E. S. WINN.

MOP OR BRUSH.

APPLICATION FILED APR. 27, 1914.

1,148,560. Patented Aug. 3, 1915.

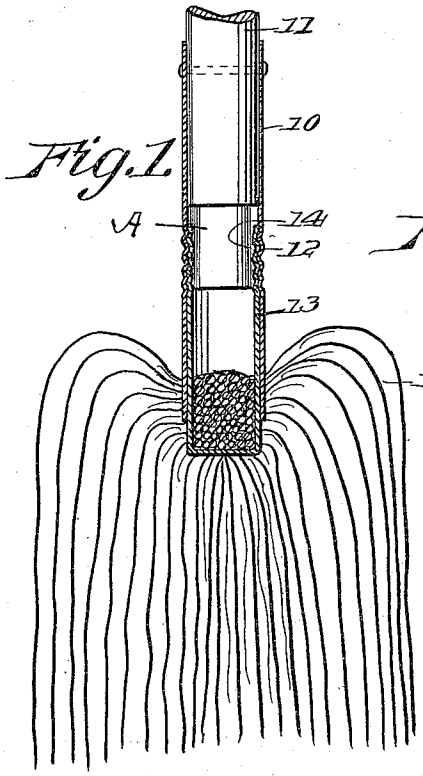


Fig. 1.

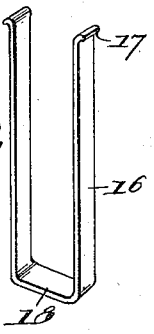


Fig. 2.

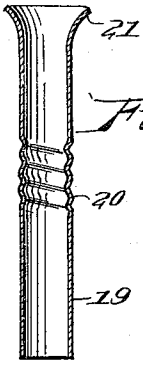


Fig. 3.

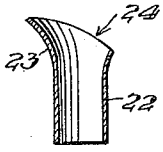


Fig. 4.

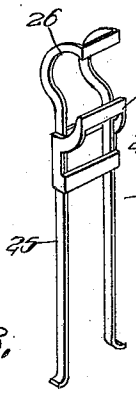


Fig. 5.

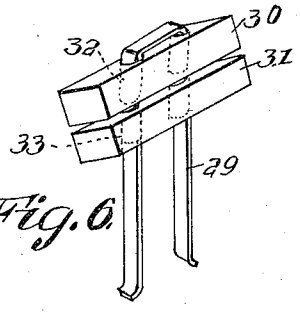


Fig. 6.

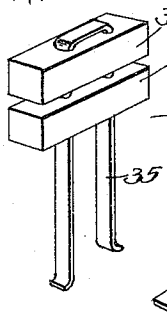


Fig. 8.

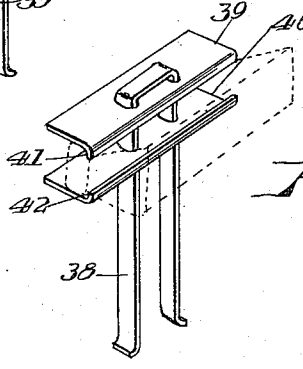


Fig. 9.

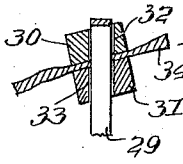


Fig. 7.

Witnesses

Pearl Putnam.

L. C. Barkley.

Inventor

Elisha S. Winn,

by Evans & Putnam.

Attorneys

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ELISHA S. WINN, OF CULLODEN, GEORGIA.

MOP OR BRUSH.

1,148,560. Specification of Letters Patent. Patented Aug. 3, 1915.

Application filed April 27, 1914. Serial No. 834,849.

To all whom it may concern:

Be it known that I, ELISHA S. WINN, a citizen of the United States of America, and resident of Culloden, in the county of Monroe and State of Georgia, have invented certain new and useful Improvements in Mops or Brushes, of which the following is a specification.

This invention relates to brushing and scrubbing and particularly to a brush, mop or the like having a detachable brush fiber holding device adapted to coact with a support or handle whereby the fiber is clamped in place to form a brush, mop or the like, so that the clamping member may be removed for the purpose of renewing the fiber or for other causes. While I have, in the foregoing introductory clause, referred to a brush, mop or the like, I wish to be understood as intending this invention to apply to brooms or other brushing and scrubbing implements, although I will, hereinafter, refer to the invention as a scrubbing device and it is obvious that the invention is not limited to a device which is intended for scrubbing purposes alone and I do not wish to be so limited.

An object of the present invention is to provide novel means for applying fiber to a handle and retaining said fiber in bunches in such appropriate quantities as will insure the result desired, the said fiber clamping device having means for permitting its removal for renewing the fiber and reapplying the holding or clamping device so that the fiber is effectually held in place.

With the foregoing and other objects in view, the invention consists in the details of construction, and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail, reference will be had to the accompanying drawings forming part of this specification, wherein different methods of utilizing the principle of the invention are illustrated and by which the invention is carried into practice, in which drawings—

Figure 1 illustrates a sectional view of a head showing the fiber in section and partly in elevation; Fig. 2 illustrates a perspective view of a clamping member similar to that shown in Fig. 1, except that it is modified slightly; Fig. 3 illustrates a socket similar to that shown in Fig. 1, except that the end thereof is flared to permit spreading of the fiber to a greater extent than is allowed by the socket shown in Fig. 1; Fig. 4 illustrates a fragment of a socket showing the end flared and tapered, the form shown in Fig. 4 being designed for the purpose of producing a scrubbing member which stands at an angle to the socket or handle; Fig. 5 illustrates a fiber or brush engaging device embodying a further modification; Fig. 6 illustrates a perspective view of the clamp shown in Fig. 2 with the auxiliary clamps associated therewith; Fig. 7 illustrates a sectional view on the line 7—7 of Fig. 6 with the addition of fiber shown between the blocks; Fig. 8 illustrates a perspective view of the clamping device shown in Fig. 2 with auxiliary clamping members associated therewith; and Fig. 9 illustrates a perspective view of a clamping member such as shown in Fig. 2 with auxiliary brush or fiber holding members associated therewith.

