

F. W. Miller.

Wash Boiler.

N^o 89,784. Fig. 1.

Patented May 4. 1869.

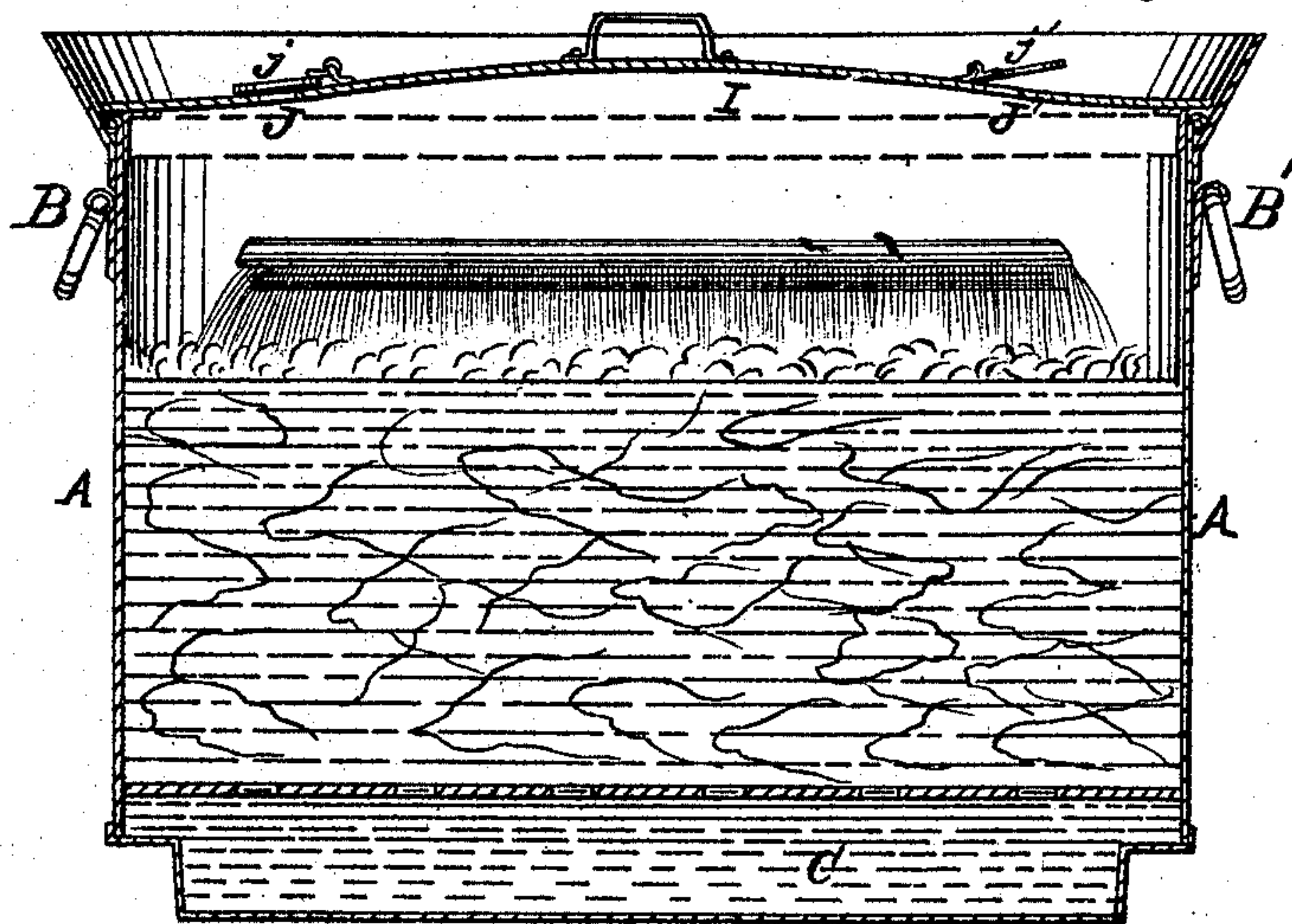


Fig. 2.

