United States Patent [19]

Cross

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[54] **BRACKET CONSTRUCTION FOR WALL MOUNTING OF CABINETS**

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[51] **Int. Cl.** **A47b 67/02,** A47f 5/08, A47h 1/10

[58] **Field of Search** 312/245; 248/476, 296, 298; 52/27, 34

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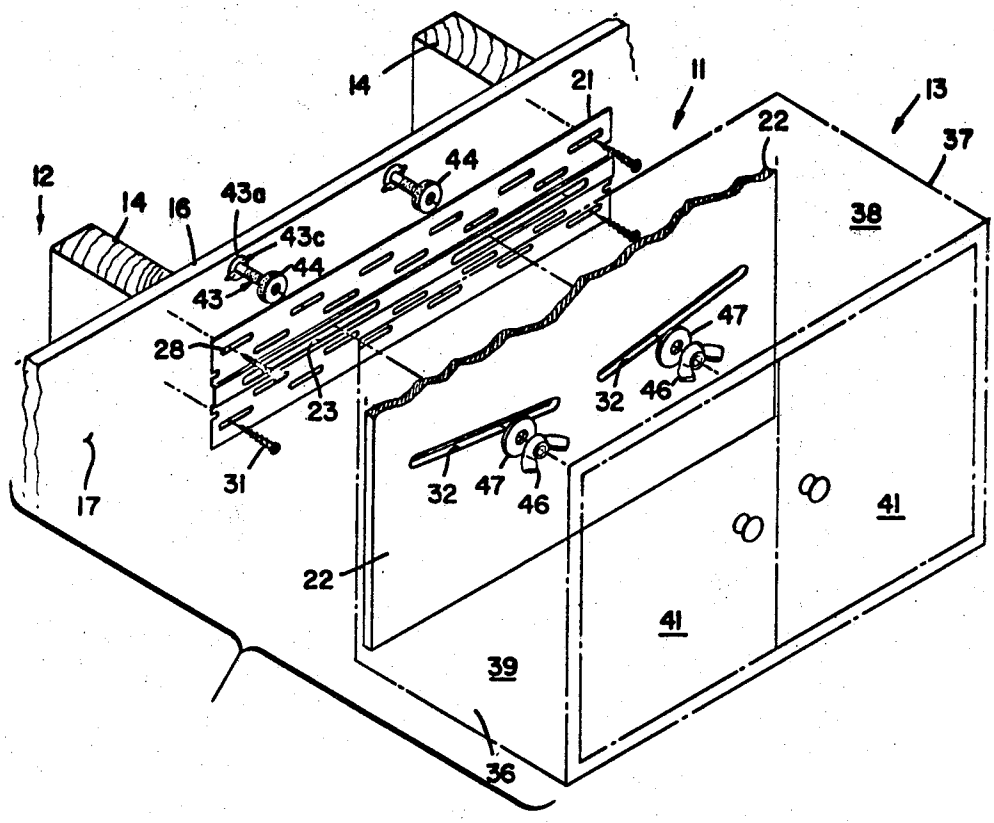
[57] **ABSTRACT**

Bracket construction for wall mounting of cabinets having a relatively rigid member adapted to be secured to a wall and an additional rigid member. Each of the members has a pair of slots formed therein with the slots on one of the members being inclined at an angle with respect to the slots in the other of said members. Releasable securing means extends through the slots in the first-named and additional members for removably securing the additional member to the first-named member whereby said slots permit adjustment of the additional member with respect to the first-named member.

