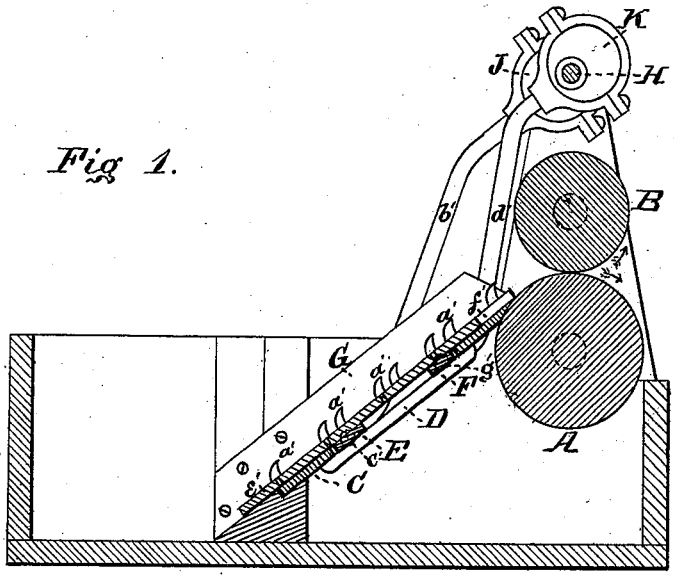
W. H. BRADLEY.

Wool-Washing Machine.

No. 203,995. Patented May 21, 1878.

Fig 1.



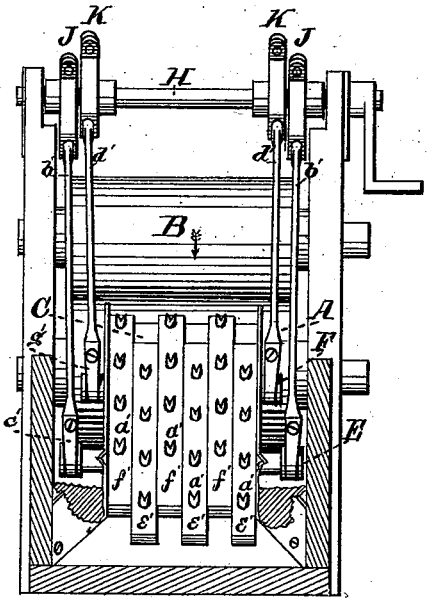


Fig 2.

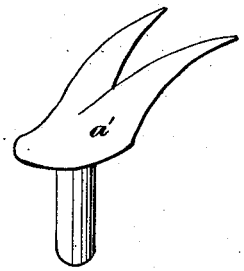


Fig 3.

WITNESSES:

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WILLIAM H. BRADLEY, OF ALLEGHENY, PENNSYLVANIA.

IMPROVEMENT IN WOOL-WASHING MACHINES.

Specification forming part of Letters Patent No. **203,995**, dated May 21, 1878; application filed April 11, 1878.

To all whom it may concern:

Be it known that I, WILLIAM H. BRADLEY, of Allegheny city, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Wool-Scouring Machines, which improvement is fully set forth in the following specification, reference being had to the drawings, in which—

Figure 1 is a sectional side view, and Fig. 2 is a front view in section.

The object of my invention is to secure a steady and even feed of the wool to the scouring-rolls, thereby causing a more thorough cleansing, and also preventing the strain produced by large lumps of wool entering the rolls, which is frequently the case when the wool is fed by forks or by hand, and results in imperfect cleansing.

In the drawings, A and B are the scouring or squeezing rolls, having motion in the direction of the arrows, and situated at one end of a vat containing the scouring or cleansing liquor covering the lower roll, and extending on an incline into the vat, and securely fastened thereto is the supporting-plate C, the upper and lower ends of which are plane surfaces. The center is recessed for the play of the connecting-bars E and F, which rest and move upon the bearings D D, and on the top of the connecting-bars are placed the feeding slide-bars e' e' e' and f' f' f', which are fastened to E and F, respectively, by rivets or screws. These slide-bars e' and f' are placed alternately side by side, covering the whole surface of the supporting-plate C, and on their top surface they are provided with the feeding teeth or claws a' a' a' a', which are riveted or fastened in any suitable manner. On each side of supporting-plate the guards G G are placed. They also act as guides to the connecting-bars E and F, keeping them in place.

Over the top of the rolls is the shaft H, bearing a series of four eccentrics—two on each side. Of these, J J are arranged to make their full stroke together, and are joined, by the curved arms b' b', to the connecting-bar E by the joints c' c', while K K, having their full stroke set directly opposite to J J, are similarly attached, by d' d', to F at g' g'. Hence it follows that motion being applied to the shaft H, in any convenient manner, the stroke of the eccentrics is carried to the connecting-bars E and F, and will, through them, cause the slide-bars e' and f' to have an alternate upward and downward movement, and the feeding-teeth a' a' a' a' to advance and recede, passing and repassing one another.

The wool in the cleansing-liquor being brought in contact with these teeth, by any convenient mechanical device, those first striking it will seize and advance it a certain distance, then leave it to the next series, which have passed under it, and return for a fresh supply, their action in passing back tending to distribute the wool and break up the lumps. This process is continued by each succeeding set of teeth until the wool is gradually worked up to the surface of the under roll, A, which carries it through.

The feed-teeth a' are more fully shown in the enlarged drawing, Fig. 3. This formation of the tooth admits of its ready passage under the wool when returning downward to the vat, and the sharp prongs assist in tearing the same apart when advancing upward.

Any number of slide bars and teeth may be used, so that they are proportionate to the size of the machine.

The advantages of this mode of feeding are that the wool is most thoroughly cleansed, the breaking up of the lumps allowing the cleansing-liquor to act upon it, and the complete extraction of the same while passing through the rolls. The wool is also in better shape for future processes, owing to the action of the machine, and is almost dry when discharged.

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

In combination with the squeezing-rolls of a wool-scouring machine, the mechanism for feeding the same, provided by the plate C, set at an incline, and bearing the series of sliding bars e' and f', having an alternate forward and backward movement from the eccentrics J and K, and armed with the teeth a' a' a' a', the said bars e' and f' being secured to their respective connecting-bars E and F, whereby the wool is evenly advanced and fed to the rolls A B.

WILLIAM H. BRADLEY.

Witnesses:
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HUGH MCMAHON.