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C. E. WILDING
SCOURING DEVICE HAVING A PIVOTED HANDLE
FOR BATH TUBS, SINKS, ETC
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2,790,193

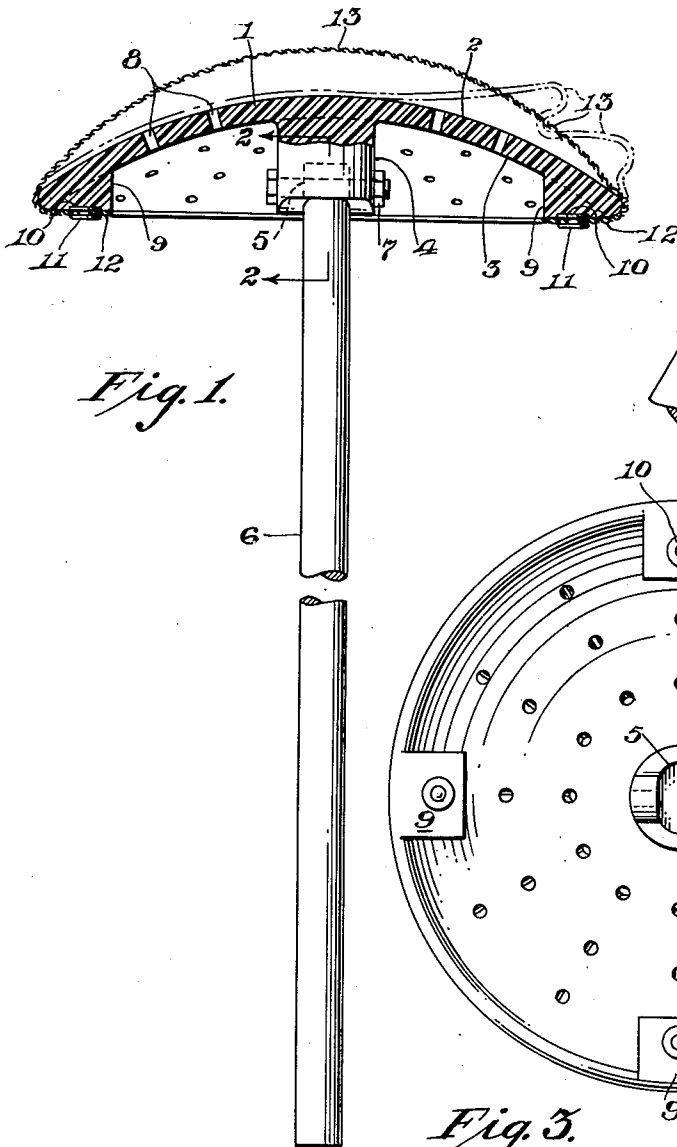


Fig. 1.

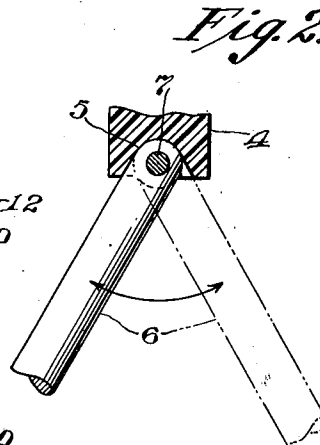


Fig. 2.

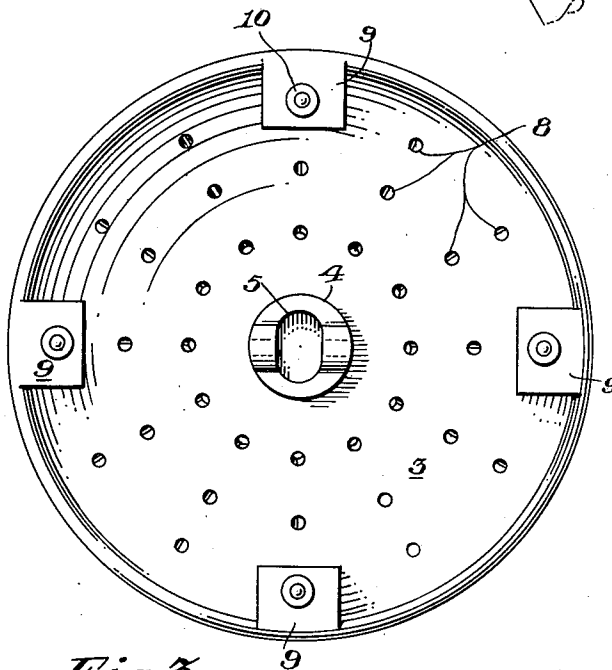


Fig. 3.

