April 26, 1927.

1,626,135

C. W. FANKHAUSER

COUPLING FOR CLOSETS

Filed April 16, 1926

Fig. 1.

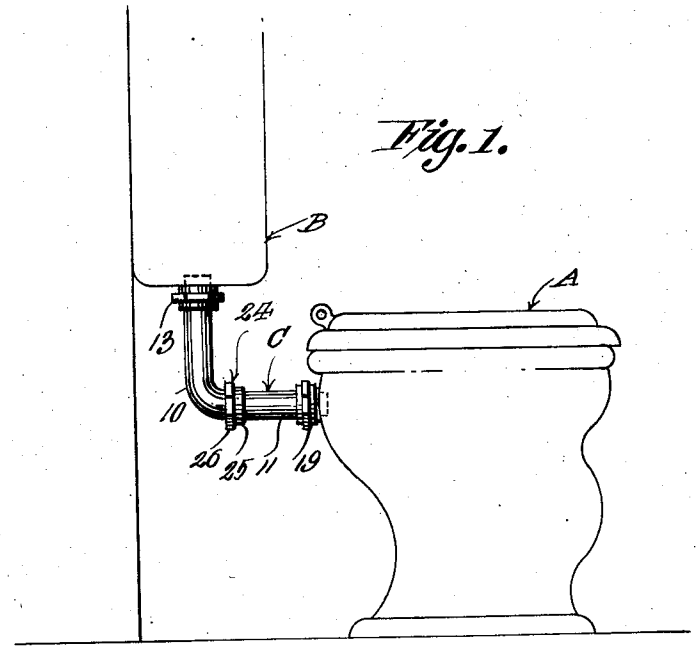
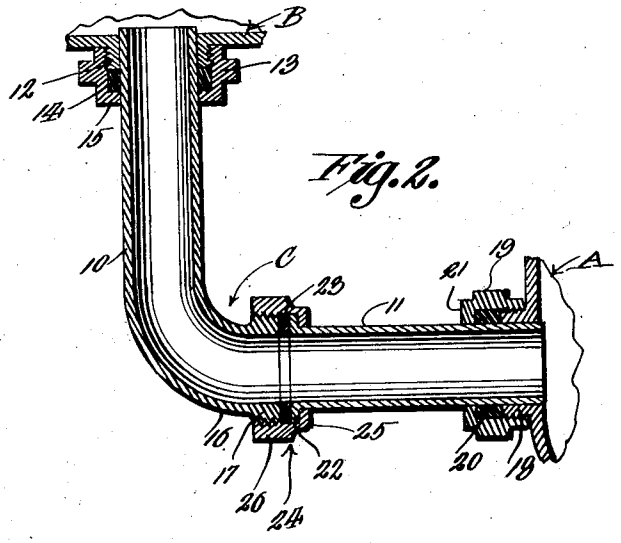


Fig. 2.



WITNESSES.

Guy M. Spring

Inventor

CHARLES FANKHAUSER

By Richard B. Owen

Attorney

Patented Apr. 26, 1927. 1,626,135

UNITED STATES PATENT OFFICE.

CHARLES W. FANKHAUSER, OF GREAT BEND, KANSAS.

COUPLING FOR CLOSETS.

Application filed April 16, 1926. Serial No. 102,516.

This invention appertains generally to new and useful improvements in plumbing and has more specific reference to a novel and simplified coupling for use in connection with closets and especially with that type known as low down closets.

At the present time, it is well known that in order to remove the bowl of low down closets, it is first necessary to remove the flush tank thereof, this being due to the particular construction of the coupling connecting the flush tank and the bowl together. Thus, a great amount of time and labor is unnecessarily expended in the removal and replacing of the bowl incident to the making of repairs thereto.

It is, therefore, the primary object of the present invention to provide an improved coupling for low down closets so constructed that the bowl of the closet may be removed without the necessity of first having to remove the flush tank.

Another object of the present invention is the provision of such an improved coupling consisting of a pair of independent sections which may be readily detached one from the other so that the bowl of the closet may be easily and quickly removed without disturbing the flush tank.

A further object of the present invention is the provision of such a novel coupling, the use of which will result in the saving of both time and labor in the positioning or removal of the bowl of the closet.

A still further object of the present invention is the provision of such a coupling of the character stated which is both durable and efficient in use, one which can be manufactured and placed on the market at a small cost and one which may be readily incorporated with bowls and flush tanks now in use.

Numerous other objects and advantages of the present invention will become more readily apparent during the course of the following description when taken in connection with the accompanying drawings.