In these drawings 10 denotes a socket which is designed to be and is shown as secured to the handle 11, a fragment of said handle being illustrated. Intermediate its length, the socket 10 has threads 12 and a U-shaped clamping member 13 has its arms corrugated as shown at 14 to conform with the threads of the socket so that as the clamping member is turned in the socket, the threads serve to draw the clamp inwardly. The extension A of the handle is so reduced as to form a clearance between the said extension and the socket to receive the ends of clamping member and to retain the ends of said member in engagement with the threads of the socket. In producing a scrubbing device, fiber 15 may be used or if brushes are to be made, strands of material are used similar to the fiber 15, the same being laid in the looped portion of the clamp and as the clamp is rotated and is caused to be drawn into the socket, the fiber in the clamp is compressed against the end of the socket so that the fiber is retained in place.

In Fig. 2 I have shown a clamp 16 of modified construction in which the ends are turned outwardly to form lugs 17 which engage the threads of the socket and the said clamp is thereby drawn into the socket for clamping material which may be applied to the loop-portion 18 of the clamp.

In the form shown in Fig. 3, a socket 19 has the threads 20 intermediate its length and the outer end thereof is flared as shown

at 21, a provision which allows the fiber to be moved without subjecting it to the abrading action of the edge of the socket when a clamping member such as is shown in Fig. 2 is applied to it, and the fiber is interposed between the clamping member and the socket.

In Fig. 4 I have shown the socket 22 as having a flared portion 23 and a beveled end as at 24, so that when the clamp, such as is shown in Fig. 2 is applied to a socket of this type, and fiber is interposed between them, the article produced thereby has a head which can be pressed against the surface being mopped by the substantially beveled edge of the socket.

In the modification shown in Fig. 5, a clamping member 25 is shown of somewhat the type shown in Fig. 2 but the fiber, instead of being placed in the loop-portion thereof is inserted in a seat 26 formed by curving the clamp laterally. In order to retain fiber in the seat, a slidable retaining member 27 is applied to the arms of the clamp and is slidable thereon so that when the clamp is screwed into a socket, the retaining member 27 is forced toward the seat 26 to engage the fiber or brush material of a brush and hold it in place. The member 27 has a curved extension 28 which conforms somewhat to the contour of the socket 26 but is oppositely disposed so that the extension and the socket serve as seats for the fiber or brush which is held in place by the clamping action of these two members, when the clamp is applied to the socket.

In Fig. 6 I have illustrated a clamp 29 of the general form of that shown in Fig. 2 so that it may be screwed into a socket and I have provided the arms of the clamp with plates 30 and 31 having diagonally disposed apertures 32 and 33 respectively, which receive the arms of the clamp so that the said plates are held on the clamp in a tilted position and are adapted to hold between them fiber 34 of appropriate type by which a scrubbing device is produced.

Fig. 8 shows a clamping member 35 substantially like that shown in Fig. 6 with clamping plates 36 and 37 thereon, the said plates standing at right angles to the arms instead of being obliquely disposed to the arms as they are shown in Fig. 6.

In Fig. 9 the clamping member 38 standing obliquely or at right angles to the arms is substantially the same as that hereinbefore described and in this form the clamping member has plates 39 and 40 thereon provided with a flange 41 and 42 respectively, the said flanges forming a holder for mop or brush material or an abutment for a brush the latter of which is shown in dotted lines of said figure, the head of which is inserted between the plates and retained by the clamping action of the plates when the clamp is applied to the socket, as heretofore described.

From an inspection of the drawing and from the foregoing description, it will be seen that the invention is capable of many modifications or modified uses, the clamp and socket of which are the elements common to all of the forms and while I have not shown the clamps and plates, as in Figs. 6, 8 and 9 applied to a socket, nor have I shown the clamp, Fig. 5, applied to a socket, it is obvious that by reason of the fact that they are provided with lugs at their ends, the said lugs are intended to engage threads of a socket in substantially the manner that the clamp shown in Fig. 1 is interlocked or inter-engaged with the socket to cause the clamp to be drawn into or partially into the said socket.

I claim—

1. In a scrubbing device, a socket having threads, a handle to which the socket is attached, the said handle having an extension opposite the threads of the socket and constituting a guard, a clamping member having arms provided with thread engaging portions adapted to engage the threads of the socket, and a mop element clamped by the coacting clamping member and the socket.

2. In a scrubbing device, a socket having threads, a handle to which the socket is applied, said handle having an extension spaced apart from the threads and forming a guard, a clamp having thread engaging portions adapted to lie between the threads and the extension of the handle, and scrubbing material held by the coaction of the clamp and socket.

3. In a scrubbing device, a socket having threads, a handle to which the socket is applied, said handle having an extension spaced apart from the threads and forming a guard, a clamp having thread engaging portions adapted to lie between the threads and the extension of the handle, and holders for cleaning elements held by the socket and clamp.

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

ELISHA S. WINN.

Witnesses:
B. H. CLEMENT,
W. R. FULLER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."