[117.]

ELIAS M. WRIGHT.

2 Sheets--Sheet 1.

Improvement in Wash Boilers.

No. 119,489. Patented Oct. 3, 1871.

Fig. 1.

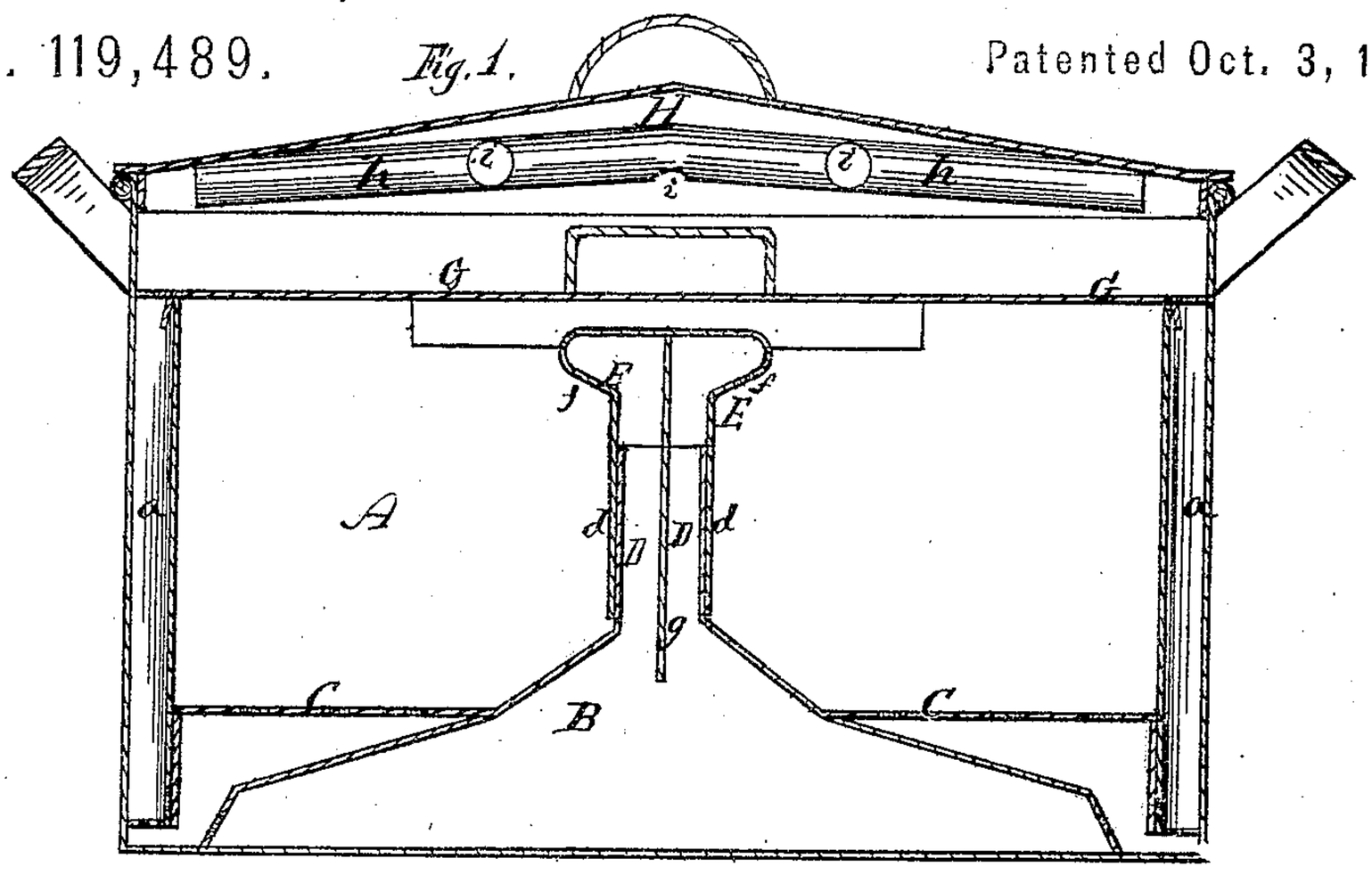


Fig. 2.

