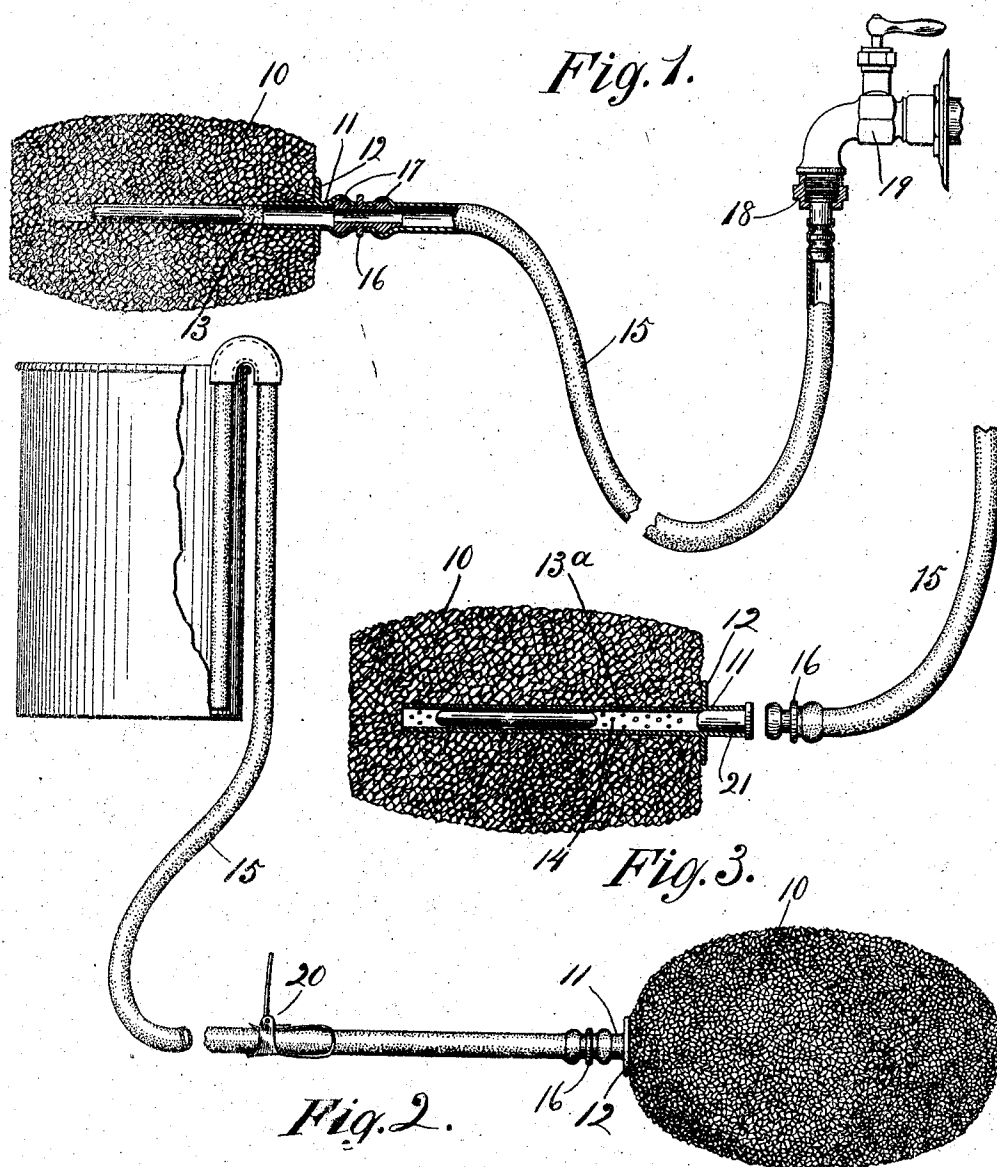


G. H. WILLIS.
 FOUNTAIN SPONGE.
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UNITED STATES PATENT OFFICE.

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FOUNTAIN-SPONGE.

No. 800,254.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, GLENN H. WILLIS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Fountain-Sponges, of which the following is a specification.

This invention relates to improvements in fountain cleaning devices, and particularly to a novel arrangement of sponge and connection for supplying the sponge with water as necessary without dipping the same into the water.

The invention is also concerned with a novel form of sponge designed to be used for cleaning purposes generally. Ordinarily when soap is used with a sponge it is rubbed upon the outer surface thereof. This is an inconvenient and oftentimes an awkward operation, in that it necessitates the use of both hands.

One of the objects of my invention is to provide a sponge designed to obviate the objection to the ordinary sponge in this respect and which, in effect, soaps itself. To this end the sponge of my invention is provided with a pocket or cavity adapted to contain a piece of soap, which will readily lather the sponge, due to the kneading or working of the same in the use thereof.

