

J. B. CROWLEY.

Cooking Stove.

No. 59,894.

Patented Nov. 20, 1866.

Fig. 1

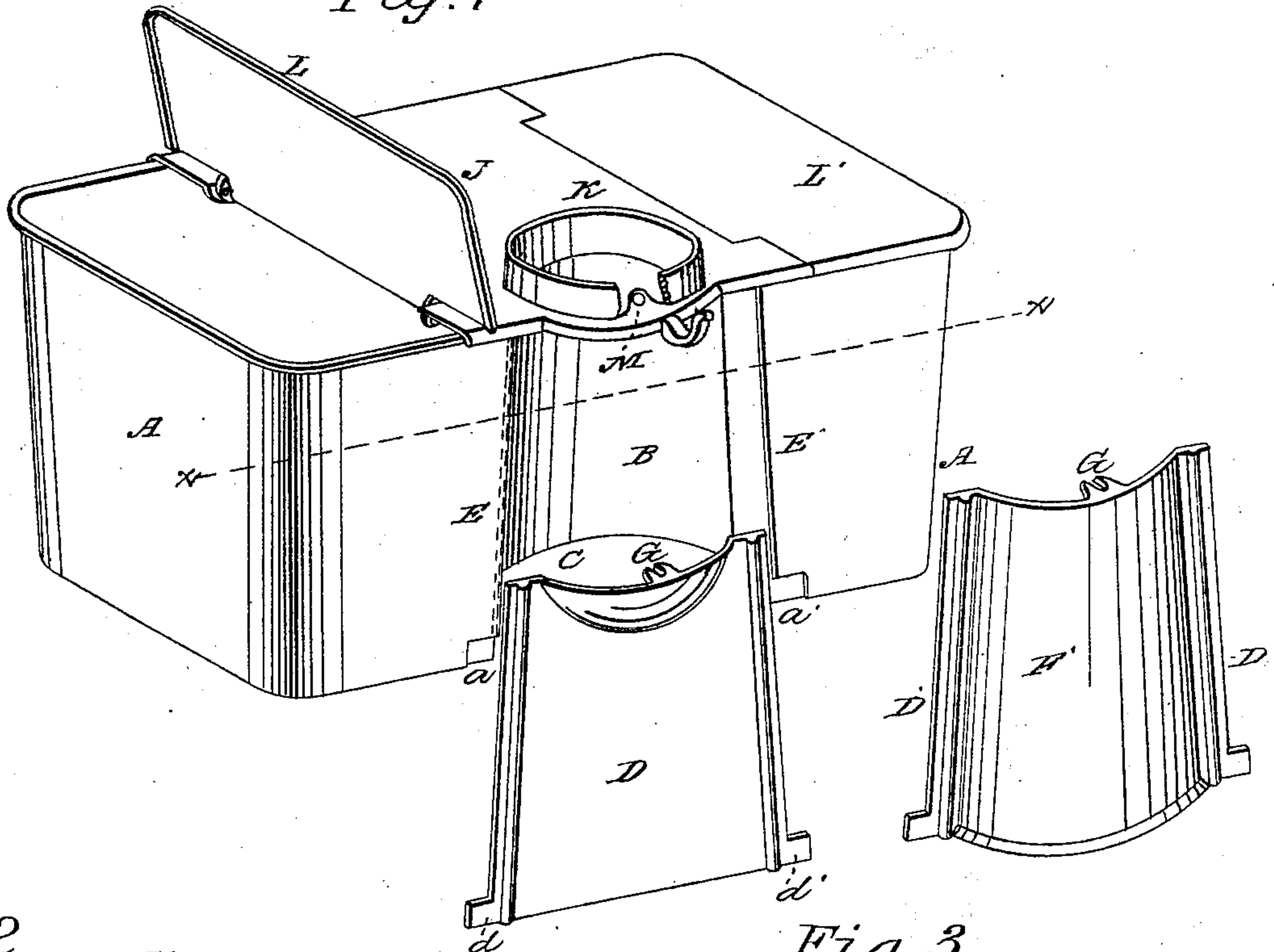


Fig. 2