8 Claims, 5 Drawing Figures



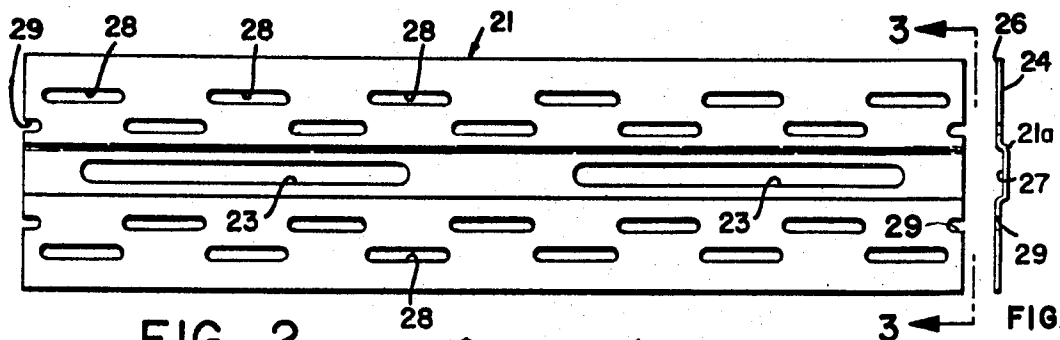


FIG_2

FIG.3

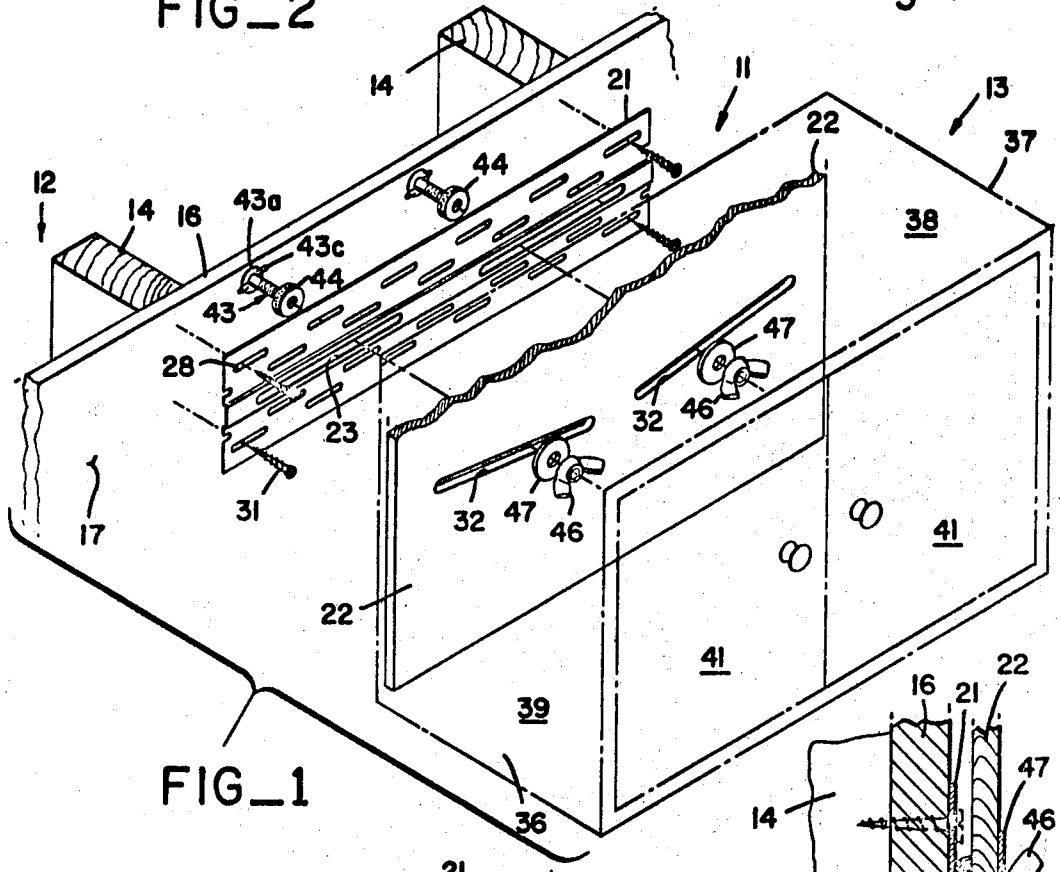


FIG_1

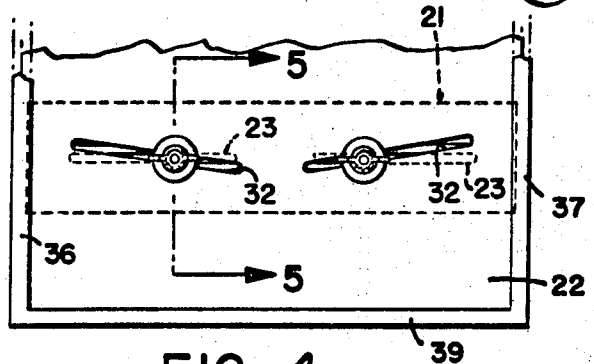


FIG_4

FIG_5

BRACKET CONSTRUCTION FOR WALL MOUNTING OF CABINETS

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to a bracket construction for the wall mounting of cabinets.

