

Sept. 17, 1940.

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2,214,972

DEVICE FOR CLEANING TOILET HOPPERS AND THE LIKE

Filed May 18, 1939

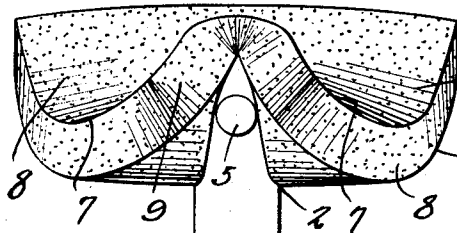


Fig. 1.

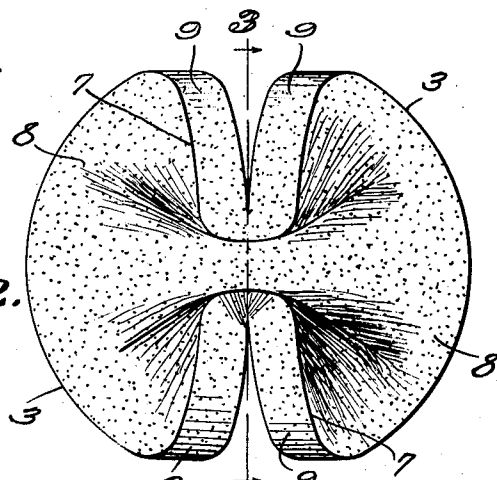


Fig. 2.

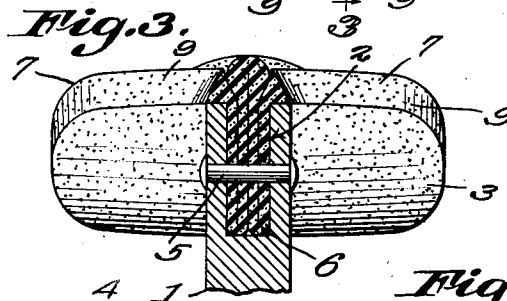


Fig. 3.



Fig. 4.

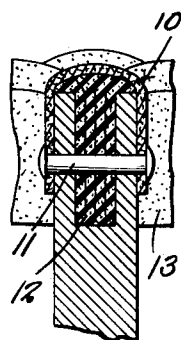


Fig. 6.

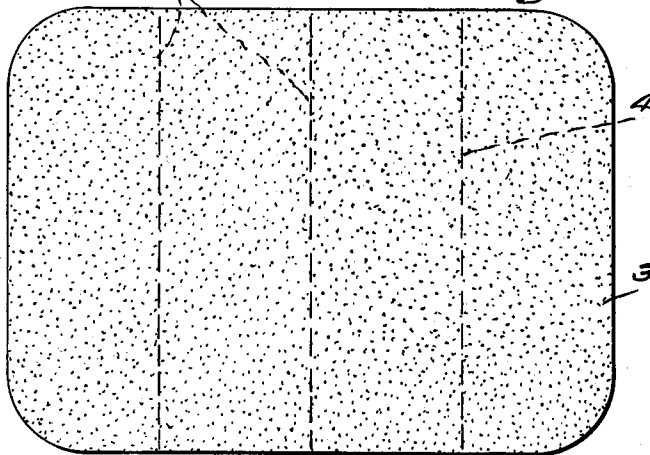


Fig. 5.

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UNITED STATES PATENT OFFICE

2,214,972

DEVICE FOR CLEANING TOILET HOPPERS
AND THE LIKE

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Application May 18, 1939, Serial No. 274,445

1 Claim. (Cl. 15—244)

This invention relates to a device for cleaning toilet hoppers and the like, one of the objects being to provide a simple but efficient device of this character which can be manufactured at low cost and easily operated, the construction being such that the device will not only serve as a force pump but will also operate to wipe the engaged surfaces without danger of injuring the same.

A further object is to provide a structure of this type which can be readily cleaned and which cannot become damaged easily.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claim, it being understood that changes may be made in the construction and arrangement of parts without departing from the spirit of the invention as claimed.

In the accompanying drawing the preferred form of the invention has been shown.

In said drawing

Figure 1 is a side elevation of the device.

Figure 2 is a plan view of the head portion thereof.

Figure 3 is a section on line 3—3, Figure 2.

Figure 4 is a plan view of the member from which the head is formed.

Figure 5 is a section through the member shown in Figure 4 illustrating how the same is folded prior to being compressed within the handle portion.

Figure 6 is a section through a portion of a slightly modified form of the invention.

Referring to the figures by characters of reference 1 designates an elongated handle formed of wood or any other suitable material and provided at one end with a slot 2 producing a fork.

The head portion of the device is formed of a substantially rectangular sheet of thick sponge rubber indicated at 3, the corner portions being preferably rounded. This sheet is adapted to be folded substantially along the broken lines indicated at 4 in Figure 4 so as to have the transverse contour indicated in the section shown in Figure 5. Obviously the overall thickness of the member 3 when folded as in Figure 5 is much greater than the width of the slot 2. The central portion of the folded member is then compressed tightly and forced into slot 2. While it is thus held under restraint and compression

within the slot, a rivet 5 or the like is inserted transversely through the forked end of the handle and through the compressed portion 6 of the head so that it thus becomes impossible to separate the head from the handle under ordinary working conditions.

As a result of the central compression of the folded member 3, the remaining or unrestrained portions of the member will assume a rosette form as shown particularly in Figure 2. Thus the completed head is provided on one end of the handle as shown in Figure 1 and when it is desired to clean the toilet hopper or the like it is merely necessary to use the head as a scrubbing surface. Under some conditions it can also be used as a force pump. Under any conditions, the head will present to the engaged surface scrubbing edges 7 and scrubbing faces 8 and 9, these latter being disposed at different angles as shown. Thus when the head is moved back and forth over the surface being cleaned, a thorough scrubbing action is set up and as the head is formed of a porous material, namely sponge rubber, water will be absorbed thereby and expressed therefrom, thereby increasing the cleansing action of the article.

For the purpose of preventing the forked or slotted end of the handle 1 from striking against an object being cleaned, a protecting strap 10 of leather or other suitable material can be placed astride the slotted end of the handle as shown in Figure 6, it being possible to hold it in place by means of the rivet 11 used for holding the compressed central portion 12 of the sponge rubber member 13.

What is claimed is:

The combination with a handle having a slot extending into one end thereof, of a member comprising a thick porous sheet of rubber, said member having its center portion compressed laterally in folds and seated within and held under compression by the walls of the slot, the remaining portions of said seat being left unrestrained and providing a substantially rosette-shaped head having unbroken arcuate scrubbing edges and surfaces diverging from the compressed portion to said edges, said portions cooperating to form a head substantially circular in end view, and means extending transversely through the slot and the compressed portion for holding said portion and the handle assembled.

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