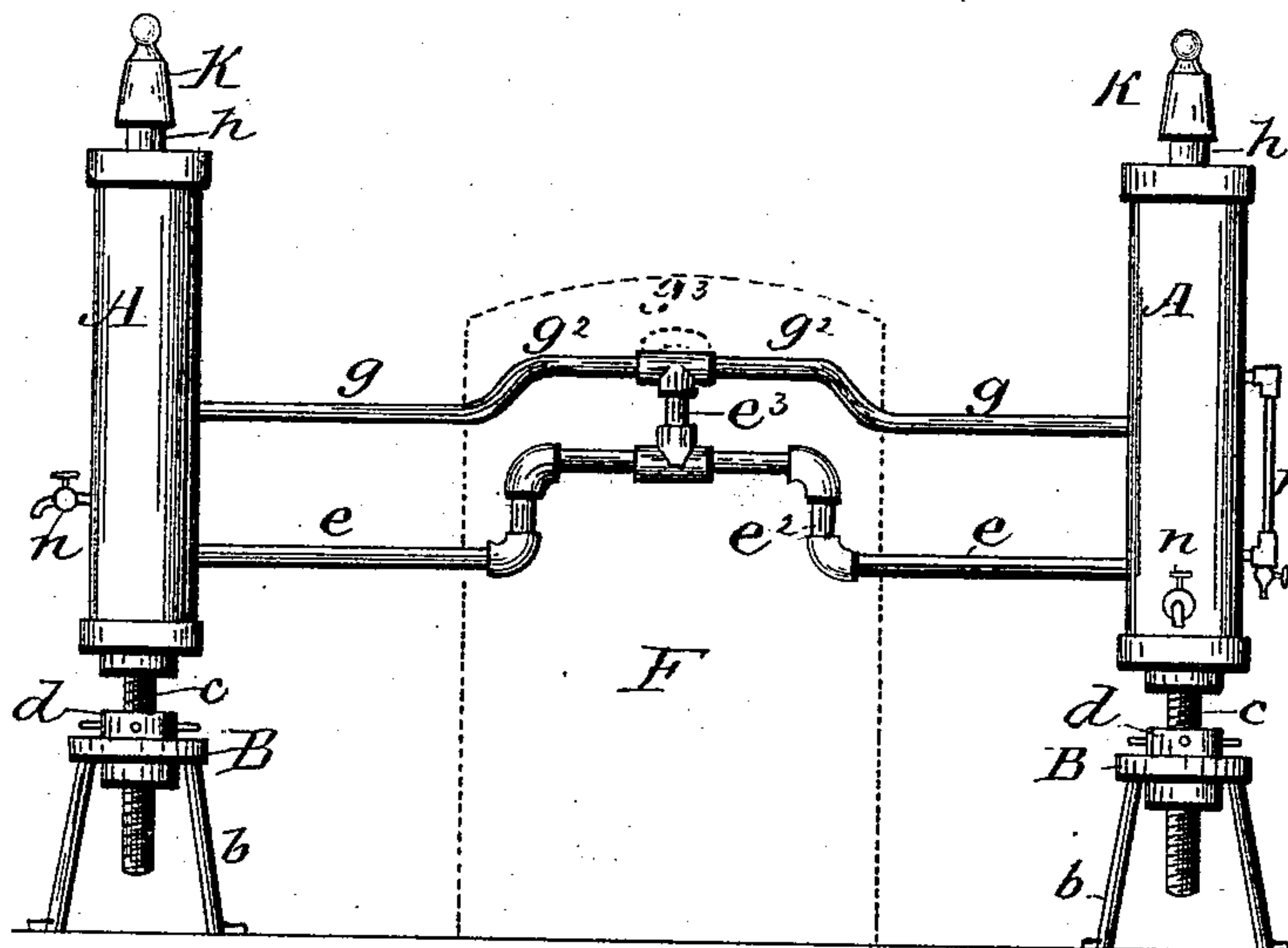


Fig. 2.

