Aug. 11, 1936. F. PREISSER ET AL 2,050,762

UNIVERSAL MOP

Filed Oct. 23, 1934

Fig. 1.

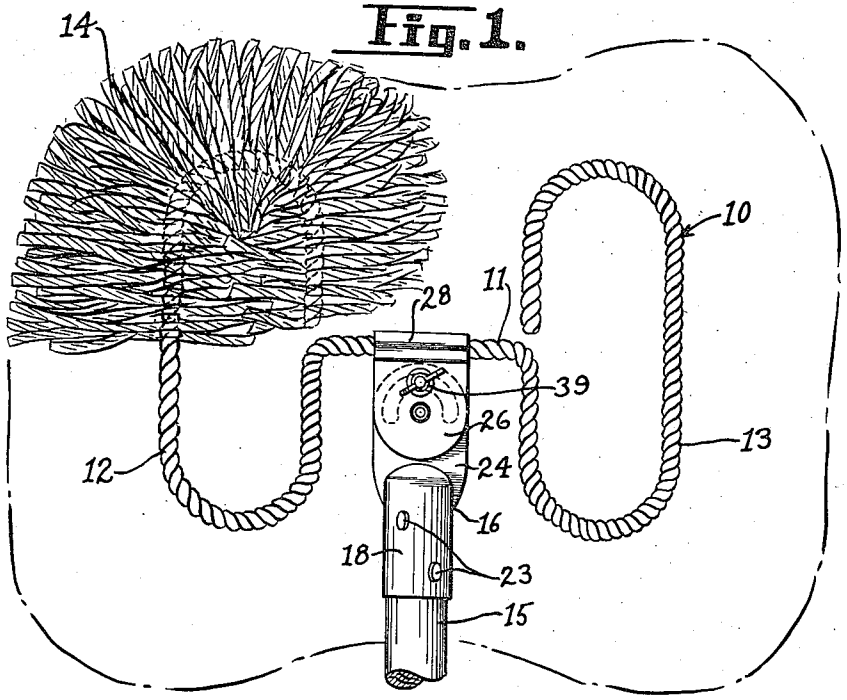


Fig. 2.

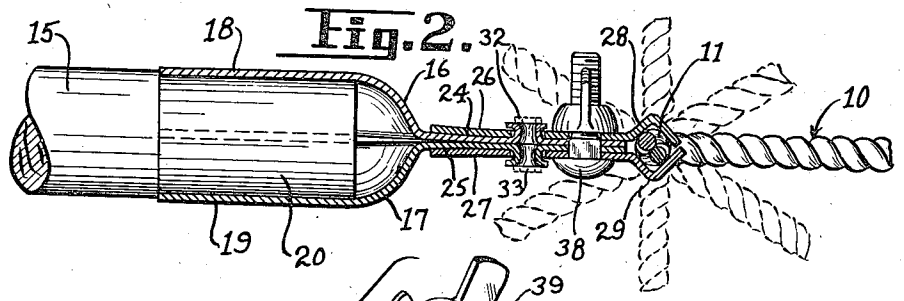
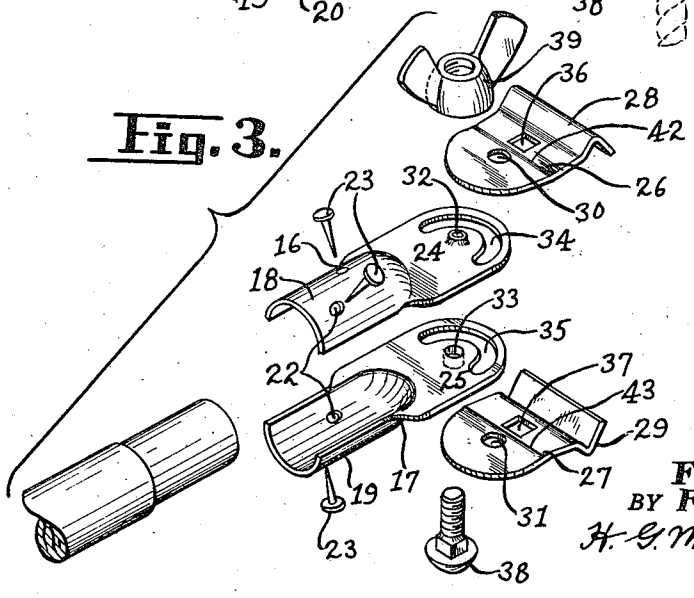


Fig. 3.



INVENTORS
Frederick Preisser.
BY Frank A. Lindsley
H. G. Manning
ATTORNEY

Patented Aug. 11, 1936

2,050,762

UNITED STATES PATENT OFFICE

2,050,762

UNIVERSAL MOP

Frederick Preisser, Plainville, and Frank A. Lindsley, Bridgeport, Conn.

