April 24, 1945. F. C. BRENNAN ET AL 2,374,170

MOP SWAB FOR USE ON SMOOTH SURFACED FLOORINGS AND THE LIKE

Original Filed May 17, 1939

Fig. 1.

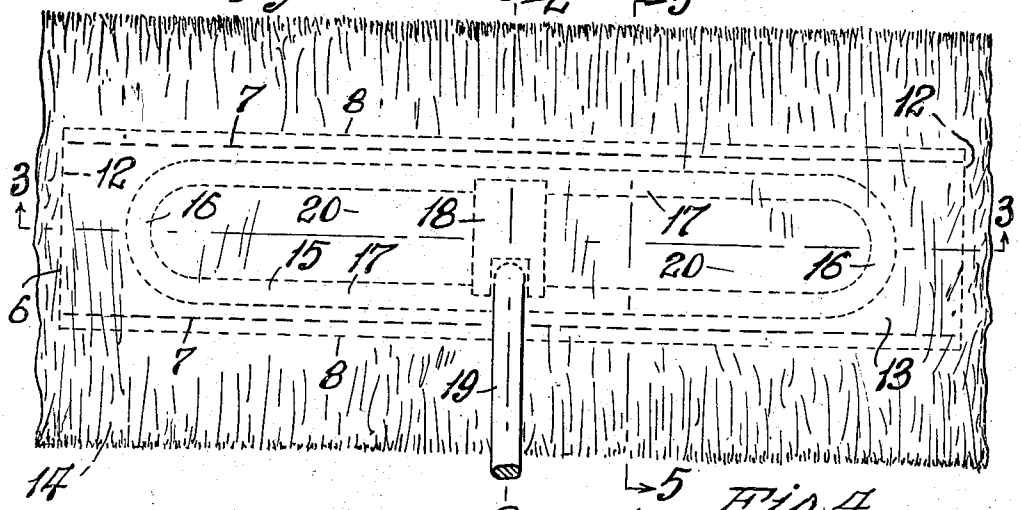


Fig. 2.

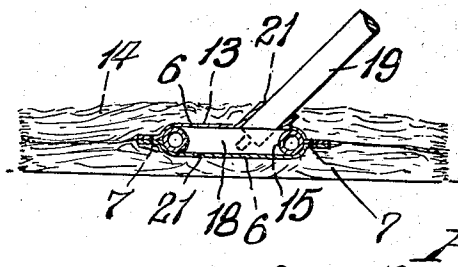


Fig. 4.

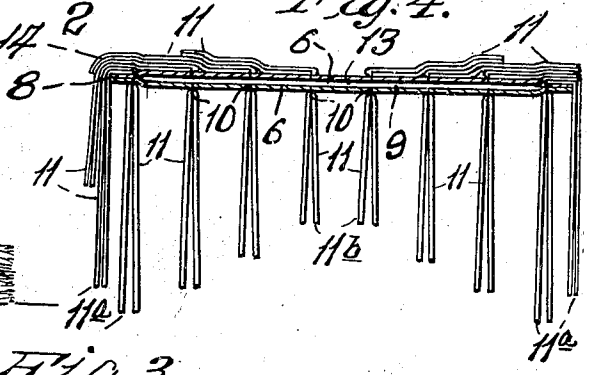


Fig. 3.

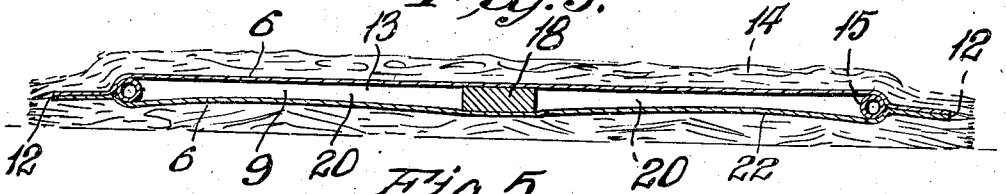
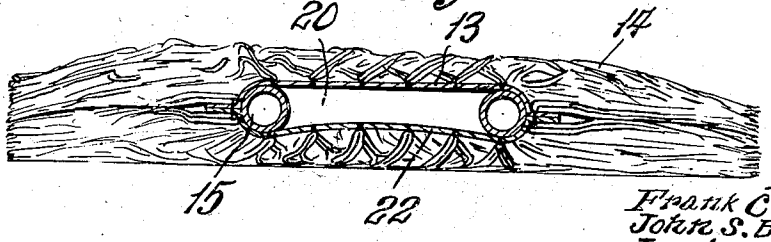


Fig. 5.