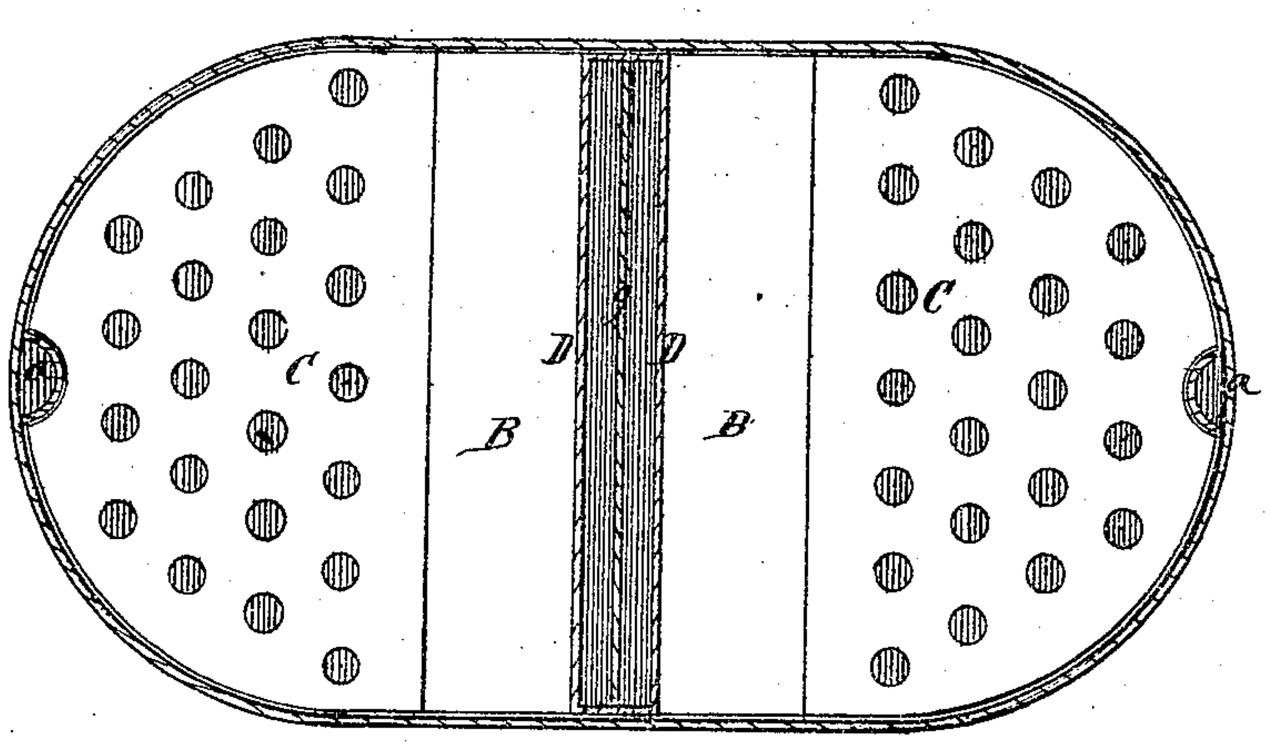