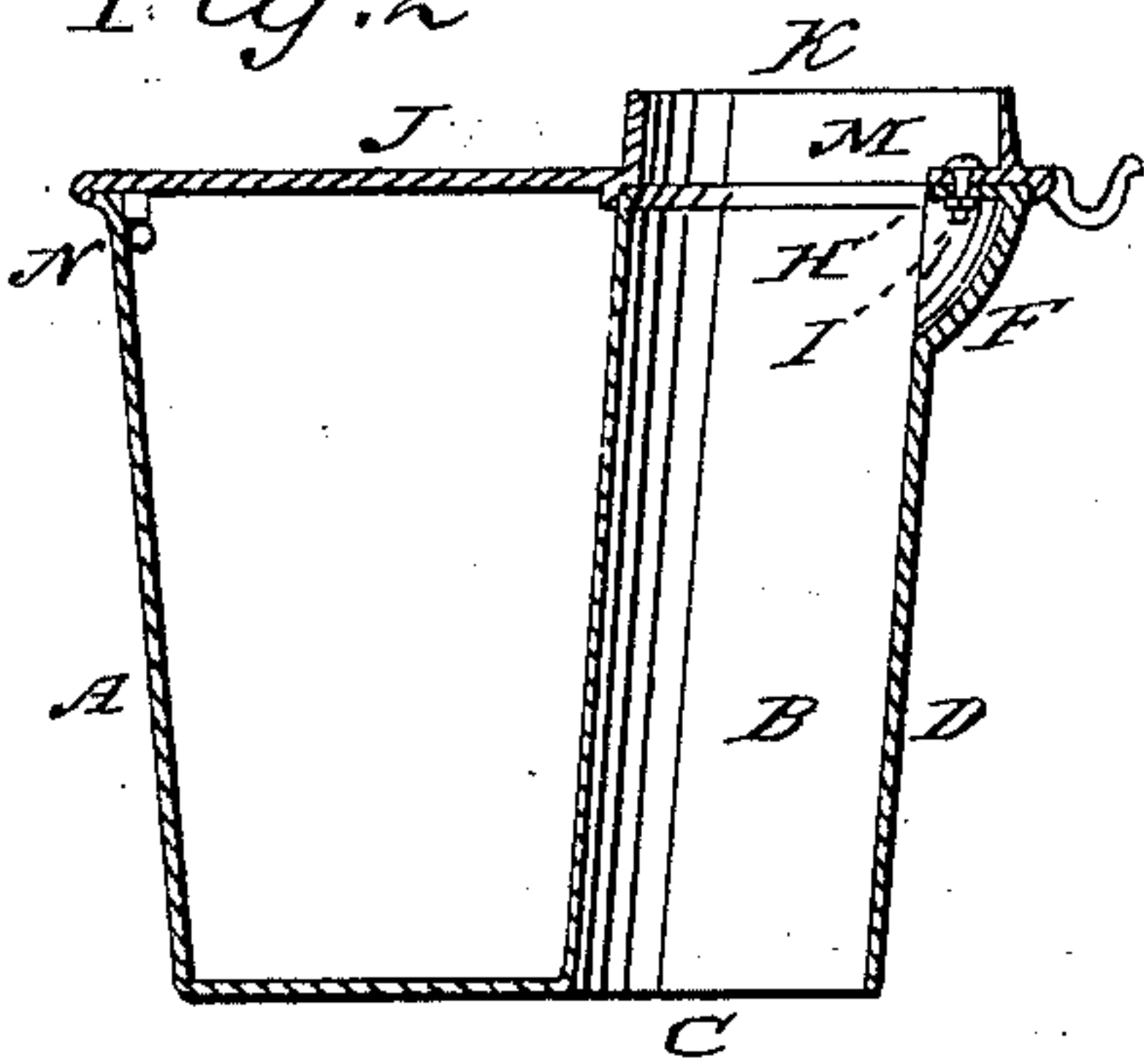


Fig. 3

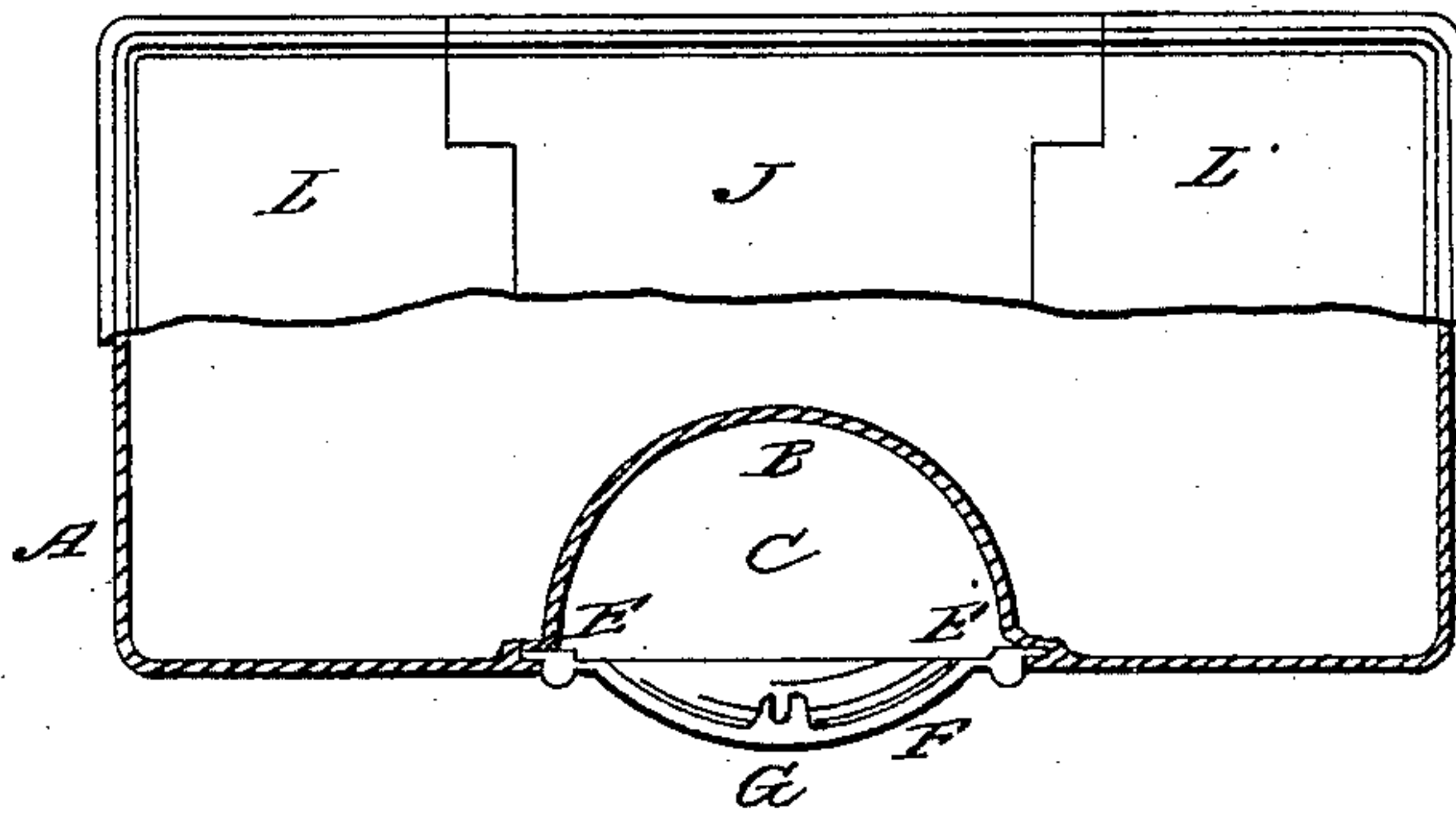
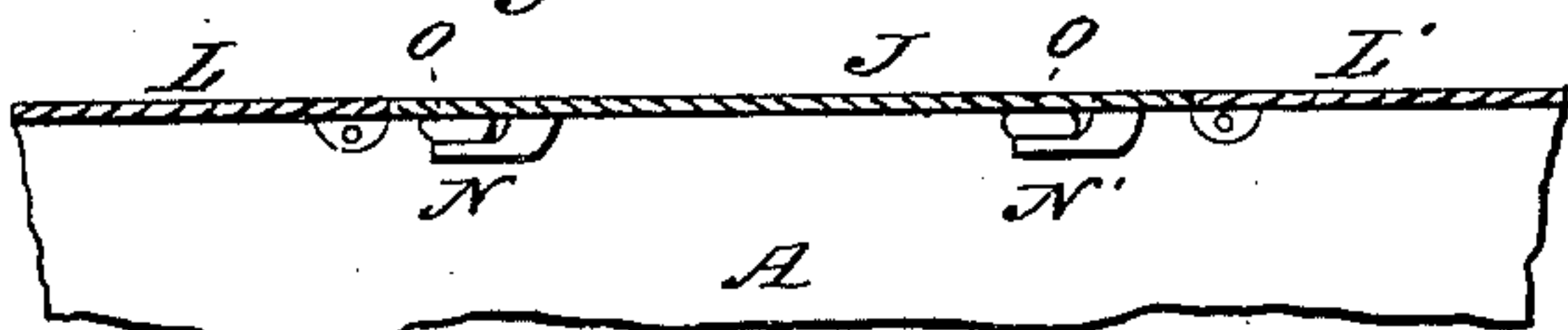


Fig. 4



Witnesses:

James H. Layman  
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# United States Patent Office.

