A. A. BROOKS & H. D. CROOKER.
Atmospheric Clothes-Washers.

No. 204,880. Patented June 18, 1878.

Fig. 1.

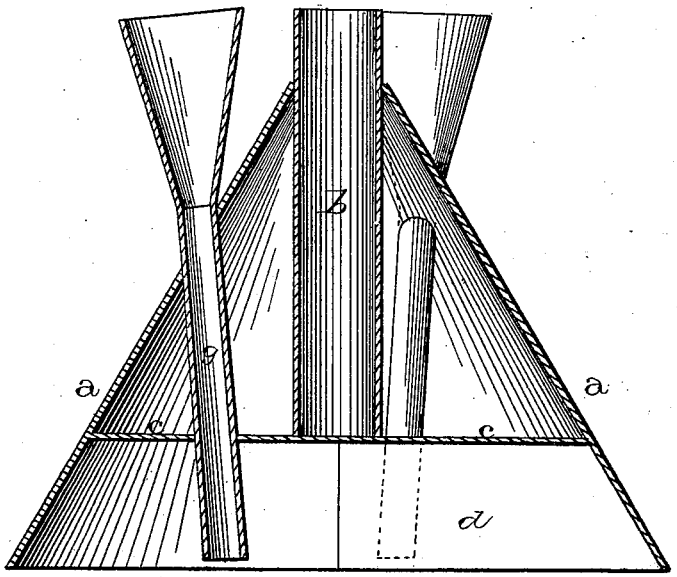
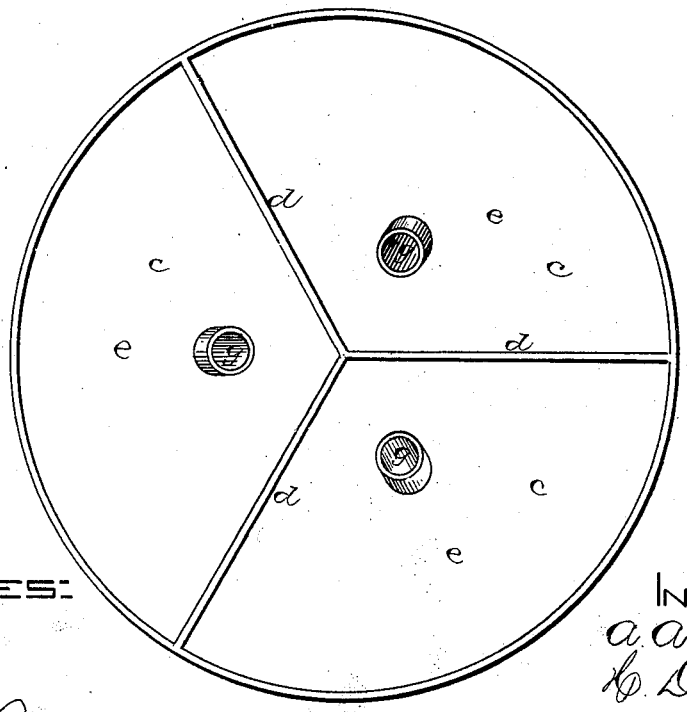


Fig. 2.



WITNESSES:

R. M. Barr.

J. W. Garner.

INVENTORS.

A. A. Brooks.

H. D. Crooker,

per

F. A. Lehmann, atty

UNITED STATES PATENT OFFICE.

ALBERT A. BROOKS AND HEMAN D. CROOKER, OF BATTLE CREEK, MICH.

IMPROVEMENT IN ATMOSPHERIC CLOTHES-WASHERS.

Specification forming part of Letters Patent No. **204,880**, dated June 18, 1878; application filed May 2, 1878.

To all whom it may concern:

Be it known that we, ALBERT A. BROOKS and HEMAN D. CROOKER, of Battle Creek, in the county of Calhoun and State of Michigan, have invented certain new and useful Improvements in Atmospheric Clothes-Washers; and we 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

Our invention relates to an improvement in atmospheric clothes-washers; and it consists in dividing the lower part of the washer into a number of separate and distinct chambers, and providing each chamber with an air-tube, that extends some distance above the side of the washer, for the purpose of admitting air to the chamber, as will be more fully described hereinafter.

The accompanying drawings represent our invention.

Figure 1 is a vertical section of our invention. Fig. 2 is an inverted view of the same.

a represents the body of our washer, which is preferably made conical, and is provided with a socket, *b*, in its top to receive the handle. Extending horizontally across this frame, at any suitable distance above its lower edge, is the partition *c*, as shown. Extending across the bottom of this partition *c* are a number of vertical partitions, *d*, which project downward to the lower edge of the frame *a*, and thus divide the lower portion of the frame into any desired number of separate and distinct chambers *e*. Passing down through the sides of the frame, through the partition *c*, and almost down to the bottom edges of the partitions *d*, are the air-pipes *g*, there being one air-pipe for each chamber. These air-pipes are preferably made large and tapering at their tops, and serve to allow cool air to be drawn down into the chambers *e*, thus causing a greater ebullition in the water, as the cool air coming through the pipes becomes greatly expanded upon contact with the surface of the hot water. The expansive pressure of this air forces the water through the clothes much more rapidly and thoroughly, and also carries the clothes up from the bottom of the tub by means of its movement when the washer makes its upward stroke. The washer is forced vertically down through the water upon the clothes, and by this downward movement forces a large volume of air downward through them, and after the washer has made its full stroke it is raised vertically, or nearly so, through the water again to any desired height. By having the pipes *g* communicating with the different chambers it is evident that it is not necessary to exert as great a power in lifting the washer upward, as the air passes down through the pipes and destroys the partial vacuum.

Having thus described our invention, we claim—

In an atmospheric clothes-washer, the conical body *a*, divided horizontally by the partition *c*, and the space below the partition divided into separate chambers *e* by the vertical partitions *d*, in combination with the tubes *g*, the lower ends of which reach nearly to the lower edge of the body *a*, substantially as shown and described.

In testimony that we claim the foregoing we have hereunto set our hands this 24th day of April, 1878.

ALBERT A. BROOKS.
HEMAN D. CROOKER.

Witnesses:
U. G. GILLILAND,
MARY EASON.