(No Model.)

R. S. HARRINGTON.

WASHING MACHINE.

No. 277,028. Patented May 8, 1883.

FIG. 3

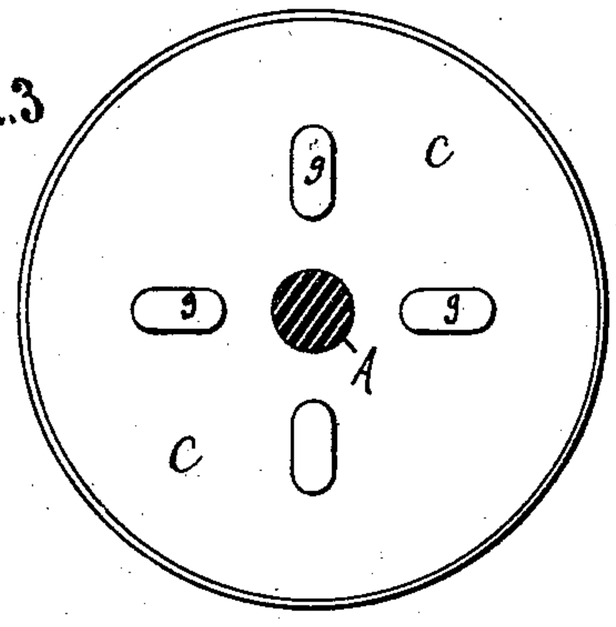


FIG. 1

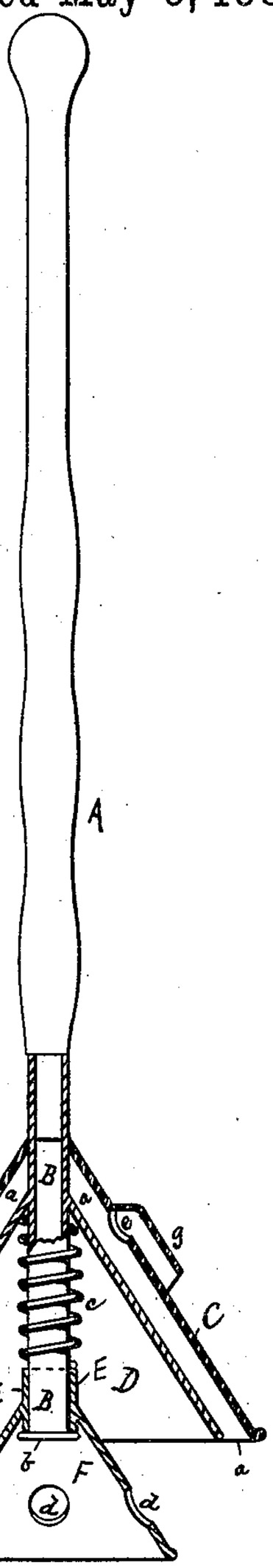


FIG. 4

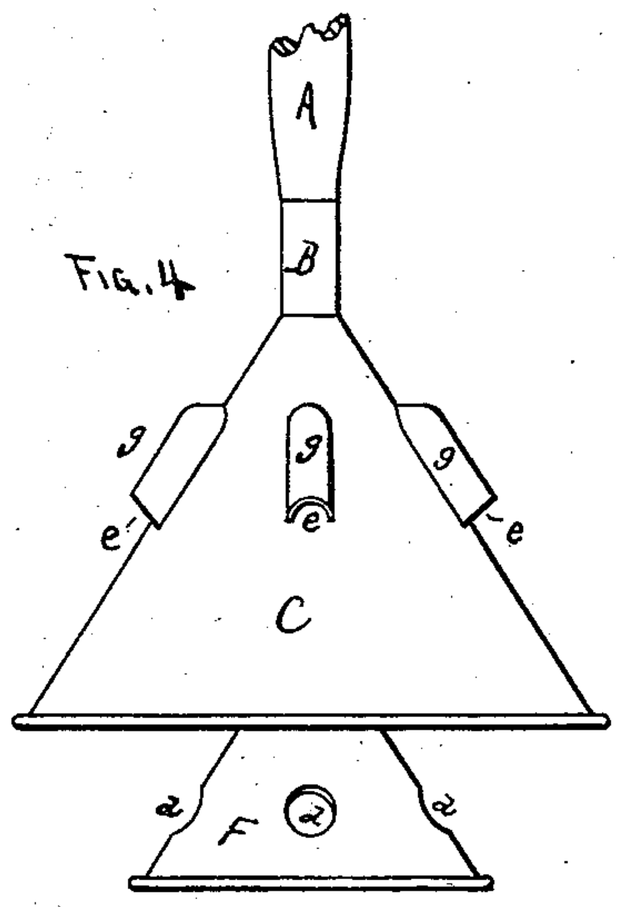
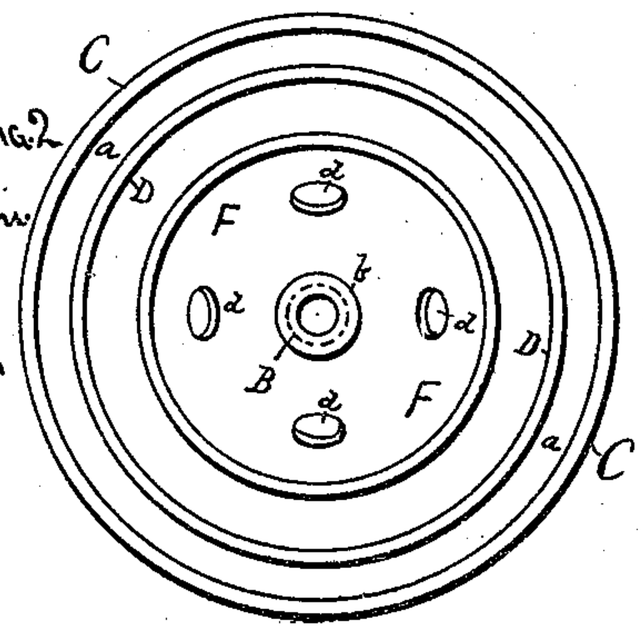