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MOP SWAB FOR USE ON SMOOTH SURFACED FLOORINGS AND THE LIKE

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Original application May 17, 1939, Serial No. 274,160. Divided and this application July 10, 1941, Serial No. 401,764

2 Claims. (Cl. 15—229)

This invention relates to certain new and useful improvements in mops and is a division of our co-pending application Serial No. 274,160, filed May 17, 1939 (later abandoned), and pertains more particularly to that character of mops known to the trade as dustless sweeper mops, and the invention having for one of its primary purposes, the provision of means to provide a swab of an improved construction for a mop.

Another object of the invention is to provide a sleeve-like swab of a relatively flat structure.

A further object is to provide a swab with an improved cooperable supporting frame which forms part of the mop.

Still another object is to provide an improved removable and reversible swab structure.

Another object is to provide an improved double-faced swab for a mop.

A still further object is to provide a swab for a mop to serve as a head or brush end therefor, of an improved construction wherein balling or bunching of the yarn or twine is eliminated when the swab is mounted on a cooperable holding frame.

With the foregoing and other objects in view which will appear as the description proceeds, our invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes may be made within the scope of what is claimed without departing from the spirit of the invention.

An embodiment of the invention is illustrated in the accompanying drawing, wherein:

Figure 1 is a plan elevation showing this improved swab mounted on a cooperable supporting frame and the handle of the frame being broken away.

Figure 2 is a vertical transverse sectional elevation taken approximately on the line 2—2 of Fig. 1.

Figure 3 is a vertical longitudinal sectional elevation taken approximately on the line 3—3 of Fig. 1.

Figure 4 is an enlarged vertical transverse sectional elevation taken through the swab element of the mop for the purpose of illustrating the yarn or twin structure thereof.

Figure 5 is an enlarged vertical transverse sectional elevation taken approximately on the line 5—5 of Fig. 1.

Referring by numerals to the accompanying drawing, this improved swab comprises a pair of fabric layers 6 which are secured together by longitudinal stitching 7 adjacent each side margin 8 of the layers when the layers are positioned together ready for stitching.

The longitudinal stitching 7 adjacent the side edges 8 of the layers provides a pocket 9 between the layers 6, and as the layers are relatively long as shown in Figs. 1 and 3 of the drawing, the pocket 9 consequently will be relatively long.

Secured in longitudinally spaced rows on each layer 6 by stitching 10, are looped strands of yarn or twine 11, as shown more clearly in Fig. 4. Specifically, the strands 11 vary in length and in which the outer strands 11*a* are of a longer length than the intermediate strands, the intermediate strands 11*b* being the shortest in length, and the strands which are outer disposed from the strands 11*b* varying in length to that of the outer disposed strands 11*a*. This arrangement of varying strand lengths has for its purpose to provide a uniformly flat floor contacting layer to the swab when the swab is mounted on a mop frame and in use on a floor surface.

In securing the strands to respective layers 6, the strands are stitched to the layers before they are secured together by the longitudinal stitching 7 and as the ends 12 of the layers are free of secured together stitching, these layers provide an open-ended envelope 13 to which the yarn strands 11 are secured for providing the swab 14.

A preferred supporting frame for the swab 14 is shown at 15, this frame being of tubular structure and formed from a suitable tube length of relatively large diameter and bent into an oblong shape and having rounded ends 16. Secured at its ends to the runs 17 of the frame 15 is a handle attaching block 18 having a securing socket for a handle 19, the space on each side of the block 18 within the confines provided by the tubular structure of the frame 15, providing respective pockets 20 for purposes hereinafter described.

