G. C. ROBINSON.

Grates.

No. 148,325. Patented March 10, 1874.

Fig 1

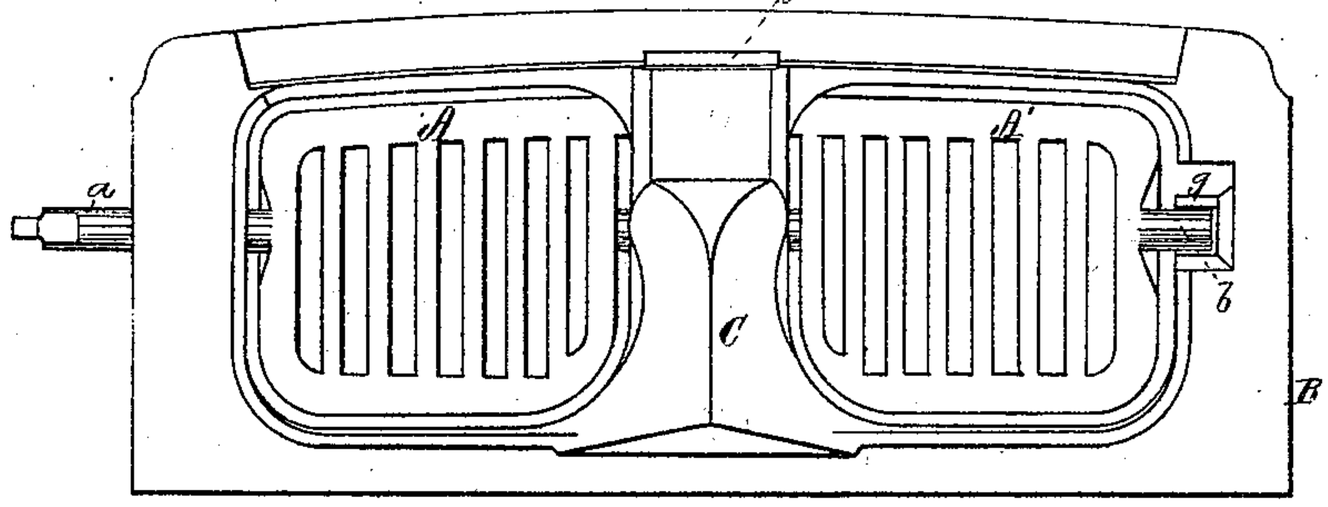


Fig 2.

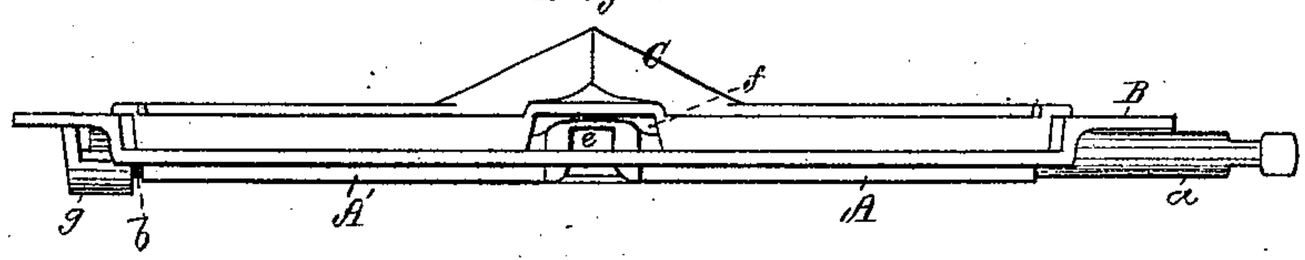


Fig 3.

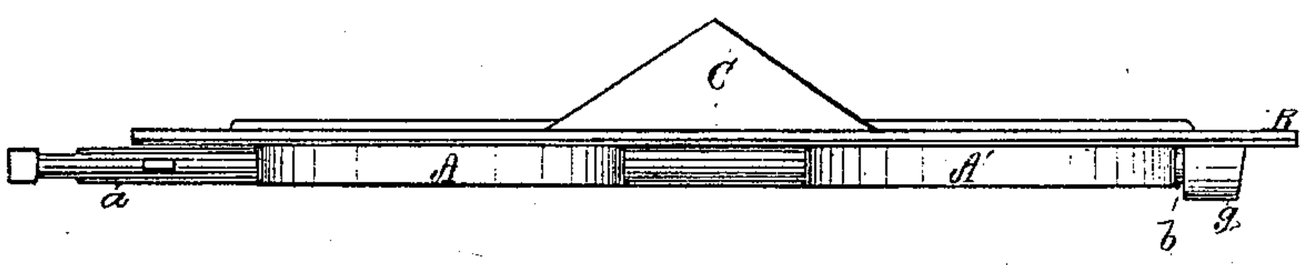


Fig 4.

