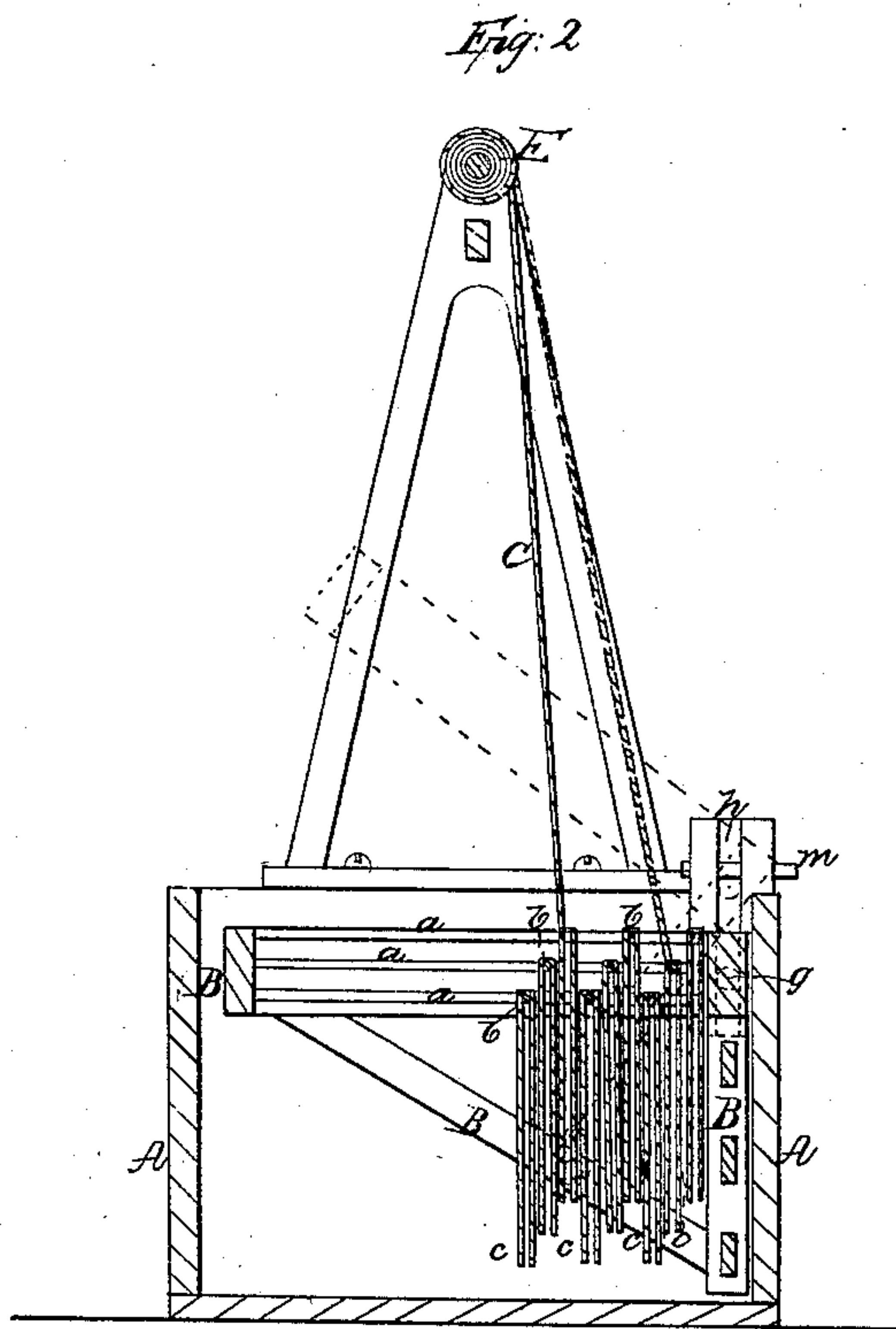
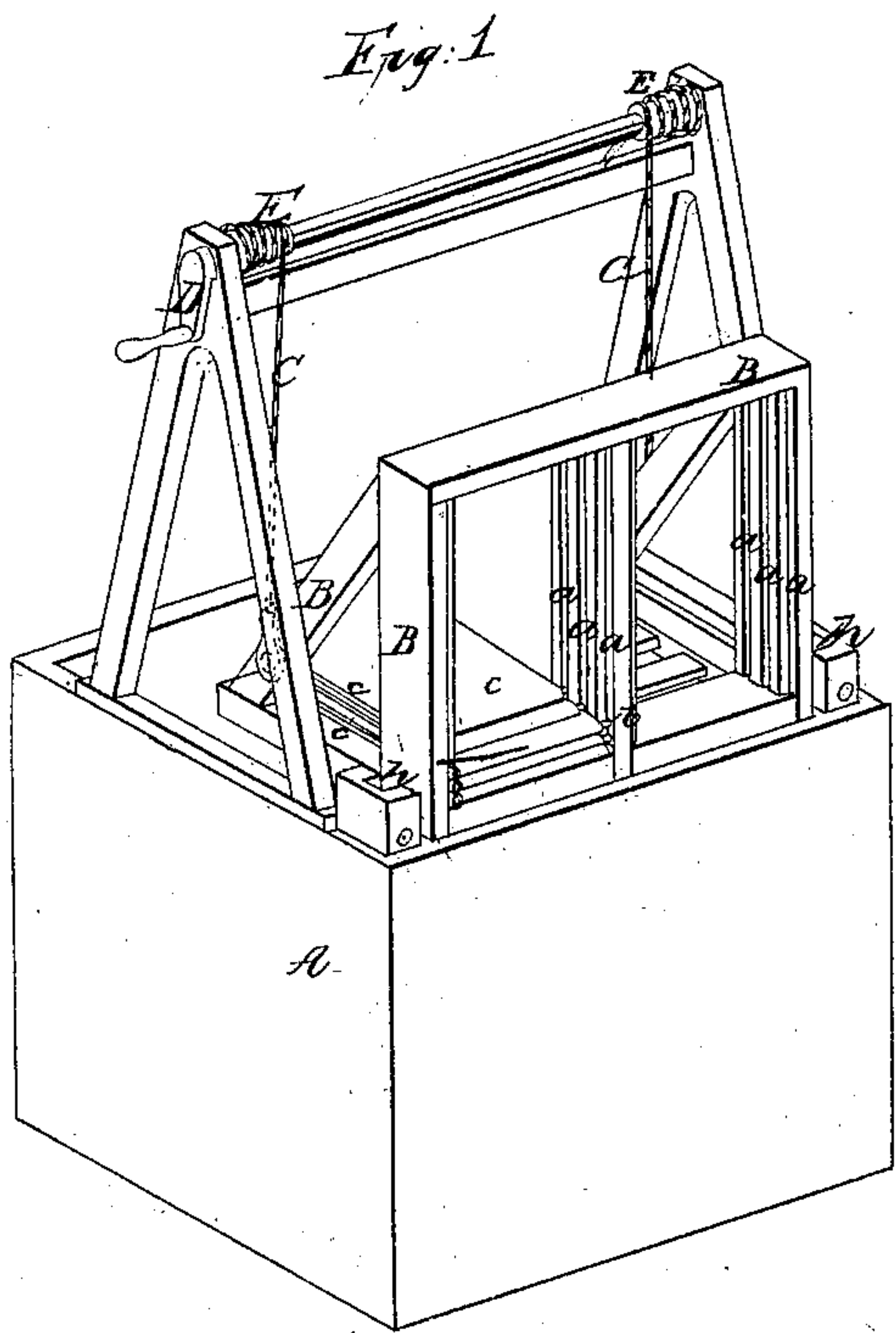


