

UNITED STATES PATENT OFFICE.

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MOP-WRINGER.

SPECIFICATION forming part of Letters Patent No. 668,102, dated February 12, 1901.

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To all whom it may concern:

Be it known that I, JOHN H. JOHNSON, a citizen of the United States, residing at Silver-
5 ver-ton, in the county of Marion and State of Oregon, have invented a new and useful Mop-Wringer, of which the following is a specification.

My invention relates to mop-wringers, and has for its object to produce a device of this
10 kind which can be cheaply constructed, will be simple and efficient in operation, and can be readily moved from place to place, so as to be convenient for use when needed.

With this object in view my invention consists in the improved construction and novel
15 arrangement of parts of a mop-wringer, as will be hereinafter more fully set forth.

In the accompanying drawings, in which the same reference-numerals indicate corresponding parts in each of the views in which
20 they occur, Figure 1 is a perspective view of my mop-wringer ready for use. Fig. 2 is a vertical central sectional view of the same. Figs. 3 and 4 are sectional detail views at
25 right angles to each other, taken through the free end of the pivoted jaw.

Referring more particularly to the drawings, 1 indicates the base, which may be of
30 any suitable size and dimensions, upon which are mounted suitable standards 2, preferably three in number. A table 3 is secured to the upper ends of the standards and is provided with an upwardly-projecting rim 4, which terminates in a spout 5. The table is preferably
35 substantially circular, and the spout overhangs or projects beyond one side of the base, so as to deliver the water from the mop into the bucket when the wringer is being used.

Journaled within suitable bearings 6 and 7
40 in the base and the table, respectively, is a vertical shaft 8. The shaft is provided with one or more spiral grooves 9, which extend from directly below the table to its lower end, and a head or nut 10 is arranged to travel upon
45 the shaft, its interior being provided with a projection or rib 11 for each one of the spiral grooves. A substantially L-shaped stirrup 12 is secured to the nut 10 at one end and engages with one of the standards at the other end—
50 as, for instance, by means of a perforation 13. A coiled spring 14 fits around the shaft 8 and

extends from the base up to the nut, so as to normally hold the nut and stirrup at their highest point. If desired, the lower end of the spring may rest within a suitable annu-
55 lar recess 15 around the bearing at the bottom of the shaft. The upper end of the shaft directly below the table is provided with a collar 16, which engages with the bottom of the table and prevents the spring from lift-
60 ing the shaft out of its bearing at the bottom and also limits the upward movement of the nut 10 against the action of the spring.

Secured to the upper end of the shaft above the table is a head comprising a base or cross-
65 piece 17, two standards 18, and two jaws 19 and 19', one of which, 19, is secured to the tops of the standards 18 and the other one, 19', is pivotally secured to the jaw 19 at one
70 end, the pivoted end of the jaw 19' being curved sufficiently to cause the jaws to stand substantially parallel to each other when in their closed position, and thereby hold the mop firmly between the two jaws. The op-
75 posite ends of said jaws are detachably secured together by means of a curved rack 20, one end of which is secured to the jaw upon the tops of the standards, and the other end extends beneath the pivoted jaw and is pro-
80 vided with teeth 21, preferably upon its upper surface, with which a pawl 22 engages. The pawl is pivotally seated in a recess 23 in the upper surface of the pivoted jaw, and a
85 spring 24 engages with its inner end for holding it in normal engagement with the teeth of the rack 20. The teeth of the rack are in-
90 clined away from the rigid jaw upon one side, and the head or engaging end of the pawl is also inclined away from the rigid jaw, so that when the movable jaw is being moved to-
95 ward the rigid jaw the pawl will slide over the inclined surface of the teeth; but its straight face will engage with the straight faces of the teeth of the rack and prevent the outward movement of the free end of the jaw
100 until after the pawl has been released by pressing downwardly upon its outer end. A bracket 25 is secured to the under side of the pivoted jaw and extends underneath the track, so as to prevent the accidental dis-
engagement of the jaw from the rack. The inner or adjacent faces of the jaws are each

provided with suitable means for engaging with the mop—as, for instance, teeth or pointed pins 26.

