H. G. SAAL.

MOP.

APPLICATION FILED JUNE 21, 1917.

1,259,781. Patented Mar. 19, 1918.

Fig. 1.

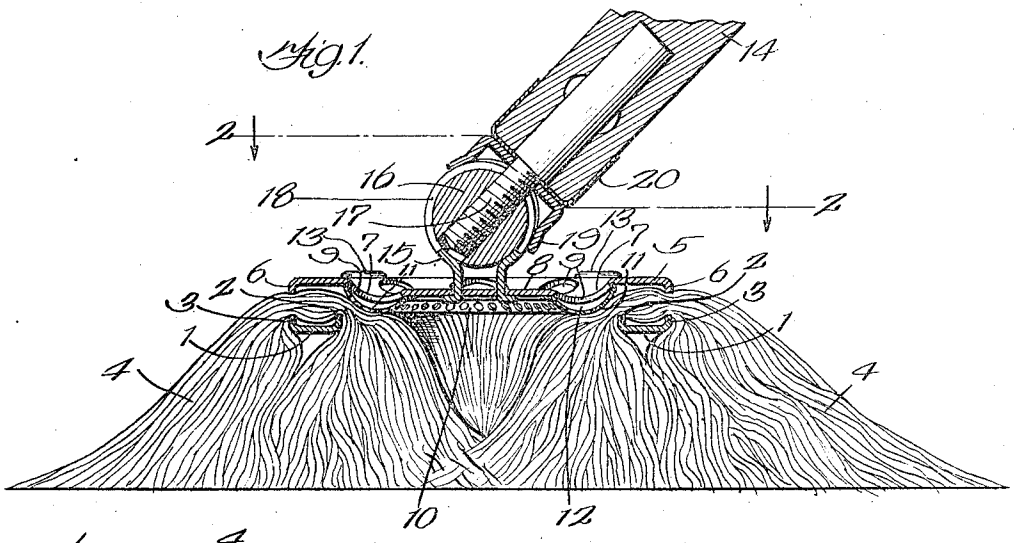


Fig. 2.

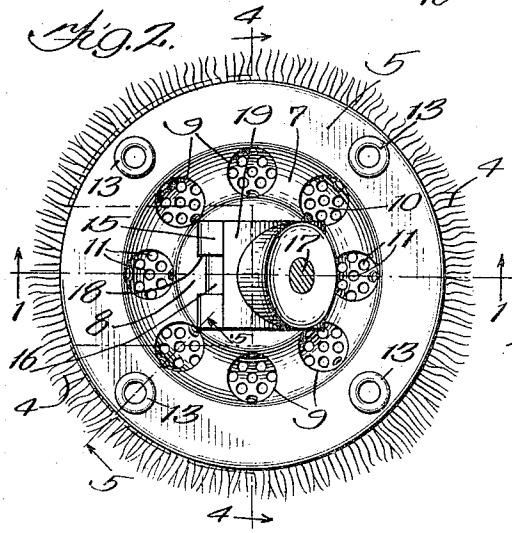


Fig. 3

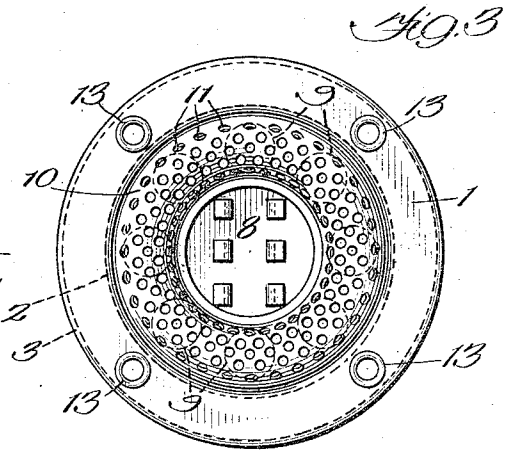


Fig. 4.

