## J. K. PROCTOR. Wool-Washing Machine.

No. 163,249. Patented May 11, 1875 Fig 2 11 Jasend of Frankling **Mitnesses** 

## UNITED STATES PATENT OFFICE.

JOSIAH K. PROCTOR, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO JAMES SMITH & CO., OF SAME PLACE.

## IMPROVEMENT IN WOOL-WASHING MACHINES.

Specification forming part of Letters Patent No. 163,249, dated May 11, 1875; application filed January 28, 1875.

To all whom it may concern:

Be it known that I, JOSIAH K. PROCTOR, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Wool-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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification, in which—

Figure 1 is a longitudinal vertical section of the invention; Fig. 2, a detail section; Fig. 3,

a plan of the invention.

My invention has for its object to provide a continuous and uniform feed to the press or squeeze rolls of a wool-washing machine. My invention accordingly consists of a cylindrical lifter of peculiar construction, which I substitute for the reciprocating carrier heretofore generally employed. It consists, also, in certain details of construction and combinations, as hereinafter more fully described.

Referring to the accompanying drawing, A indicates the tank or bowl of the wool-washer; B, a curved incline or chute, a continuation of which forms the false-bottom C; and D D, the squeeze or press rolls. E is a lifting-cylinder, having a central shaft,  $E^1$ , and heads  $E^2 E^2$ , said shaft having bearings on the upper edges of the sides a a of the tank. F F are shafts journaled in the heads  $E^2 E^2$ , having crankarms or winches f f supporting anti-friction rollers f' f', which travel on curved ways b b, formed in the upper edges of the incline B. e e are L-shaped teeth secured fixedly in the shafts F. When the cylinder is revolved in the direction of the arrow these teeth move concentric with the incline B, carrying the wool from the bottom C to the squeeze-rolls

D D. At the moment the teeth reach the upper edge of the incline B the rollers f' f' leave the ways b b, permitting said teeth to rest awhile on said edge, and allowing the stock carried up to come under the influence of the bite of the rolls, and be drawn off perfectly thereby. The cylinder continuing to revolve the teeth are drawn away from the rolls, and immediately fall, by gravity, into the position shown, and are ready to again come into engagement with the stock to be borne up the incline.

The cylinder will require to be fed by a fork similar to that illustrated in my patent of November 26, 1872, or other equivalent deliverer.

What I claim as my invention is—

1. In a wool-washing machine, a lifting cylinder having revolving shafts F F and teeth *e e*, as described.

2. The shafts F, having winches f, anti-friction rollers f', and teeth e, substantially as

shown and set forth.

3. A lifting-cylinder, having an under-feed motion forward toward the incline B, and carrying teeth pivoted on its periphery, which move concentric with said incline on their upward motion, and drop by gravity into position for re-engagement with the stock, as set forth.

4. In combination with the revolving shafts F F of a wool-washing lifting-cylinder, having winches f and anti-friction rollers f', the curved way b b, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 22d day of January, 1875.

JOSIAH K. PROCTOR.

Witnesses:

JACOB R. MASSEY, SAMUEL HART.