FIG. 2



WITNESSES.
Edw Rotert
Louis Fesser Jr.

Rufus Spencer Harrington.
INVENTOR, BY
Louis Fesser & Co.
Atty's.

UNITED STATES PATENT OFFICE.

RUFUS S. HARRINGTON, OF MINNEAPOLIS, MINNESOTA.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 277,028, dated May 8, 1883.

Application filed September 8, 1882. (No model.)

To all whom it may concern:

Be it known that I, RUFUS SPENCER HARRINGTON, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have made new and useful Improvements in Washing-Machines, of which the following is a specification.

This invention relates to washing-machines; and it consists in the construction and arrangement of parts, substantially as specifically described and claimed.

In the drawings, Figure 1 is a sectional side view. Fig. 2 is a bottom plan view. Fig. 3 is a top plan view, and Fig. 4 is a side view.

This invention relates to that class of clothes-washing implements formed of a reversed cone or cones, with which the clothes immersed in water are pressed to remove the impurities; and it consists in a handle, A, to the lower end of which a tube, B, is attached, as shown in Fig. 1. Connected to the outside of this tube, near the top, is a large cone-shaped metal hood, C, extending downward and opening outward, the lower line of the hood being on a line about even with the lower end of the tube B. Inside of this conical hood is a smaller cone, D, secured to the same tube, B, leaving a parallel space, *a*, between the hood C and cone D.

Around the tube B, inside the cone D, is a loose sleeve or collar, E, to which a third cone, F, smaller than the cone D, is secured. The sleeve E is adapted to slide up and down upon the tube B, and is prevented from running off the end by a rib, *b*, upon the tube B, while a spring, *c*, surrounding the tube B between the sleeve E and cone D, holds the sleeve and its attached cone downward, as shown in Figs. 1 and 4, but at the same time enables the inner cone, F, and sleeve E to be forced upward into the cone D, or the latter and the hood C forced down over it.

The inner cone, F, and the hood C are each provided with a number of vent-holes, *d e*, respectively, the vents *e* in the hood C being covered with deflecting caps or shields *g*, to prevent the water spattering, as and for the purpose set forth hereinafter.

In operating this invention the clothes are immersed in the water and the implement pressed down upon them until the inner cone, F, runs up inside the others, and the lower edges of the hood C and cone D press upon the clothes. This action forces the water down through the clothes, and then when the downward pressure is removed from the handle A the reaction of the spring *c* suddenly raises the cones D and hood C and sucks the water upward through the clothes, thereby thoroughly cleansing the clothes by forcing the water upward and downward through them. This action causes the water to rush up with considerable force between the hood C and cone D, and thence out through the vents *e*, and is thrown down by the caps *g* and flows over the clothes again.

The ordinary pounder or washer consists only of the handle A, tube B, cone D, and spring-actuated cone F, but is objectionable for the reason that the narrowness of the base of the cone D causes it to sink so deeply into the clothes as to spatter the water when it rises again; but by adding the hood C an additional base is formed, which prevents the implement sinking as deeply into the clothes as formerly, and also prevents spattering or wastage of water, as the hood C catches all the water that rises up outside the cone D and throws it down upon the clothes again through the vents *e*, and prevents any waste or spattering of the water.

Instead of providing each vent-opening with a separate shield, a single shield may be made to extend around the hood, so as to inclose all the vents.

I do not claim, broadly, the intermediate fixed cone or the inner spring-actuated cone, as I am aware that they are not new; but

What I claim as new is—

In a clothes-pounder, the external hood, C, provided with vent-openings having a deflecting-shield, the intermediate cone, D, the centrally-located sliding cone F, provided with circumferential openings *d*, and the intermediate actuating-spring, *c*, surrounding the operating shaft or handle A, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

RUFUS SPENCER HARRINGTON.

Witnesses:

C. N. WOODWARD,

LOUIS FEESER, Sr.