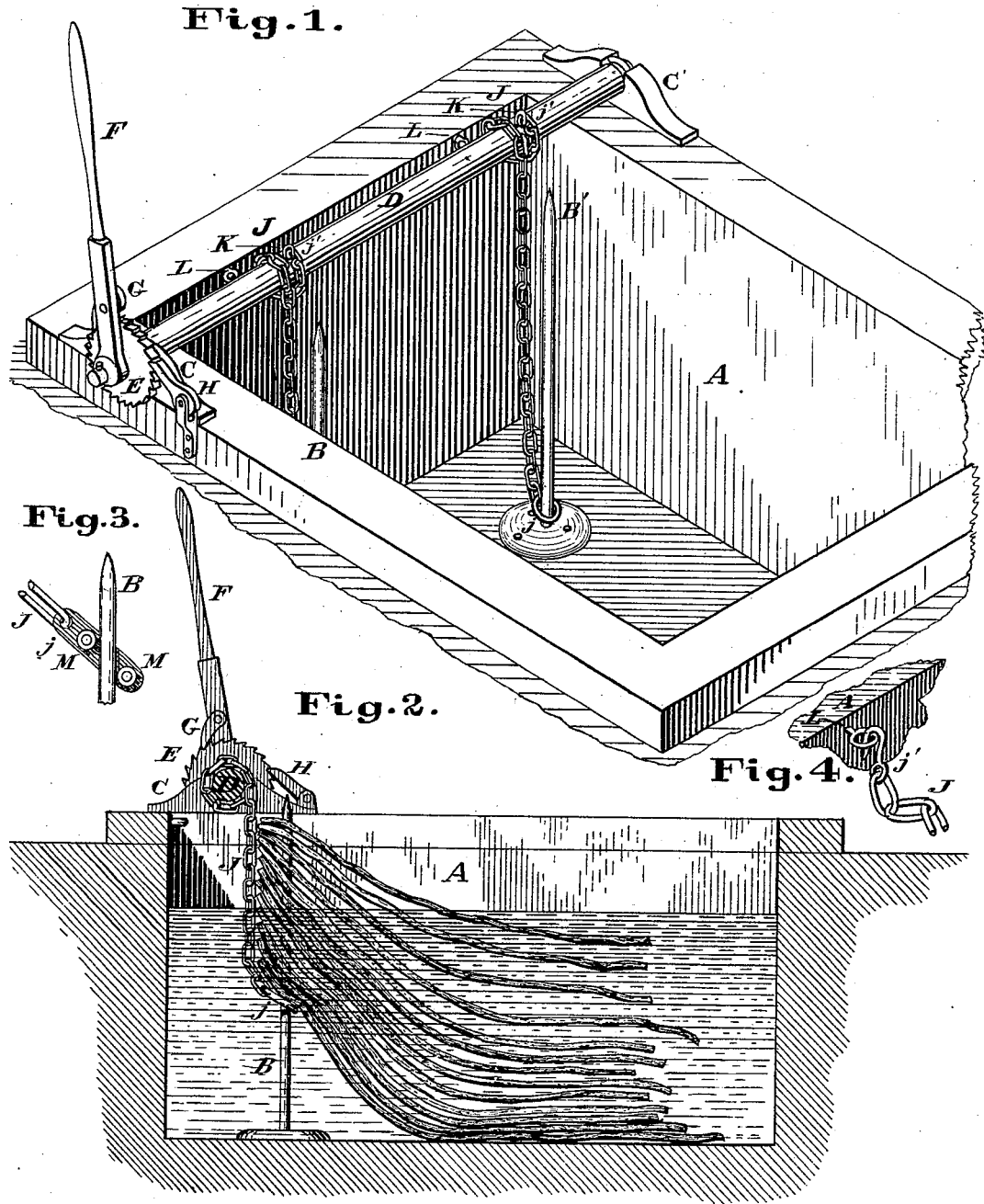


C. STEINMANN & J. METZGER.
Tanner's Apparatus for Handling Hides.

No. 197,426.

Patented Nov. 20, 1877.



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UNITED STATES PATENT OFFICE.

CHARLES STEINMANN AND JOHN METZGER, OF CINCINNATI, OHIO, ASSIGNORS
TO C. STEINMANN & CO., OF SAME PLACE.

IMPROVEMENT IN TANNERS' APPARATUS FOR HANDLING HIDES.

