

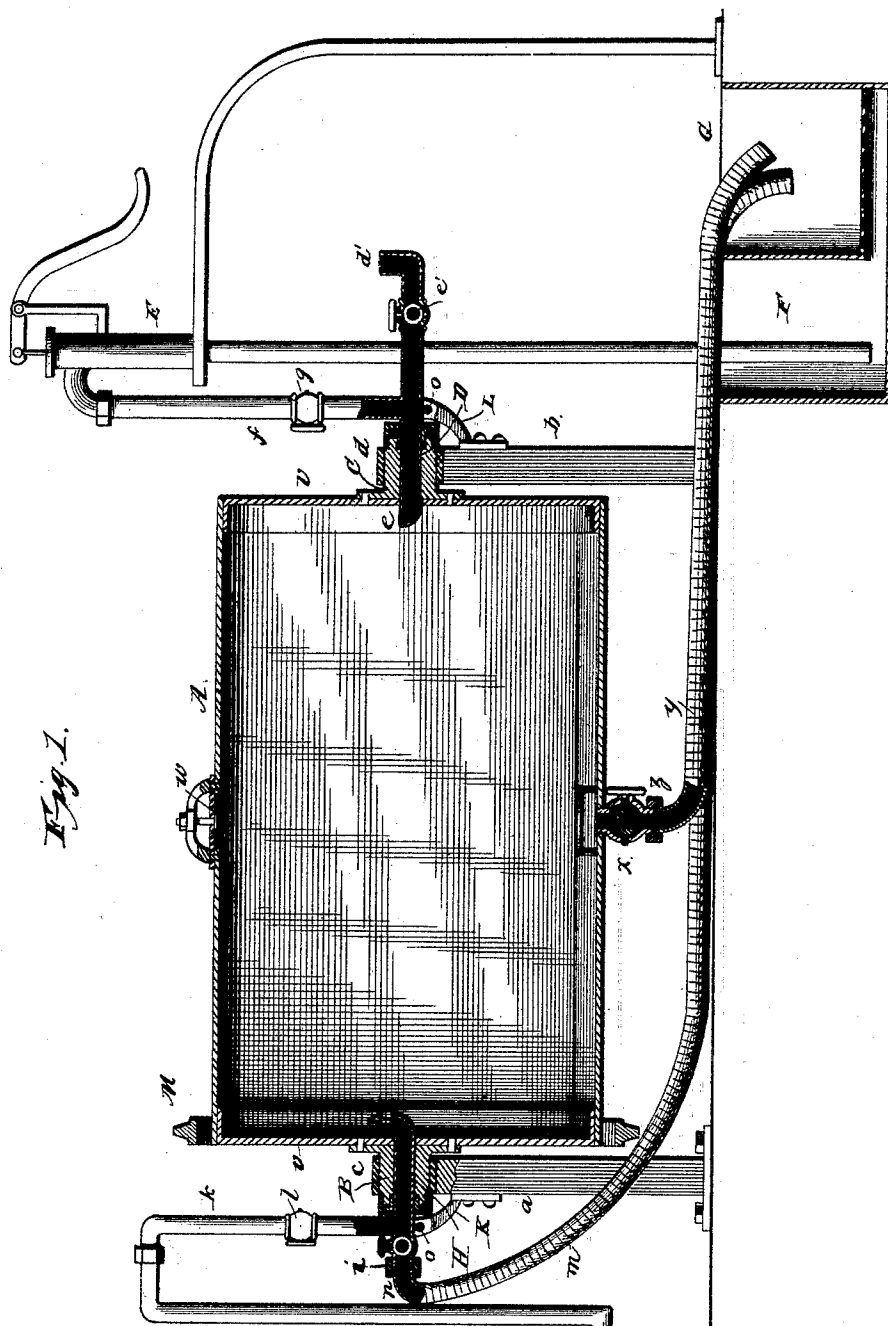
(No Model.)

2 Sheets—Sheet 1.

J. DAVIS.
APPARATUS FOR TANNING.

No. 497,951.

Patented May 23, 1893.



WITNESSES

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L. B. Whitaker

Inventor:
John Davis

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Attorneys

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Fig. 3.