2. Description of the Prior Art

Brackets for the wall mounting of cabinets have heretofore been provided. However, with such brackets it has been necessary to precisely position the brackets on the wall to make it possible to precisely position cabinets on the wall and in particular to place a row of cabinets at the same level or height. There is a need for a new and improved bracket construction which does not require such a precise positioning of the bracket.

SUMMARY OF THE INVENTION AND OBJECTS

The bracket construction for the wall mounting of cabinets comprises a relatively rigid member adapted to be secured to the wall. An additional rigid member is provided. The first-named and additional rigid members are each provided with a pair of slots which are formed therein. The slots in one of the members are inclined at an angle with respect to the slots in the other of said members. Releasable securing means is provided which extends through the slots in the first-named and additional members for removably securing the additional member to the first-named member whereby said slots permit adjustment of the additional member relative to the first-named member.

In general, it is an object of the present invention to provide a bracket construction which is particularly adapted for readily mounting cabinets on a wall.

Another object of the invention is to provide a bracket construction of the above character by which it does not require the portion of the bracket construction mounted on the wall to be precisely positioned.

Another object of the invention is to provide a bracket construction of the above character which permits adjustment of the position of the cabinet on the wall.

Another object of the invention is to provide a bracket construction of the above character which substantially reduces the mounting time required by the installer of the cabinets.

Another object of the invention is to provide a bracket construction of the above character which facilitates mounting of cabinets on walls which are not absolutely flat or planar.

Additional features and objects of the invention will appear from the following description in which the preferred embodiment is set forth in detail in conjunction with the accompanying drawing.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is an isometric view of a bracket construction incorporating the present invention for mounting a cabinet on a wall.

FIG. 2 is a front elevational view of one of the mounting members of the bracket construction.

FIG. 3 is an end elevational view looking along the line 3—3 of FIG. 2.

FIG. 4 is a front elevational view of the bracket construction.

FIG. 5 is a cross-sectional view taken along the line 5—5 of FIG. 4.

DESCRIPTION OF THE PREFERRED EMBODIMENT

The bracket construction **11** is adapted to be mounted on a wall **12** and is utilized for securing cabinets such as cabinet **13** to the wall. The wall **12** can be of any conventional type, as for example, as shown on the drawings it can consist of spaced parallel vertical studs **14** to which there has been secured plaster board **16** in a conventional manner. The plaster board **16** provides an outer wall surface **17** which is generally planar and extends in a vertical direction.

The bracket construction **11** consists of a relatively rigid plate or member **21** and an additional rigid member **22.** Both the members **21** and **22** can be formed of suitable materials. For example, the member **21** can be formed of steel whereas the member **22** can be formed of plywood, Masonite or other materials of which cabinets are made. As hereinafter described, it is preferable that the member **22** form the rear wall of the cabinet **13** which is to be mounted upon the wall **12.**

Each of the members **21** and **22** has two slots which are formed therein, with the slots in one of the members being inclined at an angle with respect to the slots in the other of the members. Thus, as shown in the drawing, the member **21** is provided with two slots **23** which are in axial alignment and which extend in a generally horizontal direction when the member **22** is secured to a wall. The slots **23** are of substantial length and preferably are of such a length so they extend over at least one-half of the member **22** but to a distance which does not impair the structural rigidity of the member **21.**

