No. 612,842. Patented Oct. 25, 1898.

C. GRIFFITH.

MOP WRINGER.

(Application filed May 3, 1897.)

(No Model.)

Fig. 1.

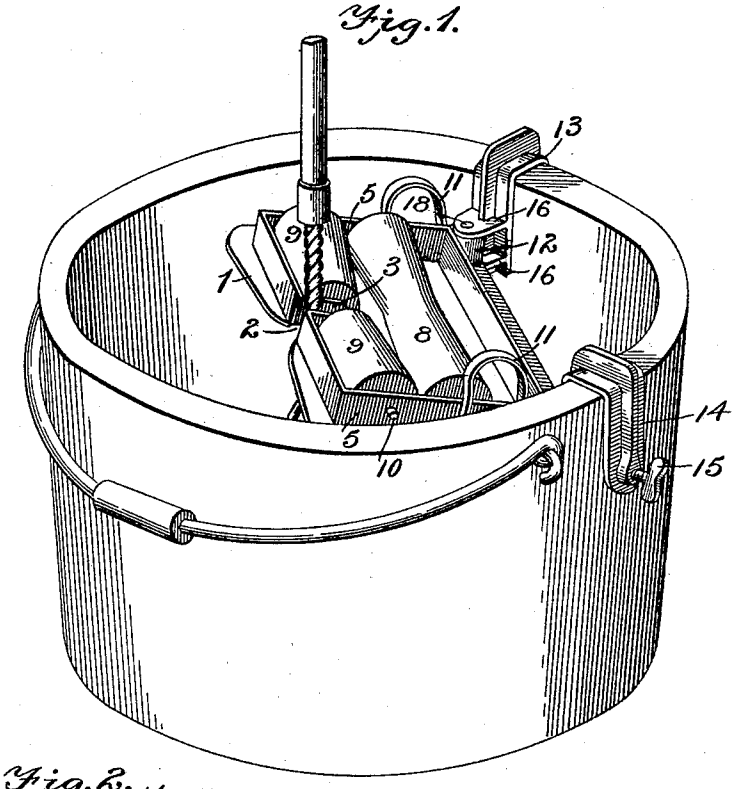


Fig. 2.

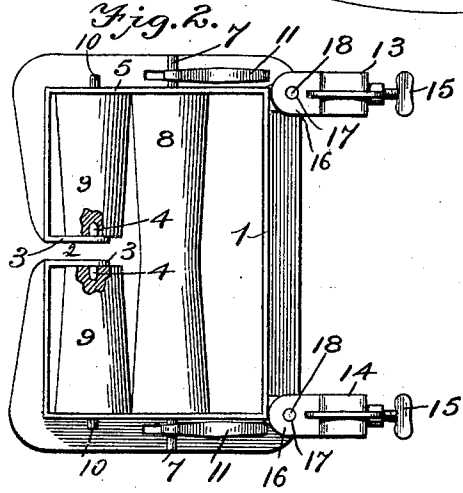
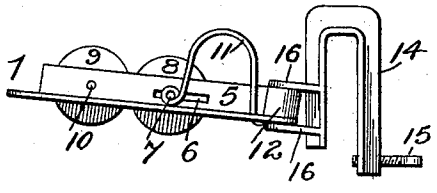


Fig. 3.



Inventor

Charles Griffith

Witnesses

Edwin G. McKee

Edwin Cruse.

By his Attorneys,

C. A. Snow & Co.

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

UNITED STATES PATENT OFFICE.

CHARLES GRIFFITH, OF WOBURN, ILLINOIS.

MOP-WRINGER.

SPECIFICATION forming part of Letters Patent No. 612,842, dated October 25, 1898.

Application filed May 3, 1897. Serial No. 634,958. (No model.)

To all whom it may concern:

Be it known that I, CHARLES GRIFFITH, a citizen of the United States, residing at Woburn, in the county of Bond and State of Illinois, have invented a new and useful Mop-Wringer, of which the following is a specification.

This invention relates to mop-wringers; and the object in view is to provide a simple and efficient device of this character which may be readily attached to pails or tubs of different diameters and in which a space is formed in the front side of the frame to permit the insertion of the shank of the mop in order that the mop may be drawn out between the rollers.

With this and other objects in view the invention consists in the several details of construction and combination of parts, as will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings, Figure 1 is a perspective view of a pail with my improved wringer attached thereto. Fig. 2 is a top plan view of the wringer detached. Fig. 3 is an end view of the wringer detached.

Similar reference-numerals indicate similar parts in the several figures.

