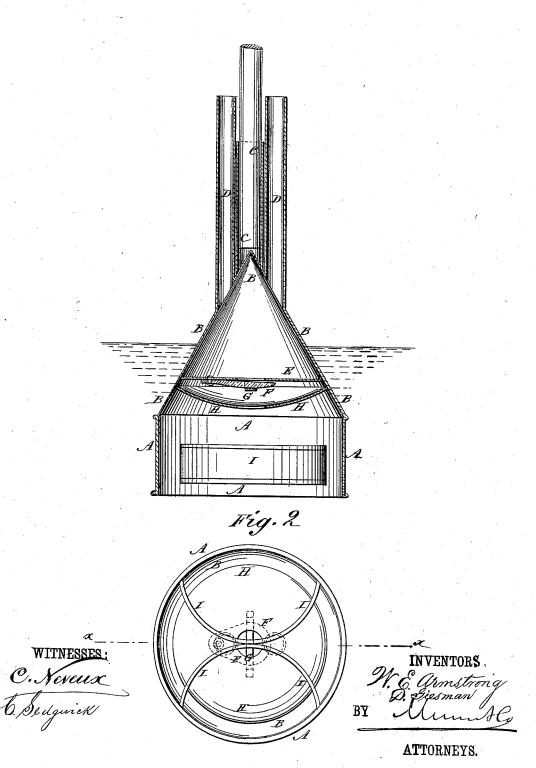
## W. E. ARMSTRONG & D. GIESMAN. Clothes Pounder.

No. 201,642.

Patented March 26, 1878.

Fig. 1



## UNITED STATES PATENT OFFICE.

WILLIAM E. ARMSTRONG AND DAVID GIESMAN, OF LUDINGTON, MICHIGAN.

## IMPROVEMENT IN CLOTHES-POUNDERS.

Specification forming part of Letters Patent No. 201,642, dated March 26, 1878; application filed February 9, 1878.

To all whom it may concern:

Be it known that we, WILLIAM EDWARD ARMSTRONG and DAVID GIESMAN, of Ludington, in the county of Mason and State of Michigan, have invented a new and useful Improvement in Clothes Washer and Pounder, of which the following is a specification:

Figure 1 is a vertical section of our improved machine, taken through the line x x, Fig. 2. Fig. 2 is a bottom view of the same.

Similar letters of reference indicate corre-

sponding parts.

The object of this invention is to furnish an improved device for washing clothes by the combined action of air and water, which shall be simple in construction, convenient in use, and effective in operation, washing the clothes quickly and thoroughly, so that they will not require to be rubbed.

The invention consists in the combination of the shell, made cylindrical in its lower part and conical in its upper part, the tubular handle-socket, the air-tubes, the horizontal partition, provided with a rubber valve, the concavo-convex partition, having a hole formed through its middle part, and the braces, with each other, as hereinafter fully described.

A is a cylindrical shell, to the upper edge of which is attached the lower edge of a conical shell, B. To the apex of the conical shell B is attached a tubular socket, C, to receive the handle.

In the conical shell B, upon the opposite sides of the handle-socket C, are formed two holes, in which are secured the lower ends of two air tubes, D, which are made long, so that their upper ends will always be above the surface of the water.

E is a horizontal plate or partition, the edges of which are secured to the conical shell B, and in the center of which is formed a hole. The hole through the plate E is closed by a rubber plate, F, attached at one end to the lower side of the said plate, so as to serve as a downward-opening valve.

The valve F is kept from dropping too far

away from the opening in the plate E by a keeper, G, attached to the said plate upon the opposite sides of the hole through it, and through which the said valve-plate E passes.

To the sides of the conical shell B, a little below the partition E, is attached a concavoconvex plate or partition, H, with its convex side downward, and which has a hole formed through its center.

The cylindrical shell A is strengthened by the two half-ring braces I, which are placed with their convex sides toward each other, and with their ends attached to the said shell A.

In using the machine the clothes, several pails of water, and a suitable amount of soap are put into a tub. The machine is then put in and worked up and down with a quick motion, care being taken to keep the lower part of the machine always below the surface of the water. As the machine is raised the tendency is to form a vacuum, which causes the air to pass down the tubes D, open the valve F, and pass into the lower part of the machine. As the machine is forced downward the air in the lower part of the machine is forced out through the clothes, so that the said clothes will be washed clean in a very short time.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

The combination of the shell A B, made cylindrical in its lower part and conical in its upper part, the tubular handle-socket C, the air-tubes D, the horizontal partition E, provided with a rubber valve, F, the concavoconvex partition H, having a hole formed through its middle part, and the braces I, with each other, substantially as herein shown and described.

WILLIAM EDWARD ARMSTRONG. DAVID GIESMAN.

Witnesses:

Jas. W. Page, Eli Nelson.