P. W. MULDER.

MOP HOLDER.

APPLICATION FILED APR. 10, 1914.

1,123,784. Patented Jan. 5, 1915.

Fig. I.

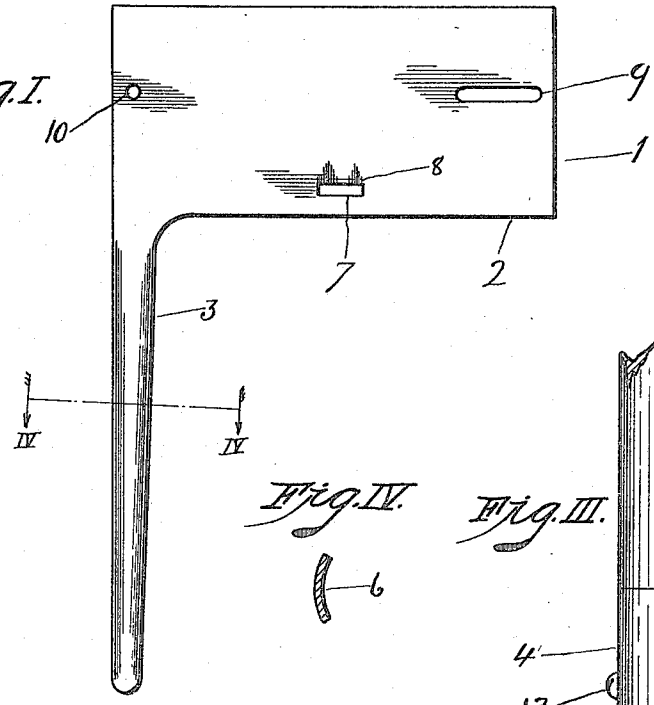


Fig. IV.

Fig. III.

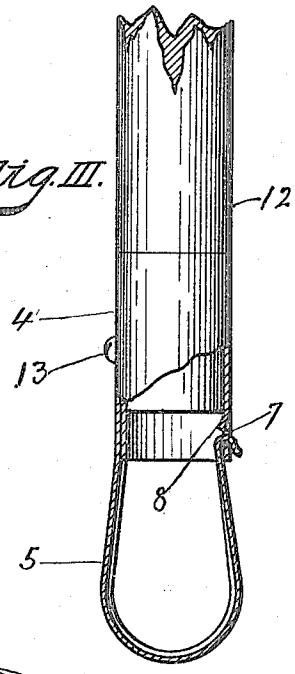


Fig. II.

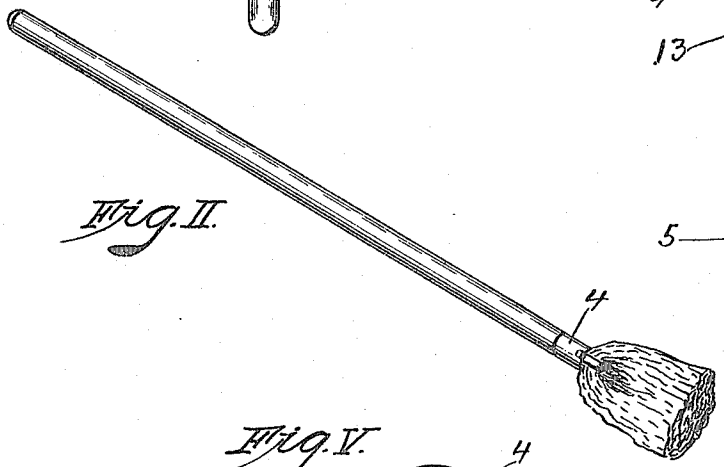
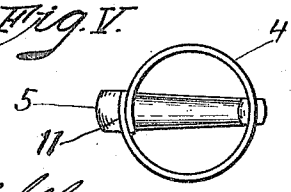


Fig. V.



WITNESSES:

Edmund Abbott.

J. N. Hargis

INVENTOR

Peter W. Mulder.

BY

M. C. Gilham

ATTORNEY

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

PETER W. MULDER, OF BETHEL, KANSAS, ASSIGNOR TO EDWIN L. MILLER, OF KANSAS CITY, MISSOURI.

MOP-HOLDER.

1,123,784. Specification of Letters Patent. Patented Jan. 5, 1915.

Application filed April 10, 1914. Serial No. 830,885.

To all whom it may concern:

Be it known that I, PETER W. MULDER, a citizen of the United States, residing in Bethel, in the county of Wyandotte and State of Kansas, have invented a new and useful Improvement in Mop-Holders, of which the following is a specification.

My invention relates to mop-holders of that class which are assembled with the mop-handle to hold the mop-fabric.

