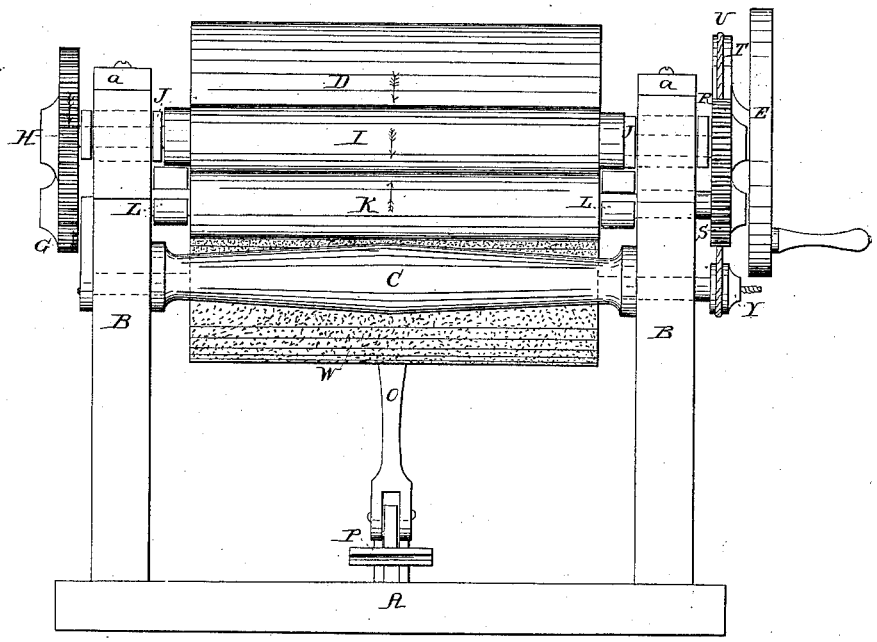
S. S. Weed,

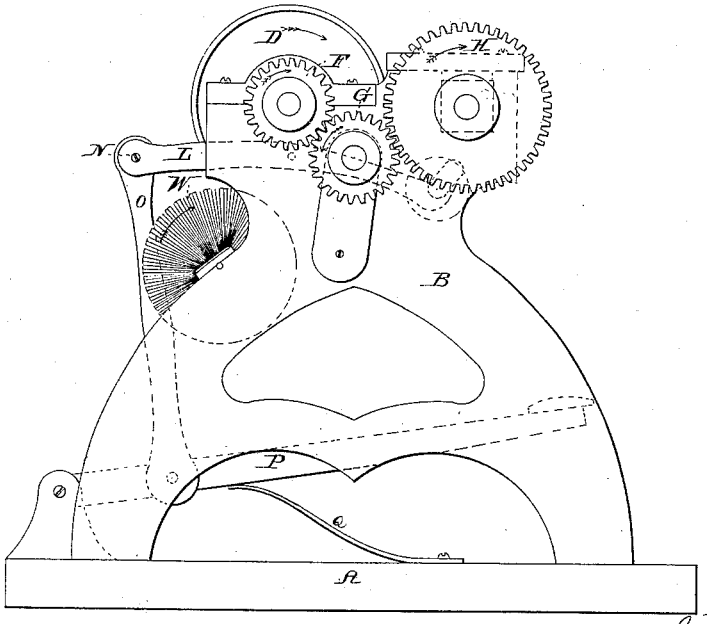
Preparing Hides,

No. 49,839. Patented Sep. 5, 1865.

Fig; 1.



Fig; 2.



Witnesses;
N. Arms
Geo. R. Elliott

Inventor;
Samuel S. Weed

UNITED STATES PATENT OFFICE.

SAML. S. WEED, OF STONEHAM, MASSACHUSETTS, ASSIGNOR TO HIMSELF, EDGAR M. STEVENS, AND JAMES L. HALL.

IMPROVED APPARATUS FOR REMOVING HAIR FROM HIDES.

Specification forming part of Letters Patent No. **49,839**, dated September 5, 1865.

