Oct. 30, 1923. 1,472,618

J. M. SCHWARTZ

ADJUSTABLE CLAMP FOR THE EDGES OF LEATHER AND THE LIKE

Filed June 8, 1922

Fig. 1

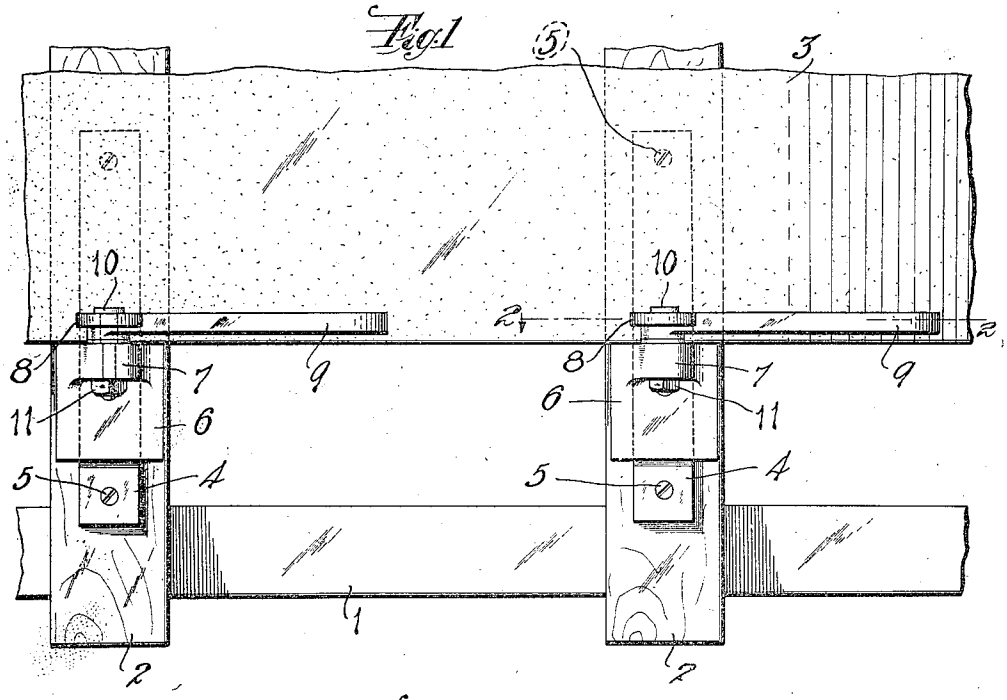


Fig. 2

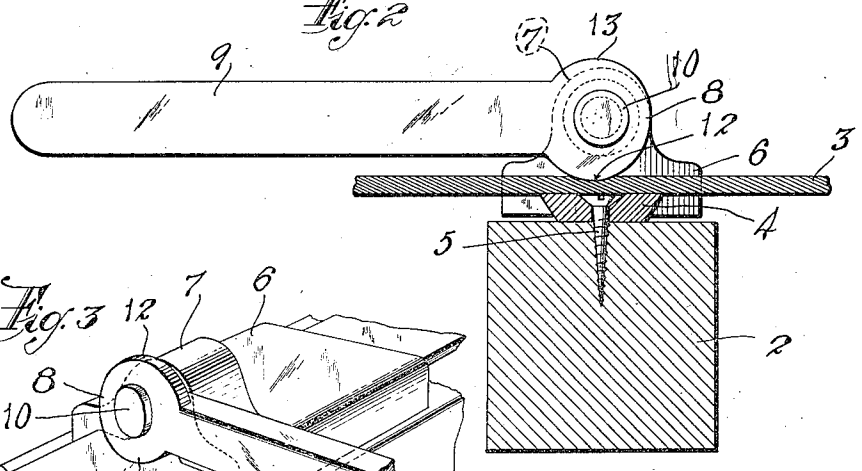
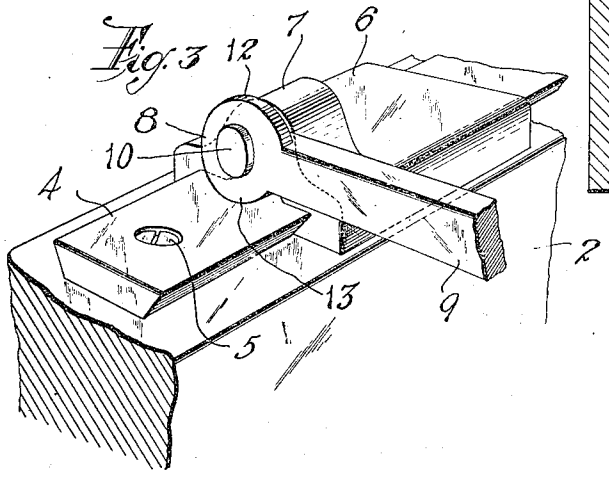


Fig. 3



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ADJUSTABLE CLAMP FOR THE EDGES OF LEATHER AND THE LIKE.

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To all whom it may concern:

Be it known that I, JAMES M. SCHWARTZ, a citizen of the United States, and a resident of Boonton, in the county of Morris and State of New Jersey, have invented new and useful Improvements in Adjustable Clamps for the Edges of Leather and the like, of which the following is a specification.

