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MOP HOLDER HAVING AN ADJUSTABLE HANDLE

Filed July 20, 1960

Fig. 1.

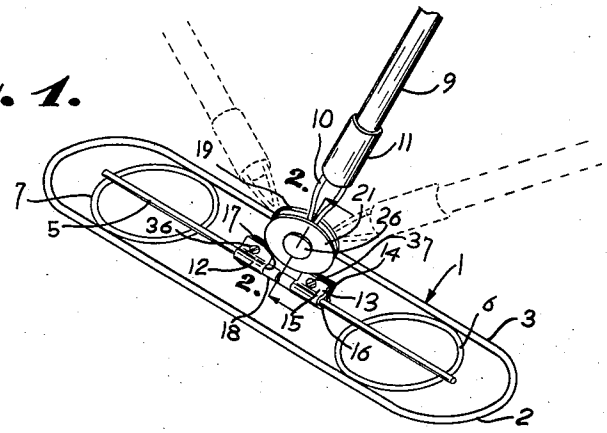


Fig. 2.

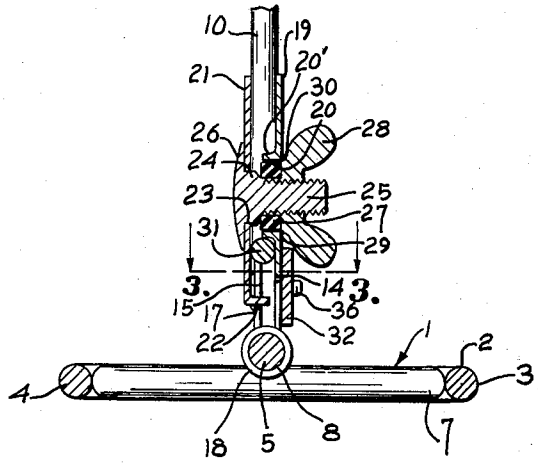
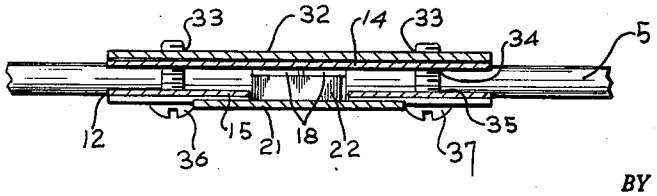


Fig. 3.



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MOP HOLDER HAVING AN ADJUSTABLE HANDLE

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This invention relates to a mop holder, and more particularly to a frame or head for a mop hood and a handle for the head swingable in various directions to provide ease of handling of the device and full control at any angle.

The principal objects of the present invention are to provide a mop holder with a connecting member for the head of the mop and the handle therefor for rotational movement of the handle in a direction transversely to the longitudinal axis of the head and also for swinging the handle in line with the longitudinal axis of the head.

Other objects of the present invention are to provide a frame member substantially elongated having two side members and an elongated rod substantially midway between said side members and secured to said side members by intermediate means so that the rod will lie in a plane partly to one side of said side members; to provide a bearing member on said rod having two spaced plates or arms, one of said plates having an extension thereon provided with an opening having a bearing surface; to provide an anchoring member having an opening for receiving a pin or bolt for engaging in the opening in the extension portion of one of said side plates; to provide a wing nut for said bolt; to provide resilient means surrounding said bolt and engaging in the opening in the extension on the plate to resiliently hold the nut and bolt in place thereby holding the said removable plate member relative to the fixed plate member; to provide the fixed plate member with a boss for receiving the loop of a handle member and to provide a device of this character simple and economical to manufacture.

Other objects and advantages of this invention will become apparent from the following description taken in connection with the accompanying drawings wherein are set forth by way of illustration and example certain embodiments of this invention.

FIG. 1 is a perspective view of our mop holder and connecting member for the handle, various transverse positions of the handle being shown in the dotted lines.

FIG. 2 is an enlarged cross sectional view taken on the line 2—2, FIG. 1.

FIG. 3 is an enlarged cross sectional view taken on a line 3—3, FIG. 2.

