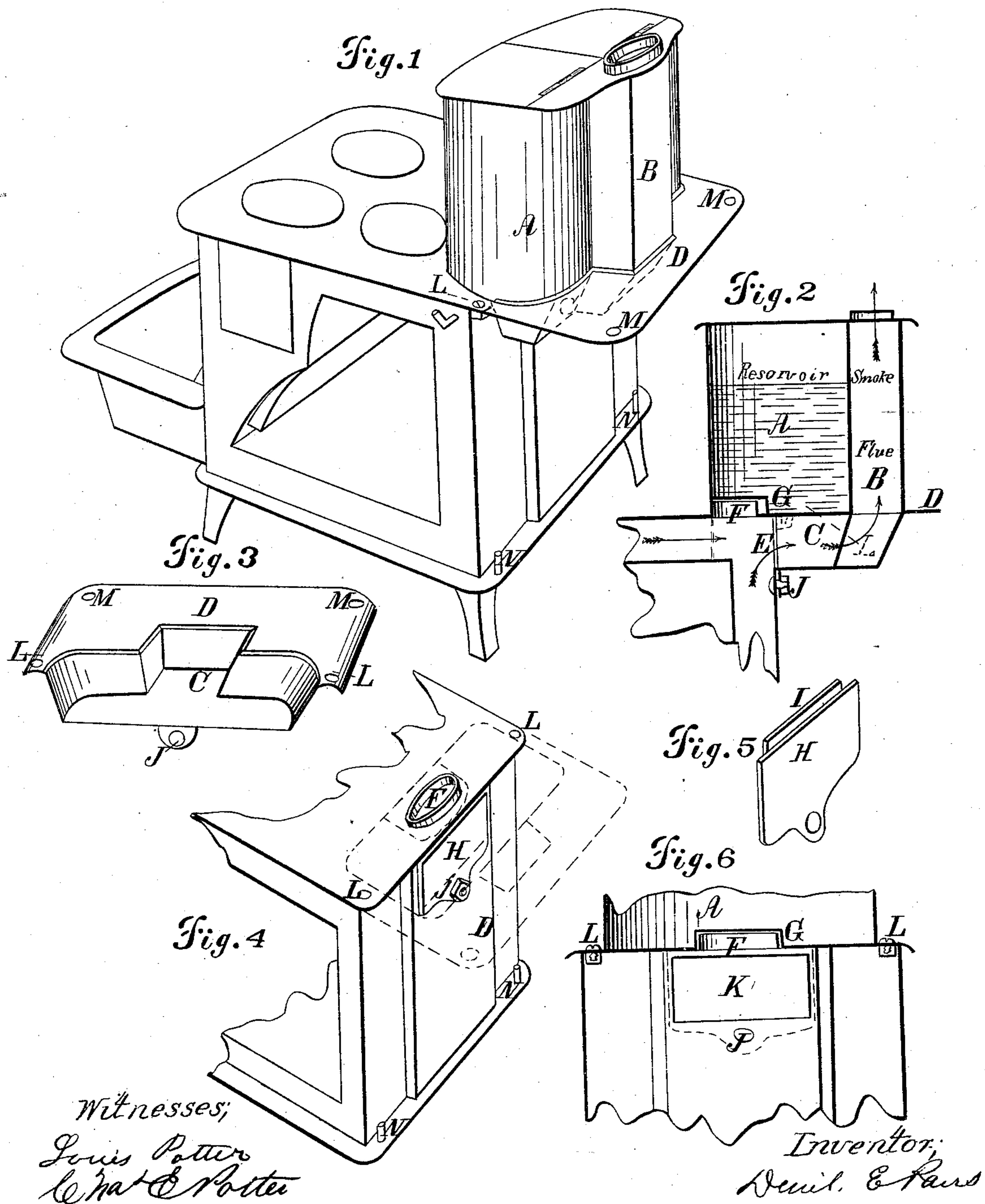


D. E. PARIS.
Cooking Stove.

No. 78,686.

Patented June 9, 1868.



United States Patent Office.

DANIEL E. PARIS, OF TROY, NEW YORK.

Letters Patent No. 78,686, dated June 9, 1868.

WATER-RESERVOIR ATTACHMENT TO COOKING-STOVES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, DANIEL E. PARIS, of the city of Troy, in the county of Rensselaer, and State of New York, have invented new and useful Improvements in Water-Reservoirs for Stoves; and I do hereby declare that the following is a clear and accurate description of the same, reference being had to the accompanying drawings, and letters of reference marked thereon, like letters representing like parts, in which—

Figure 1 is a perspective view of a cooking-stove, with the reservoir attached.

Figure 2 is a sectional side view, taken through the centre of the stove, lengthwise, showing the reservoir, together with the flue-chamber C underneath it, and the smoke-flue B at the back of the reservoir.

Figure 3 shows the piece forming both the flue-chamber C and also an extension-piece, by means of which the top surface of the stove, as seen at M D M in fig. 1, is extended rearward.

Figure 4 is a perspective outline of the rear part of the stove-top, together with the extension-piece D, showing also the movable piece H attached to the stove-back.

Figure 5 shows this movable piece detached from the back plate of the stove, leaving the opening, K, seen in Figure 6.

It is very desirable to so construct a cooking-stove that it can be used with or without a reservoir. In the invention of Paris & Davis, for which application has been made for a patent, this was done by elevating the bottom of the reservoir sufficiently far above the pipe-collar to allow the products of combustion to pass off into the smoke-flue B, above the top plate of the stove, while in this invention the flue is formed below the top plate of the stove, in the ordinary way—the new features being, first, the sink or elevated place, G, in the bottom of the reservoir, which is not made for a flue, but simply to set over and accommodate itself to the pipe-collar F; and the second new feature is the movable piece H, fitted over the opening K, in the central part of the back plate of the stove, (if the stove is made with three flues,) and at or near its top edge.