Specification forming part of Letters Patent No. 197,426, dated November 20, 1877; application filed
October 1, 1877.

To all whom it may concern:

Be it known that we, CHARLES STEINMANN and JOHN METZGER, both of Cincinnati, Hamilton county, Ohio, have invented a new and useful Tanners' Apparatus, of which the following is a specification:

Our invention relates to an appendage to the ordinary vat or pit employed by tanners, and is designed to facilitate the handling of the hides and their removal from the pit.

With these objects in view, we provide two pointed rods or spears, which, being secured to the pit-floor, near one end thereof, extend upward to near the level of the pit-mouth. We further provide two chains, hung by one extremity to rings in the pit-wall, near the top of the same, and having their other extremities passed over said spears. We further provide a windlass, to which the upper ends of the chains being attached, enables the elevation of the chains.

The end links of the chains being engaged over the spears, and permitted to drop to the pit-floor, the hides to be depilated or tanned, as the case may be, are impaled, one by one, upon the spears, the orifices customarily made in raw hides enabling this to be done without any fresh incisions.

The removal of the hides is easily effected by lifting their impaled ends from the pit, by means of the chains and windlass, into convenient position for the use of the common grappling hook or bar.

The removal of the hides is more readily effected by our apparatus than by the old-fashioned hooks alone, or other ordinary means, while over the more recent plan of lifting by a platform it possesses the important advantage of easy and thorough riddance of the ooze and other adventitious matters.

In the accompanying drawings, Figure 1 is a perspective view of a tanner's pit embodying our invention. Fig. 2 is a vertical section of the same, showing a batch of hides about being lifted from the pit. Fig. 3 represents our preferred form of link, from which one of the cheeks has been removed, so as to exhibit the rollers. Fig. 4 represents the upper extremity of one of our chains temporarily engaged in the wall-eye.

A represents any ordinary or suitable vat, tank, or pit, such as used by tanners. B B' are two pointed rods or spears, secured firmly to the pit-floor, near one end thereof, and extending vertically to the level of the pit-mouth, in the manner shown. C C' are bearings for a shaft or windlass, D, which, terminating in a ratchet, E, and having a lever, F, and propelling and tentative pawls G H, is capable, by a simple vibratory movement of the lever, of being rotated in one direction in the manner familiar in windlass actions.

J J' are two similar chains, whose lower ends carry rings *j*, capable of engaging loosely over the spears, and whose upper ends carry hooks *j'*, capable of being engaged either in eyes K on the windlass-shaft, or in eyes L that project from that side of the pit nearest to the spears. The rings *j* may have rollers M, Fig. 3, to lessen friction against the spear sides.

The operation is as follows: The rings *j* being engaged over their respective spears B B', and permitted to descend to the pit-floor, and the hooks *j'* being engaged in the wall-eyes L, the hides are engaged, one by one, upon the spears, and pushed down or suffered to descend, so as to make way for those which succeed them.

When the hides are deemed ready for removal, the windlass D is placed in its bearings, and the hooks *j'* being engaged in the lugs K of the windlass, the latter is rotated so as to elevate the batch of hides into the partially-up-ended position shown in Fig. 2. This action causes the hides to float separate from one another, in the manner shown in Fig. 2, so as to permit the ooze to flow away from them. This separation of the hides, moreover, facilitates their separate agitation by means of any suitable instrumentality before removal from the liquor, for the more complete riddance of the ooze. The hides, having been thus brought to the surface and cleansed, are drawn out of the pit one by one. The pawls G H are now disengaged from the ratchet, so as to permit the chains to unwind from the shaft D, and their links *j* to return to the pit-floor, and the removal of their hooked upper extremities *j'* to the wall-eyes L. This liberates the windlass for similar use on another pit.

Any mechanical equivalent for the windlass D, such as a block and tackle, or a simple lever, may be employed, and such appliance may be either removable from pit to pit, as above shown, or may constitute a permanent appendage thereto.

Hooked projections may be substituted for the wall-eyes L.

We claim as new and of our invention—

1. The combination, with a tanner's pit, of the spears B B', chains J J', and a windlass, D, or other hoisting-tackle, substantially as and for the purpose set forth.

2. The combination, in a tanner's pit, of the spears B B', chains J J', windlass D, or other hoisting-tackle, and wall-eyes L L', or their equivalents, substantially as set forth.

In testimony of which invention we hereunto set our hands.

CHAS. STEINMANN.
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Attest:

GEO. H. KNIGHT,
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