

W. B. Le NOIR.
Washing-Machine.

No. 214,827.

Patented April 29, 1879.

Fig. 1.

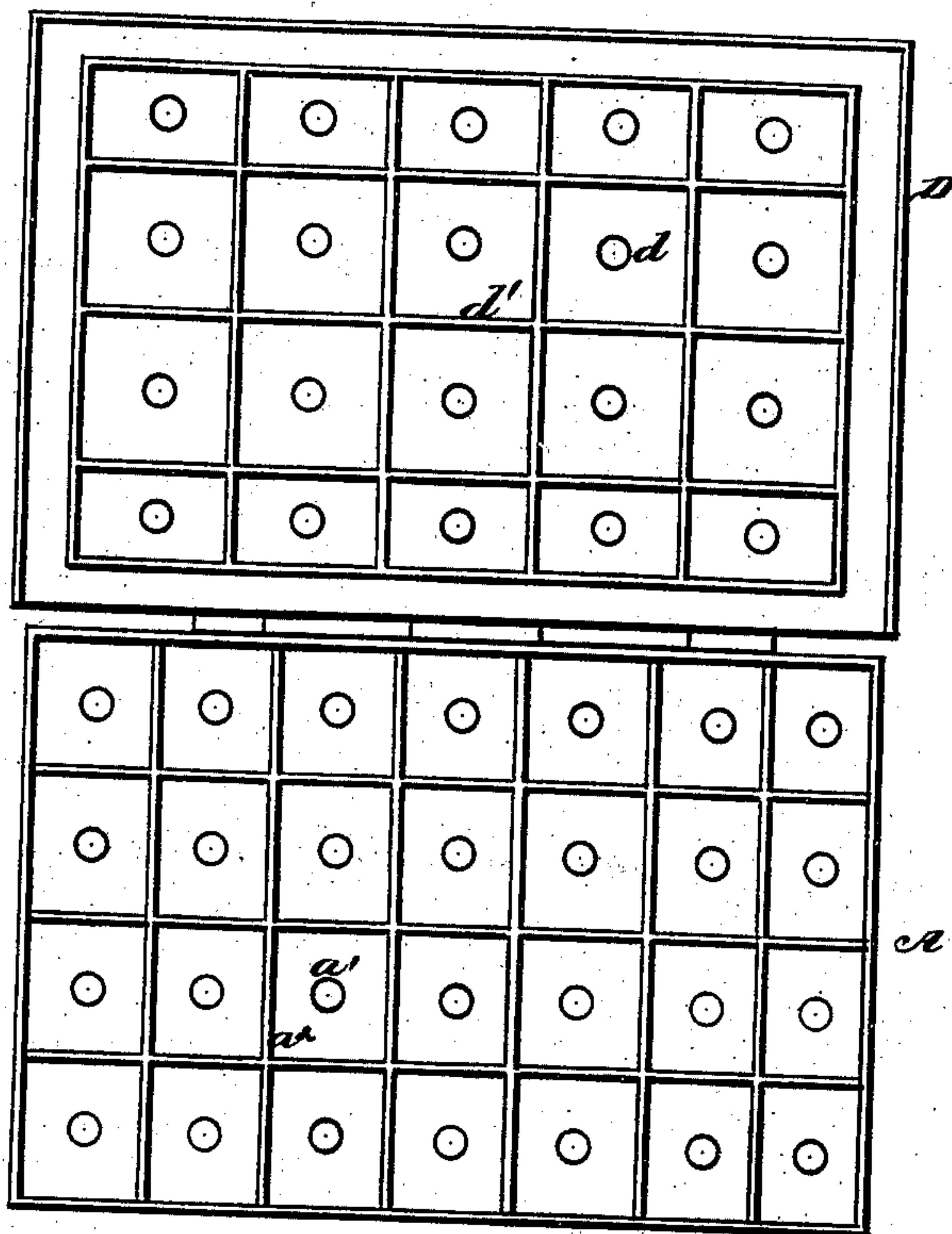
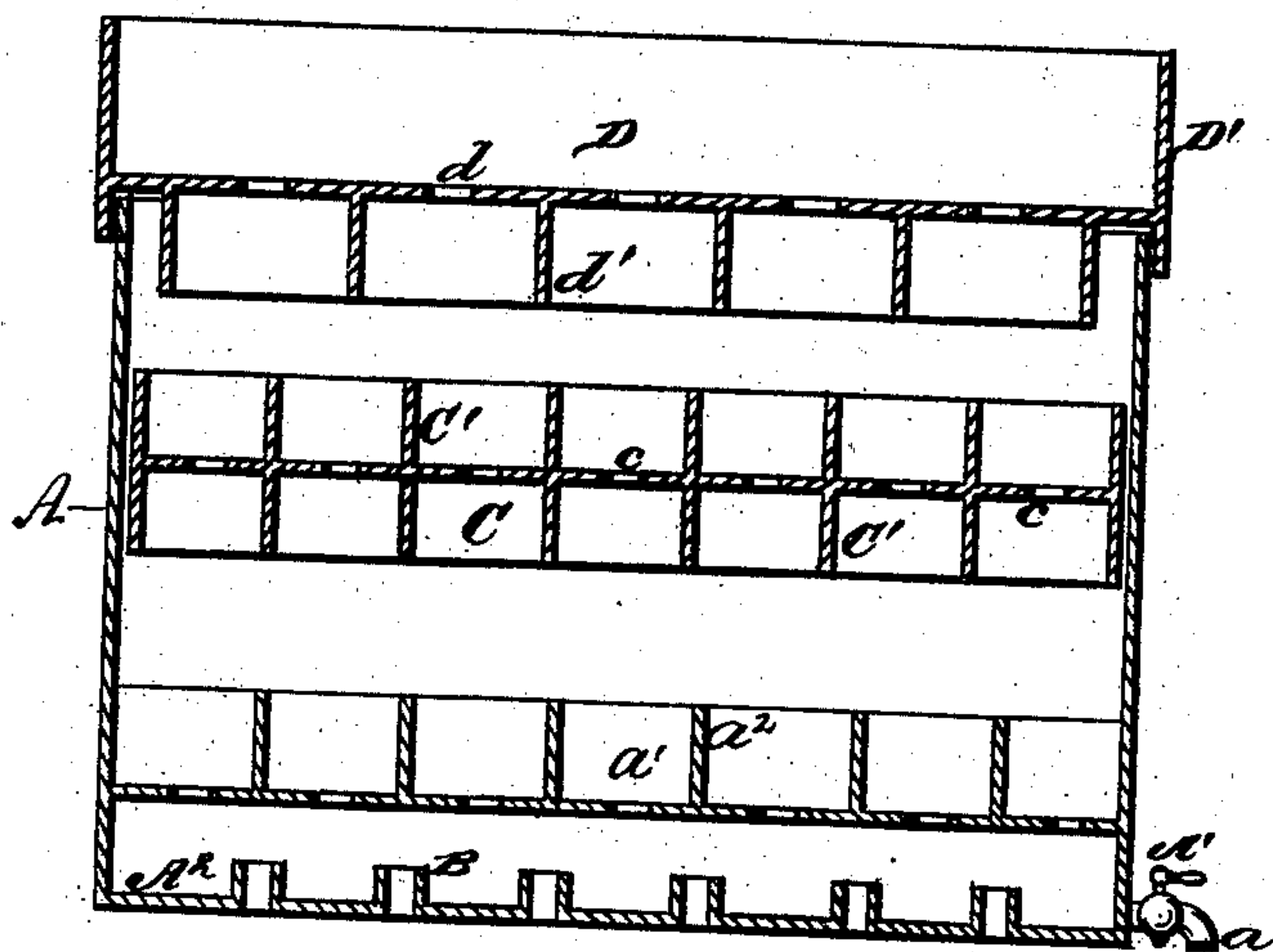


