Sept. 3, 1929. C. S. DOWNS 1,726,948

BATHROOM SHOWER CURTAIN HOLDER

Filed Nov. 13, 1928 2 Sheets-Sheet 1

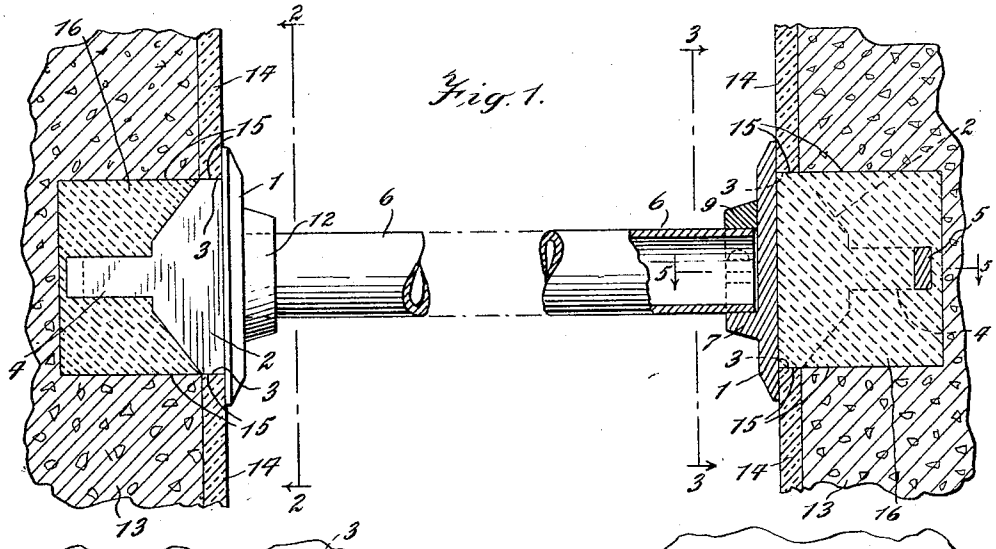


Fig. 1.

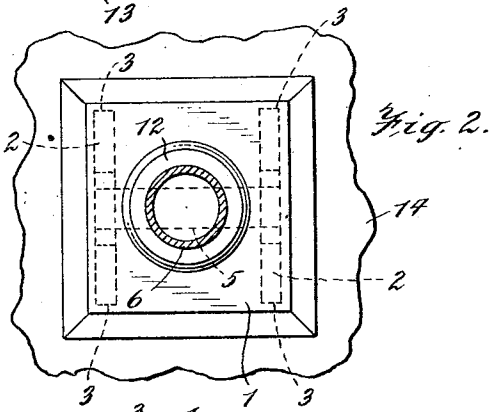


Fig. 2.

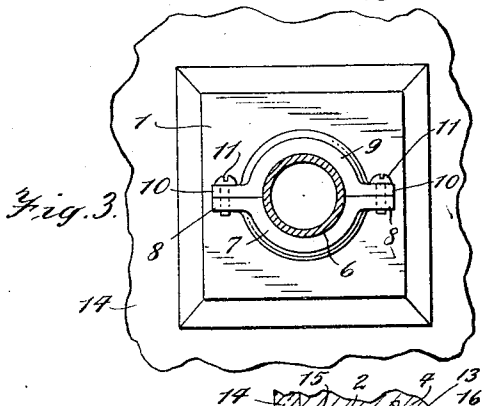


Fig. 3.

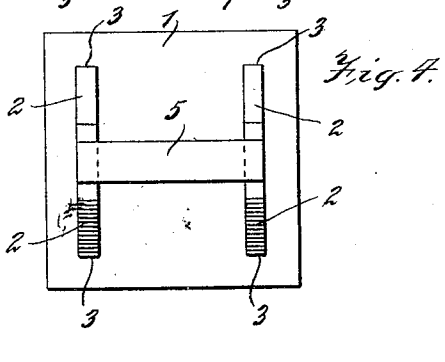


Fig. 4.

