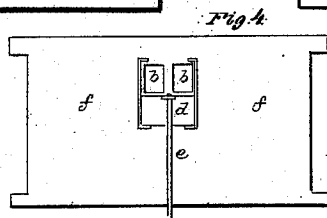
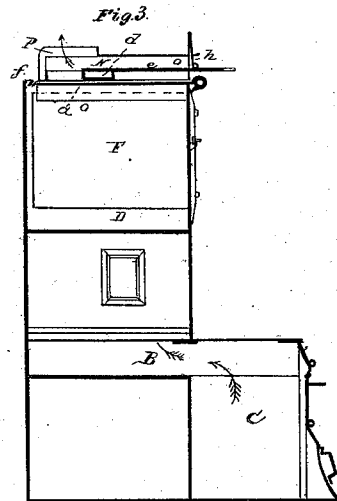
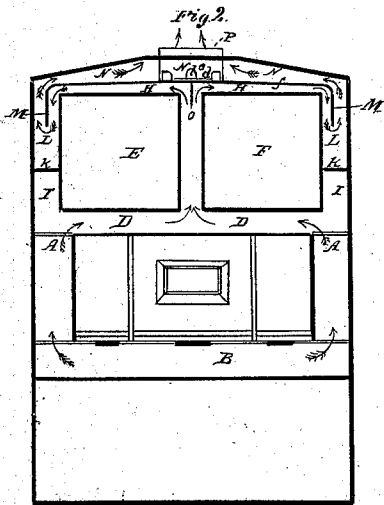
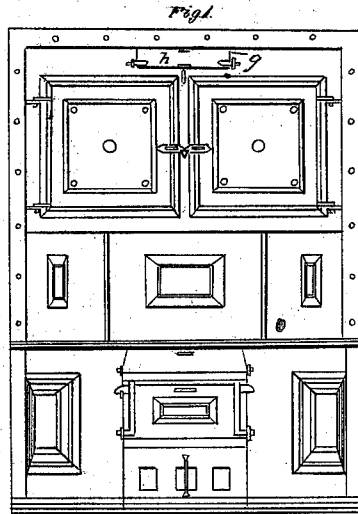


J. ALBEE.

Range.

No. 107,849.

Patented Oct. 4, 1870.



Witnesses.  
S. K. Piper.  
L. K. Moller.

James Albee.  
by his attorney  
W. Waddy

# United States Patent Office.

JAMES ALBEE, OF CHELSEA, ASSIGNOR TO MOSES POND & CO., OF BOSTON, MASSACHUSETTS.

Letters Patent No. 107,849, dated October 4, 1870.

## IMPROVEMENT IN COOKING-RANGES.

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

To all persons to whom these presents may come:

Be it known that I, JAMES ALBEE, of Chelsea, of the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Cooking-Ranges, provided with what are termed "elevated ovens;" and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawing, of which—

Figure 1 is a front elevation of a cooking-range, provided with my invention.

Figure 2 is a longitudinal section of the ovens and their flues.

Figure 3 is a vertical section, taken between the ovens.

My invention consists in a certain new or improved arrangement or arrangements of oven-flues.

In the drawing—

A A denotes two vertical flues, extended upward from the flue-space B, which goes over and backward from the fire-place C, and has its top plate perforated for the reception of kettles or other vessels.

The two upright flues A A lead directly into a narrow flue-space, D, arranged along underneath both of the ovens E F.

Between the said ovens is a flue-space, G, which rises vertically from the space D, and opens directly into another narrow flue space, H, extended over both ovens.

Furthermore, there is led out of the bottom flue space D two upright flue spaces I I, which are arranged against the outer vertical sides of the two ovens, and terminate at or about one half the height of each against horizontal plates K K.

Directly over the side flue-spaces I I are other flues L L, which extend up against the sides of the ovens, in manner as represented.

Furthermore, there is projected downward from the ends of the top *f* of the flue-space H, and into the flue-spaces L L, two partitions M M, such partitions terminating at a sufficient distance above the horizontal plates K K, and each being arranged in or about in the middle of its flue L.

The two flues L open at top, in manner as represented, into another horizontal flue-space N, which is disposed immediately over the space H.

A pendulous valve or gate, O, is arranged in the flue H, at its middle, and pivoted at its upper part *a*, so as to be capable of being swung from one oven to the other.

The flue N is to have a discharge opening, P, at its middle.

Furthermore, at the rear part of the middle of the top of the flue H there are to be two holes *b b*, made through such top, they being provided with a slide valve, *d*, whose stem or rod is shown at *e*, in fig. 3.

Figure 4 denotes a top view of the top plate *f* of

the flue H, and exhibits the direct discharge openings *b b* and their valve *d*.

In the front of the flue N, and at its middle, is an opening, *g*, provided with a door, *h*, the same answering two purposes, viz., to enable access to be had to the flue N, to cleanse it at any time, and also to serve as a means of introducing, or permitting to be introduced into the flue, a quantity or current of air, to check the draught about the ovens, as occasion may require.

The object of my arrangement of flues is to disseminate the smoke and heat equally about the ovens, or to cause the smoke and volatile products of combustion to flow principally around either of the said ovens, as may be desirable from time to time.

After rising out of the vertical flues A A, the smoke and hot gases, or portions thereof, will pass into the flues I I, and impinge against the lower portions of the outer sides of the two ovens.

From the flues I A, the smoke and hot gases will pass into the flue D, thence up the flue G, between the two ovens.

From this latter flue the volatile products will divide, and pass in opposite directions, through the flue H, over the ovens, thence downward in the flues L L, thence underneath the plates M M, thence upward in the flues L, and thence into and through the flue N, to the escape-passage P.

By drawing forward the valve *d*, the smoke and heat may, in whole or in part, be diverted from flowing over the tops of the ovens, or through the flues H, L, and N.

I claim—

1. The arrangement and combination of the diving-flues L L, the partitions M M and K K, the horizontal flues D H, and the vertical flues I I and G, disposed relatively to the two ovens E F, in manner substantially as explained.

2. The arrangement and combination of the flue N, the diving-flues L L, partitions M M and K K, the horizontal flues D H, and the vertical flues I I and G, disposed relatively to the two ovens E F, in manner substantially as explained.

3. The arrangement and combination of the valve O, with the two ovens E F, and the flues I I, D G, H L, and the partitions M M K K, disposed with the said ovens, as explained.

4. The arrangement and combination of the valve *d*, and its escape-opening or openings *b*, with the two ovens E F, the flues N, H, and D, the flues I I, and the diving flues L L, the whole being as specified.

5. The arrangement and combination of the opening *g* and door *h*, with the two ovens E F, and the flues I I, D, G, H, L, and N, arranged with the ovens, as explained.

Witnesses:

R. H. EDDY,  
S. N. PIER.

JAMES ALBEE.