

H. ROYER.

MACHINES FOR TREATING RAW-HIDE.

No. 172,346.

Patented Jan. 18, 1876.

Fig. 1

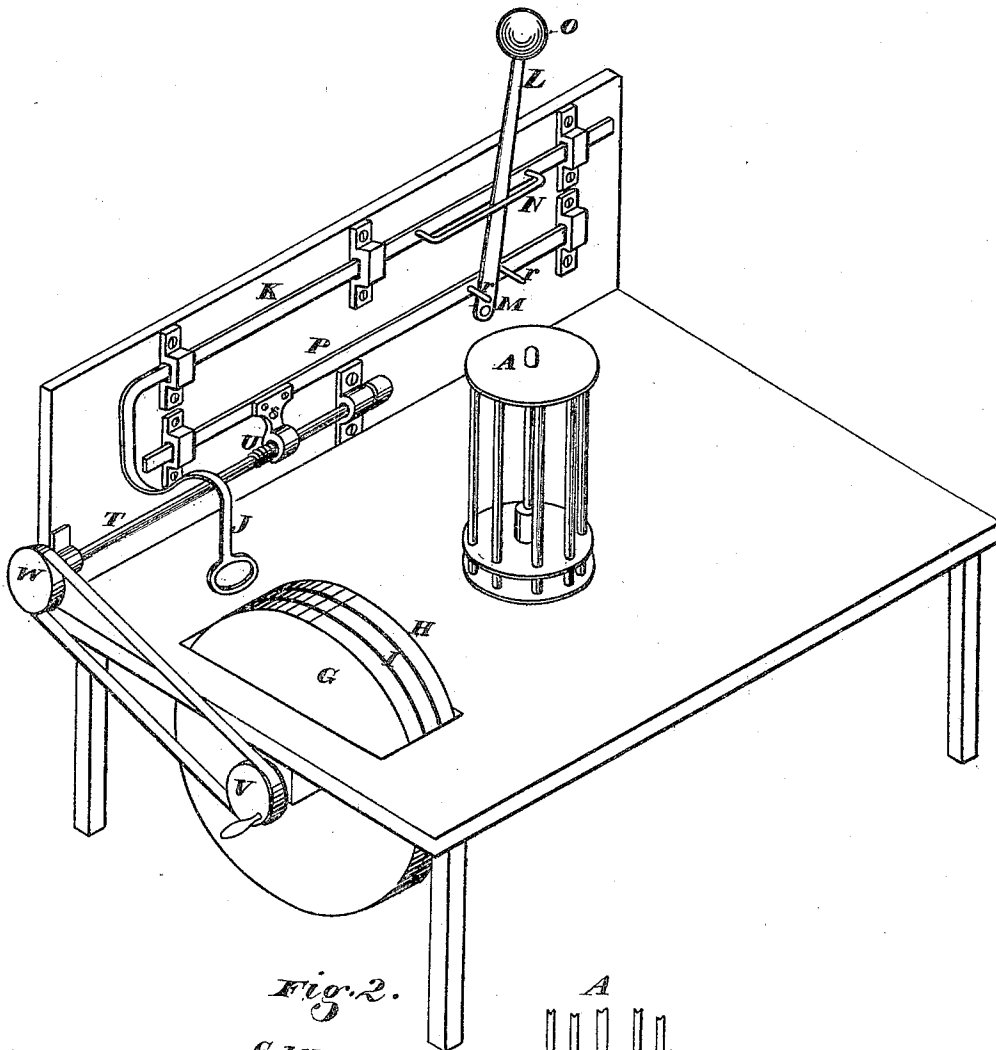
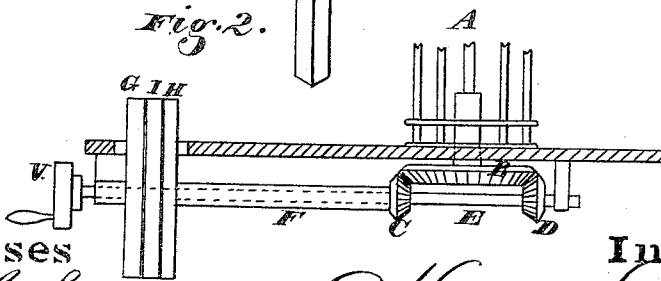


Fig. 2.



Witnesses

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IMPROVEMENT IN MACHINES FOR TREATING RAWHIDE.

Specification forming part of Letters Patent No. 172,346, dated January 18, 1876; application filed November 15, 1875.

To all whom it may concern:

Be it known that I, HERMAN ROYER, of San Francisco city and county, State of California, have invented an Attachment for Rawhide-Fulling Machine; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention without further invention or experiment.

The object of my invention is to provide an improvement in a rawhide-fuling machine for which Letters Patent were granted to me; and it consists in an automatic device by which I am enabled to run the machine in one direction for a sufficient length of time, and then reverse it, this process continuing automatically until the leather is finished.

Referring to the accompanying drawing for a more complete explanation of my invention, Figure 1 is a perspective view of my device. Fig. 2 is a side elevation.

In the present case I have shown my machine as operated by belts; but it will be seen that gears or friction-couplings could be used, if desired, and the action of my machine be still automatic.

A is the drum of a machine, which I employ for fulling rawhides or forming it into leather.

This machine is more fully described in Letters Patent granted to me June 22, 1869, No. 91,772, and Letters Patent granted to myself and L. Royer, March 12, 1868, No. 77,920, and its central shaft has a bevel-gear, B, upon its lower end. The pinions C and D mesh with this gear at opposite sides, one of them being mounted upon a solid shaft, E, which passes through the hollow shaft F of the other, and has the driving-pulley G keyed to it. The driving-pulley H is keyed to the hollow shaft F, and the loose pulley I runs between them. It will be seen that when the belt from the driving-pulley turns one of the pulleys, the machine will operate in one direction, and when the belt is shifted to the

other pulley it will operate in the opposite direction. In order to make this action automatic I employ a belt-shifter, J, which is a part of, or attached to, a sliding bar, K. This bar is operated by a lever, L, which is hinged or pivoted at M, and works in a slot or link, N, upon the bar, so that when turned from side to side it will slide the bar in one direction or the other. A weight, O, is secured to the top of the lever L, so that as soon as it passes the center it will fall by its own weight and shift the belt suddenly.

In order to operate this lever I have fitted another sliding bar, P, to move below and parallel with the bar K, and this bar has pins *r r* upon each side of the lever L, so that when the bar is moved it will shift the lever. The bar P has a nut, S, projecting downward from it, and a horizontal shaft, T, has a screw, U, formed upon it, so as to fit the nut S. A belt from the pulley V upon the shaft E extends to the pulley W upon the shaft T, and by its action the screw will be turned in one direction until the lever L has passed the center and fallen over, so as to shift the belt to the other pulley, when the whole mechanism will be moved in an opposite direction until the screw has again moved the bar and reversed the lever. By this construction I am enabled to make my machine automatic in its action, and it can be left until the work is entirely finished. A frictional coupling or reversing-gear might be used in place of a belt, but they would not work as well.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

In combination with the drum A of a rawhide-fuling machine, operating to twist the leather alternately in one direction and the other, a shifting device for the purpose of making the operation automatic and continuous, substantially as described.

HERMAN ROYER.

Witnesses:

GEO. H. STRONG,
JNO. L. BOONE.

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