T. TSCHUDIN.

INVISIBLE SUPPORT FOR BRACKETS AND THE LIKE.

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1,297,609. Patented Mar. 18, 1919.

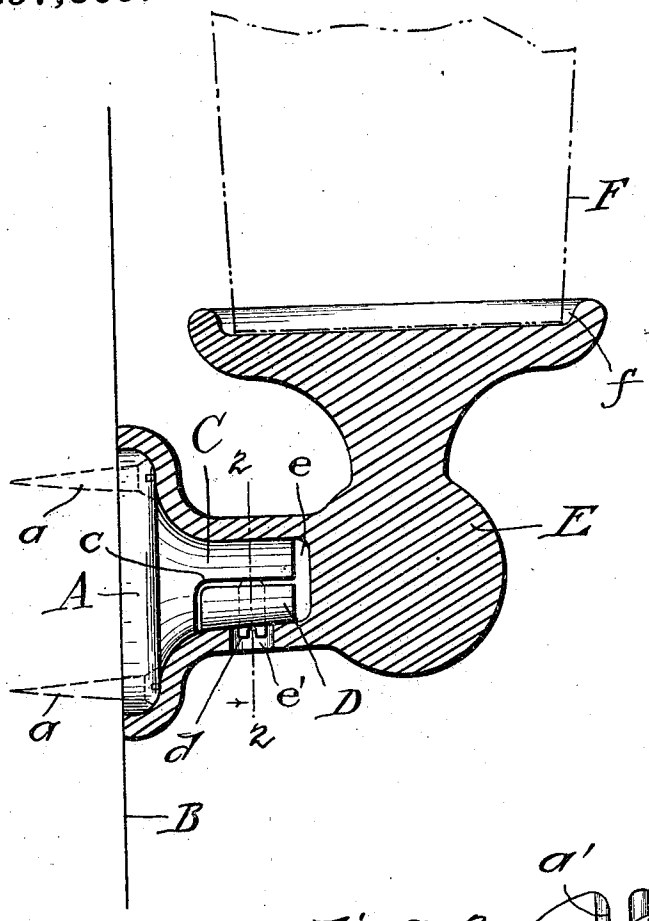


Fig. 1.

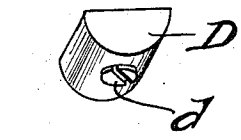


Fig. 4.

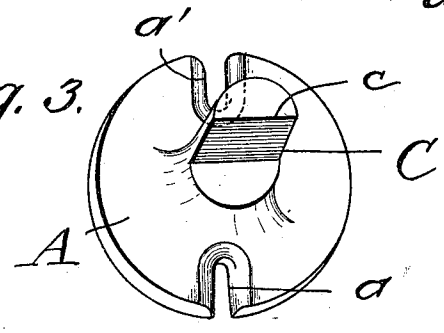


Fig. 3.

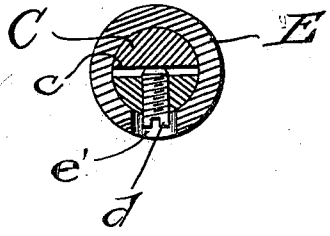


Fig. 2.

Inventor

Trougott Tschudin.

By his Attorney

Jas. H. Griffin.

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

UNITED STATES PATENT OFFICE.

TROUGOTT TSCHUDIN, OF BROOKLYN, NEW YORK.

INVISIBLE SUPPORT FOR BRACKETS AND THE LIKE.

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To all whom it may concern:

Be it known that I, TROUGOTT TSCHUDIN, a subject of the Confederation of Switzerland, but having taken out my first naturalization papers in the United States, residing in the city of New York, borough of Brooklyn, county of Kings, and State of New York, have invented a certain new and useful Invisible Support for Brackets and the like, of which the following is a specification.

This invention is an invisible support, adapted, more particularly, for the attachment of bath-room fixtures and other toilet articles. Fixtures of this general character are frequently constructed from porcelain or vitreous china, and are generally secured in place on the wall of a bath-room by means of screws or other fastening devices passing through an attaching plate. The fixtures are generally either of white material or enameled white, and are mounted in position by screws, the heads of which have been previously enameled white to harmonize with the fixtures. As the screw heads are exposed to view after the fixture is mounted, considerable care is required in the attaching operation, in order that the enamel on the screw heads will not be chipped or broken off, in which instance the fixture would become unsightly. The chipping of the enamel is a very frequent occurrence and can be obviated only by exercising the greatest care in mounting the bracket.

