

Sept. 19, 1961

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3,000,146

WALL ANCHOR

Filed Oct. 19, 1959

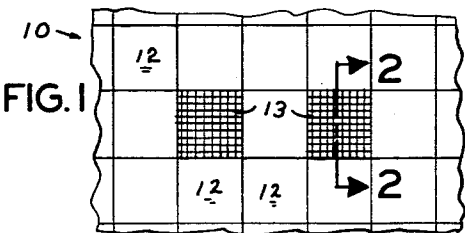
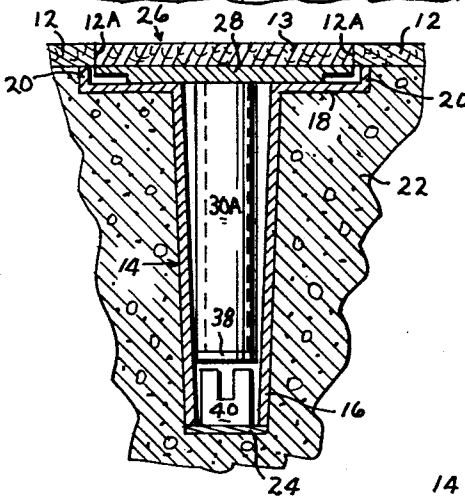


FIG. 3

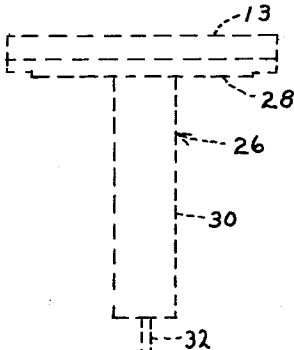
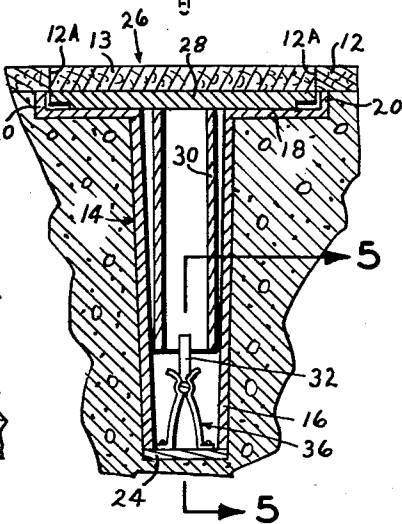


FIG. 5

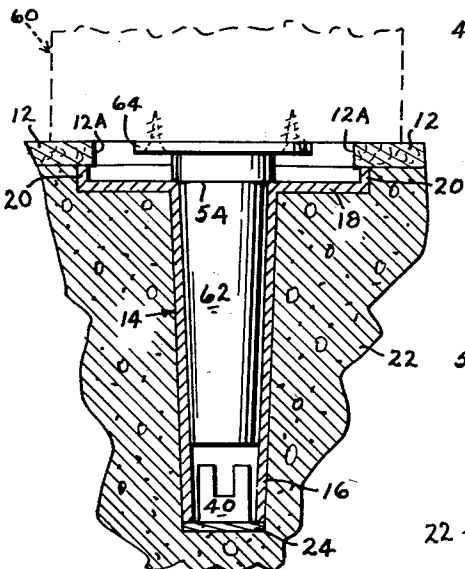


FIG. 6

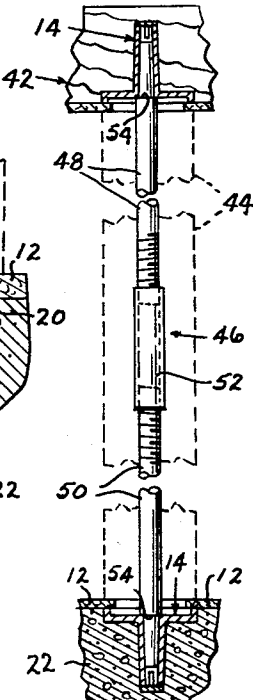


FIG. 7

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Filed Oct. 19, 1959, Ser. No. 847,287
4 Claims. (Cl. 50—471)

The present invention relates to house construction and more particularly to a socket means for removably positioning a partition wall or the like.