Application October 23, 1934, Serial No. 749,522

9 Claims. (Cl. 306—15)

This invention relates to mops and dusters, and more particularly to a device for adjustably holding the wire frame of a dry mop upon the end of an elongated wooden handle.

One object of this invention is to provide a clamping device of the above nature having means for "universally" attaching the dry mop frame to a handle in such a manner that the mop may swing through an angle of substantially 180 degrees with respect to the axis of the handle, and the frame of the mop in turn may be rotated as much as desired about its own axis, thereby permitting both surfaces of the mop to be used interchangeably, and the mop frame to assume any desired angular position with respect to the floor.

A further object is to provide a mop joint structure of the above nature having a pair of clamping jaws which are adapted to be held in frictional contact with the straight cross-bar of the wire mop frame by means of a bolt passing through said jaws.

A further object is to provide a universal mop holder and handle joint having novel means for pivotally connecting the mop clamping jaws to the handle ferrule plates.

A further object is to provide a universal mop holder of the above nature which will be simple in construction, inexpensive to manufacture, easy to assemble and manipulate, compact, ornamental in appearance, and very efficient and durable in use.

With these and other objects in view, there has been illustrated on the accompanying drawing one form in which the invention may be conveniently embodied in practice.

In the drawing:

Fig. 1 represents a plan view of the mop and universal handle joint shown on a reduced scale.

Fig. 2 is a full size vertical longitudinal sectional view through the joint member.

Fig. 3 is a perspective exploded view of the several parts of the universal mop joint.

Referring now to the drawing in which like reference numerals denote corresponding parts throughout the several views, the numeral 10 indicates a standard form of mop frame made from a twisted pair of wires bent to form a straight central cross-bar 11 and a pair of oval end loops 12 and 13, said loops being provided with a multiplicity of soft dust-absorbent cords 14 wound therebetween.

In order to connect the mop frame 10 to a suitable handle member 15, preferably constructed of wood, provision is made of a pair of split ferrule members 16 and 17. Each of the ferrule members 16, 17 comprises a pair of semi-cylindrical sections 18 and 19 which are adapted to embrace a reduced neck 20 formed on the end of the handle 13. The semi-cylindrical sections 18 and 19, as shown in Fig. 2, preferably do not completely surround the entire surface of the reduced neck 20 in order to permit the ferrule members 16 and 17 to fit various sizes of mop handles. The semi-cylindrical sections 18 and 19 may be provided with one or more perforations 22 (two in this instance), through which a corresponding number of small nails or tacks 23 may be inserted and driven into the handle 15. The lower portions of the ferrule members 16 and 17 are provided with integral flat plates 24 and 25, so constructed that when said ferrules 16 and 17 are assembled upon the handle 15, the flat plates 24 and 25 will lie in close parallel relationship.

For connecting the mop frame 10 to the ferrule members 16 and 17, provision is made of a pair of clamping jaws 26 and 27 which are adapted to be located on opposite sides of the flat ferrule plates 24 and 25. The forward ends of said jaws 26 and 27 are sprung outwardly slightly along the lines 42 and 43 and are provided with opposed integral angular sections 28 and 29 which are adapted to frictionally embrace the intermediate straight central section 11 of the mop frame 10 in such a manner as to permit the mop frame to be rotated about said central section 11 as an axis.

In order to pivotally connect the clamping jaws 26 and 27 to the ferrule plates 24 and 25, a pair of round apertures 30 and 31 are pierced through the jaws 26 and 27, and are adapted to fit about a pair of drifted pivot tubes 32 and 33 struck up from the outer surfaces of the body of the ferrule plates 24 and 25 in opposed relationship. The tubes 32 and 33 are preferably spun over or outwardly flattened to permanently hold the clamping jaws upon the outside of the ferrule plates. The ferrule plates 24 and 25 are provided near their outer ends with a pair of arcuate slots 34 and 35 concentric with the tubes 32 and 33, and the clamping jaws 26 and 27 are provided with a pair of square apertures 36 and 37 which, when said jaws 26 and 27 are assembled, register with each other, said apertures also being in alinement with the arcuate slots 34 and 35.

A headed carriage bolt 38 is adapted to pass through the square apertures 36, 37 and the arcuate slots 34 and 35, and said bolt has the base of its shank squared to fit within the square apertures of the clamping plates seated on the

head of said bolt. The threaded end of the bolt is adapted to receive a winged nut **39** for tightly clamping the plates **24**, **25** and jaws **26** and **27** together with sufficient force to hold the mop frictionally in adjusted position. The resiliency of the metal of the jaws **26** and **27** will cause said jaws to press outwardly against the wing nut and thus avoid the necessity of a spring washer.

