

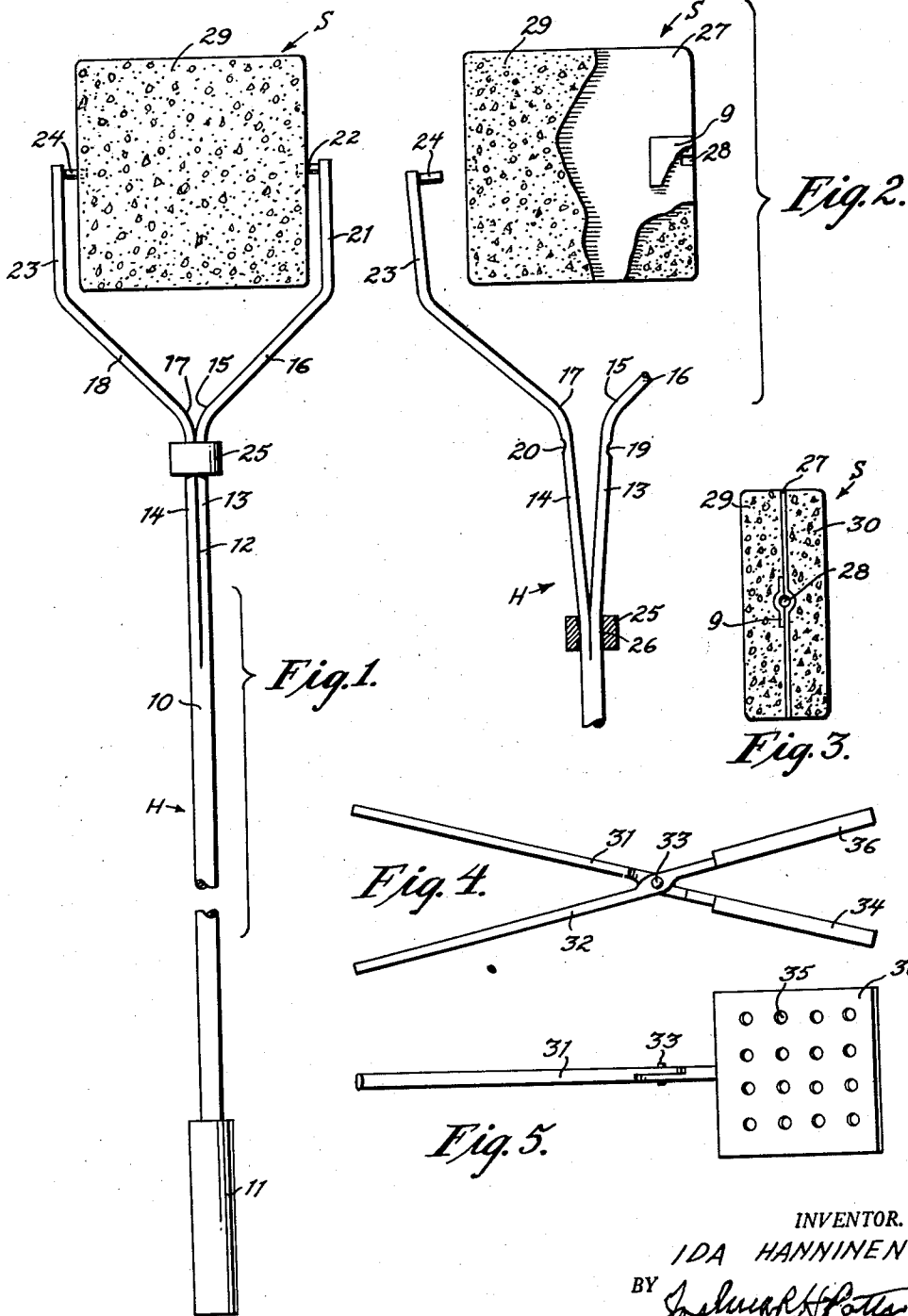
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WALL SPONGE

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WALL SPONGE

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2 Claims. (Cl. 15—244)

The present invention relates to a sponge that is intended primarily for use on walls, windows, ceilings, and other surfaces that ordinarily are hard to get at or reach by the cleaner.

