June 25, 1957 J. KALINOWSKI 2,796,622

HANDLE SOCKET FOR MOPS AND OTHER CLEANING IMPLEMENTS

Filed Dec. 14, 1953

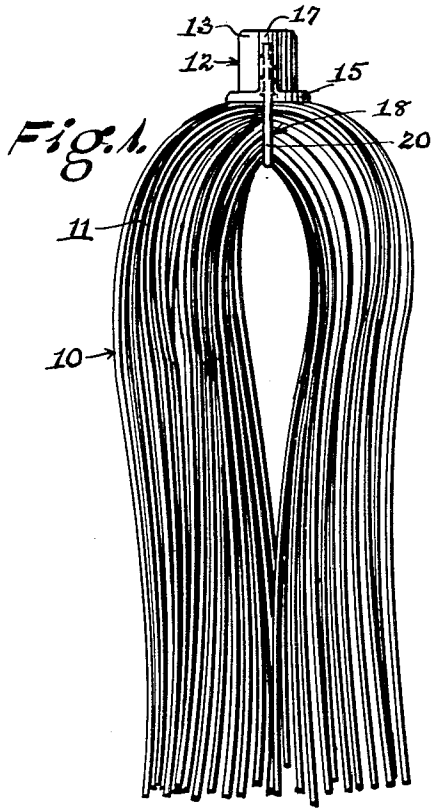



Fig. 1.

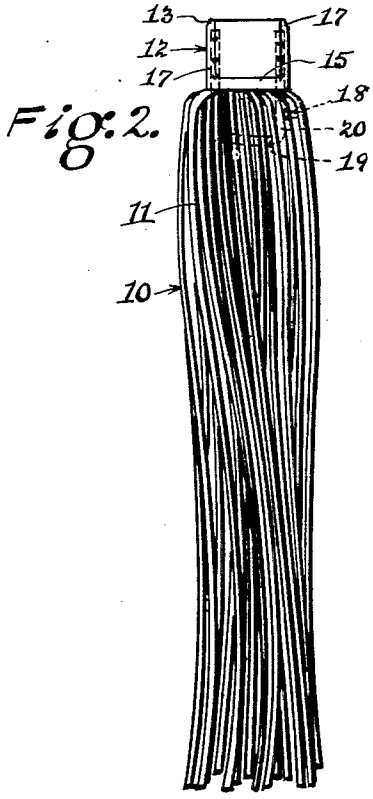



Fig. 2.

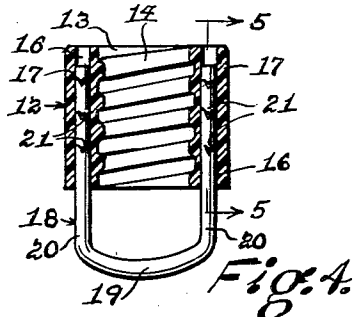



Fig. 4.

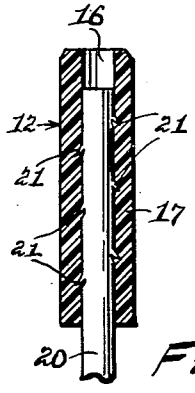



Fig. 5.

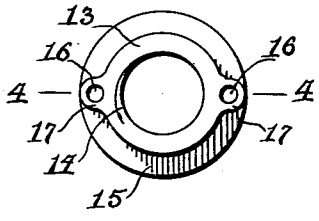



Fig. 3.

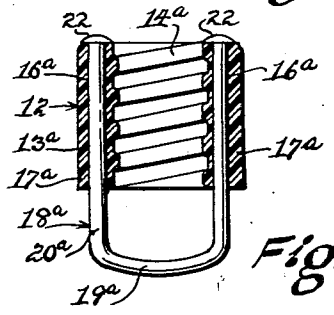



Fig. 6.

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United States Patent Office 2,796,622 Patented June 25, 1957



2,796,622

# HANDLE SOCKET FOR MOPS AND OTHER CLEANING IMPLEMENTS

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Application December 14, 1953, Serial No. 398,014

1 Claim. (Cl. 15—229)

My invention relates to a new and useful handle socket for mops and other cleaning implements and has for one of its objects to provide an exceedingly simple, light weight, strong and durable device of this character that can be quickly and inexpensively assembled on a mop head or other item of a kindred nature.

The tubular body portion of the present device is formed of "Nylon" or other rigid and strong material capable of being slightly penetrated by sharp metallic instrumentalities and, therefore, it is intended that penetrable metals, wood and the like be included as equivalents.

Another object of this invention is to construct a handle socket consisting of a fastening element including a pair of legs with holding means thereon and a tubular body secured to the fastening element by said holding means.

Another object of the invention is to provide a handle socket comprised of a fastening element and a tubular internally threaded body impaled on said fastening element.