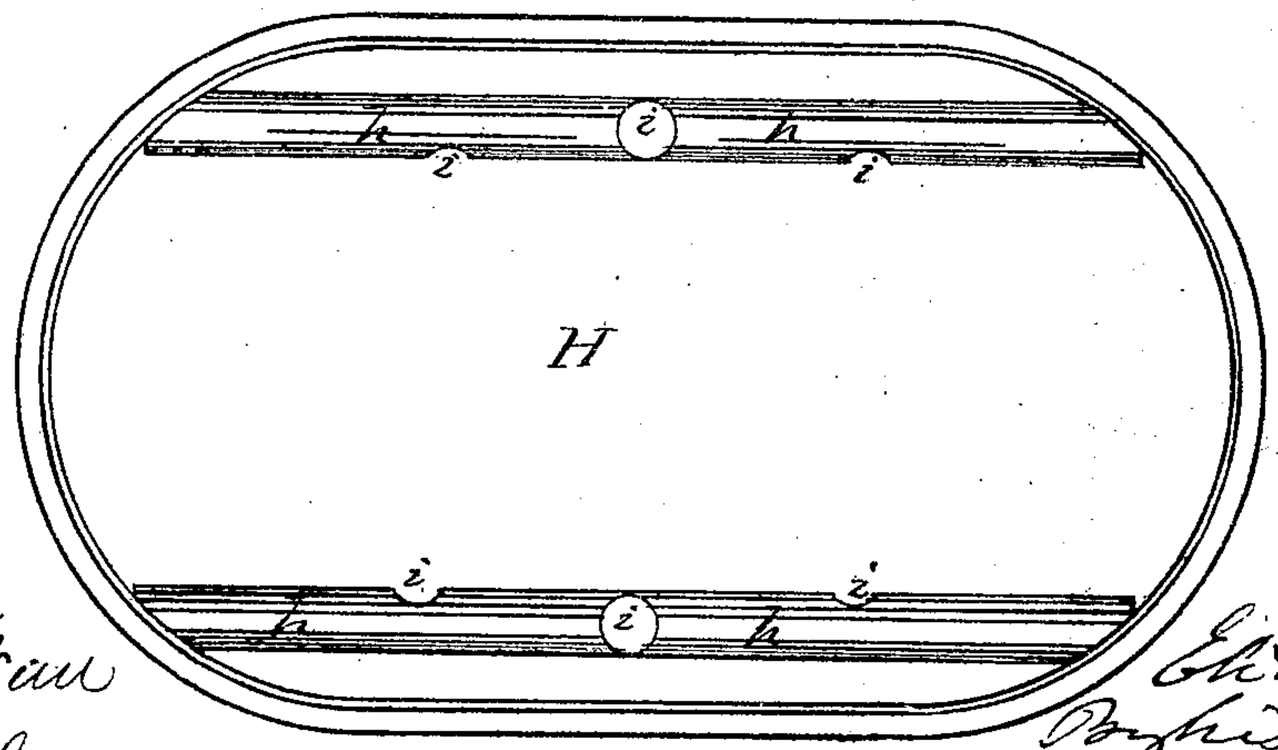