W.H. Heald,

Tanning Apparatus,

N^o 30,062,

Patented Sept. 18, 1860.



Witnesses:
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Inventor:
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UNITED STATES PATENT OFFICE.

WM. H. HEALD, OF BALTIMORE, MARYLAND.

APPARATUS FOR TANNING.

Specification of Letters Patent No. 30,062, dated September 18, 1860.

To all whom it may concern:

Be it known that I, WM. H. HEALD, of the city of Baltimore and State of Maryland, have invented certain new and useful
5 Improvements in Apparatus for Tanning Hides; and I do hereby declare that the following is a full, clear, and exact description of its construction and operation, reference being had to the accompanying drawings,
10 in which—

Figure 1 represents a perspective view of said apparatus. Fig. 2 represents a longitudinal vertical section through the same.

The work of repeatedly raising the hides
15 from the vat for the purpose of exposing them to the air constitutes one of the most laborious tasks in the operation of tanning.

My invention relates to the construction of an apparatus to which the hides are
20 united in such a manner as that they will hang loosely and vertically in the vat and may be raised from the vat with facility and when raised lie in a pile and the drippings therefrom all run back into the vat.

25 To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

A, represents the vat which contains the tan liquor.

30 B, represents a triangular frame which is suspended within said vat by means of ropes or chains, C, and which can be raised or lowered by turning the crank D and the drums E around which the ropes or chains
35 C are wound. The frame B has grooves, *a*, cut on its inner sides into which the ends of the bars *b* are inserted, the hides *c*, to be tanned are hung over these bars as represented in Fig. 2 and one or more such
40 grooves may be used for securing the bars therein. When three such grooves are used the hides may be suspended as represented in Fig. 2, where the bar of each consecutive hide is inserted in a different groove by
45 which arrangement they can be inserted and removed with greater facility than when they are all inserted in one groove and when they are packed closely together. The frame B has pivots, *g*, at its sides, which
50 slide in corresponding grooves *h*, in the sides of the vat and which cause the frame to move perpendicularly on being raised or lowered.

When the frame is to be raised for the

purpose of exposing the hides to the air or 55
for removing them, the crank, D, is turned and the frame B rises and as the side, near the pivots, *g*, is somewhat heavier than its opposite side, the frame will lean toward that side and when arrived at the top of 60
the vat it will be canted on the edge of the side of the vat, as represented in red lines in Fig. 2, and it may then be raised to any degree of inclination or almost to a horizontal position leaving just sufficient inclina- 65
tion for the drippings to run back into the vat. The frame in this position may be secured by braces, stops or their equivalents. To prevent the frame from being raised out of the groove *h* by inadvertence, 70
the stop pins, *m*, may be used by which the motion of the frame is arrested as soon as the pivots, *g*, come in contact with them.

By this apparatus the hides when once hung within the frame B, do not require 75
any further handling and can be raised and lowered with facility thus saving a great amount of labor in the operation of tanning. And when the frame B, arrives at the position shown in Fig. 1, the hides lie on top of 80
each other in a pile, and may be conveniently removed. In this position too the frame is more readily filled with hides as it is comparatively clear of the vat though ready to turn into it when desired. 85

In the mere handling of the hides these machines save much labor, as they can be immersed in the vat, or raised out again into a pile whence they can be removed, and others put in their place. 90

Having thus fully described the nature of my invention what I claim herein as new, and desire to secure by Letters Patent, is—

In combination with a tanning vat a frame which can move vertically and also 95
turn upon its journals or bearings and to which the hides are suspended in a perpendicular position while in the tanning liquor but which when raised will together with the hides tilt to an inclined or horizontal position bringing the hides in a pile 100
substantially as described, and from whence they are readily removed and others attached thereto as herein set forth.

WM. H. HEALD.

Witnesses:

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