

Nov. 15, 1927.

1,648,927

W. WURDACK

TRIM SECURING CLAMP

Filed April 15, 1926

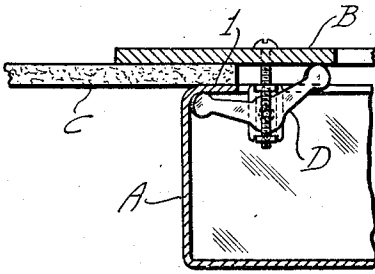


Fig. 1.

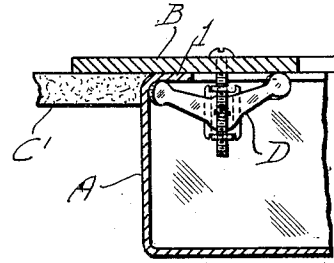


Fig. 2.

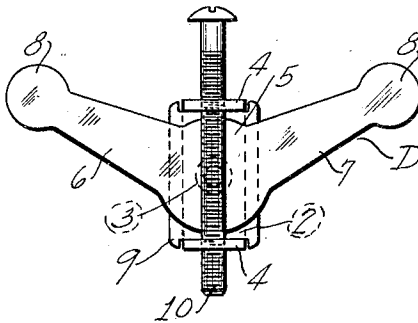


Fig. 3.

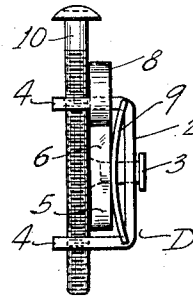


Fig. 4.

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Patented Nov. 15, 1927.

1,648,927

UNITED STATES PATENT OFFICE.

WILLIAM WURDACK, OF ST. LOUIS, MISSOURI, ASSIGNOR TO WM. WURDACK ELECTRIC MFG. CO., OF ST. LOUIS, MISSOURI, A CORPORATION OF MISSOURI.

TRIM-SECURING CLAMP.

Application filed April 15, 1926. Serial No. 102,361.

This invention relates generally to securing-clamps and, more particularly, to a certain new and useful improvement in clamps especially adapted for securing the trim of an electrical panel-board cabinet or other such structure in proper location upon and relatively to the wall or other support and the cabinet, my present invention having for its chief object the provision of a clamp for the purpose stated which is simple and inexpensive in form and construction, which is conveniently usable, which is compensatorily adjustable to accommodate different wall thicknesses and relative locations of the cabinet or box, which obviates the use and employment of nails and other such fastening devices, and which is efficient in the performance of its intended functions.

And with the above and other objects in view, my invention resides in the novel features of form, construction, arrangement, and combination of parts hereinafter described and pointed out in the claims.

In the accompanying drawing,

Figure 1 is an elevational view of a clamp embodying my invention, illustrated in operative securing relation with a trim, wall, and cabinet, the cabinet and trim being in wall-spaced relation;

Figure 2 is a similar view of the clamp, with the trim and cabinet in flatwise contiguous relation;

Figure 3 is an enlarged elevational view of the clamp alone; and

Figure 4 is an edge view of the clamp.

Referring now more in detail and by reference characters to the drawing, which illustrates a preferred embodiment of my invention, A designates a panel-board cabinet or box and B the trim therefor, both of standard construction and both fragmentally here shown. The box A includes, as is usual, a front inwardly-presented flange 1 and in electrical installations is preferably and desirably mounted upon the wall with the outer face of its flange 1 flush with the outer face of the wall, so that the trim B may fit flatwise smoothly upon both the wall and the cabinet-flange 1, as illustrated in Figure 2. Frequently, however, owing to the relatively reduced size of the wall-opening or other cause, such desired wall-location of the cabinet A cannot be obtained, as illustrated, for instance, in Figure 1, where, in the installation of the cabinet, the flange

1 thereof is necessarily disposed under or behind the wall. Frequently, also, the walls, as, for instance, the walls C and C' of flanges 1 and 2, respectively, upon or within which the cabinet A is to be installed, may vary in thickness. In any such installations, I conveniently secure the trim B to the cabinet and in installed location upon the particular wall by novel clamps of my invention.

Such clamps D are best seen in Figures 3 and 4, and, as there shown, each clamp D includes a substantially U-shaped body-member or yoke 2. Pivotally connected centrally, as by a transverse stud 3, to and upon the yoke 2 for rocking or tilting movement intermediate the opposite yoke-legs 4, 4, is a somewhat V-shaped member 5 comprising two angularly opposed arms 6, 7, of preferably outwardly tapering form, with their outer free ends preferably enlarged and rounded, as at 8. The stud 3 at its inner end is upset upon or otherwise fixed to the rockable member 5 and at its opposite or headed end fits loosely for both rotatory and slidable movement in the body of the yoke 2; and interposed between the rockable member 5 and the yoke 2 and notched at its opposite ends to seat in engagement with and upon the opposite yoke-legs 4, is an arcuate leaf-spring 9 suitably apertured to freely accommodate the pivot-stud 3. Provided in the lower yoke-leg 4, is a threaded aperture, which registers with a preferably non-threaded aperture in the upper yoke-leg 4, and fitting loosely through said upper aperture and having threaded engagement with the yoke 2 at said lower aperture, is a headed suitably elongated screw-member 10, longitudinally upon which the yoke 2 and its carried rockable member 5 are movable.

