G. A. CROOKER.
Clothes-Washer.

No. 208,798. Patented Oct. 8, 1878.

Fig. 1.

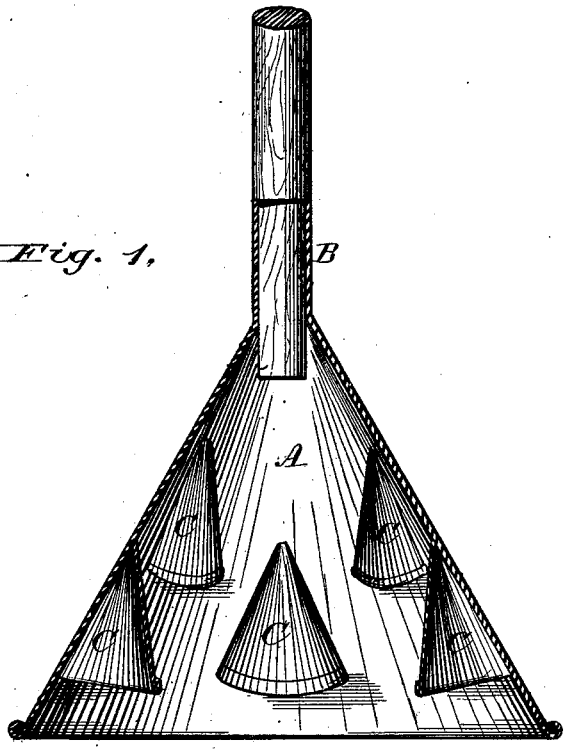
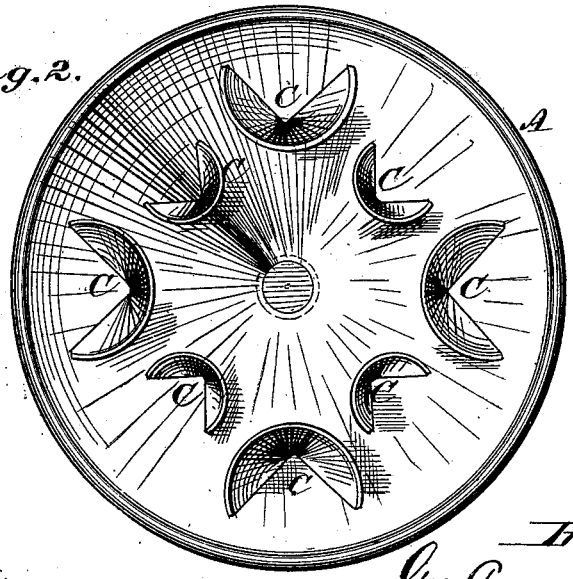


Fig. 2.



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GEORGE A. CROOKER, OF CHARLOTTESVILLE, VIRGINIA.

IMPROVEMENT IN CLOTHES-WASHERS.

Specification forming part of Letters Patent No. **208,798**, dated October 8, 1878; application filed April 5, 1878.

To all whom it may concern:

Be it known that I, GEORGE AUGUSTUS CROOKER, of Charlottesville, in the county of Albemarle and State of Virginia, have invented certain new and useful Improvements in Clothes-Washers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

I have improved the conical-cup clothes-washer by arranging around its inner wall an upper and a lower row of suction and air-compressing semi-cones alternately with each other, whereby those in the upper row serve as supplemental suction-chambers and air-compressors, and thus obtain a succession of such actions upon the clothes as the cone is depressed upon them, the upper row acting after the lower row, and in the spaces between them, thereby greatly increasing the suction action and forcing through the clothes a greater number of separate streams of air; and as the effectiveness of the washing depends upon the suction and air-forcing, the more separate and divisible these forces are made the quicker and better will be the washing. This arrangement of the semi-cones in double rows also gives a greater number of rubbing-edges upon the clothes. The cone itself acts by suction and air-compression upon the clothes in the tub.

Referring to the drawings, Figure 1 represents a vertical section of a cone-washer embracing my improvements, and Fig. 2 a bottom view of the same.

The cone A is of tin of suitable size, wired at its base, and provided at its apex with a socket, B, for the handle, by which it is operated. Small semi-cones C are soldered upon the inner wall of the cone in rows, one above the other, at suitable distances apart, with their open base ends down, and with the semi-cones in the upper row arranged alternately with those in the lower row. The object of this arrangement is to obtain the advantage of having the small suction-chambers and air-compressors act in succession, or by tiers, as the cone is pressed down upon the clothes, and to obtain the benefit of the greatest number of separate and distinct suction and air forces at different heights of the cone, to increase the rapidity and effectiveness of the washing. The lower row of these semi-cones acts first, and the upper row acts next and upon different portions of the clothes, so that the cone A acts at different depths in the suds by the successive actions of the lower and upper rows of the wall semi-cones. This arrangement also gives a greater number of rubbing-edges upon the clothes in connection with the cone A, which also forms an air-compressing and suction chamber.

The alternate arrangement of the wall semi-cones is to place them out of vertical lines with each other, and thus have their full action. The semi-cones nearest the apex of the cone are preferably smaller than those nearest the base of the cone, to lessen their projection from the wall as they approach the apex of the cone.

Wall-cups and semi-cones have been used in washing-cones, but only in single rows, and in connection with a flat or convex bottom to the suction and air-compressing chamber, which cannot produce successive cleansing actions at different heights in the cone-chamber as it is pressed upon the clothes; and it is this construction by which I obtain this advantage that forms my improvement.

A washer having a frustum-of-a-cone air-compressing chamber, divided into three compartments, formed by flaring curved partitions and the convex bottom of the frustum, to form air-compressing chambers on the inner sides of the frustum-wall, is not new, and therefore it is not intended to claim, broadly, wall-chambers in a washing-cone, whether such chambers be adapted for suction or air-compression; but my improvement, as described and hereinafter claimed, is designed to effect better results and a more perfect utilization of the effect of air-compressing semi-cones, by their novel disposition in relation to the entire space of the main air-compressing chamber of a hollow cone.

I claim—

The improved clothes-washer herein described, as an article of manufacture, consist-

ing of the hollow cone A, having the air-compressing wall semi-cones C in the upper part of its air-compressing chamber, arranged to alternate with a base row of air-compressing semi-cones, whereby the upper row of said semi-cones acts in succession with the lower row, and the entire cone-chamber is utilized for upper and lower air-compressors, as shown and described.

In testimony that I claim the foregoing I have affixed my signature in the presence of two witnesses.

GEORGE AUGUSTUS CROOKER.

Witnesses:
A. E. H. JOHNSON,
J. W. HAMILTON JOHNSON.