(No Model.)

F. S. SPANGLER.

WASHING MACHINE.

No. 490,372. Patented Jan. 24, 1893.

Fig. 1.

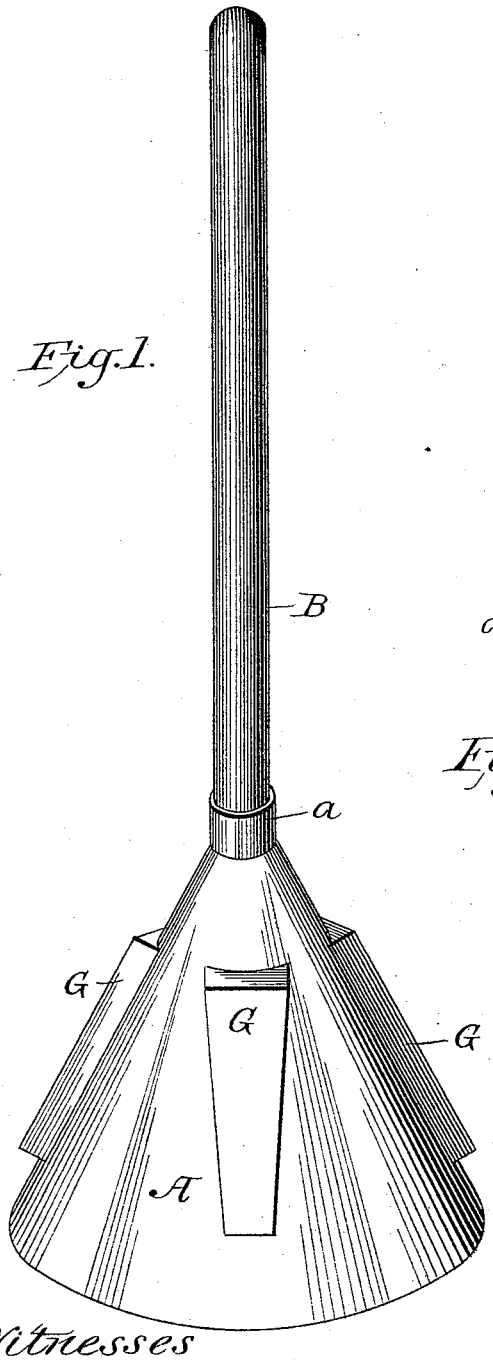


Fig. 2.

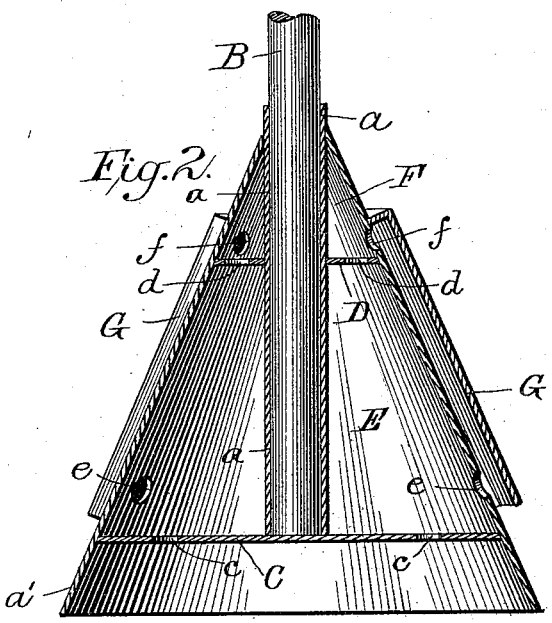
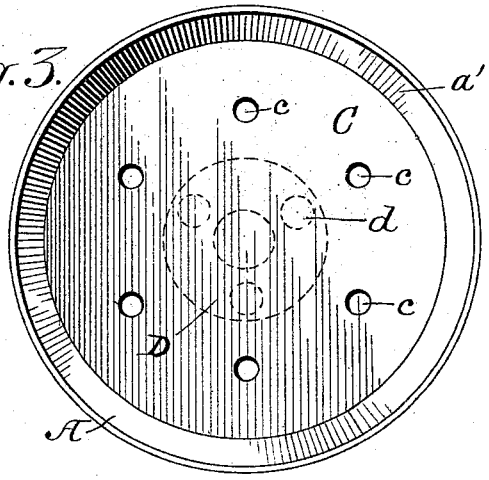


Fig. 3.



