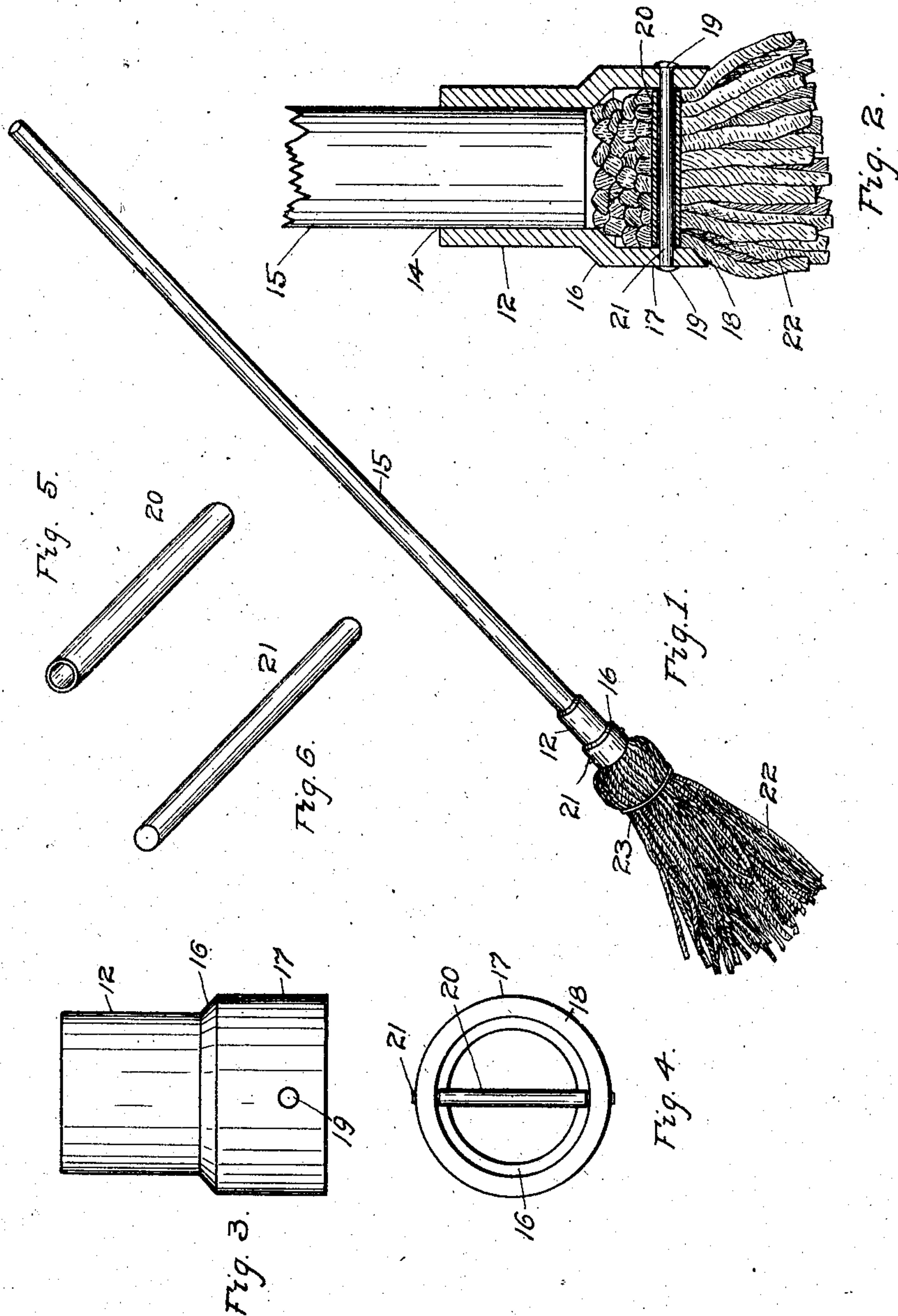


No. 834,880.

PATENTED NOV. 6, 1906.

H. A. ANTONI.
MOP.

APPLICATION FILED FEB. 26, 1906.



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MOP.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HENRY A. ANTONI, a citizen of the United States of America, residing at Mount Washington, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Mops; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

The invention relates to means for connecting the mop with the handle; and it has for its object a retainer for the mop which may be inserted within a cavity at the end of the handle with the mop under pressure and secured in position without injury to the material composing the mop.

The invention consists in the novel construction and combination of parts, such as will be first fully described and then specifically pointed out in the claim.

In the drawings, Figure 1 is a view in perspective of the mop and its handle embodying the invention. Fig. 2 is a vertical sectional view of the ferrule, showing the mop within the ferrule and the novel retaining devices for the mop, also showing the broken lower end of the handle within the ferrule. Fig. 3 is a detail side view of the ferrule, showing the opening for the pin securing the thimble in position. Fig. 4 is a view of the lower end of the ferrule looking upwardly. Figs. 5 and 6 are detail views in perspective of the mop-retaining device.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

Referring to the drawings, 10 indicates a ferrule for the lower end of the mop-handle, with which ferrule the mop is connected. The ferrule is preferably cylindrical in form and is cast or stamped out from suitable material, the upper portion 12 having its inner cylindrical surface 14 of the requisite circumference to admit under pressure the lower end of the handle 15, which is made slightly larger in circumference than said opening 14. The lower portion of the ferrule from a point about equidistant from its ends is bent or flared outwardly, forming a shoulder 16, the

inner and outer surface 16 of said bent portion being inclined outwardly and downwardly a short distance, and thereby increasing the inner circumference of the cavity in lower portion of the ferrule. The lower surface of the lower portion 17 of the ferrule is inclined outwardly and downwardly, as at 18. Through the lower portion 17 of the ferrule, at a point a short distance upwardly from the line of the inclined surface 18 of the ferrule, extends transversely the openings or perforations 19, which are diametrically opposite each other.

20 indicates the mop-retaining thimble, which is of the proper length to be inserted within the opening in the lower portion of the thimble in a transverse position thereto and is cylindrical, and 21 is a thimble-retaining pin or bolt slightly longer than the thimble 20.

22 is the mop, which is of the usual material and, as shown, composed of a number of strands of cotton of equal length. These strands at a point equidistant from their ends are folded over the thimble 20 and the thimble and folded strands placed in position opposite the opening in the lower portion 17 of the ferrule and on a plane with the perforations 19. Pressure is then applied to the thimble, forcing the thimble and the folded portion of the mop within the ferrule, the inclined surface 18 facilitating its entrance, the pressure forcing said folded portion of the mop against the inclined bent portions or shoulder 16 and in a position in which the ends of the thimble 20 are directly opposite the openings 19 in the ferrule and the pin 21 inserted within one of said openings, thence through the thimble 20 and also through the other opening in the ferrule. The ends of the pin are then upset, thus securing the mop to the handle.

In the introduction of the folded portion of the mop within the opening in the ferrule the inclined lower surface 18 permits the strands to be crowded upon the thimble. The curved surface of the thimble being smooth facilitates the packing of the strands. The loose strands of the mop may be held together by the band 23. Upon the renewal of the mop the heads of the pin are readily upturned and the pin forced from the thimble and ferrule.

Having fully described my invention, what I now claim as new, and desire to secure by Letters Patent, is—

5 In a mop, a handle, a ferrule thereon extending beyond the handle and having perforations in the lower end portion thereof, a thimble within the said ferrule and a pin ex-

tending through said perforations and said thimble.

HENRY A. ANTONI.

Witnesses:

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