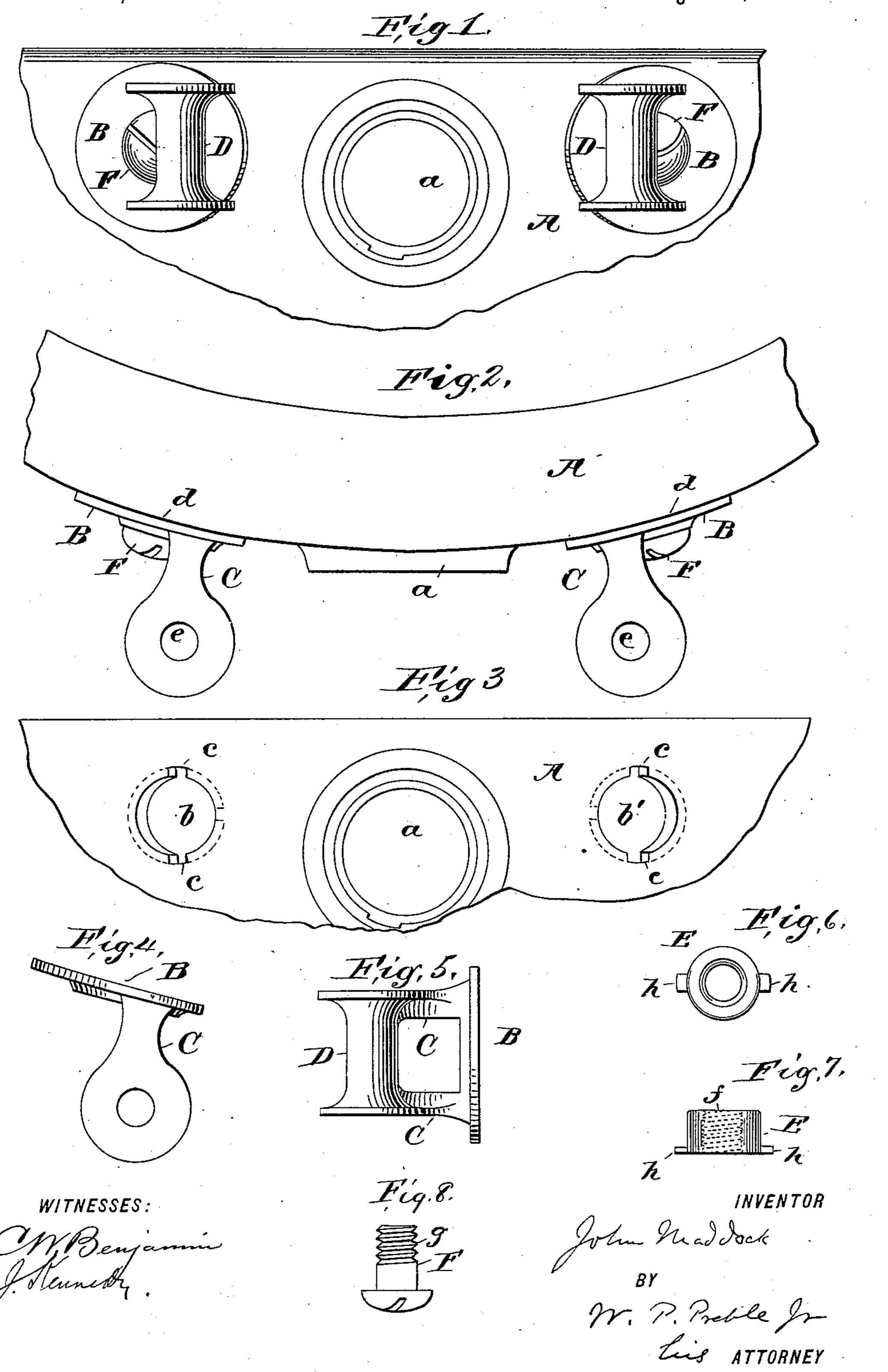
## J. MADDOCK.

MEANS FOR ATTACHING SEATS AND LIDS TO WATER CLOSET BOWLS.

No. 564,438. Patented July 21, 1896.



## United States Patent Office.

JOHN MADDOCK, OF TRENTON, NEW JERSEY.

MEANS FOR ATTACHING SEATS AND LIDS TO WATER-CLOSET BOWLS.

SPECIFICATION forming part of Letters Patent No. 564,438, dated July 21, 1896.

Application filed June 4, 1895. Serial No. 551,608. (No model.)

To all whom it may concern:

Be it known that I, JOHN MADDOCK, a citizen of the United States, and a resident of the city of Trenton, county of Mercer, and 5 State of New Jersey, have invented certain new and useful Improvements in Means for Attaching Seats and Lids to Water-Closet Bowls, of which the following is a specification.

