J. L. WILLIAMS.

MOP.

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1,185,564.

Fig. 1.

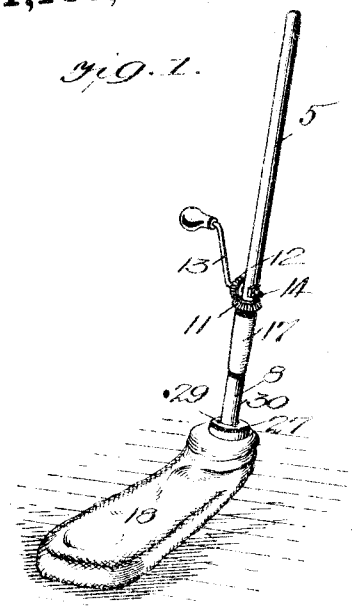


Fig. 2.

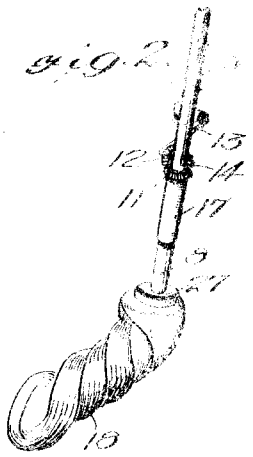
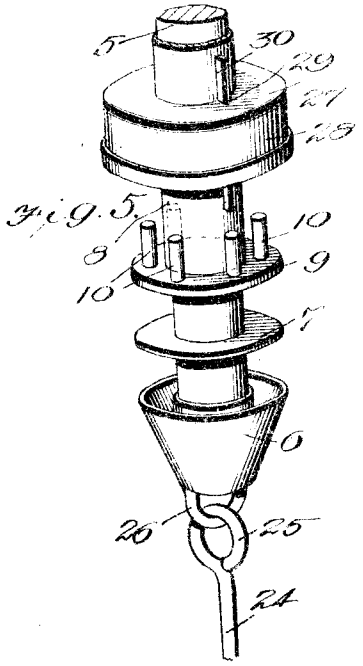


Fig. 3



Fig. 5.



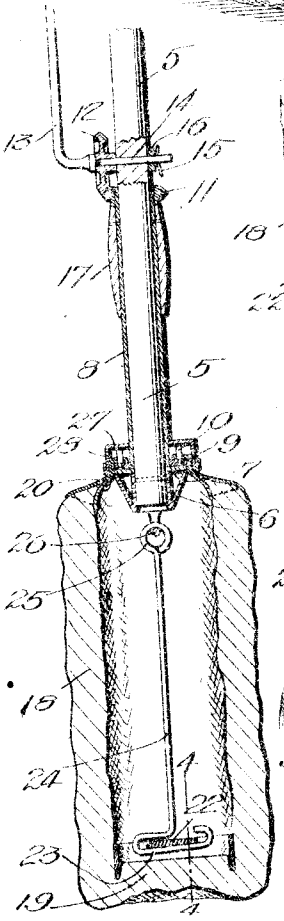


Fig. 4.

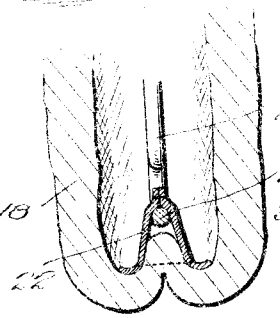
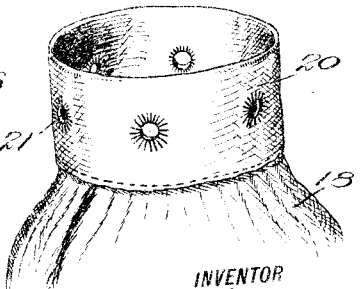


Fig. 6.



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MOP.

1,185,564. Specification of Letters Patent. Patented May 30, 1916.

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To all whom it may concern:

Be it known that I, JOSEPH L. WILLIAMS, a citizen of the United States, and a resident of Du Pont, in the county of Pierce and State of Washington, have invented a certain new and useful Improvement in Mops, of which the following is a specification.

One of the principal objects of my invention is to provide an improved mop of the self-wringer type in which the mop cloth may be wrung without wetting the hands, which will be simple, and durable in construction and devoid of frames or other projecting parts which might scar or mark the furniture or woodwork while the mop is in operation.

