

UNITED STATES PATENT OFFICE.

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TANNER'S TOOL.

SPECIFICATION forming part of Letters Patent No. 373,748, dated November 22, 1887.

Application filed April 6, 1887. Serial No. 233,854. (No model.)

To all whom it may concern:

Be it known that I, JAMES McDERMOTT, a citizen of the United States, residing at Middletown, in the county of Orange and State of New York, have invented certain new and useful Improvements in Tanners' Tools; 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 tools employed in the manufacture of leather, commonly called "fleshers." In the accompanying drawings I have shown one form in which I have contemplated applying my invention, and I have fully set forth my invention in the following specification and claims.

In the drawings, Figure 1 is a view of the complete tool. Fig. 2 is an enlarged sectional view of one of the handles, showing the blade in its operative position. Fig. 3 is a similar view showing the blade partly removed. Fig. 4 is a view of the tang. Fig. 5 is a cross-section of the blade on line *x x*, Fig. 2, showing the handle beyond. Fig. 6 is a view of the end of a handle nearest the blade.

In the drawings, A represents the blade of the tool, and B B the handles. The blade A is of the usual form, as shown in Figs. 1 and 5, and is provided at each end with the projection or ear *a*. These projections are made to taper from the handle on one or both edges, and the edges may meet to form a point, if desired. The blade is also provided with the slots or openings *a' a'*, which may be of any desired form. I prefer to make them of semi-circular form, as shown, in order to give a straight bearing-edge nearest the handle.

The handles B B are of the ordinary size and shape, and are hollowed out to receive the tang C. Each handle is provided with the ferrule B' and the sleeve-nut D. The tang is a rod somewhat longer than the handle, and moves easily in a longitudinal direction through the same. It is screw-threaded at one end and fitted with the sleeve-nut D, and is provided at the other end with the short hook or bend *c* and the depressed or recessed portion *c'*, which is to receive the blade. The ferrule B' is of the usual form, and is provided with the slot *b*, which is made with inclined or tapering sides, as shown in Fig. 3. These

inclined sides are made to correspond with the tapering edges of the ear or projection of the blade, and are at such a distance apart that when the ear of the blade is inserted in the ferrule the inclined faces of the ear and of the slot will touch without permitting the end of the blade proper to come in contact with the end of the ferrule.

The sleeve-nut D is provided with a slot, *d*, to receive a key to be used in turning the same, and is also provided with a flange or collar, *d'*, which bears against the end of the handle and enables the tang C to be drawn back into the handle when the nut is revolved. The hook *c* of the tang C is made to fit the slot *a'* of the blade, and the inner surface of the hook engages the straight bearing-edge of the same, so that on turning the sleeve-nut D the tang will draw the blade toward the handle and force the inclined surfaces of the ear and slot together.

The operation of my device is as follows: To remove the blade, unscrew the sleeve-nuts on both handles with a key until the tang can move far enough through the handle to allow the ear *a* of the blade to disengage the slot *b* of the ferrule. The hook *c* can then be removed from the slot *a'* in the blade and the blade entirely removed from the recessed portion of the tang, and hence from the handle. To insert the blade, having the nut D unscrewed sufficiently to allow the tang C to project beyond the ferrule enough to receive the blade in the recessed portion *c'*, insert the hook *c* in the slot *a'* of the blade and press the ear *a* into the slot *b* of the ferrule. Upon tightening the nut D the hook will draw the blade so that the inclined surface of the ear will engage the inclined face *b'* of the slot *b*, thus producing a firm and strong connection. I may prefer to let the tang extend beyond the end of the handle and screw it up with an ordinary nut. I may make the ears *a* and the slots *b* with one inclined and one straight face, in which case the operation will be exactly the same.

It will be readily seen that the use of my invention is not limited to one blade, as a number of blades may be used with one pair of handles, so that a dull blade may be removed and a sharp one inserted without loss of time. So, also, blades for different purposes,

as the "unhairing-blade," the "worker," the "hide-breaker," and others, may be used with the same pair of handles, as they may be easily provided with the ears *a* and the slots *a'*.

5 There are many advantages in constructing these tools in this manner, for in the old method of making them the tangs were riveted or welded to the blade and again riveted to the handles, so that upon the breaking of one of

10 the tangs at the point of riveting or welding, which was always the weakest point, the tool became worthless. Then, too, the tangs were usually divided and embraced the blade, which rendered it difficult to obtain a straight edge

15 when grinding.

I do not limit myself to the exact construction herein shown and described, as many changes may be made in the same without departing from the spirit of my invention.

20 What I claim, and desire to secure by Letters Patent, is—

1. The herein-described flesher, consisting of a blade, handles engaging the blade at each end, and bolts connecting the blade and handle, substantially as set forth. 25

2. The combination, with a flesher-blade, of handles engaging the ends of said blade and bolts passing through said handles and engaging openings in the blade, substantially as described. 30

3. A flesher-blade having ears provided with an inclined side, and openings near said ears, in combination with handles having openings with inclined sides, and a bolt engaging the openings of said blade, substantially as described. 35

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

JAMES McDERMOTT.

Witnesses:

D. E. CHESEBROUGH,
D. W. VAN ZANDT.