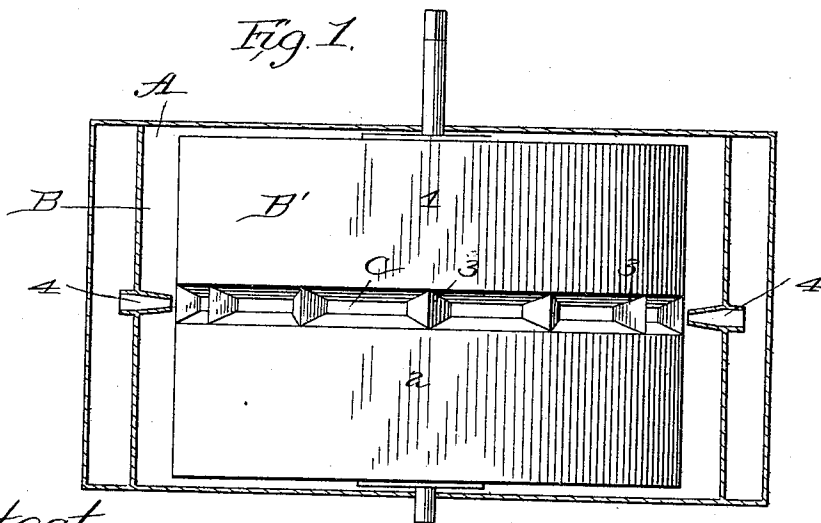
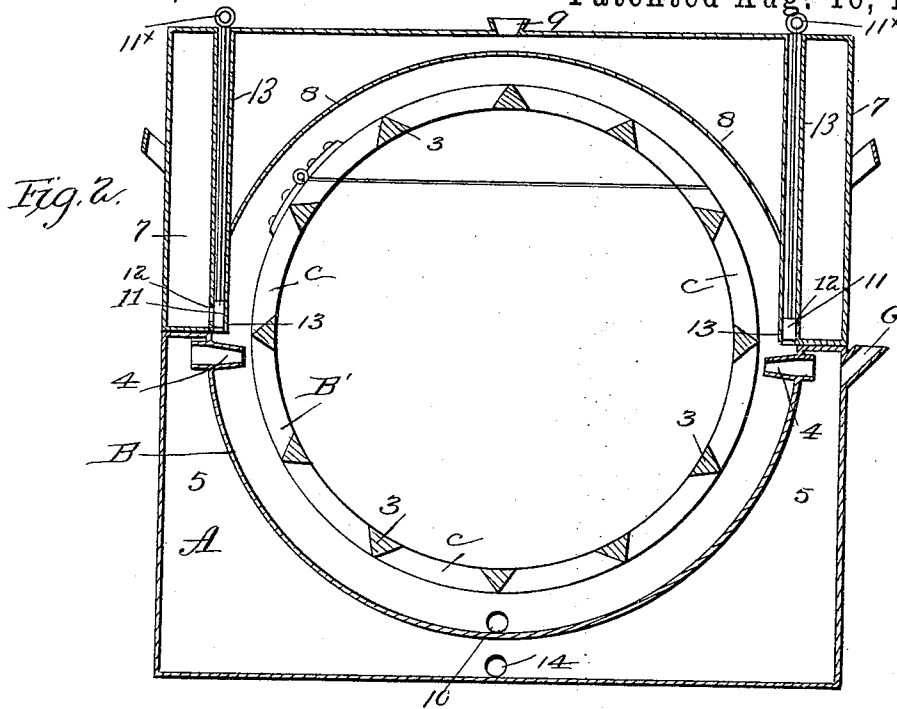


G. A. COFFEE.
WASHING MACHINE.

Patented Aug. 16, 1892.



Attest
Matter Donaldson
McFar.

Inventor
George A. Coffee
by His Son
Atty.

UNITED STATES PATENT OFFICE.

GEORGE A. COFFEE, OF DALTON, GEORGIA.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 481,003, dated August 16, 1892.

Application filed January 2, 1892. Serial No. 416,753. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. COFFEE, a citizen of the United States of America, residing at Dalton, in the county of Whitfield and State of Georgia, have invented certain new and useful Improvements in Washing-Machines, of which the following is a specification.

My invention includes the feature herein-
after particularly pointed out.

In the drawings, Figure 1 is a top view with the cover removed, and Fig. 2 is a vertical sectional view.

In the drawings, A is the tank, having the semicircular depression or cylinder-chamber B. The cylinder B' is journaled in the side walls and its lower portion fits within the chamber B.

A series of slots *c* are formed about the cylinder, and these are of elongated shape and have their side walls inclining toward each other inwardly. The purpose is to utilize the full quantity and force of the steam by offering as slight resistance to the steam-jets as is possible. The two portions of the cylinder 1 2 are connected by the cross-bars 3, which form the ends of the slots. These cross-bars are of special form to attain the end in view, of presenting as little resistance as possible and utilizing all the steam. They are triangular in form and the apices of the triangles point radially outward, and thus when the cylinder is revolved and the cross-bars carried past the nozzles 4 (which direct the steam horizontally from the steam-tank A) the sharp edge of the triangle will simply divide the steam-jet and direct it on opposite sides, and as the movement of the bar across the nozzle continues the incline side will receive the whole jet and simply deflect it, without, however, lessening its force to any appreciable degree, and in no case will there be any steam wasted or reduced in force, as the inclined sides of the slot will act in the same way as the cross-bars and simply direct the steam inward and, in fact, concentrate its force to one point. This concentration of the steam force is also aided by the contracted form of the nozzles. The steam-tank A is practically divided into two chambers 5, and the nozzles lead from the upper parts of these chambers into the cylinder-chamber. The steam-tank is filled with water through the inlet 6.

In order that the dirty water in the cylinder-chamber B may be replenished with fresh hot water, I provide a water-heating chamber in the cover. The cover consists of an outer shell 7 and the inner curved shell 8, the latter conforming to the curve of the cylinder. The space between these shells forms the fresh-water space, which is filled through the central inlet 9. This water will become heated from the steam within the cylinder-chamber, and when the dirt has been removed from the clothes and it is desired to rinse or whiten them with fresh hot water the dirty water in the chamber is withdrawn through the outlet-pipe 10, the valves 11 are raised by the handles 11^x at the top of the cover, and then the fresh water is permitted to escape through the openings 12 and the pipes 13 into the cylinder-chamber. The clothes are then subjected to the action of the steam and fresh water for a short time, and they may be then taken from the machine ready for drying. The pipes 13 extend to the top of the cover and open at their lower ends into the cylinder-chamber, the openings 12 being formed laterally. The water in the steam-tank may be drawn off through the opening 14. The curved inner shell of the cover forms a contracted lower part of the water-space and the water is properly directed to the openings 12.

I claim as my invention—

In combination with the steam-tank and cylinder-chamber, the nozzles leading from the steam-tank into the cylinder-chamber, a cylinder within said chamber, and the cover having the water-space, said water-space comprising the two depending portions extending downward to the cylinder and steam-space on each side of the cylinder, the said water-space being formed by the curved inner wall attached to the cover, each of the depending portions of the water chamber being contracted toward the lower end and the valves in said contracted portions leading into the cylinder-chamber, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

GEO. A. COFFEE.

Witnesses:

W. I. DUDLEY,
R. L. DUDLEY.