At the present time, mops are commonly employed for the purpose of cleaning floors. However, a conventional mop is not adapted for use on a wall, window, or any other vertical or overhead surface because of the inherent nature of a mop. Any cleaning device which is intended for use on walls or overhead surfaces must of necessity have high absorbent qualities so as to preclude the possibility of dripping. Thus a sponge is particularly indicated as the basic element in any cleaning device intended for such use.

With the foregoing conditions in mind, the present invention has in view as its foremost objective the provision of a wall mop which consists essentially of a sponge element together with a handle on which it is mounted.

More in detail, the invention has as an object the provision of a wall mop of the character indicated in which the sponge element takes the form of a flat metallic plate with flat pieces of sponge mounted on the opposite faces thereof, as by an adhesive. The plate is in turn detachably secured to the handle.

Another object of the invention is to provide, in a wall sponge of the type noted, means for rotatably mounting the sponge element on the handle. Thus, both sides of the sponge element are rendered usable by a simple manipulation. Moreover, during use of the sponge, the rotatable connection between the handle and the sponge element makes it possible and entirely practical to run the sponge over the surface being cleaned in face-to-face engagement therewith.

In providing the rotatable connection aforesaid, the plate of the sponge element is formed on opposite edges, substantially at the center thereof, with a pair of opposed recesses. These recesses receive pivot pins on the handle element.

Still another object of the invention is to provide, in a wall sponge of the character aforesaid, a handle which is particularly adapted for establishing the rotatable connection with the sponge element in a detachable manner. This object is achieved by employing a pair of spring arms, the outer portions of which are in spaced relation and which carry the pivot pins. These spring arms converge towards one another and are provided with a retaining ring which may be moved outwardly and snap into a locking position to maintain the assembled relation or withdrawn to permit the spreading of the arms and detachment of the sponge element.

Various other more detailed objects and advantages of the invention, such as arise in connection with carrying out the above-noted ideas in a practical embodiment, will in part become apparent and in part be hereinafter stated as the description of the invention proceeds.

The invention, therefore, comprises a wall sponge consisting essentially of a sponge element including a central metallic plate, with the opposite faces of the plate carrying

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flat pieces of sponge, together with a handle having a pivotal and detachable connection with the sponge element.

For a full and more complete understanding of the invention, reference may be had to the following description and accompanying drawings, wherein:

Figure 1 is an elevation of a wall sponge designed in accordance with the precepts of this invention, with the handle shown as broken away to permit of illustration on an enlarged scale.

Figure 2 is a detailed elevation, with a portion of the sponge element broken away and a part of a handle shown in exploded relation relative thereto.

Figure 3 is a side-edge elevation of the sponge element, per se.

Figure 4 is a view in side elevation of the squeezing device; and

Figure 5 is a plan view taken normal to the showing of Figure 4.

Referring now to the drawing, wherein like reference characters denote corresponding parts, and first more particularly to Figure 1, a handle is therein illustrated and referred to in its entirety by the reference character H. The handle H comprises a rod 10, preferably of metal, and of a desired length, which carries at its free end a handle element proper 11, which may be wood, cork, rubber, plastic, or any other material which may be conveniently gripped. At the end remote from the handle element 11, the rod 10 is divided by split 12 to provide two arms 13 and 14. The arm 13 is bent outwardly at the bend 15 to provide an inclined portion 16; while the arm 14 is bent outwardly at a bend 17 to provide an outwardly extending portion 18. Immediately adjacent to the bends 15 and 17, the arms 13 and 14 are formed with a pair of recesses 19 and 20, for a purpose to be later described.

Integrally joined to the outwardly extending portion 16 is an end piece 21, the free end of which carries an inwardly extending pivot pin 22. There is another end piece 23 integrally joined to the outer end of the part 18; and this end piece 23 carries a second inwardly extending pivot pin 24. The pivot pins 22 and 24 are in substantial alignment, for a purpose to be later described.