Fig. 2.



WITNESSES
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UNITED STATES PATENT OFFICE.

WILLIAM B. LE NOIR, OF LOWER PEACH TREE, ALABAMA.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **214,827**, dated April 29, 1879; application filed February 1, 1879.

To all whom it may concern:

Be it known that I, WILLIAM B. LE NOIR, of Lower Peach Tree, in the county of Wilcox and State of Alabama, have invented a new and valuable Improvement in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a top plan of my washing-machine with one of the sections removed. Fig. 2 is a vertical central sectional view of the same.

My invention relates to a device adapted to be used with escape-steam from mills, engines, steamboats, manufactories, and the like, for the purpose of cleansing clothes by such steam; and the novelty consists in the construction and arrangement of parts, as will be more fully hereinafter set forth.

In carrying out my invention, I employ a box or case of round, square, rectangular, or other form desired, such case or box being adapted to be placed over the escape-pipe of steam-boilers, or over an ordinary boiler on a stove.

The bottom is provided with upwardly-extending tubes, through which the steam passes into the lower chamber of the case. While these upwardly-projecting tubes admit the passage of steam from the boiler to the box, any water is prevented from gravitating into the boiler; but all such water is let off by a stop-cock placed at one side of the box below the level of the upper ends of the tubes.

A horizontal partition forms the upper surface of the lower or first steam-chamber, and it is perforated to admit the passage of steam upward. These perforations are arranged in such a manner that one shall be located within each cell of a series of cells formed by vertical ribs or plates.

A removable diaphragm, similarly perforated, and having similar vertical partition-plates upon each side, above and below, is adapted to operate within the box, to one side of which is hinged a cover, also provided with the perforations and cell-plates, and having upwardly-projecting flanges on all sides to

form a rectangular box with a perforated bottom.

The holes in the bottom of the box are eighteen in number, while those in the next horizontal partition are twenty-eight in number. These numbers may be varied as desired; but it is desirable to retain about those proportions, and not to have the holes in each opposite to each other; and this fact should be true of all the holes from below upward. This arrangement renders the course of the steam through the box tortuous, and delays it in the clothes as long as desirable.

In the operation of my device I deposit the colored or foul clothes upon the lower partition, place the removable diaphragm above them, and place the finer linen or white clothes thereon and close the lid. A solution of soap and water, or other cleansing solution, is poured in the top, which gravitates slowly through the clothes, the steam rising through them at the same time.

The foul water reaches the first steam-chamber, and runs off through the stop-cock. When the clothes need rinsing, clean water is poured in in the same manner and let off by the same outlet.

Placing the foul or colored clothes at the bottom prevents the dye, &c., from reaching the finer linen.

Referring to the drawings, A represents the box or case; *a*, the outlet stop-cock; and *A'*, the partition, having perforations *a'* and cell-plates *a''*, as shown.

The bottom *A''* of the box has upwardly-extending tubes or projections B, which admit the steam to the first steam-chamber, and prevent the egress of water, which passes out through the outlet *a* below the level of the upper ends of the tubes.

C represents the removable diaphragm, perforated at *a*, and having cell-plates *C'* upon both upper and lower sides. The cell-plates *a''*, *C'*, and *d'* form cavities, which act as distributors of the steam, these cavities becoming filled before the steam penetrates the clothes, thereby causing the steam to be gently distributed through the clothes. The upper ribs or strips which form the cell-plates support the clothes in addition to serving as distributors for the steam.

D represents the hinged cover, perforated at d , and having cell-plates d' upon its lower side. Upwardly-projecting flanges D' upon all sides form of the cover D a rectangular box with open bottom.

I claim—

1. The box A, having outlet stop-cock a , and tubes B, in combination with the partition A^1 , perforated at a^1 , to form a tortuous steam-passage, and having cell-plates a^2 , and with a rectangular hinged cover, D, having projecting flanges D' and perforations d , as specified.

2. The combination of the box A, having

outlet stop-cock a , lid D, having flanges D' , perforations d , and cell-plates d' , partition A^1 , cell-plates a^2 , and perforations a^1 , tubes B, and removable diaphragm C, having cell-plates C' and perforations c , as and for the purposes specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM BRIDGES LE NOIR.

Witnesses:

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D. P. HICKS.