Another object of the invention is to provide a handle socket consisting of a fastening element in the form of a metal staple adapted to receive strands of mop material and having a pair of legs on which are sharp rearwardly inclined barbs protruding from the peripheral surfaces of said legs and an internally threaded tubular body adapted to receive the threaded end of a handle, said body having longitudinal holes outside of the threaded bore and substantially coextensive with the body to receive the snugly fitting barbed legs which may be forced into the holes, said barbs piercing the walls of said holes to securely attach said body to said fastening element and prevent separation of said parts under all ordinary conditions.

With the above and other objects in view this invention consists of the details of construction and combination of elements hereinafter set forth and then designated by the claim.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same I will describe its construction in detail referring by numerals to the accompanying drawing forming a part hereof, in which:

Fig. 1 is a side view of one type of mop representing a cleaning implement having my improved handle socket attached thereto.

Fig. 2 is an edge view thereof or a view at right angles to Fig. 1.

Fig. 3 is an upper end view of the tubular body member on a larger scale.

Fig. 4 is a section of the body member on the line 4—4 of Fig. 3 with the fastening element assembled thereon and shown in elevation.

Fig. 5 is an enlarged sectional view on the line 5—5 of Fig. 4 with a portion of the fastening element in elevation.



Fig. 6 is a sectional elevation similar to Fig. 4 illustrating a modification.

In carrying out my invention as herein embodied **10** represents a cleaning implement which, for purposes of illustration, is shown as a mop of the "spaghetti" type wherein the head **11** comprises a multiplicity of individual "nylon" strands. It is to be understood that strands of other materials and various types of cleaning implements can be utilized.

A handle socket **12** is provided for the cleaning implement and includes a tubular body member **13**, Figs. 1 to 5 produced from "nylon" or a similar plastic, metal, wood and the like which is sufficiently rigid to accomplish the function desired but soft enough to be penetrated or pierced by relatively harder sharp metallic barbs. The tubular body is internally threaded at **14** to receive the threaded end for an appropriate handle (not shown) and has an external peripheral flange **15** at the inner or base end.

Outside of the bore through the body and at diametrically opposite locations are formed two longitudinal plain holes **16** and, preferably said holes are formed in longitudinal ribs or enlargements **17** which are within the boundary of the flange **15**.

A fastening element **18** is produced from hard metal, such as a wire or rod, and has the general characteristics of a staple including a cross bar **19** and a pair of parallel legs **20**. Projecting from both legs are a plurality of sharp rearwardly and outwardly extending barbs **21** preferably in two rows on diametrically opposite sides of each leg. These barbs, desirably, are stamped from said legs but may be formed in any other suitable manner.

The fastening element **18**, as herein shown, embraces the mop strands so that the latter lie within the loop formed by cross bar **19** and the adjacent portions or rear parts of the legs **20** and the forward ends of these barbed legs, which have a rather snug or running fit in the holes **16**, are entered in said holes from the base end of the body and because of the rounded end of the body and because of the rounded outer surfaces of said barbs the legs can readily be forcibly slipped into the holes but the sharp points pierce the walls of the body surrounding the holes and thereby secure the fastening element to said body preventing separation of the parts even when strong opposed forces are applied thereto.

In actual practice, when the fastening element **18**, with the mop strands embraced thereby, is assembled on the body member said strands are compressed at the bights and therefore are prevented from being pulled out of place.

The body **13***a* in the modification is similar to that shown in the first described form but need not be capable of being pierced by prongs. Said body is internally threaded at **14***a* and may have the base flange. There are the two longitudinal holes **16***a* at diametrically opposite locations preferably formed in the side ribs **17***a*. In this form of the device the fastening element **18***a* is also in the general style of a staple including the cross bar **19***a* and the legs **20***a* but the latter are smooth or plain. In a manner similar to that previously described the legs **20***a* are entered into the holes **16***a* from the base of the body and when assembled, especially with the mop strands, the terminals of said legs have rivet heads **22** formed thereon to prevent withdrawal of said fastening element or separation of the parts.

Of course I do not wish to be limited to the exact details of construction herein shown and described as these may be varied within the scope of the appended claim without departing from the spirit of my invention.

Having described my invention what I claim as new and useful is:

A handle socket for mops and the like comprising a substantially U-shaped wire staple adapted to receive the strands of mop material in the bight thereof, the legs of said staple including spaced barbs, a tubular member of substantially circular cross-section having an internally threaded bore adapted to receive the threaded end of a handle, diametrically opposed bores formed with said tubular member outside of said internally threaded bore and being substantially coextensive with the length of said tubular member, said staple legs being received in said diametrically opposed bores and extending substantially coextensive therewith and with said staple leg barbs penetrating the walls of said tubular member bounding said diametrically opposed bores.


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