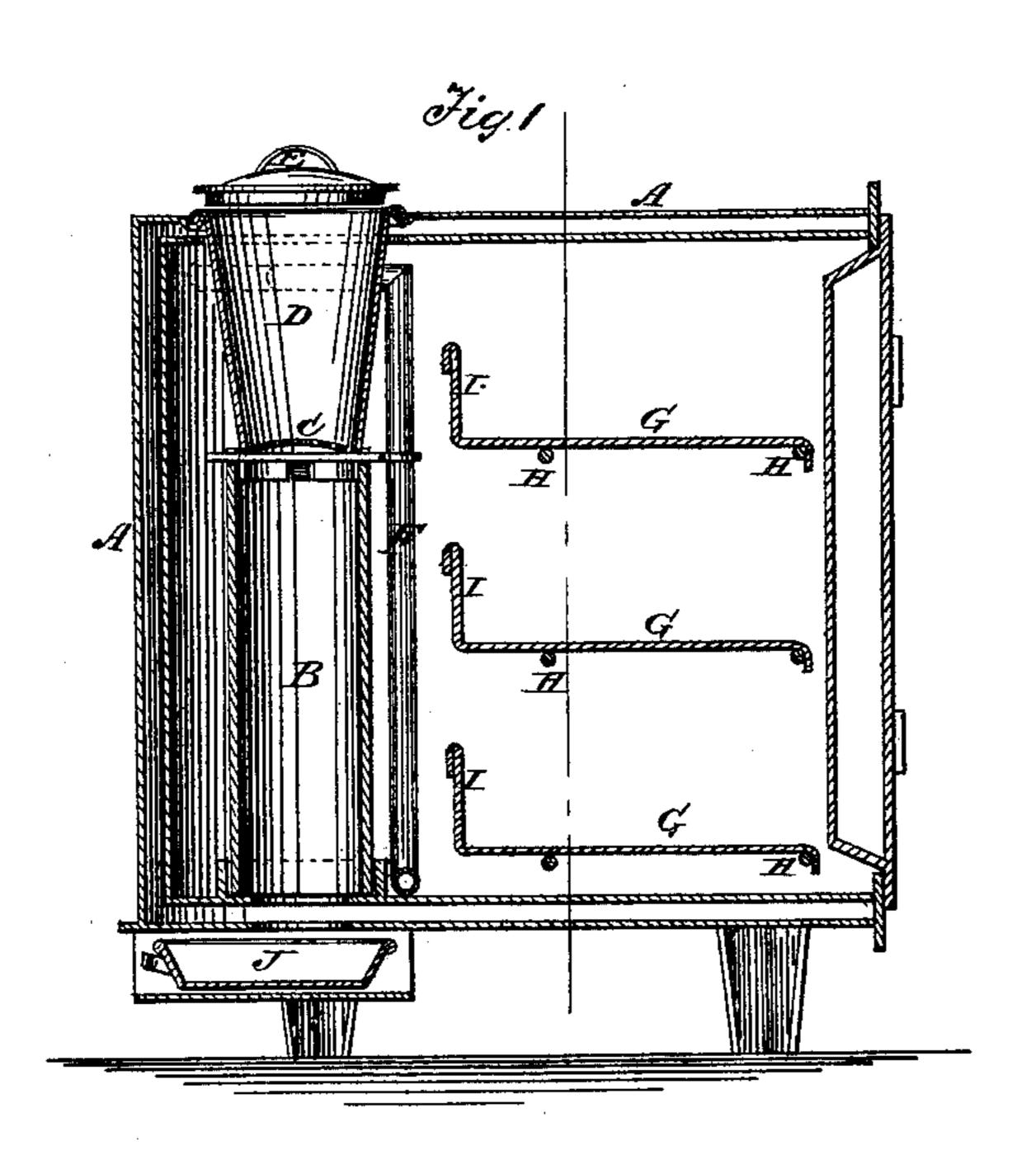
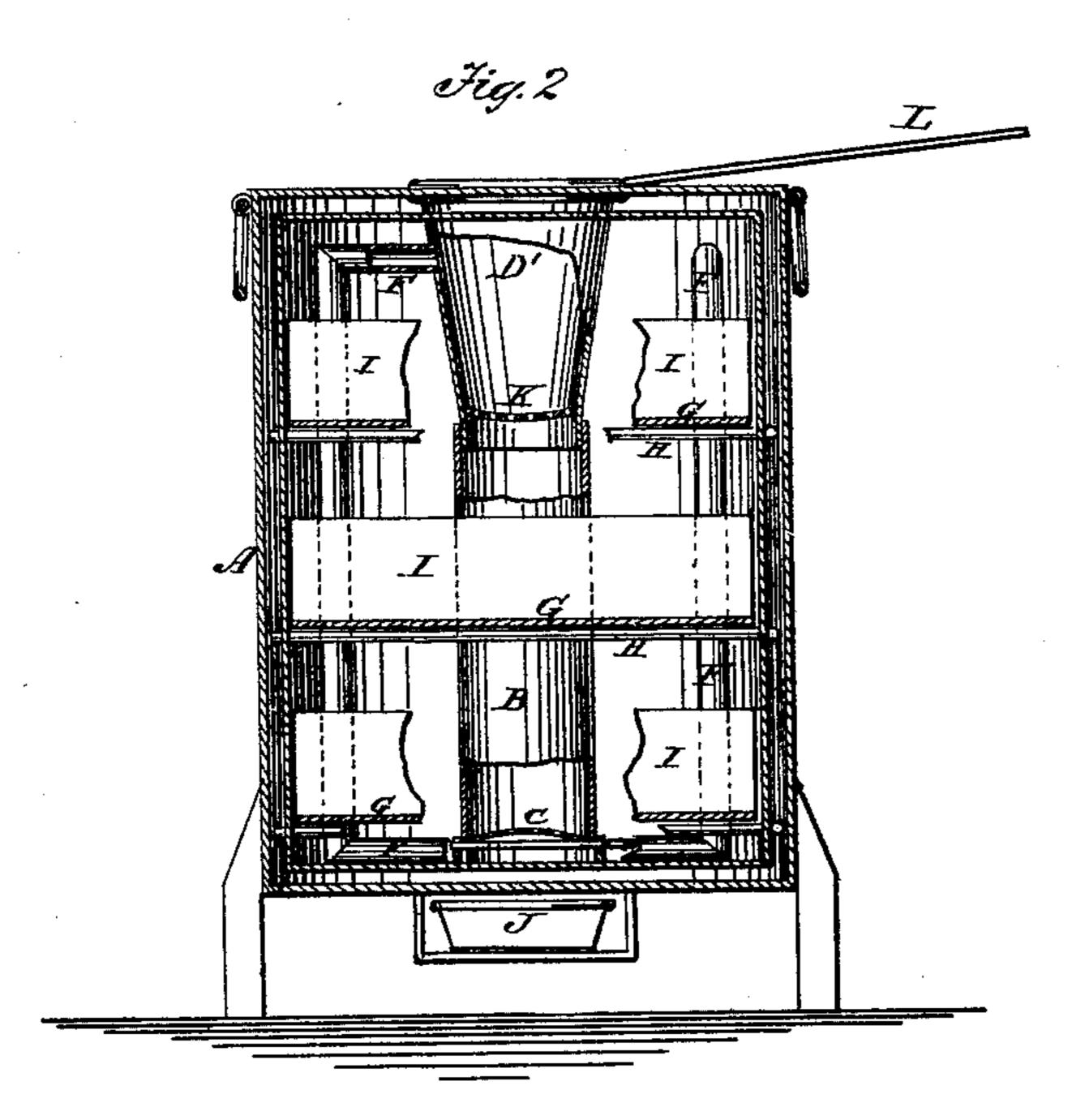
## E. B. VAN DE MARK. PORTABLE OVEN.

