The object of this invention is to devise novel extracting mechanism for mops and a novel mop handle.

A further object is to devise a novel and loop forming extractor members, the upper ends of the members being fixed to the carrier and having their lower or free ends overlapping each other. The carrier is pivotally connected with its operating rod and further object is to devise a novel deformed arrangement of the mop handle to cause the loop of the members to align with the mop head.

With the foregoing and other objects in view which will hereinafter clearly appear, our invention comprehends novel extracting mechanism for mops.

For the purpose of illustrating the invention, we have shown in the accompanying drawings an embodiment which we have found in practice to give satisfactory and reliable results. It is, however, to be understood that the various instrumentalities of which the invention consists can be variously arranged and organized, and we therefore do not desire to be limited except by the scope of the appended claims to the exact arrangement and organization of these instrumentalities as herein set forth.

FIGURE 1 is a top plan view of a mop and extracting mechanism embodying our invention.

FIGURE 2 is a side elevation and shows the extractor being moved rearwardly after the extracting operation.

FIGURE 3 is a sectional view of FIGURE 1.

FIGURE 4 is a sectional view of FIGURE 2.

FIGURE 5 is a detail of the mop of FIGURES 1-4, showing different positions of the extractor and cooperating parts.

Referring to the drawings:

Referring to the embodiment shown in FIGURES 1 to 5, the mop has a handle 1, the forward end of which is in the form of a crank shaped bar 2 fixed to the body portion of the handle in any desired manner. The front end of the bar has a slot 3 opening through its top face to receive a cross rod 4 of a mop head 5, which latter is of the spaghetti type consisting of absorbent strands having an absorbent core and a plastic cover or tube.

A cap 6 slideable on the bar, when moved forwardly over the rear end of the mop head, retains the mop head in assembled relation with the bar of the mop handle.

A guide 7 is fixed to the bar by a fastening device 8, and has a longitudinally extending opening 9 in which an operating rod 10 has a desired clearance. The rod 10 at its rear end is bent downwardly and pivoted at 11 to a sleeve 12 slideable on the mop handle and having a projection 13 extending into a longitudinally extending groove 14 in the handle. The rearward movement of the sleeve is limited by a stop 15 on the mop handle.

A carrier 16 is pivoted at 17 to the front end of the operating rod 10. Loop forming extractor members 18 and 19 have their upper ends fixedly mounted on the carrier so that they will swing forwardly and upwardly as the carrier pivots when passing in a rearward direction over the mop head. The lower ends of the members are laterally spaced from each other and one overlaps the other. Rearward movement of the loop members from a perpendicular position is prevented since the loop members are fixedly connected at their upper ends to the carrier and the carrier is prevented from swinging rearwardly beyond a perpendicular position due to the manner in which it is pivotally connected with its actuating rod.

The mop is held at an inclined position with the extractor rod and carrier uppermost during the extracting operation.

Assuming now that the strands are in a moist condition and the loop forming extractor members are in the position shown in FIGURE 4, the operator moves the sleeve forwardly on the mop handle and the extractor members take the form of a closed loop pass over the mop head and extract the water from the mop strands. He next moves the sleeve rearwardly and the members together with the carrier swing forwardly and upwardly as they pass over the mop head and after passing by the mop head swing downwardly and the lower ends of the members are at opposite sides of the lateral stretch 20 of the bar 2.

On the forward extracting movement of the sleeve and carrier, the member 18 contacting the stretch 20 is momentarily prevented from forward movement, thereby causing the carrier to pivot in a counter-clockwise direction about element 17, the members passing over the bar to bring the loop formed by the members into longitudinal alignment with the mop head.

The rod is pivoted in a slot in the carrier so that the lower wall of the slot contacting the rod limits the extent of rearward swing movement of the carrier. The carrier swings upwardly and forwardly during its rearward movement over the mop head so that the loop forming members clear the mop head.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is:

1. A mop having a mop head and a mop handle, the handle in rear of the mop head being crank shaped to provide a plurality of longitudinal and lateral stretches, a carrier having opposed curved extractor loops secured at one end to it, a rod pivotally connected at its front end with the carrier, a guide on the mop handle through which said rod passes, and a slideable sleeve on the mop handle connected with said rod, said carrier and loops after the extraction stroke moving outwardly to ride over the mop head on the return stroke, said loops on the forward extracting stroke contacting a lateral stretch and said loops at their free ends being laterally spaced from each other to permit them to pass over said lateral stretch to position the loops in longitudinal alignment with the mop head for the forward extracting stroke.

2. The construction defined in claim 1, wherein the carrier is pivoted at its outer portion to the rod.

3. The construction defined in claim 1, wherein one end of each loop is fixed to the carrier.

4. The construction defined in claim 1, wherein the free end of one loop is longer than the other loop and overlaps said other loop.

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