Referring more in detail to the drawings:

1 designates a mop holder embodying the features of our invention comprising, an elongated wire frame 2 having sides 3 and 4 and a rod 5 extending longitudinally between the sides 3 and 4. The rod 5 is secured to the sides 3 and 4 by ring members 6 and 7 welded or otherwise suitably secured between the side members and the rod 5 being welded or otherwise suitably secured to the top side of the ring members 6 and 7. The ring members are slightly depressed as indicated at 8 (FIG. 2) and the rod set therein. The rod 5 is, however, slightly above the plane of of the side members 3 and 4 as best illustrated in FIG. 2. A handle 9 having a wire loop member 10 secured to the lower end thereof by a fastening member 11 is secured to the frame 2 by a connecting member 12 comprising a U-shaped plate member 13 including legs or arms 14 and 15. The legs 14 and 15 are connected by a substantially circular portion forming a bearing 16 through which the rod 5 extends. The U-shaped leg members and bearing portion have a cut-out center portion as indicated at 17 and mounted on the rod by swaging or other means is a spacer 18 for holding the connecting member in place substantially mid-way of the frame member.

The leg 14 of the connecting member 12 has an extension 19 near the longitudinal center substantially circular in form and is provided with an opening 20 including an inwardly extending boss 20' for a purpose later described.

A removable substantially circular plate member 21 is adapted to face the substantially circular extension member 19 of the leg 14 and has an inturned bracket arm 22 engaging in the cut-out portion 17 and engages against the respective sides of the notch as best illustrated in FIG. 3. The plate 21 has an opening 23 for the shoulder 24 of a threaded bolt 25 having a head 26 engaging against the plate 21 and the threaded shank extending through the opening 20 of the extension portion 19 of the leg 14. The opening 20 is substantially larger than the shank portion of the bolt 25 and a resilient washer 27 is provided for encircling the bolt 25 and engaging against the inside of the boss 20'. A thumb nut 28 engages the threaded shank of the bolt 25 and has a slightly rounded or beveled portion 29 engaging against the rounded shoulder portion 30 of the opening 20 in the extension 19 of the arm 14.

The loop member 10 of the handle includes a circular eye portion 31 which encircles and bears on the boss 20' formed by the opening in the extension 19 when the handle is assembled on the connecting member. The bolt 25 extends through the rounded or loop member 31 as illustrated in FIG. 2. By adjusting the wing nut 28 the plate 21 will be drawn toward the extension 19 to exert a tension or pressure on the eye portion 31 of the handle 9 to adjust rotation of the handle sideways with respect to the frame 2. By tightening of the thumb nut to the extreme, the handle may be tightened so it will not move laterally.

The resilient washer 27 may be of neoprene or other similar material.

Lateral rotation of the handle with respect to the longitudinal axis of the frame is accomplished by providing a plate 32 along the outer side of the leg 14 of the U-shaped member 12 having spaced threaded openings 33 aligning with openings 34 and 35 in the legs 14 and 15 respectively for receiving screws or the like 36 and 37 to hold the connecting member on the rod 5 and to adjust the tension of the U-shaped member on the rod to control rotation of the handle member or to completely hold it stationary if desired.

In assembling the device as described, the connecting member 12 is, of course, permanently secured on the rod 5 by the swaged sleeve 18 and the set screws 36 and 37 secured in place so that the connecting member will rotate on the framework when the handle is secured thereto as will be obvious from FIG. 2 which shows the handle in vertical position. The eye portion 31 of the handle 9 is then placed over the boss 20' on the extension 19 of the side arm 14 and the removable plate 21 with the bolt 25 therein placed facing the extension 19 with the bracket arm 22 engaging in the opening or notch 17. The bolt 25 goes through the opening of the eye portion 31 of the handle and the boss 20' forms a bearing for the handle. The neoprene washer 27 is then placed on the threaded shank of the bolt 25 and in the opening 20 and the thumb nut 28 secured to the threaded shank of the bolt 25. The neoprene rubber forms a resilient connection between the plate 21 and the extension 19 of the arm 14 to provide for lateral movement of the arm 9 as shown in dotted lines in FIG. 1. The resilient rubber member also holds the thumb nut

in the desired position and prevents loosening thereof in use as often happens in metal-to-metal contact in devices of this kind.

