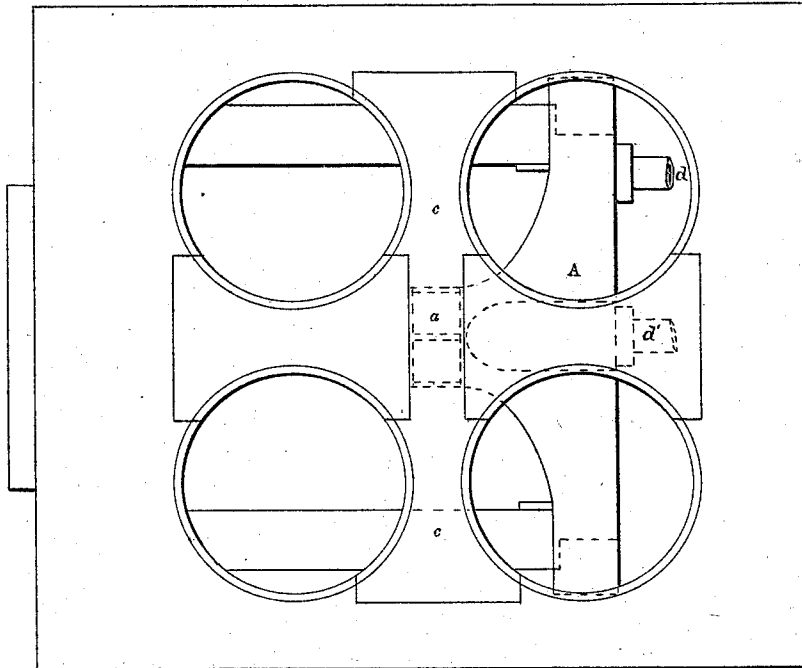


J. L. HUTCHINSON.
Water-Backs for Stoves.

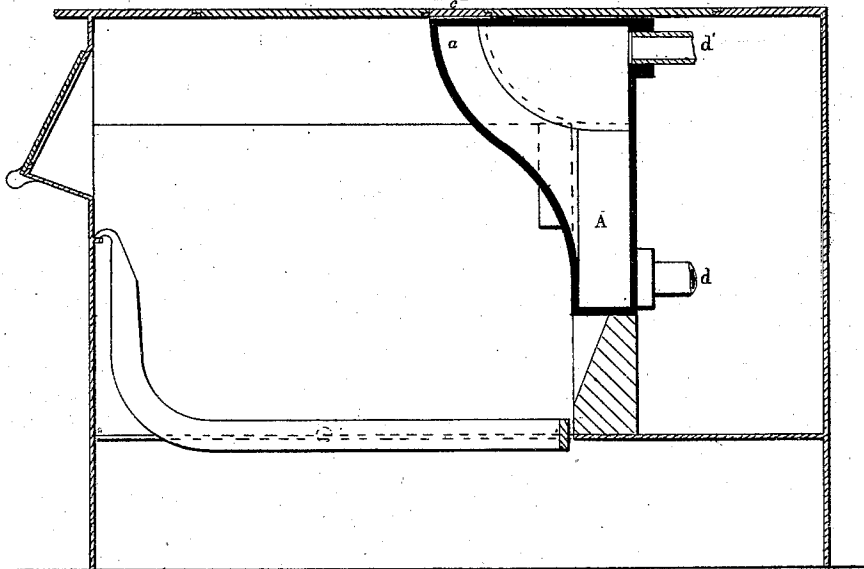
No. 147,941.

Patented Feb. 24, 1874.

— FIG. 1. —



— FIG. 1. —



WITNESSES =

Joseph Cragg
Geo. Cragg

INVENTOR =

Jesse L. Hutchinson
by G. H. & W. J. Howard
attys.

UNITED STATES PATENT OFFICE

JESSE L. HUTCHINSON, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN WATER-BACKS FOR STOVES.

Specification forming part of Letters Patent No. 117,941, dated February 24, 1874; application filed February 2, 1874.

To all whom it may concern:

Be it known that I, JESSE L. HUTCHINSON, of the city of Baltimore and State of Maryland, have invented certain Improvements in Water-Backs for Stoves and Ranges, of which the following is a specification; and I do hereby declare that in the same is contained a full, clear, and exact description of my said invention, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

My invention relates to a water-back for heating water for household purposes, which, by extending to a height equal to that of the top plate or supporting surfaces of the stove or range lids, can be used as a rest or support to the central removable bearing of the said lids, and also, by being made to project over or overhang the grate, in order to cause the water-back to be used as the said support, is afforded an enlarged and more efficient fire or heating surface than is found in water-backs of the ordinary construction.

In the further description of my invention which follows, due reference must be had to the accompanying drawing, in which—

Figure 1 is a longitudinal section of a portion of a range illustrating the invention. Fig. 2 is a plan of the same.

Similar letters of reference indicate similar parts of the invention in both views.

A represents the fire-back, its lower part resting upon the rear fire-brick, and its sides fitting between the side fire-brick and the rear portions of the range, the water-back with the brick forming the entire rear portion of the grate. The highest or central part *a* of the water-back extends to the level of that part of the top plate of the range forming the several rests for the lids and central bearing-plate *c*. The central part *a* of the water-back is reduced to the width of the central bearing *c*, and serves as a firm support to it, preventing it from falling or deflecting, when heated, by the weight of such vessels as may be placed on

the range. The part of the water-back forming the support is provided with facing strips, enabling it to be leveled to the exact height necessary.

It will be seen that the water-back is made to project over or overhang the grate, in order that the supporting part may be brought to the necessary position. This overhanging of the water-back, at the same time, gives to it an increased heating or fire surface.

The inlet and outlet pipe connections are represented by *d d'*. By contracting the upward-extending and overhanging portion of the water-back, the draft and products of combustion are given free egress to the smoke-flue under the top plate of the stove or range past the water-back.

I am aware that water-backs have been used as supports to certain parts of stoves or ranges, and, therefore, to a water-back applied as a support to such parts generally, or as a rest for vessels placed directly upon the water-back, I make no claim; but,

Having described my invention, what I claim as new and wish to secure by Letters Patent of the United States, is—

The water-back A, extending upward as a support to the central lid-bearing of the range or stove, and overhanging the grate, thereby increasing the fire or heating surface of the said water-back, the upward-extending and overhanging part thereof being contracted in width, as shown, allowing the draft and products of combustion to pass back to the smoke-flue under the top plate of the stove or range, substantially as specified.

In testimony whereof I have hereto subscribed my name, in the city of Baltimore, this 29th day of January, in the year of our Lord, 1874.

JESSE L. HUTCHINSON.

Witnesses:

W. H. HAYWARD,
J. F. BEARD.