J. T. WILSON.

LOCKING DEVICE FOR MOP HOLDERS.

APPLICATION FILED FEB. 25, 1915.

1,148,559. Patented Aug. 3, 1915.

Fig. 1.

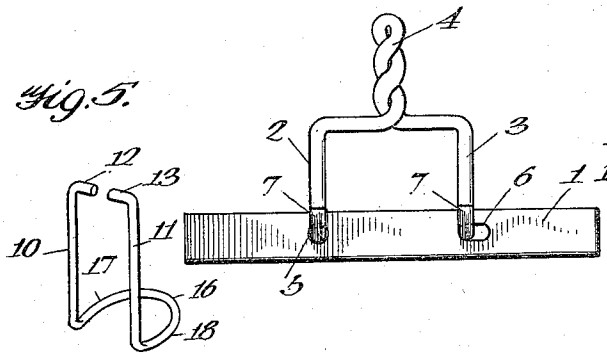


Fig. 4.

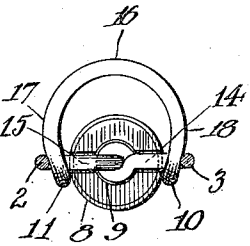


Fig. 5.

Fig. 2.

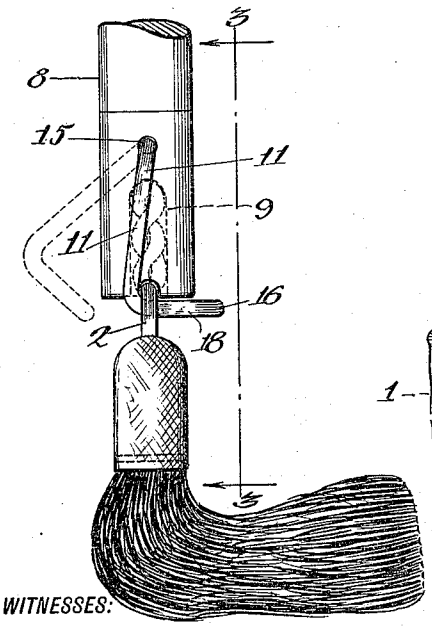
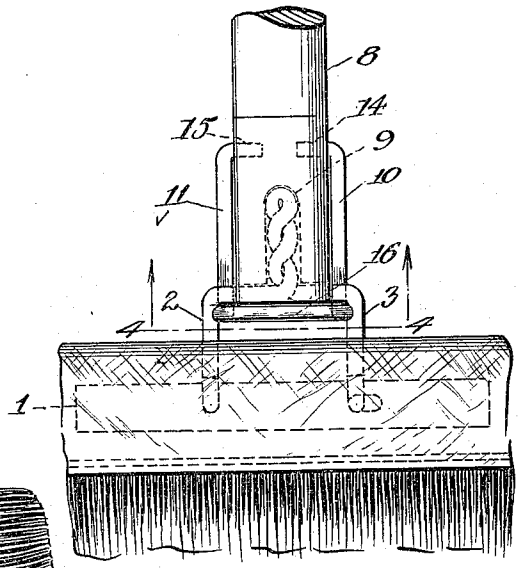


Fig. 3.



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LOCKING DEVICE FOR MOP-HOLDERS.

1,148,559. Specification of Letters Patent. Patented Aug. 3, 1915.

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To all whom it may concern:

Be it known that I, JOSEPH T. WILSON, a citizen of the United States, residing at Clayton, in the county of Gloucester and State of New Jersey, have invented certain new and useful Improvements in Locking Devices for Mop-Holders, of which the following is a specification.

This invention relates to new and useful improvements in mop holders, and its principal object is the provision of a device of this character whereby the mop rag, or the strands comprising the rag, may be detachably secured to the handle portion in a simple but efficient manner.

More specifically my invention aims to provide a fastening device for mop rags which consists substantially in two coacting elements, one of which is so constructed that it serves as a receiving frame for the mop cloth or rag, and the other of which is in the nature of a retainer, mounted on the handle and movable either into operative position to engage the mop frame and hold it securely upon the handle, or to be moved into inoperative position, whereby the frame is released. Both the movements heretofore referred to are effected against resiliency which is inherent to one of the members.

