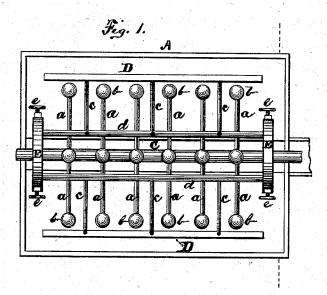
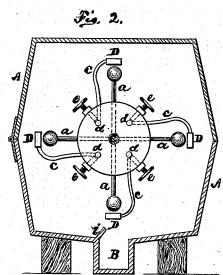
## T. C. BEATTY.

## MACHINES FOR WASHING HAT BODIES.

No. 186,295.

Patented Jan. 16, 1877.





Witnesses Charles E. H. Janes. F. J. Smaler Inventor. His, b, Beatty By O, Drake alty

## UNITED STATES PATENT OFFICE.

THOMAS C. BEATTY, OF NEWARK, NEW JERSEY.

## IMPROVEMENT IN MACHINES FOR WASHING HAT-BODIES.

Specification forming part of Letters Patent No. 186,295, dated January 16, 1877; application filed December 1, 1876.

To all whom it may concern:

Be it known that I, THOMAS C. BEATTY, of the city of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Machines for Washing Hat-Bodies; 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 appertains to make and use the same, reference being had to the accompanying drawing, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to certain improvements in the construction and operation of machines for washing hats, by means of which the operation is greatly facilitated, and the hats are more thoroughly washed, both inside and out, than by the methods heretofore employed.

The accompanying drawing fully illustrates the nature and character of my improvements, in which-

Figure 1 is a top or plan view, and Fig. 2 an end view.

Similar letters of reference indicate corresponding parts in the several figures.

In carrying out my invention I construct a tub or box, A, which is provided with a trough, B, in the bottom, extending nearly or quite its entire length, for the purpose of catching and retaining the dirt and refuse from the hats during the process of washing, a flange, i, preventing the flow of currents of water from the trough and the carrying out of the refuse. In other respects the box does not differ materially from other boxes now in use for the same purpose. Extending lengthwise of the box, and having its bearings at the ends thereof, is a shaft or drum, C, which is provided with a series of arms, a, the ends b of which are enlarged and rounded, and upon each one of which is intended to be placed a hat, the number of said arms being limited only by the capacity of the box and shaft. The hats being properly placed on the ends of the arms a are clamped thereon by adjustable bars D, or other suitable clamping device, supported by arms c attached to a series of rock-shafts, d, which have their bearings in flanges E rigidly secured to the shaft or drum C, said rock-shafts being retained in position by set-screws e, or other suitable device, all substantially as shown and indicated in the drawing.

The mode of operation is as follows: The main shaft or drum C is simply made to revolve, either by crank or belt, until the hats are thoroughly washed, when the set-screws are loosened and the clamps removed, the hats taken off and replaced by others, when the

operation is repeated.

It will be observed that each hat is thus washed separately, and the tub being about one-third filled with water, as the hats revolve they come up filled with water, and their contents being continually poured out upon those beneath them greatly facilitates the process of washing.

Having thus described my invention, what I claim as new, and desire to secure by Let-

ters Patent, is-

1. The combination, with a box or tub, A, of the shaft or drum C, provided with tue arms a, terminating in balls b, as and for the purpose set forth.

2. The combination of the shaft C, arms a, and adjustable retainer-bars D, as set forth.

3. The combination, with the shaft or drum C, having the arms a, of the flanges E, bars D, arms e, shafts d, and set-screws e, substantially as specified.

4. The combination of a box or tub, A, revolving arms, trough B, and flange i, substan-

tially as specified.

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

THOMAS C. BEATTY.

Witnesses:

OLIVER DRAKE, CHARLES E. H. DAVIES.