

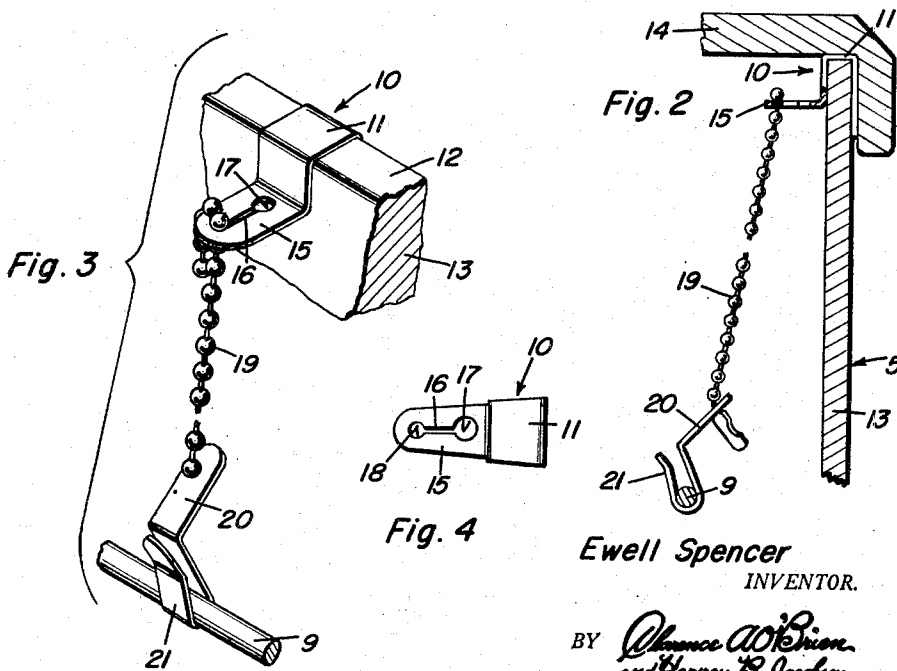
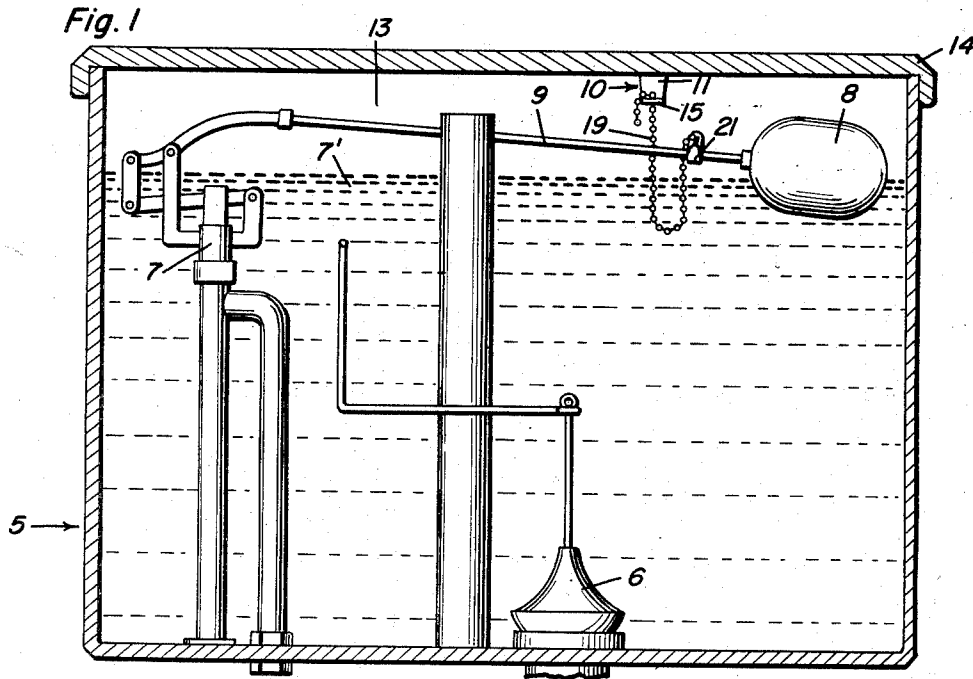
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FLUSH TANK ATTACHMENT

