

O. TILTON.  
Wash-Boiler.

No. 228,230.

Patented June 1, 1880.

Fig. 1.

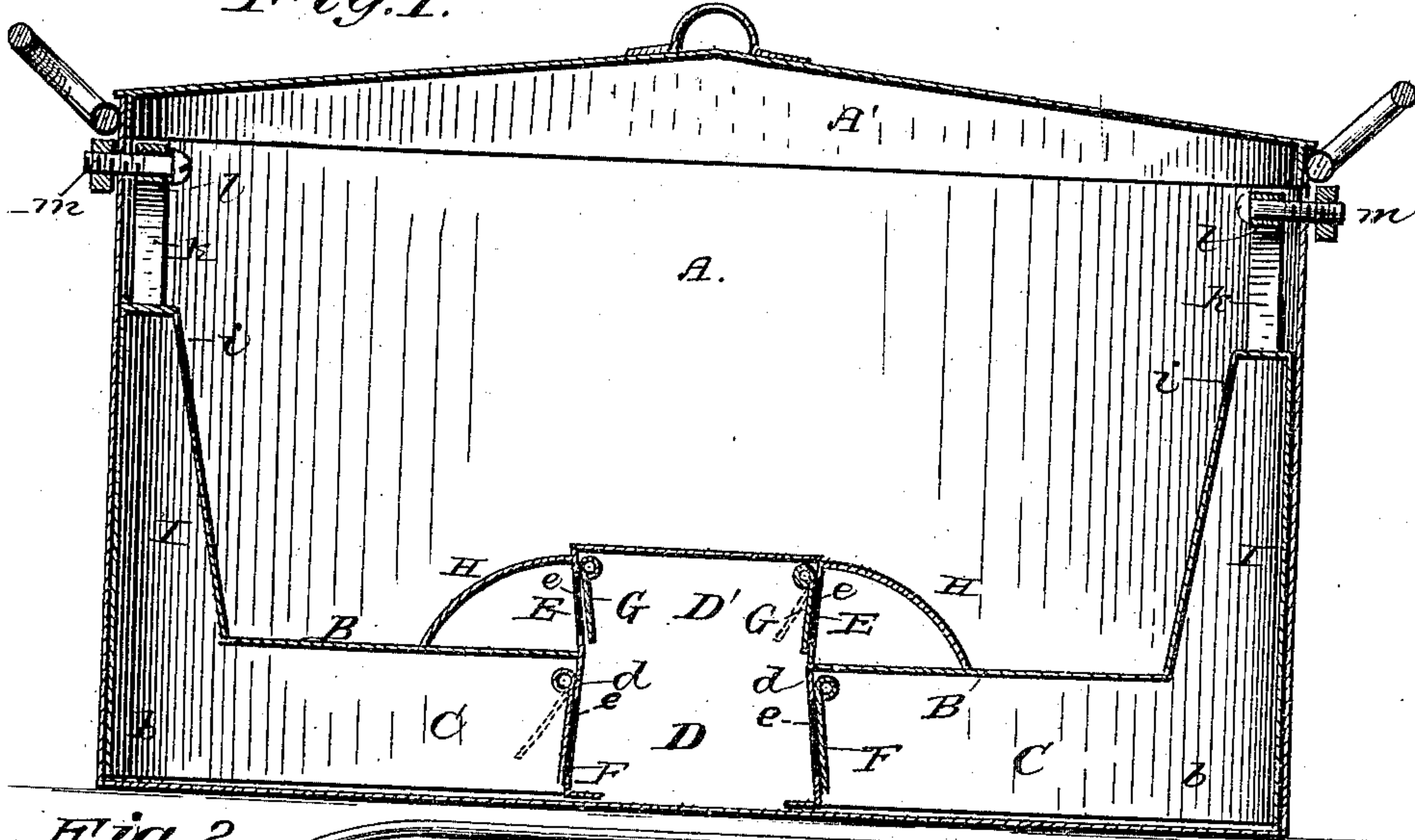


Fig. 2.

