

(No Model.)

P. DIEHL.

MACHINE FOR BREAKING HIDES OR SKINS.

No. 346,900.

Patented Aug. 10, 1886.

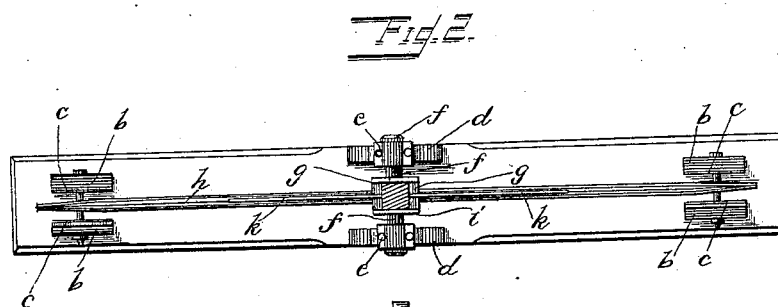
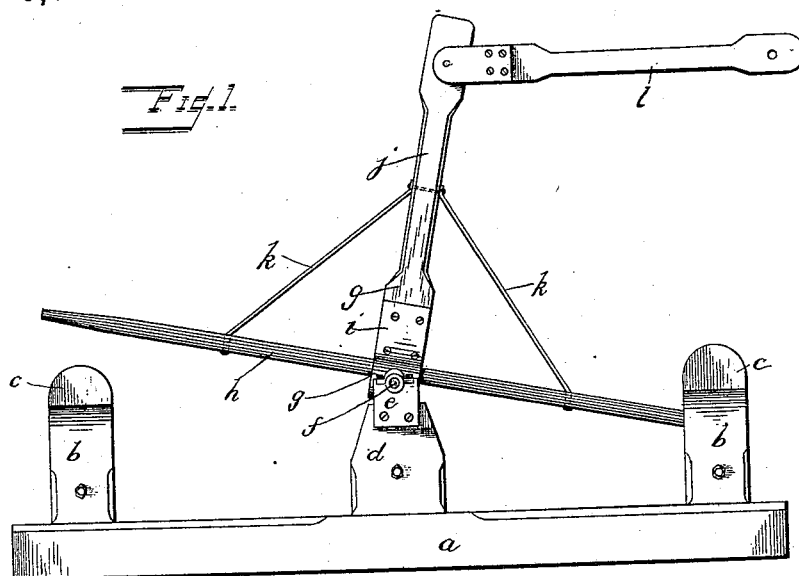


Fig. 3.

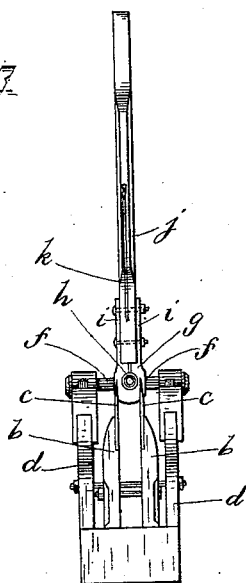
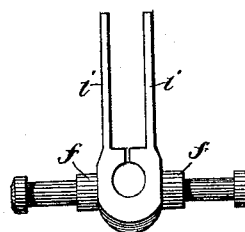


Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

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MACHINE FOR BREAKING HIDES OR SKINS.

SPECIFICATION forming part of Letters Patent No. 346,900, dated August 10, 1886.

Application filed May 19, 1886. Serial No. 202,608. (No model.)

To all whom it may concern:

Be it known that I, PETER DIEHL, a citizen of the United States, residing at Gloversville, in the county of Fulton and State of New York, have invented certain new and useful Improvements in Machines for Breaking Skins, of which the following is a full, clear, and exact description.

The object of this invention is to provide simple and efficient machinery for "breaking" skins, so as to render them soft and pliable, and fit for use in making gloves and mittens, and for the manufacture of shoe-leather. Heretofore it has been customary to perform this work by hand, although machinery has been devised for it, an example of which may be seen in Letters Patent No. 80,018, wherein the invention consists in using a number of parallel and adjustable blades fastened to a bench, and a lever with parallel rollers pivoted to the same bench, so that a hide or skin laid across said blades can be stretched by moving the lever, with its rollers, between said blades, while holding the ends of the skin to allow only so much to be drawn in from the outside as to prevent the skin from being torn, by which operation the skin is stretched and softened more completely than can be done by hand.

My device is an improvement upon such machinery.

My invention consists in a skin-breaking bar rocking upon a bearing about midway of its length, and co-operating with pairs of stationary breaking-knives at each end, substantially as hereinafter particularly set forth and claimed.

In the accompanying drawings, in the several figures of which like parts are similarly designated, Figure 1 is a side elevation of one form of my machine. Fig. 2 is a plan view with the operating-lever in cross-section; Fig. 3, an end elevation with the brace broken away to show the cross-head; and Fig. 4 is an end view of the cross-head detached, and on a larger scale.

A suitable base, *a*, is employed, which is to be, preferably, bolted or otherwise fastened to a floor. At each end of this base are fastened parallel standards *b*, in pairs, provided at their upper ends with upwardly-projecting flat knives or blades *c*. About midway between these pairs of knife-standards are arranged upon the base other parallel standards, *d*, pro-

vided with bearings *e*, which receive the laterally-projecting arms or gudgeons *f* of the cross-head *g*. This cross-head *g* has in it a transverse opening to receive the skin-breaking bar *h*, in which cross-head said bar is firmly clamped by the bolting of the sides *i* of said cross-head to the operating-lever *j*, said cross-head being in substance a split sleeve with parallel projections from its slit forming the said sides *i*, as may be seen in Figs. 3 and 4. These sides *i* form in the cross-head a socket for the reception of the operating-lever *j*. The breaking-bar is braced by rods *k*, extending diagonally from the lever *j* to the bar, and rigidly secured to each. A pitman or other rod, *l*, may lead from the lever to a source of power to impart a rocking or vibrating motion to the breaking-bar.

In operation an attendant stands at each end of the machine, spreads a skin to be broken over the knives, and as the bar descends it stretches and draws the skin over and between said knives and effects the breaking operation in a very speedy and efficient manner, and at a great saving of time and manual labor. The position of the skin will of course be changed from time to time as its condition of softness and pliability demand.

What I claim is—

1. The combination of a base, pairs of knives arranged at or near each end thereof, standards intermediate of said pairs of knives, and a rocking breaking-bar arranged in said standards in line with the knives, to co-operate with the knives at each end of the base, substantially as set forth.

2. In a skin-breaking machine, a breaking-bar, a rocking cross-head in which it is securely held, and bearings for said cross-head, combined with knives at the ends of the machine, with which said breaking-bar co-operates, substantially as described.

3. The combination of pairs of knives at the ends of the machine, a cross-head supported in suitable bearings to permit it to rock, a breaking bar secured in said cross-head and co-operating with the said pairs of knives, an operating-lever, and braces connecting the lever and bar, substantially as described.

In testimony whereof I have hereunto set my hand this 17th day of May, A. D. 1886.

Witnesses:

PETER DIEHL.

SAMUEL E. DODGE,

NELSON H. ANIBAL.