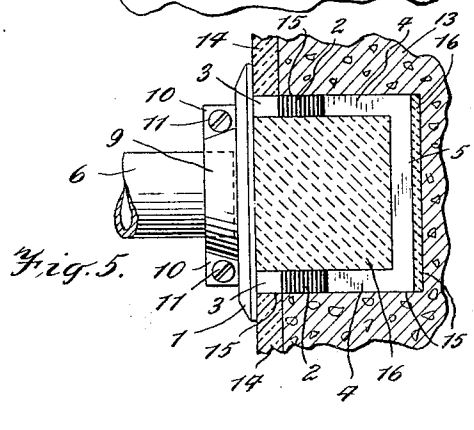


Fig. 5.

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Fig. 6.

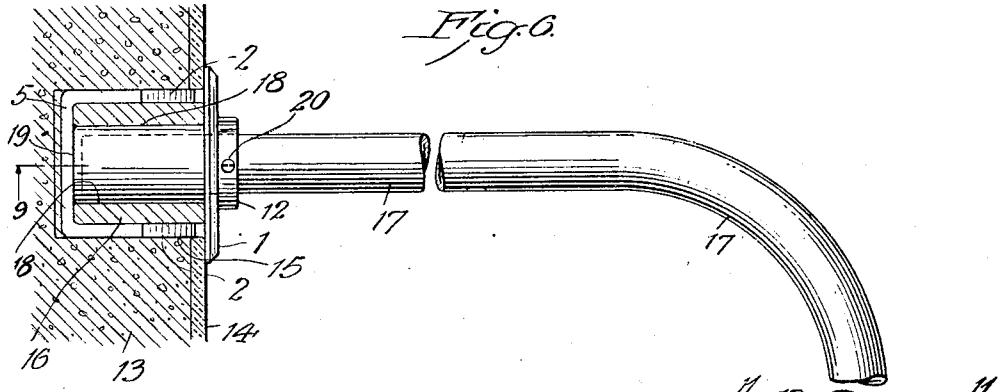


Fig. 7.

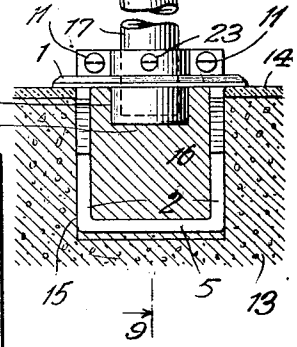


Fig. 8.

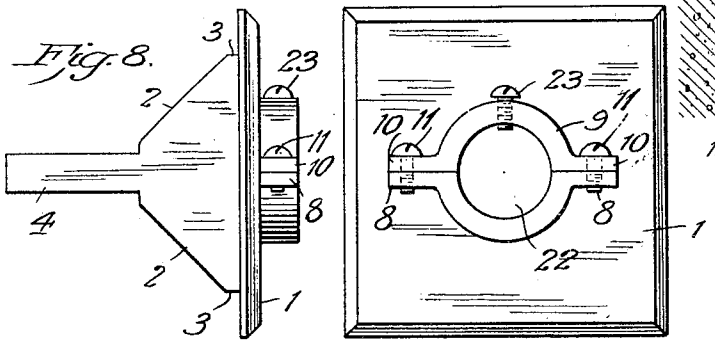
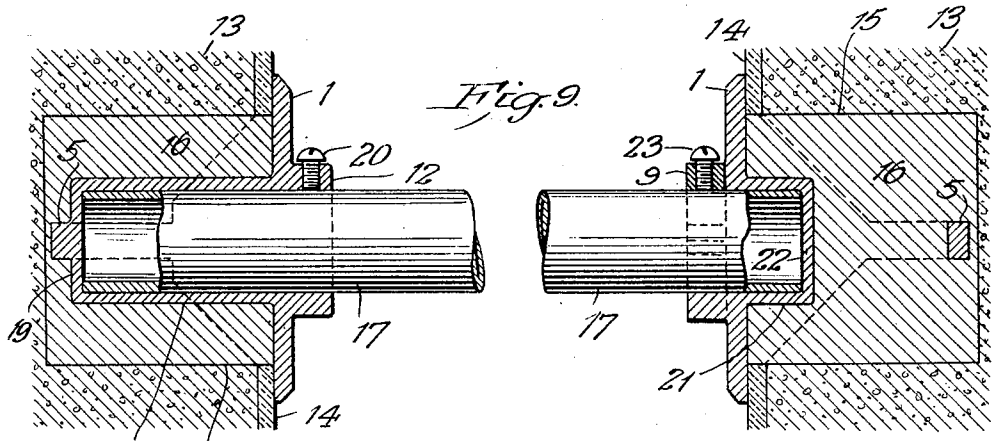


