E. C. SMITH & C. L. MEADE, JR. WATER CLOSET COUPLING.

(Application filed May 22, 1902.)

(No Model.)

2 Sheets-Sheet 1.

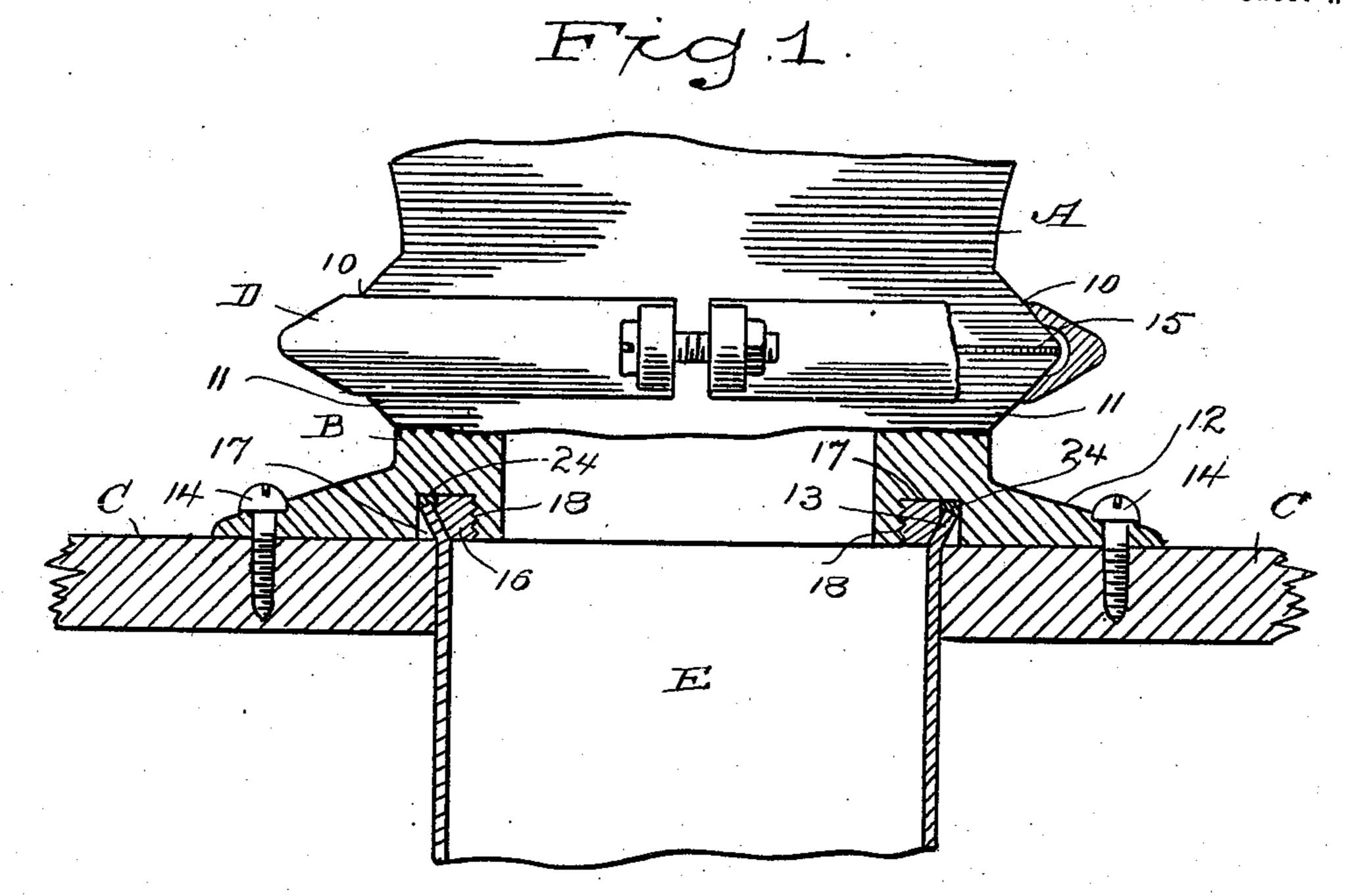
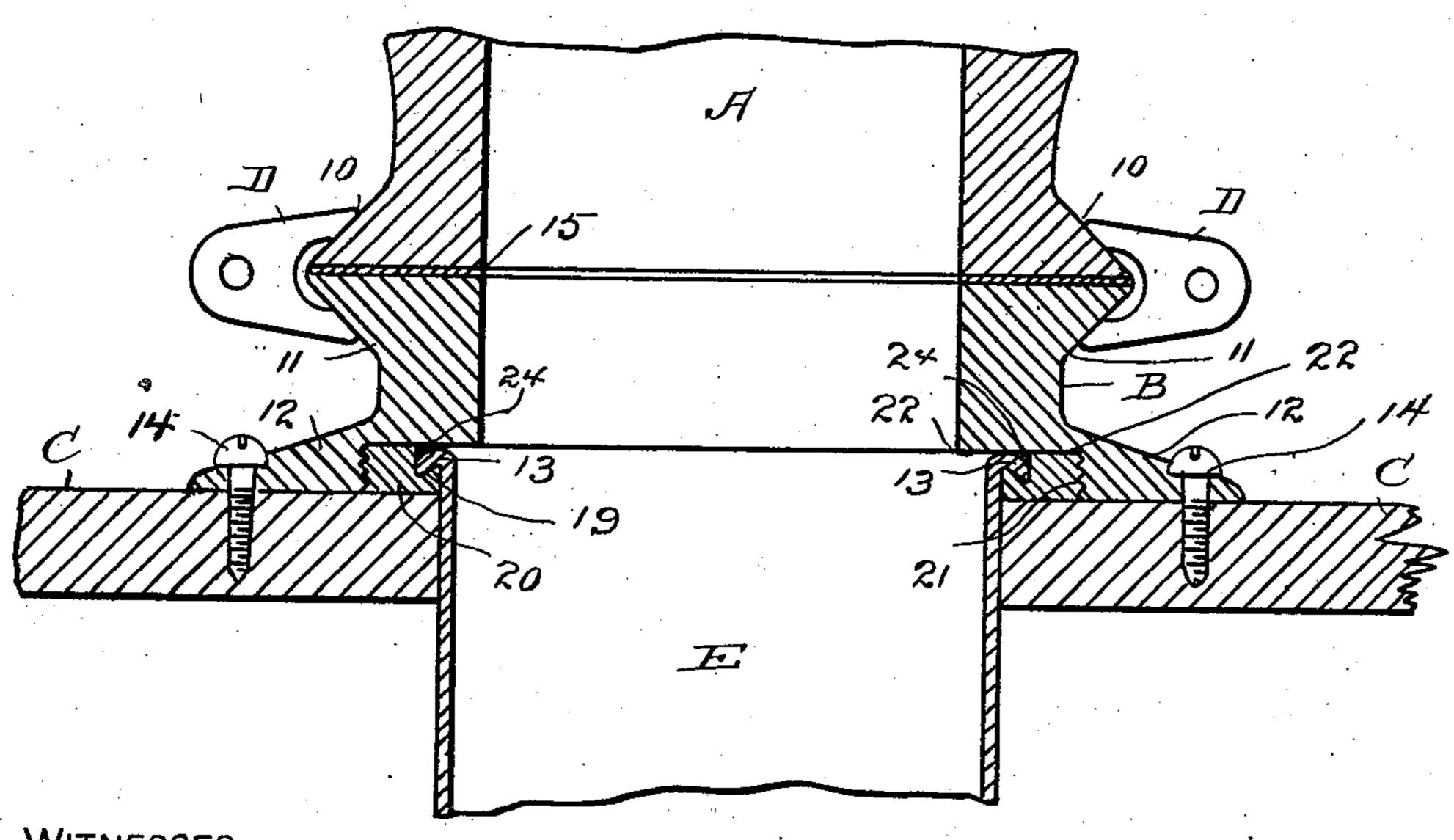


