M. VEECK.

BRUSH OR MOP HOLDER.

APPLICATION FILED APR. 9, 1920.

1,407,341. Patented Feb. 21, 1922.

Fig. 1.

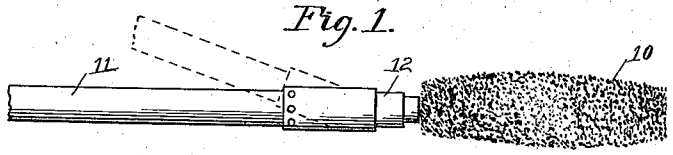


Fig. 2.

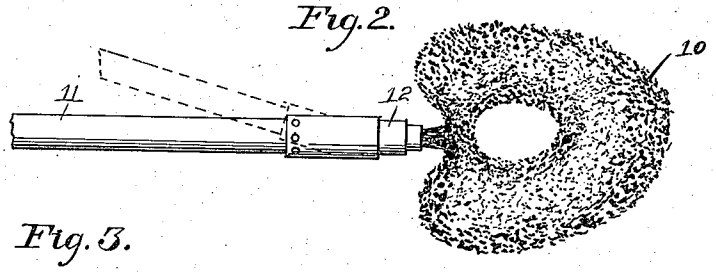


Fig. 3.

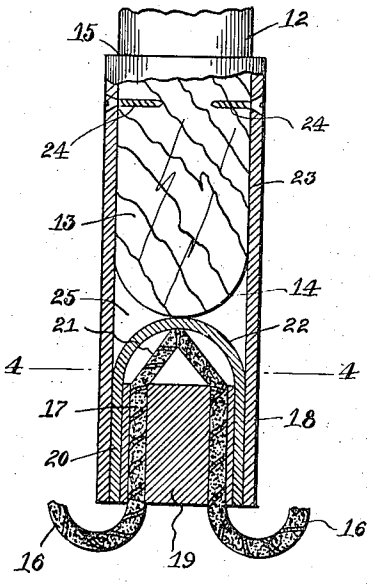


Fig. 4.

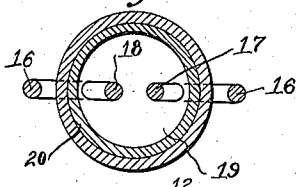


Fig. 5.

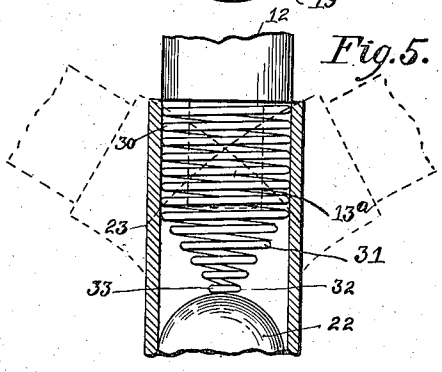
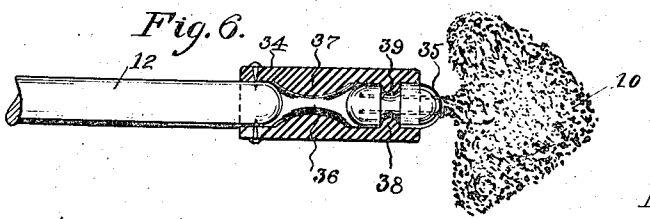


Fig. 6.



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WITNESS:

UNITED STATES PATENT OFFICE.

MAX VEECK, OF LAFAYETTE, PENNSYLVANIA.

BRUSH OR MOP HOLDER.

1,407,341. Specification of Letters Patent. Patented Feb. 21, 1922.

Application filed April 9, 1920. Serial No. 372,578.

To all whom it may concern:

Be it known that I, MAX VEECK, a citizen of the United States, residing at Lafayette, in the county of Montgomery and State of Pennsylvania, have invented new and useful Improvements in Brush or Mop Holders, of which the following is a specification.

The invention relates to brushing and scrubbing and more particularly to brushes and mops and holders therefor, and it has for an object to provide a brush, mop or some other similar cleaning device equipped with a holder, permitting of the ready manipulation of the cleaning implement, the use of the same in corners and small ordinarily inaccessible places and for the reversing of the brush or mop so that in instances where the latter are of a duplex construction, either side thereof can be readily adapted to the cleaning operation.

Among other features the invention comprehends a mop or brush which can be readily connected to a holder, the latter embodying certain flexible properties whereby the handle can be readily swung or moved at an angle to the brush or the brush disposed at an angle to a holder thus providing for the inclination of the handle relative to the brush when desired, so that the implement can be conveniently held by the user, also permitting of readily cleaning floors and the like and manipulating the brush or mop in corners and other small inaccessible places.

In the further disclosure of the invention, reference is to be had to the accompanying drawings, constituting a part of this specification in which similar characters of reference denote corresponding parts in all the views, and in which,—

Figure 1— is a fragmentary elevation of the implement showing the manner in which the handle can be inclined relative to the horizontal plane of the brush or mop, the dotted lines indicating the normal position of the handle.

Figure 2— is a plan view of the structure shown in Figure 1, with the dotted lines indicating the angular position of the handle relative to the brush or mop.

Figure 3— is a fragmentary enlarged sectional view taken through the connection between the handle and the brush or mop and showing the manner of securing the frame thereto.

Figure 4— is a transverse sectional view taken substantially on the line 4—4 in Figure 3, and

Figure 5— is a fragmentary longitudinal sectional view of a slightly modified form of connection between the handle and the brush or mop, parts being shown in section and parts in elevation, and

Figure 6— is a fragmentary vertical sectional view of another modified form.

