

J. G. Curtis,

Rolling Leather.

No. 101234.

Patented Mar. 29, 1870.

Fig. 1.

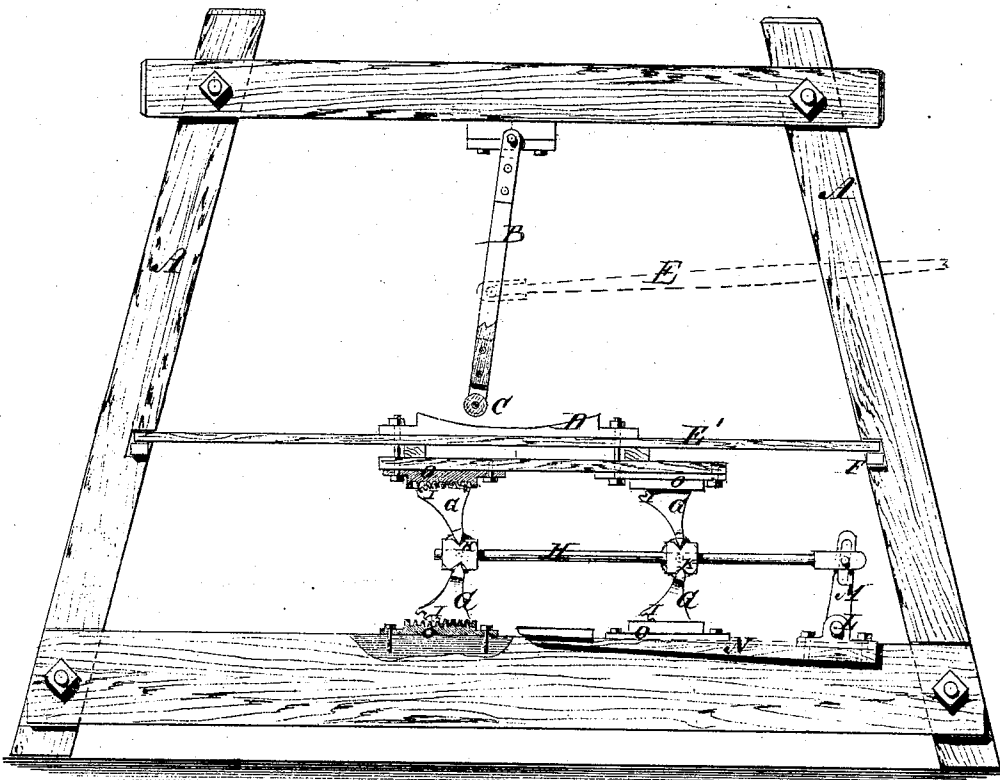
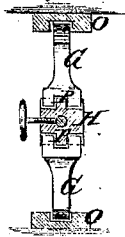


Fig. 2.



Witnesses:

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# United States Patent Office.

JOHN G. CURTIS, OF EMPORIUM, PENNSYLVANIA.

Letters Patent No. 101,234, dated March 29, 1870.

## IMPROVEMENT IN ROLLING-MACHINE FOR LEATHER.

The Schedule referred to in these Letters Patent and making part of the same

### To all whom it may concern :

Be it known that I, JOHN G. CURTIS, of Emporium, in the county of Cameron and State of Pennsylvania, have invented a new and improved Leather-rolling Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings forming part of this specification.

This invention relates to that class of leather-rolling machines which work with toggle or knuckle-joints, and consists in certain improvements thereon, which will be particularly specified hereinafter.

Figure 1 is a side elevation of my improved machine with a part represented in section, and

Figure 2 is a transverse section through the rod or bar for operating the rocker-arms.

Similar letters of reference indicate corresponding parts.

- A is the frame of the machine;
- B the pendent vibrating roller support;
- C the roller;
- D the concave bed; and

E the connecting-rod, by which motion is communicated to the roller support and rollers.

I place this rolling bed D on a springing support, E', arranged in the parts of the frame for adjustment higher or lower, as required, as shown at F, and under this support I arrange the eccentric rocker-arms G, in one or more pairs, and the reciprocating bar H, as clearly shown in the drawings, for raising the bed D, and its support E toward the roller by springing the said support when required for varying the pressure on the leather placed on the bed D, and subjected to the action of the roller. These arms G have eccentric curved bases I, and the ends opposite the said bases are connected to the rod or bar H in notches K, which serve as the axis or the rocking motion of the said arms, which axis is moved to and fro when the bar H is moved, causing an upward movement to the support B, as the greater radii of the arms are brought to coincide with the line perpendicular to the rod H.

The downward movement of the support is caused by the elasticity of the bed and the force of the roller

and roller support on the bed D or the leather thereon.

For moving this rod or bar H back and forth, I have provided the rocker-shaft L, arm M, and treadle-lever N, connected thereto, so that the operator may force the bed D upward at pleasure by placing his foot on the treadle.

The arm M is provided with a slot for the connecting-pin of the rod or bar H, to admit of the necessary radial movement of the pin with the said arm.

To prevent the rocker arms from slipping on their bases, they are serrated, notched, or provided with cogs or teeth, and plates O, with recesses in the faces, for the reception of the curved bases of the arms, and with notches, serrations or cogs corresponding to those on the arms, one attached to the support E and the permanent bed, and suitably arranged to hold them in place, both laterally and in the direction in which they rock. The said arms are  $\Lambda$ -shaped on the other end, where they fit the notches in the bar, and these points are notched, as shown in fig. 2, to fit bars P, extending across the notches, which prevent the escape of these ends laterally.

The mode of construction is very cheap and simple, requiring little or no fitting in putting together the parts being suitably formed by casting.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

1. The combination of the treadle, rock-shaft, slotted arm M, reciprocating rod H, eccentric cogged arms G, and corresponding rack-plates O, all arranged as set forth.

2. The eccentric knees G, having their sharp ends located in the notches *k* of movable bearing-blocks on the rod H, whereby they are allowed free and easy play, while they are entirely prevented from slipping.

The above specification of my invention signed by me this 19th day of November, 1869.

JOHN G. CURTIS.

Witnesses:

JNO. DOY,  
A. J. MOORE.