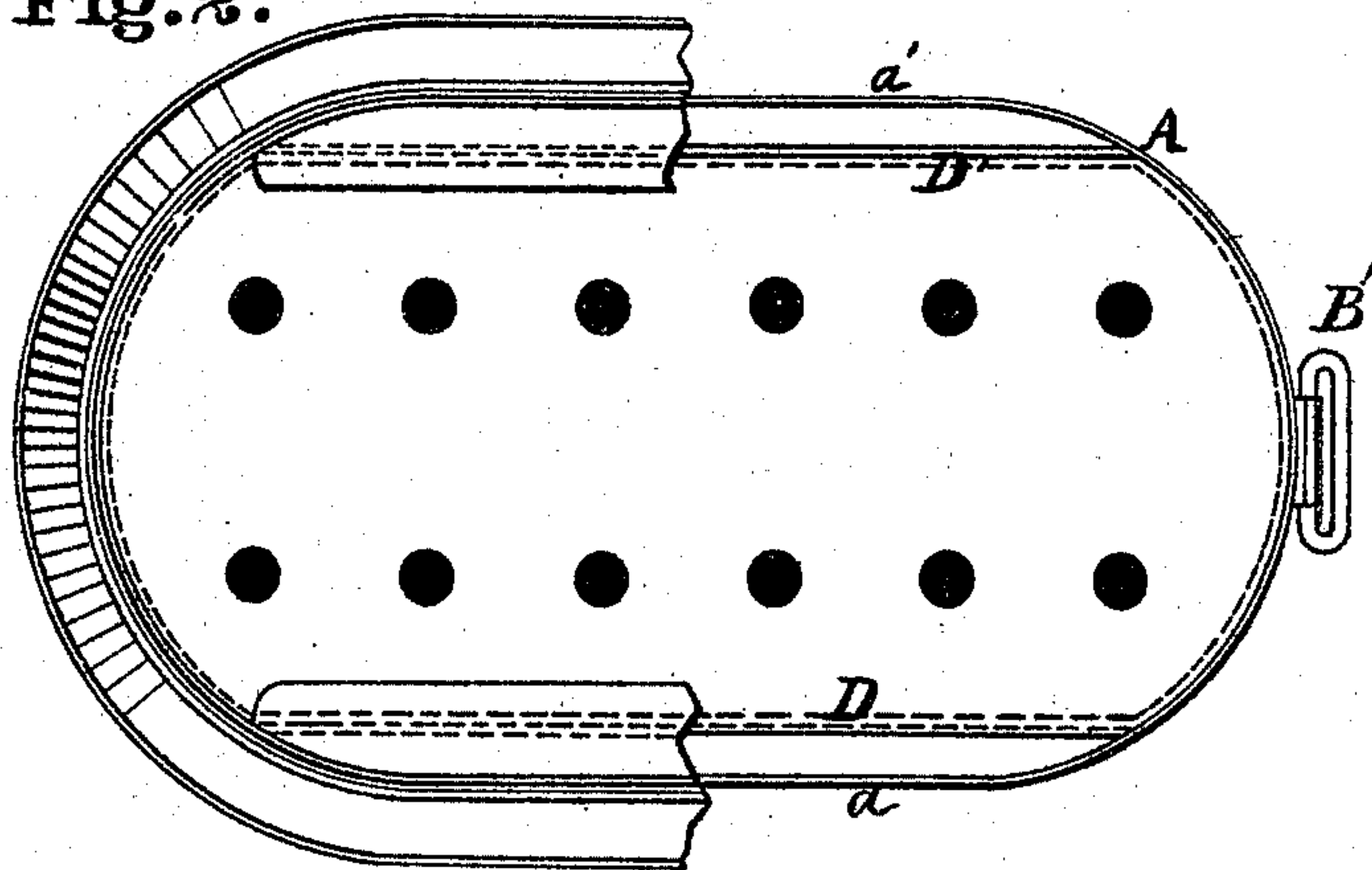
