

J. STRYKER.
KNIFE CYLINDER FOR HIDE WORKING MACHINES.
APPLICATION FILED AUG. 26, 1912.

1,062,617.

Patented May 27, 1913.

Fig. 1.

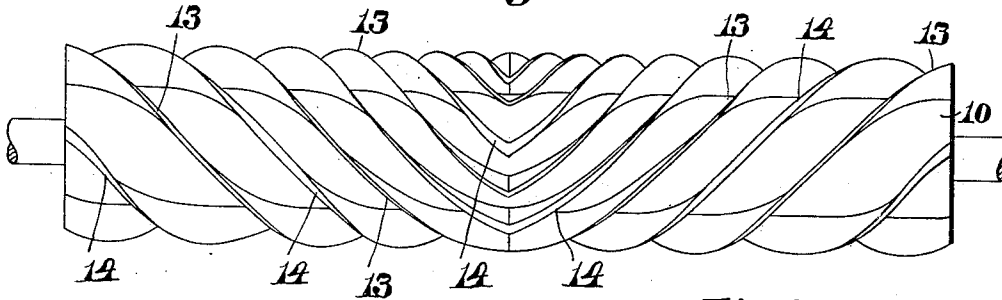


Fig. 3.

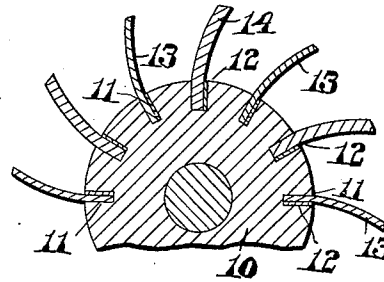


Fig. 2.

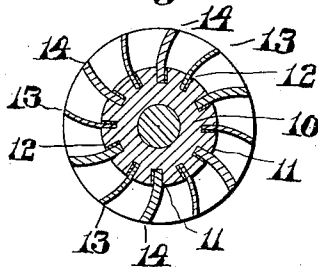


Fig. 4.

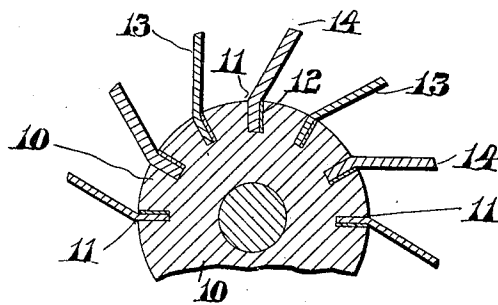
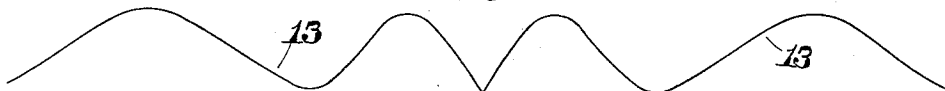


Fig. 5.



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UNITED STATES PATENT OFFICE.

JACOB STRYKER, OF SOMERVILLE, MASSACHUSETTS.

KNIFE-CYLINDER FOR HIDE-WORKING MACHINES.

1,062,617.

Specification of Letters Patent.

Patented May 27, 1913.

Application filed August 26, 1912. Serial No. 717,212.

To all whom it may concern:

Be it known that I, JACOB STRYKER, a citizen of the United States of America, and a resident of Somerville, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Knife-Cylinders for Hide-Working Machines, of which the following is a specification.

This invention relates to knife cylinders and particularly to devices of this class adapted for use in fleshing and similar hide working machines.

The object of the invention is to produce a device of this class which will shave off a thin layer of the hide without injuring any portion thereof, producing practically the same result as is secured by hand operated tools.

The invention consists in providing a knife cylinder with certain blades which tend to position and stretch the hide while other intermediate blades are peculiarly constructed in order to properly perform the shaving operation.

The invention consists in certain novel features of construction and arrangement of parts which will be fully understood by reference to the description of the drawings and to the claims hereinafter given.

Of the drawings: Figure 1 represents an elevation of a knife cylinder embodying the features of the present invention. Fig. 2 represents a transverse section of the same. Fig. 3 represents a sectional detail drawn to a greatly enlarged scale. Fig. 4 represents a similar view showing a modified form of blade, and Fig. 5 represents in diagram one of the knife blades and showing the pitch thereof decreasing from the center outwardly in each direction.

Similar characters designate like parts throughout the several figures of the drawings.

In the drawings, 10 is the body portion of the cylinder into which is cut a plurality of helical grooves 11 extending in opposite directions from a point midway of said body portion 10. The grooves 11 are radial to the axis of said cylinder and their pitch decreases gradually toward the ends of said cylinder.

Secured in the grooves 11 by means of the shims 12 are the blades 13 the edges of which are bent forward as indicated in the draw-

ings with their edges lying in a cylindrical surface. These blades 13 are preferably curved forward as indicated in Fig. 3, and their edges are shaped so that they lie in a cylindrical surface, thus leaving a cutting edge on the front face of said blades. Interposed between the blades 13 are other blades 14 of thicker material and preferably these blades are curved forwardly as indicated in Fig. 3. Very good results, however, may be obtained when the blades are simply bent forward as shown in Fig. 4. The wide blades 14 bear upon the material and position it while the cutting or shaving blades 13 shave off a thin layer of the flesh. The blades 13 and 14 decrease in pitch from the center of the roll 10 outwardly in either direction and thereby act upon the bellies of the hides to smooth them out carefully preparatory to the cutting operation.

Heretofore, when it has been attempted to shave the hides by machinery usually the bellies are injured materially and often entirely destroyed. By the use of a knife cylinder constructed as shown and described herein the objection is entirely overcome and the hides may be shaved as cleanly as if the operation was performed by hand.

It is believed that the operation and many advantages of the invention will be fully understood from the foregoing.

Having thus described my invention, I claim:

1. A knife cylinder for hide working machines consisting of a cylindrical body portion, and a plurality of helical knife blades of alternately thin and thick material all inclined forward with their edges in a cylindrical surface.

2. A knife cylinder for hide working machines consisting of a cylindrical body portion, and a plurality of helical knife blades, every alternate blade being of thinner material than the others and bent forward with the edges of all of said blades lying in a cylindrical surface.

3. A knife cylinder for hide working machines consisting of a cylindrical body portion, and a plurality of helical knife blades, every alternate blade being of thinner material than the others and curved forward with the edges of all of said blades lying in a cylindrical surface.

4. A knife cylinder for hide working machines consisting of a cylindrical body por-

tion, and a plurality of helical knife blades
extending in opposite directions with their
pitch gradually decreasing from a point mid-
way of said body portion, every alternate
5 blade being of thinner material and bent
forward and the edges of all of said blades
lying in a cylindrical surface.

Signed by me at Boston, Mass. this 10th
day of August, 1912.

JACOB STRYKER.

Witnesses:

EDWARD F. ALLEN,
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."