No. 189,403.

Patented April 10, 1877





Hancis Mcardle, John Goethals BY Munich ATTORNEYS.

## UNITED STATES PATENT OFFICE

EDWARD B. VAN DE MARK, OF NEW YORK, N. Y.

## IMPROVEMENT IN PORTABLE OVENS.

Specification forming part of Letters Patent No. 189,403, dated April 10, 1877; application filed July 1, 1876.

To all whom it may concern:

Be it known that I, EDWARD BLOOMING-DALE VAN DE MARK, of the city, county, and State of New York, have invented a new and Improved Portable Oven, of which the follow-

ing is a specification:

The object of this invention is to provide and construct a neat, cheap, and effective portable oven, which may be heated by one or more distinct fires, and having the smoke-pipe extending from the upper fire pot or chamber down and around the oven, up to the point of exit.

The construction of my invention will be fully understood from the following description, reference being had to the accompany-

ing drawings, in which—

Figure 1 represents a sectional side elevation, showing the oven as heated by a single fire. Fig. 2 represents a sectional front elevation, showing the oven as heated by a double fire.

Similar letters of reference indicate corre-

sponding parts.

In the case here presented, A represents a double-walled oven constructed of sheet metal, at or near the rear end of which I have a cylindrical pipe, B, whose sides are parallel, and at the top of the said pipe I have a dumpgrate, C. The fire-pot D is bottomless, and is made cone-shaped, its lower end fitting snugly in the top of the pipe B, and is provided with a tight-fitting cover, E, so as to cause the smoke and heat, which would otherwise be lost, to run through the pipe F, downward and around the oven up to the point of exit at the rear.

This pipe F is to be made in sections at the bottom, so that it may be taken apart when necessary, to clear the same of ashes which may collect therein, the said pipe serving to

retain the heat in the oven.

G G are a series of movable shelves supported on rods H, which extend across the interior of oven. These rods are bent at one

end, and fit into holes made and provided for them in the sides of the oven, and are set in the following manner: First, place the bent end in its hole, and run it in sufficiently to let the opposite end reach its hole; then slide the rod in until the bent end strikes the outer side of the inner wall, and all is secure, each shelf to have a broad flange, I, to keep the article being baked from burning.

J is an ash-pan, located under the oven immediately beneath the pipe B, so as to catch the ashes which fall through the grate C.

In some instances a very strong heat is necessary, and to provide for such cases I use a double fire, as shown in Fig. 2. In this case I reverse the cylindrical pipe B, and thus bring the dump-grate C at the bottom, and, instead of using the bottomless fire-pot, I use a similar-shaped fire-pot having a barred or perforated bottom, K, the said fire-pot being provided with a bail or handle, L, so as to enable it to be removed with ease when necessary. This second or upper fire-pot not only serves to heat the oven, but also affords a means whereby articles may be cooked on top of the oven.

Having thus described my invention, I claim as new and desire to secure by Letters

Patent-

1. In combination with the oven A, having coincident holes at top and bottom, the pipe B, the fire-pot, and the pipe F, extending from the latter around the oven, as shown and de-

scribed, for the purpose specified.

2. The cone-shaped fire-pot D', having a slotted or perforated bottom, K, the same being applied to the reversed end of the cylindrical pipe B, as shown in Fig. 2, for the purpose of enabling two fires to be built within the oven, one in the fire-pot D', and one at the base of the pipe B, substantially as shown, and for the purpose specified.

EDWARD B. VAN DE MARK.

Witnesses:

CHARLES H. NASH, T. B. MOSHER.