Dec. 28, 1965 P. J. BREWINGTON 3,225,642

ANCHORING DEVICE FOR WATER CLOSETS

Filed April 5, 1963

FIG. 1

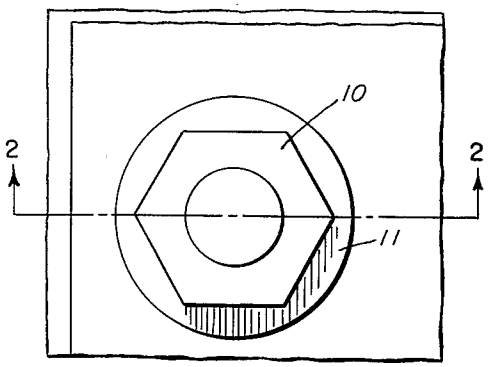


FIG. 2

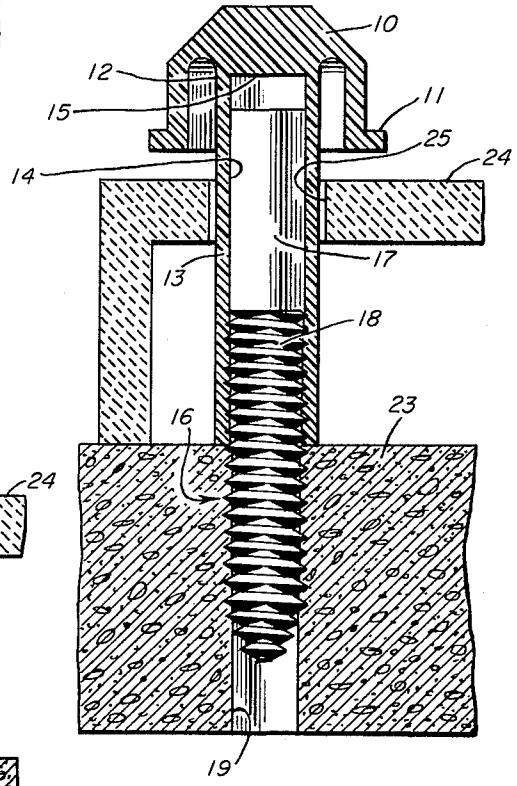
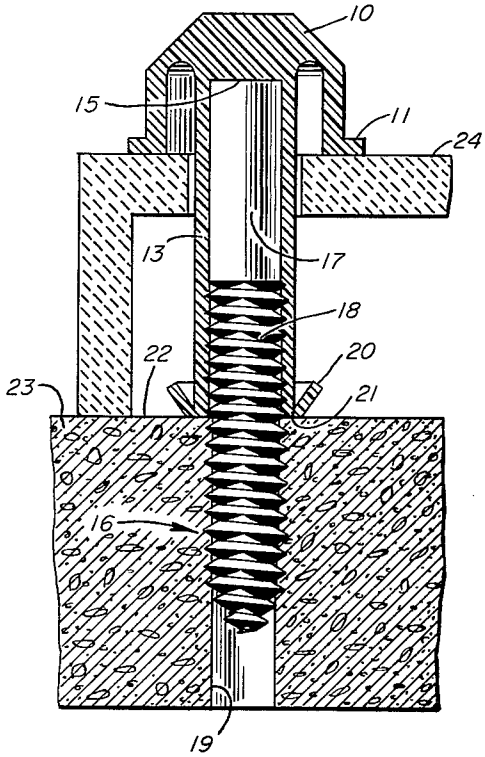


FIG. 3



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ANCHORING DEVICE FOR WATER CLOSETS

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1 Claim. (Cl. 85—9)

This invention relates to closet screws and has for its principal object the provision of an anchoring device for water closets in which the total cost, material and labor, of securing a closet bowl to the supporting surface such as a floor is minimized, the device is suitable for a wide range of bowl rim heights, and the life of the steel holding screw is lengthened by shielding it from corrosion.

More specifically, the invention consists of the provision of a threaded steel screw and a one-piece cooperating member having an elongated tube of softer material than the screw and which may therefore be tapped by the screw as it is inserted over the previously positioned screw. This eliminates the cost of forming fine machine threads in a cap or nut and also avoids the use of the usual washer under the cap. A further advantage is that the present screw need have no head and the snugly fitting tube, integral with the cap, allows great variation of the screw setting.

In the drawings:

FIGURE 1 is a plan view;

FIGURE 2 is a section on line 2—2 of FIGURE 1;

FIGURE 3 shows the screw in exactly the same position as in FIGURE 2 but with the cap and sleeve lowered to allow the lip of the cap to touch the top of the rim of the closet bowl.

The anchoring device consists of a screw **18** and a cooperating member **12**, the former having a single coarse thread **16** on the lower part of the screw and having a smooth cylindrical integral portion **17** at the top, such portion being slightly less in diameter than that of the threaded part **16** for reasons explained later.

The cooperating member **12** includes a cap **10** having a lip **11** and a tube **13** snugly fitting as at **14** the upper portion **17** of the screw **18**. This tube is of plastic material such that can readily be cut or tapped by the thread **16** of the screw as the hexagonal head of cap **10** is rotated.

The method of positioning the anchoring device is as follows: the screw **18** is first driven in the hole **19** preferably by use of a brace so that the threads **16** cut into the floor **23** which may be of any material as for example, concrete. Cylindrical portion **17** can readily be received in the jaw of the brace and the screw is rotated until its top is at a chosen distance from the floor **23**. The screw

once placed in position is not later moved; all other movement being done by other parts as for example the rim **24** of the closet bowl is placed in position over the screw **18** with its hole **25** precisely coaxial with the cylindrical portion **17**. Next the tube **13** of the cooperating member is slid gently down until it strikes the top of the single thread **16**. The hexagonal head of cap **10** is now rotated as by a wrench and threads are cut in the tube **13** until the bottom of the tube touches the surface of the floor **23**. At such time further turning of the cap **10** causes the lower end **20** of the tube **13** to flair or turn upward as at **21** and this continues until the lip **11** of the cap is in firm contact with the top of the rim **24** of the closet bowl and the top of the screw is engaged by the end surface **15** of the tube **13**.

What I claim is:

An anchoring device for water closets for securing the rim of a closet bowl to a bathroom floor, comprising a screw having a single coarse thread with cutting edges extending from one end, a cylindrical portion of slightly smaller diameter than the threaded portion and extending from the threaded portion to the opposite end of the screw and a one-piece cooperating member of a size to pass readily through the usual hole in the rim of the closet bowl, said member being of plastic and softer than the screw and including a cap having a multi-faced head with an outwardly extending lip to engage the top of the rim of the bowl and a coaxial tube to fit snugly the cylindrical portion of the screw and to be tapped by the thread of the screw when the screw is embedded in the floor and the cap is turned about the axis of the screw; said cap closing the end of the tube and extending laterally beyond said end, said tube being longer than said cylindrical portion and having a smooth walled bore, said head and tube being positioned to form an annular space between them facing the leading end of the tube, whereby when the tube is forced downward by turning the cap, the bottom of the tube will flare and the cap will be brought into firm contact with the top of the rim of the closet bowl.

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