

C. STEINMANN.

Apparatus for Handling Hides.

No. 211,063.

Patented Dec. 17, 1878.

Fig. 1.

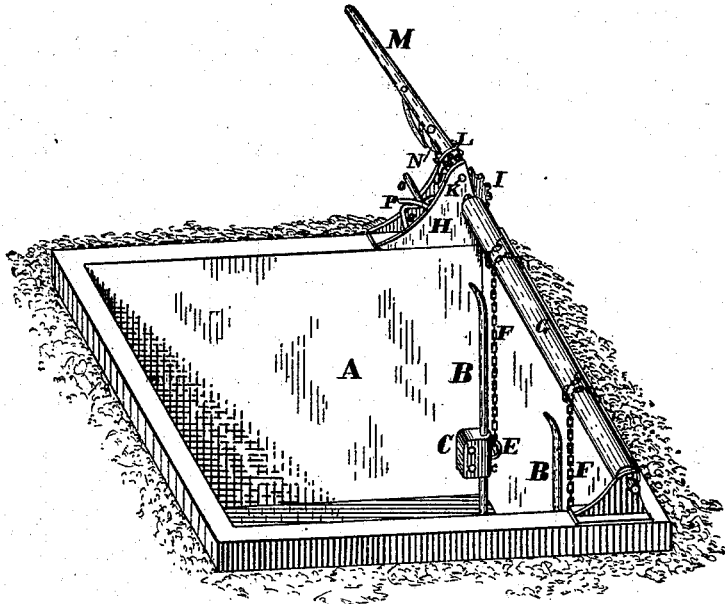


Fig. 2.

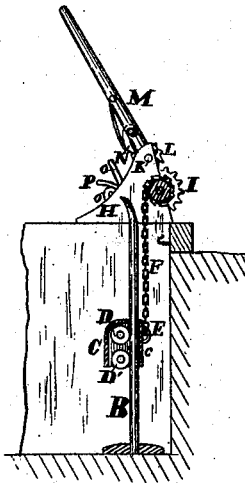


Fig. 3.

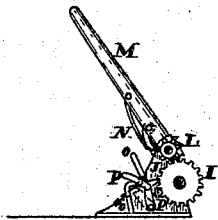
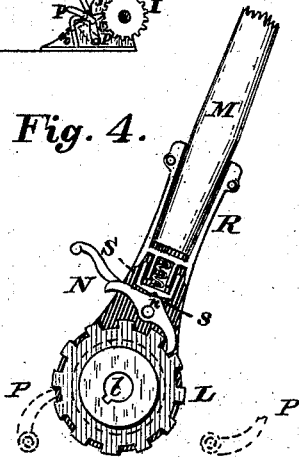


Fig. 4.



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UNITED STATES PATENT OFFICE

CHARLES STEINMANN, OF CINCINNATI, OHIO, ASSIGNOR OF ONE-HALF HIS
RIGHT TO JACOB KIENZLE, OF SAME PLACE.

IMPROVEMENT IN APPARATUS FOR HANDLING HIDES.

Specification forming part of Letters Patent No. 211,063, dated December 17, 1878; application filed
October 28, 1878.

To all whom it may concern:

Be it known that I, CHARLES STEINMANN, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Improvement in Apparatus for Handling Hides in the Lime Pit or Pool, of which the following is a specification:

The present invention consists in certain novel and valuable improvements in tanners' apparatus for handling hides patented to C. Steinmann & Co., as assignees of Charles Steinmann and John Metzger, on the 20th of November, 1877, and numbered 197,426.

My present improvements comprise an improved form of spear or spike, having its point curved toward the interior of the tank or pit, whereby the engagement and disengagement of the hides are facilitated.

My improvements further comprise a new and improved form of running block, whose rollers, being disposed vertically one above the other, coact with the semi-cylindrical sheathing of the block to prevent friction, and which rollers are at the same time fully protected by the said sheathing against contact or entanglement with the hides.

My improvements further comprise an improved construction and arrangement of operating gears and ratchet.