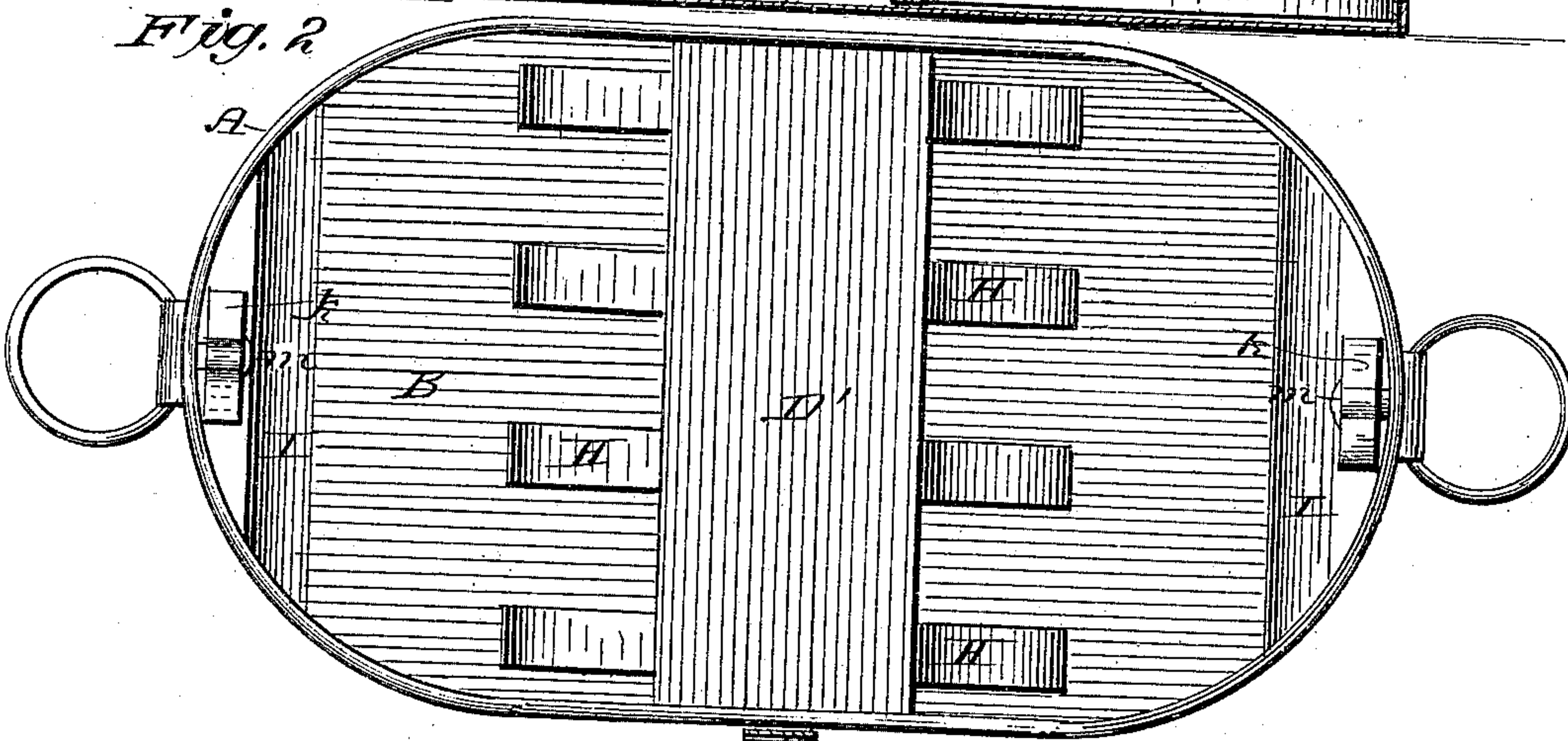