The principal object of the instant invention is to provide a socket means which may be installed in the surface of a floor and the ceiling for removably securing a partition wall or the like.

Another object is to provide a socket arrangement and a removable plug means for holding floor or ceiling tile in place to cover the socket and complete the pattern of the tile when the wall or partition wall has been removed.

Another object is to provide a socket in the surface of a supporting floor for receiving a plug or mandrel connected with an object subject to vibration, such as an automatic washing machine, for positioning the latter on the floor.

Still another object is to provide a socket and plug arrangement which will not in any way impair the use of the floor when not used for securing a partition wall.

The present invention accomplishes these and other objects by providing a cylindrical-like socket for installation below the surface of a floor or ceiling and a tubular plug member which is removably secured within the socket. Floor or ceiling tile is connected with the plug member to complete the finished appearance of the floor or ceiling when the socket is not in use. An elongated rod-like member is removably received within the sockets after removing the plug members, for securing a partition or the like in place.

Other objects will be apparent from the following description when taken in conjunction with the accompanying single sheet of drawings, wherein:

FIGURE 1 is a fragmentary plan view of a section of tile flooring to a reduced scale;

FIGURE 2 is a vertical cross-sectional view taken substantially along line 2—2 of FIG. 1 and, illustrating, by dotted lines, the plug member of the device in exploded relation;

FIGURE 3 is a vertical cross-sectional view similar to FIG. 2, illustrating an alternate manner of holding the plug member in place;

FIGURE 4 is a fragmentary vertical cross-sectional view to a reduced scale, partly in elevation, through a section of a ceiling and floor illustrating the wall holding rod member, a fragment of the wall being shown by dotted lines;

FIGURE 5 is a vertical cross-sectional view taken substantially along line 5—5 of FIG. 2; and

FIGURE 6 is a vertical cross-sectional view, partly in elevation, illustrating the manner of which the socket may hold an article in place.

Like characters of reference designate like parts in those figures of the drawings in which they occur.

In the drawings:

The reference numeral 10 indicates a section of flooring covered by tile 12. Two of the tiles are lined, as at 13, to indicate color forming a desired pattern. The tile 12 is conventional and is shown by way of example to illustrate the appearance of a floor or the like wherein the instant device is installed.

Referring more particularly to FIGS. 2 and 5, a socket 14, comprising a tapered walled tubular member 16, is connected at one end with a rectangular plate 18, having surrounding upstanding walls 20. The socket 14 is in-

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stalled in the upper surface of a concrete floor 22 with the free edge surface of the wall 20 lying in the plane of the surface of the concrete floor. The wall of the tubular member 16 converges toward its lower end and is closed by a rigidly connected disk or bottom plate 24. The size of the rectangular plate 18 is slightly greater than the size of one of the tile members 12 or 13 so that the adjacent edges 12A of the tile overlie and project inwardly of the walls 20.

A plug member 26 comprising a rectangular plate 28, flatly contacting the surface of the plate 18, is freely received between the walls 20, and, in overall dimensions is substantially equal with respect to the dimensions of the tile 13. The thickness of the plate 20 is such that, when resting upon the plate 18, its upper surface is parallel with the upper surface of the concrete floor 22. One of the tiles 13 is secured, in a conventional manner, to the upper surface of the plate 28. A depending tubular member or mandrel 30 is centrally secured to the lower surface of the plate 28 and projects downwardly into the tubular member 16 in spaced relation with respect to the bottom plate 24. A substantially U-shaped rod member 32 is connected by the end portions of its legs to the innerwall of the tubular member 30. The bight portion 34 of the U-shaped member is frictionally engaged by a spring clip 36, connected to the bottom plate 24, for holding the plug member 26 in place.