Fig.2.



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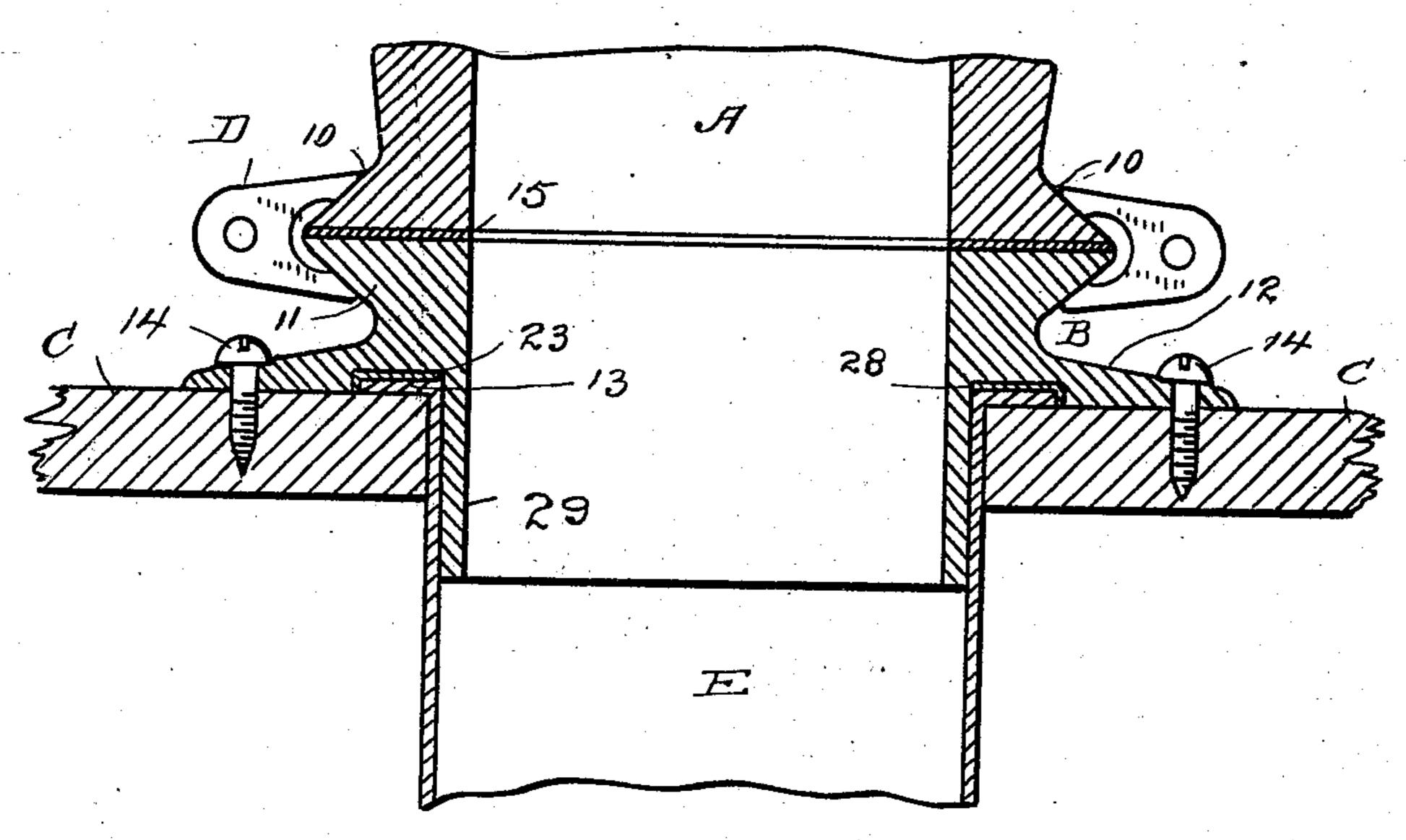
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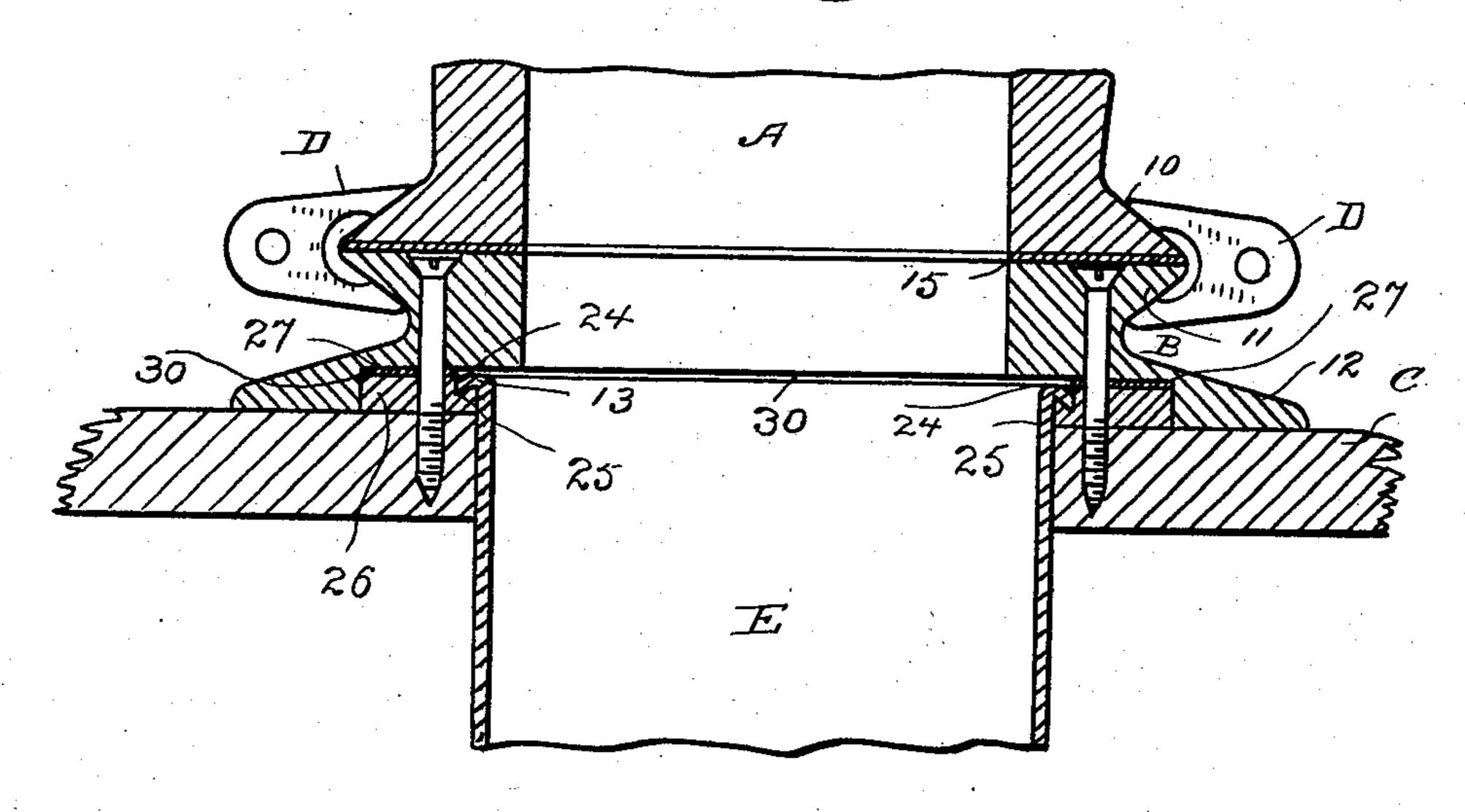
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Exg.4



