Dec. 28, 1937. H. B. TARBOX 2,103,565

MOP HOLDER

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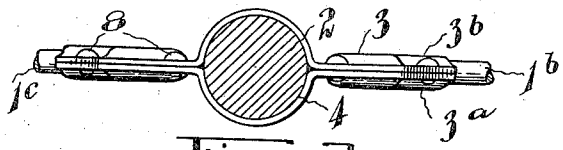


Fig. 3.

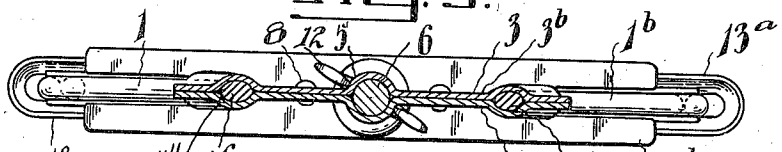


Fig. 2.

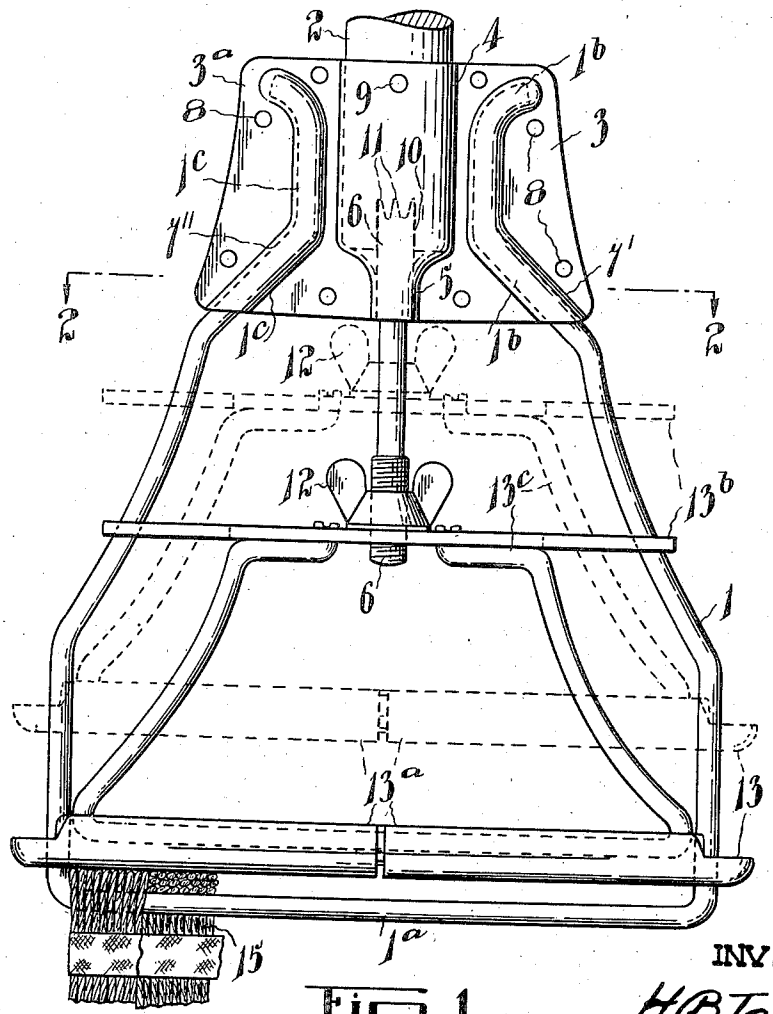


Fig. 1.

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MOP HOLDER

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1 Claim. (Cl. 15—153)

This invention relates to mop holders, and the object of my invention is to devise a mop holder which is strong in construction and which may be quickly manipulated for the insertion and removal of a mop.

Means have heretofore been devised for quickly releasing mops from mop holders, but these have been objectionable because they have been awkward to operate or complicated and expensive to make, or the provision of such quick releasing means has resulted in a weakening of the construction of the mop.

The object of this invention is attained and the objectionable features of the previously known constructions have been overcome by securing the mop holding means to the mop stick by a specially constructed ferrule and by providing a stud threaded at its outer end for a nut adapted to advance a mop clamping member and reduced in diameter or free of threads at its inner end whereby the nut may slide freely thereon to permit the clamping member to be rapidly advanced or withdrawn to clamp or release the mop.

The invention is hereinafter more specifically described and is illustrated in the annexed drawing in which

Fig. 1 is a side elevation of the mop holder showing in dotted lines the clamping member in its withdrawn or open position,

Fig. 2 a cross section of the mop holder on the line 2—2 in Fig. 1, and

Fig. 3 is a cross section through the handle showing the ferrule in plan view, part of the mop holder being broken away.

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

A bail 1 comprising a cross piece 1^a and arms 1^b and 1^c is secured to a stick or handle by a ferrule 3 comprising two plates 3^a and 3^b provided with registering grooves forming a socket 4 for the handle 2, a socket 5 for receiving a stud 6, and channels 7^1 and 7^{11} for receiving the ends of the arms 1^b and 1^c respectively. The plates 3^a and 3^b are secured or clamped together by rivets 8. A pin 9 passes through the ferrule 3 and the stick 2 to hold the said stick in position.

