

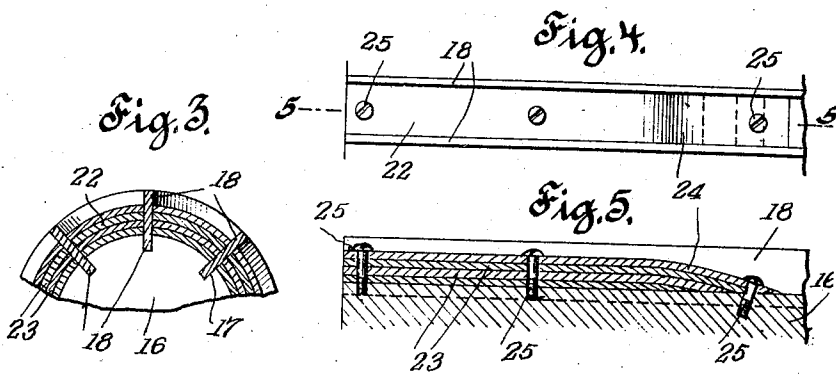
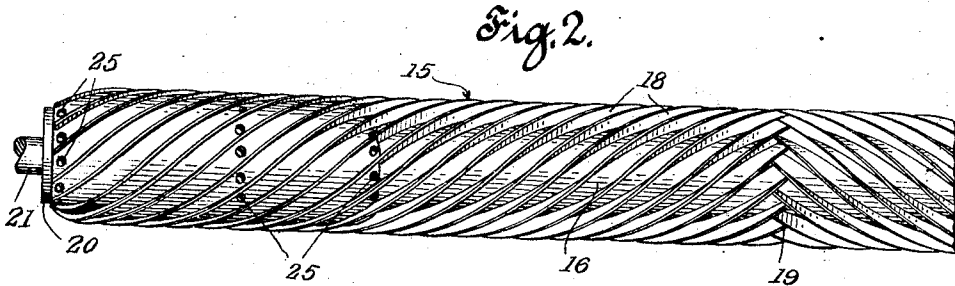
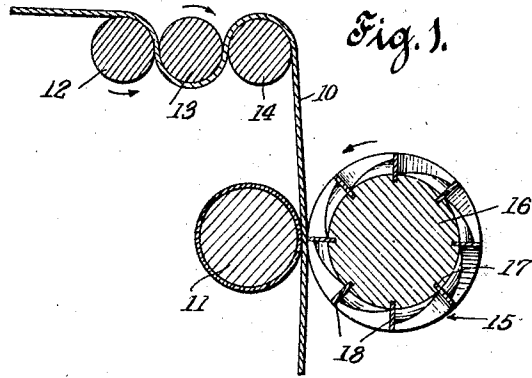
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DEFLESHING MACHINE CYLINDER

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DEFLESHING-MACHINE CYLINDER.

Application filed September 24, 1924. Serial No. 739,477.

To all whom it may concern:

Be it known that I, JOSEPH PROKOP, a citizen of Poland, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Defleshing-Machine Cylinders, of which the following is a specification.

This invention relates to improvements in leather working machines, used in defleshing the hides, and more particularly to the cylindrical, multi-bladed knife used therein, and the main object of the invention is in the provision of a defleshing cylinder including novel features of construction hereinafter described and shown in the accompanying drawing, forming part hereof, and in which:—

Figure 1 is a transverse sectional view showing the main operative elements of a conventional type of a leather working machine in their relative position.

Figure 2 is a fragmentary side view of a defleshing cylinder as made in accordance with the invention.

Figure 3 is a fragmentary cross sectional view of the same, drawn to an increased scale.

Figure 4 is a plan view of a pair of the cutters extended straight for illustrative purposes and showing a filler therebetween.

Figure 5 is a longitudinal sectional view taken on line 5—5 of Figure 4.

The knife ordinarily employed is extended lengthwise of the machine and is of such length as to operate over the entire surface of a whole hide as pressed thereagainst by a rubber covered roll of equivalent length.

Such knife, or defleshing cylinder as it is usually termed, consists of a solid or tubular body having reduced ends or a shaft, to be mounted in bearings in the machine and has in its body a series of evenly spaced helical slots in which are secured cutter blades extending uniformly outward over the entire periphery, these slots or grooves being disposed in opposite hand helices from the center of the length of the cylinder.

