L. W. MERRIAM.

MOP HEAD.

APPLICATION FILED NOV. 27, 1907.

911,894.

Patented Feb. 9, 1909.

Fig. 1.

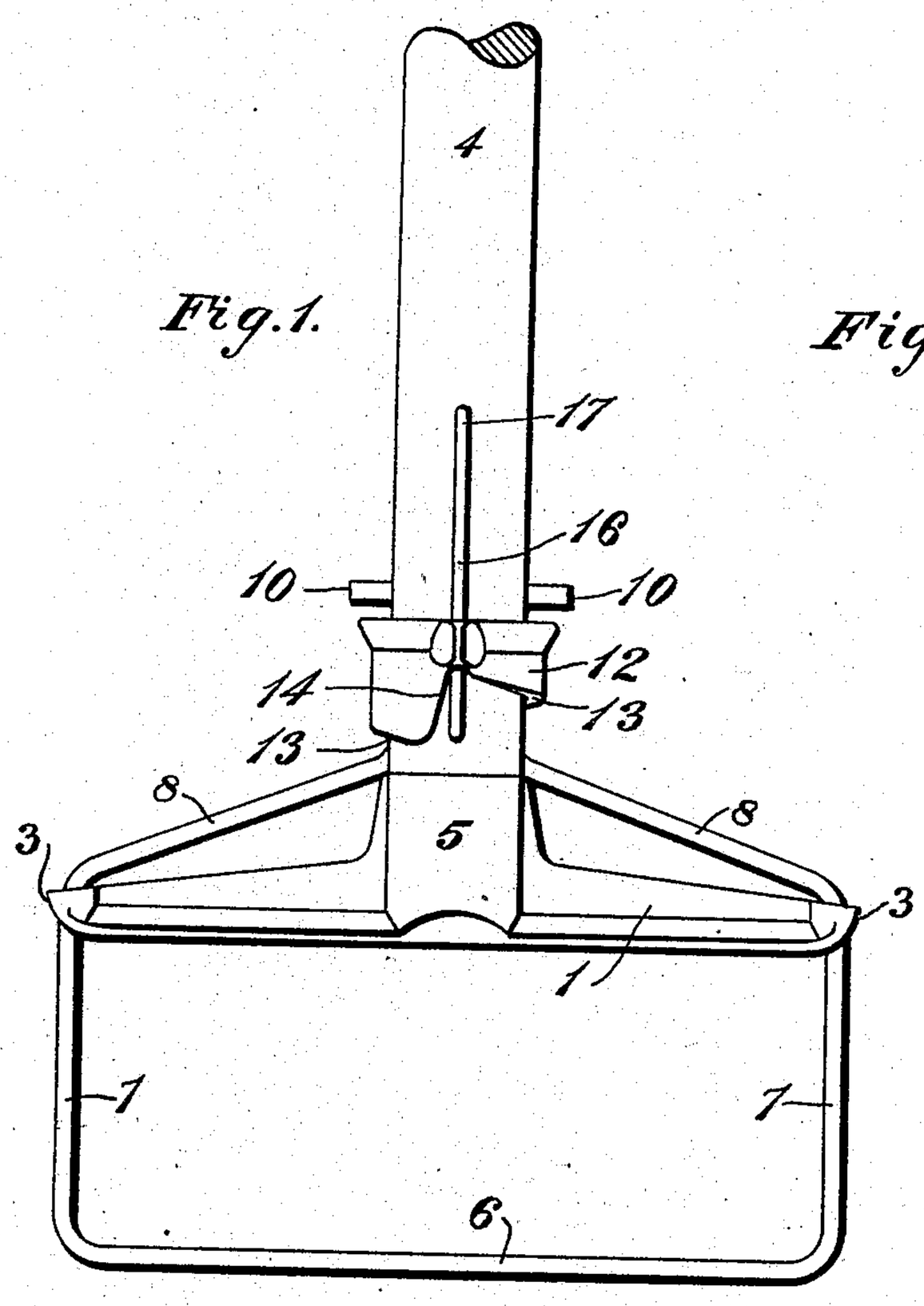


Fig. 2.