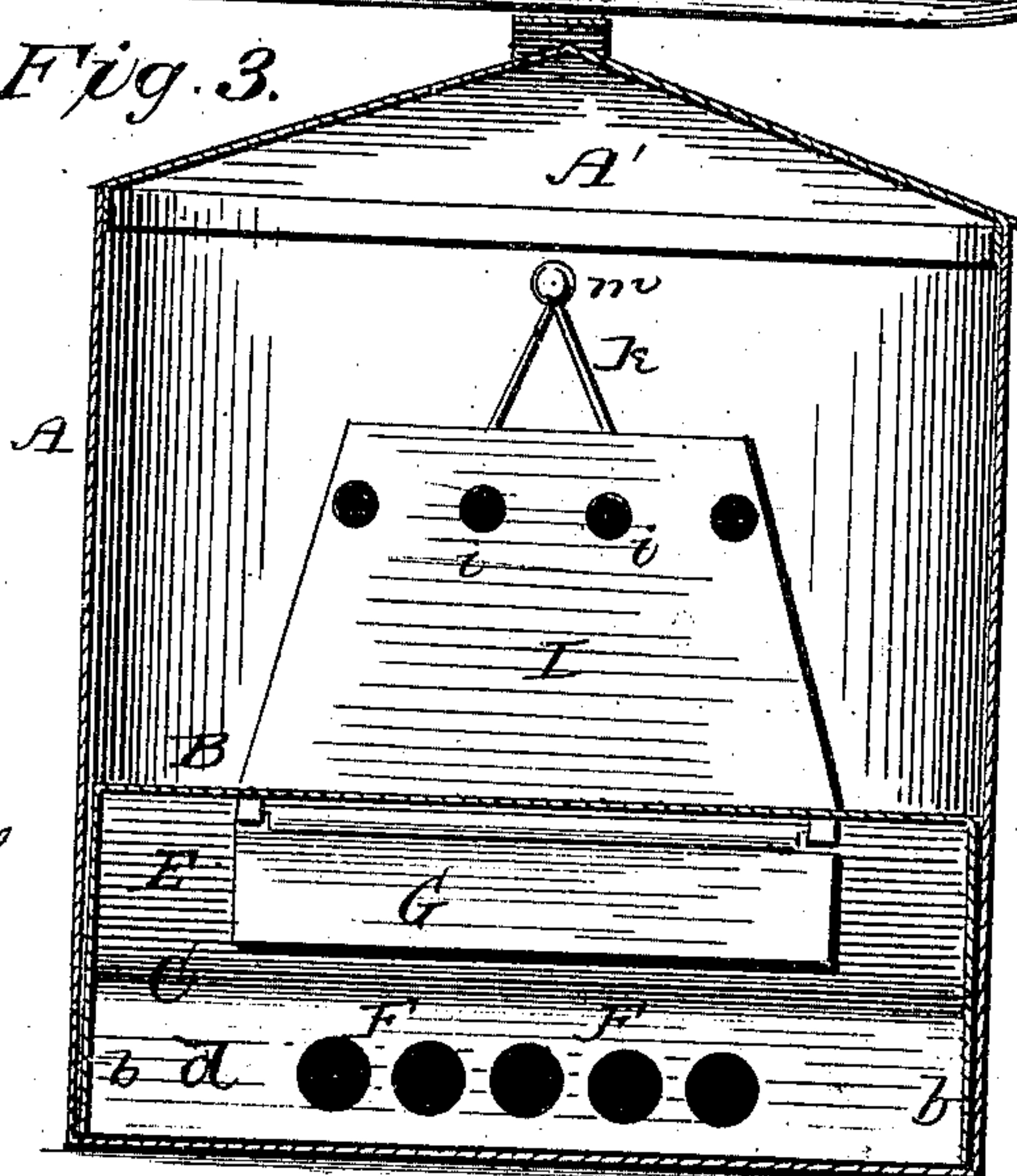