The member **21** can have any desired shape, as for example, the rectangular configuration shown in FIG. **2** and should have a length which is greater than the spacing between two adjacent studs **14.** The member **21** is provided with front and rear surfaces **24** and **26.** The member **21** is also provided with a recess **27** which is formed by a U-shaped portion extending longitudinally of the member **21** and spaced equi-distant between the upper and lower extremities thereof. The member **21** is also provided with a plurality of additional smaller slots **28** which are generally spaced over the surfaces **24** and **26** of the member **21.** As can be seen, particularly in FIG. **2,** the slots **28** extend in two rows with two rows above and two rows below the two slots **23** in such a manner that the slots in one row of each of the two rows are staggered with respect to the slots in the other row. The member **22** is also formed with open ended slots **29** provided in opposite ends of the member **21.** The member **21** is adapted to be secured to the wall **12** by suitable means such as screws **31** which extend through the slots **28** to removably secure the member **21** to the studs **14.**

As also shown on the drawing, the member **22** is provided with a pair of slots **32.** The slots **32** are inclined at an angle with respect to the horizontal and also with respect to the vertical. By way of example, the slots can be inclined at an angle of 20° from the horizontal and if desired can have an angle ranging between 10° and 30° from the horizontal. In the embodiment shown in the drawings, the slots **32** are inclined upwardly and in an outward direction. The slots **32** and the member **22** and the slots **23** and the member **22** have the same gen-

eral positions and spacing between them with the principal difference being that the slots **32** are inclined at an angle with respect to the slots **23.** The slots **23** and the slots **32** also have approximately the same width and length.

As can be seen from FIG. **1,** the member **22** serves as a rear wall for the cabinet **13** which includes spaced parallel side walls **36** and **37,** top and bottom walls **38** and **39** and a front wall formed by a pair of hinged side swinging doors **41.** The cabinet is constructed in such a manner that the rear wall formed by the member **22** is slightly recessed with respect to the rearmost extremities of the side walls **36** and **37** and the top and bottom walls **38** and **39** to accommodate the bracket construction which is utilized for mounting the cabinet.

Releasable securing means which is adapted to extend through the slots **23** and **32** of the members **21** and **22** is provided for securing the additional member **22** to the first-named member **21.** This releasable securing means consists of a pair of screws **43** each of which is provided with generally flat rounded head portions **43***a* which is offset slightly from the center of the threaded stem portion **43***b* of the screw. The screw is also provided with outwardly extending ear-like portions **43***c* underlying the head portion **43***a* and being formed integral with the head portion **43***a* and the stem portion **43***b*. The heads of the screws are adapted to seat within the recess **27** provided in the member **21** and extend through the slots **23.** When the member **21** is secured to a wall as shown in FIG. **1,** the screws **43** are retained between the member **21** and the wall and are held in position. They are prevented from turning in the slots **23** by the ear portions **43***c*. The screws are also adapted to extend through the slots **32** of the member **22** of the cabinet. A washer **44** formed of a suitable resilient material such as foam rubber is adapted to be mounted upon each of the screws **43** between the member **21** and the member **22.** The releasable securing means also includes means in the form of wing nuts **46** and washers **47.** The cabinet can be readily held in place by screwing the wing nuts **46** onto the screws **43.**

Use of the bracket construction for the mounting of wall cabinets may now be briefly described as follows. Let it be assumed that it is desired to mount a plurality of cabinets at the same height from the ceiling or floor of a room and in a row. This is accomplished by the installer by first generally ascertaining the positions for the brackets which are to be utilized for mounting the cabinets. The installer first marks the approximate positions for members **21** of the bracket construction for mounting upon the wall. The installer then without great precision can readily secure the members **21** to the wall by suitable means such as screws **31.** After the members **21** are firmly secured, the first cabinet is hung on the wall by removing the wing nuts **46** and the washers **47** from the screws **43** and positioning the cabinet so that the screws **43** extent through the slots **32.** The washers **47** and the wing nuts **46** are then placed on the screw so that the cabinet **13** is held in the general desired position. Therefore, the cabinets can be precisely positioned in the desired location by shifting the screws in the slots **23** and **32** in a horizontal direction and making it possible to precisely position the cabinet in a horizontal direction. At the same time, the cabinet can be shifted vertically as permitted by the inclined slots **32** so that the cabinet is in the desired vertical location.