Each layer 6 of the swab 14 is provided with an aperture or slit 21 intermediate its length, and in assembling the mop in readiness for use for dusting and polishing smooth surfaced floorings and the like, the frame 15 is inserted at one of its rounded ends 16 in one end of the envelope 13 of the swab 14 and is slid therein to a position wherein the apertures 21 are in alinement with the block 18 so that the handle 19 can be engaged through the uppermost aperture and secured to the block.

The envelope 13 of the swab 14 is preferably made longer than the frame 15 so that the rounded ends 16 of the frame will be disposed a distance inwardly from each end of the en-

velope of the swab and so that there will be sufficient material length for the envelope ends to collapse and meet, whereby the upper layer will rest on the lower layer of the envelope to provide material protecting end lengths for preventing the frame ends from engaging and marring furniture and the like.

In the use of a mop having this improved swab as a part thereof, the arrangement of the varying strand lengths in which the intermediate strands are shorter in length than the outer strands, provides a swab structure capable of presenting a flat floor contacting layer and in which balling or bunching of the swab into a rounded contacting surface layer is prevented. Specifically, the intermediate shorter strands of the swab provide space on the under side of the working surface thereof for the crowding in of the long outer strands in the event the long strands work thereunder, thus maintaining the flat floor contacting layer.

To assist in maintaining a flat contacting layer on either working surface of the swab, it is preferable to support the swab by an insertable frame in the form of an annulus, as indicated and shown by the frame 15, wherein a pocket 20 is provided on each side of the handle block 18 as these pockets will permit an upward flexing of the lower disposed layer 22 of the envelope of the swab, thereby providing space or room at the intermediate working surface portion of the swab for the crowding in of the outer disposed longer twine strands 11*a* of the swab so that bunching or balling of the twine strands is eliminated.

After one side of the swab has been sufficiently used, the handle 19 is removed from the block 18 and the swab 14 is slid from the frame 15 and turned over and re-mounted on the frame to present the other side of the swab for use as a floor working brush, the handle 19 being inserted in the aperture or slit 21 in the used side of the envelope or swab 14 and remounted in the socket of the block 18 of the frame 15.

While it is quite apparent that a double working surface brush is provided by this improved swab which obviously will give longer life to the swab, convenience in dismantling the swab is also provided by reason of the fact that it is but required to remove the handle to permit withdrawal of the frame from either end of the envelope of the swab for laundering purposes of the brush.

While we have described one embodiment of our invention with some particularity, obviously many other embodiments thereof may occur to those skilled in the art to which it appertains. We, therefore, do not limit ourselves to the precise details described, but claim as our invention all variations and modifications coming within the scope of the subjoined claims.

What we claim is:

1. A reversible mop swab comprising an elongated sleeve-like member open at least on one end for the insertion of a swab supporting frame and flattened to form adjacent opposing layers, each of said layers having long twine strands secured and disposed parallel to the side edges thereof in longitudinal rows, said strands adapted to extend over the side edges of said layers for floor engagement when the swab is in use, rows of short strands secured to and extending from the approximate longitutdinal center of each layer and paralleling said long strand rows, and other strands of varying length secured in rows to each layer and paralleling said other strand rows and disposed between said long and said short strand rows and receding in length from the long strands to the short strands, all of said strands extending from the outside of said member.

2. A reversible mop swab comprising an elongated sleeve-like member open at least on one end and flattened to form adjacent opposing layers for the insertion of a supporting frame therefor, twin strands of varying length secured to each layer on longitudinal lines the approximate length thereof with the longest strands disposed parallel to the side edges of each layer and adapted to extend over the side edges for floor engagement when the swab is in use, the shortest of said strands extending from the approximate longitudinal center of each layer, the strands between the shortest strands and the longest strands increasing in length from the shortest strands to the longest strands and disposed parallel thereto, and each layer having an opening for the insertion of a handle for securing it to the frame.

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