This invention relates to clamps for holding the edges of leather while in an extended state in the course of manufacture, and the objects of the invention are to provide such a clamp which shall quickly, and at the same time firmly and securely engage with the leather; to enable the same to be easily and readily operated, both in engaging it with the leather and in releasing it; to enable the clamp to firmly engage leather of different thicknesses; to make the clamp adjustable toward and away from the edge of the leather, so as to accommodate variations in the size of the piece of leather; to enable the clamp to be locked in position as well as clamped to the leather by the same means and at the same time; to secure rapidity and simplicity of operation, and to obtain other advantages and results as may be brought out by the following description.

Referring to the accompanying drawings, in which like numerals of reference indicate the same parts throughout the several views,

Figure 1 is a plan view of a portion of a piece of leather stretched upon a frame and showing clamps of my improved construction mounted upon said frame to engage one of the edges of the leather;

Figure 2 is a sectional view on line 2—2, Fig. 1, showing the clamp in elevation, and

Figure 3 is a perspective view showing the construction more in detail.

In the specific embodiment of the invention shown in said drawings 1 indicates one of the side pieces or stringers of a frame such as butt bends or pieces of leather from which leather belting is to be made is stretched in the manufacture of such belting, and 2, 2 indicate cross-pieces heretofore made of wood and laid across the opposite side pieces or stringers 1, beneath the butt bend or piece of leather 3 being stretched, it being understood that the stretching takes place in the direction of the length of the side piece or stringer 1 shown in the drawing. The clamp forming the subject matter of this application is used to hold the outer lateral edges of the piece of leather 3 from drawing inward as the stretching progresses, although the clamp is adapted to be used for many other similar purposes, and I do not wish to be understood as restricting myself by describing it in connection with this particular use.

The clamp itself, of which two are shown in Figure 1, comprises a base 4 secured on top of the cross-piece 2, as by screws 5, 5, said base providing a slideway for the clamp body 6. In the drawings, said base is shown with an undercut bevel at its opposite longitudinal edges, the clamp body 6 being correspondingly recessed at its bottom to engage the base, but it should be understood that this particular form of engagement is only illustrative of others which might be employed. All that is necessary is that the clamp body slide longitudinally of the fixed base 4 without material movement with respect thereto in any other direction.

The clamp body 6 has an upward projection or boss 7 at its end next the leather 3 and against the outer end of this is pivoted a cam 8 having a handle 9 by which it can be operated. I have shown the cam pivoted upon a headed bolt 10 extending through it and the boss 7 with its axis substantially parallel with the direction of movement of said body portion on said base and with fastening means at its inner end such as the nut 11, but obviously it can be pivoted in any other suitable manner. It will be understood that the edge of the cam is so spaced from the top of the base 4 that when the cam is turned into idle position the edge of the leather can be slipped beaneath the cam, lying on the base 4, and when the cam is turned its edge will engage the leather firmly and hold it. Preferably, the cam is made somewhat narrow or thin, as shown in the drawings, so that its edge will embed or sink into the leather and hold it more securely.

It will be observed that the forcible engagement of the edge of the cam with the leather, thereby pressing the same against the base 4, tends to force the clamp body 6 upward and thus locks it against any sliding longitudinally of the base. Thus it will be seen that the engagement of the cam with

the leather, and the locking of the clamp body in the position to which it has been adjusted on the base 4, are accomplished simultaneously and by the single means of the handled cam. This conduces to great speed, and saving of time and labor, since in operation all that is necessary is for the workman to slide the clamp body 6 endwise against the edge of the leather and then swing the cam 8 into locked position. The cam is disposed in a plane transverse of the body portion and transverse to the direction of tension on the leather, thereby obtaining a secure hold on the leather.

In order to accommodate the cam 8 to different thicknesses of leather I have in the drawings shown it as a double cam, see Figure 2, one side 12 being of much greater eccentricity than the other side 13. However, the cam could be of the single throw type if desired.

Obviously, various modifications can be made in the detail construction of my improved clamp by those skilled in the manufacture of such devices, and I do not wish to be understood as limiting myself except as set forth in the following claims when construed in the light of the prior art.

Having thus described the invention, what I claim is:

1. An adjustable clamp comprising a base, a body portion adjustable endwise on said base, and a clamping means mounted on the end of said body portion and overlying said base to clamp a piece of material against said base and simultaneously lock said body portion in adjusted position on said base.

2. An adjustable clamp comprising a base, a body portion adjustable endwise on said base, and a handled cam pivotally mounted on one end of said body portion on an axis parallel to the direction of movement of said body portion to swing in a plane transverse of said body portion, said cam overlying said base to clamp a piece of material against said base and simultaneously lock said body portion in adjusted position on said base.

3. An adjustable clamp comprising a base, a body portion adjustable endwise on said base and formed on its upper side with a boss one end of which is substantially flush with one end of said body portion, a handled cam, and a pivot bolt mounted in said boss and pivotally supporting said cam on said end of the body portion on an axis parallel to the direction of movement of said body portion to swing in a plane transverse of said body portion, said cam overlying said base to clamp a piece of material against said base and simultaneously lock said body portion in adjusted position on said base.

4. An adjustable clamp comprising a base, a body portion adjustable on said base, and a cam pivoted on said body portion to clamp an article between itself and said base, said cam being formed with two cam surfaces of different eccentricity to accommodate articles of different thicknesses.

5. An adjustable clamp comprising a base having an undercut slideway, a body portion engaging said slideway, and means on said body portion and overlying the base for clamping an article against said base and simultaneously locking the body portion against sliding on said base.

JAMES M. SCHWARTZ.