

(No Model.)

C. O. ALLEN.
MOP WRINGER.

No. 467,351.

Patented Jan. 19, 1892.

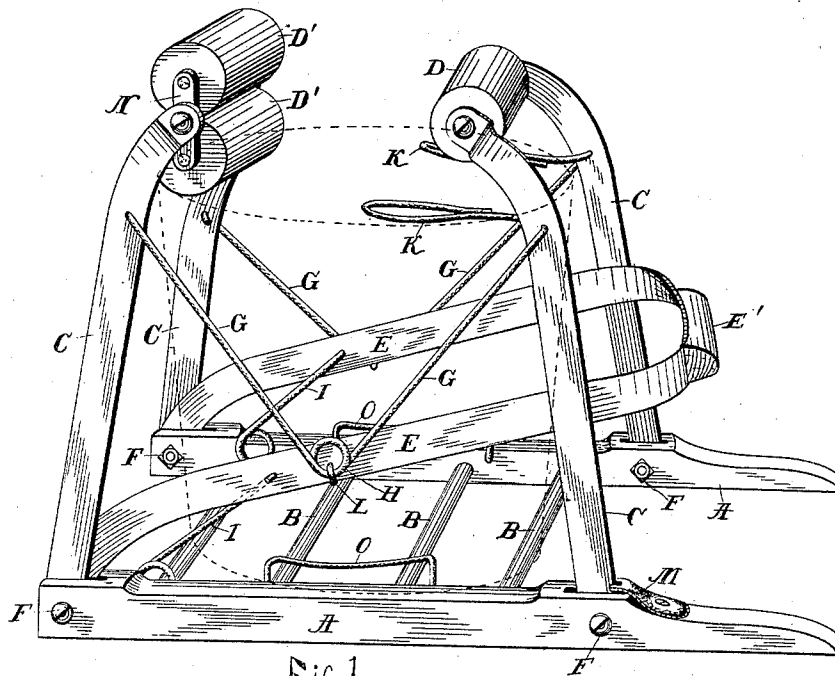


FIG. 1.

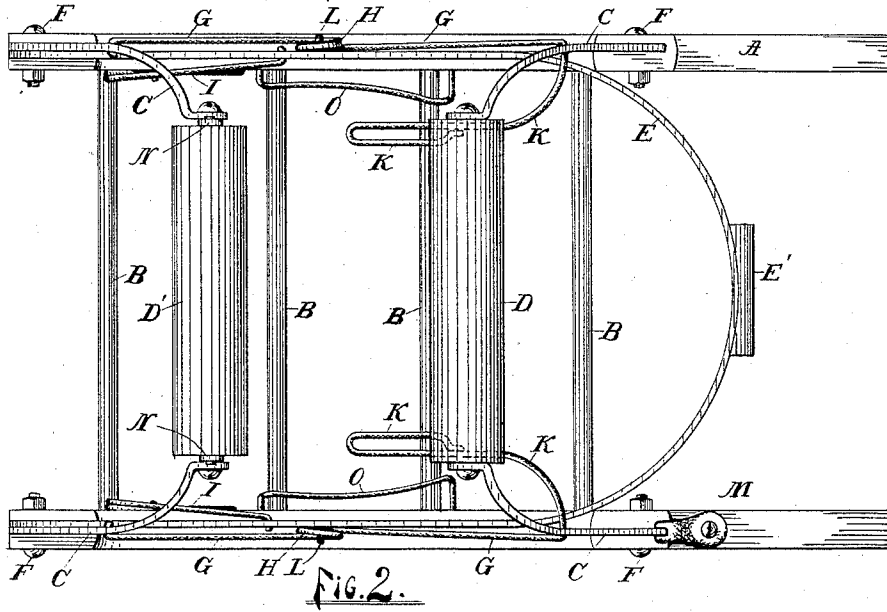


FIG. 2.

WITNESSES:

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CHARLES O. ALLEN, OF GRAND RAPIDS, MICHIGAN.

MOP-WRINGER.

SPECIFICATION forming part of Letters Patent No. 467,351, dated January 19, 1892.

Application filed April 23, 1890. Serial No. 349,191. (No model.)

To all whom it may concern:

Be it known that I, CHARLES O. ALLEN, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Mop-Wringers; 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.

My invention relates to a mop-wringer, and my object is to produce an article of utility having certain advantages which will recommend it to persons using such articles; and it consists in the construction, combination, and arrangement of the parts hereinafter described, and pointed out in the claims, reference being had to the accompanying drawings, wherein—

Figure 1 is a perspective, and Fig. 2 a plan view, of a device embodying my invention.

Like letters indicate like parts in each of the figures.

