J. E. Merritt,

Leather Machine,

No. 52,871, Patented Feb. 27, 1866.

Fig. 1.

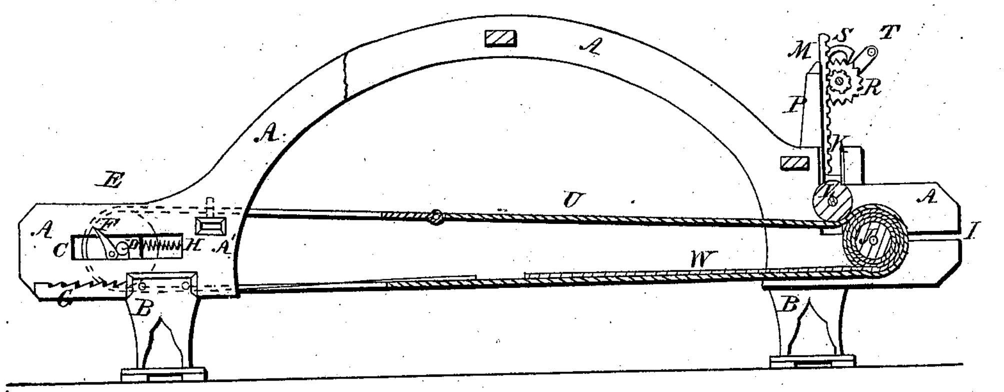
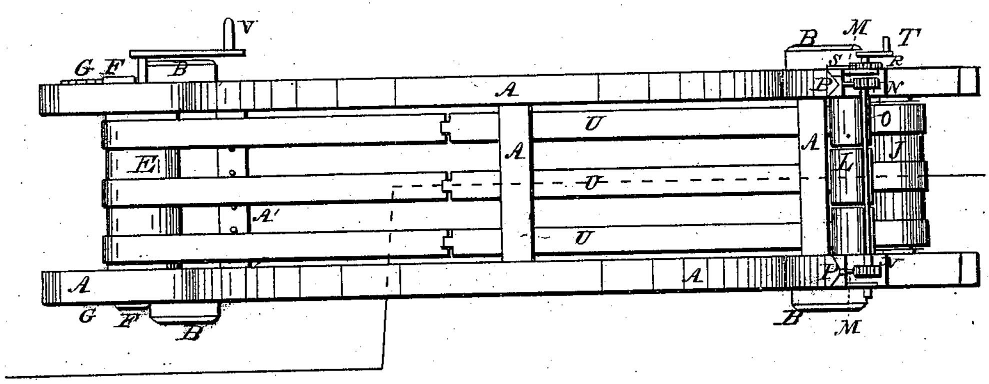


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

JOSEPH E. MERRITT, OF WINN, MAINE.

MACHINE FOR ROLLING UP LEATHER.

Specification forming part of Letters Patent No. 52,871, dated February 27, 1866.

To all whom it may concern:

Be it known that I, JOSEPH E. MERRITT, of Winn, in the county of Penobscot and State of Maine, have invented a new and useful Improvement in Machines for Rolling Up Leather; 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, in which—

Figure 1 is a side view, partly in section through the line *x x*, Fig. 2, and Fig. 2 is a top or plan view of my machine.

Similar letters of reference indicate like parts.

My invention has for its object the furnishing a machine for rolling up leather in rolls for transportation; and it consists of a machine constructed as hereinafter more fully described.

The frame A rests upon a foundation or feet, B. This foundation B should be of sufficient height for conveniently placing the leather upon the belts. The frame A is arched in the central part, as shown in Fig. 1, so as to allow easy and convenient access to the belts for placing the leather thereon without weakening the strength of the frame. The rear ends of the side pieces of the frame A are slotted, as seen at C, Fig. 1. In these slots work or slide the bearings D of the roller E.

To the outer sides of the blocks or bearings D are attached pawls F, which take hold of the racks G and prevent the blocks D and roller E from being forced back by the springs H when it has been drawn forward, as hereinafter described. The springs H are placed in the slots C, one end of said springs resting against the forward end of the slots and the other end against the forward sides of the blocks D, as shown in Fig. 1.

E is a roller extending across the rear end of the machine from one side to the other and working in the bearings D.

In the forward ends of the side pieces of the frame A are formed slots, as seen at I, Fig. 1. These slots form the bearings in which the roller J revolves.

Upon the upper sides or edges of the side pieces of the frame A are formed vertical slots K, in which slide the bearings of the roller L. To these blocks or bearings are attached racks M, into the teeth of which are geared the pinions of the pinion-wheels N attached to the shaft O. This shaft is supported by and revolves in bearings in arms attached to the standards P attached to the frame A, as seen in Fig. 1. These standards P also support the racks M and hold them in place against the pinions of the wheels N.

Upon the end of the shaft O is placed a ratchet-wheel, R, the pawl S of which is attached to the standard P. To the end of the shaft O is attached a crank, T, by means of which the roller L may be raised or lowered as desired. U are bands or belts passing around the rollers E and J and their ends joined, as shown in Figs. 1 and 2, the pin holding the ends of each belt together being removable at pleasure. In the cross-piece A′ of the frame A are placed pins, as seen in Figs. 1 and 2, to serve as guides in keeping the belts U in proper position upon the rollers E and J. Motion is communicated to the machine by means of the crank V attached to the projecting axle of the roller E.

The machine is prepared for operation by raising the pawls F from the racks G. This allows the springs H to force back the roller E, which tightens the belts U. The belts U are further tightened by lowering the roller L upon the belts U, as shown in Fig. 1. This not only tightens the belts, but also gives a downward direction to the end of the side of leather as it comes over the roller J, so that it is wound around said roller, as shown in Fig. 1. The leather W is laid upon the lower parts of the belts U, as shown; then by turning the crank V the leather is drawn forward and wound upon the roller J.

When the roll has been made of the desired size it is tied up by passing the cord around the roll and roller. The pawls F are then lowered into the racks G and the roller L raised, which slackens the bolts U so much that the pins which hold the belts U together can be withdrawn and the belts removed from the roller J. The roller and roll of leather are then removed from the slots I and the roll of leather slipped from the roller. The roller is then replaced, the belts connected, the pawls F raised from the racks G, and the roller L lowered. The machine is then ready to prepare another roll.

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

1. A machine for rolling up leather, constructed substantially as described.

2. The combination of the belts U with the rollers E and J, in a machine for rolling up leather, substantially as described, and for the purpose set forth.

3. The combination of the roller L with the belts U, substantially as described, and for the purpose set forth.

4. The combination of the pawls F and racks G with the roller E, for the purpose of holding the said roller forward while the belts are being removed and replaced, substantially as described.

5. The combination of the racks M, pinion-wheels N, ratchet-wheel R, and pawl S with each other and with the roller L, substantially as described, and for the purpose set forth.

JOSEPH E. MERRITT.

Witnesses:

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