After the cabinet has been positioned vertically and horizontally, the wing nuts **47** are tightened to firmly hold the cabinet in place. It will be noted as shown particularly in FIG. **5** that the bracket construction is recessed in the space provided behind the cabinet and for this reason it is possible to mount the cabinets flush to the wall with the rear extremities of the side walls **36** and **37** and the top and bottom walls **38** and **39** being flush with the wall. In the event that the wall surface **17** is not exactly planar, the mounting provided by the bracket construction including the resilient washers **44** provides in general a three-point mounting for the cabinet in which the bracket construction serves as one point and two of the walls serve as two of the other points.

In this manner it can be seen that it is unnecessary for the installer to precisely position the member **21.** It is only necessary that it be positioned in the general location and then the desired precise positioning for the cabinet can be obtained by shifting the cabinet relative to the member **21** to the desired position in two directions at right angles to each other as permitted by the slots **23** and **32** and then fastening the cabinet in the desired place by the wing nuts **46.**

With the foregoing bracket construction it can be seen that the height of the cabinet can be varied by the distance between the upper and lower ends of the inclined slots provided in the additional member. By way of example, one-half inch should be more than adequate to give more than adequate leeway to the mounting of the first-named member on the wall and still permitting the cabinets to be all aligned in a row on a wall of a room.

As soon as one cabinet in a row of cabinets has been installed, the other cabinets can be readily positioned in the same manner by the utilization of a level using the first installed cabinet as a reference. In this way, it is possible to provide a perfectly aligned row of cabinets with very little effort.

Although the bracket construction has been described for use in connection with the mounting of cabinets, it is readily apparent that if desired other items can be mounted on walls by use of such a bracket construction.

It is also apparent from the foregoing that there has been provided a bracket construction which makes it very easy for the installer to install cabinets on the walls without the necessity for precisely mounting the mounting plates or brackes which are utilized for securing the cabinets to the wall. The bracket construction is very neat in appearance and is concealed from view of the user. The bracket construction also makes it possible to readily remove the cabinets from the wall if they are no longer desired. The bracket construction also facilitates rearrangement or exchange of cabinets from one cabinet hanging space to another.

I claim:

1. In a bracket construction for mounting cabinets on a wal by the use of fastening means, a relatively rigid member adapted to be secured to the wall, said relatively rigid member having hole means for receiving said fastening means and permitting said relatively rigid member to be adjustably positioned on said wall, an additional relatively rigid member, each of said members having a pair of slots formed therein, the slots in one of said members being inclined at an angle with respect to each other and divergingly with respect to the slots in

the other of said members, said pair of slots in the other of said members being in alignment, and releasable securing means extending through said slots in said first-named and additional members for securing said additional member to said first-named member, said slots permitting adjustment of said additional member with respect to said first-named member in two directions at right angles to each other, said releasable securing means forming the sole means connecting said first-named and additional rigid members.

2. A construction as in claim **1** wherein said additional rigid member is the rear wall of the cabinet.

3. A construction as in claim **1,** wherein said hole means comprises a plurality of additional slots, said plurality of additional slots being arranged in spaced parallel rows with the additional slots in alternate rows being offset laterally in the rows with respect to the additional slots in the other rows.

4. A bracket construction as in claim **1** wherein said slots in said additional rigid member are inclined at an angle from the slots in the first-named rigid members ranging from 10° to 30°.

5. A bracket construction as in claim **1** wherein said slots in said first-named and additional rigid members are straight and have approximately the same length.

6. A bracket construction as in claim **1** together with a cabinet and wherein said additional rigid member forms a portion of the rear wall of the cabinet and wherein the rear wall is recessed with respect to the remainder of the cabinet to accommodate the bracket construction to thereby permit the cabinet to be flush mounted on the wall.

7. A bracket construction as in claim **1** wherein said first-named rigid member is formed with a channel, wherein said slots in said first-named rigid member open into said channel and wherein said releasable securing means comprises screws having heads seated in the channel and having stems extending rhrough the pairs of slots in the first-named and additional rigid members and nuts threaded onto said screws and engaging the additional rigid member.

8. A bracket construction as in claim **1** together with resilient means disposed between the first-named and additional members.

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