With the foregoing in mind, the object of the present invention is to provide a support for brackets of the character specified, as well as others, which not only obviates the necessity of great care in mounting the bracket, but renders the supporting elements for said brackets invisible, so that considerably cheaper materials may be employed in the mounting without, in the least, sacrificing the esthetic appearance of the brackets.

Features of the invention, other than those specified, as well as the advantages thereof, will be apparent from the hereinafter detailed description taken in conjunction with the accompanying drawing.

In the accompanying drawing I have illustrated one practical embodiment of the invention, but the construction therein shown is to be understood as illustrative, only, and not as defining the limits of the invention.

Figure 1 is a side elevation of a bracket support embodying the present invention, the bracket, in this view, being shown in section, in the interest of clearness.

Fig. 2 is a section in the plane of the line 2—2 of Fig. 1.

Fig. 3 is a perspective view of an attaching plate which I prefer to employ, and

Fig. 4 is a like view of a locking member associated therewith.

In the accompanying drawing, the invention is illustrated as adapted to support a tumbler-holder bracket, as this adaptation of the invention clearly illustrates the manner of its use. It will be understood, however, that this is for the purpose of concrete illustration, only, and that the invention is adapted to coöperate in the support of other brackets or toilet fixtures.

Referring to the drawing, A indicates an attaching plate adapted to be secured in any suitable manner, as by screws *a*, to a wall or other fixed support B. In the form shown, plate A is slotted at opposite sides, as at *a'*, and the screws *a* extend through said slots and into the fixed support. The plate is provided with a forwardly extending stem C, substantially half of which is cut away, as at *c*, and a locking or clamping member D is provided, which corresponds in shape to the cut-away portion of the stem. A set-screw *d* is threaded through locking member D for reasons hereinafter manifest.

Stem C is shaped to substantially conform to the contour of a socket *e* formed in the base of the bracket E, which it is desired to support. In the form shown, the bracket, as stated, has the function of a tumbler-holder and is shaped to properly carry out the function ascribed thereto, a tumbler F being supported within the dished portion *f* in the upper face of bracket E.

After the parts have been manufactured, they are generally shipped in assembled position; that is to say, stem C, with locking member D in the cut-away portion thereof, is inserted in the socket *e* in the base of the bracket and a set-screw *d* introduced through an aperture *e'*, formed in the wall of the bracket, and screwed through locking member D, so that the nose of said set-screw contacts with the substantially flat face of the cut-away portion *c*. As the set-screw is tightened, the adjacent faces of the cut-away portion and the locking member are forced apart, thereby causing said locking

member and the stem proper to bind within socket *e*. Thus, if we consider locking member D as a portion of the stem, which was cut away, it will appear that, by tightening the set-screw, the stem is expanded within the constricted socket and locks the parts together by friction. If the bracket is one of porcelain or vitreous china, the friction between such material and the metal from which the attaching plate and stem are formed is very great, so that all reasonable chance of the bracket pulling free from the stem is absolutely precluded.

The customer purchases the bracket with the parts locked in position, and mounts the same by first retracting set-screws *d*, dismantling the parts, and thereafter mounting the attaching plate, by means of screws *a*, upon the supporting surface B, whereupon the parts are reassembled, as specified, and set-screw *d* tightened to expand the composite parts of the stem within the socket of the bracket and frictionally maintain the same in position. In this reassembling operation, it is not essential to entirely remove set-screw *d*, since, as soon as it is loosened, the stem proper is released and may be readily withdrawn from the socket. If said socket is circular in cross-section, and locking member D semi-cylindrical, as shown, said locking member will retain its position within the socket after the stem is withdrawn, and this greatly facilitates the positioning of the parts in coöperative relation after the attaching plate has been secured in place.

It will be manifest from the foregoing description that a bracket supported in accordance with this invention is maintained in position by means which are entirely invisible. It is true that the aperture *e'* in the bracket may be seen, if one is looking for it, but this aperture is, in practice, so positioned that it will be on the under, upper, or such side of the fixture as will not be normally visible when the bracket is in place. The construction is simple, efficient, and extremely economical to manufacture, because of the fact that the support, itself, is entirely concealed and may thus be made of unfinished material, such as cast iron.

The invention has been described as associated with a tumbler support, but it will be understood that it is equally well adapted to support the brackets of a towel rack, toilet paper holder, shelf, tooth-brush holder, or any other toilet fixture. Moreover, while the invention has been described as particularly adapted for mounting porcelain or vitreous china brackets, it will be manifest that the same may be employed in the mounting of brackets of metal or other material.

