

No. 642,875.

Patented Feb. 6, 1900.

L. PAULLE.
CLAMP FOR SHOW CASES.

(Application filed Mar. 6, 1899.)

(No Model.)

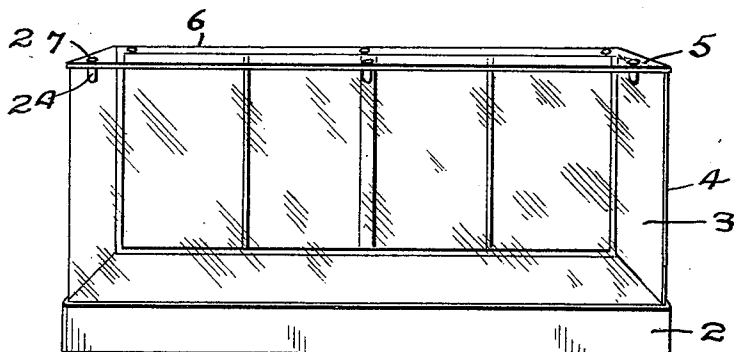


FIG. 1

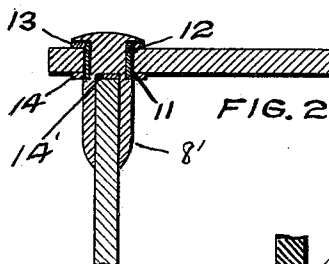


FIG. 2

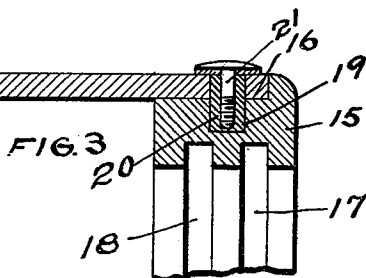


FIG. 3

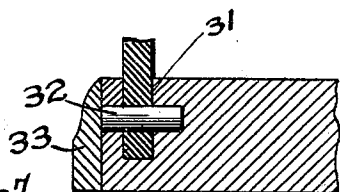


FIG. 7

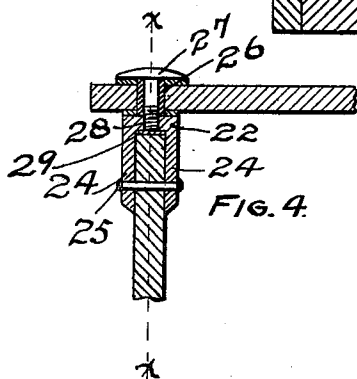


FIG. 4

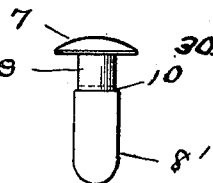


FIG. 6

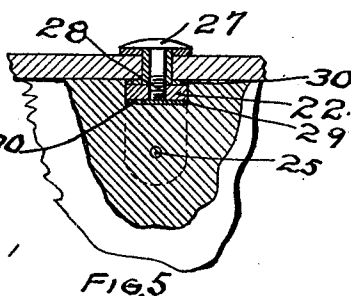


FIG. 5

Witnesses
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UNITED STATES PATENT OFFICE.

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CLAMP FOR SHOW-CASES.

SPECIFICATION forming part of Letters Patent No. 642,875, dated February 6, 1900.

Application filed March 6, 1899. Serial No. 707,847. (No model.)

To all whom it may concern:

Be it known that I, LEONARD PAULLE, of Minneapolis, county of Hennepin, State of Minnesota, have invented certain new and useful Improvements in Clamps for Show-Cases, of which the following is a specification.

My invention relates to devices designed especially for securing the ends, top, and sides of a show or display case together; and the objects of the invention are, first, to provide means consisting of a single member for securely fastening the plates of glass composing the sides of the show-case to the top plate and securing the end plates to the top and sides and dispensing with the bolts and nuts ordinarily used for this purpose; second, to provide a clamping device which, though very strong, is neat in appearance, will not collect dust, will occupy but little space in the walls of the case, and will not therefore interfere in any way with the display of articles therein.

The invention consists generally in a clamping device comprising a shank adapted to pass through a hole in the plate forming the horizontal or vertical walls of the show-case, said shank having a head at its outer end to rest upon the surface of the plate and a yoke at its inner end to clasp the edge of the abutting plate, the space or recess between the sides of the yoke being unobstructed to permit the edge of the plate to rest against the end or the head of the yoke.

Further, the invention consists in various constructions and combinations, all as hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of a show-case embodying my invention. Fig. 2 is a sectional view of a portion of the case, showing the clamping device in position. Fig. 3 is a similar view of the clamp at the rear of the case. Fig. 4 is a sectional view showing a modified form of clamp. Fig. 5 is a sectional view on the line $x x$ of Fig. 4. Fig. 6 is a view of the preferred form of clamp. Fig. 7 is a detail sectional view showing the preferred method of securing the end plates to the base.

In the drawings, 2 represents the base of a show-case of any preferred style, having front and rear plates 3 and 4 and top and rear plates 5 and 6, all preferably of heavy plate-glass, the edges of the top plate resting upon and overlapping the edges of the vertical plates, as shown in the figure. To secure the plates together at the front of the case, I provide clamps arranged at intervals in the horizontal and vertical edges of the plates, each clamp consisting, preferably, of a single member, and comprising a shank 8 to pass through a hole 11 in the horizontal or vertical walls of the case and having a head 7 to rest upon the outer surface of the plate to present a neat finished appearance to the case. That part of the shank which is within the hole 11 is preferably circular in cross-section, and the inner end of said shank is slotted longitudinally to receive the edge of the abutting plate, which is substantially at right angles to the plate through which the shank passes, and the legs 8', formed by said longitudinal slot extending over the edge of the abutting plate, clamp the same firmly in position. It is desirable that the shank should fit snugly within the hole 11, and I therefore provide a bushing 12 within said hole, inclosing the cylindrical portion of the shank, and to prevent the plates from rubbing or grinding upon each other and upon the clamp I prefer to provide washers 13 and 14, of rubber cloth, cork, or other suitable material, on the shank, one beneath the head 7 and the other between a shoulder 10, provided on said shank, and the inner surface of the plate through which the shank passes. I also prefer to provide a strip of rubber or other suitable material 14' at the inner end of the slot in the shank, against which the edge of the abutting plate rests, and said plate may be cemented within said slot to prevent it from becoming disengaged from the clamp when the device is in use.

