C. CARTIER.

CLAMP FOR TOP ROLL COVERS.

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1,228,745. Patented June 5, 1917.

Fig. 1.

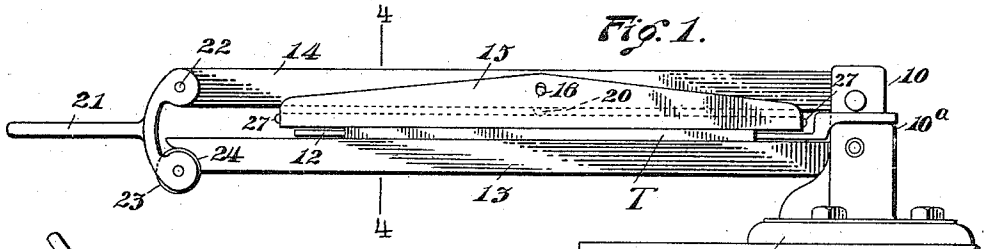


Fig. 2.

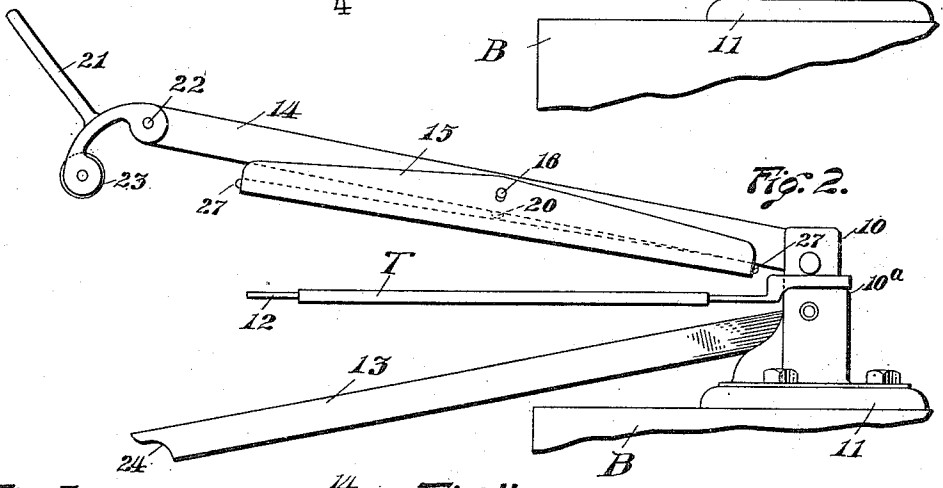


Fig. 5.

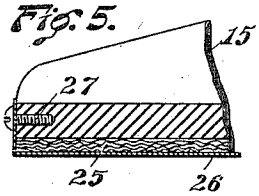
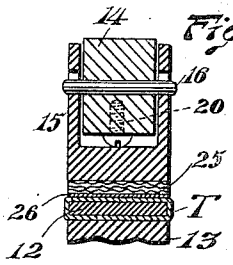


Fig. 4.



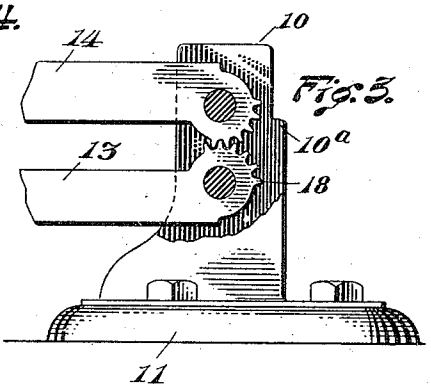
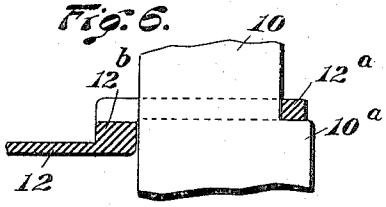


Fig. 6.



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UNITED STATES PATENT OFFICE.

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CLAMP FOR TOP-ROLL COVERS.

1,228,745. Specification of Letters Patent. Patented June 5, 1917.

Application filed February 2, 1917. Serial No. 146,267.

To all whom it may concern:

Be it known that I, CYRILLE CARTIER, a citizen of the United States, residing at Woonsocket, in the county of Providence and State of Rhode Island, have invented a new and useful Clamp for Top-Roll Covers, of which the following is a specification.

This invention relates to a clamp particularly adapted for holding leather tubes while they are being glued or cemented to form top roll covers. Certain features of my invention are, however, capable of general application.

It is the general object of my invention to provide a clamp for such purposes which shall combine simplicity of construction with convenience and efficiency in operation.

With this object in view, one feature of my invention relates to the provision of a supporting rod for a tube or cover which is substantially stationary, and to the further provision of a pair of simultaneously and oppositely movable clamping members adapted to securely clamp and hold the leather tube upon the support while the glue or cement is drying. In the preferred form the rod is readily removable or replaceable.

My invention further relates to certain improvements in the construction of the clamping members, and to other arrangements and combinations of parts which will be hereinafter described and more particularly pointed out in the appended claims.

The preferred form of my invention is shown in the drawings in which—

Figure 1 is a side elevation of my improved clamp with the clamping members closed;

Fig. 2 is a view similar to Fig. 1, but showing the clamp open;

Fig. 3 is an enlarged detail elevation, partially broken away and showing the operative connections between the clamping members;

Fig. 4 is a vertical sectional view taken along the line 4—4 in Fig. 1;

Fig. 5 is a partial longitudinal sectional view through one end of the saddle, and

Fig. 6 is a detail view of one end of the supporting rod.

