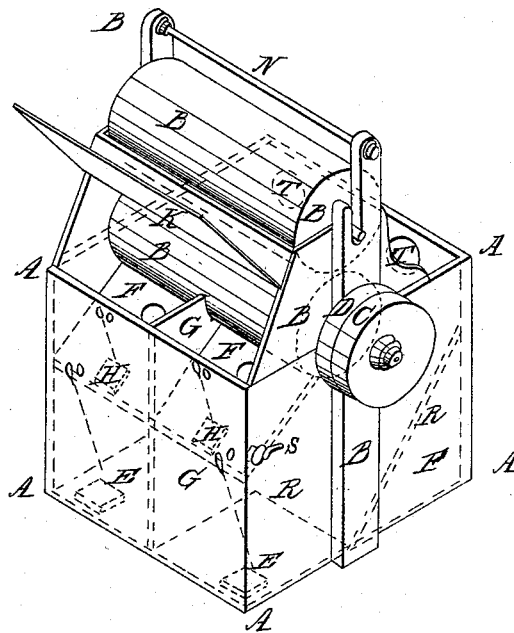


W. Soule

Washing Machine.

N^o 3586.

Patented May 17, 1844.



Witnesses:
Edw^d Hainman
Wm^d Field

Inventor:
William Soule

UNITED STATES PATENT OFFICE.

WM. SOULE, OF STAFFORD, CONNECTICUT.

WASHING-MACHINE.

Specification of Letters Patent No. 3,586, dated May 17, 1844.

To all whom it may concern:

Be it known that I, WILLIAM SOULE, of Stafford, in the county of Tolland and State of Connecticut, have invented a new and useful improvement on the washer, a machine used for cleansing satinettes and woolen cloths, by which the liquor, or scouring suds used for cleansing said cloths can be saved and reused at pleasure till entirely exhausted of its cleansing properties; and I do hereby declare that the following is a full and exact description of the construction and operation of the same, reference being had to the annexed drawing, making a part of this specification, in which—

Figure 1, is a perspective view.

The nature of my invention consists in providing a partition to the common washer, with orifices to allow the cloth to pass freely through to the press rollers, and valves so constructed as to retain the liquor or scouring suds in the upper suds chamber formed by said partition, or to let it pass below at the pleasure of the operator.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I construct my washer in any of the known forms and apply thereto press rollers and other appendages of such washers, but in order to obviate the great loss arising from wasting the suds used in scouring, when it has served to cleanse but one batch of cloth, I have constructed a partition, consisting of a plain board extending laterally across the scouring box, and running from the center of the underside of the bottom roller downward and to the front side of the box at an angle of 45 degrees, as being the angle best adapted to give direction to, and retain the suds if required in the upper chamber as shown at F, F, in the accompanying drawing and which is used for the purpose of retaining the suds, when desired in the upper part of the scouring box. In this partition there are two valves consisting of a simple board lined with spongy leather or some soft substance, and fastened to the upper side and near the lower edge of said partition by a hinge and so fitted as to cover orifices of 4 inches square as seen at H, H. These orifices serve to permit the suds expressed from the cloth by the press rollers

to escape through into the lower suds chamber when desired and in the upper edge of this partition there are two orifices of such diameter as the cloth may demand to admit its free passage to the press rollers and to guide it to a proper place in its passage between them; these orifices are marked I, I.

A, A, A, A, A, is a perspective view of the machine or washer.

B, B, B, B, B, are the press rollers between which the cloth passes, in the operation of the washer, for the purpose of pressing therefrom the suds and thus cleansing it from impurities; these rollers are 22 inches in diameter and of such length as the size of the washer may require. Motion is given to the lower roller as seen by the pulley D, in the drawing, and the upper roller is driven by the friction of the lower, on its surface. The upper roller is pressed down upon the lower by weights attached to its bearings as the operator may require. B, B, also are the supporting standards for the rollers. When the washer is in operation, the valves H, H, are opened by pulling the rods O, O, with the hand, for the purpose of allowing the free passage of all the suds expressed from the cloth by the press rollers, through the partition to the lower suds chamber, which consists of the bottom part of the box where the suds is at first placed. When it is desired to use the upper suds chamber for the purpose of saving the scouring liquor, or the first part of the rinsings of the cloth, the valves H, H, are closed by means of said rods marked O, O, and the two large cocks as seen at S, S, are opened to permit the suds thus retained in the upper suds chamber by the closing of the valves H, H, to flow freely through said cocks into any vessel desired. These cocks are placed at each of the lower corners of the upper suds chamber and are of any of the common forms. When the suds is thus saved clean water for rinsing the cloth is admitted through the orifices T, T, by any of the common contrivances for carrying water and permitting it to flow at pleasure. These orifices T, T, are upon the back side of the scouring box and on a level with the bottom of the lower press roller—the rinsing water is of course thrown into the lower chamber and is carried into the upper chamber by

the cloth absorbing it and saved at pleasure in the same manner as the suds before described.

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

The application of the partition and valves for the upper suds chamber, with the

cocks for drawing off the suds when retained in the upper chamber, to the washer described and set forth in the specification.

WILLIAM SOULE.

Witnesses:

BERG LATHROP,
H. M. BOLTON.