

L. R. JENKINS.

LEATHER-DRESSING MACHINERY.

No. 176,535.

Patented April 25, 1876.

Fig. 1

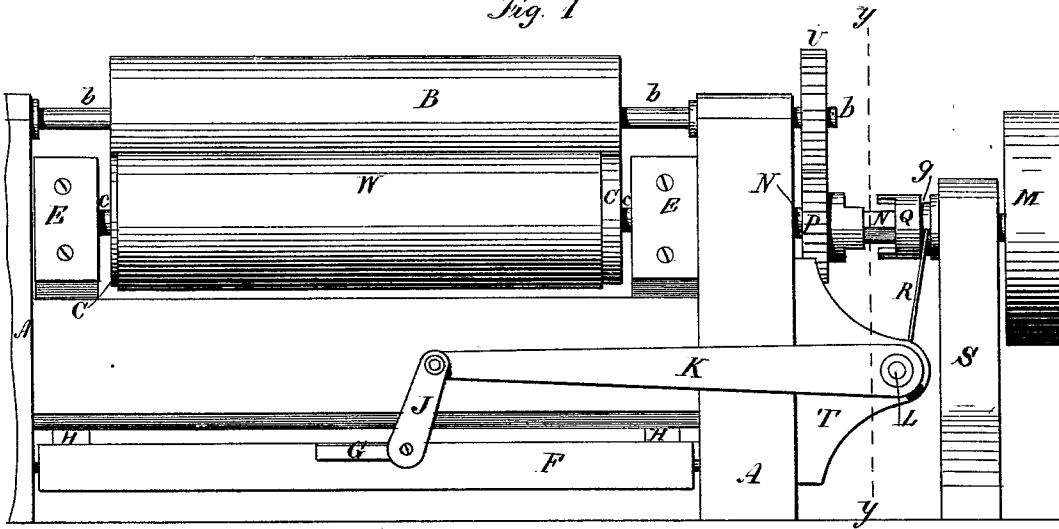


Fig. 5.

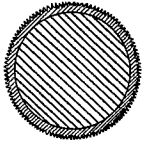
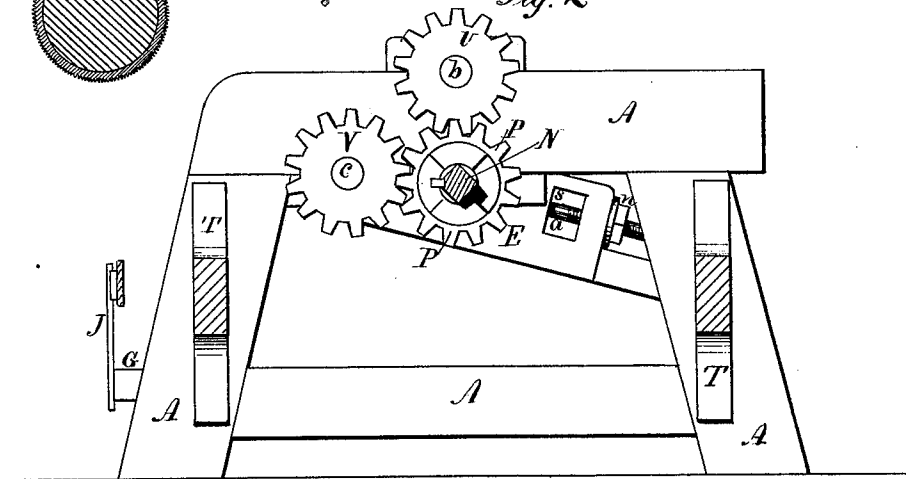


Fig. 2



Witnesses

Granville Lewis
C. M. Parks

Inventor.

