C. ROEHL.

Hearth for Cooking-Stoves.

No. 204,453. Patented June 4, 1878.

Fig. 1.

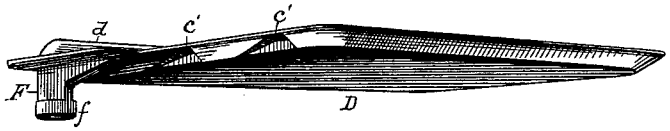


Fig. 2.

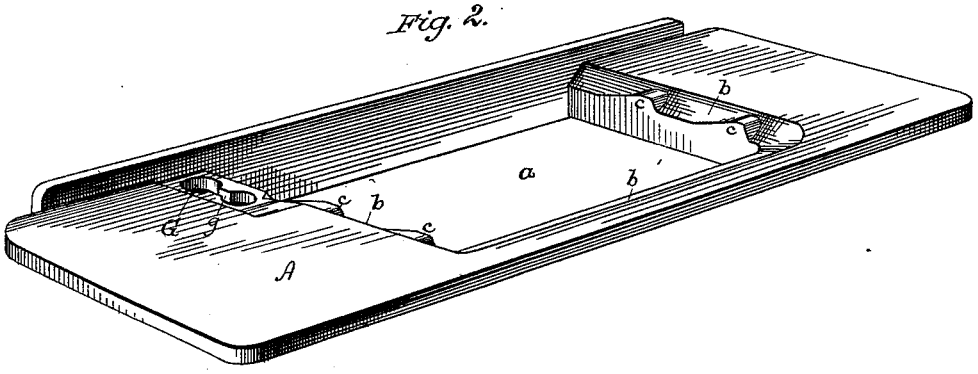
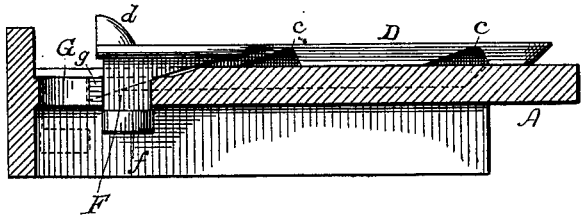


Fig. 3.



WITNESSES:

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Attys.

UNITED STATES PATENT OFFICE.

CARL ROEHL, OF PEORIA, ILLINOIS, ASSIGNOR OF THREE-FOURTHS HIS RIGHT TO RICHARD A. CULTER, DAVID C. PROCTOR, AND ADELBERT E. BRONSON, OF SAME PLACE.

IMPROVEMENT IN HEARTHS FOR COOKING-STOVES.

Specification forming part of Letters Patent No. **204,453**, dated June 4, 1878; application filed April 18, 1878.

To all whom it may concern:

Be it known that I, CARL ROEHL, of Peoria, in the county of Peoria and State of Illinois, have invented certain Improvements in Cooking-Stoves, as fully set forth in the following specification:

The nature of my invention relates to the peculiar construction of the hearth-plate in cooking-stoves; and my object is to construct and arrange said hearth-plate so as to insure tight joints with the hearth-opening, and yet enable the same plate to be turned away from said opening whenever the ashes are to be removed from the pit below it.

My invention consists in a plate sunk into the opening of the hearth so as to be flush therewith, and resting upon flanges projecting inwardly from the edges in the opening of the hearth, with inclined or wedge-like projections to the bottom of the side edges of said plate and corresponding cavities in the flanges to the hearth-opening, by which said plate, in being pulled forward, will rise above the face of the hearth; and in a stud rectangular in section pendent from under one corner of said plate, and having a round head, which is passed through an opening in the hearth, of such shape that removably it couples the plate to the hearth, and that it necessitates the drawing forward of said plate on a straight line before it can be turned away from the ash-pit opening in the hearth.

In the drawing, Figure 1 is a perspective view from the under side of the hearth-plate; Fig. 2, a top perspective view of the hearth; and Fig. 3, a section through the hearth on the line of the slot, showing in full lines the plate drawn back previous to being swung on the stud, and in dotted lines the forward position of the plate.

Like letters denote corresponding parts in all the figures.

A is the hearth of a cooking-stove, underneath which the ash-pit is arranged, an oblong opening, *a*, being provided for in said hearth, through which the ashes and cinders accumulating in said ash-pit can be removed, and through which, in most instances, the fire in the stove draws its supply of atmospheric air. To the front and side edges in said opening are formed flanges *b*, which will support a plate, D, and will form rabbet-joints therewith, in such a manner that said plate will be flush with the face of the hearth A, and will close said opening as near air-tight as possible. This plate D has formed on its rear edge a vertical flange, *d*, which will rest against the vertical front wall of the stove and will make a close joint therewith.

The side flanges *b* of the hearth-opening *a* have inclined or wedge-like projections *c c*, which fit into correspondingly-shaped cavities *c'* under the side edges of plate D, and by which said plate will be caused to rise above the level of the hearth while being slid forward, so that its lower edges will be raised above the upper edges of the opening *a* of the hearth, the front edge of said opening being sufficiently beveled to offer no impediment to the sliding of said plate. Thumb-notches (not shown) may be provided, for holding the plate while being moved.

A stud, F, projecting from under one corner of the plate D, couples said plate with the hearth A, it being rectangular in section, with its root extended to form an incline corresponding with the incline of the projections *c*, and having at its extremity a round head, *f*. This head *f* enters a hole, G, in the hearth, which is forwardly continued by a slot, *g*, of a size to admit the rectangular shank of head *f* to slide therein; and the extreme forward end of this slot *g* is cut out to form two opposite segments of a circle, in which said rectangular portion of the trunnion F can rotate a quarter of a revolution in one direction only, so that the plate D will have to be moved the length of the slot on a straight line before it becomes free to be swung sidewise to clear said ash-pit, and by this straight-line movement said plate is raised out of its seat by the projections *c*, as has been heretofore explained.

An adjustable register-plate may be arranged in the plate D, for admitting and regulating the air-supply to the fire.

As will be noticed, the above-described

hearth-plate has all the desirable advantages for the purpose intended, its joints with the hearth can be made better air-tight with less fitting than with other similar plates heretofore in use, while by its straight-line movement it is elevated out of its seat, and at the same time its pivotal corner is removed from the wall of the stove, so that it is clear of any impediment for turning it away from the ash-pit opening.

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

1. In combination with the hearth A, having opening *a*, with flanges *b* and projections *c*, the hearth-plate D, having flange *d* and cavities *c'*, substantially as and for the purpose set forth.

2. The hearth-plate D, having rectangular stud F, with head *f*, in combination with the hearth, having round and slotted hole G *g*, substantially as and for the purpose specified.

3. The hearth A, having opening *a*, with flanges *b* and projections *c*, and the round and slotted hole G *g*, in combination with the hearth-plate D, having flange *d*, cavities *c'*, and square or rectangular stud F, with head *f*, all constructed, arranged, and operating substantially in the manner set forth.

CARL ROEHL.

Witnesses:
JACOB RICHTER,
EMIL H. FROMMANN.