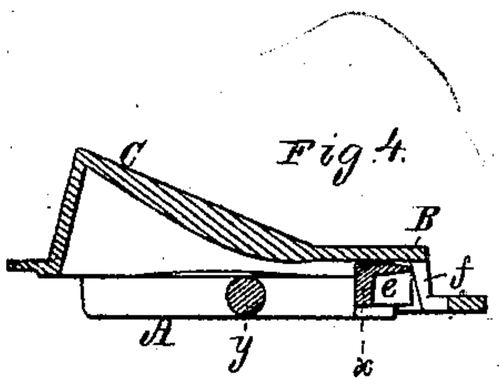
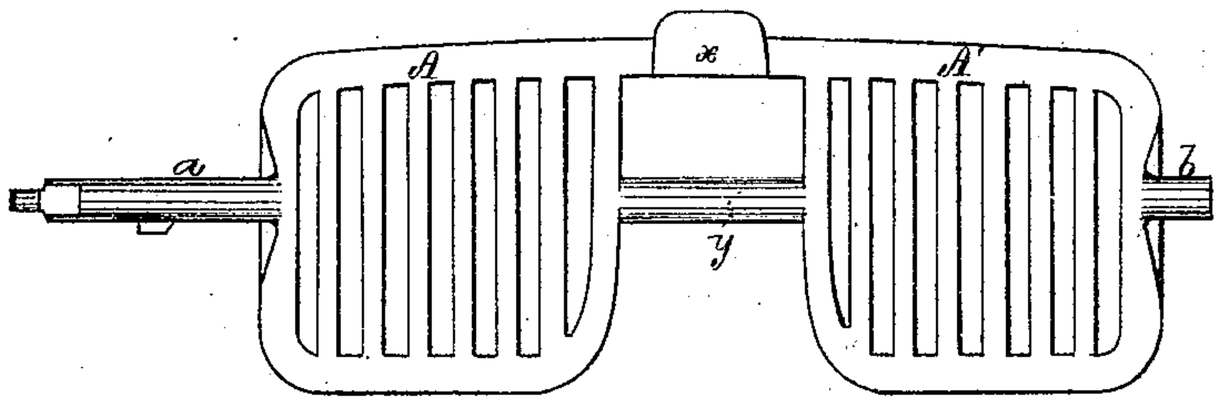


Fig 5.



Witnesses.

S. W. Pipes

L. N. Billard

George C. Robinson.

by his attorney.

R. Mudy

UNITED STATES PATENT OFFICE.

GEORGE C. ROBINSON, OF CONCORD, NEW HAMPSHIRE.

IMPROVEMENT IN GRATES.

Specification forming part of Letters Patent No. **148,325**, dated March 10, 1874; application filed January 19, 1874.

To all whom it may concern:

Be it known that I, GEORGE C. ROBINSON, of Concord, in the county of Merrimack and State of New Hampshire, have invented a new and useful Improvement in Cooking-Range or Stove-Grates; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view of a grate and its support plate or frame, provided with my invention. Fig. 2 is a front view, Fig. 3 a rear elevation, and Fig. 4 a transverse section, of the two. Fig. 5 is a top view of the grate.

In carrying out my invention, I construct the grate in two grates or ribbed sections, A A′, arranged apart from one another, and connected at their inner ends by connections *x y*, and provided at their outer ends with journals *a b*, all being as shown. Furthermore, the support-frame B is formed or provided, at its middle, with an arched or double-deflecting cross-bar, C. The connection *y* is cylindrical, and arranged in a straight line with the two journals. The front middle connection *x* of the two grates or sections, A A′, has a locking-recess, *e*, there being in front of such recess a hole or slot, *f*, made in the grate-frame, as shown, the same being to enable the grate, when in a horizontal position, to be bolted or held up by a bolt or other means introduced into the recess *e*. One of the journals of the grate rests in a bearing, *g*, formed in the support-frame. The arched bar C projects above the rest of the frame, and is triangular in transverse section; the object of its being so made and arranged is to prevent the bar from being destroyed by heat, and to deflect from it coals and ashes, and cause such to fall upon the two grate-sections.

It is well known that the grates and their support-frames of cooking ranges and stoves, generally fail or burn out at their middles, or there become most heated, in consequence of which sagging or breaking of the parts is liable to ensue.

By making the cross-bar with the raised and double-deflecting projection, and by constructing the grate in two sections or parts, arranged and connected as shown, the above-mentioned difficulty is avoided.

On turning the grate, each section will readily revolve within its aperture of the support piece or frame.

I therefore claim as my invention—

1. The grate-support frame B, provided with the elevated deflecting cross-bar C, in combination with the grate, constructed in two sections, A A′, united and provided with journals, all being arranged substantially in manner, and to operate as described.

2. The grate-frame, having the opening *f* and the arched cross-bar C, in combination with the grate, made in two sections, A A′, connected and provided with journals, and the bolting-recess *e*, all arranged substantially as specified.

GEORGE C. ROBINSON.

Witnesses:
R. H. EDDY,
J. R. SNOW.