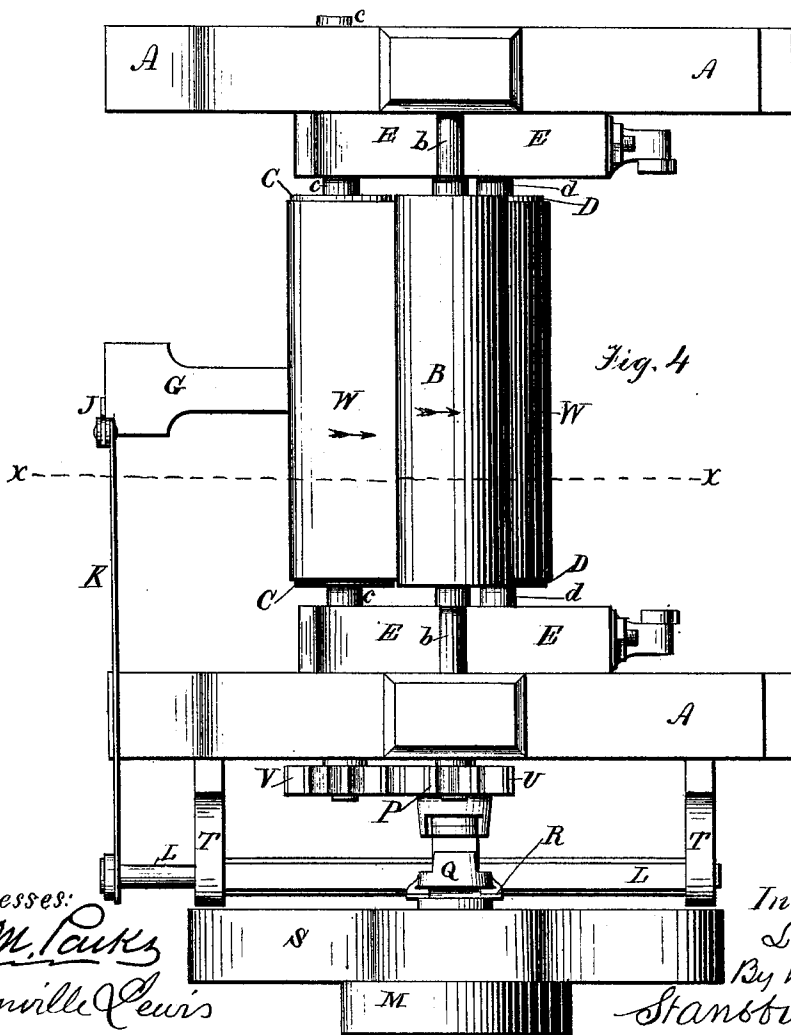
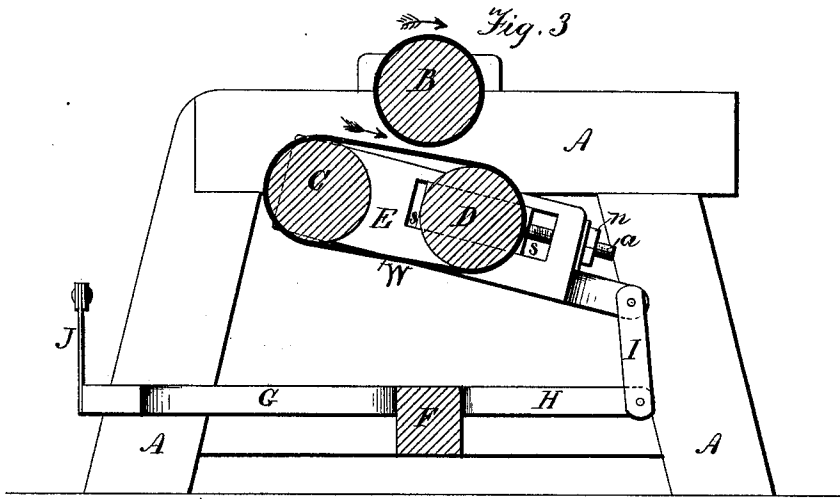
L. R. Jenkins,
By his Attorney
Stansbury Sellum

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UNITED STATES PATENT OFFICE.

LEWIS R. JENKINS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
HIMSELF AND MCNEELY & CO., OF SAME PLACE.

IMPROVEMENT IN LEATHER-DRESSING MACHINERY.

Specification forming part of Letters Patent No. **176,535**, dated April 25, 1876; application filed
March 13, 1876.

To all whom it may concern:

Be it known that I, LEWIS R. JENKINS, of Philadelphia, in the State of Pennsylvania, have invented a new and Improved Machine for Pebbling, Graining, and Boarding Leather; and I do hereby declare the following to be a full and correct description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a front elevation of the machine. Fig. 2 is a transverse vertical section on line *yy* of Fig. 1. Fig. 3 is a similar section on line *xx* of Fig. 2. Fig. 4 is a top view of the machine. Fig. 5 is a transverse section of the brass-boarding roller.

