No. 725,256. PATENTED APR. 14, 1903.

C. J. JOHNSON.

MOP WRINGER.

APPLICATION FILED FEB. 6, 1902.

NO MODEL.

Fig. 1.

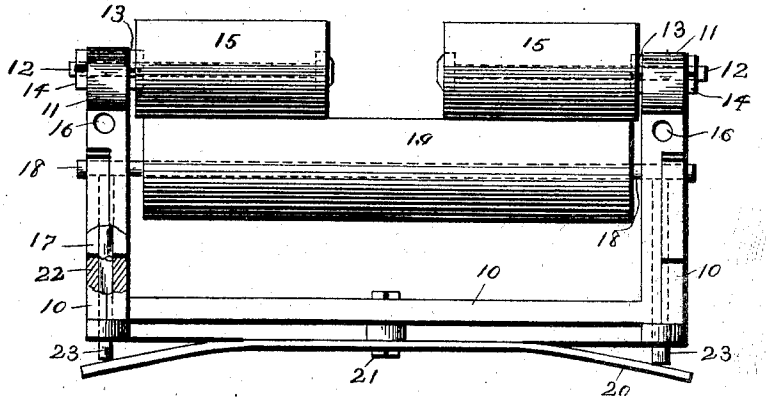


Fig. 2.

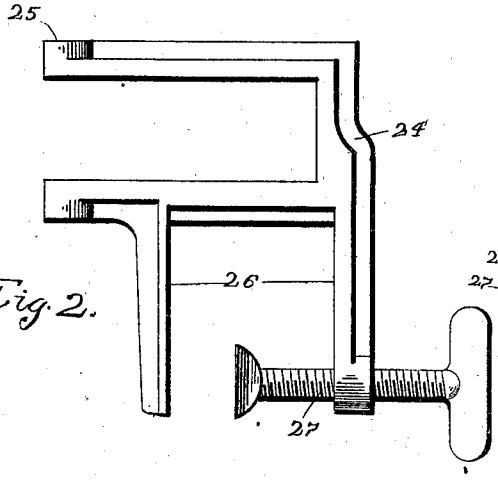


Fig. 3.

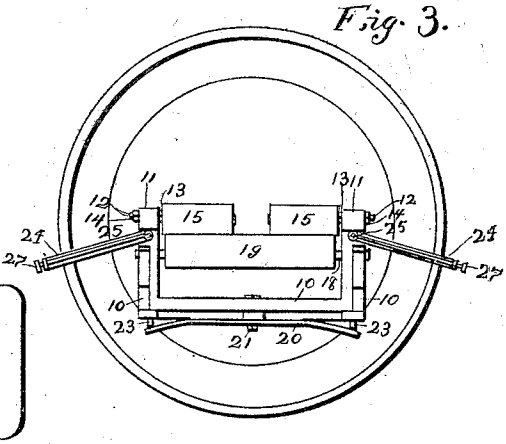
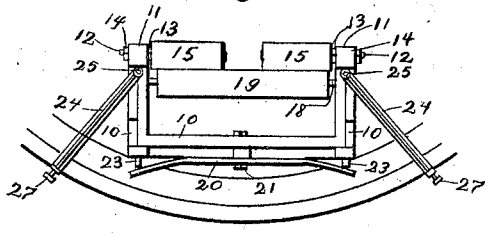


Fig. 4.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES J. JOHNSON, OF NEWTON, IOWA.

MOP-WRINGER.

SPECIFICATION forming part of Letters Patent No. 725,256, dated April 14, 1903.

Application filed February 6, 1902. Serial No. 92,797. (No model.)

To all whom it may concern:

Be it known that I, CHARLES J. JOHNSON, a citizen of the United States, residing at Newton, in the county of Jasper and State of Iowa, have invented certain new and useful Improvements in Mop-Wringers, of which the following is a specification.

This invention relates to that class of mop-wringers designed to be attached to a pail and to admit a mop between two rollers supported within the upper portion of the pail, which rollers will act to squeeze the water from the mop when the mop is drawn upwardly.

My objects are, first, to provide a device of this class that shall be of simple, durable, and inexpensive construction and that may readily and quickly be assembled and applied to a bucket.