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FLUSH TANK ATTACHMENT

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1 Claim. (Cl. 4—10)

The present invention relates generally to commode flush tanks, and has for its primary object to provide, in a manner as hereinafter set forth, novel means for positively preventing the usual float from swinging downwardly far enough to foul the ball valve and interfere with the proper seating thereof when the tank has been emptied in the course of a flushing operation.

Another very important object of the invention is to provide an attachment of the character described which may be expeditiously installed without the necessity of altering the tank or the flushing mechanism therein.

Still another important object of the invention is to provide a flush-tank attachment of the aforementioned character which may be readily adjusted as may be found necessary for different tanks.

Other objects of the invention are to provide a flush tank attachment of the character set forth which will be comparatively simple in construction, compact, highly efficient and reliable in use and which may be manufactured at low cost.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a view in vertical longitudinal section through a flush tank, showing an attachment embodying altering the tank or the flushing mechanism therein.

Figure 2 is a fragmentary view in cross-section through an upper rear portion of the flush tank, showing the attachment therein;

Figure 3 is a perspective view, showing the attachment applied; and

Figure 4 is a detail view in top plan of the bracket.

Referring now to the drawing in detail, it will be seen that reference character 5 designates a conventional flush tank comprising the usual ball valve 6. Water, as indicated at 7', is supplied to the tank 5 through a suitable valve 7 which is actuated by a float 8 on the free or outer end portion of a pivoted, vertically swinging arm or rod 9.

The embodiment of the present invention which has been illustrated comprises a bracket of suitable resilient metal which is designated generally by reference character 10. The bracket 10 includes a substantially inverted U-shaped clamp or clip 11 which is engageable over the upper edge 12 of the back wall 13 of the tank 5 beneath the cover 14 of said tank. The clamp 11 terminates in

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a right angularly bent inner end portion providing a horizontal arm 15. The arm 15 has formed therein a longitudinal slot 16 which terminates in relatively large and small end portions 17 and 18, respectively.

Adjustably anchored to the bracket 10 and depending therefrom is a flexible bead type chain 19. One end portion of the chain 19 is anchored in the angularly bent, apertured end portion 20 of a resilient clip 21 which is engageable with the float rod 9 for adjustably and detachably connecting said chain thereto.

It is thought that the operation of the device will be readily apparent from a consideration of the foregoing. Briefly, the cover 14 is removed and the bracket 10 is mounted on the upper edge of the back of the tank 5. The chain 19 is adjusted to the desired length on the bracket 10 and the clip 21 is engaged with the float rod 9. The cover 14 is then replaced. When the commode is flushed, the ball valve 6 is raised from its seat and the water drains from said tank. As the water level in the tank drops, the float 8 moves downwardly therewith for opening the supply valve 7. As seen in Figure 1 of the drawing, there is sufficient slack in the chain 19 to permit this. However, after the tank has substantially emptied, the chain 19 arrests the float 8 before it can foul and interfere with the proper reseating of the ball valve 6. The adjustable chain 19 is inserted upwardly through the end portion 17 of the slot 16 in the bracket 10, slipped through said slot and seats in the small end portion 18 of the slot.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

A flush tank attachment comprising: a substantially inverted U-shaped clip for mounting on the top portion of a flush tank beneath the cover thereof, a flat metallic horizontal arm on the inner end of said clip, said arm having spaced, large and small openings therein and a slot connecting said openings, a chain comprising beads adapted to be selectively seated in the small opening and insertable therein through the large opening and the slot for adjustably suspending said chain from the arm, and a clip on the lower end of the chain for connecting said chain to a float arm in the tank for limiting the downward swinging movement of said float arm.

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