In the accompanying drawings, Figure 1 represents a tanner's pit furnished with my improved apparatus. Fig. 2 is a vertical section in the plane of one of the spikes. Fig. 3 is a vertical section of the operating jack or gear-work. Fig. 4 represents, on a larger scale, a form of lever, pawl, and ratchet movement adapted for use with such apparatus, one inclosing-plate being removed.

The pit A may be such a one as illustrated in said Patent No. 197,426, or may be of any suitable form. As in said patent, there rise from the floor of the pit, near one end thereof, two spears or spikes, B B, whose pointed summits extend slightly higher than the mouth of the pit; but these spikes differ from those in said patent in that their points are curved somewhat toward the interior of the pit, in the manner shown. Spikes thus formed are a great improvement on the straight ones shown in said patent, because it is much easier to en-

gage or to disengage the hides, and the hides are in much less danger of injury in said acts of engaging and disengaging.

In the aforesaid patent sliding blocks are shown having a roller on each side of the spike, and it has been found, in practice, that blocks thus constructed are liable to bind and hitch in the operation of hoisting the hides. It has also been found that portions of hide and hair would lodge in the unprotected rollers, and clog the same to such an extent as to render the device nearly inoperative. I remedy both these defects by constructing the frame of my block in the form of a tube or sleeve, C, half of which, c, is semi-cylindrical, and closely hugs one side of the spike, while the other half is made of proper form and dimensions to contain two rollers, D D', journaled, one vertically over the other.

Extending from the upper part of each sleeve or block is an eye, E, for engagement of the hook on the extremity of a chain, F, attached to a windlass, G, operated by a lever and ratchet and gear movement, on the same principle as fully shown and described in the aforesaid patent, but differing in some important details of the said movement, which, in the present improvement, comprise the following part:

A suitable step or bearing, H, affords journal-bearing for the windlass-shaft, which shaft carries a spur-wheel, I, that gears with a pinion, J, on the ratchet-shaft K, to which shaft is permanently fastened a ratchet-wheel, L. A lever, M, having a pawl, N, engages in this wheel. A tentative pawl, P, pressed by a spring, O, prevents any retrograde rotation of the spur-wheel I, and thereby enables the windlass to hold the hides to the degree of elevation desired, or, being released, permits the parts to "run down," and the hides to descend by their weight to the bottom of the pit. The length of the lever and the excess of diameter of the spur-wheel I over the pinion J impart so high a purchase that one man can do the work of two or more under the plan shown in my former patent above cited.

At Fig. 4 is shown my preferred form of operating lever, pawl, and ratchet. In this form L represents the ratchet-wheel, having a central orifice, l, whereby it is fitted and keyed

fast to the shaft of the windlass-cylinder G. R is the lever-socket, sleeved, and capable of revolving upon a boss of said wheel. (Shown by dotted lines.) N is a pawl, held to the position shown, or to the reverse position, or to one just intermediate, by spring-follower S. If it is desired that the lever M should feed in the opposite direction, the pawl is reversed, and the tentative pawl P is applied on the other side. If it is desired that the lever should be inoperative, so as to allow the hides to descend freely into the pit, the pawl N is placed so that its apex *n* will engage with the notch *s* of the follower.

I claim herein as new and of my invention—

1. In an apparatus for handling hides in a lime pit or pool, substantially as set forth, the spears B, whose points are curved or bent toward the interior of the pit, in the manner and for the purposes designated.

2. In an apparatus for handling hides in a lime pit or pool, substantially as set forth, the traveler or block C, with its pair of sheaves or rollers D D', arranged vertically, one over the other, both on the same side of and adapted to operate with the spear B, in the manner explained.

3. In an apparatus for handling hides in a lime pit or pool, substantially as set forth, the pawl-and-lever mechanism, consisting of the ratchet-wheel L *l*, lever M, two-ended driving-pawl N *n*, tentative pawl P, and lever-socket R, in the described combination with the notched spring-follower S *s*.

In testimony of which invention I hereunto set my hand.

CHAS. STEINMANN.

Attest:

GEO. H. KNIGHT,
W. TYSON JUDKINS.