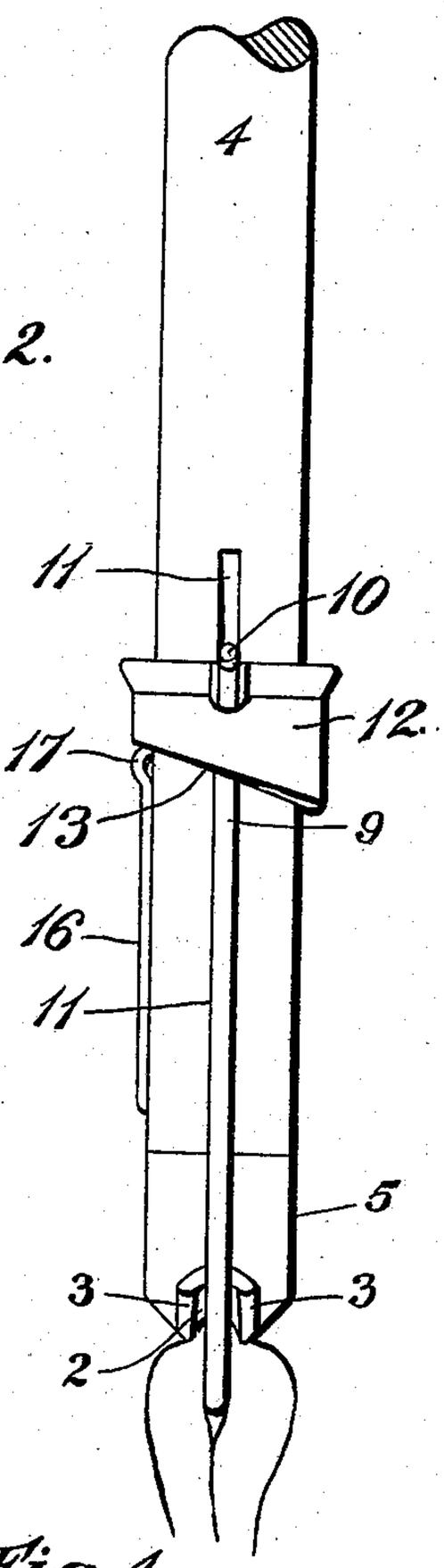


Fig. 3.

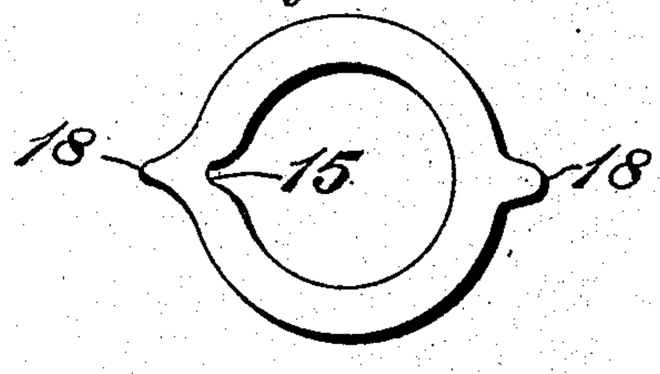
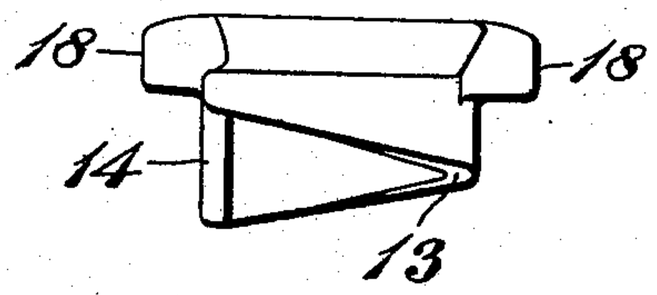


Fig. 4.



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UNITED STATES PATENT OFFICE.

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MOP-HEAD.

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Application filed November 27, 1907. Serial No. 404,064.

