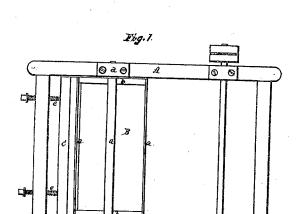
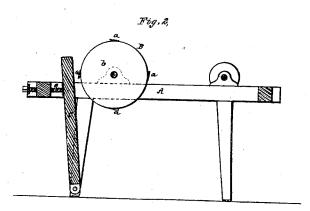
## J. M. Brown, Preparing Hides. No. 109379 Fatented Nov. 22.1870.





S. N. Sher.

L. Mailler

by his attorney.

12. M. Sady

## Patent Office. United States

## JAMES M. BROWN, OF LYNN, MASSACHUSETTS.

Letters Patent No. 109,379, dated November 22, 1870.

## IMPROVEMENT IN SOFTENING SHEEP AND OTHER SKINS.

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

To all persons to whom these presents may come:

Be it known that I, JAMES M. BROWN, of Lynn, of the county of Essex and State of Massachusetts, have invented or discovered a new and useful mode or process of Softening and Defleshing or Beaming Sheep or other Skins, having the wool or hair upon them; and I do hereby declare the same to be fully described as follows:

In carrying out my invention, I make use of a rotary beater and a beam or support for the skin, such rotary beater being composed of one or more dull blades fixed to a rotary shaft, by means of two or more arms or heads.

The drawing, herewith presented, represents the machine as employed by me for the aforesaid purpose-

Figure 1 being a top view, and

Figure 2, a vertical section of such machine.

In such drawing-

A denotes the frame for supporting the operative parts.

B is the rotary beater, consisting of a series of blades, a a, fixed to the peripheries of two heads, b b. arranged upon and concentric with a shaft, c, or having journals projecting from them at their centers.

This rotary beater has its journals supported in

boxes, d d, upheld by the frame A.

In rear of this rotary beater is a beam or platform, C, for supporting the skin, such beam or platform being, at its lower corners, pivoted to posts of the frame A, and provided with screws, e e, for adjusting it relatively to the beater; that is, for moving it nearer to or further from it, as occasion may require, and for holding it in position. The screws screw through one of the girts or cross-bars of the frame A.

On the shaft of the beater is a wheel, f, for putting such beater in revolution by a belt from a driving-

pulley or drum.

In operating with the machine, the skin, after having been soaked in water, is to be laid, hair-side down, on the top of the vibratory platform or beam C, and extended down between such and the rotary beater, and while the latter may be in rapid revolution, the skin is to be moved either upward or downward, or

both, as occasion may require, upon the beam, so as to allow the blade or blades of the beater to come into contact with the flesh part of the skin, and thoroughly beat the whole or nearly the whole of such, thereby removing from it the fatty and fleshy portions, or extraneous matters.

The hide or skin, by this process, will be rapidly softened, cleaned and stretched, and the slimy, glossy, and other animal matters prone to putrefaction will be

scraped from it.

I have found, by the use of a machine of the kind, and in the manner described, five hundred sheep-skins may be beamed in ten hours by two men, whereas, by the common process in use, viz., by the ordinary beam and fleshing-knife, they could not beam more than one-third the number of skins in the same time.

I am aware, that for burring wool upon the skin or removing burrs from it, a machine analogous to that hereinbefore described has been in use, and therefore shall not herein claim such, it never, to my knowledge, having been used for effecting what is termed the "fleshing" of skins, or, more properly the defleshing of them.

In using it for this latter purpose, it will be perceived that the hair or wool of the skin is to be placed directly against the beam or platform, and under this condition constitutes a natural cushion for supporting the skin against the action of the rotary knives or blades while acting against the flesh side of it, such causing the skin to so yield to the blades as to enable them to evenly dress its surface.

I claim-

The new mode, hereinbefore described, of beaming or defleshing and softening a skin, such being, by supporting and moving it on a vibratory beam or platform, and subjecting it in manner described to the action of a rotary beater, made in manner and arranged and operating with such beam or platform, substantially as set forth.

JAMES M. BROWN.

Witnesses:

R. H. EDDY,

S. N. PIPER.