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1,974,471

MOP

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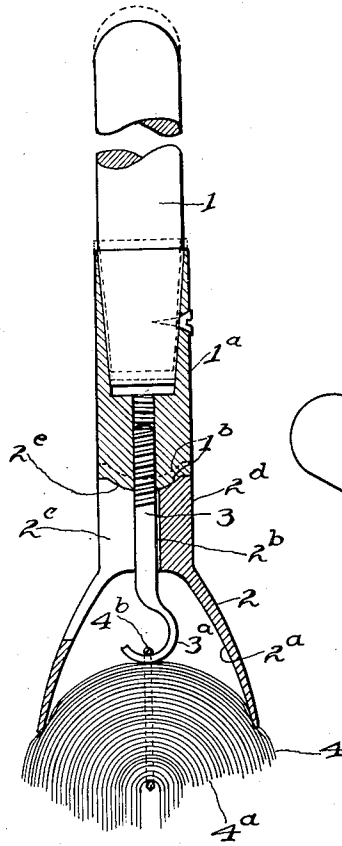


FIG. 2.

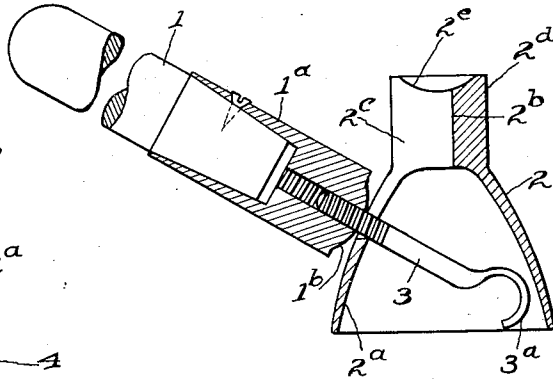


FIG. 1.

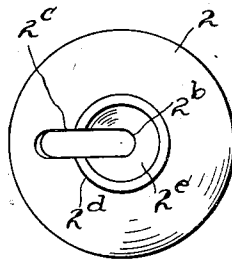


FIG. 3.

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# UNITED STATES PATENT OFFICE

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MOP

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6 Claims. (Cl. 15—147)

This invention relates to mops and more particularly to mops used by roofers for applying tar or pitch to roofs, and my object is to devise simple means for carrying the cloth part of the mop on the handle so that a new cloth part may be readily and quickly substituted for a worn cloth part even when the latter is tightly stuck by tar to the part of the mop in contact therewith.

I attain my object by providing a slot in a head against which the cloth part of the mop is firmly held so that a hooked stem which engages the cloth part may be displaced laterally through the slot when the handle of the mop is shifted slightly to disengage it from the end of the head remote from the cloth. In other words, the handle is threaded on the end of the stem remote from the hook thereof and normally engages the end of the head remote from the cloth so that by unthreading the handle a few turns to clear the head and then swinging the handle with the hook as a pivot until the end of the handle is clear of the head, the handle and thus the stem may be moved axially. The cloth may thus be forced out of contact with the head and may then be readily removed from the hook and a fresh cloth applied. The handle will then be swung into position for engagement with the end of the head and be threaded on the hook stem to draw the cloth and handle into engagement with the opposite ends of the head.

The constructions are hereinafter more fully described and are illustrated in the accompanying drawing in which

Fig. 1 is a vertical section of my mop showing in full lines the parts ready for use, and in dotted lines the handle unthreaded sufficiently to clear the head;

Fig. 2 a similar view showing the handle and stem moved to the position for replacing a cloth; and

Fig. 3 a plan view of the head.

In the drawing like numerals of reference indicate corresponding parts in the different figures.

The mop comprises a handle 1, a head 2, a hooked stem 3 and a cloth part 4. The latter is formed by a plurality of lengths of cotton string or rope 4<sup>a</sup>, the strings being secured together substantially midway between their ends by a wire 4<sup>b</sup>. The hook 3<sup>a</sup> on the stem 3 is adapted to engage the wire 4<sup>b</sup> and the hollow cup shaped end or bell mouth 2<sup>a</sup> of the head 2 is adapted to receive the inner or upper end of the cloth.

The handle 1 is provided with a metallic ferrule or end piece 1<sup>a</sup> which engages the inner or upper end of the head 2 and is threaded on the end of the stem 3 remote from the hook 3<sup>a</sup>. The threaded end of the stem passes through an opening 2<sup>b</sup> in the head 2 and the ferrule 1<sup>a</sup> serves as a nut to draw the cloth into engagement with the cup 2<sup>a</sup>. It is obvious from this description that by unthreading the handle from the stem, the latter and thus the cloth could be removed, a fresh cloth engaged with the hook and the device could be re-assembled by threading the handle on to the stem.