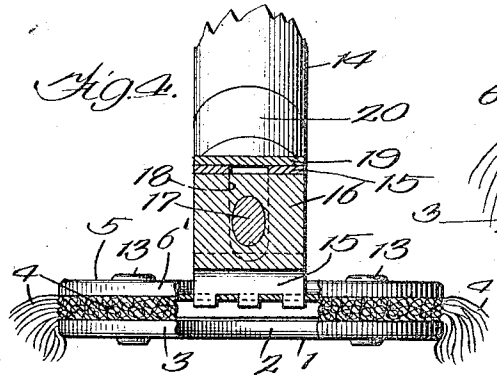
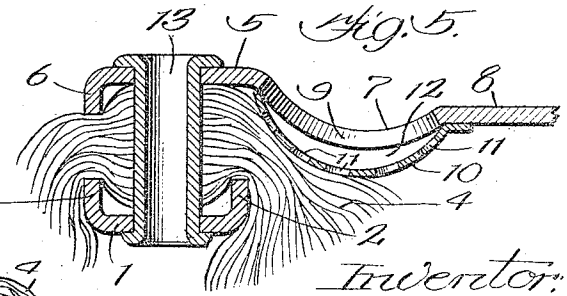


Fig. 5.



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MOP.

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To all whom it may concern:

Be it known that I, HENRY G. SAAL, citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Mops, of which the following is a full, clear, concise, and exact description.

My invention relates to mops and has for its general object the provision of improved clamping means for holding the mop forming strands and the mop handle in relation, and the provision of a screen below the holes that are desirably formed in the mop head for the passage of oil or other liquid to the mop strands.

I will explain my invention fully by reference to the accompanying drawing showing the preferred embodiment thereof and in which—

Figure 1 is a view on line 1—1 of Fig. 2; Fig. 2 is a view on line 2—2 of Fig. 1; Fig. 3 is a bottom view of the mop head shown in Fig. 1 minus the absorbent strands; Fig. 4 is a view on line 4—4 of Fig. 2; and Fig. 5 is a view on line 5—5 of Fig. 2.

Like parts are indicated by similar characters of reference throughout the different figures.

The mop structure includes a clamping ring 1 having upwardly extending annular ridges 2, 3 at its inner and outer circular edges. The strands 4 of absorbent material have their mid portions overlying said ring 1 and engaged by the annular ridges 2, 3 to form the strands into loops between whose sides the ring passes. A circular clamping cap 5 overlies the mid portions of the strands and is co-axial with the clamping ring 1. This cap has a downwardly extending annular ridge 6 at its outer edge, this downwardly extending ridge being of substantially the same diameter as that of the outer ridge 3 upon the clamping ring.

An annular gutter 7 is formed in the clamping cap 5 between the central portion 8 and the rim thereof, this gutter being disposed above the absorbent strands adjacent the bights in the loops that are formed in the strands by the ring 1. The cap 5 has large holes 9 therethrough where the gutter is formed to permit the passage of liquid through the cap to the absorbent strands. An annular screen 10 whose openings 11 are relatively small in comparison with the holes 9 in the cap 5 is interposed between the gutter or depression 7 of the cap and the absorbent strands 4 and underlies the openings in the gutter, clearance 12 intervening between the imperforate portions of the gutter or depression 7 and the screen to permit the flow of liquid between these imperforate portions and the screen. The screen serves to prevent too rapid flow of the liquid, such as oil with which the absorbent strands are to be supplied, to the strands while at the same time permitting sufficient flow of such liquid as is required. By affording the clearance 12 between the under side of the gutter 7 and the top surface of the screen 10 the oil or other liquid is permitted to flow over the entire screen to promote the even distribution of the oil to the absorbent strands. This screen extends to the inner ridge 2 of the clamping ring to enable the inner sides of the loops to hold the screen and cap in assembly. Means are employed for assembling the clamping cap 5 and clamping ring 1 into holding engagement with the absorbent strands, these means being desirably in the form of hollow or sleeve rivets 13 through which liquid may find passage to the absorbent strands.

The handle 14 is connected with the central portion of the clamping cap 5 preferaby by the means illustrated. The cap 5 supports a circular bearing 15 in which there is provided a short or stub shaft 16 which, in effect, constitutes a part of the handle structure as long as it is connected with the gripping portion of the handle by means of a screw 17 that is in fixed relation with the gripping portion of the handle. The bearing 15 has a slot 18 formed therein that is parallel with the plane of the bearing and is included in the plane of swinging movement of the handle and the screw 17. When it is desired to readjust the position of the handle the gripping part thereof is turned so as partially to unscrew the screw 17 whereupon the handle may be swung to the desired position, said screw working within the slot 18. After the new position has been selected the screw 17 is screwed home to clamp the shaft 16, the screw 17 and the gripping portion of the handle in firm relation. If desired the friction spring washer 19 may be interposed between the lower end of the ferrule 20 and the exterior of the bearing 15 whereby the firm relation of the handle and the bearing is assured.