Another object of the invention is to provide a mop in which the mop cloth is so constructed as to hold a piece of scouring soap, while the mop is in use.

Another object of the invention contemplates the provision of an improved mop in which the cloth may be readily wrung through means operated by a crank, the construction being such that should the crank be removed for any purpose, the cloth may still be conveniently and quickly wrung without wetting the hands.

Still another object contemplates the provision of a mop in which the cloth may be readily removed to be replaced by a fresh one or by a cloth of a different type, as for instance, by an oiling cloth.

Still another object of the invention is to provide an improved mop of the class described which will be extremely simple, durable, efficient in operation, and inexpensive to manufacture.

With these and other objects in view which will become apparent as the description proceeds, the invention resides in the construction, combination, and arrangement of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawing in which like characters of reference indicate like parts throughout the several figures, of which—

Figure 1 represents a view in perspective of a mop constructed according to my invention, showing the position of parts when the mop is in use. Fig. 2 represents a view in perspective showing the mop as in the position taken when the cloth is being wrung out. Fig. 3 represents a view in section taken longitudinally through a mop constructed according to my invention. Fig. 4 represents a view in section taken on the plane indicated by the line 4—4 of Fig. 3. Fig. 5 represents a view in perspective of the lower portion of the handle or standard showing parts of the mop head in separated position for clearness of illustration. Fig. 6 represents a view in perspective of the upper or neck portion of the mop cloth. Fig. 7 represents a view in perspective of the mop showing the same as being used without the crank.

In carrying out my invention, I provide a mop including a standard or handle 5 having a conical head 6 fixedly mounted upon its lower end. A washer or wear ring 7 surrounds the handle 5 and rests upon the upper end of the head 6. Rotatably mounted on the handle above the wear ring or washer, is a sleeve 8 carrying an outstanding flange 9 at its lower end. This flange is provided with a plurality of upstanding spaced pins 10, set in a circle around the sleeve 8 and separated somewhat therefrom. On the upper end of sleeve 8 is mounted a beveled pinion 11, with which a bevel gear 12 carried on a crank 13 meshes. The shaft portion 14 of the crank is journaled in the handle 5 transversely thereof, and is held against accidental displacement from the handle by means of a cotter pin or other device 15, a washer or nut 16 being mounted between the cotter and the handle. A hand grip 17 is provided on the sleeve 8 below gear 11.

The mop cloth indicated at 18 is tubular in formation, being formed of knitted or other suitable material. The cloth is closed at its lower end as at 19, and at its upper end is ecuipped with a suitable sleeve portion 20 provided with a plurality of eyes or openings 21 therein, conforming in number to the number of pins 10. The cloth interiorly and at its lower end is provided with a strap 22 made of cloth or other material. This strap which is relatively long, is adapted to be engaged by an elongated hook 23 formed at the lower end of a link or rod 24, as indicated in Fig. 3. This link or rod extends within the tubular mop cloth and is provided at its upper end with an eye 25 engaging a staple-like member 26 carried by the head 6. The sleeve portion 20 of the mop cloth extends up around the head 6 and is gathered in above the flange 9, the eyes or openings 21 being passed over the pins

10 in the manner indicated in Fig. 3. A cap 27 providing a downwardly extending marginal flange 28 is slidably mounted on sleeve 8, and is provided with a notch or recess 29 which when brought into registration with a rib or feather 30, will allow movement of the cap 27 upwardly or downwardly upon sleeve 8 as the case may be. When the cap is shifted downwardly it engages over and houses the upper portion of the mop cloth, inclosing the same tightly about head 6 and flange 9 whereby to insure the continued engagement of the sleeve upon the pins 10. When this cap is moved downwardly for thus returning the mop cloth in position, it is shifted to the right or to the left to move the notch 29 out of registration with the feather 30, so that accidental upward movement of the cap will be prevented.

When the parts are in the positions indicated in Fig. 3, the mop is ready for use. The hinge connection provided between the rod 24 and the handle or standard 5, through the medium of eye 25 and staple 26, allows of the rod or link moving into various positions relatively to the handle, so that the mop may follow the contour of the surface being treated. When it is desired to wring the mop, all that is necessary is to rotate the crank 13, by which operation the sleeve 8 is rotated, relatively to the handle 5, and since the upper end of the mop cloth is connected with this sleeve through the means already described, the cloth is twisted about the rod or link 24, and is thoroughly wrung. Should it be desired for any purpose to remove the crank 13, this may be done and in such case the sleeve may be rotated by means of the hand grip 17 for wringing the mop cloth. The mop cloth may be readily removed and a new one substituted when desired. Thus the mop may be used either with the ordinary wet mopping cloth or with an oiling cloth.