Referring to the drawings, my improved clamp comprises a stand 10 having a base 11 by which it may be securely bolted to a bench or table B as indicated. The operative members of the clamp comprise a supporting rod 12, a lower clamping member 13, an upper clamping member 14, and a saddle 15 loosely pivoted on a stud 16 in the member 14.

The supporting rod 12 is enlarged at its right-hand end, as viewed in Figs. 1 and 2, and is provided with a rectangular opening permitting it to slide downward on the stand 10 until it engages a shoulder 10^a upon the rear side thereof. The cross-connecting portions 12^a and 12^b of the supporting rod 12 are so disposed that the rod will be held in substantially horizontal position by such engagement of the part 12^a with the projection 10^a. The rectangular opening in the enlarged end of the rod 12 is of such size that the rod may be entirely removed from the clamp by swinging the member 14 upward and slipping the recessed end of the rod over the member and saddle. Several rods 12 are provided, said rods being made in different sizes corresponding to the diameter of the different top rolls to be covered.

The clamping members 13 and 14 are formed with intermeshing gear teeth 18, as clearly shown in Fig. 3. With this connection, upward movement of the member 14 causes a corresponding downward movement of the member 13, thus leaving the rod 12 separated from both of the clamping members, and permitting convenient removal of the tube T therefrom.

The saddle 15 is capable of slight vertical movement relatively to the member 14, as shown in Fig. 4, and clamping pressure is communicated to the saddle through the adjusting screw 20 threaded into the member 14. By removing the saddle and turning this screw in or out the pressure upon the tubes T may be adjusted. The application of pressure at a single point also permits the saddle to adjust itself to a position parallel to the member 13 and the rod 12.

To secure the members 13 and 14 in clamping position a handle 21 is provided, hinged at 22 to the member 14, and provided with a roll 23 adapted to engage the end of the member 13 and to fit into a holding recess 24 in said member. Simple downward pressure upon the handle 21 acts through the gear teeth 18 to swing the jaws toward each other, whereupon the roll 23 engaging the member 13 applies clamping pressure thereto.

The saddle 15 is preferably provided with a cushioning layer 25 upon its lower face, said layer being protected by a thin strip of

tinned metal 26 secured by screws 27 to the saddle 15. It is well known that the ordinary kinds of glue will not adhere to a tinned surface.

The operation of my improved clamp has been indicated in the detail description thereof, and only brief reference thereto is deemed necessary. The strip of leather from which a tube is to be formed is wrapped around a supporting rod 12 of suitable size. The edges are coated with glue or cement and are then brought smoothly together after which clamping pressure is applied through the handle 21. After the glue has set the pressure is released and the tube is slipped off of the end of the rod 12. If a different size of tube or cover is then to be made, it is a simple matter to remove the rod 12 and substitute another rod of suitable size.

Having thus described my invention it will be evident that changes and modifications can be made therein by those skilled in the art without departing from the spirit and scope thereof as set forth in the claims, and I do not wish to be otherwise limited to the details herein disclosed, but what I claim is:

1. A clamp for a top roll cover having, in combination, a fixed upright stand, a rod effective to support a top roll cover, said rod being mounted upon said stand and held from longitudinal movement thereby, upper and lower clamping members supported by said stand, means to move one of said members toward and from said rod, and connections between said members through which movement of either member causes a simultaneous but reverse movement of the other member.

2. A clamp for a top roll cover having, in combination, a fixed stand, a long narrow rod effective to support a top roll cover and mounted on said stand, upper and lower clamping members pivoted to said stand, and means to clamp said members against opposite sides of said rod, said members having intermeshing gear teeth effective to insure simultaneous but reverse movements of said members whenever either member is moved.

3. A clamp for a top roll cover having, in combination, a fixed stand, a straight narrow rod effective to support a top roll cover and removably supported by said stand, upper and lower clamping members mounted on said stand, and means to clamp said members simultaneously against opposite sides of said rod.

4. A clamp for a top roll cover having, in combination, a fixed stand, upper and lower clamping members supported by said stand, a rod effective to support a top roll cover, said rod being positioned between said members and being removably mounted on said stand, and means to clamp said members against opposite sides of said rod, said rod having an enlarged recessed end by which it is supported upon said stand and by which removal of said rod over said upper clamping member is permitted.

5. A clamp for a top roll cover having, in combination, a fixed stand, a rod effective to support a top roll cover and mounted on said stand, upper and lower clamping members supported by said stand, and means to clamp said members against opposite sides of said rod, one of said members being provided with a cushioning layer protected by a thin covering strip of tinned metal.

6. A clamp for a top roll cover having, in combination, a fixed stand, a rod effective to support a top roll cover and mounted on said stand, upper and lower clamping members supported by said stand, and means to clamp said members simultaneously against opposite sides of said rod, one of said members including a saddle pivotally mounted thereon in position to engage said rod.

7. A clamp for a top roll cover having, in combination, a fixed stand, a rod effective to support a top roll cover and mounted on said stand, upper and lower clamping members supported by said stand, and means to clamp said members simultaneously against opposite sides of said rod, one of said members including a saddle pivotally mounted thereon in position to engage said rod and an adjustable contact screw in said member through which pressure is transmitted to said saddle.

In testimony whereof I have hereunto affixed my signature.

CYRILLE CARTIER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."