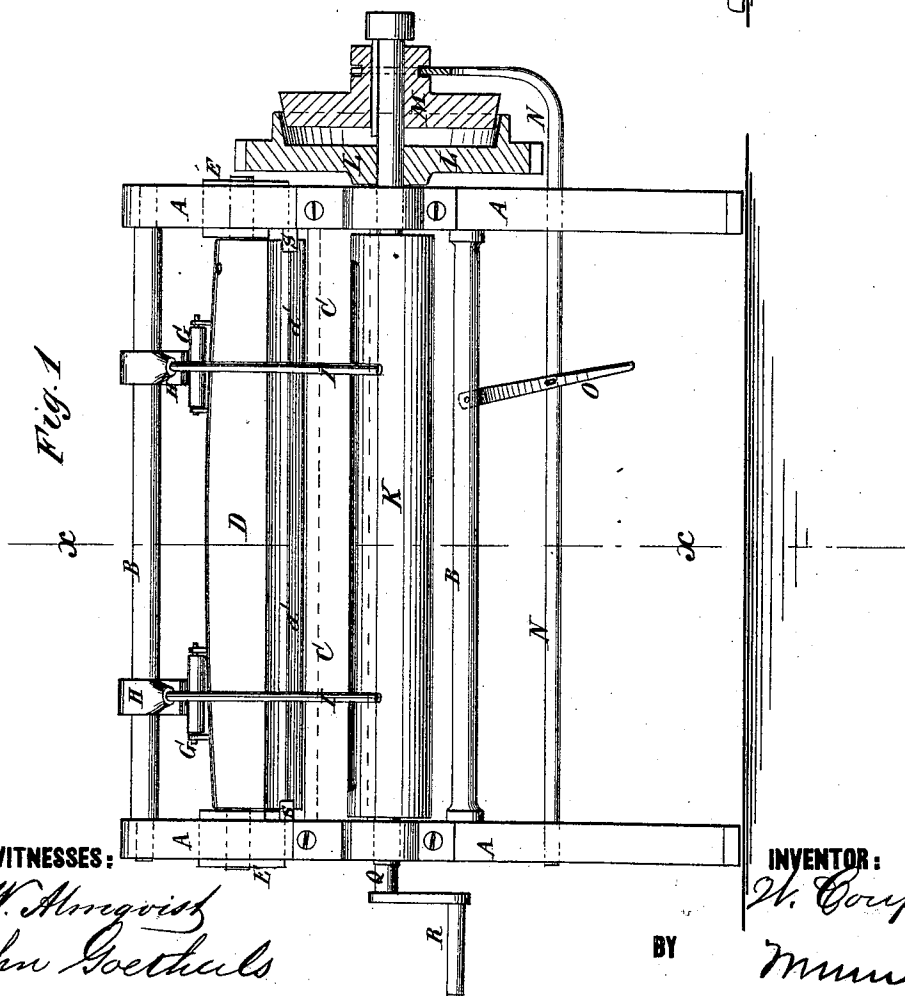
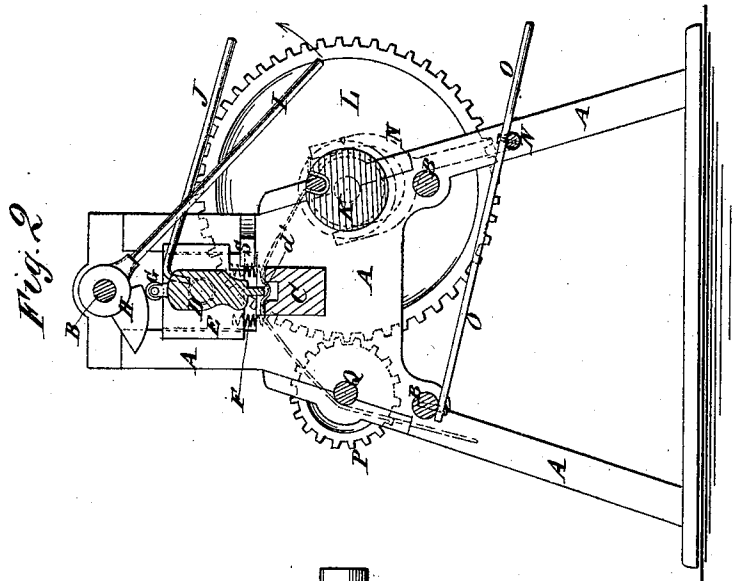


W. COUPE.

LEATHER STRETCHING MACHINE.

