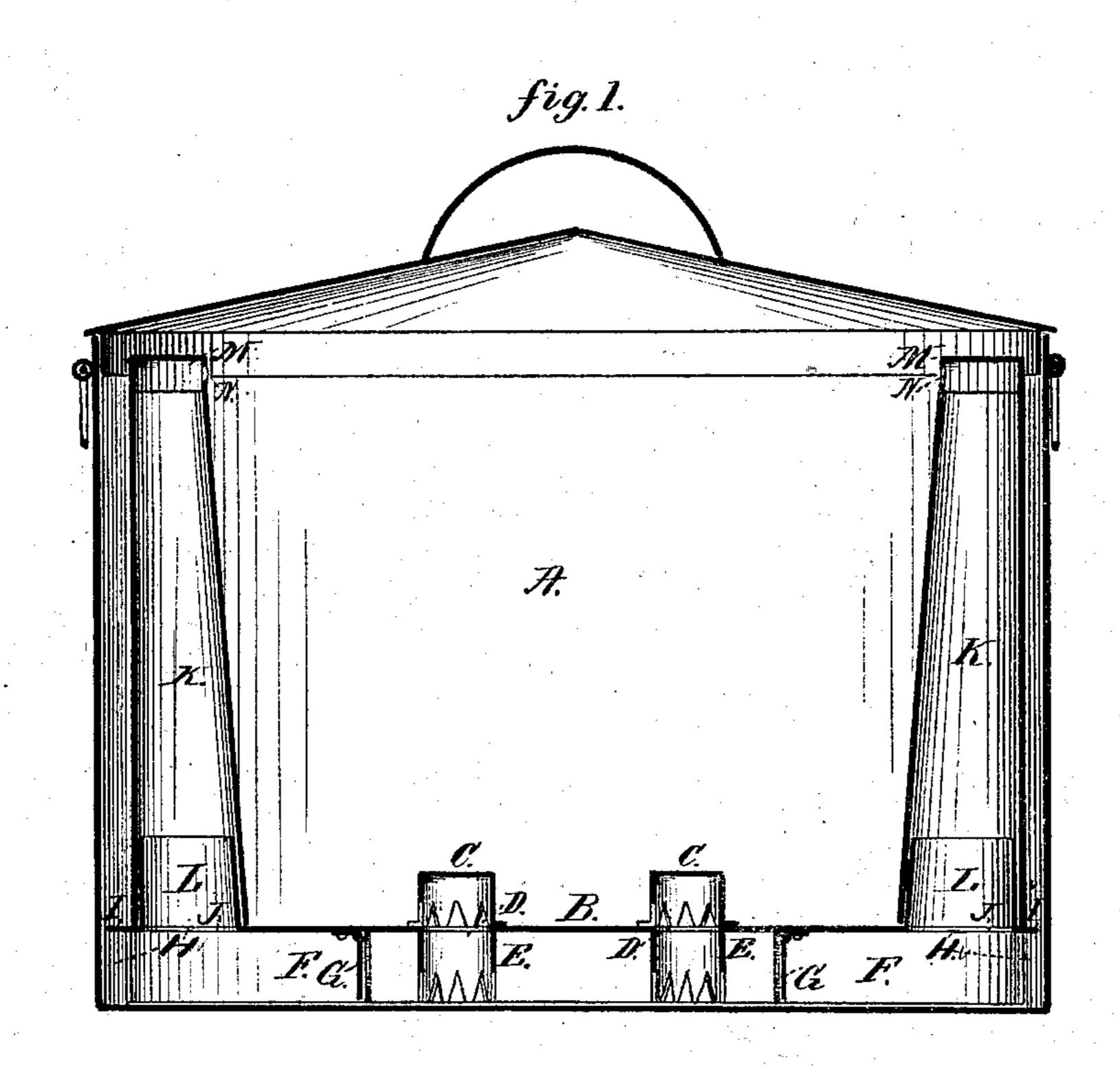
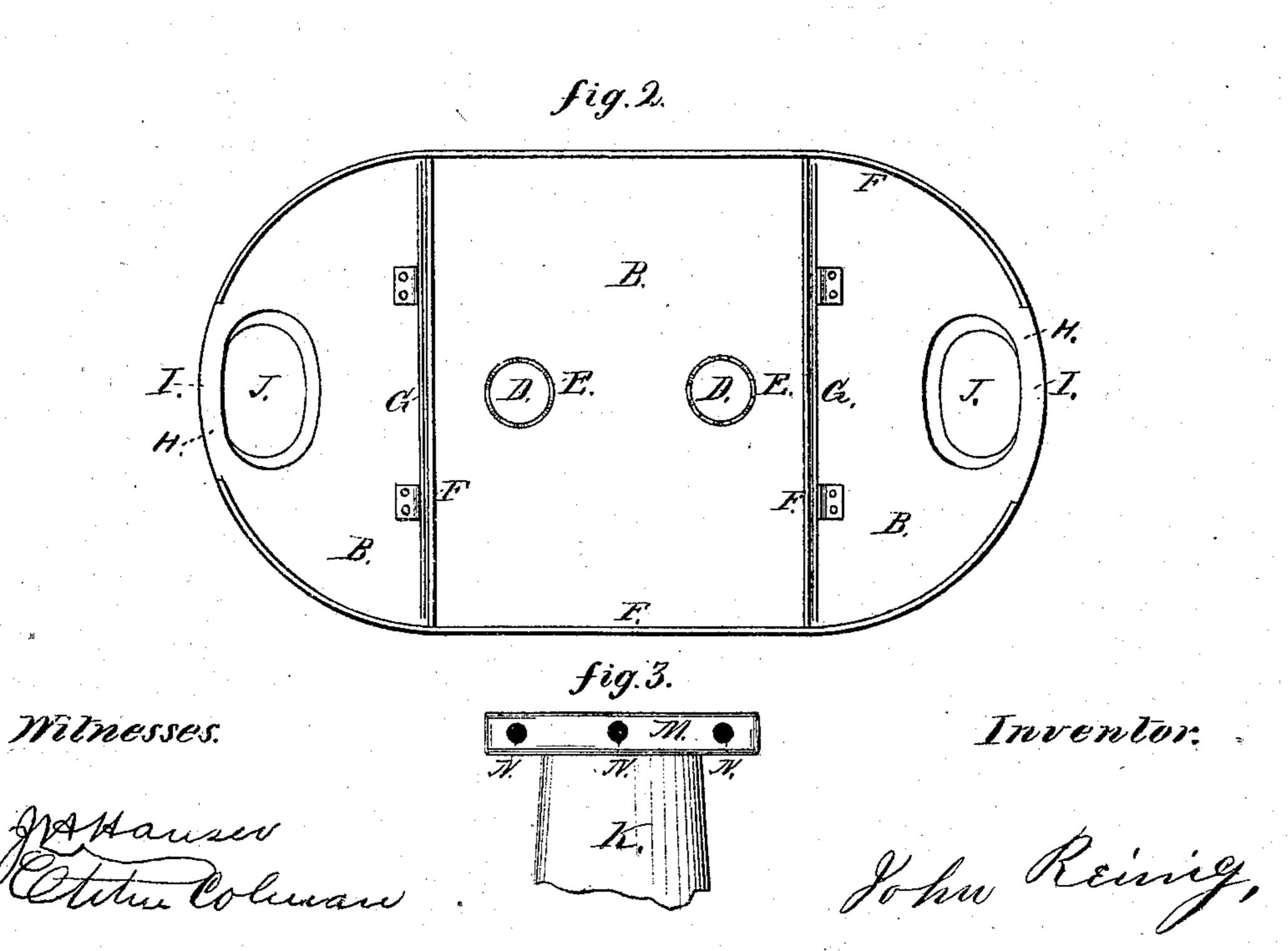
J. REINIG. Wash-Boilers.

