J. LEWIS.

Machine for Rounding Leather.

No. 168,403. Patented Oct. 5, 1875.

Fig. 1.

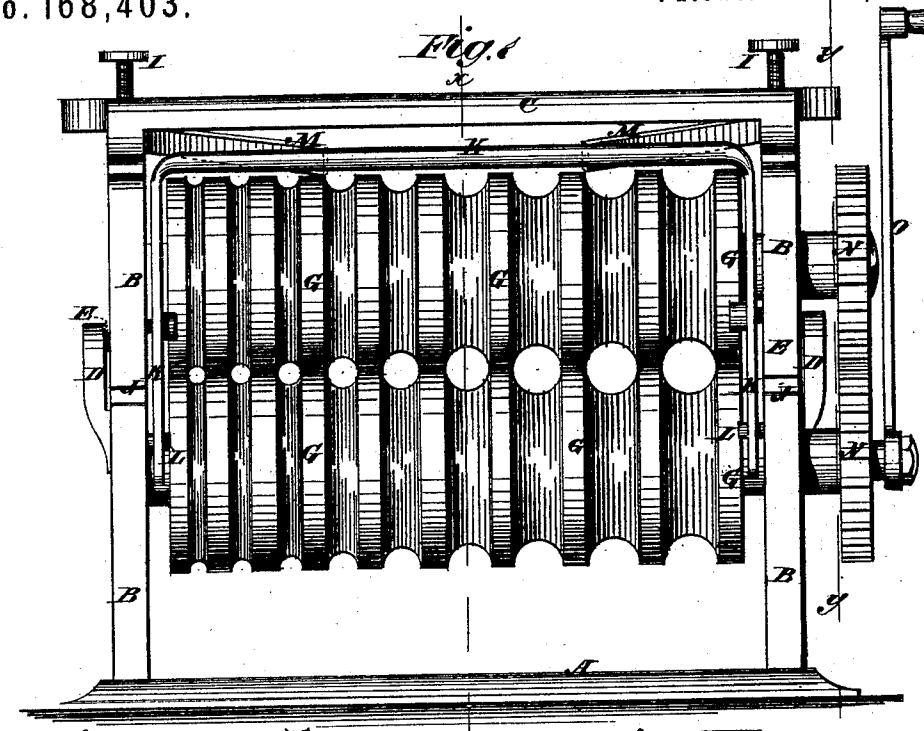


Fig. 2.

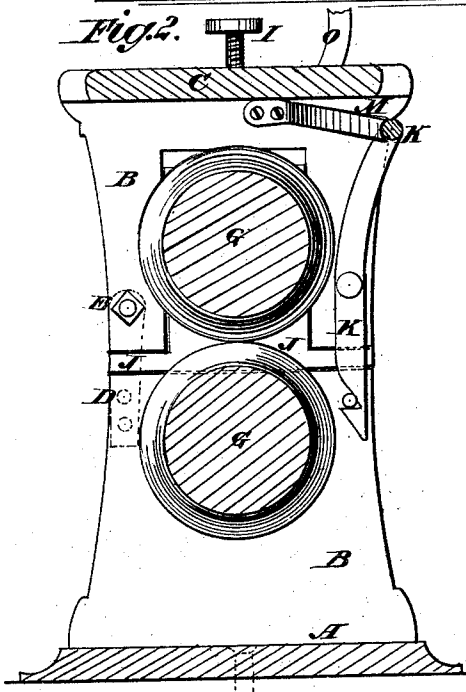
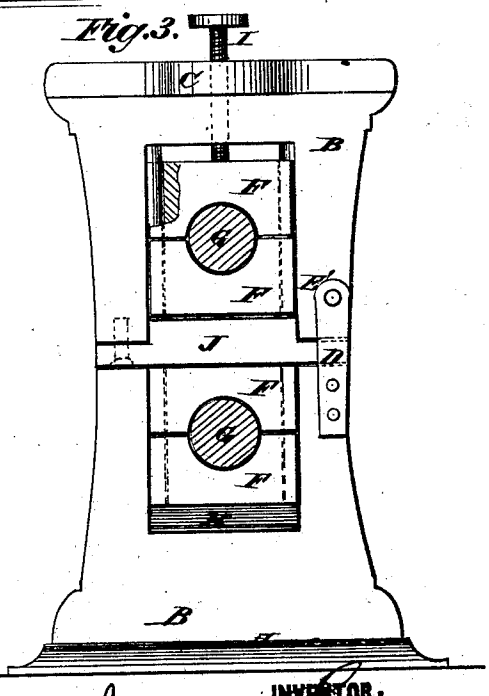


Fig. 3.



