No. 678,007.

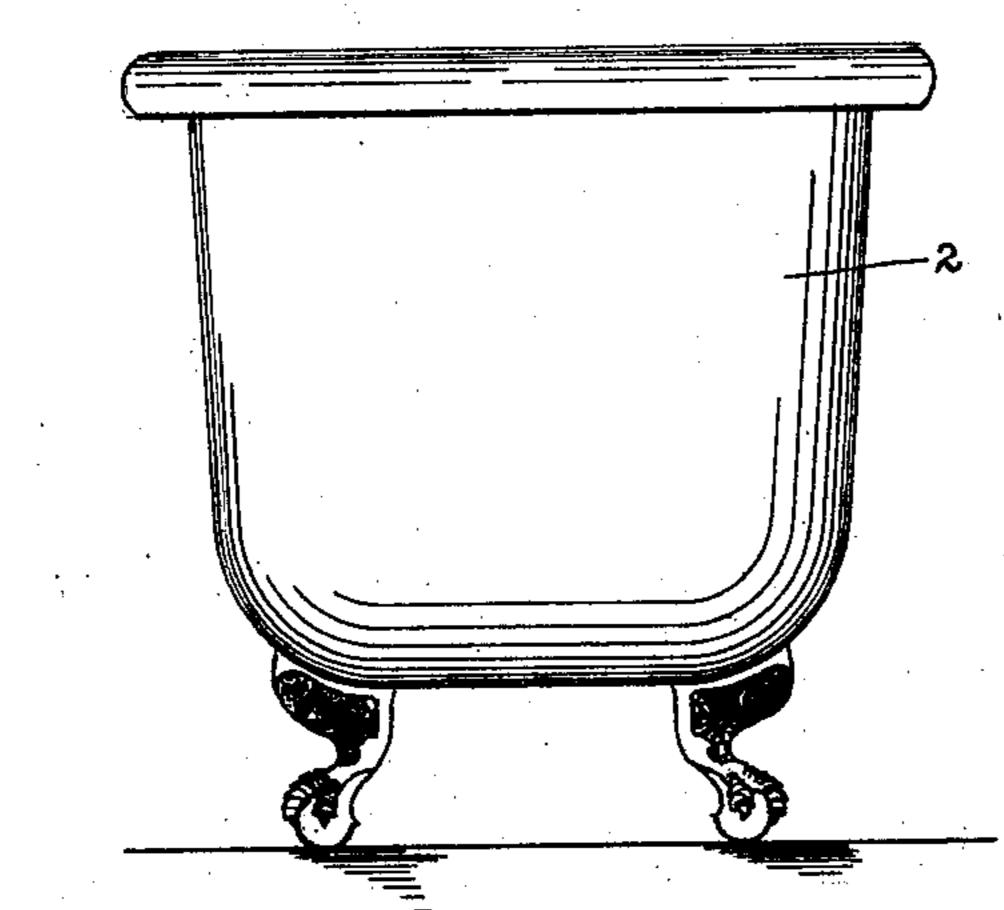
Patented July 9, 1901.

