

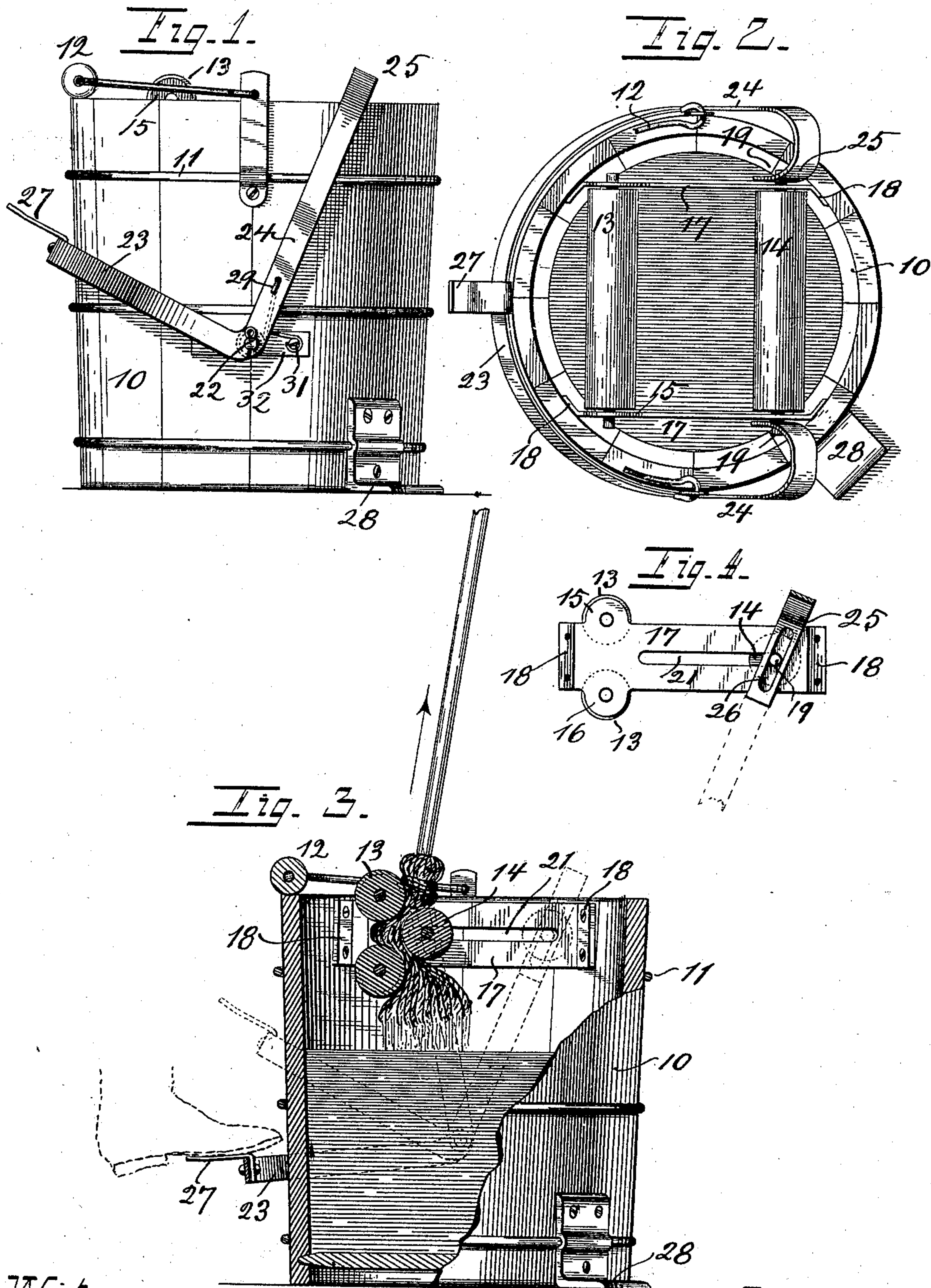
No. 671,136.

Patented Apr. 2, 1901.

F. HOFFMAN.
MOP WRINGER.

(Application filed Aug. 11, 1900.)

(No Model.)



Witnesses:

Arthur Kline

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UNITED STATES PATENT OFFICE.

FRANK HOFFMAN, OF CINCINNATI, OHIO, ASSIGNOR TO FRANK M. FRITSCH,
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MOP-WRINGER.

SPECIFICATION forming part of Letters Patent No. 671,136, dated April 2, 1901.

Application filed August 11, 1900. Serial No. 26,554. (No model.)