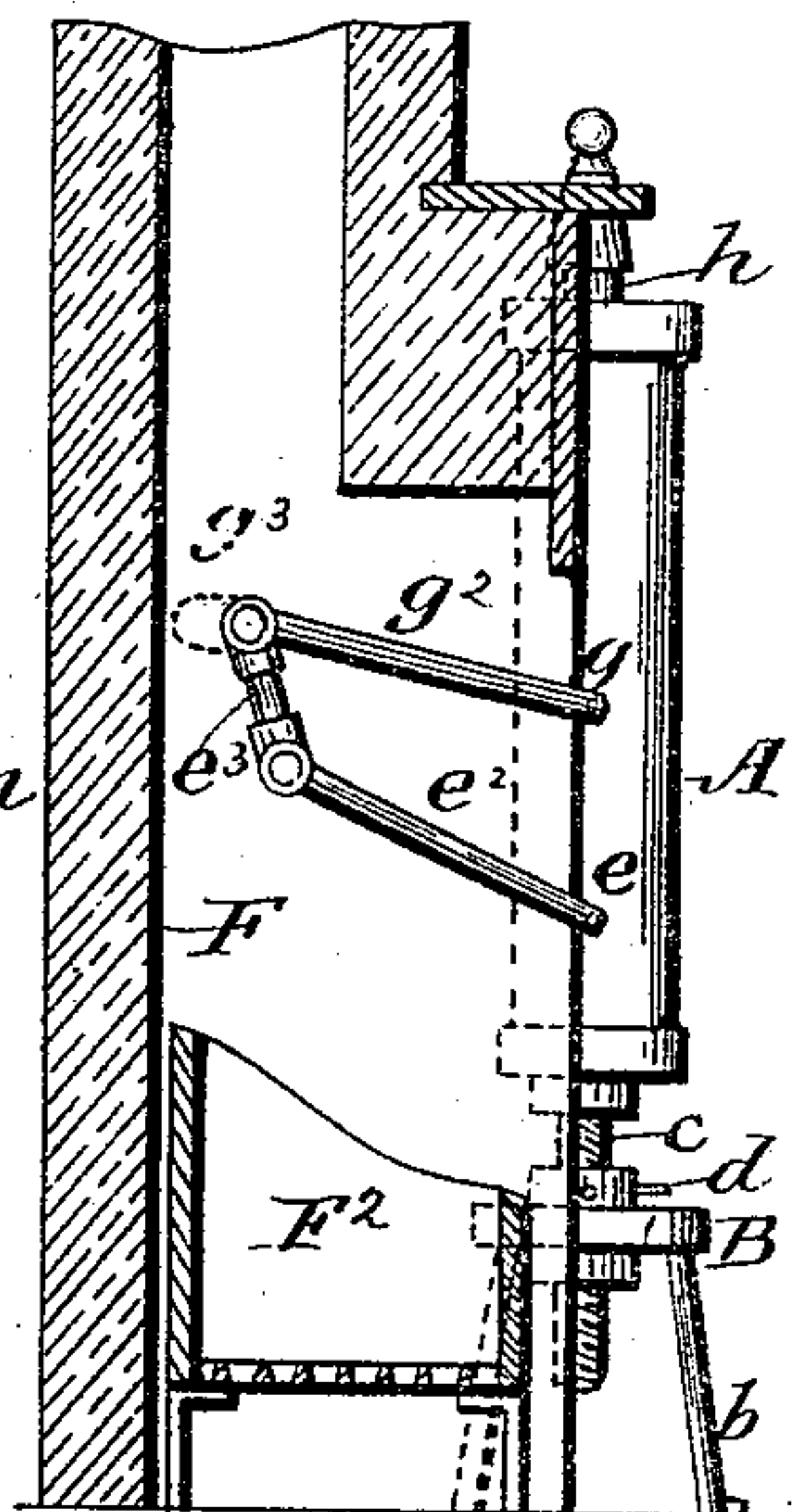
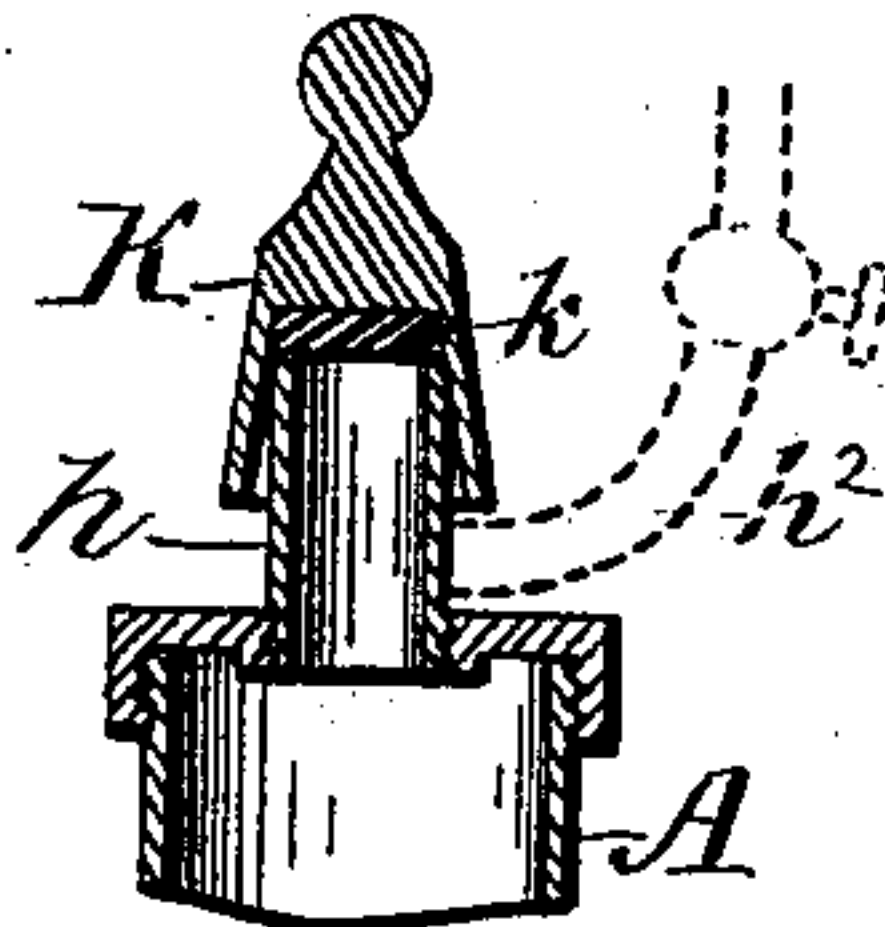


Fig. 3.



