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MOP HEAD

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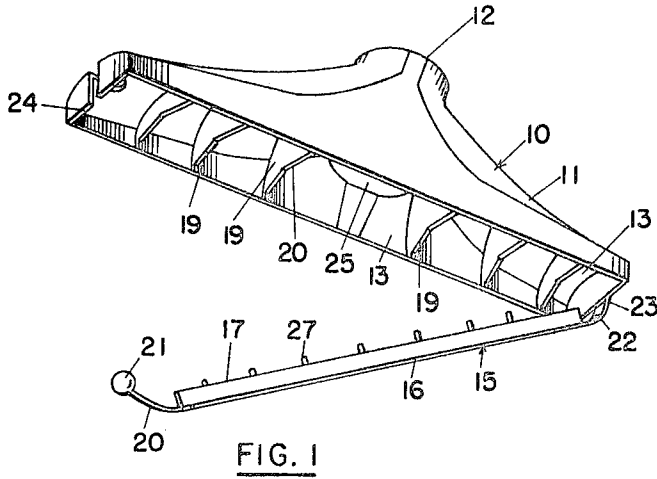


FIG. 1

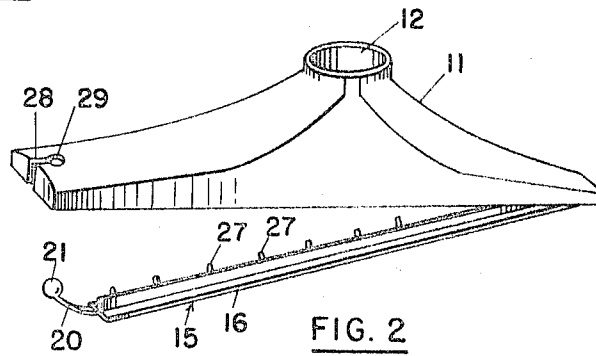


FIG. 2

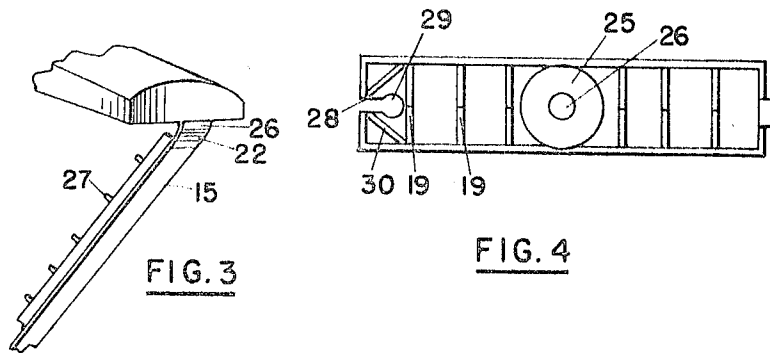


FIG. 3

FIG. 4

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MOP HEAD

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4 Claims

ABSTRACT OF THE DISCLOSURE

The mop head is made up of molded plastic body having a wet mop refill retaining bar attached to it by an integral hinge of the type known in the trade as a "living hinge" or a "built-in hinge." A unique snap-in clasp or clamp arrangement is attached to the distal end of the bar. The entire mop head clamping bar, hinge and clasp are made of an integral piece of molded plastic. The entire mop head can be molded as a single piece. The bar is T-shaped.

This invention relates to mop heads and, more particularly, to the type of mop head for removably clamping a sponge, cloth or the like to use in mopping or polishing floors.

Accordingly, it is an object of the invention to provide an improved mop head.

Another object of the invention is to provide a mop head which is simple in construction, economical to manufacture, and simple and efficient to use.

Another object of the invention is to provide a mop head that may be integrally molded of plastic.

With the above and other objects in view, the present invention consists of the combination and arrangement of parts hereinafter more fully described, illustrated in the accompanying drawing and more particularly pointed out in the appended claims, it being understood that changes may be made in the form, size, proportions, and minor details of construction without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing:

FIG. 1 and FIG. 2 are isometric views of the mop head according to the invention.

