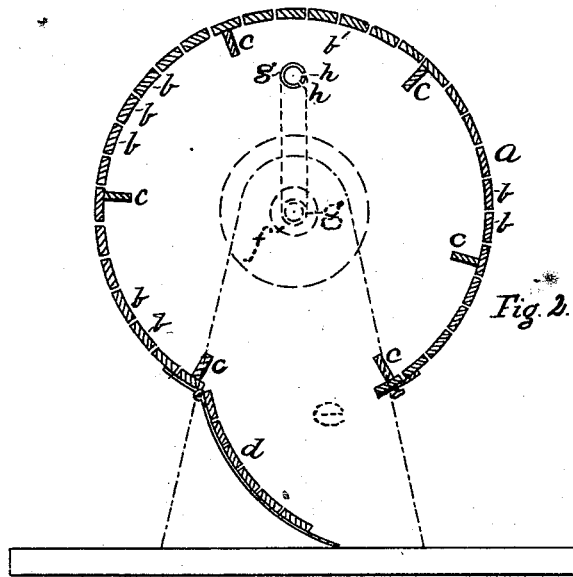
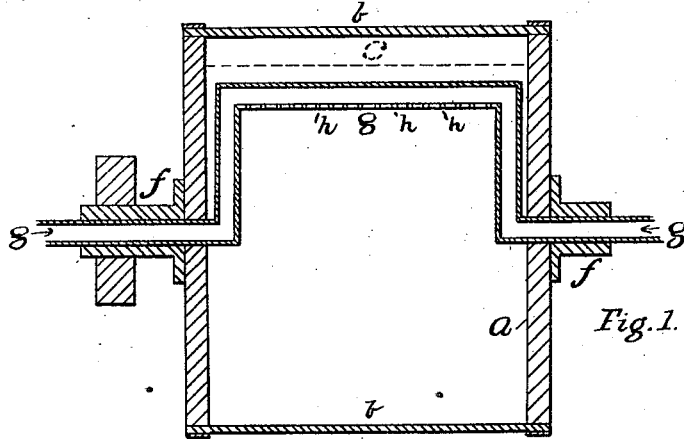


W. SHAW.

Machine for Washing Leather.

No. 164,106.

Patented June 8, 1875.



Witness

W. J. Ferguson
Wm. King

Inventor

Wm. Shaw
Per. C. H. ...
Atty

UNITED STATES PATENT OFFICE.

WILLIAM SHAW, OF KINGMAN, MAINE.

IMPROVEMENT IN MACHINES FOR WASHING LEATHER.

Specification forming part of Letters Patent No. **164,106**, dated June 8, 1875; application filed April 6, 1875.

To all whom it may concern:

Be it known that I, WILLIAM SHAW, of Kingman, in the county of Penobscot and State of Maine, have invented certain new and useful Improvements in Machines for Washing Leather; and I do hereby declare that the following is a full, clear, and exact description thereof, that will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 shows a longitudinal section of cylinder; Fig. 2, a transverse section of my machine.

My invention consists of an improvement in leather-washing machines, by which the water is applied economically and thoroughly to the skins, and in such a manner as to present no obstacle to the free passage of the operator around the machine. It furthermore consists of an improved arrangement of the washing-cylinder, whereby the skins may be removed, after washing, by inverting the cylinder, and allowing them to drop out, obviating the necessity of pulling them out, as heretofore.

In my machine I employ the ordinary cylinder in common use for drenching and scrubbing hides, suspending it upon hollow journals through which passes a pipe extending into the drum, and provided with perforations. Water is supplied through this pipe, passing into the cylinder, and escaping through its perforations upon the leather, which, as usual, is placed within the drum.

My device for removing the leather consists in setting the cylinder upon a suitable framework, sufficiently high to allow a space of some two feet between the cylinder and the floor.

The leather being washed, the door of the cylinder is unfastened and turned down, when it opens, and the leather falls out upon the floor.

Reference to the drawing will explain my invention fully. At *a* is shown the drum or cylinder, having slats *b* far enough apart to permit the escape of the water after use, bars *c* extending lengthwise the cylinder on the inside to assist in raising and turning the leather as the cylinder is revolved, and door *d* for

the insertion and removal of the skins, all as in the ordinary drenching-cylinder. At *e* is the frame, and *f* the journals, which, as stated, are hollow. *g* shows the water-pipe passing through them into the drum, and provided with perforations. It is convenient to bend this pipe as shown, in order that it may not interfere with the leather.

Any known means may be employed to revolve the drum, and the water applied to the leather through the perforated pipe *g* escapes between the slats after its office is accomplished.

I do not claim the devices shown in Branagh's patent of November 24, 1874, in which the water is applied to the leather through the openings between the slats of the cylinder by being thrown against the outside of said cylinder as it revolves. This causes a great waste of water, which it is my purpose to avoid, and it also fails to apply the water to the best advantage. Nor do I claim the devices shown in the Ross patent of 1867, No. 64,575, in which the drum is divided into compartments for the reception of the leather and the water applied through perforated journals.

In my machine the ordinary drenching-cylinder is used, and the water is applied by means of a perforated pipe passing through the journals, which are hollow, and crossing the cylinder. This throws the water directly downward upon the leather, utilizing it entirely, avoiding waste, and washing the leather not only by its quantity but by its force and manner of application.

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

The combination of a revolving drum or cylinder provided with a door upon its surface, with hollow journals, and a perforated pipe passing through the journals and across the cylinder, all substantially as and for the purposes described.

In testimony that I claim the foregoing I have hereunto set my hand this 31st day of March, 1875.

WILLIAM SHAW.

Witnesses:

WM. FRANKLIN SEAVEY,
WM. E. BROWN.