In the drawings forming a part of this application:

Figure 1 is a side elevation of an improved coupling constructed in accordance with the present invention and shown associated with a low down closet.

Figure 2 is a longitudinal central sectional view through the improved coupling.

Reference now being had more particularly to the accompanying drawings wherein for the purpose of illustration has been disclosed a preferred embodiment of the present invention, the letter A generally indicates the bowl of a low down closet, B the flush tank thereof and C the improved elbow coupling for connecting the flush tank and the bowl together. It is to be understood that the bowl A and the flush tank B may be of any conventional or preferred construction.

The coupling C embodies in its construction a pair of cylindrical independent pipe sections 10 and 11, the section 10 communicating with and secured to the flush tank B while the section 11 is secured to and communicates with the bowl A as will be readily seen upon reference to Figure 1.

The section 10 is substantially vertically disposed and the upper end thereof is inserted upwardly through the externally threaded nipple 12 formed on the bottom of the flush tank B. A lock nut 13 encircles the section 10 and is threadedly engaged with the threaded nipple 13, for retaining the section 10 in position. A suitable packing washer 14 is disposed between the end of the nipple 12 and the inwardly directed annular flange 15 formed on the nut 13. The lower end portion of the section 10 is curved forwardly as indicated at 16 and the terminal thereof is provided with the external threads 17.

The section 11 is substantially horizontally disposed and the forward end thereof is inserted through the externally threaded nipple 18 formed on the bowl A. Encircling the section 11 and threadedly engaged with the nipple 18 is a nut 19, similar to the nut 13, a suitable packing washer 20 being positioned adjacent the end of the nipple 18 and held in place by the inwardly directed annular flange 21 of the nut 19. The opposite end of the section 11 is provided with the right angularly directed annular flange or shoulder 22 and positioned between the said shoulder 22 and the threaded end of the section 10 is a washer 23.

For the purpose of securing the adjacent ends of the pipe sections 10 and 11 together, there is provided a nut generally represented by the numeral 24. This nut is slidably positioned on the section 11 and is provided at one end with an inwardly directed annular flange 25 adapted to abut the shoulder 22 of the section 11. The opposite end 26

of the nut is internally threaded to threadedly engage the threads 17 formed on the adjacent end of the section 10.

Thus, it will be seen that when it is desired to secure the sections 10 and 11 together, it is only necessary to screw the nut 24 on the adjacent threaded end of the section 10. When it is desired to remove the bowl A, it is only necessary to unscrew the nut 24 so as to disengage the same from the section 10. The section 11 can then be slightly slipped into the bowl A whereupon the same may be readily removed without the necessity of having first to remove the flush tank B.

The couplings now in use are ordinarily formed from a single length of pipe so that before the bowl A can be removed, it is first necessary to remove the flush tank B, inasmuch as the bowls now in use have a depending projection which is received within the floor thus making it necessary that the bowls be raised vertically in order that they may be removed.

From the foregoing, it will be appreciated that there has been provided a novel and simplified coupling for use in connection with low down closets so that the bowl thereof can be removed with the expenditure of a minimum amount of time and labor. It is also to be understood that while there has been shown and described a preferred embodiment of the present invention, that changes in the details of construction thereof may be resorted to without departing from or sacrificing the spirit of the invention so long as such changes fall within the scope of the appended claims.

What is claimed is:

1. The combination with the flush tank and bowl of a closet, each having a passage formed therethrough and surrounded by an outwardly projecting threaded nipple, of an improved coupling therefor consisting of a pair of independent pipe sections each having one end slidably extended through one of said nipples and the other ends thereof in abutting relation, a collar surrounding each pipe and engaging the adjacent nipple, a packing surrounding each pipe and secured against the engaged nipple by the associate collar, and means for securing the abutting ends of said pipes together in leak-proof engagement.

2. The combination of the flush tank and bowl of the closet, each having a passage formed therethrough and surrounded by an outwardly projecting threaded nipple, of an improved coupling therebetween consisting of a pair of independent pipe sections each being formed of constant diameter throughout one end thereof, said ends being each slidably extended through one of said nipples, the other ends of the pipes being flanged in abutting relation, a collar member surrounding each pipe and threadably engaging the adjacent nipple, an inwardly projecting annular flange formed about the outer edge of each collar and engaging the pipe fastened thereto, a packing element surrounding each pipe and arranged to be compressed between the outer edge of the nipple through which the pipe passes and the inturned flange of the attached collar, and means slidable upon one of said pipes and engaging the other pipe for drawing the abutting ends of the pipes together.

In testimony whereof I affix my signature.

CHARLES W. FANKHAUSER.