Oct. 10, 1933. J. HEINKEL 1,930,344

CLOSET CHAIR AND TEST CAP MECHANISM

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Fig I

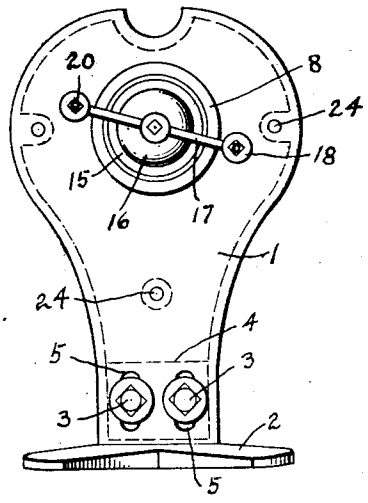


Fig II

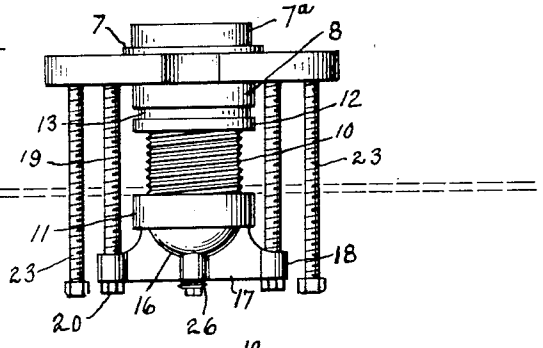
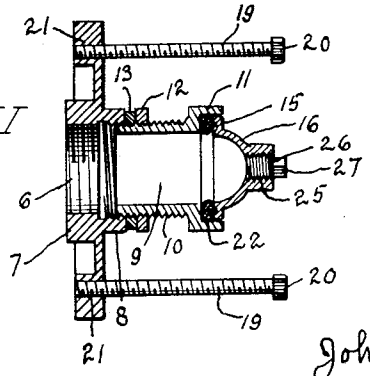


Fig III



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CLOSET CHAIR AND TEST CAP MECHANISM

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4 Claims. (Cl. 4—252)

My invention has reference to a closet connection and test cap mechanism, and is more specially designed for use with a multiple arrangement of wall-hung closet carriers or chairs. A row or series of these chairs is set just within a wall and connections made with a drain system for waste water, which system is also back of the wall. The bowls or toilets are supported from said chairs against the outer face of the wall, and coupled up with said connections so that the waste water will pass through the same into the drain pipes.

After the plumbing system has been roughed in, and before the bowls are installed, it is usual to make a test of the system, to determine if it is non-leakable. In order to do this it is necessary to close the openings into the connections by means of expansion test plugs or similar means, calling for the use of expensive tools and the expenditure of a considerable amount of time. The chief purpose of the present invention is to provide a simple and inexpensive capping apparatus by means of which the openings may be temporarily and tightly closed, and the parts of which can be quickly removed to make way for the installation of the bowls after the test has been completed. The apparatus can be used any number of times with plumbing systems as they are being installed.

In mounting a series of bowls in alignment against a wall there is danger of one or more of the bowls being improperly positioned, by reason of inequalities or other inaccuracies in the face of the wall, and in the present invention this is sought to be overcome by providing connections which will be capable of adjustment in the chairs, so that the bowls can be set squarely against the wall, and in alignment with each other. This is accomplished by making a threaded connection between the end of the chair connection and chair. In connection therewith is provided a means for preventing leakage between the connection and chair, and means for locking the connection from movement, after it has been adjusted.

Another purpose of the invention is the provision of means for supporting the test caps so that they are capable of being adjusted with reference to the chairs, so that the same may be made to conform to the adjustment of the chair connection.

The above named, and other features and advantages of the invention will more fully appear from the following specification, reference being had to the accompanying drawing, wherein;

Fig. 1 shows a closet chair in front elevation, with a test-cap positioned thereon.

Fig. 2 is a plan view thereof.

Fig. 3 is a longitudinal section on the line 3—3 of Fig. 2.