Difficulties have arisen in attaching seats and lids to earthenware water-closet bowls, and especially to those which have a rounded back. Various expedients have been adopted, such as forming a square offset as a part of 15 the bowl and making the attachment to said offset, and also by the use of cement or rubber gaskets.

The object of my invention is to overcome these difficulties and to provide a simple at-20 tachment which can be readily applied or detached without the use of rubber gaskets, cement, or offsets on the bowl, and which can be made reversible, so as to be used right or left, as desired.

One form of my invention is shown in the

accompanying drawings, in which—

Figure 1 is a rear elevation of a pair of my improved attachments applied to a bowl. Fig. 2 is a plan view of the same. Fig. 3 is 30 a rear elevation with my attachments removed to show the sockets in the bowl. Figs. 4 and 5 are details of the lug or ear with the plate forming the main portion of my attachment. Figs. 6 and 7 are details of the coup-35 ling-nut, and Fig. 8 is a detail of the screw which joins the coupling-nut to the lug and plate when in use.

Same letters indicate similar parts in the

different figures.

A represents a portion of an earthenware water-closet bowl, provided with the opening a for receiving the supply-pipe and with the recesses b b' for receiving my improved attachment. These recesses are preferably sit-45 uated a short distance on each side of the supply-pipe, as shown, as that is the strongest part of the wall of the bowl; but their position may be changed, if desired. They are preferably formed with an overhanging wall, 50 as indicated by dotted lines, Fig. 3, so as to leave a space into which the projecting lugs of the coupling-nut may be turned, as here-

inafter specified. A convenient means of getting the coupling-nut into this recess is by providing the latter with a number of 55 grooves or channels c c to admit the lugs of the coupling-nut into the interior of the recess.

B is a flat plate preferably made of metal and provided with a central hole d, for the 60 passage of the screw designed to attach the plate to the coupling-nut. The inner surface of this plate should be adapted to fit pretty snug against the outer wall of the closet-bowl and the plate should be large enough to cover 65 the opening of the recess. To this plate B are attached, preferably integral therewith, the arms or brackets C C, the outer ends of which are connected by the post or ear D, which is perforated longitudinally by the 70 opening e, thus making said ear serve as a supporting-lug for the seat and lid, (not shown,) one of the bolts of which passes down through said opening e.

The lug or ear, the arms, and the flat plate 75 constitute the main portion of my improved attachment and are preferably cast as one solid piece. Two of these structures are usually necessary to afford good support to the water-closet seat and lid. It is an advantage, 80 therefore, to make this casting of a form somewhat similar to that shown in the drawings, as it thereby becomes reversible and can be used either right or left, so that any two of these castings may be used together, as shown, 85

to constitute a pair.

E is the coupling-nut, which is designed to be inserted in the recess of the bowl and when turned into position to be drawn toward the plate B by the screw F, thus getting a good 90 hold upon the overhanging wall of said recess. The coupling-nut is provided with an internal thread f, which engages with the thread g on the screw F, and is also provided with projecting lugs h h, adapted in size and 95 number to enter the channels c c of the recess in the bowl.

My improved means for attaching seats and lids to the bowl is put together as follows: The coupling-nut is dropped into the recess 100 and turned partly around to bring the projecting lugs under the overhanging wall. The plate is then placed against the earthenware, so that the hole d coincides with the

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screw-thread of the nut and with the ear arranged right or left, as desired. The screw is then inserted through the hole of the plate and turned until it draws the lugs of the coupling-nut up against the inside of the recess to make a firm hold. The other device being inserted in the other recess, the bowl is ready to receive the seat and lid, which are secured by passing the bolts thereof down through the ears of said attachment.

Where the device is to be applied to a bowl rounded at the back, the plate B is preferably set at an angle with regard to the arms C C corresponding to the curvature of the bowl, as shown in Fig. 4. The importance of this lies in the fact that the supporting-lugs can be brought into their proper position to support the seat-hinges in a right line somewhat back of the bowl without necessitating any thickening of the walls of the bowl or the production of offsets thereon. This an-

gular character of the attachment is, so far as I know, novel in this art.

I claim—

The above-described means for attaching 25 seats and lids to water-closet bowls, which consists of three separate parts adapted to be associated together in connection with a recess in a water-closet bowl, namely, a plate provided with a projecting post vertically 30 perforated and adapted to receive one of the bolts of said seat or lid; a coupling-nut provided with projecting lugs adapted to be inserted under the overhanging wall of said recess; and a screw-threaded bolt to fit said 35 nut and adapted to draw said nut toward said plate and against said overhanging wall, as and for the purposes set forth.

JOHN MADDOCK.

Witnesses:

J. KENNEDY, W. P. PREBLE, Jr.