J. C. PICKENS.
Clothes Pounders.

No. 197,053. Patented Nov. 13, 1877.

Fig 1.

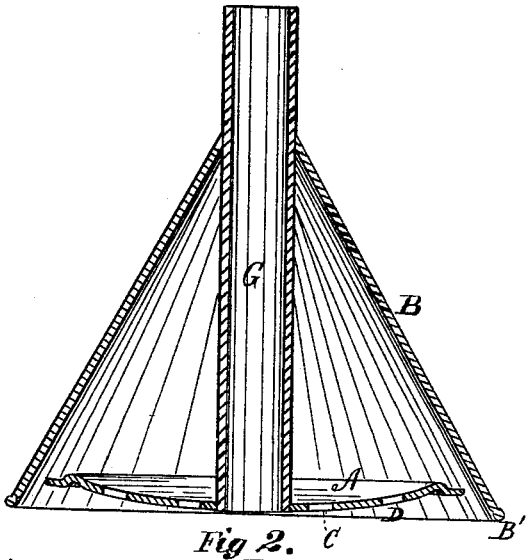
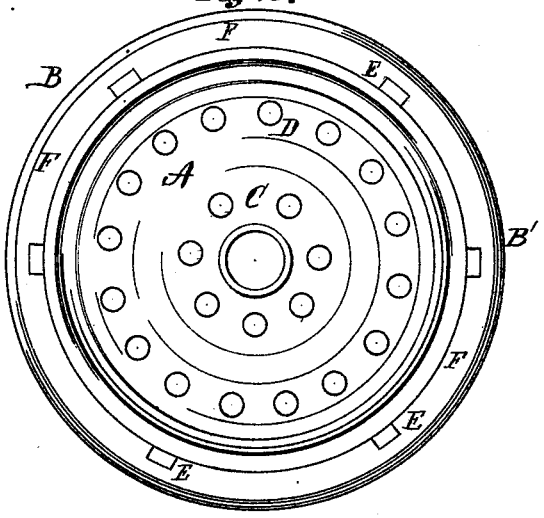


Fig 2.



Witnesses.
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UNITED STATES PATENT OFFICE.

JOHN C. PICKENS, OF WEAVERVILLE, NORTH CAROLINA.

IMPROVEMENT IN CLOTHES-POUNDERS.

Specification forming part of Letters Patent No. **197,053**, dated November 13, 1877; application filed April 16, 1877.

To all whom it may concern:

Be it known that I, JOHN C. PICKENS, of Weaverville, in the county of Buncombe and State of North Carolina, have invented certain new and useful Improvements in Clothes-Pounders; 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 pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in clothes-pounders; and has for its object to furnish a device that will be efficient in its operation, and that will not cut or otherwise injure the clothing in the process of washing.

It consists in a perforated globular presser plate or disk placed within the mouth of a cone or funnel shaped pounder, and secured in position by narrow lugs, so as to provide an annular opening or space around its entire circumference between its edge and the rim of the cone.

In the drawings, Figure 1 is a vertical section, and Fig. 2 a plan view, of my invention.

Clothes-pounders of ordinary construction are formed with a view to cleansing the clothing by an agitation or commotion of the water, created by currents of air forced through tubes extending downward from an inner pan or shell. While it is possible for a slight agitation of the water thus to be created, yet it will be obvious, on careful examination, that the devices employed for such purpose tend not only to press the clothing compactly together on the bottom of the tub, but to leave it so compacted that the water cannot have free passage through the fabrics, thus to a very great extent defeating the very object sought to be attained—namely, speedy and efficient cleansing of the clothes. It will be further obvious that the narrow projecting tubes or air-pipes are objectionable because they furnish but a slight or limited pressing-surface; and because of their slender or narrow ends, they are liable to cut or punch holes in or otherwise seriously injure the clothing.

To obviate the above objections is the object of my invention.

In my device I employ a broad, continuous, smooth pressing-surface, free from projecting pipes or other points, and which is so constructed that, after it has been forced down on, and has pressed the water out of, the clothing under it, it will, as it is lifted upward, raise the compressed clothing, loosening the latter up, so that the water may again pass through and completely saturate every fiber of the fabrics. My device not only presses every part of, but keeps the clothing moving in the water. These results are accomplished by the globular plate placed in the open end of, and acting in conjunction with, the cone B.

A is the globular presser plate or disk, which is made slightly less in diameter than the mouth of the cone B, so that when placed in the latter there will be an annular space, F, surrounding it, between its edge and the rim of said cone. It is secured to the cone by the narrow lugs E, and is perforated by the series of holes or vents C D, arranged in circular form; and it has its convex side placed outward, as shown, so that as it is pressed down into the tub the water will first enter the perforations C; or it may have its center arranged slightly within, or flush with, or slightly without, the plane of the rim B′ of the cone B. I prefer to place it slightly within the rim B′, as shown, thereby affording for it greater protection.

The cone is provided with the usual stem G, which is extended downward, so as to rest against and provide an efficient brace or support for the disk.

In the operation of the device the central portion of the disk first comes in contact with the water, which flows through the openings C and D, and filling or partially filling the cone, causes the air to escape through the annular space F, thereby creating a partial vacuum in said cone. By the further descent of the device the clothes are firmly compressed, and the water forced out of them. The device is now raised. The cone, by reason of the exhaustion of the air from it, acts as a suction-cup, and holds and lifts the clothing from the bottom of the tub to a point where the pressure of the atmosphere without is insufficient to retain the water in the cone.

It will be readily seen that the clothes are prevented from being compacted on the bot-

tom of the tub, and that in the process of washing they are not only pressed, but are kept constantly moving through the water. I provide a broad, solid compressing-surface, and its entire action is more nearly like that of hand-washing than the action of other devices of its class, and there are no sharp or narrow ends of tubes to injure the clothing. In the descent of this device into the water the center of the plate first comes in contact with the water, a portion of which flows through the openings C and D into the pounder, out of which air is forced through the annular space F. It will be seen that all the water below the pounder and within the line of the circumference of the rim B′ cannot enter the cone, nor is it desirable that it should enter. The surplus water is given an outward flow by the convex disk, and is caused to rapidly pass from beneath the pounder as the latter descends, thereby causing a great agitation of the water through the clothes in the tub. It will be seen that the resistance offered by the compressed air in ordinary devices is obviated in mine, and that I can have the full force of the operator brought to bear on the clothes. It will be further seen that there will be sufficient air retained within the pounder to prevent the device from "sticking" as it is raised from the tub. At the same time the quantity of water which found its way through the openings C D into the cone will have caused a sufficient vacuum to give to the device a suction-power sufficient to lift the clothes from the bottom of the tub as the cone is drawn upward.

Having thus described my invention, I would have it understood that I do not claim, broadly, a clothes-pounder having a cone, B, provided with a plate extending across or partially across its mouth, as I am aware that pounders have been heretofore used with flat plates extending across or partially across their mouths; but

What I do claim, and desire to secure by Letters Patent, is—

A clothes-pounder embodying in its construction a cone, B, having a stem, G, the open end or mouth of the cone being provided with a globular presser-plate, A, placed with its convex side outward, and formed with a series of perforations, C D, and arranged so that it will have an annular space, F, between its edge and the rim of the cone B, and supported and held in position by the narrow lugs E, substantially as shown.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JOHN C. PICKENS.

Witnesses:

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WM. B. WILD.