Witnesses
Percy B. Hills.
A. M. Parkins.

Inventor:
Fred S. Spangler.
By his attorneys
Penne & Goodborough

UNITED STATES PATENT OFFICE.

FRED S. SPANGLER, OF ORION, ILLINOIS.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 490,372, dated January 24, 1893.

Application filed May 17, 1892. Serial No. 433,283. (No model.)

To all whom it may concern:

Be it known that I, FRED S. SPANGLER, a citizen of the United States, residing at Orion, in the county of Henry and State of Illinois, have invented certain new and useful Improvements in Washing-Machines; and I 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 appertains to make and use the same.

My invention relates in general to machines for washing clothes, bedding, linen, &c., and especially to that class of washing machines known as pounders.

It has for its object to provide a device of this character which shall be simple in construction, efficient in operation, and which can be manufactured and sold at small cost.

The invention consists in the construction illustrated in the accompanying drawings, and described and claimed in the following specification.

Referring to the annexed drawings Figure 1 is a perspective view of the complete device; Fig. 2 is a central vertical section of the same, and Fig. 3 is a bottom plan view.

Similar letters of reference denote corresponding parts in the several views.

A is a hollow metallic shell, made in the form of a cone as represented. A tube *a* extends centrally down from the apex of the cone, to receive a handle B.

C denotes a horizontal partition near the bottom of the shell, and D another partition near the top of the cone. These partitions divide the interior of the shell into two compartments or chambers E and F, as clearly represented in Fig. 2. The lower partition is provided with openings *c*, preferably six in number, whereby the chamber E communicates with the atmosphere. The upper partition is also perforated as at *d*, the holes being preferably three in number as shown in dotted lines in Fig. 3, forming communication between the two chambers E and F. The lower edge or rim *a'* of the vessel extends down some distance below the bottom partition C, for a purpose which will be explained later on. The chamber E has further communication with the atmosphere through openings *e*, and the chamber in the top of the shell also communicates with the atmosphere through openings *f*.

G are air tubes, three in number, on the outside of the shell A, running longitudinally of the same and preferably formed, as shown, wider at the top than at their lower ends. These tubes are arranged in line with the openings *e* and *f* in the sides of the shell, and cover and protect the same. The principal object of these tubes is, however, to direct and carry any splashings through the openings *e*, *f* downward into the wash-tub or boiler.

The construction of the device being as thus described, the operation will be readily understood.

The instrument is adapted to be used by hand, or in a mechanical or automatic washer, being connected in the latter event with a crank shaft, or other mechanism, for reciprocating it up and down to beat or pound the clothes to be washed. In the downward stroke of the device the air caught under the bottom partition C is forced into the water and among the articles to be washed, thoroughly agitating the water. A portion of the confined air escapes through the openings *c* into the chamber E, and up through the perforations *d* into the chamber F whence it escapes out the side openings *f*. Air also escapes from the lower chamber E out the side openings *e*. In the upstroke a partial vacuum will be formed under the bottom partition C sucking up the clothes with the instrument, until the air which rushes up the tubes G and into the openings *e* and, *f* passes through chambers E and F, to the under side of C. As the air rushes in and out of the chambers, through the bottom and side openings, considerable water and suds are carried with it, and the function of the tubes G is to prevent this water from splashing out of the tub or other vessel in which the instrument is used, and to direct the same downward into the bottom of the receptacle.

Having thus described the invention, what I claim and desire to secure by Letters Patent is:—

In a clothes washing device, the combination of the shell A, the partitions C, D, dividing the shell into the chambers E, F, the openings *c*, *d*, in said partitions, respectively, the openings *e*, *f*, in the side walls of the chambers, and the tubes G covering the latter openings, substantially as described.

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

F. S. SPANGLER.

Witnesses:
A. M. BURD,
F. A. SAND.