Fig. 9.



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UNITED STATES PATENT OFFICE.

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BATHROOM SHOWER-CURTAIN HOLDER.

Application filed November 13, 1928. Serial No. 319,173.

This invention relates generally to wall bracket structures, and relates particularly to bathroom shower curtain holders. Among the objects of this invention are substantially to reduce the at present prevailing costs of installation, substantially to eliminate the usual expensive upkeep, and to free the users from inconvenience and annoyance. Other more particular objects and advantages will hereinafter appear.

The usual practice at present, in the case of bathroom shower curtain holders, in making an installation, is to cut screw threads upon the opposite ends of a tubular metallic curtain rod, a flange is then screwed over each end of the rod, these flanges then being secured to respective walls of the bathroom by means of screws which enter lead anchors set into the walls. In drilling the holes for these lead anchors tiles are often cracked, and also in many instances after the walls and tiling have become thoroughly dried out, these anchors are left loose, and expensive repairs are then necessary. In this practice, the broken tiles must of course be replaced, or if the walls have been plastered, the damaged plaster must be patched. In the cost of these usual installations there is also to be considered the time of the workmen consumed in cutting threads on the rods and in drilling the holes in the walls for the anchors. Also in many cases there is a recurring expense of upkeep. These expenses are eliminated by the present invention, as will hereinafter clearly appear. According to this invention, there is also both greater ease and accuracy in making the installation of the curtain holders, as well as simplicity of construction of such holders.

In carrying out the present invention, socketed rod-holding wall brackets are provided which are themselves anchored directly in the walls, means being provided according to the invention for accurately locating the rod-receiving sockets in relation to each other, and also including means by which after these brackets or holders have been installed in the walls, one end of the curtain rod may be inserted into one of the sockets, the construction of the other socket being such that the other end of the rod may be inserted laterally and be removably held therein. More particularly, the invention includes various features of construction and combinations of parts, as will appear from the following description.

Two embodiments of the invention are illustrated in the accompanying drawings, which embodiments will now be described and thereafter the invention will be pointed out in claims, reference now being had to the drawings, in which:

Fig. 1 shows a substantially complete installation of an embodiment of the invention, partly in front elevation and partly in vertical section centrally of the curtain rod, the middle portion of which is broken out;

Fig. 2 is a vertical section on the line 2—2 of Fig. 1, showing a face view or outside elevation of one of the socketed wall brackets;

Fig. 3 is a similar view of the other socketed wall bracket with the section taken on the line 3—3 of Fig. 1;

Fig. 4 is a rear elevation of one of these brackets;

Fig. 5 is a horizontal section generally indicated by the line 5—5 of Fig. 1, with the wall bracket appearing in plan view;

Fig. 6 shows a substantially complete installation of another embodiment of the invention in plan view with the walls in horizontal section, the front of the installation being at the top of this figure;

Fig. 7 is an enlarged face view or outside elevation of the socketed wall bracket appearing at the right in Fig. 6;

Fig. 8 is a side elevation of the same bracket as viewed from the left in Fig. 7; and

Fig. 9 is a similarly enlarged vertical section of the complete installation taken on the right angular line 9—9 of Fig. 6.

