

L. MEYER.
Ranges.

No. 145,674.

Patented Dec. 16, 1873.

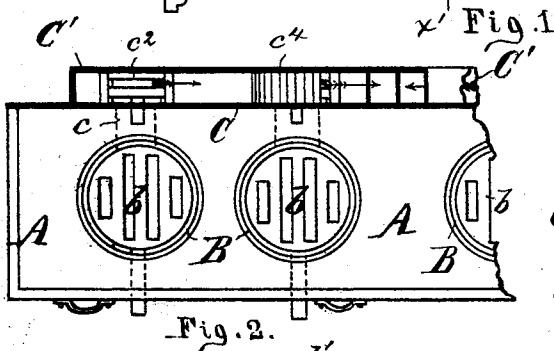
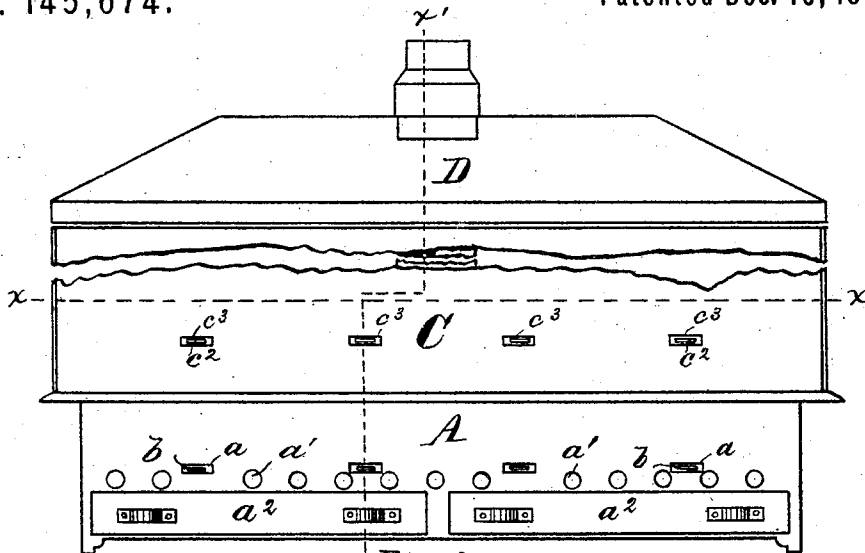


Fig. 2.

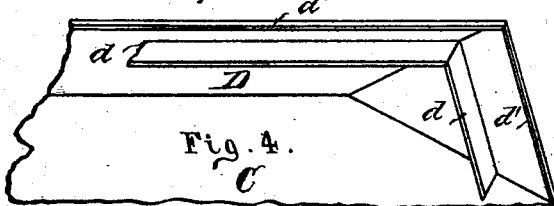


Fig. 4.

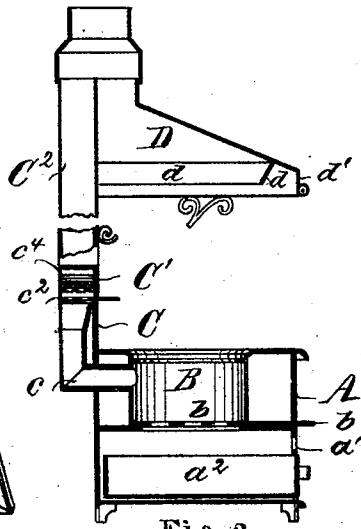


Fig. 3.

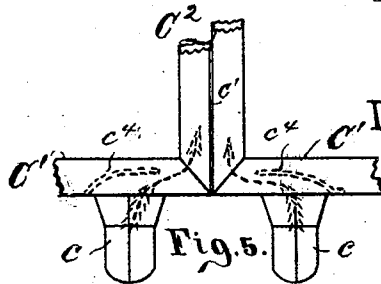


Fig. 5.

Witnesses:

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UNITED STATES PATENT OFFICE.

LOUIS MEYER, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN RANGES.

Specification forming part of Letters Patent No. **145,674**, dated December 16, 1873; application filed November 1, 1873.

To all whom it may concern:

Be it known that I, LOUIS MEYER, of St. Louis, in the county of St. Louis and State of Missouri, have invented an Improved Oyster-Range, of which the following is a specification:

This improved range is designed for broiling, frying, stewing, and similar purposes, specially adapted for restaurants, hotels, oyster-depots, markets, and the like, although by its nature being also adapted for general household purposes. My invention possesses the following improved constructive features, viz: It can have as many grates or stoves as demanded, and the range suited to the room, location, or business. By slide-dampers the flues of each stove or grate can be controlled, or the entire range can be regulated or controlled, as required; also, the range has its backing provided with a peculiarly-constructed canopy. Further details of construction of parts will now more fully appear.