A locking ring 25 is slidably mounted on the rod 10 and has a central bead 26 which is adapted to be snapped into the recesses 19 and 20. It is evident that, with the ring 25 in the position depicted in Figure 2, the arms 13 and 14 may be spread or separated. However, when these arms are moved into abutting relation as shown in Figure 1, the ring 25 may be slid up to the point where the bead 26 is received in the recesses 19 and 20; and in this position, the ring 25 holds the arms 13 and 14 together.

A sponge element is referred to in its entirety by the reference character S. It comprises a central plate 27, which preferably is of metal, and which has its side edges formed with a pair of recesses 28 that are substantially in alignment. Each recess 28 in the plate 27 is covered by a small rectangular plate 9 having a complementary recess confronting the recess 28 as shown in Figures 2 and 3. These recesses 28 receive the pivot pins 22 and 24 in the manner illustrated in Figure 1. This plate 27 is preferably of a rectangular or square shape, as illustrated. A flat piece of sponge 29, of a desired thickness, is mounted on one face of the plate 27; while a second similar piece 30 is mounted on the other face. These pieces of sponge 29 and 30 may be the natural sponge, sponge rubber, or any comparable material that has high moisture-absorbing properties. They may be secured to the plate 27 in any preferred manner such as by using an adhesive, or in the case of sponge rubber, by being vulcanized thereto.

Referring now more particularly to Figures 4 and 5, the device for squeezing the sponge element S will be described.

A pair of arms 31 and 32 is pivotally connected at 33. At one end, the arm 31 carries a plate 34, which preferably is perforated as indicated at 35 in Figure 5. The corresponding end of the arm 32 also carries a perforated plate 36. Those portions of the arms 31 and 32 on the side of the pivot 33 remote from the plates 34 and 36 are intended to be used as handles. It is evident that the sponge element S, either on or off the handle, may be inserted between the plates 34 and 36, and the arms 31 and 32 urged together to subject the sponge element to a squeezing action which will extract the moisture therefrom.

Operation

While the manner of using the wall sponge of this invention is believed to be obvious from the illustration of the drawing and description of parts given, it may be briefly outlined as follows:

When it is desired to attach the sponge element S to the handle H, the ring 25 is moved toward the handle element 11 and the arms 13 and 14 separated. The sponge element S is now positioned between the end pieces 21 and 23 so that the pivot pins 22 and 24 align with the recesses 28. These end pieces 21 and 23 are now moved towards one another, which causes the pivot pins 22 and 24 to be received in the recesses 28. The ring 25 is now moved up into the position of Figure 1, with the bead 26 being received in the notches 19 and 20. The sponge element S is now pivotally mounted on the handle H, and the device is ready for use.

It is evident that, as the handle is gripped and the sponge moved up and down over a vertical surface or across an overhead surface, the pivotal connection between the handle H and the sponge element S provided by the pivot pins renders it entirely practical and an easy matter to maintain the sponge in proper engagement with the surface being cleaned. Moreover, the effective side of the sponge may be easily reversed.

The sponge element S may be removed by simply withdrawing the ring 25 and spreading the arms 13 and 14.

While a preferred specific embodiment of the invention is hereinbefore set forth, it is to be clearly understood

that the invention is not to be limited to the exact constructions, mechanisms, and devices illustrated and described, because various modifications of these details may be provided in putting the invention into practice within the purview of the appended claims.

What is claimed is:

1. In a wall sponge, a cleaning head comprising a square metallic plate having a pair of outwardly opening recesses formed in opposite side edges thereof and a pair of correspondingly shaped flat pieces of sponge secured to the opposite faces of said plate, a handle comprising a rod having a divided end providing two flexible diverging arms with each arm having an end piece carrying an inwardly extending pivot pin, said pivot pins being received in said recesses, said arms being formed with a pair of outwardly opening notches, and a locking ring slidable on said rod and having a bead adapted to be received in said notches.

2. In a wall sponge, a cleaning head comprising a plate having a pair of outwardly opening recesses formed in opposite side edges thereof and a pair of flat pieces of sponge secured to the opposite faces of said plate, a handle comprising a rod having a divided end providing two flexible diverging arms with each arm having an end piece carrying an inwardly extending pivot pin, said pivot pins being received in said recesses, said arms being formed with a pair of outwardly opening notches, and a locking ring slidable on said rod and having a bead adapted to be received in said notches.

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