The arms 1^b and 1^c of the bail 1 converge to the point where they enter the channels 7^1 and 7^{11} in the ferrule 3 and from that point they continue to converge to a point adjacent the socket 4 and then run substantially parallel to said socket 4 and are flared outwardly at their ends, the general shape of the arms 1^b and 1^c within the ferrule being substantially U shaped in side elevation. The channels 7^1 and 7^{11} extend from front to back of the ferrule on either side of the socket 4 and are of corresponding shape to receive the arms 1^b and 1^c and hold them firmly between the plates 3^a and 3^b of the ferrule, not only preventing the bail from twisting or pulling out of the channels, but also reinforcing and strengthening the arms of the said bail. The fact that the arms 1^b and 1^c of the bail extend for the greater part of their length on either side of the socket 4 and the end of the stick or handle 2 adds greatly to the strength and rigidity of the mop holder.

The socket 4 is of such size that the end of the stick 2 need be but slightly reduced in size to be received therein and is connected with the socket 5 which is concentric therewith and of smaller diameter.

The end of the stick 2 is provided with a recess 10 into which the end of the stud 6 may be forced. Prongs or tangs 11 on the end of the stud 6 pierce the wood or other material of which the stick or handle 2 is constructed.

The stud 6 is threaded at its outer end but for a portion of its length between the threaded end and the point where the stud enters the socket 5 is reduced in diameter or stripped of threading. A wing nut 12 is adapted to be screwed on the threaded end of the stud and slide freely on the reduced portion thereof. Although the stud is described as threaded at its outer end and reduced or stripped of threads between the threaded part and the ferrule it will be understood that the essential feature of the stud is that the nut 12 may be screwed on the outer end and may slide freely on the inner end, and the exact construction or process whereby this result is obtained is not material, e. g. instead of reducing or stripping the inner portion of the stud the outer portion may be built up and threaded.

Slidably mounted on the bail 1 is a mop clamping member 13, preferably composed of two cross bars 13^a and 13^b. The bar 13^a is provided with holes and the bar 13^b is provided with longitudinally centrally located slots at each end through which the arms of the bail pass. The bars 13^a and 13^b are connected by a transverse member 13^c.

The stud 6 extends through a hole or aperture in the cross bar 13^b and the wing nut 12 is adapted to engage the said cross bar so that when the nut 12 is moved outwardly or advanced, e. g. by screwing it toward the outer end of the stud 6, it moves the clamping member 13 outwardly towards the cross member 1^a of the bail. When the nut 12 is screwed in the opposite direction the clamping member 12 is released and may be drawn

away from the cross bar 1a. When the nut 12 reaches what may be called for convenience the reduced portion of the stud 6 it drops or may be pushed inwardly toward the mop stick or handle until it comes into engagement with the ferrule 3. This leaves the clamping member perfectly free and it drops or may be readily pushed in a direction away from the cross piece 1a of the bail.

Mops are ordinarily made of a number of strands of material connected centrally and free at the ends or they may be merely pieces of cloth that are clamped centrally in the mop holder. In either case, to get the mop in the holder requires that the clamping member must be withdrawn a considerable distance from the bail to leave ample space for passing the loose ends therebetween. However, once the mop is in position the clamping member must be moved a considerable distance before it actually begins to clamp the mop against the cross bar of the bail.

Heretofore in mop holders of this type, in order to remove a mop it has been necessary to screw the nut down the stud practically its whole length and to secure a mop in the holder it has been necessary to screw the nut up the whole length of the stud until the mop is firmly held between the bail and clamping member. By my improved construction, in removing the mop 15, the mop holder is held with the bail up. The nut 12 is screwed down the threaded portion of the stud to the reduced portion and slide down the reduced portion until it is stopped by engagement with the ferrule 3. The clamping member 13 drops with the nut or may be readily pushed down, thus quickly and effectively releasing the mop. To insert a mop, the mop is placed in position between the clamping member 13 and the bail. Preferably the mop holder is held with its head down so that the mop hangs over the bail. The clamping member then falls or may be pushed outwardly until the mop is lightly engaged between said clamping member and the bail. The nut 12 drops or may be slid over the reduced portion of the stud 6 and then screwed on the threaded portion until it engages the clamping member and forces it outwardly to firmly clamp and hold the mop against the bail.

It will be readily seen that by constructing the stud so that the nut slides over a portion thereof a great saving in time and work is effected in inserting and removing mops, and that this object has been achieved without sacrificing the strength and effectiveness of the mop holder, which has in fact been increased by the novel method of securing the bail and the stud to the stick or handle.

What I claim as my invention is:

A mop holder including a stick; a bail secured to the stick; a mop clamping member slidable on the bail; a stud secured to the stick, said stud being threaded adjacent its outer end and having a diametrically reduced portion between said threaded portion and the stick; and a nut adapted to be screwed on the threaded end portion of the stud and to slide freely on the reduced portion of the stud between said threaded end portion and the stick, said stud being so positioned relative to the slidable clamping member that the nut may engage said clamping member to advance it to clamp a mop between the said clamping member and the bail.

HUGH B. TARBOX.