No. 680,757. Patented Aug. 20, 1901.

R. L. BRAUCHT.

CLAMP FOR LEATHER STRETCHING MACHINES.

(Application filed June 15, 1900.)

(No Model.)

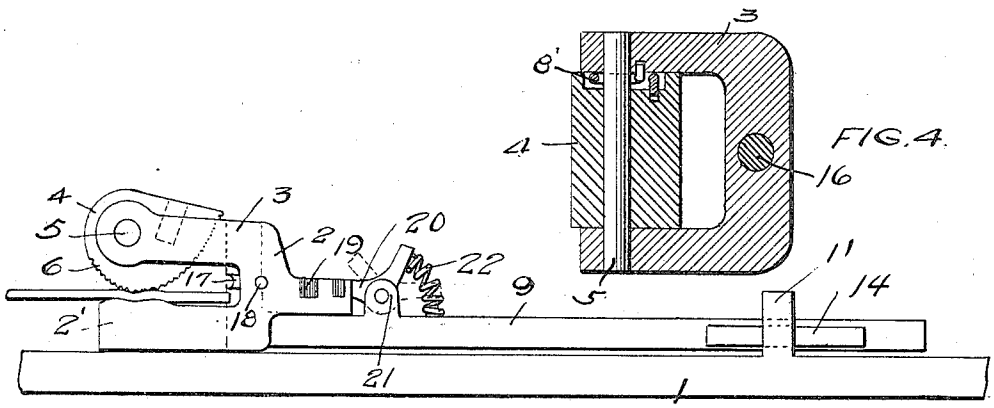


FIG. 4.

FIG. 1

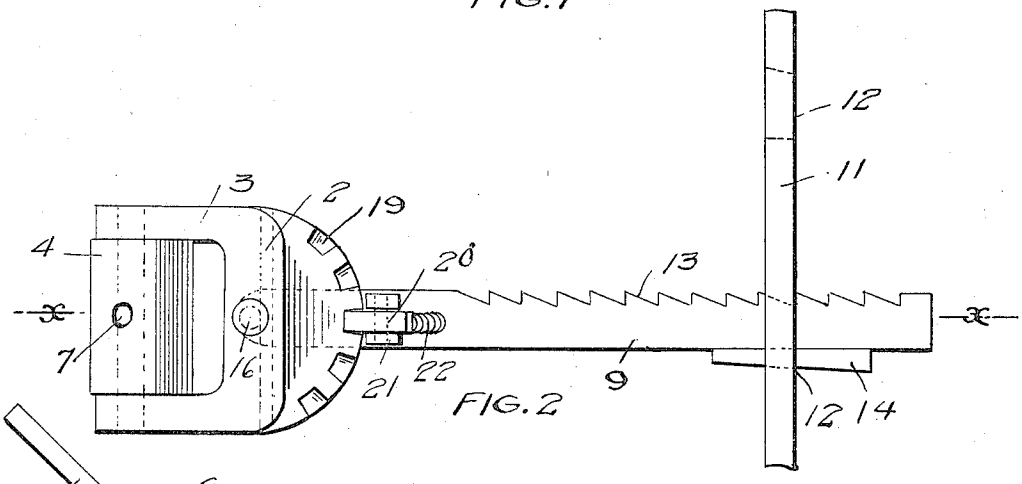


FIG. 2

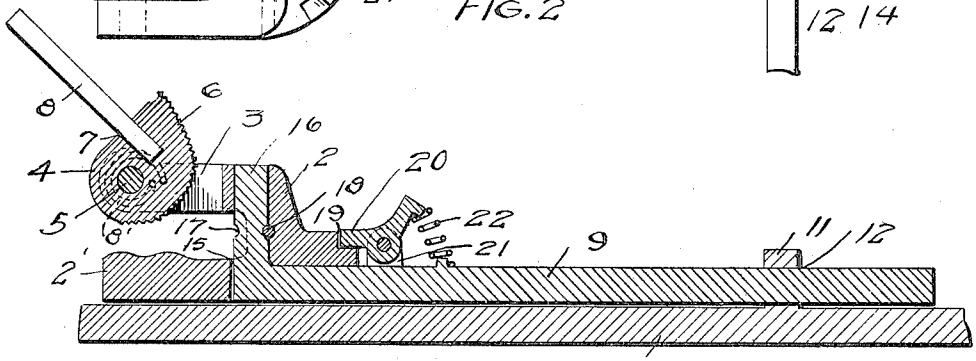


FIG. 3

Witnesses
C. Glaune
Richard Paul.

Inventor
Roy L. Braucht
By Paul & Hanley,
His Attorneys

THE MORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ROY L. BRAUCHT, OF MINNEAPOLIS, MINNESOTA; KATIE D. BRAUCHT, AS GUARDIAN OF SAID ROY L. BRAUCHT, MINOR, ASSIGNOR TO THE W. S. NOTT COMPANY.

CLAMP FOR LEATHER-STRETCHING MACHINES.

SPECIFICATION forming part of Letters Patent No. 680,757, dated August 20, 1901.

Application filed June 15, 1900. Serial No. 20,390. (No model.)

To all whom it may concern:

Be it known that I, ROY L. BRAUCHT, of Minneapolis, Hennepin county, Minnesota, have invented certain new and useful Improvements in Clamps for Leather-Stretching Machines, of which the following is a specification.

This invention relates to clamps for leather-stretching machines, and especially to that class of machines that are ordinarily employed in the manufacture of belting.

The primary object of the invention is to provide a clamp that can be quickly applied to the leather without tearing or otherwise injuring the same.

A further object of the invention is to provide a clamp that can be readily applied to an irregular edge of the leather.

