

Wallace Fleming, Tanning Machine,

Nº 2,729.

Patented July 20, 1842.

Fig. 2.

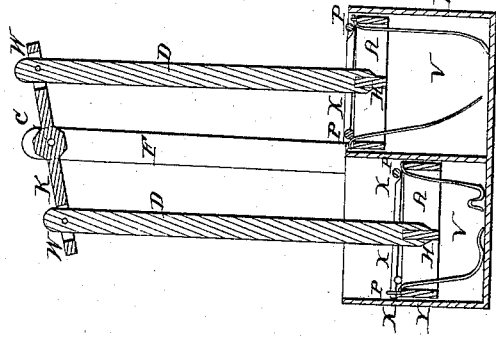
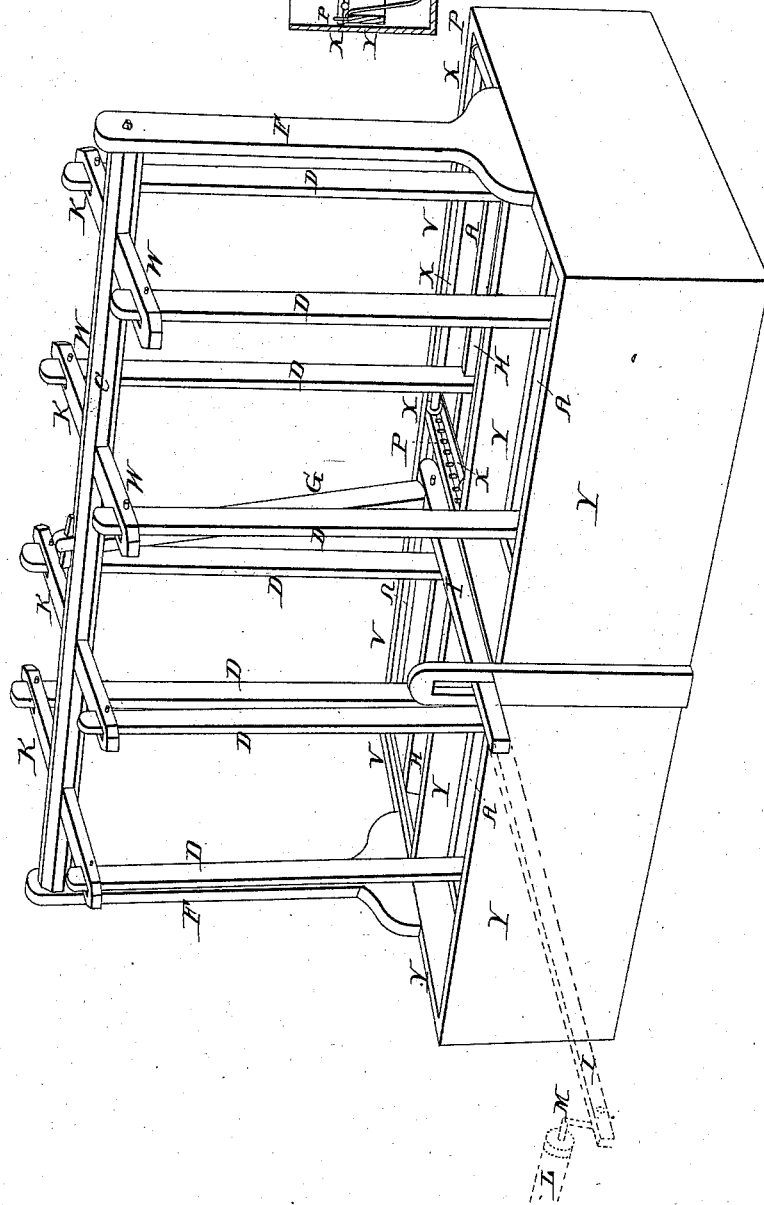


Fig. 1.



UNITED STATES PATENT OFFICE.

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OF SANDISTON TOWNSHIP, SUSSEX COUNTY, NEW JERSEY.

TANNING HIDES BY MACHINERY.

Specification of Letters Patent No. 2,729, dated July 20, 1842.

To all whom it may concern:

Be it known that we, WEBB WALLACE, of Lehman township, in the county of Pike and State of Pennsylvania, and JOSEPH FLEMING, of Sandiston township, in the county of Sussex and State of New Jersey, have invented a new and useful Machine for Managing or Handling Hides During the Process of Liming and Tanning, called "The Tanners' Handler," which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 is a perspective view of the apparatus. Fig. 2 is a transverse section through two vats and frames.

The machine is made of sufficient size to handle the hides simultaneously in several vats V. Each vat is fitted with a rising and falling oblong frame A of nearly the size of the inside of the vat V shaped and arranged so as to move freely up and down in the vat, of any convenient depth. The upper sides of these frames are provided with pins P from which the hides to be tanned or limed are suspended. In Fig. 1 of the drawings only one of the frames is shown with pins. In Fig. 2 two frames are shown with pins. The rest of the frames are however to be furnished in a similar manner. These frames are suspended to the outer extremities of several arms K passed horizontally through a horizontal longitudinal vibrating roller or rock shaft C by means of hanging rods D. The upper ends of these rods are connected with the outer extremities of the arms by pins W or loose joints. The lower ends of the rods are attached to the longitudinal cross timbers H of the aforesaid suspended hide frames A by loose joints which cross timbers are arranged in the middle of the said hide frames. The hides being put on the pins or slit near their edges and suspended to said pins, are held down securely on the said pins by means of cross sticks X inserted into eyes or apertures of the frames A, or the hides may be secured to the frames A in any convenient way.

The vibrating roller C has a gudgeon at each end on which it turns freely in the tops of upright standards or posts F F, which are

placed at the ends of the vats V and support the whole vibrating apparatus with the hides suspended thereto.

An arm or lever G is inserted into the rock-shaft for vibrating or rocking the same projecting downward therefrom having attached to its lower end a pitman or connecting rod I extending to a crank M in the end of a horizontal shaft L turned by any convenient power. Thus by the simple operation of turning the last mentioned shaft L and crank M the rock shaft C is turned to the right and left which raises and lowers alternately the several oblong frames A with the hides suspended therefrom about ten inches in the liquor or tannin keeping them constantly in motion below the surfaces of the liquor causing the hides to be tanned in about a fifth part of the time required in the old process; and with a saving of about one third of the bark, and producing a leather of a superior quality and weighing about ten per cent. more than leather tanned by the old process.

In liming the hides they are handled in a similar manner to that above described.

Any required number of frames may be operated by one crank shaft by connecting the arms and rods by suitable gearing and may be kept in motion night and day by water power which we prefer.

The rising and falling hide-frames A being of the same weight and suspended to the arms K projected equally at right angles from either side of the rock shaft C and the frames with the hides moving in the liquor or tannin, will require but little power to move the apparatus.

What we claim as our invention and which we desire to secure by Letters Patent is—

The use of the machine constructed as before described in the process of tanning leather, for keeping the hides alternately rising and falling in the liquor during the process of tanning leather, as herein set forth.

WEBB WALLACE.
JOSEPH FLEMING.

Witnesses:

WM. P. ELLIOT,
EDMOND MAHER.