The roll-supporting uprights C are pivoted to a base-frame adapted to hold a pail and consisting of the sills A, having their front ends extended to a suitable distance beyond the treadle for steadying the structure and preventing it from tipping when in use, and connecting or cross bars BB, upon which the pail rests. These sills are provided with vertical slots or mortises in which are pivoted the lower ends of the roll-supporting uprights by bolts F. Secured to the sills upon opposite sides are spring pail-clamps O O for holding the pail by engaging with the sides thereof when in position. The roll-supporting uprights C C C C are arranged in pairs at or near the opposite ends of the sills, respectively, and the upper ends of each pair are bent laterally toward each other and toward the opposite pair, and the wringer-rolls D D' D' are journaled between each pair at their upper laterally-inclined ends in such manner that when the pairs are sufficiently inclined toward each other the rolls will come in contact. Each pair of uprights is connected to the opposite pair and to the operating-treadle by rods G G, the opposite ends whereof are attached to the uprights, and the loops H H, formed near the middle of said rod, are attached to the treadle, whereby the rod G forms an expanding spring

for said uprights, keeping the rolls apart when not in operation, and also acts as a lifting-spring for said treadle. The upper front ends of the rods are carried through the uprights, bent rearwardly toward the opposite rolls, thence backward, forming the loops K K, arranged at each end of the wringer-rolls, and adapted to pass underneath the opposite pair when the rolls are brought in contact and form a mop-guard for guiding the mop-cloths between the rolls during the operation of wringing, or the coils of the rods G may be omitted by providing a supplemental spring I for actuating the treadle, which has the foot-piece E' and curved arms E E, arranged parallel to the sills and pivoted to the frame at the rear, as shown. Between one pair of uprights are pivoted yokes N N, having rolls D' D', journaled between their opposite ends, and the parts are adjusted relative to each other in such a manner that the opposite roll D engages both the rolls, thereby securing a larger wringing surface than if only a single pair of rolls were employed. A guard M is secured to one of the sills A, upon which the foot is placed during the operation of the device. In this construction the base-frame is preferably of wood and the uprights of band-iron. The springs of wire and the rolls may be of either wood or rubber.

From the foregoing description and accompanying illustration the method of using my invention will be obvious.

I claim—

1. In combination with a base-frame, paired uprights pivoted thereto at their lower ends, wringer-rolls journaled between said uprights at their upper ends, a treadle also pivoted to said base-frame, having arms E E and a foot-piece E', connecting-rods, as G, attached to said arms upon each side and connecting the treadle to the paired uprights, and springs secured to the base-frame and connected to the treadle for operating the same, substantially as set forth.

2. In combination with a base-frame, paired uprights pivoted thereto at their lower ends and having their upper ends horizontally curved and inclining toward each other, wringer-rolls journaled between each pair of uprights, a treadle also pivoted to said base-frame, a spring I, secured to the base-frame

and adapted to actuate the treadle, and connecting-rods G for connecting the treadle and uprights and having their forward upper ends forming loops K, arranged at each end
5 of said rolls and projecting toward the opposite roll, substantially as and for the purpose set forth.

3. In a mop-wringer, the combination, with paired sills adapted to engage the floor and
10 cross-bars connecting the sills and forming a pail-rest, of paired roll-supporting uprights pivoted to the sills at their lower ends, wringer-rolls journaled between each pair of uprights at their upper ends, a foot-lever, as
15 E, consisting of a frame open at one end pivoted to the rear end of said sills, respectively, and having its other end provided with a suitable foot-piece, and connecting-rods G, attached to said foot-lever or treadle upon each
20 side and connecting said roll-supporting uprights and treadle, substantially as and for the purpose herein set forth.

4. In a mop-wringer, the combination, with a base-frame consisting of suitable sills and
25 cross-bars connecting the same, of paired roll-supporting uprights pivoted to said sills, having their upper ends bent toward each other and toward the opposite pair of rolls, respectively, as set forth, a single roll D, journaled
30 between the said upper ends of one pair of said uprights, a pair of rolls D' D', journaled in a yoke N, journaled between the opposite pair of uprights, a treadle having curved
35 arms E E, pivoted at their lower ends to the sills, respectively, and an expanding spring consisting of a single rod coiled midway of its length, secured to the treadle at the coil and having its opposite ends secured to each
40 pair of rolls, respectively, whereby the said rod operates both as an expanding spring for throwing the rolls apart and as a lifting-spring for said treadle, substantially as set forth.

5. In a mop-wringer and in combination, a
45 base-frame composed of paired sills arranged one on each side of the structure, having their forward ends projecting beyond the treadle,

cross-bars connecting said sills, paired roll-supporting uprights pivoted to said sills at their lower ends, having their upper ends curved toward each other and toward the op- 50
posite pair of rolls, respectively, paired rollers D' D', journaled in a yoke N, journaled between one pair of uprights, a single roll D, journaled between the opposite pair of up- 55
rights, a U-shaped treadle having curved arms E E, pivoted to said sills, respectively, arranged between said uprights, paired springs, each consisting of a single rod of suitable material having its opposite ends secured to each one of each pair of uprights, and a coil 60
midway of its length and secured to the respective arms of the treadle at the coil, substantially as described, and for the purpose set forth.

6. In a mop-wringer and in combination 65
with a base-frame consisting of paired sills arranged one upon each side of the structure, having their forward ends projecting beyond the treadle, paired roll-supporting uprights pivoted to said sills, rolls journaled between 70
said uprights, a treadle pivoted to the base-frame and connected to said uprights, respectively, by rods G G, arranged as described, and a pail guard or grip consisting of springs O O, secured to the sills, respectively, upon each 75
side and adapted to grip the outside of the bottom of the pail, substantially as and for the purpose herein set forth.

7. In a mop-wringer having a suitable base-frame and paired roll-supporting uprights 80
pivoted thereto, substantially as set forth, and provided with a suitable treadle connected to the uprights by a spring H, having rods G, a plurality of wringing-rolls journaled in a suitable yoke journaled between said up- 85
rights, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES O. ALLEN.

Witnesses:

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LUTHER V. MOULTON.