The said yoke-leg apertures are so located relatively to the rockable-member 5 and its supporting-stud 3 that, under the engagement between the screw 10 with the yoke 2, the rockable-member 5 and its stud 3 will be forced outwardly of the yoke 2 and the spring 9 compressed, and thus, under the frictional engagement between the rockable-member 5 and the screw 10 created by the tension of the spring 9, both rockable movement of the member 5 and threaded or longitudinal movement of the screw 10 relatively to the yoke 2 are retarded or impeded. In use and operation, the trim B is suitably provided adjacent its usual door-opening

with any suitable number of perforations and any suitable corresponding number of the clamps D, the screws 10 fitting through said trim-perforations for engagement at their heads upon the outer face of the trim. and the yoke members 2 and their carried rockable-members 5 being disposed upon the respective screws inwardly of the trim. The cabinet A is now first suitably mounted in or upon the wall in the desired location. Conditions permitting and desirably, the cabinet A is disposed relatively to the wall with the outer face of its flange 1 flush with the outer face of the wall, as in Figure 2, so that the trim B may fit flatwise upon both the wall and flange; or, conditions preventing, the cabinet A is installed with its flange 1 behind the wall, as in Figure 1, when the trim B is disposed flatwise upon the wall to project in spaced concealing relation over the cabinet-flange 1. In either such installation, the trim B is fitted as described upon the wall and relatively to the cabinet and turning movement then imparted to the screws 10, when, the trim-perforations being so located relatively to the wall of the cabinet or box A and the parts having such relative dimensions, the respective members 5 will engage at one of their arms with the adjacent wall of the cabinet. On further turning movement then of the screws 10, the yokes 2 and their carried rockable members 5 will be drawn outwardly longitudinally of the screws and, in due course, each rockable-member 5 will engage first at the rounded end 8 of one arm 6 with and under the cabinet-flange 1 and then at the rounded end 8 of its other arm 7 with and under the trim B, the arms 6, 7, riding at their rounded ends 8 upon the cabinet-wall, flange 1, and trim B until the clamp is in "home" position and the member 5 tilting or rocking on its pivot 3 in such locking or securing engagement with the cabinet A and trim B and thereby compensating for variation in the planes of the underface of the flange 1 and the underface of the trim B. The arms 6 and 7 of the member 5, in so clamping the trim B to and upon the cabinet A and the particular wall, function, as will be evident, in opposed relation to the screw 10, and thus the trim B is firmly and rigidly secured to and upon the wall and concealingly over the cabinet-flange 1, it being understood, of course, that there may be any suitable number of the clamps D employed in the particular installation.

Under the described tension of the spring 9 and the consequent yielding frictional engagement between the screw 10 and member 5, both tilting or rocking movement of the member 5 and threaded movement of the screw 10 relatively to the yoke 2 are frictionally retarded, and thus the clamps D automatically adjust and accommodate them-

selves not only through the threaded engagement between the yokes 2 and the screws 10, but also through the tilting or rocking capacity of the members 5, which latter movement is limited under engagement of the arms 6, 7, with the upper yoke-legs 4, to varying wall thicknesses and varying spaced relation between the cabinet-flange 1 and the trim B, in firmly and tightly securing and obtaining a neat, attractive, workmanlike installation.

I am aware that changes in the form, construction, arrangement, and combination of the several parts of my new clamp may be made and substituted for those herein shown and described without departing from the nature and principle of my invention.

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

1. In a trim-securing clamp, a clamping screw, a yoke having threaded engagement with, and movable longitudinally of, the screw, and a member pivoted for rocking movement upon the yoke intermediate the legs thereof and including a pair of oppositely-extending angularly opposed arms adapted for clamping engagement in opposed relation to the screw, said screw and member having yielding engagement one with the other for frictionally retarding the rocking movement of said member and threaded movement of the screw.

2. In a trim-securing clamp, a clamping screw, a yoke having threaded engagement with, and movable longitudinally of, the screw, a pivot-stud loosely engaging the yoke, a member fixed on the stud for rocking movement relatively to the yoke intermediate the legs thereof and including a pair of oppositely-extending angularly opposed arms adapted for clamping engagement in opposed relation to the screw, and a spring interposed between the body of the yoke and said rockable member and compressed under engagement between the screw and the yoke, said screw and member having yielding engagement one with the other under the tension of said spring for frictionally retarding rocking movement of said member and threaded movement of the screw.

3. In a trim-securing clamp, in combination, a clamping screw, a body-member, the screw and body-member being relatively adjustable, and a pair of oppositely-extending arms mounted for rocking movement upon the body-member for clamping engagement in opposed relation to the screw, the screw, body-member, and arms having relative engagement for retarding adjustment between the screw and body-member.

4. In a trim-securing clamp, in combination, a clamping screw, a body-member, the screw and body-member being relatively ad-

justable, and a pair of oppositely-extending arms mounted for rocking movement upon the body-member for clamping engagement in opposed relation to the screw, the screw, 5 body-member, and arms having relative engagement for retarding both adjustment between the screw and body-member and rocking movement of the arms.

5. A trim-securing clamp including, in 10 combination, a clamping-screw, a body-member mounted on the screw, the screw and body member being relatively adjustable, and a pair of oppositely-extending arms carried by the body-member for tilting movement relatively to the screw and adapted for 15 clamping engagement in opposed relation to the screw, the arms having yielding engagement with the screw for retarding tilting movement thereof.

In testimony whereof, I have signed my 20 name to this specification.

WILLIAM WURDACK.