FIG. 3 is a partial isometric view of the mop head.

FIG. 4 is another view of the mop head.

Now with more particular reference to the drawings, the mop head generally indicated at 10 has a body 11 with a handle receiving bore terminating at an opening 12 that has a bottom 25 with a hole 26 therein for receiving a screw or the like for holding a handle of the conventional type. The mop body has generally flat edges that define the open side 13 and these edges define the opening and are disposed in a plane along with the edges 23 and 24. The bar 15 is integrally attached to the end 23 by means of the strap 22, which forms a hinge and extends outwardly laterally at 26 and is integrally attached to the bar 15. The strap 20 is integrally attached to the distal end of the bar 15 and has a ball 21 thereon. The strap 20 is flexible and is approximately half of the width of the portion 16 of the bar 15. Portion 16 lies in a plane generally parallel to the plane passing through the edge defining the opening 13 when the bar is clamped. The bar has the pintles 27 integrally fixed thereto and these pintles will engage the sponge or the like and hold it against sliding in clamped relation to the bar.

A keyhole shaped slot 28 has a narrow portion and a

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round socket portion 29 in which the ball 21 rests when the device is clamped. The strap 20 will pass through the slot 28 and the ball will rest in the round portion 29 when clamped.

The partitions 19 are spaced along the inside of the mop head body and they have generally V-shaped outwardly facing edges. Thus, the portion 17 of the bar which is perpendicular to the portion 16 will overlie the apex of the V defined by the other side of the spaced partitions thereby clamping a sponge between the outwardly facing edges of the partitions and the portion 17 of the bar.

The angular webs 30 extend from the partition 19 adjacent the opening 28 and join the edges of the slot 28.

To utilize the device, the bar is swung into the position shown in FIG. 1 and a sponge placed between it and the mop head, then the strap 20 is inserted in the slot 28 and the resiliency of the sponge or cloth or other wet mop refill will urge the ball 21 into the opening 29. A suitable handle may be inserted in the handle receiving hole 20 and thus the mop may be used for the usual mopping procedures.

Bar 16 is T-shaped in cross section. Thus, when a tensile force is exerted on a sponge or cloth clamped between the T-shaped bar, the stem of the bar is twisted whereby the sponge or cloth is cramped between bar 16 and partitions 19.

The embodiment of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A mop head comprising:

a body made of a hollow channel shaped member, open on a first side and having a handle receiving opening in the other side,

a sponge retaining bar,

an integral hinge integrally attaching said bar to one end of said body with the bar facing the open first side, and

means for fixing the distal end of said bar to said body, said means for fixing said distal end to said body comprising:

a keyhole shaped slot in said body open at the end of said body opposite the hinge end,

a flexible strap fixed to the distal end of said bar, and

a ball fixed to the distal end of said strap,

said ball being adapted to overlie the enlarged end of said keyhole shaped slot and said strap being movable into and out of said slot.

2. The mop head recited in claim 1 wherein said bar is T-shaped in cross section,

said bar having a flat side generally parallel to a plane passing through the edges defining said open side, and

said bar having a portion disposed generally perpendicular to said first mentioned portion,

spaced web members disposed in said channel shaped members and integrally attached to the sides of said channel and distributed along said bar,

said webs having an edge facing said bar,

said bar being adapted to force a sponge or the like into engagement with said webs.

3. The mop head recited in claim 2 wherein said strap and said hinge are flat relatively wide thin members attached to and being generally coextensive with the ends of said flat side of said body.

4. The mop head recited in claim 3 wherein said strap is integral with said bar.

FOREIGN PATENTS

65,866	11/1955	France.
1,076,106	7/1967	Great Britain.
179,016	11/1935	Switzerland.

References Cited

UNITED STATES PATENTS

116,174	6/1871	French	15—150
2,242,869	5/1941	Phipps	15—147
2,970,332	2/1961	Zelinkoff	15—147
3,187,363	6/1965	Auwarter	15—229.1

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