In use of the device constructed and assembled in the manner described, by adjusting the thumb nut 28 the tension on the eye portion 31 will be controlled for movement of the handle laterally with respect to the frame 2 to move the mop around tables, chairs, desks and other equipment, and by adjustment of the screws 36 and 37 rotation of the handle on the rod 5 may be controlled or by tightening the screws to a taut condition, the handle may be adjusted at any desired angle with respect to the frame to make a rigid connection therewith.

It will be obvious from the foregoing that we have provided an improved mop holder which provides for adjustment of the handle for swinging transversely with respect to the longitudinal axis of the frame, and also for movement of the handle in longitudinal alignment with the longitudinal axis of the frame.

It is to be understood that while we have illustrated and described one form of our invention, it is not to be limited to the specific form or arrangement of parts herein described and shown except insofar as such limitations are included in the claims.

What we claim and desire to secure by Letters Patent is:

1. A holder for a mop hood having a pocket in which said holder is enclosed comprising, an elongate frame having a longitudinal rod, a handle having an eye portion, a connecting member for attaching said handle to said rod, said connecting member including spaced arms having a connecting portion forming a bearing portion for connection of said rod on the frame, means securing said bearing portion for rotation of the handle about said rod transversely of the longitudinal axis of said frame, one of said arms having an extension provided with an opening and said extension having a rounded surface surrounding said opening and a boss extending in the direction of said other arm, said boss forming a bearing portion for the eye portion of said handle, a plate member engaging said eye portion on a side opposite said extension and having an opening aligning with the opening in said extension, a resilient washer in said opening in said extension, and means for securing said plate member to said extension, said means including a bolt extending through said plate and extension and a nut engaging against said washer and the rounded surface of said extension whereby tension on said eye portion of the handle may be adjusted for movement of the handle longitudinally of the longitudinal axis of said frame.

2. A holder for a mop hood having a pocket in which said holder is enclosed comprising, an elongated frame having spaced side members and a rod between said members, a handle having an eye portion, a connecting member for attaching said handle to said frame, said connecting member including spaced flat arms having a connecting portion forming a bearing portion for a connection to said

rod on the frame, said bearing portion and arms having a notched out portion at substantially the center thereof, a plate having spaced threaded openings engaging alongside one of said arms, said arms having openings aligning with said threaded openings, screws having threaded shanks extending through said last-named openings and engaging in said threaded openings in said plates for adjustably securing said bearing portion for rotation about said rod transversely of the longitudinal axis of said frame, one of said arms having an extension provided with an opening and having a boss extending in the direction of said other arm, said boss forming a bearing portion for the eye portion of said handle, a plate member engaging said eye portion on a side opposite said extension and having an opening aligning with the opening in said extension, said last named plate having a lateral arm engaging in said notched out portion and having sides engaging against the sides of said notched out portion, and means for securing said last-named plate to said extension whereby tension on said eye portion of the handle may be adjusted for movement of the handle longitudinally of the longitudinal axis of said frame.

3. A holder for a mop hood having a pocket in which said holder is enclosed comprising, an elongated frame having spaced side members and a rod between said members, a handle having an eye portion, a connecting member for attaching said handle to said frame, said connecting member including spaced arms having a connecting portion forming a bearing portion for connection of said rod on the frame, said bearing portion and arms having a notched out portion at substantially the center thereof, means securing said bearing portion for rotation about said rod transversely of the longitudinal axis of said frame, one of said arms having an extension provided with an opening and having a boss extending in the direction of said other arm, the outer surface of said boss forming a bearing portion for the eye portion of said handle, a plate member engaging said eye portion on a side opposite said extension and having an opening aligning with the opening in said extension, a bolt having a threaded shank engaging in said openings of said plate and extension, said opening in said extension being larger than the shank of said bolt and said extension having a rounded surface surrounding said opening, a resilient washer for said threaded shank of the bolt engaging in said opening in the extension, and a nut on said threaded shank having a face engaging against said washer and a portion engaging against said rounded surface surrounding said opening for securing said plate member to said extension whereby tension on said eye portion of the handle may be adjusted for movement of the handle longitudinally of the longitudinal axis of said frame.

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