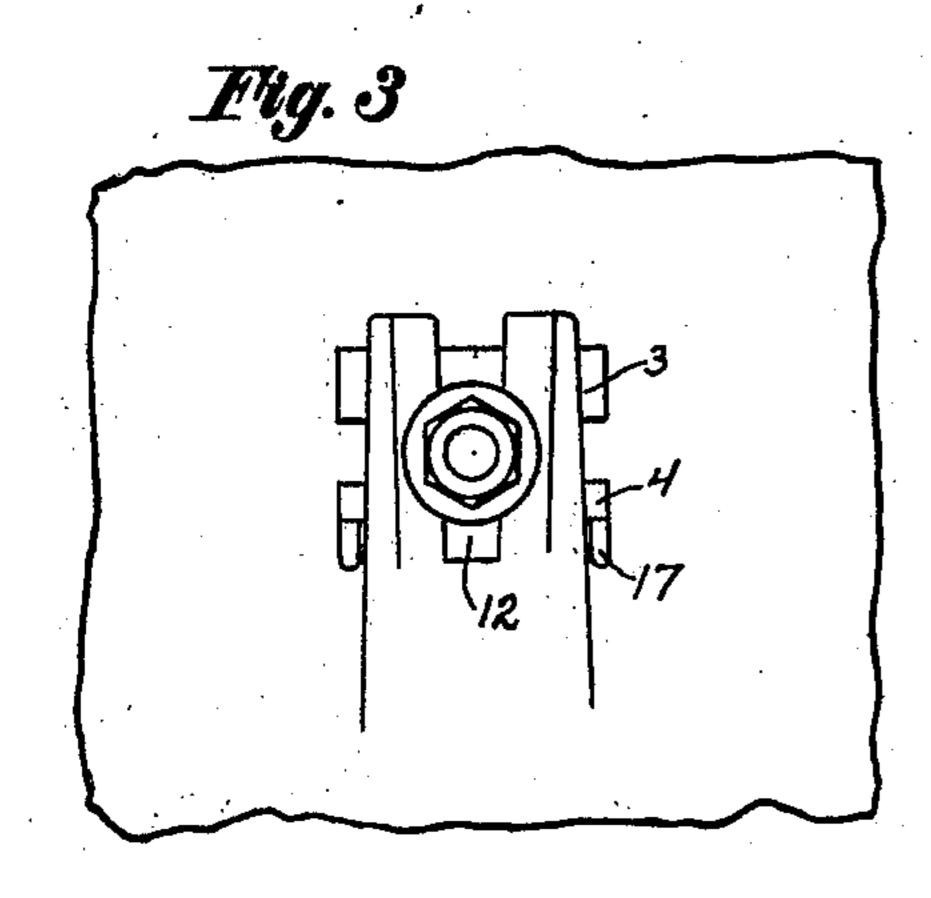
W. C. MCKINNEY & J. F. WHITEHEAD.

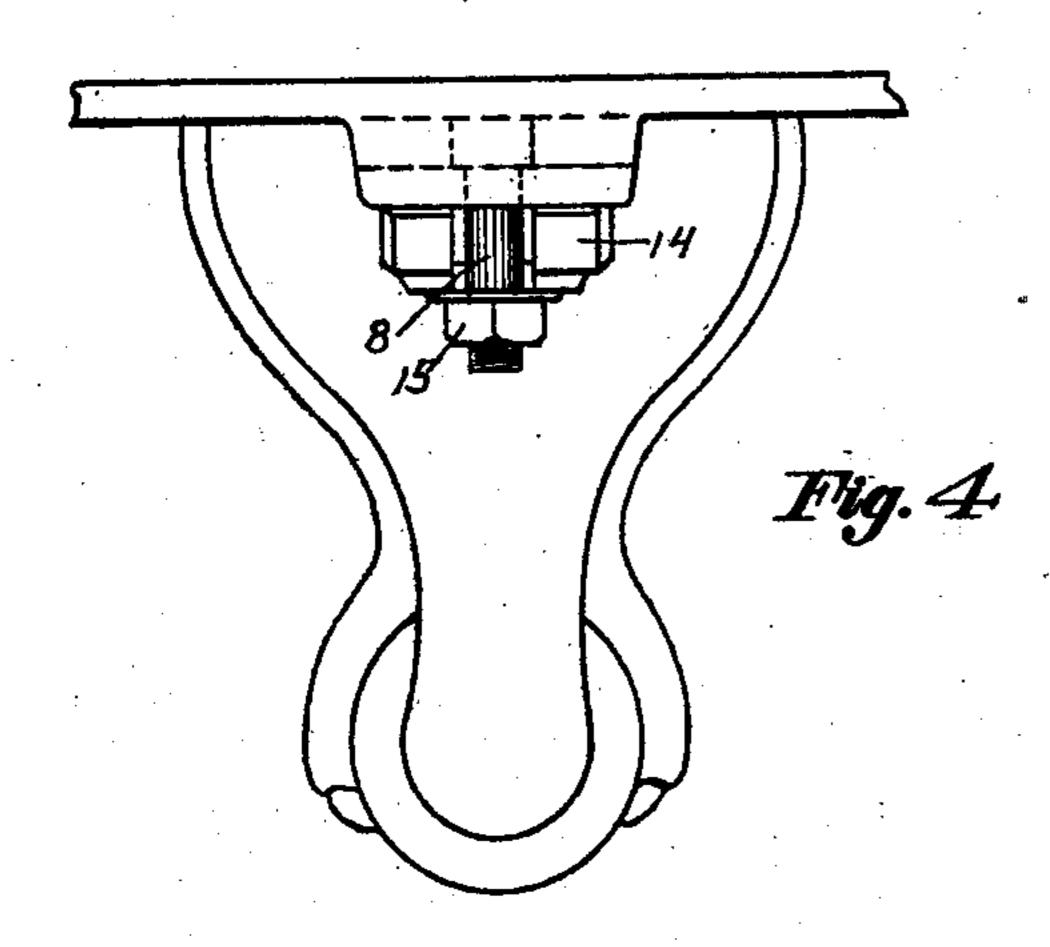
TUB FOOT FASTENER.