An alternate manner of securing the plug member 26 is illustrated in FIG. 3 wherein the tubular member or mandrel 30A is closed by a bottom plate 38 and is disposed in close spaced relation with respect to a magnet 40 secured to the bottom plate 24. While the socket 14 has been illustrated as installed in a concrete floor, obviously, it may be installed in connection with a wood floor.

Operation

In operation, a pair of the plug members 14 are installed in vertically aligned relation in the floor 22 and ceiling 42, respectively. The plug members 26 are removed from the sockets, which is easily accomplished by a steady pull on the covering tile 13, as by the use of a suction cup or the like, not shown. A temporary partition, indicated by the dotted lines 44, is positioned between the oppositely disposed sockets. The partition 44 is provided with an elongated rod member 46 comprising an upper section 48 and a lower section 50, threadedly connected, in longitudinally adjustable relation, by a collar member 52 for extending and retracting the opposing ends of the rod members into and out of the sockets 14. The respective upper and lower end portions of the rod member is co-operatively formed to be closely received by the inner surface of the wall of the tubular member 16. An annular shoulder 54 forms a stop which engages the surface of the plate 18 and limits the movement of the rod member 46 into the socket.

FIG. 6 illustrates the manner of using one or more of the sockets 14 for positioning an article 60 on the surface of a floor. A mandrel-like plug member 62, formed similar to the free end portions of the rod member 46, is secured to the bottom surface of the article 60 by a disk 64. The mandrel 62 is inserted into the socket thereby holding the article in place against lateral movement.

When the wall 44 is removed, the open sockets 14 are closed by inserting the tile equipped plug members 26 as disclosed hereinabove.

Obviously the invention is susceptible to some change or alteration without defeating its practicability, and I therefore do not wish to be confined to the preferred embodiment shown in the drawings and described herein, further than I am limited by the scope of the appended claims.

I claim:

1. A wall anchor, including: a socket adapted to be installed below the upper surface of a supporting floor, said socket comprising, a centrally apertured rectangular plate having a relatively short upstanding surrounding wall, and a tubular member secured in depending relation to said apertured plate around the aperture therein, said tubular member having a closed free end; a plug member removably received by said socket, said plug member comprising, a rectangular cap freely received between the walls surrounding said apertured plate, the upper surface of said rectangular cap lying in a plane common to the upper edge surface of said upstanding wall and the surface of the floor, and a mandrel connected to the central portion of one side of said rectangular cap and extending into said tubular member; and means within said tubular member for normally retaining said plug member within the socket.

2. A movable partition wall anchor, including: a socket adapted for installation in a supporting surface to be covered by tile, said socket comprising, a centrally apertured rectangular plate having a surrounding relatively short outstanding wall, the outer free edge surface of said outstanding wall lying in the plane of the supporting surface below the tile, the dimensions of said rectangular plate being slightly greater than the dimensions of a section of tile, and a tubular member secured at one end to said rectangular plate around the aperture therein and projecting inwardly of the supporting surface, said tu-

bular member having a closed free end; a plug member removably received by said socket, said plug member comprising, a rectangular cap freely received within the outstanding wall of said rectangular plate, said rectangular cap being of equal dimensions with respect to a section of tile and having its outer surface parallel with respect to the plane of the free edge surface of said outstanding wall, and a mandrel centrally connected to one side of said rectangular cap and extending into said tubular member; and means within said tubular member for normally holding said plug member within the socket.

3. Structure as specified in claim 2 in which the means includes: a spring clip connected with the inner surface of the closed end of said tubular member; and a U-shaped member connected with the free end of said mandrel and frictionally gripped by said spring clip.

4. Structure as specified in claim 2 in which the means includes: a magnetic member secured to the inner surface of the closed end of said tubular member adjacent the inwardly disposed end of said mandrel.

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