In carrying out the invention, a pair of wall bracket structures may each consist of a single casting, such as cast iron. In the embodiment of the invention shown in the drawings, each of these rod-supporting bracket structures comprises a square, outwardly beveled face plate 1 from the back of which, inwardly from the lateral edges thereof, there project a pair of spaced parallel flat lugs or wings 2 at right angles to the back of the face plate 1 and which wings at their upper and lower ends terminate inwardly from the upper and lower edges of the face plate to form shoulders 3 at right angles to the back of the face plate, the outer sides of the flat wings themselves serving to form lateral shoulders. The ends of these wings are shown as inclined or sloped inwardly and rearwardly from the end shoulders 3. From the middle of the rear edge

of each wing 2, and shown as forming a slight shoulder therewith, there projects rearwardly therefrom in alignment therewith a straight flat leg or stem 4. The rear ends of these legs or stems are united by means of a straight transverse flat horizontal anchor bar 5.

Each of the face plates 1 is integrally provided upon its outer side with an outwardly projecting socket part for receiving the adjacent end of a usual hollow or tubular metallic curtain rod 6. In the case of at least one of the bracket structures, such socket part comprises a lower semicircular half socket 7 provided at its ends with horizontal outwardly projecting ear lugs 8 having therein screw threaded perforations. The upper half of the complete circular socket is formed by means of a separate attachable and detachable semicircular peripheral part 9, provided at its ends with outwardly projecting ear lugs 10 which are perforated to receive screws 11 which engage in the ear lugs 8 of the lower socket part 7. This construction of socket is shown at the right in Fig. 1 and is also shown in Figs. 3 and 5.

The socket on the outer side of the other face plate 1 may be of similar construction if desired, with a separable peripheral socket part, but that is not necessary to the carrying out of the invention, and for simplicity of construction such socket on the other face plate 1 for receiving the other or opposite end of the curtain rod 6 may be in the form of a complete annulus or ring 12 cast upon and projecting axially from the front of this face plate 1, as is shown at the left in Fig. 1 and also shown in Fig. 2.

The invention is particularly adapted for installation on walls 13 composed of concrete or of more or less similar building material, or of the commonly used blocks or building tiles of such material, and such a wall may or may not include an outer facing 14, which may consist of tiles or of plaster, the particular features of the wall construction not being essential to the carrying out of the invention. In carrying out the invention, according to the particular installation thereof shown in the drawings, a transversely square hole 15 is formed in each of the walls 13, to open outwardly through its tile facing 14 there shown, each of these holes having opposite vertical and horizontal sides, and the bottoms of these holes are shown as flat, but that is immaterial.

The transverse dimensions of these holes 15, both vertically and horizontally, particularly in the outer portion thereof, are such as to receive therein with a snug fit the positioning shoulders formed by the flat lateral outer sides of the wings 2 and by their squared ends 3, so that thereby the entire bracket structure is automatically positioned on the wall against sliding movement or lateral displacement thereon in any direction. Thus merely by cutting these holes 15 at the proper place opposite each other in the walls, the sockets for the opposite ends of the curtain rod 6 will be automatically positioned in axial alignment, both horizontally and vertically.

It may be noted that it is a common practice to line bathrooms and shower stalls with encaustic tile of a three inch by six inch size. In such case the tile setter only needs to leave a three by three inch opening, which provides the correct shape and outer dimension for a hole 15 for installing the present invention, with the distance between the upper and lower sides of the wings 2, and between their end shoulders 3, made three inches, this being a convenient size, and that may be considered as the arrangement which is indicated in the drawings.

In effecting an installation, the holes 15 in the walls are filled to a sufficient extent with a suitable cementitious material 16, such as Portland cement mortar, which when it has set provides a firm anchorage for the bracket structures.