The invention consists of the parts and arrangement of parts hereinafter fully described, particularly designated in the claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a sectional view of a sponge made in accordance with my invention and provided with a connection for conducting the water to the sponge, the connection being shown coupled to a faucet. Fig. 2 illustrates the invention when used with a tank or bucket, from which the supply of water is taken, the sponge being shown in elevation; and Fig. 3 is a section on an enlarged scale and showing a modification of the sponge-nipple connection.

The invention comprises generally an artificial sponge, desirably made of rubber, and which is provided with a connection adapted to be connected to or lead from a suitable source of water-supply. Specifically, the rubber sponge has permanently secured thereto a rubber nipple which opens into the body of the sponge and is adapted to have connected thereto a conduit, which may be

an ordinary flexible tube. The opposite end of the tube may be provided with a device for coupling the tube to a source of water-supply. The device comprises a rubber sponge, such as 10, having a nipple 11 permanently secured thereto, as by vulcanization, and preferably extending slightly into and opening into the cellular or porous body of the sponge. A collar or flange 12, integral with the tube employed for the nipple and vulcanized to the surface of the sponge, may be provided as an additional securing means for the nipple 11, or the nipple may be attached to the sponge solely by the collar 12 or by any other suitable means, but in any event is a unity with the sponge, being a permanent inseparable part thereof.

Preferably the sponge is formed with a cavity or pocket 13, which in the embodiment of the invention illustrated extends nearly to the opposite end of the sponge, and the nipple extends into this pocket, thereby providing for a more uniform distribution of water throughout the sponge than would result were this extended pocket not present.

In the form of the invention illustrated in Fig. 1 the cells or pores of the sponge pass or enter directly into the pocket and the nipple extends only a short distance therinto. A somewhat more durable structure is illustrated in Fig. 3. As there shown, the nipple is provided with a tubular extension 13^a, which extends the full length of the pocket, and as a more extended surface for vulcanization is provided a more secure attachment of the nipple will result. When the form of nipple shown in Fig. 3 is employed, the wall of the extension is provided with openings 14 to permit the water to pass from the extension into the sponge.

The sponge is provided with a suitable connection adapted to be attached to or fed from any suitable source of water-supply. This connection may consist of a flexible tube 15, attached in any suitable manner to the nipple 11, as by means of a coupling 16, provided at opposite ends with annular ribs 17, fitting within the adjacent ends of the nipple and the flexible tube and serving to prevent accidental disconnection, although permitting of ready disconnection when desired. When the water is taken from a faucet, as when the sponge is used for bathing purposes or in the kitchen, the opposite end of the flexible tube

15 may be provided with an ordinary screw-coupling 18, designed to take onto the externally-threaded outlet of the faucet 19, or the attachment may be made in any other preferred manner.

The fountain-sponge herein described is equally serviceable for scrubbing and general cleaning as well as toilet purposes. When used in a position where a faucet is not available, the sponge may be supplied with water from an elevated tank or bucket, and in Fig. 2 I have illustrated the invention in this connection as it may be used, for example, for scrubbing floors, washing carriages, &c. The tank is placed upon an elevated support and the end of the flexible tube is extended into the same, the water in this instance being fed to the sponge by siphonic action. In order to regulate the feed of the water, a suitable device, such as the ordinary finger-operated clamp 20, may be provided to compress the tubing when it is desired to shut off or reduce the supply of water.

The pocket or cavity 13 in the sponge forms a receptacle for soap and may be of any desired shape or size. Soap for this purpose may be put up in suitable sticks and inserted in the pocket by detaching the coupling 16 from the nipple 11 and then passing the soap through the latter. The end of the coupling 16 is then returned to the nipple. In using the device the water passing through the nipple 11 into the sponge softens the soap, so that by the working of the sponge in the hand in the ordinary use of the same the sponge is kept constantly filled with lather. This avoids soaping the sponge by hand. I

do not, however, limit myself to a sponge having a soap-containing pocket in combination with the fountain attachment, as the sponge may be used alone in the manner of the ordinary hand-sponge, and when so used a plug, such as 21, may be inserted in the mouth of the nipple or pocket, as shown in Fig. 3, to prevent the egress of the soap. Moreover, the sponge, provided with a nipple attached thereto for use with a connection for supplying water to the sponge, as described, may be made and sold as a separate article of manufacture.

Having described my invention, what I claim is—

1. In a device of the class described, in combination, a rubber sponge having a pocket extending into the same, a flexible nipple opening into the pocket and vulcanized to the sponge, and a flexible tube connected to the nipple for conducting water to the sponge.

2. In a device of the class described, a rubber sponge having a pocket opening through its surface and extending to nearly the opposite side thereof, a flexible rubber nipple projecting beyond the surface of the sponge and having a tubular perforated extension located in and extending the length of the pocket and vulcanized to the sponge, and a flexible tube connected to the nipple.

In testimony whereof I affix my signature in presence of two witnesses.

GLENN H. WILLIS.

Witnesses:

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