Other objects of the invention will appear from the following specification in connection with the accompanying drawings, in which—

Figure 1 is a side elevation of a clamp embodying my invention. Fig. 2 is a plan view of the same. Fig. 3 is a longitudinal section on the line *x x* of Fig. 2. Fig. 4 is a detail section of the head and cam.

It is customary in the manufacture of belting and for some other purposes to employ a mechanism for stretching the leather, and prior to my invention the ends of the leather to be stretched were connected to the stretching mechanism by means of pins passing through the leather near its ends or edges. This method of securing the edges of the leather was found to be inconvenient and at the same time caused considerable waste of the leather. In carrying out my invention, therefore, I provide a clamping device that can be set at any angle with respect to the stretching-machine and can be easily and quickly attached to or disconnected from the leather and with the use of which there is no danger of tearing or otherwise injuring the leather.

In the drawings, 2 represents the head of the clamp, provided with a fixed jaw 2′, having preferably transverse grooves or ribs in its face, as shown in Figs. 1 and 3, to prevent the leather from slipping in the clamp. I provide brackets 3 on said head, which overhang the fixed jaw, and between said brackets a block 4, forming a rotary movable jaw, is eccentrically pivoted on a pin 5. The block 4 has a broad jaw-face provided, preferably, with corrugations 6, which engage the upper surface of the leather and clamp it firmly upon the fixed jaw. A hole or socket 7 is provided in the block 4 to receive a pin 8, by means of which the movable jaw may be operated. The block being eccentrically mounted and operating in the direction of the pull or strain on the leather when it is turned down to the position shown in Fig. 1, any drawing or stretching of the leather will only serve to clamp the edge of the same more firmly between the cam-block or movable jaw and the fixed jaw. A coil-spring 8′ on the pin 5 tends to hold the movable jaw in a raised position.

The head 2 is pivoted, preferably, upon a bar 9, that is adapted to be adjustably connected to the leather-stretching machine. Any suitable means may be employed for connecting the bar to the machine. I have here shown a movable bed piece or plate 10, having a transverse rib 11, provided with a series of openings 12 to receive the bar 9, which is preferably provided with ratchet-teeth 13, adapted to engage a beveled edge of any one of the openings 12 and be locked therein by the wedge-block 14. The bar and clamp may thus be adjusted in any desired position with respect to the leather-stretching machine. Any suitable means may be provided for pivotally connecting the head to the bar. I prefer, however, to provide a socket 15 in the head to receive a stud 16 on said bar, said stud being provided with an annular groove 17 to receive a locking-pin 18. By removing said pin the head may be readily detached from the bar by simply lifting it off the stud.

The rear edge of the head 2 is preferably curved and provided with a series of notches 19, adapted to be engaged by a latch 20, pivoted on the studs 21, provided on the bar 9. A spring 22 normally holds said latch projected into one of said notches. The latch

device prevents the head from turning on its pivot when the device is in use, but permits said head to be adjusted at any desired angle with respect to the bar 9.

In operation a number of these clamps will ordinarily be used, arranged side by side and adjusted to clamp the edge of the leather. The clamping-head being adjustable at any desired angle to the bar at whatever angle the head may stand with respect to the bar, the pull or strain will always be on the center of the head. There is, therefore, no danger of tearing or otherwise injuring the leather and causing a waste of the same, and no matter how irregular the edge of the leather may be the clamps may be easily and quickly adjusted to secure the same.

The movable jaw or cam-block is normally held in the position shown in Fig. 3 by the spring heretofore referred to, so that the operator can readily insert the edge of the leather into the clamp. Upon moving the jaw or cam-block into engagement with the leather the spring will be put under tension and the roughened or corrugated face of the jaw engaging the leather will cause the jaw to turn on its pivot and wedge the edges of the leather in the clamp. Any increase in the strain or pull on the leather will only serve to increase the grip of the clamp on the edges of the same.

In various ways the construction that I have shown and described may be modified by any one skilled in the art, and I therefore do not wish to be confined to the details herein set forth.

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

1. A leather-holder, comprising a laterally-adjustable head having a portion of its upper surface corrugated or suitably roughened to adapt it to constitute a gripping-jaw, a cam-block eccentrically mounted thereon and having its face correspondingly corrugated or roughened to adapt it to coöperate with said jaw in gripping and holding leather under tension, means for operating said block, a spring for holding the block normally out of engaging position, and means for pivotally connecting said head to a stretching-machine, substantially as set forth.

2. A leather-holder, comprising a head or plate having a face adapted to constitute a gripping-jaw and provided with brackets which overhang such jaw, a cam-block eccentrically pivoted between said brackets and having its face corrugated or roughened to adapt it to coöperate with said fixed jaw in gripping and holding leather under tension, means for operating said block, and a coupling-bar to which said head is connected, substantially as set forth.

3. A leather-holder, comprising a head or plate having a face adapted to constitute a gripping-jaw and provided with brackets which overhang such jaw, a cam-block eccentrically pivoted between said brackets and having its face corrugated or roughened to adapt it to coöperate with said fixed jaw in gripping and holding leather under tension, means for operating said block, a spring for holding the block normally out of engaging position, and a coupling-bar to which said head is connected, substantially as set forth.

4. In a leather-stretching machine, the combination with a bed-piece having a transverse rib provided with an opening, one of the side walls of which is beveled, of a coupling-bar provided with ratchet-teeth adapted to engage such wall, a wedge-block for locking the same in engagement, and a leather-holder connected to said coupling-bar, substantially as set forth.

In witness whereof I have hereunto set my hand this 6th day of June, 1900.

ROY L. BRAUCHT.

In presence of—
RICHARD PAUL,
M. C. NOONAN.