Fig. 3.



Witnesses,
E. C. Dewitt
E. C. Lyons

Elias M. Wright,
By his attorneys
L. S. Brown.

[117.]

ELIAS M. WRIGHT.

2 Sheets--Sheet2.

Improvement in Wash Boilers.

No. 119,489. Patented Oct. 3, 1871.

Fig. 4

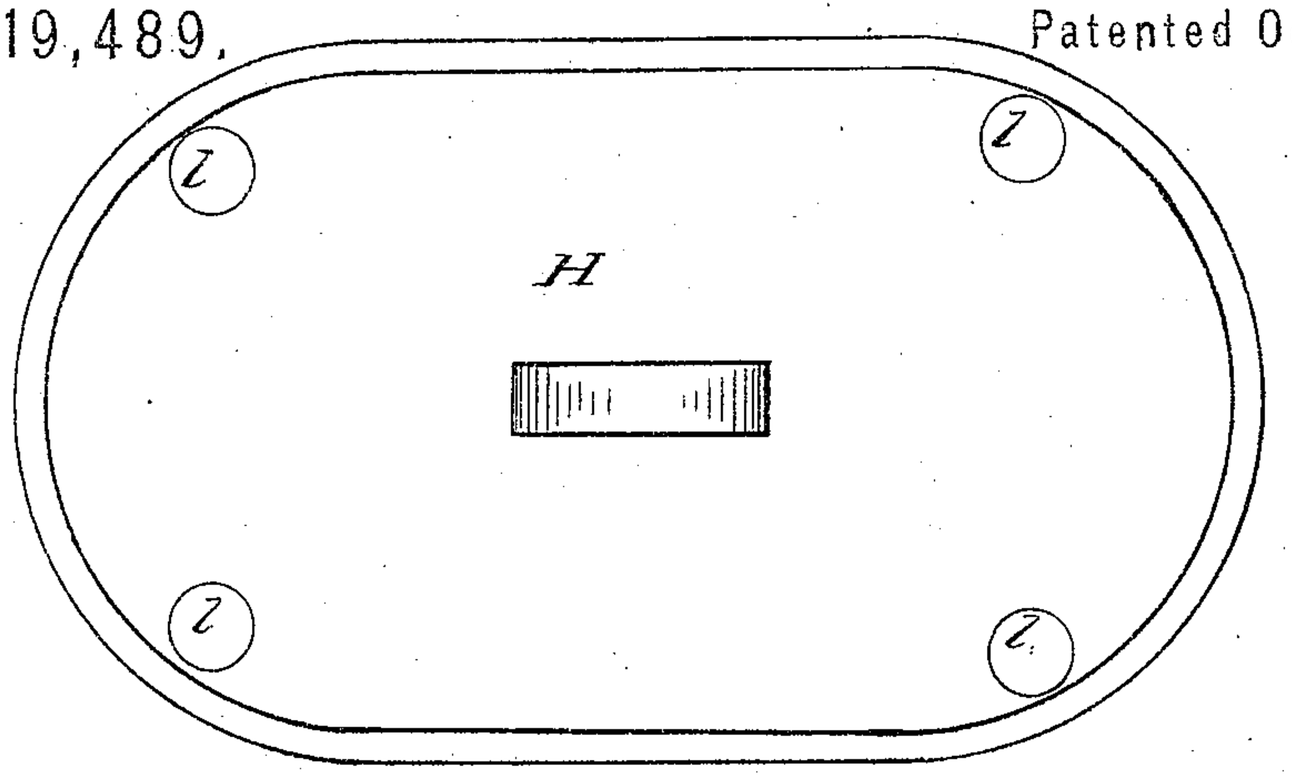


Fig. 5.