Referring more particularly to Figures 1—4 inclusive, the numeral 10 indicates a cleaning implement which in this instance is shown to be a mop, but which may also be any suitable form of brush or otherwise adapted to the cleaning of walls, floors or other surfaces and the numeral 11, indicates a handle which is in the nature of a stick and usually made of wood, but which may be made of any desired material. The handle 11 has a reduced end 12 forming an extension 13, the extremity of which is formed to provide a convex surface 14, the reduction of the shank or end 13 in diameter as to the body of the handle 11, providing an annular flange 15.

The mop 10 may be formed of any suitable yarn or other soft material and is carried on a wire or other frame 16 which may be made in any desired shape or form with the wire twisted to secure the texture of the mop and the ends of the wire, indicated by the numeral 17, arranged to pass through a plurality of longitudinal openings or passages 18 in a wooden or other core 19, which together with an encircling ferrule 20 form what I might term a socket for the mop frame. The ends 17 of the wire are loosely passed through the openings 18 and the extremities are then bent toward each other as indicated at 21, after which the ferrule is driven home over the core as shown. The ferrule has a convex surface or end 22 and when the ferrule is driven home over the core, the inner face of the convex end of the ferrule striking the extremities or ends to closely engage and be bent substantially relative to the straight portions of the ends, thus securing the ends of the wire frame in the core.

An encircling flexible sleeve 23 is provided to be slipped over the extension 13 and the socket, as shown, and when thus assembled it will be seen that the convex surface 14 of the extension 13 will engage with the convex surface 22 of the ferrule 20 so that the two

surfaces can roll one upon the other. The inner end of the sleeve may be secured to the extension 13 by suitable nails, tacks or any other form of holding member 24 and it will be seen that the inner extremity of the sleeve abuts against the flange 15 forming a smooth perfect fit at this point. The frictional contact of the rubber or other flexible sleeve 23 with the socket holds the latter within the sleeve and by reference to Figure 3 it will be seen that between the engaging or rolling surfaces 14, 22, and the sleeve 23, there is provided an annular space 25 which allows for the flexing of the sleeve at this point when the handle 11 is disposed at an angle to the horizontal or vertical planes of the mop or brush as clearly shown in Figures 1, and 2. It will also be apparent that the sleeve not only acts as a means for providing a flexible connection between the handle and the mop proper, but also acts as a covering to protect the enclosed parts and surfaces, hold the two parts, namely the handle and mop together, and insure the desired rolling contact between the handle and the mop by the rolling of one of the convex surfaces upon the other.

In Figure 5, I disclose a slightly modified form of my device and in which additional flexibility is provided by having the extension or shank of the handle of a resilient nature. To this end instead of forming a solid part of the shank of the handle with a convex surface, I secure upon a reduced shank 13^a, a resilient spring-like element 30 which has the convolutitons 31 decreasing toward its free end to form a semi-circular head 32 which will have its tip or end 33 in rolling contact with the convex surface 22 of the ferrule, the heretofore described encircling sleeve 23, being of course provided, but in this instance held in engagement with the handle by reason of the convolutions of the member 30 upon which the sleeve is screwed up, thus firmly securing the sleeve.

In the modified form shown in Figure 6, the mop is of course the same, being indicated by the numeral 10 and the handle by the numeral 12. The encircling sleeve preferably made of rubber, is designated by the numeral 34 and has the inner curved end of the handle 12 secured in any suitable manner in one end of the sleeve, the other end of the sleeve receiving the core or socket 35 to which the mop 10 is attached. It will be noted that the sleeve has the passage 36 therethrough formed larger at both ends, than in the center thus providing an inner reinforcing bead 37, with the sleeve also formed with an inner holding bead or rib 38, the socket being curved as at 39 to receive the bead 38, thus holding the socket in the encircling sleeve.

From the foregoing description it will be seen that with a cleaning implement of the character described the mop can be reversed so that both sides or even the end or the point thereof can be used and by reason of the flexibility of the connection between the mop and the handle, the handle can be maintained at an angle convenient to the user and the flexible connection provided, will further permit of the handle being disposed at vertical and horizontal angles to the vertical and horizontal planes of the mop and its frame.

Although I have shown and described a particular construction in the views and specification, it will be understood that various slight changes may be made without departing from the spirit of the invention, the scope of which is defined in the appended claims.

Having described my invention, I claim—

1. In a device of the character described the combination with a frame and a handle, of a longitudinally apertured socket having extremities of the frame passing through the apertures and beyond the inner end of the socket, a ferrule enclosing the socket and abutting against the extremities of the frame, securing the same against removal from the socket, a convex surface formed at one end of the ferrule, a convex surface at one end of the handle and in rolling contact with the convex surface of the ferrule and a flexible sleeve encircling the ferrule and the handle, at and in juxta-position to the said convex surfaces.

2. A means for providing a flexible connection between a cleaning implement and the handle thereof, comprising an element for the implement and having a convex surface, an element for the handle and having a convex surface in rolling contact with the convex surface of the element for the implement and flexible covering means encircling said elements at and in juxtaposition to the convex surfaces thereof.

3. A flexible connection for a cleaning implement and the handle thereof, comprising a socket for the implement and provided with a convex surface, a shank for the handle and provided with a convex surface in rolling contact with the convex surface of the socket and a flexible sleeve encircling the shank and the socket and providing a space between the said convex surfaces adjacent and around their points of engagement.

4. A means for providing a flexible connection between a cleaning implement and the handle thereof, comprising an element for the implement and having a convex surface, and a flexible sleeve receiving an end of the handle and having the element of the implement seated therein and normally lying in the longitudinal plane of the handle.

In testimony whereof I affix my signature.

MAX VEECK.