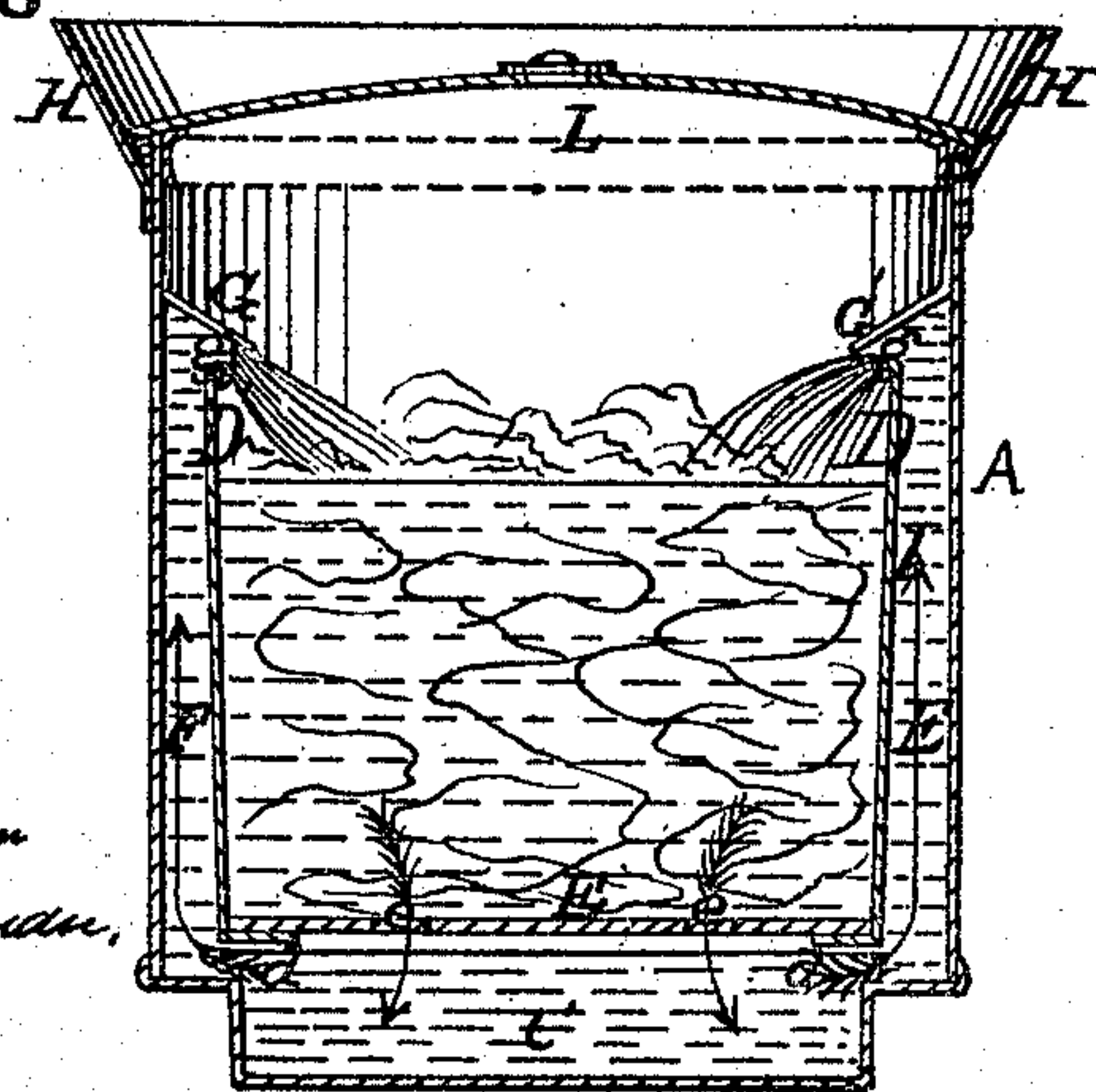


