H. S. CORWIN.

WORK SUPPORT FOR LEATHER WORKING MACHINES.

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Inventor.

Witnesses.

Patented July 3, 1906.
To all whom it may concern:

Be it known that I, HAMILTON S. CORWIN, a citizen of the United States, residing in Peabody, in the county of Essex and State of Massachusetts, have invented an Improvement in Work-Supports for Leather-Working Machines, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

This invention relates to a work-support or bed employed in machines for treating hides, skins, and leather and is herein shown as embodied in the form of a roll. The invention is particularly well adapted for use in machines employed for fleshing hides and skins, an example of such a machine being shown and described in United States Patent No. 696,588, dated April 1, 1902.

Prior to this invention hides or skin designed for use in the sole-leather trade have been fleshed by hand, owing to the pronounced irregularities in the thickness of the hides. Attempts have been made to flesh hides designed for the sole-leather trade with machines; but heretofore, so far as I am aware, such attempts have not been satisfactory to the trade, owing to the fact that if the machine is adjusted for the thin parts of the hide it removes too much of the thicker portions of the hide, and if adjusted for the thicker portions of the hide it does not treat or flesh the thin portions of the hide. For this reason hides designed for use as sole-leather are now commonly fleshed by hand.

The present invention has for its object to provide a support of such character as will be described as will enable hides for sole-leather to be fleshed with a machine, and to this end the support or bed is provided with a layer of rubber or other yielding material which is composed of sections, zones, or parts of different degrees of resiliency or density, so that the thicker portions of the hide can be forced into the support or bed farther than the thinner portions of said hide, and thereby enable the surface of the hide being treated to be cut or otherwise acted upon by the operating-tool to substantially the same depth, thus insuring uniform or substantially uniform treatment of the hide throughout its surface without waste of material.

These and other features of this invention will be pointed out in the claims at the end of this specification.

Figure 1 is an elevation of a bed-roll embodying this invention; Fig. 2, a longitudinal section of the bed-roll shown in Fig. 1, and Fig. 3 a longitudinal section of a modified form of bed-roll.

Referring to the drawings, a represents a cylinder or roll of metal or other suitable material which is provided with the heads b, having the journals c. The cylinder a has a vulcanized or otherwise secured to it a covering or layer d, of rubber or like yielding material, which in accordance with this invention is provided with or composed of sections or zones of different resiliency or density, which are conventionally represented in Fig. 1 by the transverse lines e and in Figs. 2 and 3 by the difference in the section-lines. In Fig. 2 the rubber covering d is represented as composed of five sections, the two outside or end sections e being of the same density or resiliency, which may be assumed to be the least resilient, the center section f the most resilient, and the intermediate sections 6 of an intermediate density or resiliency.

In other words, the rubber bed or covering d, as shown in Fig. 2, is the softest at the center and increases in hardness toward its opposite ends. Such a yielding bed or support is especially designed for use with hides which are thickest at their center portion or backbone—for instance, cowhides—as the portion of the yielding bed near the center is capable of yielding to a greater extent than the ends, with the result that when the hide is engaged by the operating-tool cooperating with the yielding support or bed, usually a bladed roll, the thicker portions of the hide effect a greater compression of the softer portions of the yielding bed than do the thinner portions of the hide, and the thicker portions of the hide are thus moved away from the operating-tool such a distance as will bring the surface of the hide which is engaged by the operating-tool or bladed roll into substantially the same plane, with the result that the operating-roll effects a cut of substantially the same depth throughout the width of the hide, and the latter is thereby fleshed in a uniform manner without waste of material.
In bullhides the flanks are thicker than the backbone portion, and when bullhides are to be fleshed a bed or roll substantially as shown in Fig. 3 is used, in which the roll is harder at the center and softest at the ends.

I have herein shown the yielding support as provided with sections or zones of three degrees of density or elasticity, and while I may prefer this arrangement I do not desire to limit my invention in this respect, as it is evident that the number of sections or zones may be varied to suit any particular work.

To enable the invention to be readily understood, I have represented the zones or sections as quite prominent; but it will be understood that the sections or zones of different density or elasticity may be merged with one another so gradually as to render it practically impossible to tell the line of demarcation when the yielding support is made in one piece. I have herein shown the yielding support in the form of a roll; but I do not desire to limit my invention in this respect, as it may be made in other forms—such, for instance, as the segment of a drum or roll, or it may be made in the form of a straight or flat support.

I claim—

1. As an improved article of manufacture, a roll having a covering of rubber or like yielding material of substantially uniform thickness throughout its length and composed of sections of different resiliency integrally united, for the purpose specified.

2. As an improved article of manufacture, a yielding support for a hide or skin provided with end sections of one resiliency, a center section of a different resiliency, and intermediate sections of a resiliency which differs from the said end and center sections, said sections being united to form an integral body, substantially as described.

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

HAMILTON S. CORWIN

Witnesses:

A. M. Wilson,
S. G. H. Fitch.