No. 178,361.

Patented June 6, 1876.



WITNESSES:

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WILLIAM COUPE, OF SOUTH ATTLEBOROUGH, MASSACHUSETTS.

IMPROVEMENT IN LEATHER-STRETCHING MACHINES.

Specification forming part of Letters Patent No. **178,361**, dated June 6, 1876; application filed April 28, 1876.

To all whom it may concern:

Be it known that I, WILLIAM COUPE, of South Attleborough, in the county of Bristol and State of Massachusetts, have invented a new and Improved Leather-Stretching Machine, of which the following is a specification:

Figure 1 is a front view of my improved machine, partly in section, to show the construction. Fig. 2 is a vertical cross-section of the same, taken through the line *x x*, Fig. 1.

The object of this invention is to furnish an improved machine for stretching leather for belts and other uses, which shall be so constructed as to stretch the leather evenly when varying in thickness, and which may be readily adjusted to stretch the leather to any desired extent.

The invention consists in the construction and combination of parts, which will be hereinafter more fully described, and then pointed out in the claims.

A A are the end frames of the machine, which are connected by the rounds or bars B. C is the beam, the ends of which are firmly and rigidly secured to the end frames A, and in the upper side of which is formed the groove into which the leather is pressed by the knife *d'* while being drawn through the machine. The knife *d'* may be made with a straight or slightly-crowning edge, and is attached to the lower side of the bar D, placed directly above the beam C, and the ends of which are pivoted to the bearings E. The bearings E slide up and down in slots in the end frames A, and are held up, holding the knife *d'* above the beam C, by springs F, placed beneath the said bearings. To the upper side of the bar D are pivoted short rollers G, to receive the cams H, which are provided with lever-handles I, and which slide upon the top round B, so that they may be slid over the rollers G when required for use, and may be slipped to one side, out of the way, when not required for use. The knife-bar D can be turned out of the way and adjusted by a detachable lever, J, inserted in holes in the end part of the said bar. K is the shaft, in one side of which is formed

a recess, in which the end of the leather to be stretched is secured by a key-bar, in the usual way, so that by turning the said shaft the leather may be drawn through the machine, stretched, and wound upon the said shaft. Upon one of the journals of the shaft K runs a large gear-wheel, L, which is made to carry the said shaft K with it in its revolution by the friction-clutch M. In a groove in the hub of the clutch M rides the forked end of the rod N, which is bent so as to pass through and slide in holes in the end frames A, and to which is pivoted the lever O. The rear of the lever O is pivoted to the rear round B of the frame. The teeth of the gear-wheel L mesh into the teeth of the small gear-wheel P, attached to the end of the driving-shaft Q, which revolves in bearings in the end frames A, and to which power is applied by a crank or pulley, R. If desired, the machine may be thrown out of and into gear by sliding the gear-wheel P upon its shaft Q. With this construction, the lever-cams I H and the rollers G enable the desired pressure to be applied to the leather, and enable one end of the knife-bar D to be forced down farther than the other, so that a strip of leather thicker at one side than at the other may be stretched evenly. S are stops attached to the end frames A, for the lower parts of the ends of the knife-beam D to rest against, to resist the draft-strain upon said beam.

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

1. The combination, in a leather-stretching machine, of the stationary grooved beam C, the vertically-movable knife-bar D, and a pressure mechanism located above the knife-bar, for forcing the latter upon the grooved beam, substantially as and for the purpose set forth.

2. The combination of the rollers G and the sliding lever-cams I H with the knife-beam D and a round or bar, B, of the frame, substantially as herein shown and described.

WILLIAM COUPE.

Witnesses:

JAMES T. GRAHAM,
T. B. MOSHER.