The particular construction or embodiment of the invention shown in Figs. 1 to 5 inclusive is suitable for straight line installation, that is to say, where a straight curtain rod such as 6 extends between two opposite walls facing each other, as shown more particularly in Fig. 1. However, some installations require that the curtain rod shall be installed at its opposite ends on walls at right angles to each other, as shown in the plan view of Fig. 6, and without any intermediary support for the curtain rod, which is bent at right angles on a curve. In such case, it is obvious that the shallow sockets such as shown in Figs. 1 to 5 inclusive would not provide adequate support for the curtain rod. For such installations, the modified embodiment of the invention as shown in Figs. 6 to 9 inclusive may be employed.

The modified construction shown in Figs. 6 to 9 inclusive, while retaining the features of construction already described with reference to Figs. 1 to 5 inclusive, contains further features. Accordingly, for clarity and conciseness, the same reference numerals have been applied, throughout Figs. 1 to 9 inclusive of the drawings, to substantially similar or corresponding parts with additional reference numerals for the additional parts shown in Figs. 6 to 9 inclusive.

In this installation a horizontally extending bent curtain rod 17, having its end portions extending at right angles to each other, is installed at its ends upon two walls at right angles to each other and which join or come together at the corner of the bath room, portions of these walls being broken out, as also are portions of the bent curtain rod 17,

because of lack of space on the drawings. As indicated in Fig. 6, one of the end portions or arms of the curtain rod 17 is longer than the other, so as thereby to enclose an elongated rectangular space in the corner of the bath room, this being a common form of installation required.

It is to be noted that the front of this rectangular corner space to be enclosed by the bath room curtain is at the top or upper side in the plan view of Fig. 6. The illustration in Fig. 6 is arranged in this reverse position in order thereby to utilize the available space on the drawings to the best advantage. As viewed in this Fig. 6, the longer arm of the bent horizontal curtain rod 17 is at the left, while its shorter arm is at the right. In a horizontally bent or curved curtain rod such as this, supported only at its ends, it is necessary not only to provide for convenient installation but also to take measures to provide against the sagging of the rod at its corner curve or bend, it being borne in mind that this rod must bear the weight of the curtain hung thereon.

The wall bracket structure shown at the left in Figs. 6 and 9 has its face plate 1 apertured centrally in line with the outer socket ring 12 and from the inner or rear side of this face plate a deep cylindrical socket 18 extends rearward and is shown as closed at its inner end by a bottom wall 19 immediately adjacent to the anchor bar 5. At its open forward end the socket tube 18 is integral or in one piece with the face plate 1, while its bottom wall 19 is integral or in the same piece with the anchor bar 5, this entire rear wall bracket thus forming a single casting. The inner socket tube 18 forms an inward continuation of the external socket ring 12 so that thereby a deep socket tube is formed extending from the outer side of the ring 12 to the bottom 19 of the inner socket part 18. It will be evident that this deep socket thus formed will firmly hold the longer arm of the curtain rod 17 in horizontal position when the end of this rod is fully inserted therein as shown. For yet more firmly holding this end of the curtain rod, particularly against any possible twisting movement, it is desirable to provide a set screw 20 in the top of the external socket ring 12.

The wall bracket structure shown at the right in Figs. 6 and 9 and also further shown in Figs. 7 and 8 is provided with an outwardly opening internal socket part 21 cast in one piece with the outer face plate 1 and closed at its inner end by a bottom wall 22 cast in the same piece therewith. The socket cup thus formed, it will be noted, is considerably shallower or of less depth than the socket tube 18 formed on the other wall bracket structure, as above described. This inner socket 21 forms an inward continuation of the outer socket part formed by the lower half socket 7 and its upper detachable part 9, which is firmly but detachably held in place by means of the screws 11.