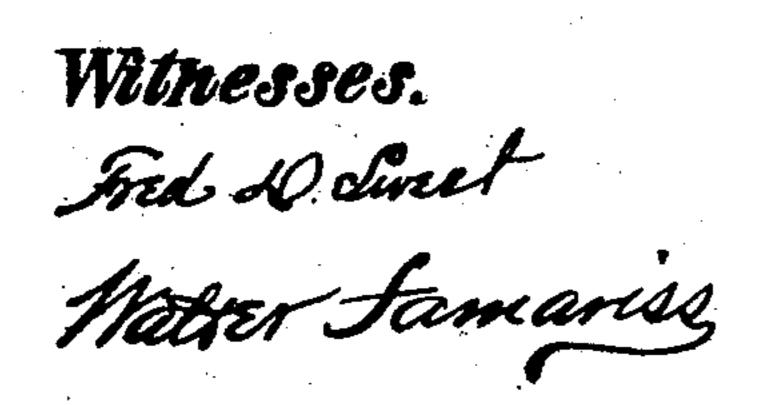
(Application filed Nov. 16, 1900.)

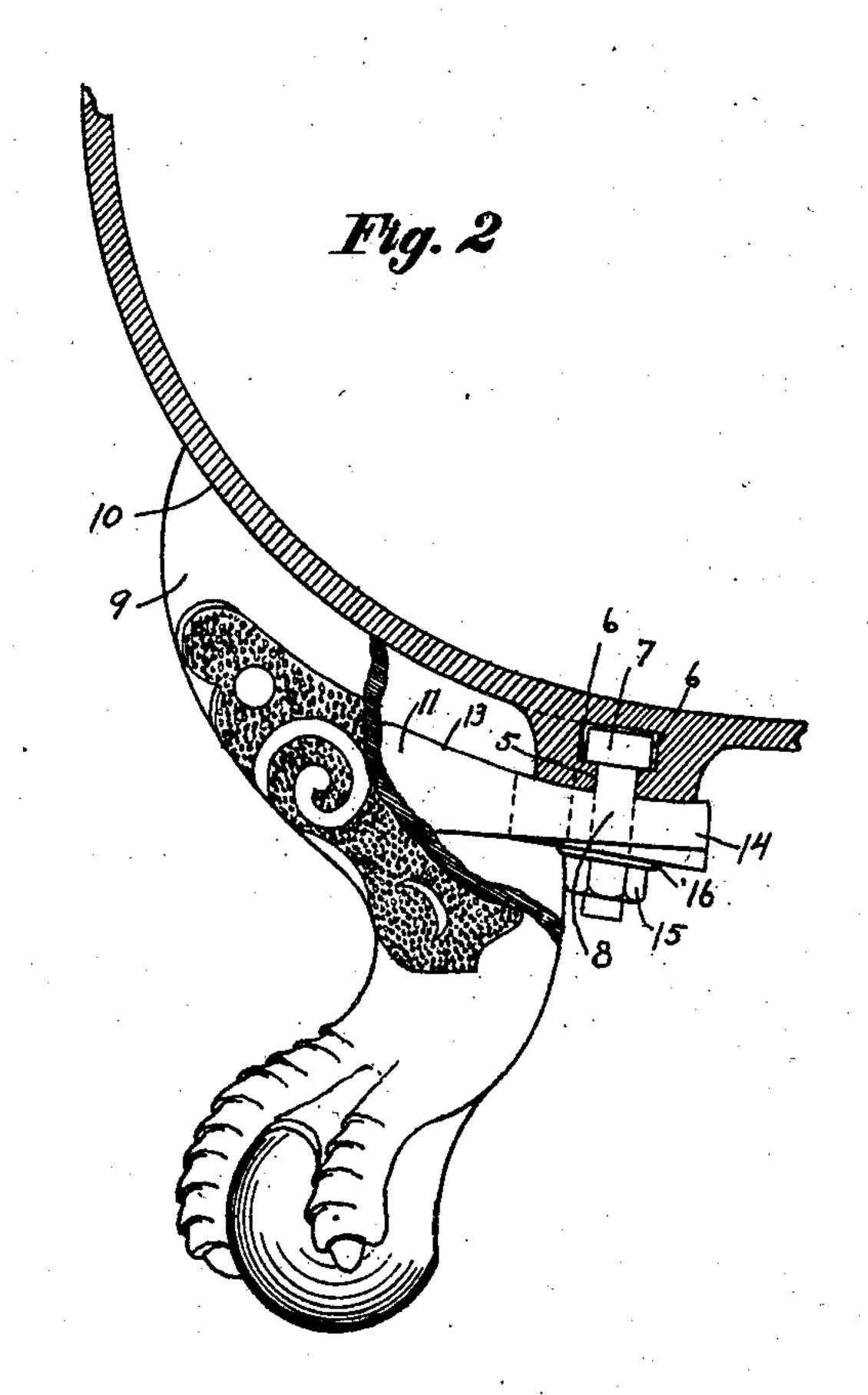
(No Model.)











