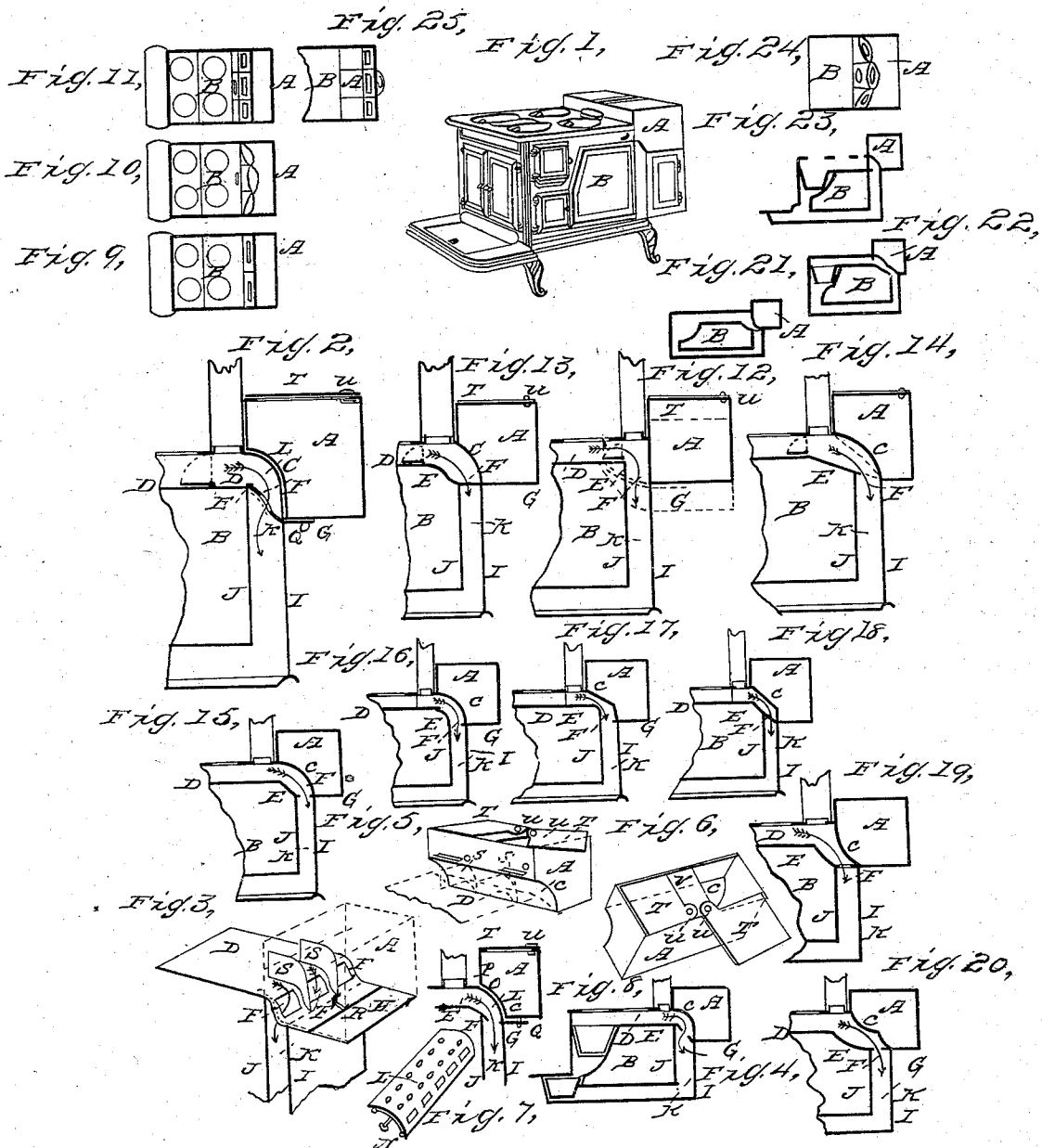


J. B. WILKINSON.

Cooking Stove.

No. 91,993.

Patented June 29, 1869.



UNITED STATES PATENT OFFICE.

JOSEPH B. WILKINSON, OF TROY, NEW YORK.

COOKING-STOVE.

Specification forming part of Letters Patent No. **91,993**, dated June 29, 1869.