In using my improved mop-wringer it is placed adjacent to the bucket or other receptacle for the water used in scrubbing, with the spout of the table projecting over the edge of said receptacle. The jaws are separated by releasing the pawl from the rack and forcing the free end of the pivoted jaw away from the rigid jaw a sufficient distance to permit of the entrance between the jaws of the mop that is to be wrung or dried. The pivoted jaw is then swung inwardly toward the rigid jaw as far as it will go, the teeth or pins upon the coacting faces of the jaws rigidly clamping and holding the material of the mop therebetween. The operator then places the foot in the stirrup and forces the head downward as far as desired, which will cause the head to be revolved above the table, and by holding the handle of the mop rigid between the hands of the operator the fibrous material or scrubbing portion of the mop will be twisted around and around until it has been sufficiently dried or cleansed from water. As soon as the foot is released from the stirrup the spring upon the shaft will carry the head or nut upward, which will cause the shaft to revolve in the opposite direction, and thereby untwist the fibrous material of the mop. The pawl is then released from the rack and the pivoted jaw moved away from the rigid jaw, when the mop can be removed from the wringer for further use. By forming the spiral grooves upon the shaft to the right hand or in the same manner as the threads of an ordinary screw and locating the free end of the pivoted jaw to the right, where it will be the most convenient for manipulation by the right hand, the head and the shaft will be locked against rotation when the mop is being clamped within the wringer, owing to the engagement of the nut 10 with the collar 16, thus permitting of the pivoted jaw being drawn toward the rigid jaw with sufficient force to clamp the mop so tightly as to prevent its slipping from between the jaws during the process of wringing.

As above described, it will be evident that the process of ringing the mop can be performed quickly and efficiently and without soiling the hands.

The device is so simple that any one can operate it, and it can be made of such strength that it will not be easily broken and yet be made light enough to be easily carried from place to place when desired.

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

1. In a mop-wringer, the combination, with a base, of a table above the same, a shaft journaled in the base and in the table, a clamping-head upon the upper end of the shaft above the table, and a stirrup provided with

means for rotating the shaft as the stirrup is depressed, substantially as described.

2. In a mop-wringer, the combination, with a base, of a table above the same, a shaft journaled in the base and the table, the surface of the shaft being provided below the table with a spiral groove, a nut upon the shaft provided with means for entering said groove, a stirrup connected with the nut for moving the same upon the shaft, and a clamping-head upon the upper end of the shaft above the table, substantially as described.

3. In a mop-wringer, the combination, with a base, of a table above the same, a shaft journaled in the base and the table, the upper end of which shaft is provided with a collar below the table and below the collar is provided with a spiral groove, a nut upon the grooved portion of the shaft, provided with means for entering said groove, a stirrup secured to the nut, and a clamping-head upon the upper end of the shaft above the table, substantially as described.

4. In a mop-wringer, the combination, with a base, of a table below the same, a spirally-grooved shaft journaled in the base and in the table, the upper portion of which is provided with a collar below the table, a nut upon the shaft provided with a rib for engaging with the grooved portion of the shaft, a stirrup secured to the nut, a coiled spring upon the shaft, between the base and the nut for normally holding the nut in its elevated position, and a clamping-head upon the upper end of the shaft above the table, substantially as described.

5. In a mop-wringer, the combination, with a base, of standards projecting upwardly therefrom, a table secured to the upper ends of said standards, a shaft journaled in the base and in the table, and grooved spirally below the table, a nut upon the grooved portion of the shaft, provided with means for engaging therewith, a substantially L-shaped stirrup secured to the nut at one end and having its opposite end provided with means for engaging with one of the standards, a spring upon the shaft between the base and the nut, and a clamping-head upon the upper end of the shaft above the table, substantially as described.

6. In a mop-wringer, the combination, with a base, of a table above the same, the upper side of which is provided with a rim, the ends of the rim and a portion of the table terminating in a spout that overhangs the base, a spirally-grooved shaft journaled in the base and the table, a nut upon the shaft provided with means for moving it upon the shaft, and a clamping-head upon the upper end of the shaft above the table, substantially as described.

7. In a mop-wringer, the combination, with a base, of a table above the same, a shaft journaled in the base and the table, means for rotating the shaft, a head upon the upper end

of the shaft above the table, said head being provided with separable clamping-jaws, and means for detachably holding said jaws in engagement with the mop, substantially as described.

5 8. In a mop-wringer, the combination, with a base, of a table above the same, a shaft journaled in the base and the table, means for rotating the shaft, a cross-piece secured to the upper end of the shaft above the table, two standards secured to the ends thereof, a jaw rigidly secured to the upper ends of said standards, a jaw pivotally secured to one end of said rigid jaw and a toothed rack secured to the other end thereof, the free end of the pivoted jaw being normally in engagement with said rack, and a spring-actuated pawl pivotally secured to the free end of the pivoted jaw in position to engage with the rack and lock the jaw thereto, substantially as described.

9. In a mop-wringer, the combination, with

a base, of a table above the same, a shaft journaled in the base and the table, means for rotating the shaft, a cross-piece secured to the upper end of the shaft above the top of the table, standards projecting upwardly therefrom, a jaw rigidly secured to the upper end of the standards, a movable jaw having one end curved and pivotally secured to one end of the rigid jaw and a toothed rack secured to the other end of the rigid jaw, the adjacent or coacting faces of said jaws being each provided with teeth, and the free end of the movable jaw being recessed, and a spring-actuated pawl pivotally seated in said recess in position to engage with the rack and lock the movable jaw in fixed relation to the rigid jaw, substantially as described.

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Witnesses:

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