Of the drawing, Figure 1 is a front elevation with part of canopy broken away. Fig. 2 is a plan of section on line *xx*; Fig. 3, a transverse or sectional elevation on line *x' x'*; Fig. 4, a part perspective view of canopy; Fig. 5 being a part rear elevation, showing the arrangement of pipes or flues.

My improved range can be made of cast or sheet iron.

A represents the outer casing, in which I arrange and provide the stoves or grates B. (See Figs. 2 and 3.) The body of the grates B is of circular form, and has resting upon its bottom flanges the movable gratings *b*. (See Figs. 2 and 3.) The handles of the grates *b* extend through slots *a* left in front of casing A, (see Figs. 1, 2, 3,) so as to be readily operated by a lateral motion. The row of holes *a'* provided in front of casing A are draft-holes. At bottom of casing A are provided suitable ash-pans *a''*, Figs. 1 and 3. The stoves or grates B at top of casing A are provided with proper lids. As apparent, the casing A can be made any length, and provided with a series of grates, B; also, said range can be made either straight, curved, or in form according to adaptation and requirement. Forming part of the range, I provide a backing or wall, C, Figs. 1, 2, 3. From the rear of each grate B

extends an elbow-jointed flue, *c*, Figs. 2, 3, 5. Each of the elbows or flues *c* further communicates with a horizontal flue, C¹. The flue C¹ extends along the back of the wall C the length required for the range. (See Figs. 2, 3, and 5.) Further, from the flue C¹, and dividing same, extends vertically the chimney-flue C². (More clearly shown in Figs. 3 and 5.) The chimney-flue C² is divided in two parts by the partition *c'*, (see Fig. 5,) the said partition also dividing the horizontal flue C¹. The flue C¹ and chimney-flue C² being thus divided, a ready means of escape for the smoke and gases out of chimney is provided for; especially as each grate to the right of the chimney C² can be used independently and irrespective of those on the left of said chimney. When all the grates are used simultaneously, the escape and passage of the smoke and gases are, therefore, through each separate flue *c* into main flue C¹, and exit out of chimney C², as indicated by arrows, Fig. 5. It is essential to control each grate irrespective of the uses of those remaining; hence I provide slide-dampers *c''*, to control the flue-openings in the flue C¹, where the respective elbows *c* are jointed. (See Figs. 2 and 3.) The slide-dampers *c''* are made to slide in proper guides provided in flue C¹, and otherwise said dampers are so made with relation to said flue-openings that the same shall be open when said dampers are in open position, and closed when in closed position. Each flue-opening being thus provided with a damper, *c''*, each flue *c* of each grate can be controlled or regulated. For convenience of operation, the handles of the dampers *c''* extend through slot *c'''* in the wall C, (see Figs. 1 and 3,) so as to be operated from the front. Further, I provide the horizontal flue C¹ with curved flue-plates *c'*, (see Figs. 2, 3, and 5,) the object of the flue-plates *c'* being to permit the passage and exit out of flues C¹ C² of all gases, smoke, and the like, and prevent same entering the opened flues, which, if taking place, would tend to check the action of the remaining grates when used.

The parts being thus constructed and arranged, each grate can be separately used at any time required, and, by controlling the slide-dampers of any or all the grates, the same can be immediately used.

The construction here shown gives a most

decided, quick, and greatly-concentrated heating action, so essential to a perfect accomplishment of the purposes for a range of this nature.

The wall C of the range I provide with a canopy, D. (See Figs. 1, 3, 4.) The object of the canopy D is to concentrate the gases, fumes, and the like taking place from the use of the range, and cause and permit them to pass out of chimney C². Therefore the canopy D is of the construction shown in Figs. 3 and 4. At its lower side it has an outer and inner rim *d d'*, which surrounds its front and side edges. Whatever gases, fumes, and the like cannot immediately exit out of chimney, are still retained by the canopy D within the space formed by its rims *d d'*, until sufficient outlet is made by the continued passage out of chimney, which always takes place.

Having described my said invention, what I claim is—

1. A range consisting of the casing A, having one or more grates, B, wall C, flues *c* C¹ C², dampers *c*², and flue-plates *c*⁴, as and for the purpose set forth.

2. The canopy D, having outer and inner rims *d d'*, as and for the purpose set forth.

3. The improved range, consisting of the casing A, wall C, canopy D, flues *c* C¹ C², flue-plates *c*⁴, and dampers *c*², all constructed to operate as and for the purpose set forth.

In testimony of said invention I have hereunto set my hand in presence of witnesses.

LOUIS MEYER.

Witnesses:

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