Instead of using a clamping device composed of a single member I may employ the device shown in Figs. 4 and 5 of the drawings, which consists in a block 22, having a longitudinal slot to receive the edge of the abutting plate, the legs or prongs 24 so formed extending over the surface of the plate on

each side, and to prevent the plate from being disengaged therefrom I may provide a pin 25, passing through said legs and through a hole in the plate on which the block is placed. When this form of clamp is used, I prefer to provide a recess 29 in the edge of the plate wherein the block 22 rests, so that its outer end is flush with the edge of the plate, as shown in Fig. 5, and, if preferred, a strip of rubber or other flexible material 30 may be placed between the end of the block and the edge of the plate. To secure the plates together, I provide a threaded hole 28 in the outer end of the block 22 to receive a screw 27, which passes through a hole in the horizontal or vertical wall of the case and is provided with an ornamental head resting upon the outer surface of the plate through which the screw passes. Bushings or washers similar to those heretofore described may be provided between the block 22, the head and shank of the screw, and the walls of the case to prevent any grinding or rubbing together of the parts. When the form of clamp shown in Figs. 4 and 5 is used, it is not necessary to provide as large an opening for the shank as is required for the clamp shown in Fig. 2, where the opening is of sufficient size to permit the inner forked portion of the shank to be passed through to engage the edge of the abutting plate.

At the rear of the show-case it is desirable to provide a molding 15, of wood or other suitable material, having a rabbet 16, wherein the rear edge of the top plate 5 rests, and the usual grooves 17 and 18, forming guideways for the doors of the case. Said molding 15 is preferably provided with a hole or recess 19 to receive the lower end of the plug 20, whose upper end fits snugly within a hole or perforation in the top plate, thus securing the plate and molding together. To form a finish for the top of the plate and prevent it from becoming disengaged from the plug 20, I prefer to provide a screw 21, having a large ornamental head to conceal the top of the plug and a threaded shank to extend down into the same, thus locking the parts firmly together. I prefer to provide means for securing the lower ends of the plates forming the walls of the case within a socket 31 in the base, which may be of wood, marble, or other suitable material, and to accomplish this I provide pins 32, fitting within recesses in said base and passing through perforations in said plates, thus locking the plates and base firmly together and preventing any racking or twisting of the case when in use. Any suitable finish 33 may be provided on the base to conceal the plug 20 and present a finished appearance to the lower portion of the show-case.

When the form of clamp shown in Fig. 2 is used, the opening in the plate 5 is of course made of sufficient size to permit the forked end of the clamp to be passed through the

opening, and the bushing having been placed upon the cylindrical portion of the shank and the washer under the head of the same the clamp will fit snugly within the hole in the plate, and its inner forked end engaging the edge of the abutting plate will hold the two walls firmly in position, and at the same time the clamp will present a neat appearance to the outer surface of the case and in no way interfere with the exhibition of articles therein. The washer between the shoulder 10 and the bushing may, if preferred, be placed in position after the shank is passed through the hole in the plate 5 and before the plate is placed over the edge of the abutting plate, or if a strip or band of suitable material is used in place of a disk or washer it may be placed in position and its ends cemented or glued together after the plates composing the horizontal and vertical wall of the case are brought together. When the style of clamp shown in Fig. 4 is used, it is only necessary of course to have the opening in the plate 5 of sufficient size to permit the insertion of the shank of the screw and the bushing surrounding the same.

I have shown my improved clamp on the horizontal edges of the case only; but it will be understood that it is equally applicable to the vertical edges, and I am not confined in its use to a glass show-case, as it may be used wherever it is desired to connect the edges of plates placed at an angle to one another, and although I prefer the details of construction herein shown the same may be varied considerably without departing from my invention.

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

1. As a new article of manufacture, a show-case clamp, comprising a shank to pass through a hole in the plate forming a wall of the case and having a head to rest upon the outer surface of said plate, a yoke or fork portion to clasp and clamp the edge of the abutting plate, said shank being connected to said yoke portion but terminating at the junction of its sides whereby a clear space is left between said sides for the edge of the glass, substantially as described.

2. As a new article of manufacture, a show-case clamp, comprising a shank to pass through a hole in the vertical or horizontal walls of the case and having a head at its outer end, a yoke or fork integrally formed with said shank at its inner end to embrace the edge of the abutting plate, the space or recess between the sides of the yoke being unobstructed to permit the edge of the glass to bear upon the end of the yoke, whereby the horizontal and vertical walls of the case will be held closely together, substantially as described.

3. In a show-case, the combination, with a plate forming a wall of the case and having a hole near its edge, of a molding having a

groove or rabbet to receive the edge of said
plate and a hole or recess to register with the
hole in said plate, a plug fitting within the
hole in said plate and said molding, and a
5 screw having a head to conceal the end of said
plug and a shank to extend into the same,
substantially as described.

In witness whereof I have hereunto set my
hand this 28th day of February, 1899.

LEONARD PAULLE.

In presence of—

RICHARD PAUL,
M. C. NOONAN.