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SCOURING DEVICE HAVING A PIVOTED HANDLE FOR BATH TUBS, SINKS, ETC.

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1 Claim. (Cl. 15—210)

The object of the invention is to provide improvements in scouring and scrubbing devices, and especially in a device that is designed and particularly adapted for the cleaning of bathtubs, kitchen sinks and the like with their widely differing degrees of curvature.

Another and more detailed object is to provide one form of a device of this class, which essentially comprises a relatively rigid head, means to quite loosely and detachably secure to the periphery of said head the marginal portion of a cloth or the like, means to hingedly secure a suitable handle to said head, the relative movement of said handle with respect to said head being limited to a predetermined angle, and apertures in said head to permit liquid to flow into and from the variable space between said head and said cloth, as said cloth swishes loosely to and fro transversely of said head, during the usual reciprocatory movement of the device.

With the objects thus briefly stated, the invention comprises further details of construction and operation, which are hereinafter fully described in the following specifications, when read in conjunction with the accompanying drawings, in which Fig. 1 is a diametrical section of a device comprising the invention with the handle shown in elevation; Fig. 2 is a fragmentary section on the line 2—2 of Fig. 1; and Fig. 3 is a rear plan view of the head plate per se.

Referring to Figs 1-3, an annular head plate 1 preferably formed of plastic material is shown as of generally concavo-convex shape, to provide an outwardly curved operating surface 2, comprising a spherical segment whose radius is preferably equal to or less than that of the most abruptly curved portions of the surface of a bathtub or the like. The inner or rearwardly directed surface 3 of said plate is concavely curved so as to provide a recess or partial housing, so that a centrally positioned integral boss or shoulder 4 can be wholly within the plane of the periphery of said head plate. Said boss has a central rear recess or cavity 5 into which extends one end of a handle 6, that is maintained in angularly oscillatable relation to said boss by means of a suitable pin or bolt 7, that extends through both said handle end and the diametrically opposite walls of said cavity 5, the lateral limits of the walls of said cavity being operative to limit the angular movement of said handle with respect to said head plate to a predetermined degree.

By this construction and relationship of the two parts, when holding the handle in given position, said head

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plate will be free to oscillate within sufficiently wide angular limits, as to permit the outer surface of said plate to conform to changes and variations in the curvature of a bathtub's surface. However, if the user desires to apply increased local pressure to a particular portion of such surface, increased pressure in either opposite direction in a plane transverse to the axis of said pivot pin will permit one portion or another of the periphery of said plate to be pressed more positively than otherwise against the bathtub surface, as for abrading and removing some particularly obstinate accumulation of foreign matter.

Said head plate is preferably provided with spaced radial apertures 8 to permit the passage of water or other liquid through said plate, while a plurality of circumferentially spaced integral shoulders 9 upon the rear of said plate, and adjacent to its radially outer limits, are provided in each instance with one element 10 of a snap-fastener unit, the other element 11 of each such unit being carried by the marginal portion 12 of a preferably annular scouring cloth or the like 13, that is preferably carried loosely across the outer face of said plate, as indicated in dash-and-double-dash lines in Fig. 1. With this relationship the central portion of said cloth switches back and forth, as said head plate is moved to and fro across and in engagement with the surface of a bathtub, or other unit to which it is adapted, as for example the various shapes of kitchen sinks, washtubs, etc.

Having thus described my invention, what I claim and desire to protect by Letters Patent of the United States is:

A scouring device, comprising the combination of an annular concavo-convex head plate having peripheral inwardly directed thickened reinforcing portions the rear-most surfaces of which lie in a plane, an integral boss having an elongated recess and carried by the rearward concave surface of said plate and lying within the plane of its said peripheral portions, a handle pivotally connected to said boss within said recess, said handle being engageable with the opposite freed ends of said recess to limit the relative angular movement of said handle with respect to said boss, a plurality of spaced apertures extending through said head plate, a scouring cloth of substantially greater extent than and extending loosely across the outer convex face of said head plate, and snap fastening means to detachably secure the periphery of said cloth to the thickened reinforcing peripheral portions of said plate.

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