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United States Patent Office.

EDMOND C. SMITH, OF SAUGATUCK, AND CYRUS L. MEADE, JR., OF WESTPORT, CONNECTICUT.

WATER-CLOSET COUPLING.

SPECIFICATION forming part of Letters Patent No. 712,013, dated October 28, 1902.

Application filed May 22, 1902. Serial No. 108,504. (No model.)

To all whom it may concern:

Be it known that we, EDMOND C. SMITH, residing at Saugatuck, and CYRUS L. MEADE, Jr., residing at Westport, county of Fairfield, State of Connecticut, citizens of the United States, have invented a new and useful Water-Closet Coupling, (Case B,) of which the following is a specification.

This invention relates to certain improvements in couplings for water-closets, and has for its object to provide a mode of connecting a soil-pipe with a ceramic bowl which shall be thoroughly sanitary, as the escape of sewer-gas is made impossible, of few parts, which are relatively inexpensive and easily put together, and thoroughly durable, as the bowl itself is not attached to the floor, but to a metal base, so that all difficulty in setting up and danger of breakage owing to unevenness of floors and their swelling, shrinking, or settling is avoided.

It is an essential feature of this invention that we produce a water-closet coupling in which a metal base and a soil-pipe are independently secured in place, a packing is placed between the ceramic bowl and the metal base, and said parts are secured together by a clamp.

With the above objects in view the invention consists in certain constructions and in certain parts, improvements, and combinations, which will be hereinafter described and then specifically pointed out in the claims hereunto appended.

In the accompanying drawings, forming part of this specification, in which like characters of reference indicate like parts, the four figures are sectional views illustrating variant forms in which we have exemplified the principle of our invention.

A denotes a ceramic water-closet bowl having a flange 10; B, a metal base having an upper flange 11, corresponding with flange 10 upon the bowl, and a lower flange 12 for attachment to a floor C by means of screws 14 or in any ordinary or preferred manner; D, a two-part clamp adapted to engage flanges 10 and 11 and secure the bowl to the base; 15, a packing, as a gasket, interposed between the ceramic bowl and the metal base, and E is a soil-pipe whose upper end is flanged out-

ward, as at 13, as a means of securing it directly to the floor or to a ring lying upon the floor over which the base is placed.

