B. W. DUNKLEE.

Cooking Range.

No. 102,925. Patented May 10, 1870.

Fig. 1

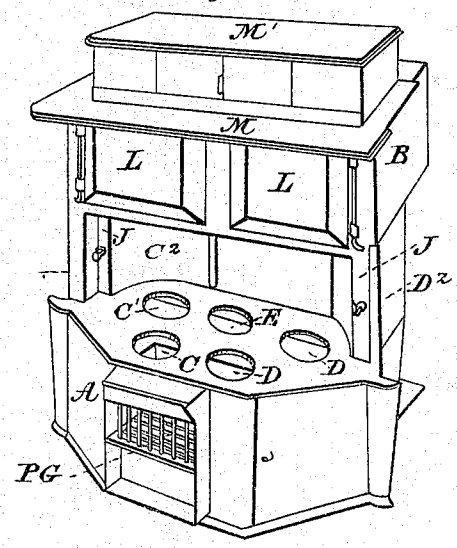


Fig. 2

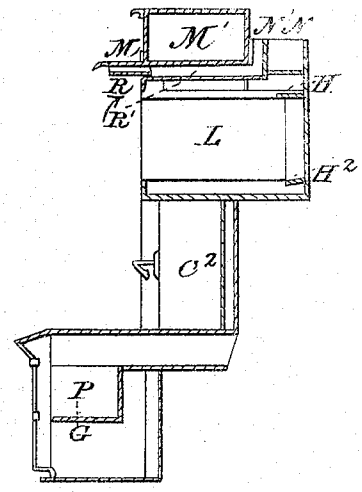
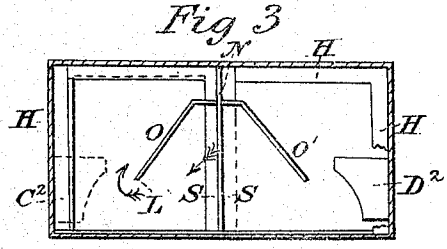


Fig. 3



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UNITED STATES PATENT OFFICE.

B. WELLS DUNKLEE, OF BOSTON, MASSACHUSETTS.

COOKING-RANGE.

Specification forming part of Letters Patent No. **102,925**, dated May 10, 1870.

To all whom it may concern:

Be it known that I, B. W. DUNKLEE, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Ranges for Cooking; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists, first, in a new and peculiar arrangement of the boiling-places in relation to the fire-pot and the draft-flues; second, in the relation and arrangement of the fire-pot, boiling-places, draft-flues, and ovens; third, in the arrangement of the draft-flues, draft-deflectors, and ovens; fourth, in combining with the hot closet of a range a vapor and smoke passage to draw off the exhalations produced by cooking.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and use.

In the drawings, Figure 1 is a perspective view of my invention. Fig. 2 is a vertical section. Fig. 3 is a horizontal section near the upper part.

My improved range is constructed as follows:

G and P, Figs. 1 and 2, represent the grate and fire-pot, which may be made after any of the improved methods.

D^2 and C^2 are two vertical flues, located as shown in Figs. 1 and 2. Each of these flues has a damper. (Shown at J and J′, Fig. 1.) The boiling-places D D′, C C′, and E are arranged in respect to each other and to the draft-flues D^2 and C^2 in a peculiar manner, as shown in Fig. 1. The places C and D are immediately over the fire, while D′ and C′ are so placed that they are in a direct line of draft between the fire and the draft-flues. The fifth boiling-place, E, not being in the line of draft, is warmed principally from the direct radiation from the fire. This arrangement of the boiling-places admits of great economy in the use of fuel, as it allows of four boiling-places—namely D D′ C and C′—to be acted upon directly from the fire. If but two places are required, one of the dampers J J′ may be closed and nearly the whole effect of the fire be turned upon three of the boiling-places. For instance, if the damper J′ be closed, most of the effects of the fire would be directed against the boiling-places C, D, and D′, the products of combustion all passing up the flue D^2. This arrangement of the boiling-places also admits of a new and improved form for the body of the range, so that the cook can approach it upon either side without coming in contact with the fire, thus endangering her clothes. In fact, she may do all her work standing at the side of the range.

Each of the ovens L and L′ has a separate flue, connected with the fire and smoke-pipe, so that they may be both used at the same time, or only one may be used.

As the ovens and their flue-connections are alike, it is only necessary to describe one.

The heated products of combustion, coming up the flue D^2, Fig. 3, circulates under the oven and up its rear side, and finally passes up in one of two interior passages between the two ovens shown in Fig. 3. It then circulates over the top of the oven, as indicated by the arrows T T′, Fig. 3, around the deflector O, into the smoke-flue N.

The deflectors O O′, Fig. 3, are so located on the top of the oven in relation to the flues S and S′ and the smoke-flue N that the heated products of combustion, as they ascend the flues S and S′ between the ovens, have to flow over all parts of the top of the oven before entering the smoke-flue. The deflector H^2, Fig. 2, partially closes the opening to the rear of the oven to prevent an undue amount of heat passing in that direction.

M′, Figs. 1 and 2, represents the hot-closet, under a part of which the flue R′, Fig. 2, passes, the object of R′ being to provide a passage for the escape of vapors and gases generated by cooking.

R is a register, immediately under the shelf M, Figs. 1 and 2, by means of which the passage R′ may be closed or opened. The passage R′ discharges into a small passage, N′, separated from the smoke-flue by a partition extending upward a short distance, and then discharging into it.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The arrangement of the boiling-places D D′, C C′, and E in relation to the fire-pot P and draft-flues D^2 C^2, substantially as described, and for the purpose set forth.

2. The combination and arrangement of the

boiling-places, the draft-flues D^2 C^2, their dampers J J′, and the ovens L and L′, substantially as described, and for the purpose set forth.

3. The arrangement of the draft-flues D^2 C^2, deflectors H^2, ovens L L′, and deflectors O O′, substantially as described, and for the purpose set forth.

4. Combining with the hot-air closet of a range the vapor and smoke-passage R′, substantially as described, and for the purpose set forth.

B. WELLS DUNKLEE.

Witnesses:
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