Devices of this character must be simple and economical in construction, yet efficient in operation, since it is very often necessary to change the mop cloth, or, in other words to detach the mop carrying frame from the handle.

All of the above recited objects and purposes are accomplished by the construction disclosed in the drawings forming a part of this application, described in the accompanying specification, and more particularly pointed out in the claims appended hereto.

Referring to the drawings, wherein is shown the preferred embodiment of my invention, as it is reduced to practice, and throughout the several views, of which similar reference numerals designate corresponding parts, Figure 1 is a plan view of the mop receiving frame; Fig. 2 is a side elevation showing the locking device in operative engagement with the mop handle and mop frame; Fig. 3 is a front plan view of the device as shown in Fig. 2, illustrating the mop frame partly in dotted lines; Fig. 4 is a detailed sectional view taken on line 4, 4 of Fig. 3, and Fig. 5 is a detailed perspective view of the pivoted locking member.

In the embodiment of my invention illustrated in the accompanying drawings, the device includes the mop frame having a mop receiving portion, a stem portion connected to the mop receiving portion by a laterally resilient connecting member or members, an apertured handle adapted to receive the stem portion, and a locking member adapted to detachably secure the frame to the handle.

The mop frame is formed of a substantially flat plate 1, of metal, around which the mop strands are wrapped. A covering of canvas or other suitable material is then sewed around the cloth or gathered strands, to securely hold them in position and to give a finished appearance to the mop, as is indicated in Figs. 2 and 3. Connected to the plate 1, are the uprights 2 and 3, said uprights being formed of very strong resilient wire, and twisted to provide the stem portion 4. Preferably only one piece of wire is used to form the stem and uprights, but it is clearly obvious that two sections may be provided for this purpose, and practically the same result secured. The lower ends of said uprights pass through apertures 5 and 6 in the plate 1, as clearly shown in Figs. 1 and 2, and the ends 7 thereof are thereafter turned upwardly and bent upon the shank portions 2 and 3, whereby vertical movement between the plate 1 and the uprights is prevented. The aperture 5 is substantially the diameter of its associated upright 2, while the aperture or slot 6 is somewhat elongated laterally, as shown in Figs. 1 and 3, for a purpose which will be hereinafter explained. It will be observed that, while the upright 2 is fixed with respect to the plate 1, since the restricted aperture 5 admits of no movement either laterally or longitudinally, the upright 3 may be moved laterally in the slot 6, against its inherent resiliency.

The mop handle 8 is provided with a longitudinally extending aperture 9, as shown in Fig. 4, and indicated in dotted lines in Figs. 2 and 3. The stem 4 is adapted to be inserted in the aperture 9 which is of a width and depth adequate to hold the frame in position. A locking member is pivoted upon the handle, said member comprising two upward extensions 10 and 11, having inwardly turned ends 12 and 13, adapted for insertion in apertures 14 and 15, one on either side of the handle, as clearly shown in Figs. 2, 3 and 4. The two members 10 and 11 are joined, preferably integrally, to

form a locking tongue 16, having outwardly extending sides or bulged portions 17 and 18.

From the foregoing description the operation of the device should be clearly understood. The stem 4 is inserted into the handle, the locking member being in the position shown in dotted lines in Fig. 2, and the upright 3 in the position shown in Fig. 1. Pressure upon the extensions 10 and 11 will cause the bulged portions 17 and 18 to contact with the uprights 2 and 3 respectively, and sufficient pressure will cause the end of the upright 3 to travel laterally in the slot 6, and increase the width of the opening between said uprights, allowing the tongue 16 to pass therethrough. The inherent resiliency of the upright 3 will cause it to spring or snap back into its original position behind the bulged portions 17 and 18, and the frame is then securely held upon the handle. To release the frame the same pressure may be exerted in an opposite direction upon the tongue 16, as will be readily understood.

Manifestly several different embodiments and modifications of this fundamental principle may be resorted to with good results. Clearly both the uprights 2 and 3 might be provided with elongated slots, or both uprights might be rigidly fixed and the necessary resiliency imparted from some portion of the locking member. The two uprights might be formed of separate pieces of material and allowed to extend downwardly into the aperture in the handle, the two extensions being spaced apart and allowing room for them to be spread by the pressure upon the tongue 16.