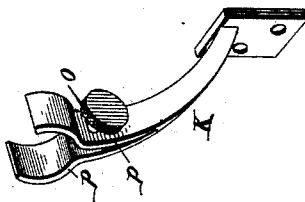
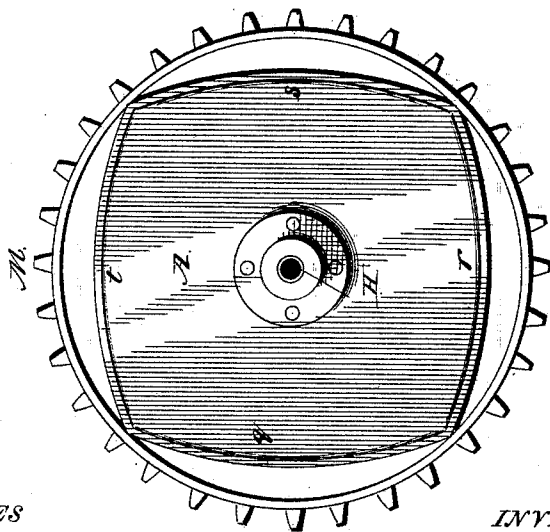


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN DAVIS, OF ALLEGHENY, PENNSYLVANIA.

APPARATUS FOR TANNING.

SPECIFICATION forming part of Letters Patent No. 497,951, dated May 23, 1893.

Application filed July 23, 1889. Renewed November 7, 1891. Serial No. 411,128. (No model.)

To all whom it may concern:

Be it known that I, JOHN DAVIS, a citizen of the United States, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Apparatus for Tanning Hides; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to tanning hides and has for its object certain improvements in apparatus therefor.

The invention will be hereinafter described and particularly pointed out in the claims.

In the accompanying drawings which form part of this specification: Figure 1, represents a side elevation, partly in section; Fig. 2, an end view, and Fig. 3 a perspective of a bracket for supporting and clamping the supply pipe.

Reference being had to the drawings and the letters thereon, A, indicates a revoluble vat, within which hides are suspended in any approved manner, and is provided at each end with a hollow trunnion B, C, supported upon pedestals *a*, *b*, having removable caps *c*, *d*. A pipe D, terminating in an open upturned end *e*, just above the horizontal center of the vat, passes through the trunnion C, and its outer end *d*, is provided with a screen to prevent any foreign matter from being drawn into the vat. The pipe D is provided with a valve *e'*, for cutting off communication with the atmosphere, and with a branch *f*, communicating with a pump E for supplying tan liquor from the junk F of a leaching vat G. The branch *f* is provided with a valve *g* for cutting off communication with the pump E. At the opposite end of the vat A, is a pipe H, passing through the trunnion B, and having an upturned end *h*, a valve *i*, a branch *k*, communicating with a pump I, and provided with a valve *l*. The outer end of the pipe H communicates with a section of hose *m*, by a detachable coupling *n*, for returning a portion of the tan liquor to the

leaching vat G, or the liquor may be transferred to another vat containing hides. The pipes D, and H are supported in brackets K, L, and are prevented from revolving by means of a screw *o*, which draws the spring arms *p*, *p*, of the bracket together and clamps the pipe so that it cannot revolve.

The vat A is made of any suitable material, and is composed of four arc-shaped sides *q*, *r*, *s*, and *t*, curved transversely, and flat heads *u*, *v*, and of sufficient strength for the purpose of tanning in vacuum. This form of the vat possesses two important advantages; first, it accommodates large hides which may be suspended longitudinally or transversely in the vat with very little loss of space, or doubling, or folding of the skins at their ends; second, it prevents collapse of the vat when the air is exhausted therefrom, as each side braces its two adjacent sides by forming a cord thereto.

The vat A is provided with a suitable man-hole and cover *w*, and a cock *x* to which a section of hose *y* is detachably secured by a coupling *z* for drawing off the tan liquor and returning it to the leaching vat.

The trunnions B, C, are each provided with a stuffing box and a gland at their outer ends to prevent the leakage of tan liquor around the pipes D and H; and the air drawn from the vat is discharged through suitable valves (not shown) for the purpose, in the pump.

The vat may be revolved by a chain (not shown) engaging with a sprocket wheel M secured to the vat the couplings *n* and *z* having been previously detached.

When the vat is being filled with tan liquor the valves in the air supply pipes must be closed, and when air is being exhausted from the vat or vats all communication with the pump E and the atmosphere must be cut off, except the discharge passage in the pump I.

I do not herein claim the several appliances and connections for supplying tan liquor and air, and exhausting the air from the vat excepting as specified in the claims.

Having thus fully described my invention, what I claim is—

1. A tanning vat having four arc shaped sides curved transversely, and flat heads, substantially as and for the purpose set forth.

5 2. A tanning vat having four arc shaped sides curved transversely, and flat heads, in combination with hollow trunnions secured to said heads, pipes extending through the

trunnions, and suitable means for supplying ro tan liquor and air, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN DAVIS.

Witnesses:

ADOLPHE H. BÖCKING,
G. EISENBEIS.