Although I have described the preferred embodiment of my invention, I may desire to make such changes in the construction, combination, and arrangement of parts thereof, as do not depart from the spirit of the invention and the scope of the appended claims.

I claim:—

1. A handle having a head fixedly secured on its lower end, a wear ring arranged above the head, a sleeve revolubly mounted on the handle and having an outstanding flange bearing against the wear plate and provided with a plurality of upstanding pins, a crank carried on the handle, means whereby the sleeve may be rotated when the crank is actuated, a tubular mop cloth having a sleeve portion at its upper end, said sleeve portion being provided with eyes engaging on the said pins, a rod arranged in the tubular mop cloth and having a hook provided at its lower end, a strap carried within the mop cloth in which said hook engages for holding the lower end of the mop cloth stationary, and a hinge connection between the rod and the mop head whereby the rod may move into any one relation with the handle so as to allow the mop to follow the contour of the surface being treated.

2. A mop including a handle, a rod carried thereby and having a hinged connection therewith, a tubular mop cloth inclosing the rod, said rod being connected with the mop near the lower end of the latter, a sleeve rotatably mounted on the handle and being provided with a plurality of upstanding pins, means carried by the sleeve for engaging over the pins for connecting the upper portion of the cloth with the sleeve, a cap carried by the sleeve and movable into position for retaining the cloth in engagement with the pins, and means whereby the sleeve may be rotated at will.

3. A mop including a handle having a head fixedly carried at its lower end, a sleeve rotatably mounted on the handle above the head, a plurality of upstanding pins carried by the sleeve, a mop cloth having means engaging the pins for connecting the cloth with the sleeve, a cap normally mounted on the sleeve and having a depending annular flange engaging when the cap is in lowered position over the mop head and pins for retaining the cloth in fixed position on the pins, and means whereby the cap may be locked in lowered position at will.

4. A mop including a handle, a sleeve rotatably mounted thereon, means whereby said sleeve may be rotated at will, a rod having a hinge connection with the end a tubular mop cloth, means carried by the cloth adapted to be engaged by the rod for fixing the lower end of the cloth to the rod, said rod being arranged within said tubular cloth, means carried by the sleeve for anchoring the upper end of the mop cloth on the sleeve, and means for retaining the cloth in anchored position against accidental displacement.

5. A mop including a handle, a tubular mop cloth, a rod having a hinge connection with the handle, said rod being provided with a hook at one end, means carried within the mop cloth engaged by the hook for positioning said rod within the cloth and for retaining one end of the cloth against rotation relatively to the handle, and a revolvible member carried upon the handle and having means for anchoring the upper ends of the cloth to the revolvible member whereby said cloth may be twisted about the rod when the revolvible member is turned.

6. A mop including a handle, a tubular mop cloth, a rod having a hinge connection with the handle and having connection with the cloth, a revolvible member on the han-

dle, means whereby said member may be rotated at will, and means whereby the cloth may be anchored at one end upon the revoluble member.

7. A mop including a handle, a tubular mop cloth, a rod arranged within the mop cloth and having a detachable connection at one end with said cloth, said rod being hingedly connected with the handle, a revoluble member arranged upon the handle, means whereby the cloth may be anchored adjacent one end to said revoluble member, means whereby the cloth may be locked in anchored position on the revoluble member, and means whereby said revoluble member may be rotated at will.

8. A mop including a handle, a tubular mop cloth, means carried by the handle and movable into various angular positions relatively thereto, said means retaining the mop cloth at one end against rotation relatively to the handle, a revoluble member mounted on the handle, means whereby the revoluble member may be rotated at will, and means whereby the mop cloth may be anchored adjacent one end on said revoluble member.

9. A mop including a handle, a rod having a hinge connection with the handle, a tubular mop cloth surrounding the rod, means for detachably connecting the tubular mop cloth and rod, and means whereby the cloth may be twisted at will about the rod.

10. A mop including a handle, a tubular mop cloth, rigid means having hinge connection with the handle extending within the mop cloth and having detachable connection with the mop cloth adjacent one end of the latter, and means whereby the cloth may be twisted about the rigid member at will.

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