To all whom it may concern:

Be it known that I, JOSEPH B. WILKINSON, of the city of Troy, in the county of Rensselaer and State of New York, have invented a new and useful Improvement in Water-Reservoirs, and their connection and combination with stoves; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification, in which—

Figure 1 represents a perspective of a stove complete, showing my reservoir attached. Fig. 2 represents a vertical section of the back part of a stove with the reservoir attached. Fig. 3 represents a perspective view of part of a stove, showing the top plate over the oven, and dotted lines showing the position of the reservoir. Fig. 4 represents a vertical section lengthwise of a stove, with reservoir attached. Fig. 5 represents a perspective view of the reservoir, with dotted lines showing the position of the top oven-plate of a stove. Fig. 6 represents the reservoir, also in perspective, one cover thrown back, and the reservoir tipped, so as to show the interior, where the cover is thrown back. Fig. 7 represents a piece of metal, which I use to cover the opening in the back of the stove, when the reservoir may be removed therefrom. Fig. 8 represents a vertical section of the reservoir, and the part of the stove immediately in connection therewith, to show the mode of attaching. Fig. 9 represents a horizontal section of the stove and reservoir when the stove has two back flues. Fig. 10 represents a horizontal section of the stove and reservoir, showing the back flues of the stove curved. Fig. 11 represents a horizontal section of the stove and reservoir, the said stove having three back flues. Fig. 12 represents a horizontal section of the back part of a stove, with a reservoir attached and resting upon the top oven-plate of the stove, or cast as a part of the same. Figs. 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, and 25 are sectional views, showing various ways of using my invention.

This invention is the completion of the one described in the caveat filed March 23, 1869, and at present in the Patent Office.

Similar letters on the drawings refer to like or corresponding parts.

The arrows are intended to show the hot-air currents.

The nature of my invention consists in placing a reservoir upon and above the top oven-plate of an ordinary cooking-stove, so that it is supported by the said top oven-plate of a cooking-stove, in any way deemed best, either as a portable reservoir, resting upon said top oven-plate of the stove, or, in combination with the said top oven-plate, cast as a part and portion of the said top oven-plate. It also consists in casting a portion of the reservoir with the top oven-plate, either the back, front, or ends of the reservoir, and the other remaining portions added afterward in any convenient and suitable way. It also consists in extending the top oven-plate of a cooking-stove, so that a reservoir can be placed thereon, with the front line of the reservoir just over the back line of the oven, or at any suitable point forward or backward of the back line of the oven. It also consists in casting a reservoir as a part of the top oven-plate of a cooking-stove, and situated as next above mentioned. It also consists in extending the top oven-plate of a stove to the back of the stove and having a depression or bend downward and backward, either curved or angular, with a reservoir resting thereon, or cast in parts, or wholly, with the said top oven-plate, so that the bottom of the reservoir is below the top line of the interior of the oven. It also consists in casting the top oven-plate of a cooking-stove so that it extends back to the back line of the stove, or beyond and outside the same, and covering the back flues of the stove. It also consists in casting the top oven-plate mentioned above with apertures therein over the back flues of a cooking-stove, said apertures being of corresponding size with the said flues, or smaller, as deemed best, and of any desired shape. It also consists in constructing the reservoir with the bottom curved on the front side far enough under to admit heat, smoke, &c., to the apertures over the flues at the back of the stove. It also consists in curving the front plate of the reservoir sufficiently to admit the smoke, heat, &c., to the said apertures over the back flues of the stove. It also consists in casting division-pieces, either as a part of the reser-

voir or as a part of the top oven-plate of the stove, or connected thereto for the purpose of dividing the heat, smoke, &c., so as to guide them to the descending flue or flues, or from the ascending flue or flues, to the exit-pipe. It also consists in constructing a damper or dampers, in combination with the top oven-plate of a stove, shutting off the heat, smoke, &c., from the descending flues of the stove-covering, over or under the before-mentioned apertures in the top oven-plate of a cooking-stove. It also consists in constructing a damper or dampers in combination with the division-plates under the curved bottom or front of the reservoir, or when the said division-plates are cast with the top oven-plate, for the purpose of shutting off the heat from the descending flue or flues of the stove. It also consists in constructing a piece or plate of metal, either sheet-iron or cast-iron, curved to correspond with the curved front or bottom of the reservoir, so formed as to cover the whole space under and in front of the said curved front or bottom of the reservoir and covering the opening at the back of the stove, intended to be covered by the reservoir. It also consists in having apertures in the above-mentioned plate, so that heat can strike against the reservoir, and said apertures being of any shape, size, or number deemed best. It also consists in constructing dampers, (one or more,) in combination with the said curved plate, for the purpose of shutting off the heat from the reservoir, as may be convenient. It also consists in providing the reservoir with covers, turning upon pivots located at one corner thereof, as hereinafter described. It also consists in an arrangement by means of which the reservoir can be attached to a stove readily and securely, and allowing it to be removed conveniently.