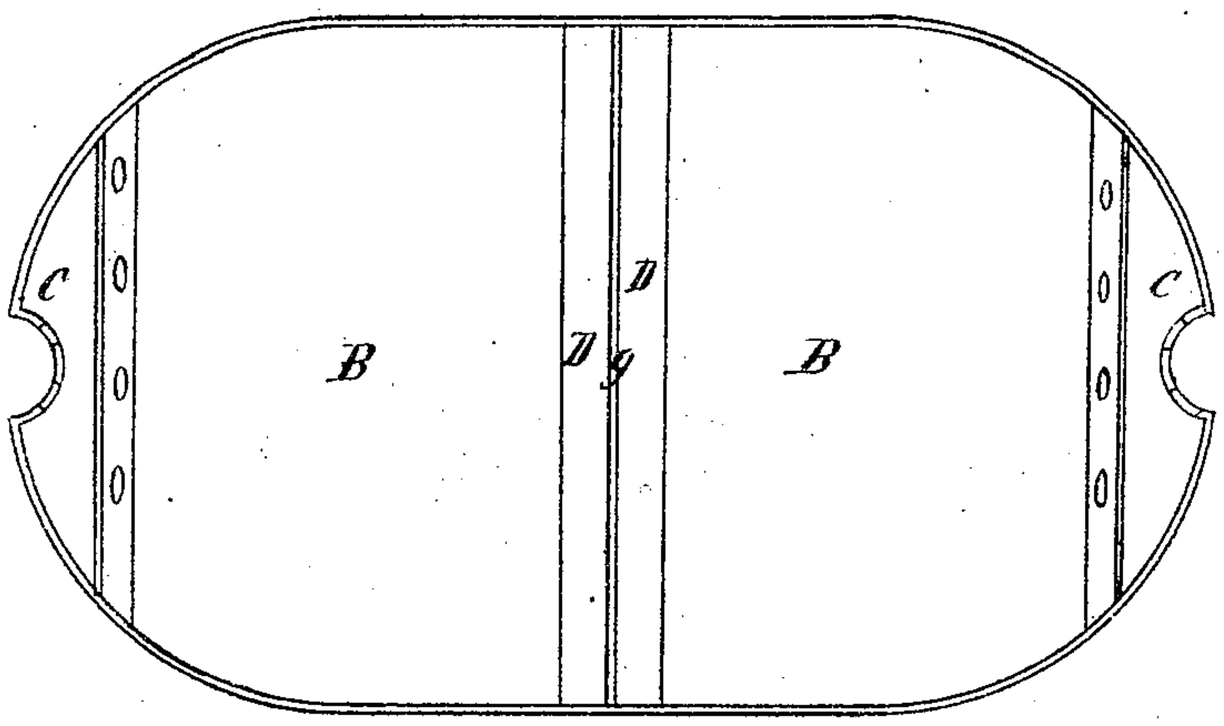
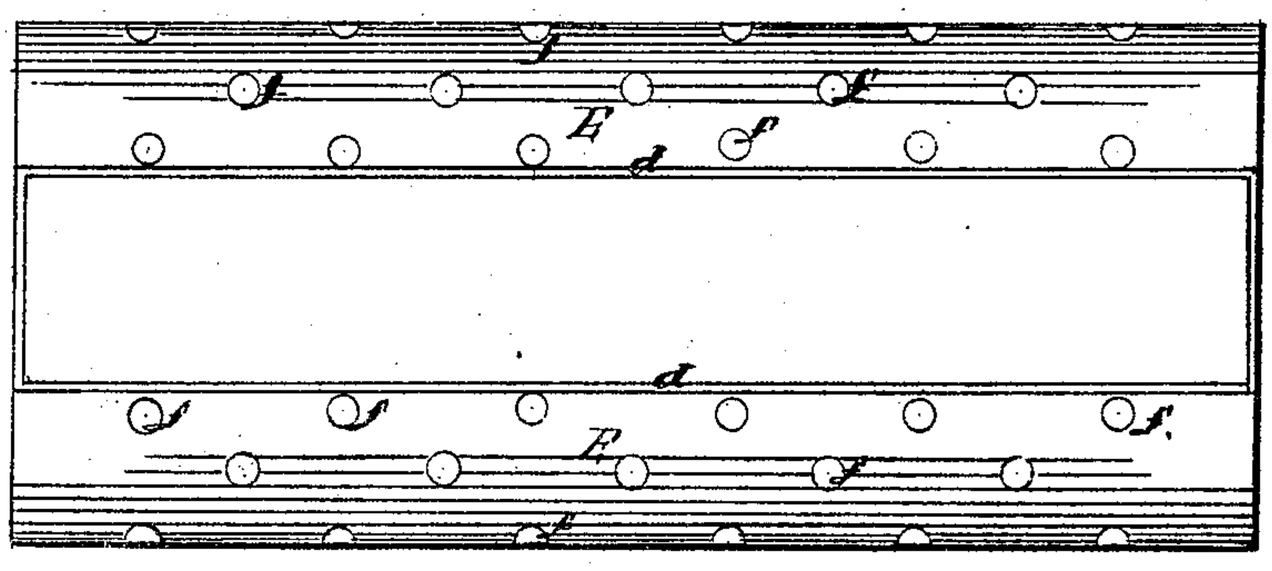


Fig. 6.