Fig. 3.



Witnesses  
Fred G. Dietrich  
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# UNITED STATES PATENT OFFICE.

OLE TILTON, OF PITTSBURG, PENNSYLVANIA.

## WASH-BOILER.

SPECIFICATION forming part of Letters Patent No. 228,230, dated June 1, 1880.

Application filed February 24, 1880.

*To all whom it may concern:*

Be it known that I, OLE TILTON, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Wash-Boilers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a longitudinal vertical section. Fig. 2 is a plan or top view, the cover having been removed; and Fig. 3 is a transverse vertical section.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to that class of wash-boilers which are known more generally as "steam-washers," which cleanse the articles placed therein by the circulation of the hot water and steam through them; and it consists in an improved construction and combination of parts of a detachable percolating attachment, substantially as hereinafter more fully set forth.

In the drawings, A represents the main body of an ordinary boiler, which is provided with a cover, A'. The percolator or steam-washing attachment is separate and detached from the boiler, into which, however, it should be made to fit closely, and is composed of a flanged false bottom, B, the flange *b* of which rests upon the bottom of the boiler, so as to form a chamber, C, which is divided centrally by a compartment, D, made with inclined sides *d d*. This central chamber or compartment, D, extends up above the false bottom B and the end chambers, C C, forming an upper box or chamber, D', which is closed on top, but provided with inclined sides E E. Both the lower outwardly-flaring sides or walls, *d d*, and the upper inclined walls, E E, of this central chamber, D D', are perforated, as shown at *ee*, and the perforated lower walls are provided with clapper-valves F F, which open outwardly, as shown in dotted lines, while the perforated upper walls, which rise above the false bottom B, are provided with similar valves G G, opening inwardly.

The apertures in the upper walls, E E, are prevented from being choked up by the clothes placed in the boiler by curved guards or ribs H H, extending from the top of the chamber D D' outwardly, on each side, down to the false bottom B.

Each of the end chambers, C C, terminates in a vertical tapering tube, I I, closed at its upper end, but provided with a series of outlets or apertures, *ii*, (of smaller dimensions than the apertures *ee* in the flaring central walls, *d d*,) opening into the body of the boiler. Each of said tubes I I is provided at its upper end with a bifurcated standard, *k*, terminating in an eye, *l*. When the apparatus is inserted into the boiler it is secured therein by inserting small nutted bolts *m m* through the eyes *ll* and registering-apertures made in the ends of the boiler, thus holding the apparatus or attachment firmly in place and preventing its being raised or displaced by the pressure of the steam generated in the chambers C C below the false bottom.

From the foregoing description, taken in connection with the drawings, the operation of my improved steam-washer will readily be understood. The attachment having been placed in and attached to the boiler A in the manner described, the boiler is filled with the suds and articles to be cleansed, the cover is put on, and it is placed over the fire. In a brief space of time steam will be generated below the false bottom B and in the chamber D D'; but the steam cannot escape through the apertures *e* in the upper walls, E, on account of the clapper-valves G G, whereas it finds an unobstructed exit through the apertures in the lower walls, *d d*, below the false bottom, whose clapper-valves open outwardly into the end chambers, C C. The steam generated here, with that from the central chamber, D D', passes up through the vertical end tubes, I I, and out through the apertures *ii*, mixed with the boiling water or suds, which is ejected with considerable force down upon and through the contents of the boiler, after permeating which it finds its way through the perforated upper walls of chamber D' down into the lower chamber, D, and out through the walls *d d*, into the end chambers, C C, where it is subjected to a second heating, and so on. As

long as the boiler remains placed over the fire the circulation or continuous flow of steam and boiling water remains uninterrupted.

Having thus described my invention, I claim  
5 and desire to secure by Letters Patent of the United States—

The described steam-washing attachment for boilers, composed of the flanged false bottom B, having vertical tapering end tubes, I  
10 I, provided with the apertures *i i i*, central raised chamber, D D', the upper sides, E E, of which are perforated and provided with clap-

per-valves G G, opening inwardly, and with the curved guards or fenders H H, while the perforated lower walls, *d d*, are provided with 15 clapper-valves F F, opening outwardly into the end chambers, C C, substantially as and for the purpose herein shown and set forth.

In testimony that I claim the foregoing I have hereunto set my hand.

OLE TILTON.

Witnesses:

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FRED. F. TURNER.