It will be understood that when the nut **39** is loosened on the bolt **38**, the jaws **26** and **27** will spread apart sufficiently to permit them to be easily fitted over the cross-bar **11** of the mop frame.

While there has been disclosed in this specification one form in which the invention may be embodied, it is to be understood that this form is shown for the purpose of illustration only, and that the invention is not to be limited to the specific disclosure but may be modified and embodied in various other forms without departing from its spirit. In short, the invention includes all the modifications and embodiments coming within the scope of the following claims.

Having thus fully described the invention, what is claimed as new and for which it is desired to secure Letters Patent, is:

1. In a universal mop holder for clamping upon a mop frame provided with a straight central cross-bar, a pair of opposed ferrule plates for attachment to the lower end of a handle, said ferrule plates having outwardly extending pivot studs, a pair of clamping jaws having apertures fitted over said studs, a screw bolt non-rotatively connected to said clamping jaws, and a nut fitted on said bolt for frictionally clamping said ferrule plates and clamping jaws together for holding said mop frame in any desired universal adjusted position.

2. In a universal mop holder for clamping upon a mop frame provided with a straight central cross-bar, a pair of opposed ferrule plates for attachment to the lower end of a handle, said ferrule plates having outwardly extending pivot studs, a pair of clamping jaws having apertures fitted over said studs, a screw bolt non-rotatively connected to said clamping jaws, a nut fitted on said bolt for frictionally clamping said ferrule plates and clamping jaws together for holding said mop frame in any desired universal adjusted position, said screw bolt having a squared section, and one of said jaws having a square hole to prevent relative rotation between said bolt and jaws.

3. In a universal mop holder for clamping upon a mop frame provided with a straight central cross-bar, a pair of opposed ferrule plates for attachment to the lower end of a handle, said ferrule plates having outwardly extending pivot studs, a pair of clamping jaws having apertures fitted over said studs, a screw bolt non-rotatively connected to said clamping jaws, and a nut fitted on said bolt for frictionally clamping said ferrule plates and clamping jaws together for holding said mop frame in any desired universal adjusted position, said clamping jaws having initially outwardly diverging sections to facilitate the assembly of the mop holder upon said cross-bar.

4. In a universal mop holder for clamping upon a straight cross-bar of a double-looped wire mop frame, a pair of opposed ferrule plates for attachment to the lower end of a handle, said ferrule plates having pivot tubes drifted up from the material thereof on the exterior sides of said plates, a pair of clamping jaws having apertures to fit over said tubes, and binding means passing through said jaws for frictionally holding said jaws upon said cross-bar.

5. In a universal mop holder for clamping upon a striaght cross-bar of a double-looped wire mop frame, a pair of opposed ferrule plates for attachment to the lower end of a handle, said ferrule plates having pivot tubes drifted up from the material thereof on the exterior sides of said plates, a pair of clamping jaws having round apertures to fit over said tubes, and binding means passing through said jaws for frictionally holding said jaws upon said cross-bar.

6. In a universal mop holder for clamping upon a straight cross-bar of a double-looped wire mop frame, a pair of opposed ferrule plates for attachment to the lower end of a handle, said ferrule plates having pivot tubes drifted up from the material thereof on the exterior sides of said plates, a pair of clamping jaws having round apertures to fit over said tubes, and binding means passing through said jaws for frictionally holding said jaws upon said cross-bar, said tubes being spun over upon said clamping jaws to retain said jaws permanently in position.

7. In a universal mop holder for clamping upon a mop head, a pair of opposed ferrule plates for attachment to the lower end of a handle, said ferrule plates having outwardly projecting pivot sections and having arcuate slots concentric with said pivot sections, a pair of clamping jaws having apertures to fit over said pivot sections, and binding means passing through said jaws, and said arcuate slots for frictionally clamping said jaws upon said mop head.

8. In a universal mop holder for clamping upon a mop head, a pair of opposed ferrule plates for attachment to the lower end of a handle, said ferrule plates having outwardly projecting pivot sections and having arcuate slots concentric with said pivot sections, a pair of clamping jaws having apertures to fit over said pivot sections, and binding means passing through said jaws and said arcuate slots for frictionally clamping said jaws upon said mop head, the ends of said jaws being outwardly flared to facilitate the insertion of said mop head therebetween.

9. In a universal mop holder for clamping upon a mop head having a straight cross-bar, a pair of opposed ferrule plates for attachment to the lower end of a handle, said ferrule plates having outwardly projecting pivot sections and having arcuate slots concentric with said pivot sections, a pair of clamping jaws having apertures to fit over said pivot sections, and binding means passing through said jaws and said arcuate slots for frictionally clamping said jaws upon said mop head.

FREDERICK PREISSER.
FRANK A. LINDSLEY.