

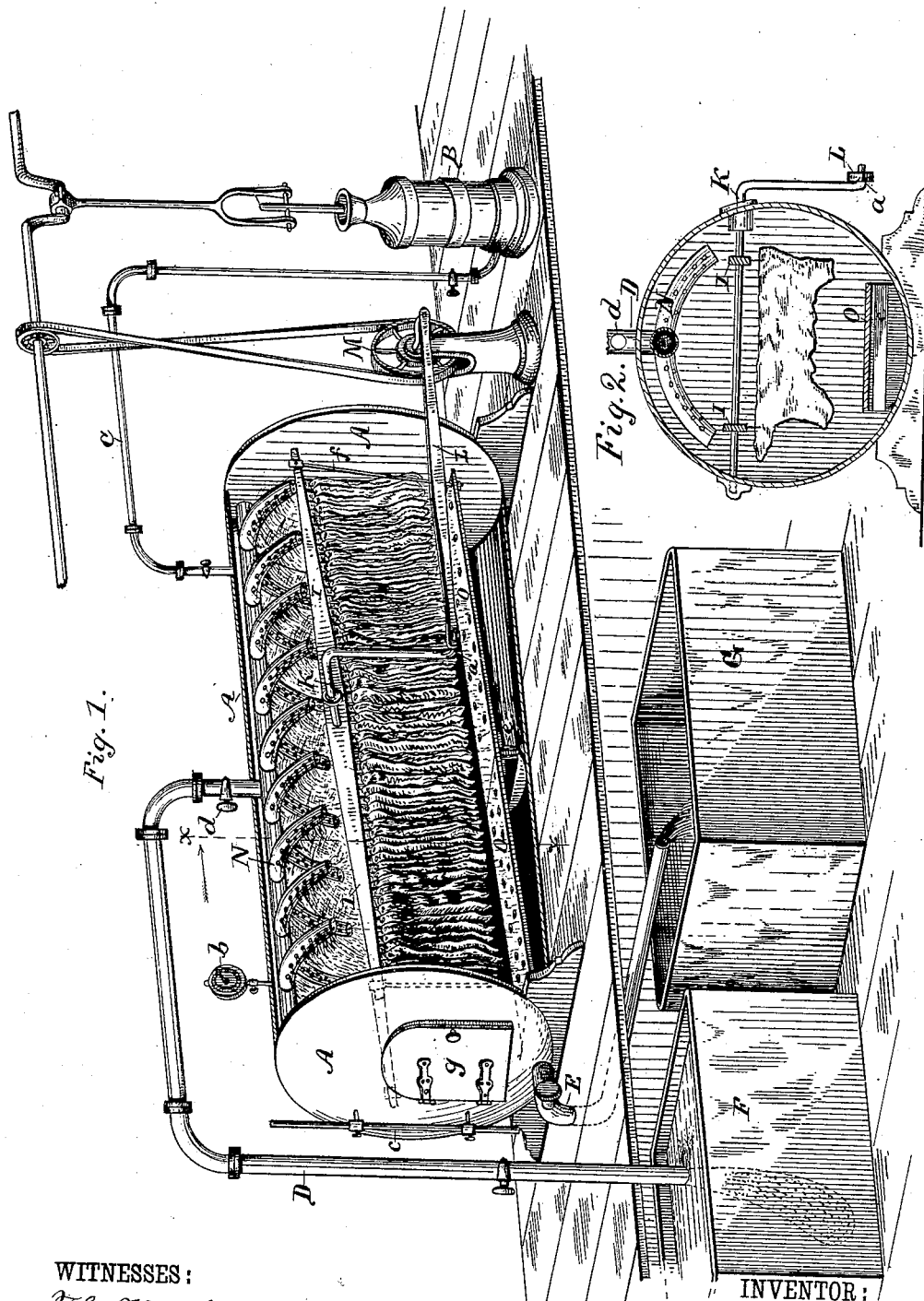
(No Model.)

W. MASEK.

TANNING APPARATUS.

No. 266,174.

Patented Oct. 17, 1882.



WITNESSES :

Thos. Houghton.

Amos H. Hart

INVENTOR:

INVENTOR: *Wenzel Moasek*
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UNITED STATES PATENT OFFICE.

WENZEL MASEK, OF PHILADELPHIA, PENNSYLVANIA.

TANNING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 266,174, dated October 17, 1882.

Application filed August 26, 1872. (No model.)