In the form illustrated in Figure 1 the flange 13 upon the soil-pipe is turned outward just 55 sufficiently to lock the soil-pipe against dropping down through the hole in the floor. Upon the inner side of the flanged upper end of the soil-pipe is rigidly secured, as by solder 24, an internally-threaded ring 16. The flange 60 13 and ring 16 are received within a circular groove or trough-shaped recess 17 in the under side of the base, the inner wall of which is provided with a male thread 18, which is adapted to engage the thread on the ring. In 65 assembling the base is screwed down tightly on the ring, after which the base is secured to the floor by screws 14 or in any suitable manner.

In the form illustrated in Fig. 2 the flange 70 13 upon the soil-pipe is inclined downward, so as to adapt it to hook onto a correspondingly-inclined internal shoulder 19 on a ring 20, which rests upon the floor surrounding the hole through which the soil-pipe passes. 75 The flange of the soil-pipe may or may not be secured to the shoulder by solder, as at 24. The outer periphery of the ring is provided with a male thread, as 21. The ring is received within a circular recess 22 in the base, 80 the wall of which is provided with a female thread adapted to be engaged by the thread on the ring. In assembling the base is turned down to place on the ring and then secured to the floor, as in the other form.

In the form illustrated in Fig. 3 flange 13 of the soil-pipe is turned over on the floor, itself surrounding the opening through which the soil-pipe is passed. 23 denotes a circular groove or trough-shaped recess in the under 90 side of the base, which receives the flange of the soil-pipe and also a packing 28, as putty or a gasket, which is interposed between the flange of the soil-pipe and the bottom of the circular groove or recess in the under side of 95 the base. In this form we have shown the base as provided with a depending collar 29, which is adapted to fit closely within the soil-pipe, as is clearly shown.

The form illustrated in Fig. 4 differs from 100

claim—

the form illustrated in Fig. 2 only in that the base and the ring are not provided with corresponding screw-threads. The flange of the soil-pipe is inclined downward, as in the other form, and engages a correspondingly-inclined internal shoulder 25 on a ring 26, the ring and the flange being received within a recess 27 in the base, and a packing 30, as a gasket or putty, being interposed between the ring and the bottom of the recess.

In setting up a water-closet where our novel coupling is used the soil-pipe is passed up through the floor and secured in place by turning the flange 13 outward, it being immaterial so far as the principle of our invention is concerned whether the end of the soil-

pipe is secured to the floor itself or to a ring resting upon the floor. The base is then set over the top of the soil-pipe and secured to the floor, packing being interposed when desirable between the flanged end of the soil-pipe or the ring and the base, and then the

bowl is placed in position on the base and se-

cured there by a two-part clamp, as the clamp D, (illustrated in the drawings,) which engages the flanges on the base and bowl, respectively, a gasket or other packing being always interposed between the ceramic bowl and the metal base.

water-closet bowl having an outwardly-extending flat-faced flange at its lower end, of a metallic support therefor having a horizontally-extended upper seat for the flange of the bowl and an internal annular flange to support a flanged upper end of a soil-pipe and means for clamping the bowl and support together, as the same forms the subject-matter of our application filed concurrently here-

40 with, Serial No. 108,503.

the combination of a metal base having an annular recess formed in its under face, 45 means for securing said base to the floor, a soil-pipe having a flange extending into and secured within said recess, a ceramic bowl

Having thus described our invention, we

1. In a coupling of the character described

secured within said recess, a ceramic bowl resting on said base, and independent means for securing said bowl to said base.

2. In a coupling of the character described the combination with a soil-pipe having an outwardly-turned flange, of a ring to which said flange is secured, a base having a recess to receive the flange and ring and a bowl resting upon and secured to the base.

3. In a coupling of the character described the combination with a soil-pipe having an outwardly-turned flange, of a threaded ring to which said flange is secured, a base hav- 60 ing a recess to receive the flange and the ring, the wall of said recess having a corresponding thread to engage the ring and a bowl resting upon and secured to the base.

4. In a coupling of the character described 65 the combination with a soil-pipe having an outwardly-turned flange and an internally-threaded ring secured in the flanged end of the soil-pipe, of a base having a circular groove to receive the flange and ring, the in-70 ner wall of said groove being threaded to engage the thread upon the ring and a bowl resting upon and secured to the base.

In testimony whereof we affix our signatures in presence of two witnesses.

EDMOND C. SMITH. CYRUS L. MEADE, Jr.

Witnesses:

A. M. WOOSTER, S. W. ATHERTON.