A further object is to provide simple, durable, and inexpensive means for applying yielding pressure to the sliding roller, whereby it is held toward the mating rollers and yet its rotary motion is not greatly impeded by the yielding-pressure device.

A further object is to provide improved supporting means for the roller-frame, whereby the roller-frame may be rigidly and securely held in position upon a bucket of any ordinary size or upon a tub of a considerably-larger diameter than an ordinary bucket.

My invention consists in certain details in the construction, arrangement, and combination of the various parts of the device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claim, and illustrated in the accompanying drawings, in which—

Figure 1 shows a top or plan view of the frame with the rollers in position. Fig. 2 shows a side elevation of one of the roller-frame-supporting brackets. Fig. 3 shows a top or plan view of the complete mop-wringer applied to a bucket of comparatively small diameter. Fig. 4 shows a like view in which the device is applied to a portion of a tub or bucket of large diameter.

Referring to the accompanying drawings, I have used the reference-numeral 10 to indicate the roller-supporting frame. This frame comprises a back and two sides and is cast complete in one piece. At the outer ends of the side pieces are the bearings 11 to admit the short shafts 12, which are supported in the frame by means of the nuts 13 and 14 and which carry the short rollers 15. By this means the said short rollers are firmly clamped in position against lateral movement and yet are capable of free rotation. Immediately in the rear of the bearings 11 are the vertical openings 16, for purposes hereinafter made clear, and about the central portions of said side pieces are the horizontal slots 17, designed to receive the ends of the roller-shaft 18, upon which the roller 19 is supported. These slots are large enough to permit the said roller to move to and from the rollers 15 a considerable distance and to freely rotate.

I have provided means for yieldingly holding the roller-shaft 18 toward the short rollers, as follows: The numeral 20 indicates a flat leaf-spring secured by the bolt 21 to the central portion of the frame 10. In the sides of the frame 10 are the longitudinal openings 22, extending from the slots 17 to the ends of the side pieces. In these openings I have mounted the smooth round rods 23 to engage the roller-shaft 18 at one end and with their other ends projected beyond the central portion of the frame 10 and in engagement with the ends of the leaf-spring 20. This wringer-frame is supported by means of two brackets constructed as follows: The reference-numeral 24 indicates a frame comprising a back and two sides, and said sides are separated far enough to admit the frame 10 between them. Bolts 25 are passed through the said ends and through the openings 16 of the side pieces of the roller-frame, thus providing a bracket pivotally connected with the roller-frame. On the bottom of the frame 24 are two downwardly-projecting arms 26, designed to admit the edge of a bucket or a tub between them. Seated in the outer one of the arms 26 is a thumb-screw 27, by which the bracket is firmly secured to the edge of a bucket or a tub.

In practical use it is obvious that the short rollers are quickly and easily placed in position, then the long roller is placed in the slots 17, and then the rods 23 placed in the openings 22 to engage the large roller-shaft and to be held in position by the spring 20. This forms the complete roller-supporting frame. The brackets are then quickly and

easily connected with the roller-supporting frame by means of the two bolts 25. If it is desired to connect these brackets with a bucket of comparatively small diameter, the brackets are placed in a position almost in alinement with each other, as indicated in Fig. 3, and there firmly clamped to the bucket by thumb-screws 27. This attachment will firmly support the wringer against the ordinary strains occasioned by use in wringing the mop, because the brackets engage the roller-supporting frame at a point midway between the two rollers and said brackets overlap the sides of the frame, so as to firmly brace the frame in every direction. When, however, the device is intended for use in connection with a large tub or bucket, the brackets are moved to a position almost parallel with the side pieces of the frame, as shown in Fig. 4. Thus the same brackets are used to support the device on a bucket or tub of any ordinary diameter.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States therefor, is—

In a mop-wringer, the combination of a frame comprising an end and two sides, said sides provided with horizontal slots and having horizontal openings extending from the slots outwardly, two short rollers mounted in the ends of the side pieces in alinement with each other and with the inner ends supported a slight distance from each other, a roller slidingly mounted in said slots, rods in said horizontal openings engaging the ends of said roller and projecting beyond the sides, a leaf-spring fixed at its central portion to the end piece of the frame to engage both of said rods, brackets attached to said side pieces, a clamp on said brackets, substantially as and for the purposes stated.

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Witnesses:
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