WITNESSES

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FIREPLACE WATER-HEATER.

SPECIFICATION forming part of Letters Patent No. 500,554, dated July 4, 1893.

Application filed March 17, 1893. Serial No. 466,450. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER BERGHOLD, a citizen of the United States, residing at Louisville, in the county of Jefferson, State of Kentucky, have invented certain new and useful Improvements in Fireplace Water-Heaters, of which the following is a specification, reference being had therein to the accompanying drawings.

10 My invention relates to devices for preventing the loss of a great portion of the caloric obtained from a fire made in a fire place, or in a grate placed therein; and the objects of my improvement are to provide a simple and
15 inexpensive apparatus of this nature that is portable and adapted to be vertically and laterally adjusted, the vertical adjustment being made relatively to the intensity of the fire in the fire place, so as to heat to a suitable temperature water placed in said apparatus, the
20 reservoirs inclosing the water thus heated being well adapted to increase the temperature of a room, and the water be used for any desired purpose. I attain these objects by the
25 construction illustrated in the accompanying drawings in which—

Figure 1, is a front view of a water heating apparatus constructed in accordance with my invention. Fig. 2, is a vertical section of a
30 fire place provided with said water heating apparatus. Fig. 3, is a vertical central section of the upper portion of one of the water reservoirs and its top closing cap.

In said drawings A, A, represent two water
35 reservoirs of preferably cylindrical form, adjustably mounted upon a base B that is provided with legs b, said base and legs constituting stands that may be of any suitable ornamented metal. To retain the reservoirs
40 vertically at any desirable height above the base B, there is attached to the center of the lower cap of each reservoir a screw c that is made to pass loosely through a perforation in the center of the base B and in engagement
45 with a nut d resting upon said base. The reservoirs are connected together at points adjacent to their lower ends by means of pipes e that are suitably bent or provided with elbows, to form with the pipes e a lateral bend
50 or crank portion e², that is of suitable size to lie nearly against the sides and back wall of

a fire place F. A short distance above the pipes e, the reservoirs are connected together by pipes g that have also their inner portions g² bent to substantially lie against the sides
55 and back wall of a fire place. To provide a good and noiseless circulation through the pipes e and g they are united together at their highest points by means of a vertical pipe e³, so that when wood, coal or other combustible
60 is burning in the fire place F, or on a grate F², placed therein, the heated products of combustion, and the radiation from the fire will heat the pipes e² e³ and g² and the water
65 therein; as it will be understood that water is first placed in the reservoirs A to a suitable height, preferably above the center thereof. The water will ascend from the pipes e e² e³
70 to the pipes g and thence back into the reservoirs; and from the lower portion of the latter it flows again through the pipes e toward the heated portions e² e³.

Water is introduced into the apparatus through the top of either one of the reservoirs, said top being provided with a short pipe h
75 of smaller diameter, into which a funnel can be placed to facilitate the pouring of water into the reservoirs. Upon the top of said pipe h a bell-shaped cover K is placed. A washer k of rubber or other suitable material is preferably
80 used to form a close stopper. The weight of the cover K may be such as to require three or four pounds pressure of steam to lift it from its seat. The cap of one of the reservoirs may also be provided with a steam
85 escape pipe h² as shown by dotted lines in Fig. 3 to permit any excess of pressure or steam to be let out and directed, for example, into the chimney flue. But the water in the
90 reservoirs is generally at a temperature of about 175° to 200° by regulating the height of the pipes e² g² above the fire, by elevating or lowering the reservoirs upon their supporting
nuts d. The heating capacity of the apparatus can be increased by making the pipes
95 e² of larger size or providing the pipes g² with a small water back as shown dotted at g³.

One of the reservoirs may be provided with a glass water-indicator m and with cocks n
100 in their sides.

Having now fully described my invention, I claim—

1. A portable water heater for fire places
consisting of two vertical water reservoirs,
pipes uniting said reservoirs, said pipes being
bent laterally into said fire place, screws un-
5 der said reservoirs, with nuts and stands for
said screws substantially as described.
2. In a portable water heater for fire places,
the combination of two vertical water reser-
voirs having a feeding pipe on top thereof,
10 and a bell-shaped cover for said pipe, pipes

uniting said reservoirs, and screws support-
ing said reservoirs, with nuts and stands for
said screws substantially as described.

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

ALEXANDER BERGHOLD.

Witnesses:

HENRY SEEKAMP,
D. M. RODMAN.