While this inner socket 21 is necessarily of less depth than the other inner socket 18, for reasons which will presently appear, still this socket 21 can be and is shown as of sufficient depth to provide substantial support, in cooperation with the deeper socket 18, for holding the shorter arm of the bent curtain rod 17 in horizontal position. For thus firmly and securely holding this end of the curtain rod, as well as for preventing the possibility of this end of the rod being pulled out of its socket beyond the outer end thereof, provided by the external socket parts 7 and 9, which might otherwise occur through the springing or bending of the curtain rod, a set screw 23 for this end of the curtain rod is provided in the top of the upper external detachable half socket part 9. This outer detachable socket part 9 in both of the constructions shown has substantially the same function, as will presently clearly appear.

In effecting the installation of the straight curtain rod 6, shown in Figs. 1 to 5 inclusive, the detachable socket part 9 is left off or removed. One end of the curtain rod 6 is then inserted into the external socket ring 12 against its bottom formed by the face plate 1, then the other end of this rod is dropped or placed in the lower upwardly open half socket 7, after which the upper half socket 9 is placed in position above this end of the rod and the screws 11 inserted and tightened.

In effecting the installation shown in Figs. 6 to 9 inclusive, the end of the longer arm of the bent curtain rod 17 is first fully inserted into the socket tube 18, as shown in Figs. 6 and 9, with the rod so held in a rotative position that the right angular end of its shorter arm is entirely clear of the other wall bracket structure. With the upper half socket 9 in detached condition, the end of the shorter arm of the curtain rod may now be readily inserted into the relatively shallow inner socket 21 merely by rotating the curtain rod 17 about the axis of its longer arm and at the same time slightly springing this longer arm outwardly sufficiently so that the end of the shorter arm will pass the outer side of the face plate 1, first down into the lower half socket 7 and then through the face plate into the inner socket 21, with its end in contact with the bottom 22 thereof, as shown in Figs. 6 and 9.

Obviously if the curtain rod 17 had to be sprung too much in order thus to insert the end of the shorter arm into the socket 21, the rod would be permanently bent and spoiled by reason of the fact that the end of its longer arm is held in the deep socket tube 18 of the other wall bracket structure. By utilizing the external detachable half

socket 9, the inner socket part 21 may be just that much deeper within the limits of springing the curtain rod, while at the same time providing a correspondingly firmer and stronger support for the curtain rod at the end of its shorter arm, as will be readily understood. The tightening of the set screws 20 and 23 will then hold both ends of this bent curtain rod 17 firmly and securely fully seated in their respective sockets.

It is obvious that various modifications may be made in the constructions shown in the drawings and above particularly described, within the principle and scope of the invention as defined in the appended claims.

I claim:

1. A wall bracket structure comprising a face plate, a rod support projecting from the front of the face plate, marginal shoulders projecting from the back of the face plate for snugly entering a hole in a wall for positioning the face plate in correct relation to and to cover such hole, and an anchor carried by the face plate at its back to be engaged and rigidly anchored in place by means of cementitious material contained in said hole.

2. A rod holder comprising a pair of substantially similar wall brackets adapted to be rigidly mounted on different walls horizontally in alignment for supporting a rod at its opposite ends with the rod at right angles at its ends to the surfaces of the walls, each of said wall brackets comprising a face plate to overlap beyond and cover a hole in the wall, a rod socket projecting from the outer face of each of said face plates with its axis at right angles thereto, at least one of said sockets including a separately attachable and detachable peripheral part to provide for the lateral insertion of the end of the rod after its other end has been inserted into the other said socket, marginal shoulders projecting from the back of each face plate to fit snugly in the hole in the wall for positioning the two sockets relatively to each other, and an anchor carried by each face plate at its back for firmly anchoring the wall bracket in place by means of cementitious material contained in the hole in the wall.

3. A one-piece wall bracket structure comprising a face plate to overlap beyond and cover a hole in a wall, shoulders projecting from the back of the face plate snugly to enter and fit in such hole to center the face plate relatively to the hole, an anchor carried by the face plate at its back to be engaged and anchored by means of cementitious material in the said hole, a peripheral half socket part projecting laterally from the outer side of the face plate, and a separately attachable and detachable peripheral socket member to form the other peripheral half of a peripherally complete socket part for the end of a rod extending at right angles to the wall.

