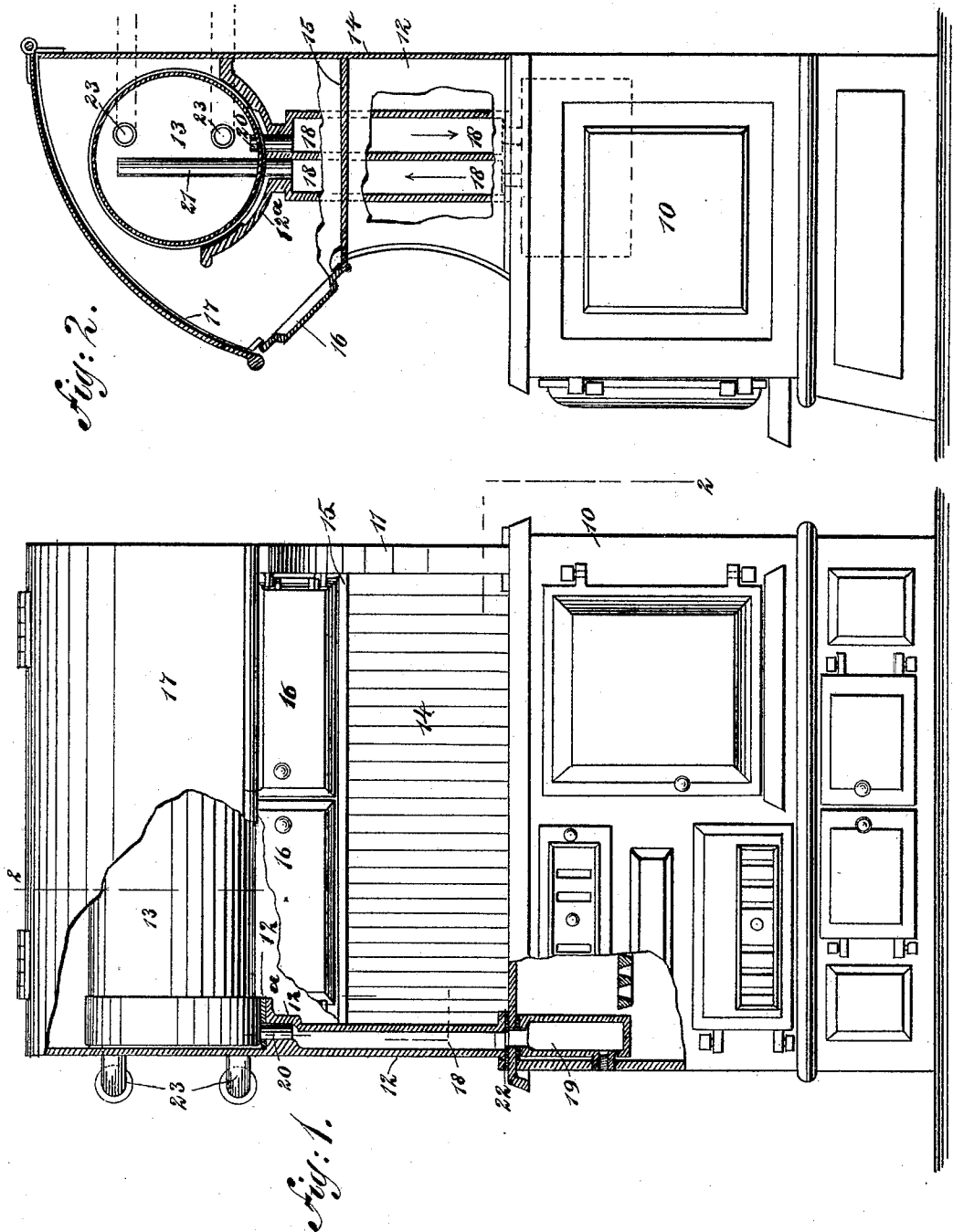


(No Model.)

I. G. LANE & A. H. LOVEJOY.
BOILER ATTACHMENT FOR RANGES.

No. 462,978.

Patented Nov. 10, 1891.