1 indicates the open rectangular frame, the front side of which is divided midway its length, as indicated at 2, and provided with parallel inturned ears or lugs 3, each of which is provided with an integral pin 4, which extends toward the ends of the frame and on which pins one end of the respective front rollers is journaled, as will be hereinafter described. The ends 5 of the frame are each provided with an elongated opening 6, in which openings the spindle 7 of the rear roller 8 are journaled. As shown, this roller is concaved longitudinally, and its diameter is therefore greater at its ends than at its middle portion for a purpose to be hereinafter referred to. 9 indicates the front rollers, each of which is provided at its outer end with a spindle 10, which spindles are journaled in the respective ends of the frame. The inner ends of the rollers 9 are journaled on the pins 4 on the ears 3. These rollers taper from their outer to their inner ends in order to correspond in longitudinal form substantially with the form of the roller 8. It will be apparent, therefore, that the space between the middle of the roller 8 and the inner ends of the rollers 9 is greater than it is at the ends of the roller 8 and the outer ends of the rollers 9. By this construction the mop can be started much easier in its withdrawal from the tub through the rollers, and much thicker mops may be used than when the rollers are normally close together throughout their length.

11 indicates curved plate-springs, which are secured at one end to the frame and loosely connected at their other ends to the respective spindles of the roller 8. The normal tendency of these springs is to force the roller 8 toward the rollers 9.

A boss 12 is formed at each of the rear corners of the frame, and each of these bosses is provided with a vertical perforation 13.

14 indicates clamps adapted to fit over the edge of the tub or bucket and to be secured thereto by the set-screws 15. Each of these clamps is provided with a pair of spaced ears 16, which project from the inner vertical arm of the clamp to form inner angles somewhat less than right angles, whereby their outer ends are slightly elevated, and the upper ear of each clamp is shorter than the lower ear. These ears are perforated on a line at a right angle to the plane in which they lie, and the bosses 12 are adapted to fit between them. 18 indicates pins which pass through the perforations in the ears and the lugs and connect the clamps to the frame in such manner that the clamps may swing on the pins 18 laterally with respect to the frame. By this construction the clamps may be adjusted to fit tubs or pails of different diameters, and the wringer can therefore be used with any size tub or pail which is large enough to receive it.

It will be seen that by having the ears of the clamp elevated at their outer ends, as described, and perforated on a line at a right angle to the plane in which they lie when the bosses on the frame are pivoted between the ears the front end of the frame will be elevated; but the clamps can be turned to any desired position relatively to the frame and have their vertical arms fitted over the edge of the tub. The elevation of the front end of the wringer-frame will greatly facilitate

the withdrawal of the mop from between the rollers and will not strain the frame as much as if it were in a horizontal plane.

I am aware of the Dechenne patent, No. 568,895, granted October 6, 1896, in which the front roller of the wringer is made in two sections with a space between their inner ends for the passage of the shank of the mop. In the Dechenne device the front rollers are journaled on long spindles which extend from the end of the frame, and there is no support for the inner ends of these spindles, and consequently a great deal of strain is put on the spindles when the mop is drawn through between the rollers, and the spindles are liable to become bent, and thereby decrease the efficiency of the wringer. In my device the inner ends of the rollers are supported by the frame, and the rollers will therefore be kept in their proper relative position to the rear roller at all times, and the operation of the wringer will consequently be much more uniform and satisfactory.

In operation the shank of the mop will be passed through the space 2 in the front side of the frame, and thereby bring the mop into position to be drawn out between the rollers, and the roller 8 will yield sufficiently to permit this withdrawal, but will be held by the springs with sufficient force against the mop to wring the water therefrom.

It will be understood that changes in the form, proportion, and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

What I claim is—

1. In a mop-wringer, the combination of an open rectangular frame, the front side of which is divided and provided with spaced inturned ears or lugs, and the ends of which are each provided with an elongated opening, a longitudinally-concaved roller the spindles of which are journaled in said elongated openings, a pair of rollers tapering from their outer to their inner ends, said rollers being respectively journaled in the ends of the frame and the said ears or lugs, and springs secured at one end to the frame and loosely connected at their other ends to the spindles of the said concaved roller, substantially as described.

2. In a mop-wringer, the combination of an open rectangular frame, the front side of which is divided and provided with spaced inturned ears or lugs, and the ends of which are each provided with an elongated opening, a roller extending across the space between the ends of the frame and having its spindles journaled in said elongated openings, a pair of rollers journaled respectively in the ends of the frame and the said ears or lugs, and springs secured at one end to the frame and loosely connected at their other ends to the roller-spindles journaled in said rectangular openings, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

CHARLES GRIFFITH.

Witnesses:
JOSEPH T. FOUKE,
JOSEPH E. WRIGHT.