It will be apparent that, in adapting the invention to its various environments, slight changes in shape or form may be made without departing from the spirit of the invention, which is to be understood as not limited to the particular showing herein made, but to be as broadly novel as is commensurate with the appended claims.

The manner of mounting brackets for supporting bath-room fixtures, as heretofore practised, has generally been to provide screw-holes in the base of the bracket, through which screws might be passed to extend into a wall or the like. In order to obtain sufficient clearance between the head of the bracket and the heads of screws inserted through the base, it has been necessary to make the base quite extensive, so that the screw-holes would be positioned sufficiently distant from the center of the bracket to allow of their manipulation by a screw-driver. Thus, in prior art structures, the bases, in many cases, have been so extensive as to be out of proportion or artistic harmony with the remainder of the fixture. Moreover, in constructing enlarged bases, considerable superfluous material is required, and this not only increases the size of the molds or castings necessary, but results, in effect, in a waste of material, as well as in additional expense in crating and shipping. It will be manifest that the present invention overcomes these disadvantages and allows of the making of the base of minimum dimensions, since the manipulation of the screw from the side, or at right angles to the center line of the bracket, cannot be interfered with by the head of the bracket. Artistic effects may, therefore, be accomplished through the employment of the present invention, which effects were absolutely impossible under the heretofore prevailing conditions specified. Furthermore, saving in material results, and the parts may be packed in small compass and more compactly than heretofore.

Having thus fully described the invention, what I claim as new, and desire to secure by Letters Patent, is:

1. A device of the class described embodying a supporting member adapted to be fixedly mounted, a stem on the supporting member, one side of which stem is cut away, and a filler piece positioned within said cut-away portion, in combination with a supported member provided with a socket to receive the stem of the supporting member, and means for imparting bodily movement to the filler piece radially of the stem to cause the binding of the stem and filler piece within the socket of the supported member.

2. A device of the class described embodying a supporting member adapted to be fixedly mounted, a stem on the supporting member, one side of which stem is cut away, and a filler piece positioned within said cut-away portion, in combination with a sup-

ported member provided with a socket to receive the entire supporting member and filler piece, whereby said supporting member is concealed by the supported member, and means for imparting bodily movement to the filler piece radially of the stem to cause the binding of the stem and filler piece within the socket of the supported member.

3. A device of the class described embodying a supporting member adapted to be rigidly mounted and having a substantially semi-cylindrical stem portion, and a substantially semi-cylindrical filler piece adapted to coöperate with the stem portion and collectively form, with the semi-cylindrical stem portion, a substantially cylindrical stem, in combination with a supported member provided with a socket for receiving said stem, and means for bodily moving the filler piece radially away from the semi-cylindrical stem portion to cause binding of the stem within the socket for the purpose of mounting the supported member upon the supporting member.

4. A device of the class described embodying a supporting member adapted to be rigidly mounted and having a substantially semi-cylindrical stem portion, and a substantially semi-cylindrical filler piece adapted to coöperate with the stem portion and collectively form, with the semi-cylindrical stem portion, a substantially cylindrical stem, in combination with a supported member provided with a socket for receiving said stem, and a set-screw threaded through the filler piece for bodily moving the same radially away from the semi-cylindrical stem portion to cause binding of the stem within the socket for the purpose of mounting the supported member upon the supporting member.

5. A device of the class described embodying a supporting member adapted to be rigidly mounted and having a substantially semi-cylindrical stem portion, and a substantially semi-cylindrical filler piece adapted to coöperate with the stem portion and collectively form, with the semi-cylindrical stem portion, a substantially cylindrical stem, in combination with a supported member provided with a socket for receiving said stem, and a set-screw, threaded through the filler piece and accessible through an aperture in the wall of the supported member for bodily moving said filler piece radially away from the semi-cylindrical stem portion to cause binding of the stem within the socket for the purpose of mounting the supported member upon the supporting member.

6. In a device of the character described a supporting member embodying a divided expansible post composed of separate, disconnected parts, and means for mounting the post rigidly in position, in combination with a supported member provided with a socket fitting over the post of the supporting member, and a screw operable through the wall of the socket and at substantially right angles to the longitudinal axis of the post for expanding the post within the socket when the parts are in assembled relation.

7. In a device of the character described, a supporting member embodying an expansible post composed of separate, disconnected parts, and means for mounting the post rigidly in position, in combination with a supported member provided with a socket fitting over the post of the supporting member, and means engaging the members forming the post entering the post and operable at substantially right angles to the longitudinal axis of the post for expanding the post within the socket when the parts are in assembled relation.

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

TROUGOTT TSCHUDIN.

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