To facilitate the replacement of cloths on the handle, I form a slot 2<sup>c</sup> in the side wall of the head 2. This slot communicates with the opening 2<sup>b</sup> and extends through the end of the head engaged by the handle ferrule 1<sup>a</sup> so that the stem 3 may be swung laterally through the slot when the ferrule is unthreaded a few turns to disengage it from the head. The latter is so shaped that the distance between the hook and the end of the head engaged by the ferrule is greater than the shortest distance between the hook and the outside of the cup 2<sup>a</sup> whereby the handle 1, ferrule 1<sup>a</sup> and stem 3 may be moved longitudinally as a unit relative to the head 2 when the stem projects through the slot.

This axial movement of the stem not only positions the hook 3<sup>a</sup> for removing the wire 4<sup>b</sup> of a worn cloth therefrom and for engaging the wire of a fresh cloth therewith, but dislodges the worn cloth from contact with the rim of the cup 2<sup>a</sup> even if the cloth is tightly stuck by a film of tar to the cup.

By forming the head 2 with a substantially cylindrical neck 2<sup>d</sup> extending upwardly from the cup 2<sup>c</sup> and forming the slot 2<sup>c</sup> in the neck and the upper part of the cup, I provide a maximum clearance for the axial displacement of the stem 3 and locate the slot at a maximum distance from the cloth so that it may readily be kept clear of the tar at all times.

The upper end of the neck 2<sup>d</sup> is provided with a recess or seat 2<sup>e</sup> adapted to receive a correspondingly shaped projection 1<sup>b</sup> on the handle ferrule 1<sup>a</sup>. The seating of the projection on its seat maintains the handle and head 2 in alignment without undue stress on the stem 3.

With my construction it will readily be seen that a worn cloth may be removed by simply loosening the handle on the stem, swinging the latter through the slot and shifting it axially. By reversing this procedure, a fresh cloth may be

easily connected ready for use in a minimum of time and without any tools.

What I claim as my invention is:

1. A device of the character described comprising a stem adapted to be releasably engaged with a mop cloth; a head adapted to engage the upper end of the mop cloth and having an opening therethrough for the passage of the stem; and a handle threaded on the stem and engaging the head at the end thereof remote from the mop cloth, the side wall of the head having a slot communicating with the opening and extending through the end of the head engaged by the handle, the slot being adapted to permit the stem to move laterally therethrough upon the handle being loosened so that the stem may be displaced longitudinally relative to the head.

2. A device of the character described comprising a stem adapted to be releasably engaged with a mop cloth; a cup shaped head adapted to receive the upper end of the mop cloth and having an opening therethrough for the passage of the stem; and a handle threaded on the stem and engaging the head at the end thereof remote from the mop cloth, the distance between the part of the stem engaging the mop cloth and the aforesaid end of the head being greater than the closest distance between the said part of the stem and the outer side of the head, the side wall of the head having a slot communicating with the opening and extending through the end of the head engaged by the handle so that the stem may be swung laterally through the slot and then moved axially.

3. A device of the character described comprising a stem adapted to be releasably engaged with a mop cloth; a cup shaped head adapted to receive the upper end of the mop cloth; a substantially cylindrical neck on said head, the neck and head having an opening therethrough for the passage of the stem; and a handle threaded on the stem and engaging the end of the neck remote from the cup portion of the head, the side wall of the neck and the cup portion of the head having a slot communicating with the opening and the interior of the cup, the slot being extended through the end of the neck engaged by the handle so that the stem may be swung

laterally through the slot and then moved axially.

4. A device of the character described comprising a stem adapted to be releasably engaged with a mop cloth; a cup shaped head adapted to receive the upper end of the mop cloth; a substantially cylindrical neck on said head, the neck and head having an opening therethrough for the passage of the stem; a seat formed in the end of the head remote from the mop cloth; a handle threaded on the stem; and a projection on the handle adapted to be seated in the said seat, the side wall of the head having a slot communicating with the opening and extending through the seat so that the stem may be swung laterally through the slot and then moved axially.

5. A device of the character described comprising a stem adapted to be releasably engaged with a mop cloth; a cup shaped head adapted to receive the upper end of the mop cloth and having an opening therethrough for the passage of the stem; a seat formed in the end of the head remote from the mop cloth; a handle threaded on the stem; and a projection on the handle adapted to be seated in the said seat, the side wall of the head having a slot communicating with the opening and extending through the seat so that the stem may be swung laterally through the slot and then moved axially.

6. A device of the character described comprising a stem adapted to be releasably engaged with a mop cloth; a cup shaped head adapted to receive the upper end of the mop cloth; a substantially cylindrical neck on said head, the neck and head having an opening therethrough for the passage of the stem; a handle threaded on the stem; and means for interlocking the adjacent ends of the handle and the neck when the mop cloth is drawn into the cup portion of the head, the side wall of the neck and the said cup portion having a slot communicating with the opening and the interior of the cup, the slot being extended through the end of the neck engaged by the handle so that the stem may be swung laterally through the slot and then moved axially.

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