I do not confine myself to the preferred form of the invention as shown in the drawings, but desire to secure by Letters Patent all such modifications as fairly come within the scope of the appended claims.

I claim:

1. A device of the character described comprising a handle, a mop frame having a mop engaging portion and a portion adapted for engagement with said handle, a resilient member connecting said portions, and a locking member adapted to be swung between said portions and frictionally engage said resilient member, whereby said resilient member may be caused to yieldingly move out of the path of the locking member and allow it to assume its operative position to detachably secure the frame to the handle.

2. A device of the character described comprising an apertured handle, a mop frame having a mop engaging portion and a stem portion adapted for insertion into said handle, a resilient upright connecting said portions, and a locking member adapted to be swung between said portions and to frictionally engage the upright, whereby said upright may yieldingly move out of the path of said locking member and allow it to assume its operative position to detachably secure the frame to the handle.

3. A device of the character described comprising a handle, a mop frame having a mop engaging portion and a portion adapted for engagement with said handle, two upright members connecting said portions and forming an opening, one of said uprights being laterally movable, and a locking device adapted to be forcibly swung into said opening and into contact with the uprights, whereby the movable upright is caused to move laterally and increase the size of said opening, and to allow the locking member to assume its operative position and detachably secure the frame to the handle.

4. A device of the character described comprising an apertured handle, a mop frame having a mop engaging portion and a stem portion adapted for insertion into said handle, two uprights connecting said portions and forming an opening, at least one of said uprights being laterally movable, and a locking member adapted to be swung into said opening and to engage the uprights, whereby the movable upright may be shifted laterally and the locking member allowed to assume its locked position to detachably secure the frame to the handle.

5. A device of the character described comprising an apertured handle, a mop frame having a mop engaging portion and a stem portion adapted for insertion into said handle, two uprights connecting said portions, at least one of said uprights being formed of resilient material and having its end mounted in an elongated slot in the mop receiving portion, and a locking member adapted to be swung between and engage said uprights and to cause the resilient upright to move laterally in said slot, whereby said locking member may assume its operative position and detachably secure the frame to the handle.

6. A device of the character described comprising a handle, a mop frame having a mop engaging portion and a handle engaging portion, two uprights connecting said portions, at least one of said uprights being formed of resilient material and having its end mounted in an elongated slot in the mop receiving portion, and a locking member adapted to be swung between and engage said uprights, and to cause the resilient upright to move laterally in said slot, whereby said locking member may assume its operative position and detachably secure the frame to the handle.

7. A device of the character described comprising a handle, a mop frame having a mop engaging portion and a portion adapted for engagement with said handle, up-

rights connecting said portions and forming an opening, at least one of said uprights being resilient, a locking member provided with a tongue of a width greater than the opening formed by the uprights, and means whereby forcible contact of said tongue upon said uprights will cause a lateral movement of the resilient upright and allow the passage of said tongue to its operative position to detachably secure the frame to the handle.

8. A device of the character described comprising a handle, a mop frame having a mop engaging portion and a handle engaging portion, uprights connecting said portions and forming an opening, at least one of said uprights being resilient, a locking tongue adapted to swing into said opening, said tongue having curved edges adapted to contact with said uprights, and being of a width greater than the opening formed therebetween, and means whereby forcible contact of said tongue upon said uprights will cause a lateral flexure of said resilient upright and allow the said tongue to assume its operative position to detachably secure the frame to the handle.

9. A device of the character described comprising a handle, a mop frame having a mop engaging portion and a handle engaging portion, uprights connecting said portions and forming an opening, at least one of said uprights being resilient, a locking member adapted to be swung into said opening and to flex said resilient upright, whereby the size of the opening is increased and the locking member allowed to assume its operative position, and thereafter the resilient upright is allowed to assume its normal position, and the frame is detachably secured to the handle.

10. A device of the character described comprising a handle, a mop frame having a mop engaging portion and a handle engaging portion, uprights connecting said portions and forming an opening, at least one of said uprights being resilient, a locking member pivoted upon the handle and adapted to be swung into said opening and flex said resilient upright, whereby the size of the opening is increased and the locking member allowed to assume its operative position, and thereafter the resilient upright is allowed to assume its normal position, and the frame is detachably secured to the handle.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH T. WILSON.

Witnesses:
J. P. POTTER,
D. L. SILVER.