To all whom it may concern:

Be it known that I, FRANK HOFFMAN, a citizen of the United States, and a resident of Cincinnati, Hamilton county, State of Ohio, have invented a certain new and useful Mop-Wringer; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, attention being called to the accompanying drawings, with the reference-numerals marked thereon, which form also a part of this specification.

This invention relates to improvements in mop-wringers, which are devices used in connection with scrub-buckets for the purpose of relieving a mop of surplus water without using the hands for such purpose.

My invention consists of certain details of construction, as described and pointed out in the annexed specification and the claims following it and as illustrated in the accompanying drawings, in which—

Figure 1 shows in side elevation a mop-wringer constructed in accordance with my invention and attached to a bucket. Fig. 2 is a top view of Fig. 1. Fig. 3 is a central vertical section and shows the device in use. Fig. 4 is a detail view of one of the roller-supports detached.

In the drawings, 10 indicates a customary bucket bound together by wire hoops 11.

12 is the usual bail or handle, partly omitted in Fig. 2.

The mop-wringing device consists, substantially, of two sets of rollers, of which one set is stationary and the other movable to or from the first set and through the space between which the mop is pulled, with said rollers tightly pressed against it. These rollers are usually of wood, and there may only be one roller in each set or two in each or two in one and one in the other. As shown, I prefer to use two rollers 13 in the stationary set and one 14 in the movable one. The stationary rollers 13 are supported one above the other in bearings 15 and 16, projecting, respectively, upwardly and downwardly from a bridge 17, of which there are two supported parallel and opposite to each other, each having at each end a flange 18, bent at proper angle to per-

mit attachment of these bridges to the inside of the bucket. The journals 19 of the adjustable roller 14 are mounted each in a slot 21 of bridges 17, thus permitting said roller to be moved to or from the stationary set and guiding it during such movement. For so moving it there is provided an angle-lever pivotally supported on studs 22 and formed in one piece, which in its middle portion 23 is shaped on a circle around the bucket and the two branches of which are bent at an angle to form the upright branches 24 of the lever, the turning-point being at the pivotal support of the latter. The upper ends 25 of these upright parts of the lever are turned inwardly and down into the bucket, as shown, and provided each with a slot 26, into which on each side one of the journals 19 of rollers 14 reaches. Now in order to move the adjustable roller against the stationary ones it is only necessary to depress the circular part 23 of the angle-lever, as shown in Fig. 3. To facilitate such depression, a step 27 is provided. To prevent upsetting of the bucket during this operation, I provide another step 28, which is engaged with one foot, while with the other one step 27 is depressed. The return of the depressed angle-lever and movable roller to their normal positions is accomplished automatically by means of a coil-spring 29, which is supported on the pivot-stud 22 and of which one end engages the upright branch 24 of the angle-lever, while the other end is secured to one of the screws 31, whereby the flange 32, from which stud 22 projects, is secured to the bucket.

By supporting the rollers below the top of the bucket splashing of water outside of this latter is prevented, and by having their bearings entirely within the bucket the ends of the roller-journals, being objectionable on the outside of the bucket on account of their projection and motion, are removed from their undesirable position.

Having described my invention, I claim as new—

In a mop-wringer, the combination of two bridges 17 each having at each end an angular flange 18, fitted to the interior curvature of the side of the bucket and whereby these bridges are secured parallel to each other and

below the upper edge of the bucket, upwardly
and downwardly projecting roller-bearings 15
and 16 on each, stationary rollers supported
in these bearings, one above the other, an
5 operating device shaped of one piece in a
manner to form two operating-levers, one on
each side of the bucket, it consisting for such
purpose of the lower part 23 curved around
the outside of the bucket and supporting a
10 step 27, and having the upwardly-bent parts
24, the upper ends 25 of which are turned over
and around the upper edge of the bucket and
down into the space between it and bridges
17, such downwardly-extended ends being in
15 close proximity to said bridges, pivot-studs 22
projecting laterally from opposite sides of the
bucket on which the operating device is piv-

otally supported, a movable roller having jour-
nals 19, slots 26 in the downwardly-extending
upper ends of the angle-levers and horizon- 20
tal slots 21 in the bridges, which two slots on
each side are simultaneously occupied by a
journal 19 on each end of this movable roller,
slots 21 being so located as to guide this lat-
ter during operation toward the stationary 25
rollers and a spring to normally keep these
rollers apart.

In testimony whereof I hereunto set my
hand in the presence of two witnesses.

FRANK HOFFMAN.

Witnesses:

C. SPENGEL,
ARTHUR KLINE.