## HOT-WATER RESERVOIRS FOR STOVES.

JOHN B. CROWLEY, OF CINCINNATI, OHIO, ASSIGNOR TO HIMSELF AND  
CHAMBERLAIN & CO., OF SAME PLACE.

*Letters Patent No. 59,894, dated November 20, 1866.*

### SPECIFICATION.

#### TO WHOM IT MAY CONCERN:

Be it known that I, JOHN B. CROWLEY, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Stationary Boiler or Reservoir for Stoves; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

This is an improvement in hot-water reservoirs for stoves, having a flue which, communicating below with the rear flue of the stove, terminates at top in a neck for the customary smoke-pipe; and my invention relates to devices for simplifying the manufacture and increasing the efficiency of such reservoirs.

Figure 1 is a rear side perspective view of my reservoir.

Figure 2 is a transverse section thereof.

Figure 3 is a partly top view, and partly horizontal section, at the line *x x*, fig. 1.

Figure 4 is an inside elevation of the upper portion of the front side.

A is an oblong vessel whose rear side has a cove or depression, B, which constitutes the inner side of the flue C, whose outer side is formed by a plate D, of the represented trapezoidal contour, which plate occupies grooves, E E', in the vessel A. At the lower corners of the plate D are two ears, *d d'*, which, when the plate is driven home, occupy sockets, *a a'*, in the vessel A. The upper portion of the plate D is formed with a cove F, projecting rearward to meet the curve of the neck, and has an inwardly projecting lug, G, perforated to receive a bolt H, which bolt is screw-threaded to take a nut, I, and serves to fasten both the rear plate D and the top plate J. The top plate, J, has a customary neck, K, and hinged covers, L L. Projecting from the inside of the neck K, is a lug, M, to receive the bolt H aforesaid. Projecting from the under side of the top plate, near its front edge, are two hooks, N N', whose inclined edges engage and bind beneath studs, O O', which project inwardly from the front side of the vessel A. The hooks N N', and the outer sides of the grooves E E', are formed by means of movable patterns, in the customary manner of moulding projections of this kind. In constructing the reservoir, the plate D is first driven home in the grooves E E'; the top plate is then so placed as to engage its hooks N N' beneath the studs O O', and is forced longitudinally of the vessel until the hooks are firmly engaged beneath the studs. The bolt H is then inserted through the lugs G and M, and the nut I screwed home, so as to draw the plate D up and the plate J down firmly to their respective places. It will be perceived that this arrangement, by placing the flue at the back of the vessel, and forming its rear side by a separate plate, enables the vessel to be more easily and simply constructed than in the common way where the flue, besides being made to occupy the central and most valuable space of the reservoir, involves the trouble and expense of a dry core in casting. It is also apparent that the location of the flue to the extreme rear of the vessel, besides leaving an almost uninterrupted interior from end to end, brings the entire bottom of the vessel in contact with the heated top of the stove, and supersedes the necessity of any considerable jut or projection beyond the general plane of the stove-back. The provision of the ears, *d d'*, by limiting the ascent of the plate D, enables the bolt H to draw both the top plate J and the rear plate D firmly home to their bearings. The single bolt H is thus made effective to secure all the parts firmly together.

I have described my improvement in its adaptation to reservoirs wholly of cast iron, but do not propose to restrict myself wholly thereto, it being manifest that the vessel A may be made of sheet copper or other sheet metal, and the back D may be either of cast or wrought metal. In some forms of stove the flue C would be most conveniently placed on the front side of the vessel. Furthermore, the grooves E E' may be replaced by simple rebates, the plate D being fastened by rivets or otherwise. Again, the cove F may be extended clear down, so as to adapt the reservoir to any stove having an oval or circular neck—see diagram D' F'.

The following is what I claim herein as new, and of my invention:

1. I claim the sliding plate D or D', formed with projections *d d'*, and a lug G, in the described combination with the grooves E E', for the purposes set forth.
2. I further claim the combination of the lugs G M, screw-bolt or pin H, hooks N, and studs O, for securing the flue plate and cover to each other and to the vessel A, as described.

In testimony of which invention I hereunto set my hand.

J. B. CROWLEY.

Witnesses:

GEO. H. KNIGHT,  
JAMES H. LAYMAN.