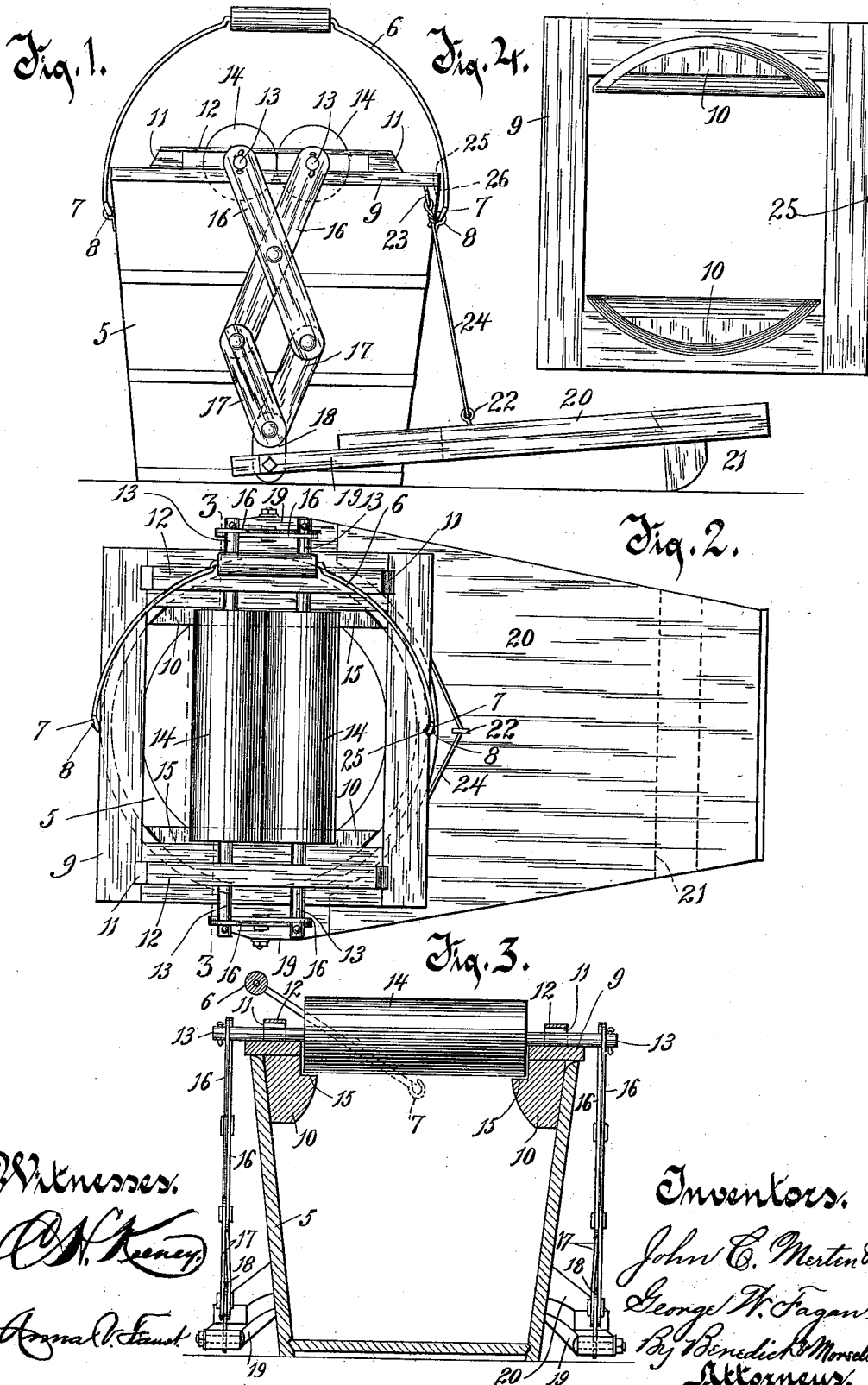


(No Model.)

J. C. MERTEN & G. W. FAGAN.
MOP WRINGER.

No. 544,641.

Patented Aug. 13, 1895.



Witnesses.

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MOP-WRINGER.

SPECIFICATION forming part of Letters Patent No. 544,641, dated August 13, 1895.

Application filed July 14, 1894. Serial No. 517,516. (No model.)

To all whom it may concern:

Be it known that we, JOHN C. MERTEN and GEORGE W. FAGAN, of Oshkosh, in the county of Winnebago and State of Wisconsin, have
5 invented a new and useful Improvement in Mop-Wringers, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

10 Our invention has relation to improvements in mop-wringers.

The object is to provide a simple and cheap wringer, conveniently adjustable to the top of a bucket or pail, and which is most efficient
15 in operation.

The invention consists of the devices and parts, or their equivalents, as hereinafter more fully described and claimed.

In the accompanying drawings, Figure 1 is
20 a side elevation showing our invention properly applied to a bucket, the rolls being in the position they assume when wringing the mop. Fig. 2 is a plan view of Fig. 1. Fig. 3
25 is a transverse section of Fig. 2, taken on a plane indicated by the line 3 3 of said figure; and Fig. 4 is a detail inverted plan view of the rectangular roll-carrying frame.

Like numerals of reference denote like parts throughout the several views.

30 Referring to the drawings, the numeral 5 indicates an ordinary form of bucket or pail provided with the usual handle or bail 6, having hooked ends 7 7, which engage the eyes 8 8 at diametrically-opposite points of the
35 bucket or pail.