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JAMES LEWIS, OF PRATTSVILLE, NEW YORK.

IMPROVEMENT IN MACHINES FOR ROUNDING LEATHER.

Specification forming part of Letters Patent No. **168,403**, dated October 5, 1875; application filed July 31, 1875.

To all whom it may concern:

Be it known that I, JAMES LEWIS, of Prattsville, Greene county, New York, have invented a new and useful Improvement in Machines for Rounding Leather, of which the following is a specification:

Figure 1 is a front view of my improved machine. Fig. 2 is a vertical cross-section of the same, taken through the line *x x*, Fig. 1; and Fig. 3 is an end view of the same, partly in section, through the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this machine is to furnish an improved machine for rounding leather for reins, tugs, and other purposes, which shall be simple in construction, effective in operation, and convenient in use, allowing the leather to be put in and taken out easily and quickly.

The invention consists in the combination of the hinges, the bent catch-rod, the catch-pins, and the springs with each other, and with the parts of the standards to which the grooved rollers are pivoted; and in the combination of the bars with the lower ends of the upper parts of the standards, and with the bearings of the upper roller, as hereinafter fully described.

A is the base or bed plate of the machine, which is designed to be secured to a bench or other support, and to the ends of which are secured the lower ends of the standards B. The upper ends of the standards B are connected and held in their proper relative positions by a cross bar or plate, C. The standards B are made in two parts, as shown in Figs. 1, 2, and 3. To the rear upper corners of the lower parts of the standards B are attached upwardly-projecting arms D, in the upper parts of which are formed holes to receive pivots E, attached to the upper parts of said standards B a little above their rear lower corners, so as to hinge the parts of the standard B to each other in such a way that the upper part of the frame A B C may be turned back. The adjacent ends of the parts of the standards B are slotted to receive the bearings F for the rollers G. The rollers G have a series of graduated, half-round ring-grooves formed in them, the grooves of the two rollers forming round apertures of different sizes for rounding the leather. The bearings F for the lower roller G rest upon rubber blocks H, to give the necessary yield to the said rollers. I are set-screws, which pass down through the top plate C, and the forward ends of which rest against the top of the bearing F of the upper roller G, and enable the said upper roller to be adjusted close to, or at any desired distance from, the lower roller. To the lower ends of the upper parts of the standards B are attached bars J, to keep the bearings of the upper roller G in place when the upper part of the machine is turned back. K is a rod, placed a little below and parallel with the forward edge of the top plate C. The end parts of the rod K are bent at right angles, pass down along the inner side of the forward edge of the standards B, and are pivoted to the upper parts of said standards near their lower front corners. The inner sides of the ends of the arms of the rod K have notches formed in them to catch upon pins L, attached to the lower parts of the standards B near their upper front corners, to lock the parts of the frame together when in an erect position. M are springs attached to the upper parts of the standards B, or to the top plate C, and the free ends of which rest against the rod K. The lower ends of the arms of the rod K are beveled off, so as to catch upon the pins L automatically when the upper part of the frame A B C is brought into an erect position. To the journals of the rollers G are attached two gear-wheels, N, the teeth of which mesh into each other, so that one of said rollers G may be revolved by the other. To the journal of one of the rollers G is attached a crank, O, by means of which the said rollers G are revolved.

In using the machine the rod K is pressed back, and the upper part of the machine is turned back upon the hinges D E. The leather is then inserted in the proper groove, the frame is closed and locked, and the crank is operated, carrying the leather through between the rollers, and bringing it to an exact and uniform round, leaving its surface smooth and unrubbed.

In case the leather be too full it may be brought to the proper size by passing it back and forth through the groove, setting the screws I down a little each time.

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

1. The combination of the hinges D E, the bent catch-rod K, the catch-pins L, and the springs M with each other, and with the parts of the standard B to which the grooved rollers G are pivoted, substantially as herein shown and described.

2. The combination of the bars J with the lower ends of the upper parts of the standards B, and with the bearings F of the upper roller G, substantially as herein shown and described.

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Witnesses:
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