WITNESSES:
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IRA G. LANE, OF NEW YORK, AND ARTHUR H. LOVEJOY, OF WHITESTONE,
NEW YORK.

BOILER ATTACHMENT FOR RANGES.

SPECIFICATION forming part of Letters Patent No. 462,978, dated November 10, 1891.

Application filed June 13, 1891. Serial No. 396,149. (No model.)

To all whom it may concern:

Be it known that we, IRA G. LANE, of New York city, in the county and State of New York, and ARTHUR H. LOVEJOY, of Whitestone, in the county of Queens and State of New York, have invented a new and Improved Boiler Attachment for Ranges, of which the following is a full, clear, and exact description.

Our invention relates to improvements in boiler attachments for kitchen-ranges; and the object of the invention is to make the connections between the hot-water boiler and the water-back of the range in such a manner that no unsightly pipes will be seen and that the connections may also be cheaply made.

A further object of our invention is to provide means for inclosing the hot-water boiler, so that it will be entirely removed from sight and will serve to heat the hot-air closet.

To this end our invention consists in certain features of construction and combinations of parts, which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in both views.

Figure 1 is a broken front view, partly in section, of a range provided with our improved attachments; and Fig. 2 is a broken vertical section on the irregular line 2 2 in Fig. 1.

The range 10 has brackets 11 and 12 at the ends and near the back, which brackets support the boiler 13, the brackets having offsets 12^a for this purpose, and the brackets are prolonged, so as to extend above the boiler and enable the boiler to be easily covered. These brackets are connected at the back by a metallic strip 14, and below the boiler and between the brackets is a shelf 15, and a closet is thus formed between the shelf and the boiler, which is closed by doors 16, which are placed in front of the same. The boiler is covered by a vertically-swinging cover 17, which is hinged to the back 14 of the attachments.

The bracket 12 is provided with two vertical and parallel bores 18, which at the upper ends connect with the boiler, and which at the lower ends align and connect with the water-back 19 of the range. The upper ends of the bores re-

ceive the lower ends of pipes 20 and 21, which project into the boiler, and a suitable packing 22 is interposed between the boiler and bracket and between the lower end of the bracket and the top of the range. It will thus be seen that a very simple connection is made between the boiler and the water-back, which provides for a free circulation of water, and when the boiler and the brackets are in place the connections are entirely concealed.

The boiler is provided with the usual circulation-pipes 23, which project outward through the bracket 12 and may project through the bracket 11, and, if desired, instead of having these pipes project through separate holes in the bracket, an opening may be left opposite the end of the boiler and the pipes led through the opening.

It is customary to make the connection between boilers of the kind described and the water-backs of ranges by means of pipes leading outward from the ends of the boilers and outside of the supporting-brackets and thence inward through the side of the range to the water-back; but when the connections are made in this way the unsightly pipes are exposed to view, and the joints at the bends of the pipes are comparatively expensive, besides causing a very slow circulation of water on account of the four right-angled bends used in connecting horizontal boilers and water-backs; but by making the connection between the boiler and water-back direct, as shown, the connections are concealed and are very much simpler and less expensive, insuring a very rapid direct circulation between water-back and boiler, thereby lessening the danger of explosions by pipes with angles becoming choked with lime or sediment.

If desired, straight pipes may be connected between the water-back and the boiler inside of the bracket 12; but the connection shown in the drawings is preferable.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. The combination, with the range having a water-back therein, the end brackets mounted upon the range, and the boiler supported between the brackets, of connections between

the boiler and the water-back, said connections being within the brackets, substantially as described.

2. The combination, with a range having a water-back and the brackets mounted upon the range, of a hot-water boiler entirely inclosed between the brackets and connections between the boiler and the water-back, substantially as described.

3. The combination, with the range having a water-back, of brackets mounted upon the range, one of the brackets having parallel vertical bores connecting with the water-back, and a boiler supported upon the brackets, said

boiler having connections with the bores of the brackets, substantially as described.

4. The combination of the range having a water-back therein, the supporting-brackets, one of which has parallel bores connecting with the water-back, and the boiler supported upon the brackets, the boiler having pipes extending into the bores of the brackets, substantially as described.

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Witnesses:

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