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United States Patent Office.

WILLIAM C. McKINNEY AND JOHN F. WHITEHEAD, OF NEW BRIGHTON, PENNSYLVANIA, ASSIGNORS TO THE STANDARD SANITARY MANUFACTURING COMPANY, OF PITTSBURG, PENNSYLVANIA.

TUB-FOOT FASTENER.

SPECIFICATION forming part of Letters Patent No. 678,007, dated July 9, 1901.

Application filed November 16, 1900. Serial No. 36,745. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM C. McKIN-NEY and JOHN F. WHITEHEAD, residents of New Brighton, in the county of Beaver and State of Pennsylvania, have invented a new and useful Improvement in Tub-Foot Fasteners; and we do hereby declare the following to be a full, clear, and exact description thereof.

Our invention relates to a tub-foot for bathtubs, and more particularly to the manner of

securing the tub-foot to the tub.

The object of our invention is to provide a tub-foot which may be readily secured in place and held firmly in position when once secured in such a manner as to prevent liability of its displacement, while at the same time the tub-foot may be readily adjusted so as to regulate the height of the tub where there is any unevenness or irregularity in the floor of the apartment in which the tub is located.

To this end our invention comprises, generally stated, a tub-foot having its upper portion in contact with and conforming substantially to the outer contour of the tub, and a projection or tongue on said tub-foot adapted to engage a bolt secured within a seat in the bottom of the tub, said tongue or projection having its upper face engaging with the tub and inclined in such a manner as to heighten or lower the said tub, according as the tongue on said tub-foot is moved inwardly or outwardly.

Our invention consists, furthermore, in enlarging the outward end of said tongue, so that the intermediate portion thereof through which the bolt passes is of less thickness than the outer end, whereby when the nut which secures the foot to the tub is drawn up tight into place said increased thickness at the end of the tongue will prevent any outward slipping of the tongue and will hold the foot rigidly in position.

To enable others skilled in the art to make and use our invention, we will describe the same more fully, referring to the accompany-

ing drawings, in which—

Figure 1 is an end view of a tub with our 50 improved tub-foot applied thereto. Fig. 2 is

an enlarged sectional view of a portion of the bath-tub with our improved tub-foot secured thereto, said tub-foot being broken away to more clearly illustrate the invention. Fig. 3 is a plan view of the bottom of the tub, showing the manner in which the tongue or projection on the tub-foot is secured in place, the remaining portion of the tub-foot being omitted. Fig. 4 is a view of our improved tub-foot applied to the tub looking toward the 60 inner face of said foot.

Like figures indicate like parts.