No. 138,285.

Patented April 29, 1873.





UNITED STATES PATENT OFFICE.

JOHN REINIG, OF FOND DU LAC, WISCONSIN.

IMPROVEMENT IN WASH-BOILERS.

Specification forming part of Letters Patent No. 138,285, dated April 29, 1873; application filed January 29, 1873.

To all whom it may concern:

Be it known that I, John Reinig, of the city and county of Fond du Lac and State of Wisconsin, have invented certain Improvements in Wash-Boilers, of which the following are specifications and description thereof, reference being had to the accompanying drawing and to letters of reference thereon.

In the drawing, Figure 1 represents a sectional elevation of my improved boiler; Fig. 2, a plan view, with the cover removed; Fig. 3, an enlarged view of the upper end of one

of the tubes K.

My invention consists in the arrangement of the false bottom, which is punctured with two or more holes near the center, and covered with caps, allowing a free passage of the water; in combination with it of the tubes around the holes, so constructed as to allow a free passage for the water to the bottom of the boiler, and at the same time preventing it from being driven back through these holes when boiling; and in combination with it of the frame attached to the bottom of the false bottom, surrounding the holes in the false bottom, having holes on two sides of the frame nearest the end of the boilers, covered with valves. The object of this part of my invention in having in combination with the false bottom the tubes around the holes in the false bottom, and the frame and valves attached, is to allow the water free passage from the top of the boiler to the bottom, at the same time preventing its return when heated to a boilingpoint, and by means of the frame and valves to allow it free passage up the tubes at the end of the boiler, at the same time giving it a steady motion. The water, being heated in the frame, is forced up against the false bottom; not being permitted to return through the holes in the false bottom, by reason of the tubes, is forced through the holes in the sides of the frame. The valves covering the holes, opening outward, permit the water to pass toward the ends of the boiler and up through the tubes. After the water has passed through the holes in the frame of the false bottom, if, for any reason, it should be forced back, the valves close and prevent its return.

A is the boiler, made in the ordinary form; B, false bottom; C, caps over holes in false bottom, to allow water free passage; D D, holes in false bottom for cold water to pass down; E E, tubes around holes in false bottom, attached to false bottom, extending down to real bottom, and forming a support for false bottom, the tubes being notched on lower end; F, frame attached to under side false bottom, extending from one side of the boiler to the other and around the holes in the false bottom, and extending down from the false bottom to the real bottom, forming a support for the false bottom as well as chamber for the water; GG, valves covering holes in frame, being attached to false bottom and close to the frame on the outside, allowing free passage of the water out of chamber made by frame, and prevent the water returning; HHH, holes in frame to allow water to pass out; I I I I, rims extending from corners of frame to near holes in end of false bottom, fastened to false bottom and extending down to real bottom, forming a support for false bottom as well as to prevent the water from returning between the boiler and frame; J J, holes in false bottom to allow water free passage up the tubes; K K, tubes through which the heated water and steam is forced to top of boiler; L L, flanges or rims around holes in end of false bottom, on which the tubes K K are joined; M M, cross-bars on upper end of tubes for the purpose of spreading the water and steam, and of giving it greater force; N N, holes in the cross-bar to allow the water and steam to escape upon the clothes.

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

The false bottom B, having two holes, D D, covered with caps C C, tubes E E, frame F, valves G G, together with the tubes K K and the cross-bars M M, in combination with washboiler A, when arranged and used as and for the purpose specified.

JOHN REINIG.

Witnesses:

J. H. HAUSER, ELIHU COLMAN.