





Witnesses;

Inventor; Jas Tanler

United States Patent Office.

JAMES TAYLOR, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO HIMSELF, BEN-JAMIN SCHOFIELD, AND THOMAS BRANSON.

Letters Patent No. 90,035, dated May 11, 1869.

IMPROVED WASHING AND FULLING-MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, James Taylor, of Philadelphia, Pennsylvania, have invented a Combined Washing and Fulling-Machine; and I do hereby declare the following to be a full, clear, and exact description of the same.

My invention consists of the combination of a vessel having a perforated lining, with a vibrating beater or beaters, the whole being constructed and arranged substantially as described hereafter, and forming a combined washing and fulling-machine, especially useful in establishments for the manufacture of hosiery.

In order to enable others to make and use my invention, I will now proceed to describe its construction and operation, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

Figure 1 is a vertical section of my combined washing and fulling-machine, and

Figure 2, a transverse vertical section of the same. A is a wooden vessel, having rounded ends a a, and rounded bottom b, and is, as regards general shape, similar to the trough of an ordinary fulling-machine.

The vessel, however, has at the bottom and ends an inner perforated lining, d, conforming in shape to the exterior casing, between which and the lining is a narrow space, m.

The sides e and e' of the vessel being continued below the bottom of the same, form the base of the machine, to which are secured standards B B, supporting two cross-bars, D and D', to suitable bearings, f f, on which is adapted the vibrating arm E, carrying at its lower end the beater F, the under edge of the latter conforming in shape to, but not being in contact with the lower portion of the perforated lining d.

The beater is of a shape similar to those of fulling-machines, and has pins, *i i*, projecting through the side of the vessel, such an attachment being made to one or both of these pieces, that a vibrating motion may be imparted to the beater from any adjacent shaft.

Doors j j are hinged to the top of the vessel, and in these doors is an opening sufficiently large to permit the arm E to vibrate freely.

The machine, although applicable to general wash-

ing-purposes, is especially useful in establishments for the manufacture of hosiery.

After the stockings have been subjected to the bleaching-process, and treated with acid, it becomes necessary to wash them thoroughly, and then to treat them with water in which blue-powder has been dissolved.

Heretofore these operations have been performed separately, and have required the removal of the stockings from one vessel to another, but by my invention the several operations can be readily accomplished without removal from the machine.

The stockings having been placed in the vessel A, which is partly filled with acidulated water, the doors j are closed, and a vibratory motion is imparted to the beater F, by which the stockings are agitated, and compressed against the perforated lining, the water being forced through the perforations and into the space between the lining and outer casing of the vessel.

This water is permitted to pass off through suitable openings, furnished with plugs x, and then soap-suds are introduced into the vessel, while the movement of the beater is continued.

After being thoroughly washed in this water, the latter is drawn off, when the stockings are rinsed in pure water, which is also drawn off, the final operation being the introduction of water in which blue-powder has been dissolved.

This water is also agitated by the beater, and after the stockings have been submitted to it for a sufficient time, it is withdrawn, and the stockings are removed from the machine.

I claim as my invention, and desire to secure by Letters Patent—

The combination of the vessel A and its perforated lining with the vibrating beater or beaters F, the whole being arranged and operating substantially as and for the purpose herein set forth.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

Witnesses:

JAMES TAYLOR.

JOHN WHITE, HARRY SMITH.