The numeral 9 indicates a rectangular frame, which is adjusted to the top of the bucket. Secured beneath two of the opposite side pieces of this frame are guard-blocks
40 10 10, the outer sides of said blocks conforming to and fitting against the inner side of the bucket. Upon the tops of the side pieces above referred to are lugs or projections 11, to which are secured the ends of
45 strips 12 12, the spaces between said strips and the side pieces of the rectangular frame forming guideways which receive therein the journals 13 of wringer-rolls 14 14, the guide-
50 blocks 10 10 being cut away, as indicated at 15 15, for the accommodation of the rolls.

The inner sides of the guide-blocks are rounded or beveled convergently toward the ends of the rolls.

The journals of the rolls are extended beyond the sides of the bucket and are connected, respectively, at opposite sides to sets
55 of toggle-jointed levers, each set consisting of upper diagonally-arranged links 16 16, intersecting each other centrally and pivoted together at the point of intersection, and the
60 lower articulating-links 17 17. The upper ends of links 16 are connected to the ends of the journals, while the lower ends of links 17 are converged and connected to a short link 18. The link 18 of each set of toggle-jointed
65 levers is connected to a foot-operated treadle. This treadle consists of the side strips 19 19, to the forward ends of which the links 18 are connected, and the foot-board portion 20. The side strips 19 19 are connected by an under
70 transverse strip 21, which forms the fulcrum for the treadle.

To the top of the foot-board is secured a screw-eye 22, and to the under side of the front side piece of the rectangular frame are
75 secured at distances apart two screw-eyes similar to 23. The screw-eye 22 of the foot-board is connected to the two screw-eyes 23 by means of a cord 24. This arrangement provides for moving the bucket and mop-
80 wringing attachment together from one place to another without the necessity of removing the attachment.

The front strip of the rectangular frame is provided centrally with a notch 25, and the
85 front of the bucket immediately above the eye 8 is provided with a similar notch 26. In adjusting the rectangular frame to the top of the bucket these notches are made to register, whereby the proper position of the rectangular
90 frame upon the bucket is always insured.

In order to properly adjust the wringer to the pail, all that is necessary is simply to unhook one end of the bail 6 from the eye 8, and by throwing said bail to one side there is no
95 obstruction to the proper adjustment of the wringer. When the device is adjusted to the bucket, it will be seen that the rectangular frame 9 rests directly on the top rim of said bucket, while the guard-blocks 10 10 extend
100

into the bucket and bear against the sides thereof, thereby holding the wringer in proper position to the top of the bucket. In adjusting the wringer care should be taken, as before stated, to see that the notches 25 and 26 register, thereby always insuring the proper position of the wringer. After readjusting the bail 6 the device is ready for operation. The operator, by properly tilting the treadle on its fulcrum 21, raises the inner end thereof, thus causing a spreading apart of the toggle-joint levers and a consequent movement of the journals 13 away from each other in their guideways formed by the strips 12. A space is thereby left between the wringer-rolls sufficient for the insertion of the mop into the bucket. The moment the foot-pressure on the treadle ceases, the rolls, of course, will immediately approach each other. If, now, the operator stands upon the foot-board, with his weight well in toward the bucket, the rolls are held firmly together, and by drawing the mop upwardly between said rolls the water is most efficiently squeezed out of the mop-cloth. The guards 10 not only serve to hold the wringer in firm position, but furthermore prevent the spreading of the mop, thereby guiding the mop in between the rollers and preventing drippings from the mop over the sides of the pail. The convergently curved or beveled inner sides of the guards facilitate the guiding of the mop in between the rollers when said mop is drawn upwardly.

From the above description it will be seen that our invention possesses many advantages, among which may be mentioned the convenience with which the wringer can be adjusted to the pail merely with the necessity of unhooking one end of the bail and throwing it to the other side of the pail, the capability of the pail being carried to any place, and the wringer remaining in position for use by means of the cord attachment 24.

Furthermore, it is to be noted that there are no rigid bearings whatever in the entire machine, all being flexible and capable of adjusting themselves equally to the working of the foot-treadle, and that the roll-carrying frame is adjusted directly to the top of the

bucket, whereby the water squeezed from the mop-cloth is sure to pass into the bucket.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. In a mop wringer, the combination, of a frame provided with an opening, and having upon its inner side depending guards adapted to fit against the undersides of the bucket, whereby the frame is made to rest upon, and to be freely removable from, the upper edge of the bucket, and said frame provided upon its upperside with horizontal elongated guideways, wringer rolls having their journals mounted, respectively, in the guideways so as to be capable of travel therein, links having their upper ends connected to the journals of the rolls, a fulcrumed foot treadle having connection with the lower ends of the links, said foot treadle, when operated, adapted to move the rolls toward or away from each other, and to simultaneously cause a downward pressure of said rolls upon the removable frame, whereby the frame is held firmly to proper position to the top edge of the bucket, said foot treadle, the links, the rolls, and the frame all being removable together from the bucket, substantially as set forth.

2. In a mop wringer, the combination, of a frame having an opening therein and adapted to rest upon the top edge of a bucket, and provided upon its under side with depending guards, said guards having their outer sides conforming to and fitting against the inner sides of the buckets, and the upper side of said frame provided with opposite horizontal elongated ways, wringer rolls having their journals mounted, respectively, in the guideways so as to be capable of travel therein, and mechanism engaging the journals of the rolls, for moving said rolls toward and away from each other, substantially as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN C. MERTEN.
GEORGE W. FAGAN.

Witnesses:

GEORGE HILTON,
GEORGE SIMMONS.