C. H. CARLING.

Grate for Oyster Range.

No. 166,965. Patented Aug. 24, 1875.

Fig. 1

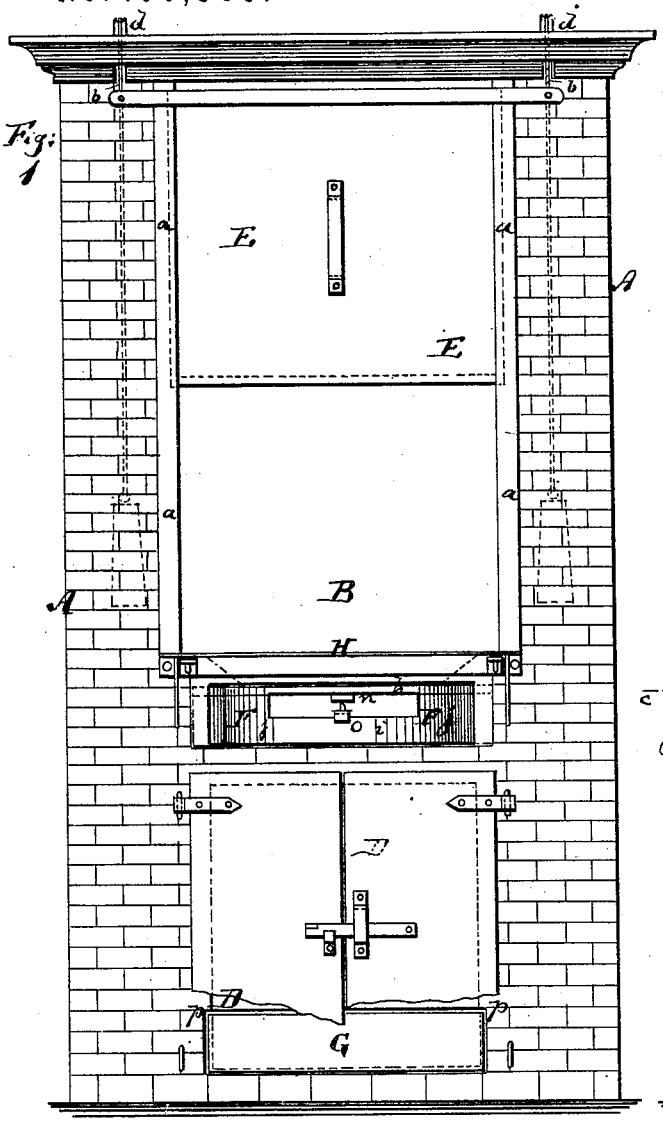


Fig. 2

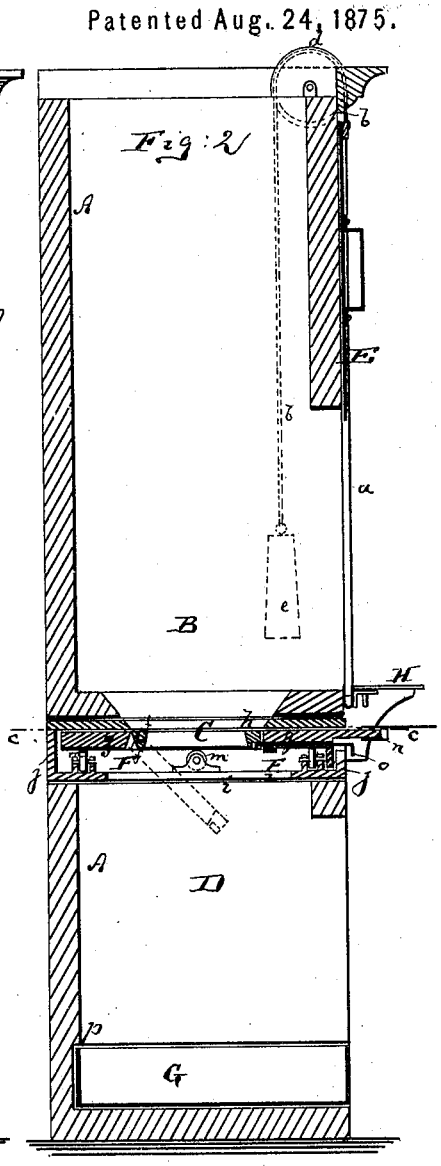
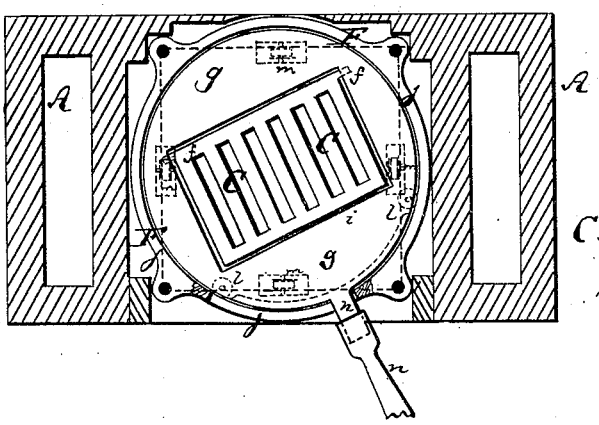


Fig. 3



Witnesses:
A. Moraga.
Ernest Kurtz

Inventor
C. H. Carling
by his attorney
Ab. Bierce

UNITED STATES PATENT OFFICE.