The reference number 1 indicates the vertical plate of a closet chair or support, connected with a footing 2 by means of bolts 3 passing through an upright 4 of the footing, and through slots 5 in said plate. By this means said plate may be adjusted vertically to adapt the same for connection with the waste pipe system. This part of the apparatus is not novel in itself. In the plate 1 is an opening 6, provided at its inner end with a collar 7, threaded to receive one end of a coupling 7^a for connection with a pipe system not shown in the drawing. Said collar is projected outwardly into a ring 8, internally threaded to receive one end of a connection 9, provided throughout its length with a screw thread 10. On the outer end of the connection 9 is a circular seat 11, with which is connected a coupling member of a bowl, when the bowl is in place. Near the inner end of the connection 9 is a lock-nut or ring 12, threaded to turn thereon, and between said ring and the end of the ring 8 is a gasket 13, of a material suited to prevent the passage of water outwardly between the ring 8 and connection 9. By a proper movement of the lock-ring the gasket is not only forced against the ring 8 so as to form a tight packing, but the connection 9 is held from rotating. When properly positioned the inner edge of the seat 11 is in line with the face of the wall, indicated in broken lines at 14.

When the system is to be tested each of the connections 10 is closed at its outer end by means of circular caps as shown at 15, each provided with a dome 16, with radial wings 17, ending in threaded eyes 18, in which are threaded bolts 19, on the outer ends of which are nuts 20. The inner ends of said bolts are received in threaded openings 21 in the plate 1, and by turning said bolts the cap 15 can be moved inwardly or outwardly to cause the same to conform to the position of the connection 9. Between the cap 15 and seat 11 is a packing ring 22, formed of composition or other suitable material. Said ring also forms a seat for the end of the bowl coupling, when the bowl is installed.

After the test of the system has been made the caps 15 are detached and the bowls secured in place in the usual manner, by means of threaded bolts 23, the ends of which engage similarly threaded openings 24 in the plate 1. A coupling member projecting rearwardly from the bowl

takes the place of the test cup in the seat 11, and is held in tight engagement with the packing ring 22 by means of the bolts 23.

The center of the test-cap is provided with a threaded opening 25, to receive a plug 26, fitted with a wrench-hold 27. By removing the plug a connection can be made through the opening for introducing liquid or fluid under compression into the system for the purpose of making tests.

What I claim, and desire to secure by Letters Patent, is;—

1. A device of the class described, comprising a closet chair formed of a main plate and footing therefor, a coupling in the main plate and integral therewith, provided in both of its ends with internal threads, an externally threaded connection engageable with the outer end of said coupling, and provided at its outer end with a female coupling, a test-cap held in said female coupling and provided with a pair of wings having bolt openings, and bolts in said openings having a tapped engagement with said main plate and adjustable to conform with the position of said test-cap with relation to the plate.

2. A device of the class described, comprising a closet chair formed of a main plate and footing therefor, a coupling passing through said main plate and integral therewith, both ends of said coupling being provided with independent internal threads, an externally threaded connection in engagement with the outer end of said coupling, for adjustable positioning therein, and provided with a coupling socket at its outer end, adapted to receive a pipe end, a test-cap seated in said socket, having a dome-shaped portion provided with a tapped central opening, a plug held removably in said opening, wings integral with said test-cap provided with bolt openings, and bolts in said openings having a tapped connection with said chair and adaptable to the position of said test-cap with relation to said chair, the test-cap being removable to permit of the use of another part with said socket.

3. A device of the class described, comprising a closet chair consisting of a main plate and footing therefor, a coupling in said plate having internally tapped ends, an externally threaded connection in engagement with the outer end of said coupling, and provided with a coupling socket at its outer end, a lock-ring on said connection, engageable with the end of said coupling, a test-cap seated in said socket provided with wings having bolt openings, and bolts in said openings having a tapped engagement with said plate, and adapted to hold said test-cap in adjusted positions conforming to the position of said connection.

4. A device of the class described, comprising a closet chair consisting of a main plate and footing therefor, a coupling integral with said plate having internal screw threads in both of its ends, an externally threaded connection in engagement with the outer end of said coupling, and adjustable axially therein, a coupling member on the outer end of said connection, a test-cap seated in said coupling member and provided with bolt connections, bolts held in said connections and having tapped connections with said main plate, and auxiliary bolts also tapped in said main plate for alternative use with parts other than said test-cap.

JOHN HEINKEL.