By these two combinations, or by the latter, I am enabled to construct my stove with or without a reservoir, a thing that is exceedingly desirable, for not one person in twenty who buys a cooking-stove gets one with a reservoir, but probably more than half would like to get it afterwards, if possible; but heretofore it has been impossible to attach a reservoir to an ordinary stove and make it serviceable and symmetrical. In this invention the stoves are made in the ordinary way, except that the movable piece H is made and attached to the back of every stove, and the holes L L are cast through the top plate, as seen in figs. 1 and 4.

These changes cost little extra, and they do not injure the stove at all. The stove is then put on the market and sold, and then at any time afterwards, either before or after it is sold by the retail dealer, if the party who is to use the stove wishes a reservoir, he can order one, together with the extension or sink-piece D, and, either before or after the stove is put in use, the reservoir can be attached to the stove simply by removing the loose piece H, fig. 5, which is done by taking out the bolt at J. The loose piece H is then laid aside, and the reservoir-seat and extension-piece D is put in its place, and the same bolt that held the piece H now holds the piece D at the bottom, while another bolt, at either of its front corners, L L, holds said piece firmly in its place. The reservoir is then set on in its place, and it sits down level because of the sink or elevated place G in the bottom of the reservoir, which is made to accommodate the pipe-collar F. This sink or elevated place may extend, if desired, clear to the back side of the reservoir, or only rearward far enough to sit over the pipe-collar, as shown in the drawings.

It will be seen that the extension-piece D projects farther backward than necessary to accommodate the reservoir. This is done so as to form a covering to a warming-closet, or hot oven, which is attached to and is supported by the extension-piece D, the closet being bolted to said piece, at either side or end, through the holes L and M; and herein consists the superiority of this invention over that of Paris & Davis, hereinbefore alluded to, because by that mode of constructing and attaching a reservoir, no place is made or provided for a warming-closet. But that reservoir has one advantage over this, in that it can be attached to any kind of stove, whether made for it or not, while this can only be attached to stoves previously made with the movable piece H,

by the removal of which the products of combustion pass from the rear central flue, E, of the stove into the flue-chamber or reservoir-seat C, and thence upward through the smoke-flue B into the exit-pipe.

The depressed or sunken part of the piece D spreads out and extends on the back of the stove, from side to side, for two reasons: first, to heat the reservoir better, by exposing to the heat more of its bottom-surface; and, second, if the stove be a two-flue stove, it is so made in order to allow the opening K, together with the loose piece H, to be moved farther to one side of the stove, so as to be opposite the flue desired.

The extension-piece D forms a complete covering, and at the same time a support for the hot closet, the combination of both of which forming a new feature.

It will be seen that I do not claim here a flue in the bottom of the reservoir, for the raised place G is not made for any such purpose, but simply to accommodate the reservoir to the pipe-collar. Thus, were the pipe-collar not there, but simply an opening through the top at F, then this raised place G would not be necessary. The bottom of the reservoir, however, is exposed to the heat of the back flues of the stove, or one of them, to the extent of the size of the pipe-collar, which is a valuable feature, as it gives so much more heating-surface in the most desirable place.

The pipe-collar, or opening through the top plate of the stove, could be omitted entirely, although it would be an inferior arrangement, and thus the raised place in the reservoir would also be omitted, as follows: In place of the loose piece H, what is known as a "pipe-collar bag," with a place made on it for a smoke-pipe, could be put over the opening K, and used in this way as a common or plain-top stove, and then removed, and the piece D put in its place, when used as a reservoir-top stove. But this arrangement would be more expensive; besides, it would decrease the heating-surface of the reservoir by closing the opening through the stove-top.

Another feature of this invention may be noticed, which is of scarcely less value than any heretofore alluded to, that is, the convertibility of the stove into a plain-top or a reservoir-top stove, for it can be used either way, as desired, according to the position it is placed in, for summer or winter use; and then, again, if the reservoir gets out of order, and it is necessary to send it away to be repaired, the stove can be converted at once into a plain-top stove, and so used until the reservoir is returned. This is impossible with the old style of reservoir, for when sent away to be repaired, no fire could be made in the stove till it be returned, which would be exceedingly inconvenient, especially in cold weather.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A cooking-stove, constructed to be used with or without a water-reservoir, by means of an opening through the back of the stove, through which the flue passes when used with a reservoir, and which is closed by a movable piece, or by a "pipe-collar bag," when used as a plain-top stove, substantially as herein shown and described.

2. A pipe-collar, or a flue-opening, through the rear part of the top plate of a cooking-stove or range, arranged to receive a smoke-pipe, also an opening through the back plate of the stove, arranged to receive a reservoir-seat or flue-chamber, so that either opening may be used separately or alternately as an exit-passage, substantially as and for the purpose described.

3. A reservoir or water-tank, having the whole or a part of the bottom-surface elevated sufficiently far to sit over an ordinary pipe-collar, and so that the outer edges of the reservoir will set down level on the stove-top, substantially as herein shown and described.

4. The extension-piece or reservoir-seat D, serving both as a sunken pit or flue-chamber, underneath the reservoir, and also as a top covering to a warming-closet, when said piece or seat is fitted to and combined with an ordinary stove-top, and so arranged that the stove can be used with or without said piece, substantially as herein described and set forth.

DANIEL E. PARIS.

Witnesses:

LOUIS POTTER,
CHAS. E. POTTER.