CORNELIUS H. CARLING, OF NEW YORK, N. Y.

IMPROVEMENT IN GRATES FOR OYSTER-RANGES.

Specification forming part of Letters Patent No. **166,965**, dated August 24, 1875; application filed July 21, 1875.

To all whom it may concern:

Be it known that I, CORNELIUS HENRY CARLING, of New York city, in the county and State of New York, have invented a new and Improved Oyster-Range, of which the following is a specification:

Figure 1 is a front elevation of my improved oyster-range. Fig. 2 is a vertical transverse section of the same; and Fig. 3, a horizontal section of the same on the line *c c*, Fig. 2.

Similar letters of reference indicate corresponding parts in all the figures.

The object of this invention is to produce an oyster-range which can be closed to permit the raking of the fire without causing ashes and dust to fly all over the room in which the range is placed, and which is otherwise arranged to supply the necessary conveniences that may be required of a good oyster-range.

The invention consists in a novel arrangement and combination of the parts that constitute the grate, as hereinafter more fully described.

The letter A in the drawing represents the frame or body of the range, the same being built of brick or made of metal, of the proper size and form. B is the fire-place formed therein above a grate, C, and D is the ash-chamber formed in the case A below the grate C. E is a sliding vertical gate, which is applied to the front of the range between two vertical guide-rails, *a a*, and which is connected with cords *b b*, that pass over the pulleys *d d* on top of the frame or case A, said cords being weighted, as indicated at *e*, the weights being concealed within the case A and serving to balance the gate E. This gate will, by its connection with the weights *e*, remain at any position to which it may be raised or lowered between its rails, and can thus be readily adjusted without trouble, to more or less open the fire-place, or to entirely close the same, during the raking of a fire.

I am aware that oyster-ranges have been made with gates which can be wound up or otherwise adjusted by cumbersome mechanism; but, as far as I know, a balance-gate like that described by me has never before been introduced on an oyster-range.

The grate C is made of rectangular form, and is pivoted at or near its rear end by projecting trunnions *f f* in a circular plate, *g*, which plate has an opening through it of a size to admit the rectangular grate proper C. The circular plate *g* is inclosed within a metallic casing, F, said casing being composed of a top plate, *h*, bottom plate *i*, and rim *j*. These three parts *h i j* are firmly connected by bolts or otherwise, the top plate having a hole through it of a size equal to about the size of the grate proper C. The bottom plate is also of approximatingly-annular form, to allow the grate proper to be suspended through it when it is dumped. Friction-rollers *l l* are formed on the circular plate *g* and bear against the circular rim *j*, while other friction-rollers *m m* are on the bottom plate *i* and sustain the circular plate *g*. By means of a rod or handle, *n*, that extends from the front portion of the circular plate *g*, through a slot of the rim *j*, the plate *g* can be oscillated in a horizontal plane that is moved to one side or the other on the friction-rollers *m m*, thereby agitating the grate and discharging the ashes into the ash-chamber. The grate is held in a horizontal position by a small bolt, *o*, that is supported on the plate *i;* and when said bolt, which extends through the slot of the rim, is withdrawn the grate will fall of its own weight, dropping on its pivots, and will cause the coal and ashes which were supported on it to drop into the ash-chamber. By the arrangement of the rectangular grate in the circular frame I am enabled to combine the advantages of a rotating grate with those of an independently-dumping grate, and to make a range with a comparatively long and narrow fire, possessing all the advantages connected with a circular grate. The ash-chamber D is recessed at its lower part, as indicated at *p p* in the drawing, so that the ash-pan G will enter this recessed portion and have its upper edges concealed in the walls of the casing A. By this means the entire bottom of the ash-chamber is occupied by the ash-pan, and no opportunity given to the descending ashes to get between the ash-pan and the walls of the surrounding casing or brick-work.

Thus I can, when the doors of the ash-chamber are closed and the gate E let down, rake the fire without having ashes enter the room, and these ashes will all enter the ash-pan, so that

after the dust has settled the ash-pan can be withdrawn and all the ashes removed without leaving any in the bottom of the ash-chamber, which is the most objectionable feature of the ash-chambers now in use.

H is a shelf, secured to the front of the framework or casing A in line about with the surface of the fire. This shelf is in a convenient position for the cook to quickly place pots which he must remove from the fire, when he has not time enough, while attending to other things on the fire, to take such pots to more distant places where they are to be finally deposited.

I claim as my invention—

1. The combination of the rectangular pivoted grate C with the circular rotary plate *g* and with the top plate *h*, that has a rectangular opening, annular bottom plate *i*, and rim *j*, all arranged substantially as herein shown and described.

2. The combination of the rotary plate *g*, grate-casing F, rectangular grate C, handle *n*, and bolt *o* with each other, all substantially as herein shown and described.

C. H. CARLING.

Witnesses:
E. C. WEBB,
F. V. BRIESEN.