Fig. 3.



WITNESSES.

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Wash Boiler.

Nº 81,784.

Fig. 4 Patented May 4. 1864.

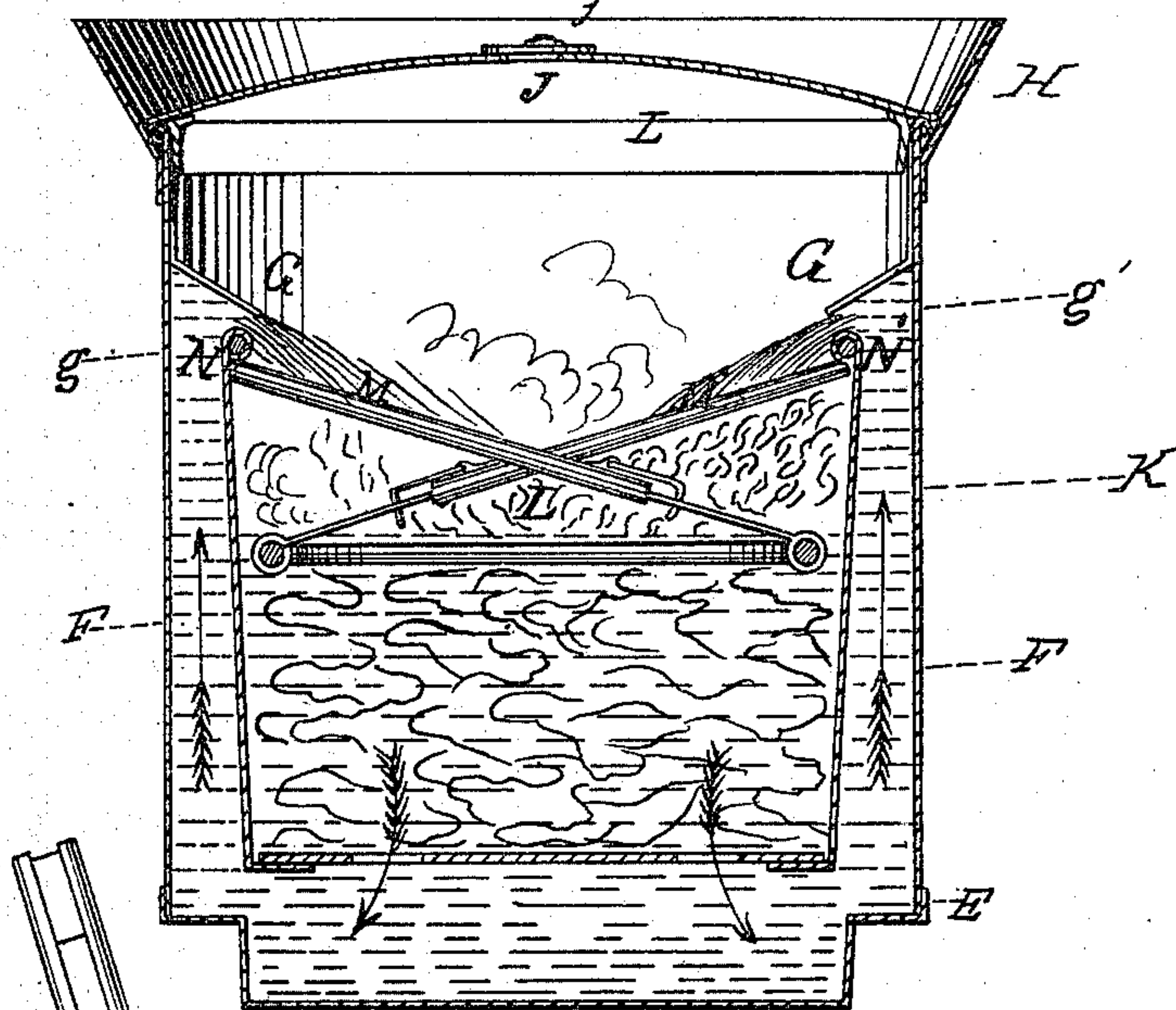
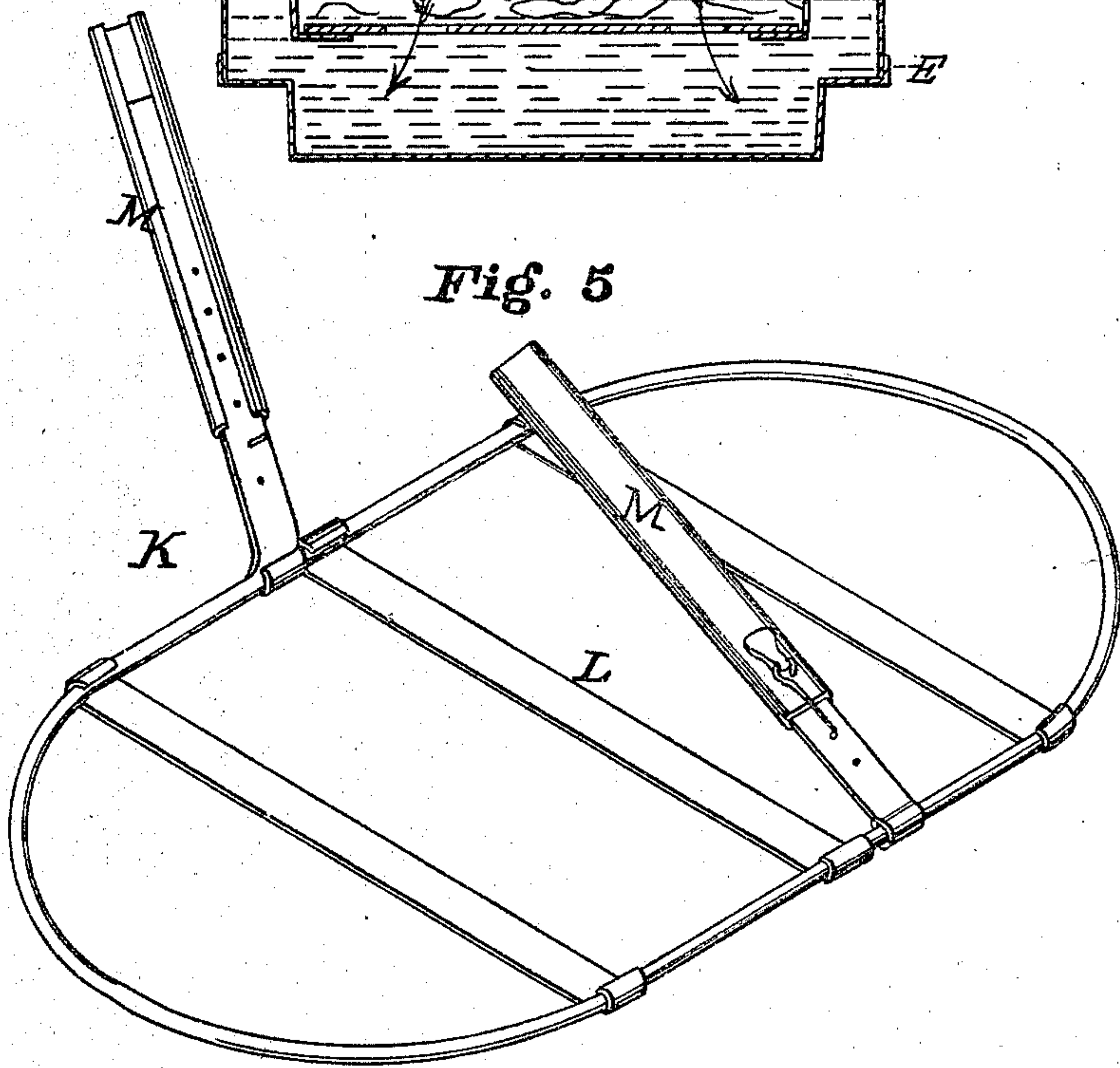