The objects of my invention are: first to provide a simple, cheap, durable, and adjustable mop-holding ferrule which may be assembled with handles of different thickness, and, second: to provide a loop having one end integral with one side of the ferrule, and the opposite end free, and means for interlocking its free end with the opposite side, whereby the mop-fabric will be held by the ferrule independently of the handle. I accomplish these objects by the means illustrated in the accompanying drawings, in which—

Figure 1. is a plan view of the plate of sheet-metal from which my invention is formed. Fig. 2. is a perspective view of a mop showing my invention holding the mop-fabric. Fig. 3. is a side elevation of the mop-holder assembled with a handle showing a longitudinal section of the loop interlocked with the ferrule, and the guiding lip. Fig. 4. is a cross section through the loop on the line 4—4 in Fig. 1 and Fig. 5. is a top-end view of the ferrule showing its over-lapping sides or means for adjusting the ferrule to different sized handles.

Similar numerals refer to similar parts throughout the drawings.

The mop-holder is made of a substantially flag-shaped plate of sheet metal 1, such as steel, iron, brass, and the like, preferably galvanized iron, the oblong portion 2, of which, is specifically designed, in connection with the strip 3, integral with the left corner of the oblong portion, to be rolled longitudinally to form a ferrule 4, the strip 3 being of a suitable length to be bent to form a loop 5 having its one side integral with one side of the ferrule, and its free end interlocked with the opposite side of the ferrule, adjacent its lower end. The inner face of the loop is formed concave, as shown at 6, at Fig. 4, so that when the mop-fabric is lodged across the loop, the edges of the strip forming the loop will be pressed into the fabric to prevent its slipping or sliding through the loop when the ferrule is assembled with the mop-handle. The inner edge of the strip 3 is made to taper slightly, in outer direction so that the loop will be pliable when its free end is drawn upwardly to compress the mop-fabric and secure the same within the loop.

A longitudinally-extending slot 7 is apertured in the lower extreme of the oblong portion of the plate 1, intermediate its length and adapted for the passage therethrough of the free end portion of the loop 5. The portion of the plate at the upper edge of the slot 7 is raised a distance to form a guiding lip 8, which projects inwardly of the ferrule when the latter is properly formed, for the purpose of guiding the terminal end of the loop in and through the slot 7. A longitudinally-extending slot 9 is apertured in the right end extreme of the oblong portion of the plate intermediate its width, and is extended inwardly a suitable distance for the purpose of providing means of engaging a fastening device, and a hole 10 is apertured in the left end extreme directly opposite to the slot 9, so that, when the plate is rolled to cylindrical shape, the hole 10 will overlap and register with the slot 9, as shown at 11, in Fig. 5.

The oblong portion 2 of the plate 1 is rolled lengthwise to form a substantially cylindrical shaped ferrule 4, so that the end of the oblong portion having the hole 10 will overlap and bind upon the end thereof having the slot 9, thus forming a slip-joint for the purpose of applying and adjusting the ferrule to different sized handles.

To assemble the parts described to form a mop, the mop-fabric is extended across the concave face of the strip 3, and the strip is then bent to form the loop 5, the terminal end of the loop being passed inside of the lower end of the ferrule, the spring reaction of the metal loop forcing the end of the loop to bear against the inner surface of the ferrule directly below the slot 9. Pressure is then applied against the loop thereby advancing the end thereof upwardly to and against the under-side of the guiding-lip 8 and is thereby deflected outwardly and upwardly through the slot 9. When the pressure applied to the loop has compressed the mop-fabric tightly against the lower end

of the ferrule the terminal end of the loop is bent downward so as to engage the lower edge of the slot and inter-lock the loop with the ferrule to retain and hold the mop-fabric securely in place. The ferrule with the mop-fabric secured in the loop is then mounted on the end of a handle 12, the latter, when entering the ferrule, operates to open the slip-joint a distance sufficient to accommodate the handle. A fastening device 13, such as a nail, screw, or the like, is then extended through the hole 10 and slot 9, and forced to pierce the handle, the head of the fastener operating to draw the over-lapping portion of the slip-joint to bind on the over-lapped portion thereof, to hold the adjustment of the ferrule to the handle.

Although I show in Fig. 3 the mop handle as extending to adjacent the lip 8, it may be extended beyond the lip to the bottom of the ferrule and engage the mop-fabric.

My invention provides a ferrule which holds the mop fabric independently of the handle or any other medium. This arrangement reduces the cost of making and assembling the mop to a minimum, and permits the easy and prompt assembling of a new mop with an old handle, an advantage not heretofore possessed by the common mops of commerce.

Having described my invention, I claim:

A mop-holder, consisting of a substantially flag-shaped plate of sheet metal rolled to form a cylindrical ferrule provided with a locking slot and with an inwardly-extending guide over-hanging the slot, the end portions of the plate being lapped, the over-lapped portion being provided with a slot adapted to slidably engage a fastening device extending through the over-lapping portion, and a depending strip integral with the over-lapping portion bent to form a loop having the free end thereof interlocked with the locking slot at the opposite side of the ferrule.

PETER W. MULDER.

Witnesses:
E. L. MILLER,
BERTHA GEARY.

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