(No Model.)

H. O. SOPER & W. M. BROWN.

CLOTHES POUNDER.

No. 489,506. Patented Jan. 10, 1893.

FIG. 1.

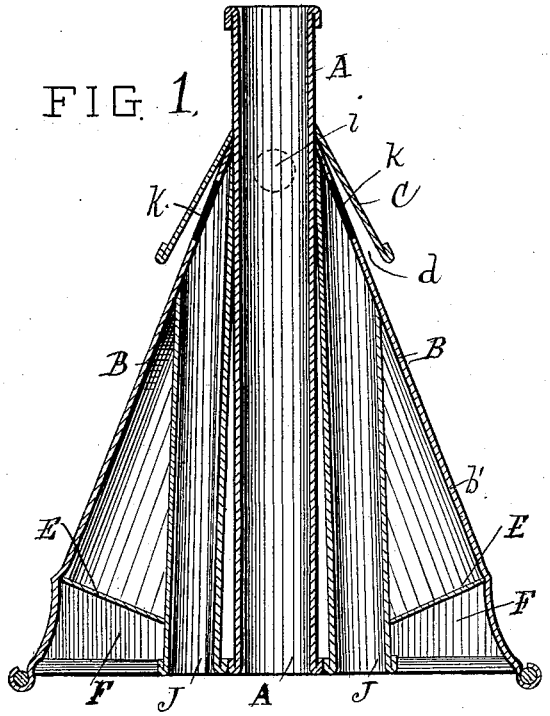


FIG. 2.

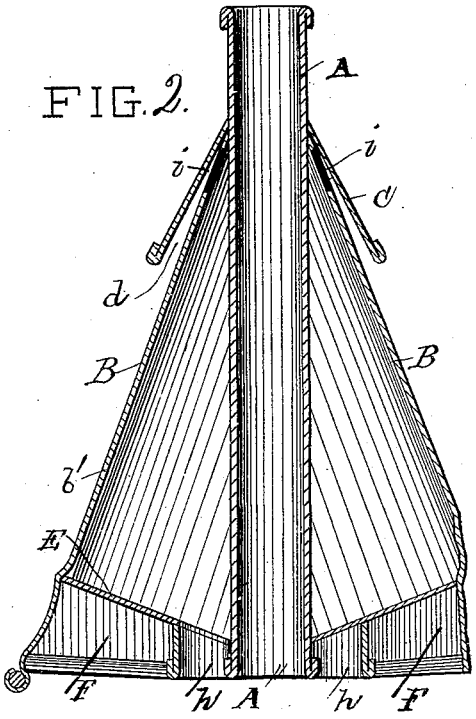
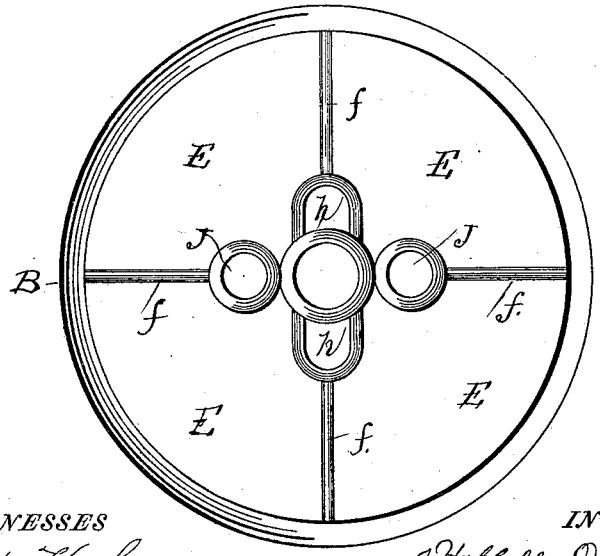


FIG. 3.



WITNESSES
Claude Kesler
Henry V. Calver.

INVENTORS
Hubbell O. Soper,
and
William M. Brown.
By their Attorneys,
John J. Halsted & Son

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HUBBELL O. SOPER, OF AURORA, AND WILLIAM M. BROWN, OF DIXON, ILLINOIS.

CLOTHES-POUNDER.

SPECIFICATION forming part of Letters Patent No. 489,506, dated January 10, 1893.

Application filed July 13, 1892. Serial No. 439,885. (No model.)

To all whom it may concern:

Be it known that we, HUBBELL O. SOPER, of Aurora, in the county of Kane, and WILLIAM M. BROWN, of Dixon, in the county of Lee, State of Illinois, have invented certain new and useful Improvements in Clothes-Pounders; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Our invention belongs to the class of conical hollow pounders, and consists in certain particulars of construction as will presently appear.

In the drawings; Figure 1. represents a central vertical section of a pounder made in accordance with our invention, and showing partially its interior construction: Fig. 2. a vertical central section, partly broken away at its right-hand lower corner, and taken at right angles to Fig. 1. and showing the remainder of its interior construction: and Fig. 3. a bottom plan, looking upward.

On a central tubular support A. is mounted a hollow cone B. whose sides have a gentle slope *b'*, to avoid much resistance from the water and clothes in raising the pounder, and C. is a supplemental smaller hollow cone, capping the top of cone B and also mounted on tube A., and projecting down considerably below the top of cone B. and leaving an annular conical space *d.* between them.

E. is an inclined partition within the cone B. and some distance from its bottom and which thus forms the top of a lower chamber F. which is divided by several vertical cross-partitions *f. f.*, serving also as braces or strengtheners to make the pounder rigid and strong. The tube A. extends as far as may be convenient above the cone C. and may be closed at any desired point, by a wooden handle inserted at its top. Vertical short tubes *h.* are made in the inclined partition E, to admit water into the large cone B. and which finds egress through openings *i.* made in the top of this cone just beneath its junction with tube A. Long tubes J. J. extend from the bottom line of the pounder, through the partition E, near its center and up to the top of cone B, where they communicate at *k.* with the space between cones B and C just below their junction, and consequently much above the bottom line of cone C. This affords easy outlet for water discharged from the space between the cones, as such space gradually broadens toward its bottom: and the cone C prevents upward or lateral splashing of the water, because it arrests the water, seeking outlet, and compels it to a direct downward course back into the tub or barrel. The lower chamber F. affords ample room to let in the air, and upon forcing the pounder downward, the air is driven out, thus driving the water or suds through the clothes, while the several outlets described, permit the ready rise of enough water to do good work without needless resistance. The gentle taper of both cones makes it easy to lift the pounder in water, and the inclination of the partition E makes it easier to force the pounder downward, than if such partition were horizontal. The cross-partitions *f.* do not reach quite down to the lowest line of the pounder. The entering air, it will be readily seen, passes instantly out on the down-stroke without any splash, and re-enters again on the up-stroke. On the down-stroke the air in the deep bottom chamber, forms but a partial cushion, while on the up-stroke, air is freely admitted downward through the tubes and through the partition F. These features in conjunction with the increased height of the cone B. (relatively to its breadth) renders it easy to operate.

We make no claim broadly to conical hollow pounders through which air or water may pass: but

What we claim is:

The improved pounder described, having in combination with the tubular support A. and its gently tapering and chambered cone B, the smaller supplemental cone C. surmounting and overlapping cone B., and leaving a conical annular space between them, the tubes J. J. opening at their upper ends into the conical space between the cones, the cone B. also having openings *i.* into the same space, and the short tubes *h.* opening into cone B. all as set forth.

HUBBELL O. SOPER.
WILLIAM M. BROWN.

Witnesses:
O. E. LOVELADY,
LOLA M. BROWN.