Fig. 5



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FREDRICH WILLIAM MILLER, OF CINCINNATI, OHIO, ASSIGNOR
TO FARES AND MILLER, OF SAME PLACE.

Letters Patent No. 89,784, dated May 4, 1869.

WASH-BOILER.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, FREDRICH WILLIAM MILLER, of Cincinnati, in the county of Hamilton, and State of Ohio, have invented certain new and useful Improvements in Wash-Boilers; and 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.

My invention relates to that class of laundry-utensils in which clothes are cleaned by the automatic circulation of water within a suitable vessel; and

The first part of my improvements consists in constructing said vessel or boiler in such a manner that the ascending column of water shall be deflected down upon the garments through two narrow openings or slots, one on each side of the boiler, by which means the clothes are cleansed in the most thorough and expeditious manner, and without consuming a great amount of fuel.

The invention further consists in devices for holding down the clothes within the boiler, and for collecting and returning to the interior any water which may boil over around the cover.

In the accompanying drawings—

Figure 1 is a longitudinal section of a wash-boiler embodying my improvements;

Figure 2 is a plan, partly in section, of the body of the boiler; and

Figure 3 is a transverse section, showing the boiler in operation, but without the clamp.

A represents a wash-boiler having the customary handles, B B', and pit C.

Attached to the ends of the boiler, and running parallel with the sides *a a'* of the same, are two longitudinal partitions, D D', which are about three-fourths as high as said sides *a a'*, and the lower edges of these partitions are provided with flanges *d d'*, for the support of the removable false bottom E, which is pierced with a series of perforations, *e*.

The partitions D D' are not vertical, but flare outwardly, as shown, in order that the channels F F', between said partitions and the sides *a a'* of the boiler, may be somewhat contracted toward the top.

Placed a slight distance above these partitions are deflecting-plates G G', which incline downwardly, so as to leave a long narrow opening, or slit, *g g'*, between the tops of said partitions and the deflecting-plates.

Secured to and surrounding the entire top of the boiler, is an outwardly-flaring plate, H, which serves to collect any water which boils over, and returns it to the interior of the vessel, thereby preventing the water running down the sides of the boiler, and over the top of the stove, or down upon the fire.

The lid I is similar to those in use on all wash-boilers, with the exception that it is provided with one or more apertures, J, which are guarded by external flaps or valves *j*.

The weight of these valves or flaps is such that they will remain closed as long as there is only a limited pressure of steam within the boiler, but they will open and permit the escape of steam at excessive pressure.

In addition to the above devices, I, in some cases, employ a clamp, K, to hold down the clothes while being boiled.

This clamp consists of an open frame, L, which fits the interior of the boiler, and has two extension-rods, M M', which, are brought to the proper length, and have their ends engaged underneath the rim N, or the deflection-plates G G'.

The operation of my boiler is as follows:

Soap is first placed under the false bottom E, and the vessel filled with water to a suitable height, after which the clothes are inserted, and the boiler covered with lid I.

As soon as the water in the vessel commences to boil, the ascending column is forced up the channels F F', and delivered with great force through the elongated slits *g g'*, the plates G G' causing the sheets of water to be deflected down upon the clothes along each side of the vessel, as clearly shown in figs. 1 and 3, by which means the garments are cleansed in the most expeditious and uniform manner, there being no streaks or stains in the clothes, on account of the thorough and complete circulation of the water.

In case any water should pass through the opening, *j*, when the valves are opened, it cannot run down the outside of the boiler, but it is retained by the plate H, and the water gradually finds its way back to the interior of the boiler at the top of the vessel.

I claim herein as new, and of my invention—

1. The plate H, when adapted to operate as set forth.

2. The clamp K, constructed and adapted to operate as set forth.

3. The general arrangement and combination, substantially as herein described, of the wash-boiler A, inclined longitudinal partitions D D', perforated false bottom, E *e*, channels F F', slits *g g'*, deflecting-plates G G', lid I J *j*, plate H, and clamp K, for the purpose specified.

In testimony of which invention, I hereunto set my hand.

Witnesses: FREDRICH WM. MILLER.
GEO. H. KNIGHT,
JAMES H. LAYMAN.