While I have herein shown and particu-

larly described the preferred embodiment of my invention I do not wish to be limited to the precise details of construction shown as changes may readily be made without departing from the spirit of my invention, but having thus described my invention I claim as new and desire to secure by Letters Patent the following:—

1. A mop including a clamping ring having upwardly extending annular ridges at its inner and outer circular edges; strands of absorbent material having their mid portions overlying said ring and engaged by said annular ridges to form the strands into loops between whose sides the ring passes; a circular clamping cap overlying said mid portions of the strands and co-axial with the clamping ring and having a downwardly extending annular ridge at its outer edge, this downwardly extending ridge being of substantially the same diameter as that of the outer ridge upon the clamping ring, an annular gutter being formed in the clamping cap between the central and rim portions thereof and above the absorbent strands, the cap having large holes therethrough where the gutter is formed to permit of the passage of liquid through the cap to the absorbent strands; an annular screen whose openings are relatively small in comparison with the aforesaid holes in the cap, this screen being interposed between the gutter portion of the cap and the absorbent strands and underlying the openings in the gutter, said screen extending to the inner ridge of the clamping ring to enable the inner sides of the loops to hold the screen and cap in assembly; means for assembling the clamping cap and clamping ring into holding engagement with the absorbent strands; and a handle connected with the clamping cap.

2. A mop including a clamping ring; strands of absorbent material having their mid portions overlying said ring and engaged by said ring to form the strands into loops between whose sides the ring passes; a clamping cap overlying said mid portions of the strands and having an annular gutter formed therein between the central and rim portions thereof and above the absorbent strands, the cap having large holes therethrough where the gutter is formed to permit the passage of liquid through the cap to the absorbent strands; an annular screen whose openings are relatively small in comparison with the aforesaid holes in the cap, said screen being interposed between the gutter portion of the cap and the absorbent strands and underlying the openings in the gutter, said screen extending to the inner edge of the clamping ring to enable the inner sides of the loops to hold the screen and cap in assembly; means for assembling the clamping cap and clamping ring into holding engagement with the absorbent strands; and a handle connected with the clamping cap.

3. A mop including a clamping ring; strands of absorbent material having their mid portions overlying said ring and engaged by said ring to form the strands into loops between whose sides the ring passes; a clamping cap overlying said mid portions of the strands and having an annular gutter formed therein between the central and rim portions thereof and above the absorbent strands, the cap having large holes therethrough where the gutter is formed to permit the passage of liquid through the cap to the absorbent strands; an annular screen whose openings are relatively small in comparison with the aforesaid holes in the cap, this screen being interposed between the gutter portion of the cap and the absorbent strands and underlying the openings in the gutter; means for assembling the clamping cap and clamping ring into holding engagement with the absorbent strands; and a handle connected with the clamping cap.

4. A mop including a clamping ring; strands of absorbent material engaged by said ring; a clamping cap overlying the strands and having a liquid receiving depression formed therein above the absorbent strands, the cap having large holes therethrough where the depression therein is formed to permit of the passage of liquid through the cap to the absorbent strands; a screen whose openings are relatively small in comparison with the aforesaid holes in the cap, this screen being interposed between the depressed portion of the cap and the absorbent strands and underlying said openings in the cap; means for assembling the clamping cap and clamping ring into holding engagement with the absorbent strands; and a handle connected with the clamping cap.

5. A mop including a clamping ring having upwardly extending annular ridges at its inner and outer circular edges; strands overlying said ring and engaged by said annular ridges; a circular clamping cap overlying the strands and co-axial with the clamping ring and having a downwardly extending annular ridge at its outer edge, this downwardly extending ridge being of substantially the same diameter as that of the outer ridge upon the clamping ring; means for assembling the clamping cap and clamping ring into holding engagement with the strands; and a handle connected with the clamping cap.

In witness whereof, I hereunto subscribe my name.

HENRY G. SAAL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."