In operation it is found that the cylinder works satisfactorily with respect to the main portion of the hide, but when the irregular portions or flanks of the hide, as taken from the legs and neck, are presented to the action of the cutter blades, the tendency is to bend these relatively narrow projections to

the right or left, causing wrinkles or folds which are frequently cut through and the hide lessened in value.

Such happening is also likely to occur when any irregular portions or shanks are partially severed from the main body of the hide, by cuts made in skinning the animal, and which the present invention seeks to avoid.

To obviate the above mentioned defects, provision is made for presenting the forward half of the hide to the maximum cutting action of the blades, after which the hide is withdrawn and reversed to present the rear quarters of the hide, from which the flanks extend outwardly, to the cutting action of the blades. Resultant of the present invention, the cutting roller is provided at its end portions with means for smoothly guiding the flank portions of the hide through the pressure and cutting rollers and the relatively narrow and irregular extremities are subjected to a minimum or lesser cutting action, due to the liability of wrinkling or folding, which frequently causes the cutting or severing of the same.

Referring now more particularly to the drawing, the hide is designated by the numeral 10 and, as shown in Figure 1, is drawn by gripping rolls 12, 13 and 14 respectively, between a rubber covered roller 11 and a defleshing knife generally designated by the numeral 15.

The knife consists of a core 16 having helical grooves 17 in which are firmly secured a series of relatively thin blades 18 set edgewise and arranged in opposite directions from the center 19 of the cylinder, at which point the adjacent ends of the blades overlap to present a continuous cutting effect.

The outer ends of the blades 18 may curve inwardly at the ends of the cylinder and are held in place by fixed washers 20 through which the shaft 21 passes.

The improvements consist mainly in partially filling the spaces between adjacent blades from the ends towards the center, leaving the blades their full height over the cylinder portion to which the main body of the hide is subjected.

These filler strips 22 may be solid, but preferably are laminated as shown in Figures 3 and 5, consisting of strips 23 of wood, fiber, leather or the like and arranged in ta-

pering formation at their inner ends, as at 24, to be held firmly in place by screws 25 set in the cylinder body 16.

The blades 18 require to be kept sharp and therefore are frequently ground while fixed in the cylinder, reducing their height; hence one of the advantages of laminated filler strips is the convenience in removing the outer plate when the knives are ground to such an extent that it is desirable to do so.

In this manner, applicant provides an attachment for defleshing machine cutting rollers, by the use of which the main body of the hide is subjected to the full cutting action of the blades, while the narrow and irregular extremities of the rear quarters are subjected to the lesser cutting action adjacent the ends of the roller, while the same are evenly guided through the rollers.

Although the foregoing is descriptive of the preferred embodiment of the invention, it will be apparent that minor changes may be made in its construction, without the exercise of invention or conflicting with the scope of the claims hereto appended.

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

1. A defleshing machine cylinder for hides comprising a core at least equal in length to the hides to be defleshed, a series of cutter blades arranged in opposed helical relation to extend from the longitudinal center of the core to the ends thereof, and filler strips disposed between said blades whereby their

operative edge is of minimum height above the core at the end portions thereof and of maximum height above the core intermediate the end portions.

2. A defleshing machine cylinder for hides comprising a core at least equal in length to the hides to be defleshed, a series of cutter blades arranged in opposed helical relation from the longitudinal center of the core to its ends, and filler strips fixed on said core between adjacent blades at their outer ends whereby their operative height is reduced with respect to their main portions.

3. A defleshing machine cylinder for hides comprising a core at least equal in length to the hides to be defleshed, a series of cutter blades arranged in opposed helical relation from the longitudinal center of the core to its ends, and a series of laminated filler strips removably engaged between adjacent blades at their outer end portions, said strips being bevelled at their inner ends, whereby the operative height of each blade becomes gradually lessened.

4. A defleshing machine cylinder comprising a core, blades fixed longitudinally therein, laminated strips arranged between adjacent blades at their end portions, and fastening means adapted for adjustment to permit removal of one or more of the laminations of each strip.

This specification signed and witnessed this 23rd day of September, 1924.

JOSEPH PROKOP.