We have illustrated our invention in connection with an ordinary porcelain-lined metallic bath-tub 2 of any suitable shape. At 65 suitable points on the bottom of the said tub 2 are cast or otherwise secured the lugs 3 and 4, sometimes termed the "doves," said lugs having the inwardly-projecting portions 5, which form the seat 6 for the reception of the 70 head 7 of the bolt 8. It is apparent that the head of the bolt may be inserted into the seat 6 at either end of the lugs 3 4, and that when once inserted within said seat the withdrawal of said bolt in a vertical course is prevented. 75

The tub-foot 9, preferably formed of cast metal, may be of any suitable design, said tub-foot having its upper portion 10 adapted to conform to the outer contour of the tub, so that the upper portion of said foot makes a 85 neat fit with the said tub. Cast integral with the tub-foot 9 or otherwise secured thereto is the projection or tongue 11, said tongue having the slot 12 formed therein through which the bolt 8 is adapted to pass when said 85 foot is secured in place. The upper face 13 of the tongue 11 bears against the lower faces of the lugs 3 and 4. This upper face 13 of the tongue 11 and the lower faces of the lugs 3 and 4 correspond substantially to the contour 90 or radius of the tub-body, so that when said tongue is in engagement with said lugs it will conform with said lugs, and owing to the inclined inner portion of the upper face of said tongue it is apparent that as said tongue is 95 moved inwardly the height of the tub will be increased, while at the same time the upper face of said tongue will still conform to the faces of the lugs 3 and 4.

The outer end of the tongue 11 is slightly roo

enlarged, as at 14, so that the portion of said tongue through which the bolt 8 passes is of less thickness than said enlarged portion 14, with the result that when the nut 15 is drawn 5 up tight with the washer 16 interposed between said nut and the lower face of the tongue 11 said enlargement will prevent any slipping outward of the tongue 11. It will thus be seen that when the nut 15 is once 10 drawn up tight the tongue will be wedged between the said nut and the lugs 3 and 4 in such a way as to hold the tongue rigidly in position and prevent all liability of its slipping in or out. When once the tub-foot has been ad-15 justed at the proper position and secured at such position, the liability of its displacement, so as to throw the tub off the level, is practically precluded.

By having the upper face of the tongue 11 20 inclined at a proper angle the tub-foot may be adjusted with great accuracy, according as it is desired to heighten or lower the tub, as may be found necessary where any unevenness exists in the floor on which the tub is 25 set up. By simply unscrewing the nut 15 the tongue may be advanced, so as to increase the height of the tub, the upper face of the tongue 11 moving in contact with the lugs 3 and 4, while the upper portion 10 of the tub-foot 30 moves along and conforms with the body of the tub. When the tub-foot has been adjusted to bring the tub to the proper level, the nut 15 is tightened and all further movement of the foot is prevented.

In order to prevent any lateral deflection of the tongue 11 when once secured in place, the lug 4 is provided with the stops 17.

By our invention we provide a tub-foot which is held rigidly in position, so that practically all liability of its working loose is avoided, while at the same time its adjustment may be readily accomplished where it is desired to raise or lower one or more corners of the tub in order to maintain the tub on a level. It may often happen that an un-

evenness may develop in the floor supporting the tub after the tub has been in use for some time, and by our invention this unevenness may be corrected without difficulty.

What we claim as our invention, and desire 50

to secure by Letters Patent, is—

1. The combination with a tub having a seat on the bottom thereof, of a bolt engaging said seat and projecting downwardly therefrom, a tub-foot having a tongue through 55 which said bolt passes, said tongue increasing in thickness at its outer end, and a nut engaging said bolt.

2. The combination with a tub, of a tub-foot, a tongue on said tub-foot, the upper 60 face of said tongue engaging said tub, the upper face of said tongue being inclined, means for securing said tub-foot to said tub, and means for adjusting said tongue to reg-

ulate the height of said tub.

3. The combination with a tub, of a tubfoot, a tongue on said tub-foot, said tongue
having an inclined upper face, lugs on the
bottom of said tub forming a seat for a bolt,
the upper face of said tongue engaging said 70
lugs and conforming thereto, and a downwardly-projecting bolt for securing said tubfoot to said tub.

4. The combination with a tub, of a tubfoot, a tongue on said tub-foot, said tongue 75
having an inclined upper face, lugs on the
bottom of said tub forming a seat for a bolt,
the upper face of said tongue engaging said
lugs and conforming thereto, a downwardlyextending bolt for securing said tub-foot to 80
said tub, and stops on said lugs to prevent
lateral movement of said tongue.

In testimony whereof we, the said WILLIAM C. McKinney and John F. Whitehead, have

hereunto set our hands.

WILLIAM C. MCKINNEY. JOHN F. WHITEHEAD.

Witnesses:

HARRY M. STAGER, E. H. THOMAS.