To all whom it may concern:

Be it known that I, S. S. WEED, of Stoneham, in the county of Middlesex and State of Massachusetts, have invented a new and useful Machine for Removing Hair from Hides; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a front elevation, and Fig. 2 a side elevation.

Like parts are indicated by the same letters in both drawings.

After skins or hides have been "limed" they are usually laid upon a convex table or "beam," and the hair is removed or scraped off and the lime pressed out by hand by means of a long scraper or knife, which is a slow and laborious operation.

The nature of my invention therefore consists in removing or scraping off the hair by means of a rotating cylinder covered with rubber, the skin or hide being moved along and pressed against said cylinder by any suitable means, whereby the operation of removing the hair is performed much more rapidly and cheaply than by the usual method.

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

A is the foundation of the machine, or the floor of the room in which it stands.

B B are the sides, of wood or metal, from four to eight feet (more or less) apart, and connected by means of the bar C.

D is a large cylinder, of wood or metal, the axis of which turns in suitable bearings in the top of the frame B B. This cylinder I propose to cover with india-rubber about one-fourth of an inch in thickness, (more or less,) so as to yield to the inequalities of thickness in the different parts of a hide or skin and afford the greatest amount of adhesion; or the feed-roller K may be covered with rubber instead of the cylinder D.

E is a pulley or crank by means of which the cylinder D is rotated by hand or other power.

F is a cog-wheel fast to one end of the axle of D.

G is an intermediate pinion, of the same diameter as F, with which it engages, and turning on a pin projecting from the side of the frame B, as shown in Fig. 2.

H is another cog-wheel, twice the diameter of G, and fast to one end of the axle of the upper feed-roller, I, as shown in the drawings.

J J are boxes in which turn the ends of the axle of I, said boxes being inserted in vertical slots in the frame B B, and held down by means of rubber pads between them and the caps *a a*.

K is the lower feed-roller, of the same diameter as I, the ends or axle of which rest in semicircular bearings in the ends of the levers L L, the latter being pivoted to the sides of the frame B B, as represented by the dotted line in Fig. 2. There is also a vertical slot in the frame B, to allow the ends of the axle of K to rise and fall to accommodate itself to the varying thickness of skins. These rollers I and K are made of wood or metal, either with or without a rubber covering; or the feed-rollers may be entirely dispensed with and a flat or concave table substituted therefor, the skin being laid upon it and moved along by hand.

N (see Fig. 2) is a rod connecting the back ends of the levers L L.

P is a treadle connected with the levers L L by means of the rod O.

Q is a spring by means of which the treadle is raised.

R is a cog-wheel attached to one end of the axle of I, and S is a similar cog-wheel attached to the end of the axle of K. Thus by depressing the treadle P it is obvious that the roller K will be raised so as to come in contact with the roller I and cylinder D, and the two cog-wheels R and S will be meshed together, as shown in Fig. 1.

W is a rotary brush the two ends of whose axis turn in suitable bearings in the frame B B. This brush is intended to slightly graze the cylinder D and remove therefrom any hair or other substance which may adhere thereto.

T is a pulley fast to the axis of the cylinder D, and Y is a smaller pulley fast to the end of the axle of the brush W.

U is a belt or band passing from T to Y, by means of which the brush is rotated.

The operation of the machine is as follows: The edge of the hide or skin is inserted, hair

side up, between the feed-rollers I and K. The operator then depresses the treadle with his foot, which presses the hair side of the skin against the cylinder D and brings the cog-wheels R and S together. Thus, as the periphery of the cylinder D moves faster than that of the feed-rolls and the skin, it is obvious that as the skin is fed along the hair will be effectually removed therefrom by the cylinder D, and drop down under the machine, performing the operation of removing the hair many times faster and cheaper than by the usual method of performing the same by hand. My machine also presses out the lime while removing the hair.

Having thus described the construction and operation of my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. Removing hair and lime from hides or skins by means of a rotating cylinder covered with rubber, substantially as described.

2. The combination of the cylinder D, feed-rollers I and K, levers L L, and treadle P, substantially as and for the purpose described.

3. The brush W, when combined and operating with the cylinder D, substantially as described.

SAMUEL S. WEED.

Witnesses:
N. AMES,
GEO. R. CLARKE.