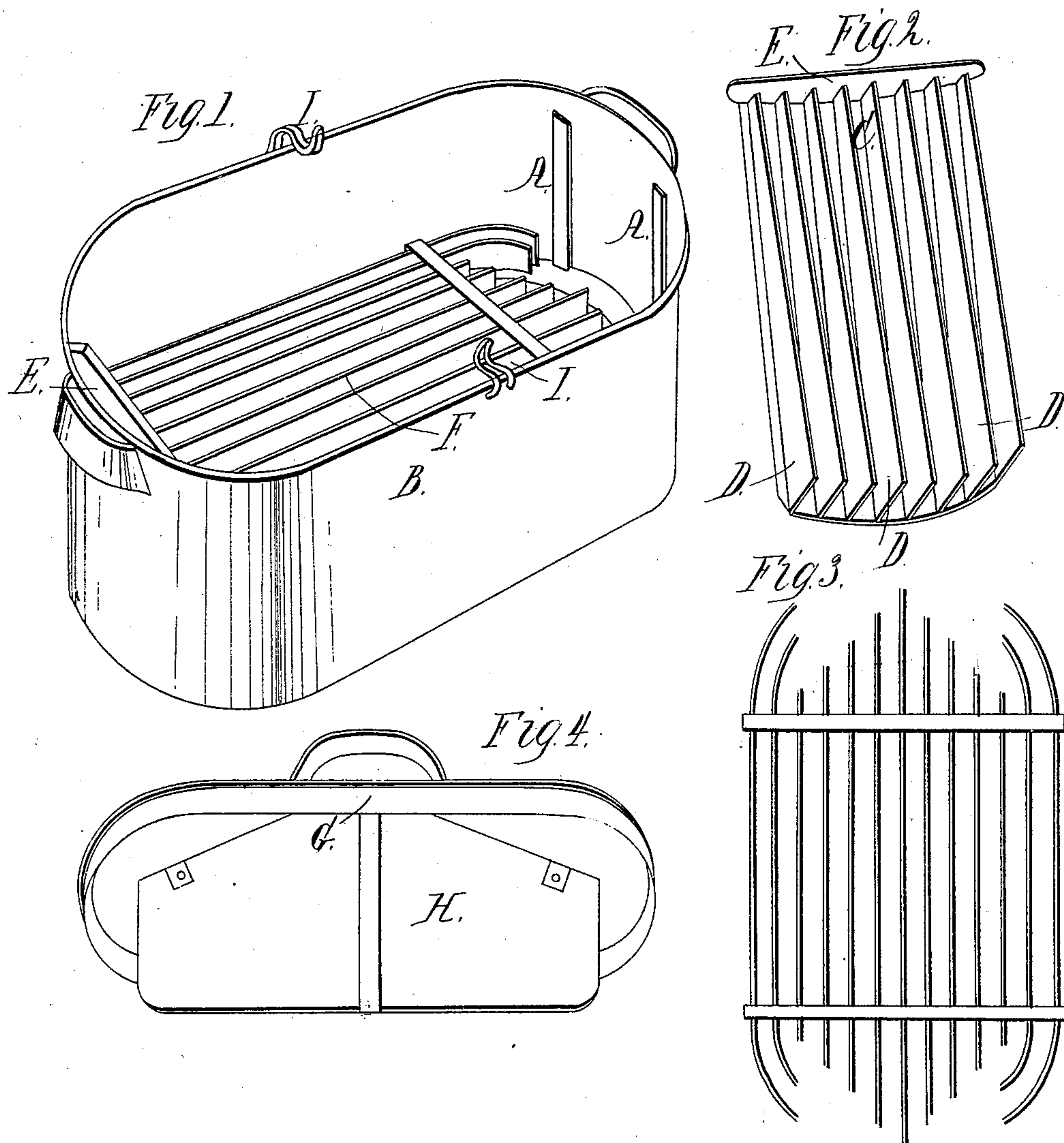


L. Granger,

Wash Boiler,

No 84,487,

Patented Dec. 1, 1868.



Witnesses;
L. C. Hyde,
John Ruhlant

Inventor,
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Thos S Sprague



LEWIS GRANGER, OF MEMPHIS, MICHIGAN.

Letters Patent No. 84,487, dated December 1, 1868.

IMPROVEMENT IN WASH-BOILERS.

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

To whom it may concern :

Be it known that I, LEWIS GRANGER, of Memphis, in the county of Macomb, and State of Michigan, have invented a new and useful Improvement in Wash-Boilers; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, and being a part of this specification.

Figure 1 is a perspective view of the inner arrangement of my boiler-attachments.

Figure 2 is a plan view of the vertical ribs.

Figure 3 is a plan view of the clothes-supporter.

Figure 4 is a perspective view of the bottom of the cover.

Like letters indicate like parts in each figure.

The nature of this invention relates to an improved attachment to wash-boilers, by means of which the labor of cleansing clothing will be very materially lessened.

I am aware that there are a number of patents already issued upon what are termed "automatic clothes-boilers," but, in all of them, conical tubes or similar devices are used as conductors for the steam and hot water from the bottom to the top of the boiler. In the course of my experiments, I have found that I can do away entirely with the tubes or other devices in common use for this purpose, and, at the same time, very materially cheapen the cost of construction.

In order to accomplish this end, I attach, by soldering or otherwise, vertical guides, A, two at each end, of an ordinary wash-boiler, B.

Fitted to the ends of the boiler, and upon the same curve, are the slides C, which, when slipped into place, are held in position by the guides A, and are provided with vertical ribs D, soldered or otherwise secured to the concave face of the slides C.

These ribs should be of about twice the width at their base than at their top, and the upper end may be secured to a cap, E, which may also be soldered to the top of the slides C.

I also construct a slotted grate, F, of a suitable shape to fit loosely into the bottom of the boiler, to act

as a supporter for the clothes, and a guide to control and conduct the water to the outlets at the ends of the boiler, through the spaces between the ribs.

To operate this boiler, fill with water an inch or two above the slotted grate, (the slides C being in place,) after which pack the clothes into the boiler, well around the edges thereof, having rubbed a little soap on the dirtier parts of the clothing. The clothing should be spread evenly upon the grate, and against the walls of the boiler, care being taken not to allow them to fill the spaces between the ribs.

The cover G, which is provided with a flanged projection, H, upon its under side, should then be placed upon the boiler, when the flanged projection will be found to prevent the clothes from rising in the boiler during the process of boiling.

Hooks, I, or any other suitable device, may be attached to the side walls of the boiler, to secure the cover in place.

The boiler should then be placed over a fire, and when the water commences to boil and generate steam, the steam seeks an outlet, and finds it in the spaces between the ribs, and rushing upward, is followed by a current of hot water, which is stopped in its ascent by the cap E and the boiler-cover, when it falls upon the top of the clothing, and percolating downward through the same, cleanses them thoroughly.

Should the boiler be required for other purposes, it is simply required to remove the slotted grate and slides.

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

1. The slides C, provided with ribs D, or their equivalents, when constructed and operating substantially as and for the purposes herein set forth.

2. The combination of the slides C, slotted grate F, and hooks I, in connection with any suitable boiler, and the flanged projection H. in connection with any suitable cover, when arranged and operating substantially as and for the purposes herein described.

LEWIS GRANGER.

Witnesses:

H. F. EBERTS,

CHARLES A. W. RICE.