To enable others skilled in the art to which my invention refers to make and use the same, I will proceed to describe its construction and operation, which are as follows:

I construct my reservoir of any suitable material, and of the form and shape as shown on the drawings, and having the front, or it may be the bottom, curved as shown in Figs. 2, 5, and 6. A represents the reservoir. B represents the stove, and C represents the curved front or bottom. D is the top oven-plate, which I construct with a curve or depression, shown at E, Figs. 2 and 3, and I construct apertures in the same, as shown at F, and I extend the said top oven-plate beyond the back line of the stove, as shown at G, Figs. 2 and 3, or as shown at H, Fig. 3. I represents the back plate of the stove, and J represents the back oven-plate. The back flues between the same are shown at K, and I construct the curved plate marked L, Figs. 2 and 7, as there shown, the curve in the same corresponding with the curve of the reservoir, the damper attached to the said curved plate being shown at M, Figs. 2 and 7; and the dampers attached to the top oven-plate are shown at N, Figs. 2 and 3. All these dampers are made to slide in the usual

manner, ways being cast on the plates to which they are attached. On the front of the reservoir I cast a flange, as shown at O, Figs. 5 and 8, so arranged as to fit under a lip or flange marked P, Fig. 8, which latter piece is cast on the top plate of the stove. I also construct a pin underneath the bottom of the reservoir, shown at Q, Figs. 2, 5, and 8, which fits into a slot left in the top oven-plate, shown at R, Fig. 3, and this, with the arrangement of the lips or flanges O and P, Figs. 2, 3, 5, and 8, holds the reservoir securely in place; and, by lifting back end slightly, the reservoir can be easily and readily removed from the stove, and when so removed the curved plate marked L, Figs. 2, 7, and 8, will cover the aperture which would otherwise be left in the stove. I construct the division-pieces, mentioned hereinbefore, as shown at S, Fig. 3, fitting closely between the top plate of the stove and the top oven-plate, and also from the reservoir forward into the stove, as far as convenient and suitable for the purpose required. The covers of the reservoir I construct as shown at T, Figs. 1, 2, 5, 6, and 8, made so as to turn on a pivot, as shown at U, Figs. 2, 5, and 6. This pivot may be cast as a part of the cover, or as a part of a piece crossing the top of the reservoir, shown at V, Figs. 5 and 6. I prefer having the pivot as a part of the cover, and passing through a hole in the piece or plate V, Figs. 5 and 6, and in this case I construct a thread around the bottom end of the pivot U, on which I place a nut, by means of which the covers can be held tightly or not, as may be most convenient and desirable.

It will be seen, by referring to the drawings, that my invention can be used in a variety of ways, all operating in the same or a similar manner, my object being to obtain heat for the reservoir directly from the fire when needed or required, so that water can be heated to a great degree, and, when not required so hot, the heat can be shut off entirely, or admitted partially, as most desirable; and I believe by my invention I get an economical and more efficient reservoir than can be obtained in any other way.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. The extension of the top oven-plate of a cooking-stove beyond the back plate of the oven, over the back flues of the stove, to the back plate of the stove, covering the said back flues of the stove, and reaching or extending to any point or distance beyond the said back plate of the stove, in the manner and for the purpose, substantially as described.

2. Curving or bending the said top oven-plate of a cooking-stove at any suitable point in the extension or extended part thereof, beyond and back of the upper back corner of the oven, for the purpose and in the manner, substantially as described and set forth.

3. The apertures F in the said top oven-plate, with or without dampers, and in combination therewith, temporarily covering the same, in

the manner and for the purpose, substantially as described and set forth.

4. The employment of a water reservoir or tank, or any equivalent therefor, in combination with the extended top oven-plate of a cooking-stove, resting upon or cast as a part of the said top oven-plate.

5. The division-pieces S, or any equivalent therefor, in combination with the said extended top oven-plate, in the manner and for the purpose, substantially as described and set forth.

6. The curved plate L, with or without ap-

ertures and with or without dampers, substantially in the manner and for the purpose as described and set forth.

7. The covers T, with the pivots U, for the purpose and in the manner substantially as described and set forth.

In testimony whereof I have, on this 1st day of April, 1869, hereto affixed my name in the presence of two witnesses, to wit:

JOSEPH B. WILKINSON.

Witnesses:

WM. H. YOUNG,
R. H. REILLE.