

A. HAWVER.  
LEATHER ROLLING-MACHINES.

No. 194,906.

Patented Sept. 4, 1877.

Fig. 1.

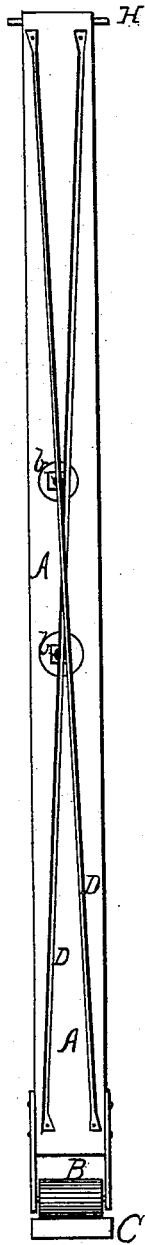
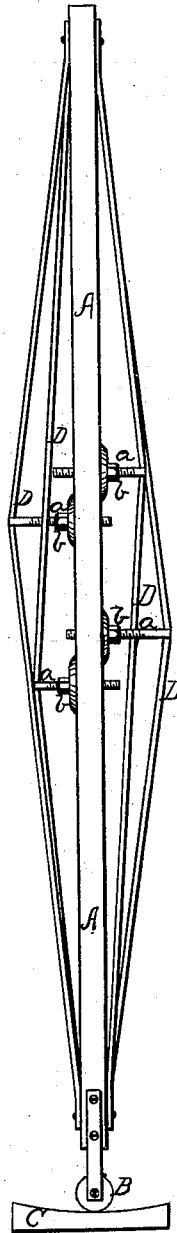


Fig. 2.



Witnesses.

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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN LEATHER-ROLLING MACHINES.

Specification forming part of Letters Patent No. 194,906, dated September 4, 1877; application filed June 14, 1877.

*To all whom it may concern:*

Be it known that I, AMENZO HAWVER, of the town of Union, in the county of Broome and State of New York, have invented certain Improvements in the Construction of Vibrators for Rolling or Hardening Sole-Leather, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, in which—

Figure 1 is a front elevation; Fig. 2, a side elevation.

The object of this invention is to prevent the roller from marring, cutting, or otherwise injuring the leather while the vibrator is in operation, for if the roller at the end is not kept perfectly true it will damage the leather by rolling unevenly; and the invention consists in so bracing the vibrator as to keep it from warping, and thus secure a true movement and action from the roller.

In the drawings, A represents the wooden vibrator, which swings from the top at H; B, the roller, at the bottom, set in metal hangers connecting the roller with the vibrator A. C represents the concave roller-bed, on which the leather is laid, and on which the roller operates.

To keep this wooden vibrator A straight, I attach metal strain rods or braces D D, two on a side, and attached at each end, and crossing each other in the center, as shown in Fig.

1, where they are kept at a proper tension by screw strain-bolts *a a a a*, which are adjusted by the nuts *b b* up or down.

These rods D D are attached at the ends by being hooked into the wood of the vibrator, and there held by bolts, or otherwise fastened. The tops of the strain-bolts are made with recesses or eyes to hold the strain-bolts therein.

The advantages of this construction are that by tightening (or loosening) the bolts *b*, the rods D D will stiffen or relax, and keep the vibrator from warping or twisting, and also keep the roller always accurately adjusted at right angles to the bed C, and thus do away with the usual jarring and trembling of the vibrator. This prevents the marring or cutting of the leather, as before stated, or other injuries common to the ordinary vibrators.

I claim—

In combination with the wooden vibrator A and roller B, the metal strain-rods D D, screw-bolts *a a*, and adjusting-nuts *b b*, substantially as and for the purpose set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

AMENZO HAWVER.

Witnesses:

T. H. PARSONS,  
J. R. DRAKE.