4. A one-piece cast metal wall bracket structure comprising a face plate to overlap beyond and cover a hole in a wall, a rod-receiving socket part projecting from the outer side of the face plate, centering shoulders projecting from the back of the face plate to have a snug sliding fit in the outer part of the hole in the wall and to prevent sliding movement of the face plate on the wall in any direction, and an anchor carried by the face plate at its back to be engaged by cementitious material in the hole for firmly anchoring the bracket structure in place on the wall.

5. A one-piece cast metal bracket structure comprising a face plate to overlap beyond and cover a hole in a wall, centering shoulders on the back of the face plate to fit snugly in the outer portion of such hole and prevent sliding movement of the face plate on the wall, an anchor carried by the face plate at its back to be engaged by cementitious material in the hole for firmly anchoring the bracket structure in place on the wall, an upwardly opening semicircular socket part with oppositely extending horizontal perforated lugs projecting from the outer side of the face plate with its axis at right angles thereto, and a separate semicircular upper socket part having oppositely extending horizontal perforated lugs which are attachable to and detachable from the perforated lugs of the said lower socket part thereby to form a circularly complete socket part for the end of a rod extending at right angles from the wall.

6. A rod-holding wall bracket structure comprising a face plate to overlap beyond and cover a hole in a wall, shoulder-forming lugs extending from the back of the face plate shaped to fit snugly in the outer part of such hole for centering the face plate thereover and preventing its sliding movement on the wall, an anchor bar connecting together the inner ends of the lugs and anchoring the bracket structure in place on the wall by means of cementitious material in said hole, and a rod-receiving socket projecting from the outer side of the face plate.

7. A rod-supporting bracket structure comprising a face plate to overlap beyond and cover a square hole in a wall, a rod-receiving socket part projecting from the outer side of the face plate, a pair of flat spaced parallel wing members projecting from the back of the face plate and filling the outer portion of the said square hole at its corners, a stem forming a projecting extension from the middle of each such wing, and a transverse anchor bar connecting together the farther ends of said stems, whereby the said wings serve to position the bracket structure on the wall and the

said anchor bar serves to anchor the bracket structure firmly in place on the wall by means of cementitious material contained in the said hole.

8. A wall bracket structure comprising a face plate, an outwardly opening rod-receiving socket carried by the face plate, marginal shoulders projecting from the back of the face plate for snugly entering a hole in a wall for positioning the face plate in correct relation to and to cover such hole, and an anchor carried by the face plate at its back to be engaged and rigidly anchored in place by means of cementitious material contained in said hole.

9. A one-piece cast metal wall bracket structure comprising a face plate to overlap and cover a hole in a wall, an outwardly open rod-receiving socket part on the face plate with its axis at right angles thereto, centering shoulders projecting from the back of the face plate to have a snug sliding fit in the outer part of the hole in the wall and prevent sliding movement of the face plate on the wall in any direction, and an anchor carried by the face plate at its back to be engaged by cementitious material in the hole for firmly anchoring the bracket structure in place on the wall.

10. The invention defined in claim 4, in which the said rod-receiving socket part is wholly at the outer side of the front face of the face plate and is closed at its bottom thereby.

11. The invention defined in claim 3, in which a bottom is formed for the said projecting complete socket by the outer front face of the face plate.

12. The invention defined in claim 2, in which a bottom is formed for each of the said projecting rod sockets by the outer front face of the face plate, whereby the said wall brackets may be mounted on opposite parallel walls facing each other with their rod sockets in axial alignment for removably and replaceably supporting a straight horizontal rod with its opposite ends seated in the respective sockets.

In witness whereof, I hereunto subscribe my signature.

CHARLES SANBORN DOWNS.