The same part is marked by the same letter of reference wherever it occurs.

My invention consists in the peculiar construction of a machine for graining, pebbling, and boarding leather, in which the leather to be operated upon is subjected to the conjoint action of an elastic endless belt and a rubber-covered roller, moving at equal speed in opposite directions, to produce in the folded skin the peculiar rubbing and rolling movement upon itself necessary to effect the desired softening, pebbling, or graining, the leather being subjected to as many repetitions of the operation as may be required. It further consists in the substitution for the upper roller used in the foregoing operation of a metallic cylinder or roller, grooved as in a brass board, for the purpose of producing upon the surface of the leather the pattern or effect known as "brass-boarding," all as hereinafter more particularly set forth.

In the accompanying drawings, A marks a stout frame, which supports the operative parts of the machine. In this frame is hung a roller, B, on one end of whose shaft *b* is fixed a toothed pinion, U. C and D are a pair of rollers, supporting an endless belt, W, of rubber or other suitable elastic or flexible and tenacious material. The shaft *c* of roller C is hung in journal-boxes on the side framing, and on said shaft, on either side of said roller, are hung the swinging arms E E, which support the journals of roller D. The journal-boxes of roller D are adjustable in slots *s* in arms

E, by means of screws *a* and set-nuts *n*. The arms E are connected, by links I I, to arms H H, projecting from rock-bar F, pivoted to the lower part of the frame. To this bar is attached a treadle, G, by means of which the rock-bar and the arms E E are vibrated at pleasure by the operator of the machine. To treadle G is attached an arm, J, pivoted to arm K, attached to the end of rock-shaft L, which rocks in brackets T T, attached to one end of the frame. This rock-shaft carries a fork or Y, which engages with a groove, *g*, in the loose jaw Q of a clutch, and, as the shaft vibrates, couples or uncouples the loose and the fixed jaws of the clutch. The fixed jaw projects from the face of a toothed pinion, P, which turns on the cylindrical part of the shaft N of the main driving-pulley M. Pinion P engages with pinion U on the end of shaft *b* of roller B, and pinion V on the end of shaft *c* of roller C, and when rotated imparts motion to both of those pinions. M is the main pulley, to which the driving-belt is applied. Its shaft N passes through the head or stanchion S, and into the end framing. That part of this shaft on which the loose clutch-jaw Q slides is made square, and that part of it on which the pinion P turns is cylindrical, so that the rotation of pulley M and its shaft N will not impart rotation to pinion P except when the clutch-jaw Q engages with the jaw on the face of that pinion.

It will be observed that roller B is driven in a direction opposite to that in which the upper surface of belt W moves, but at the same speed, because the pinions U and V are of the same size, and driven by the same pinion.

The operation is as follows: The leather to be operated upon is folded with the flesh-side outward, and placed on the endless belt, the crease being introduced into the bite of the belt and roller B. The operator then depresses the treadle-board and sets the machine in motion, raising the belt into such proximity to the roller as to give the necessary degree of pressure to the leather. The conjoint action of the surfaces of the belt and roller, moving in opposite directions at the same speed, causes the leather to be creased and rolled upon itself

under the requisite degree of pressure to produce the desired effect of softening, pebbling, or graining, the operation being repeated as often as may be desirable to perfect the result.

To produce the effect known as "brass-boarding," I substitute for the rubber-covered roller B a metallic roller or cylinder grooved like a brass board, as shown in Fig. 5, which makes the desired impression upon the leather passed beneath it on the belt W.

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

1. In a machine for graining, pebbling, and boarding leather, the combination of the endless belt W with the roller B, the former being caused to traverse in a direction opposite to that in which the roller is caused to revolve, for the purpose of acting on the folded leather in the manner described.

2. The combination of the roller B with the rollers C D, swinging arms E E, and belt W, together with mechanism for operating the same in the manner set forth.

3. The combination of the arms E E, links I I, arms H H, rock-bar F, and treadle G, in the manner and for the purpose specified.

4. The combination of the treadle G, arms J K, rock-shaft L, fork R, clutch Q, and pinions P U V, as and for the purposes stated.

The above specification of my said invention signed and witnessed at Philadelphia this 1st day of March, A. D. 1876.

LEWIS R. JENKINS.

Witnesses:

J. J. BUCHEY,

WM. S. DUNLAP.