To all whom it may concern:

Be it known that I, WENZEL MASEK, of Philadelphia, in the county of Philadelphia, in the State of Pennsylvania, have invented a new and Improved Tanning Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the same.

I have obtained Letters Patent No. 118,034 for an apparatus for use in tanning hides *in vacuo*. The present invention is an improvement thereon; and it consists in providing the tank or cylinder for containing the hides and tanning-liquor with a movable footway for use of the workmen in hanging and removing the hides, and which also serves to agitate the tanning-liquor and throw it upon the suspended hides, whereby the operation of tanning is facilitated and hastened.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of my improved apparatus, the cylinder being broken away to show the parts in the interior; and Fig. 2 is a vertical cross-section on line *xx*, Fig. 1.

The letter A indicates the metal cylinder for containing the hides and tanning-liquid.

An air-pump, B, is connected with said cylinder by means of the pipe C, and letters D and E indicate the respective pipes by which the fresh tanning-liquid is taken into the cylinder from vat F and discharged therefrom, when spent, into vat G.

The hides are suspended from a vertically-oscillating frame or rack, I, which is supported continually upon a rock-shaft, K, arranged transversely of the cylinder A, in the upper portion thereof. Said shaft is provided with a crank-arm, *a*, which a pitman, L, connects with a power driven pulley, M, or other suitable motor. The rock-shaft K has its bearings in stuffing-boxes that will exclude the air from the cylinder.

The above-described parts are substantially the same as employed by me in my former invention, and the operation, briefly stated, is as follows: The air is exhausted from cylinder A by means of the pump B until the required vacuum is indicated on the gage *b*, when the pump B is stopped and the tanning-liquid allowed to flow in through pipe D, and is distributed over the hides by a sprinkler, N, so that it will fill the open pores of the hides and

thoroughly permeate the fiber of the latter, thereby converting it into leather of homogeneous quality. When the gage *c* indicates that a sufficient quantity of the liquid has entered the cylinder A the flow is arrested by cock *d* in pipe D.

I will now describe my improvement, and I will premise that in hanging and removing hides in this class of apparatus considerable difficulty, annoyance, and delay have resulted from the want of a proper footway in the bottom of the cylinder whereon the workmen could travel with ease and rapidity without danger of slipping or wetting their feet in the tanning-liquid; and, in the second place, in order that the hides may be perfectly tanned in the shortest possible time, it is necessary the tanning-liquid shall be continuously or, at least, frequently thrown or caused to flow over them. With these ends in view I have devised a single means or device by which both are attained—that is to say, by means of a board or plank, O, which is placed near the bottom of cylinder A and adapted to receive an oscillatory motion, I provide not only a footway for use in hanging and removing the hides, but also a splasher and agitator by which the liquid is thrown upon the hides and also kept in circulation, so that the stronger portion having the greater specific gravity is caused to mingle with the weaker and lighter that tends to remain at the top or float thereon. The aforesaid board or plank O is supported at the middle of its length upon a short fulcrum, *e*, and extends nearly the length of the cylinder A. It is preferably constructed in halves, as shown, and provided with holes to increase the agitation of the tanning-liquid. Each end of the same is connected with the adjacent end of the frame I by means of rods *f f*, so that both said board and frame are held parallel and oscillate together by the means heretofore described—to wit, the rock-shaft K, pitman L, and motor M. The functions of the aforesaid footway and splasher O are more particularly as follows: In filling the cylinder the workmen enter through the end door, *g*, and travel along the way O, which is held fixed in position during that time. The workmen are thus enabled to perform the work with great dispatch and with little danger of slipping and wetting their feet or garments. When the hides have been suspended from the

frame the door *g* is closed, the vacuum produced, the tanning-liquid admitted, and the splashers and frame *O* set in motion, by which it is caused to raise the liquid and throw it
5 upon the hides, so that they are kept constantly wet.

I am aware that the tanning-liquid in a cylinder or box containing suspended hides has been agitated by mechanical means.

10 Having thus described my invention, what I claim as new is—

1. In a tanning apparatus of the class hereinbefore specified, the combination, substantially as shown and described, of the cylinder
15 having a door for entrance and exit and means

for suspending hides therein, the board arranged contiguous to the bottom of said cylinder and fulcrumed or hinged, as specified, and means for oscillating the board in a vertical plane, whereby it is adapted to subserve the
20 functions hereinbefore set forth.

2. The combination, with an oscillating frame adapted for use in suspending the hides, of the oscillating footway and splashers and rods for suspending it from said frame, substantially
25 as shown and described.

WENZEL MASEK.

Witnesses:

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