R. & H. Brackett,

Dressing Morocco,

No. 3,957, Patented Mar. 15, 1845.

Fig: 1.

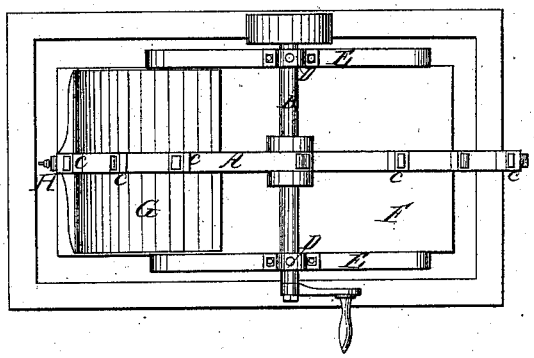
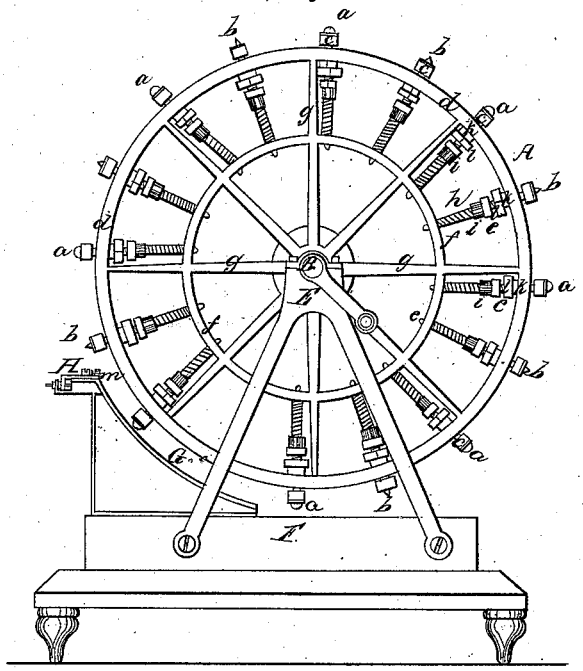


Fig: 2.



UNITED STATES PATENT OFFICE.

R. BRACKETT, OF BOSTON, AND H. BRACKETT, OF WOBURN, MASSACHUSETTS.

DICING AND POLISHING LEATHER.

Specification of Letters Patent No. 3,957, dated March 15, 1845.

To all whom it may concern:

Be it known that we, RUFUS BRACKETT, of Boston, in the county of Suffolk, and HENRY BRACKETT, of Woburn, in the county of Middlesex, State of Massachusetts, have invented certain new and useful Improvements in Machinery for Dicing and Polishing Morocco Leather, of the construction and operation of which the following description and accompanying drawings taken together constitute a full and exact specification.

Figure 1, of the said drawings, represents a top view, and Fig. 2 a side elevation of a machine, embodying our improvements.

It has been customary heretofore, in the manufacture of morocco leather, to employ separate machines for performing the operations of dicing and polishing it—that is to say, the polishing balls have been affixed to one wheel and the dicing tools to another.

Our improvement consists in arranging upon one wheel A, (Figs. 1, 2), a series of polishing or smoothing balls,—(*a*, *a*, *a* &c.) and another of dicing tools (*b*, *b*, *b*, &c.), each of the said polishing balls being followed and preceded by a dicing tool, and each of the said balls or tools, being confined within one of a series of metallic sockets, (*c c* and *c*) which extends beyond the periphery of the rim (*d*), of the wheels, and is attached to a shank or rod (*e*), which passes and moves through the rim, and another concentric ring (*f*), arranged between the arms or spokes (*g g* &c.), as seen in Figure 1. Each of the said dicers and polishers, is forced or pressed forward by one of several wound helical springs (*h h* &c.), one end of which rests against the ring (*f*,) and the other against a nut (*i*), screwed upon the shank (*e*,), before mentioned. The said shanks have each two other nuts (*k*, *l*,) screwed upon them between the nut (*i*) and the rim of the wheel, the forward nut bearing against the said rim. The object of the rear nut (*l*), is simply to keep the nut (*k*) in position upon the shank, the forward nut being, as it were, a shoulder upon the shank, which, when in contact with the inner side of the rim of the wheel, prevents the dicing or polishing tool, as the case may be, from being pressed forward by the action of the spring upon its shank. The wheel thus constructed and provided with dicing and polishing tools, is mounted upon a horizontal shaft B, whose journals—are supported in bearings (D, D,) on the top of the standards E, E, extending upward from a bed piece or sill F. The said wheel is to be revolved by hand or other suitable power, applied thereto, in such manner as convenience may dictate, and the said wheel is to operate in connection with a curved inclined metallic table G, as other dicing or polishing wheels do.

The dicing tools are usually made of lignumvitæ or other very hard wood, and require to be sharpened or recut, as often as they become too much worn or dulled by use. For this purpose, it has been customary to remove them from their sockets, and repair them by hand, often at great expense. Our improvement in effecting the recutting of them, consists in arranging on the top of the curved tablet G, a small frame H, which has a cutting tool *m*, screwed upon its end adjacent to the wheel, and is confined or adapted to the table G, in such manner as to be readily moved toward, or from the wheel at pleasure, and thus bring the cutting tool in contact with the dicers as the wheel is revolved. Thus, whenever the dicers become dulled or worn by use, it is only necessary to force the cutting tool toward and against them, while the wheel is in motion, and they will be regularly and properly retrimmed or cut over by the same; thereby rendering the removal from their sockets unnecessary. When the said operation is performed, or whenever the dicers are used, in order to grain a skin, the polishers are to be forced back, so as not to come into contact with the skin upon the table G, as the wheel is revolved. They may be held back, by inserting small pieces of leather or other suitable substance between the nuts *k*, of their shanks and the rim of the wheel. So, when the polishers are used, the dicers should be similarly forced or confined back, so as not to come into contact with the leather.

We do not claim a wheel, having a series of dicing tools alone, applied to it, as heretofore made, or one having a series of polishing tools alone,— but

That which we do claim is—

1. The arranging of a series of dicers and one of polishers upon one wheel, so as to

be operated with respect to each other, substantially as described.

2. And furthermore, we do not claim the use of a tool for cutting or repairing the dicing tools, but that which we do claim is, the arranging and applying such a tool (or the tool *m*,), upon the top of the curved table G, in such manner as to admit of its being readily forced forward against the dicers, at any time whenever necessary for the purpose of cutting them, as hereinbefore described.

In testimony whereof, we have hereto set our signatures, this third day of February A. D. 1845.

RUFUS BRACKETT.
HENRY BRACKETT.

Witnesses:
R. H. EDDY,
GEO. H. BAILEY.