To all whom it may concern:

Be it known that I, LYMAN W. MERRIAM, a citizen of the United States, residing at Fitchburg, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Mop-Heads; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in mop heads of which the following is a full, clear, and exact description.

The essential novelty of this invention resides in the use of a cam ring for operating the holding loop and securing the same in clamping position.

Reference will be had to the accompanying drawing forming a part of this specification and wherein like numerals of reference designate corresponding parts throughout the several views, in which:

Figure 1 is a side elevation showing the holding loop in open position. Fig. 2 is an end view in elevation illustrating the holding loop in closed position with the mop secured in place, Fig. 3 is a top plan view of the cam ring, and Fig. 4 is a side view thereof.

Reference numeral 1 designates the cross bar formed in its bottom edge with the usual trough 2 and in its ends with notches forming the usual guide lugs or ears 3. The cross bar 1 is attached to the mop stick or handle 4 by a ferrule or sleeve 5. The holding loop comprises the usual clamping bar and side bars 7, 7, the latter operating between the said guide lugs or ears 3. The side bars are bent inwardly to form branches 8, 8 which, when the mop head is open to its fullest extent, engages the said cross-bar 1. It is contemplated to construct the holding loop so that the same will open to a greater extent than is common in this art, to accommodate a large mop. The upper ends of the branches 8, 8 are bent upwardly to provide portions 9, 9 parallel with the stick or handle, and the extreme ends of these portions are bent outwardly at right angles into free end portions or arms 10, 10.

In opposite sides of the stick or handle, are formed longitudinal grooves 11, 11 in which the said portions 9, 9 are slidably received. Upon the stick or handle, is arranged a cam-ring 12 encircling the same and slidable thereon. This ring is located with respect to the holding loop between the portions 8, 8 and 10, 10 of the latter and embraces the portions 9, 9. The lower edge of the cam-ring is inclined as indicated by numeral 13, terminating in a shoulder 14. A groove 15 is formed in the inner wall of the ring longitudinally thereof, and is adjacent the starting point of the cam or inclined edge 14.

A guide wire 16 extends longitudinally of the stick or handle being secured thereto in any suitable manner, though preferably by bending the ends thereof and inserting the same in the stick or handle. The upper portion of this wire is bent outwardly as at 17 to form a bearing-stud, the object of which will be hereinafter set forth. The said wire 16 forms a guide-rib which is received in the said slot or groove 15 of the cam ring to prevent the ring from turning until the same has been raised to a point above the said stud or bent portion 17. To facilitate turning of the cam ring, ears or grips 18, 18 are provided thereon.

The mop head is operated in the following manner, assuming the parts to be in the position illustrated in Fig. 1 of the drawing. The mop is doubled over the lower bar of the holding loop and the cam-ring 12 is then moved upwardly on the handle or stick 4, at the same time coming into contact with the outwardly bent portions or arms 10, 10 of the holding loop and drawing the same upwardly with it to engage the mop-cloth therebetween and the cross-bar 1 of the head. During this upward movement, the ring is prevented from turning as previously described, due to the wire or rib 16 within the groove 15 of the ring. After the cam or inclined lower edge of the ring 12 has passed beyond the stud or bent portion 17 of the guide wire, the ring may be turned, and the said cam or inclined edge of the ring riding over said stud or bent portion 17 will cause the ring to move upwardly to a further extent, thereby moving the holding loop an additional step to grip the mop-cloth more securely.

What is claimed as new and useful, is:

A mop holder comprising a handle having a head, and provided with longitudinal

grooves in opposite sides thereof, a movable holding loop having its upper ends bent vertically and parallel with each other to engage the grooves, the terminals of said ends of the loop being bent outwardly so as to extend vertically from said grooves, a cam ring movably mounted on the handle and over the parallel sides of the loop, and having a groove in its inner face, said groove receiving a guide disposed on the surface of the handle parallel to and at a point between the grooves in the handle, the upper portion of the guide serving as a stop against which the cam surface of the ring will engage, when the ring is raised above the top of the guide and turned to clamp the holding loop against the mop head, substantially as specified.

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