Witnesses,
E. Pomeroy
J. C. Lynch

Elias M. Wright,
By his attorney,
J. S. Brown.

UNITED STATES PATENT OFFICE.

ELIAS M. WRIGHT, OF GENEVA, NEW YORK, ASSIGNOR TO HIMSELF AND GARDNER HERRICK, OF ALBION, MICHIGAN.

IMPROVEMENT IN WASH-BOILERS.

Specification forming part of Letters Patent No. 119,489, dated October 3, 1871.

To all whom it may concern:

Be it known that I, ELIAS M. WRIGHT, of Geneva, in the county of Ontario and State of New York, have invented an Improved Wash-Boiler; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing making part of this specification—

Figure 1 being a central longitudinal vertical section of the wash-boiler; Fig. 2, a horizontal section thereof in a plane indicated by the line *x x*, Fig. 1; Fig. 3, a view of the under side of the upper or outer cover; Fig. 4, a view of the upper side of the same cover; Fig. 5, a view of the under side of the water-chamber; Fig. 6, a view of the under side of the steam and water-distributer.

Like letters designate corresponding parts in all of the figures.

The nature of my invention consists in certain special features of construction and arrangement, which will be more fully set forth in the following description:

A represents the body of the boiler, which is usually of an oblong shape rounded at the ends, like an ordinary wash-boiler; and it may be such with the addition of two vertical tubes or passages, *a a*, at the ends, respectively, reaching not quite to the top nor to the bottom of the boiler. In this boiler A, immediately over the bottom thereof, is placed a water-chamber, B, with a perforated false bottom, C, over its ends, on which the clothes rest. The false bottom fills the area of the boiler, fitting closely, but allowing the water and suds, which descend through the clothes, to drain through its perforations and be conducted into or beneath the chamber B, which has perforations at the ends to admit the same freely, and also the water, which descends through the passages *a a*, that are perforated at the bottom to allow the water to drain from the same. The water-chamber B is higher toward the middle, so as to conduct the hot water and steam toward the center and direct the same upward through a central transverse passage, D, extending upward therefrom. For convenience in taking out and taking apart this transverse passage terminates with an open top, and a cap-piece, *d*, fits closely down over the same and terminates upward in a widened distributer, E, at the top, close on the upper but perforated on the under side, as at *f f*, Fig. 6. A partition, *g*, extends upward in the middle of the passage D and distributer E so as to divide the current of ascending steam and water and distribute the same equally toward both ends of the boiler. Over the distributer is first located a simple close cover, G, fitting the boiler A, except at the ends where the tubes or passages *a a* terminate, which are open at the top, and receive the water collecting from the condensed steam and accumulating on the cover, to conduct the same to the water-chamber B below. And over the cover G is situated another outer cover, H, with a space between it and the inner cover. This outer cover is provided with tubes or passages *h h* on its under side, communicating with the interior of the boiler by apertures *i i*, preferably near the center of the cover, and with the outer air through other apertures, *l l*, preferably near the ends of the cover, or so that the inner and outer apertures may be as far as practicable from each other. These tubes or passages and communicating apertures are intended to offer passage to the escaping steam from the boiler and to cause it to meet currents of comparatively cold air and thereby become condensed, the water flowing back into the boiler, so that the inconvenience of escaping steam is avoided. The condensing tubes or passages of this cover are applicable to ordinary wash-boilers for the same purpose. The inner cover G may be dispensed with, but the action of the boiler is more perfect when both covers are used.

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

1. The combination and arrangement of the water-chamber B, false bottom C, transverse passage D, distributer E, cover G, and passages *a a*, all constructed and operating substantially as and for the purposes herein specified.

2. The cover H, constructed with the horizontal or inclined condensing-tubes or passages *h h*, operating substantially as and for the purpose set forth.

Specification signed by me this 2d day of June, 1871.

ELIAS M. WRIGHT.

Witnesses:
E. W. HARRINGTON,
H. H. JONES.

(117)