(No Model.) 2 Sheets—Sheet 1.

H. KELLER.

MOP WRINGER.

No. 526,449. Patented Sept. 25, 1894.

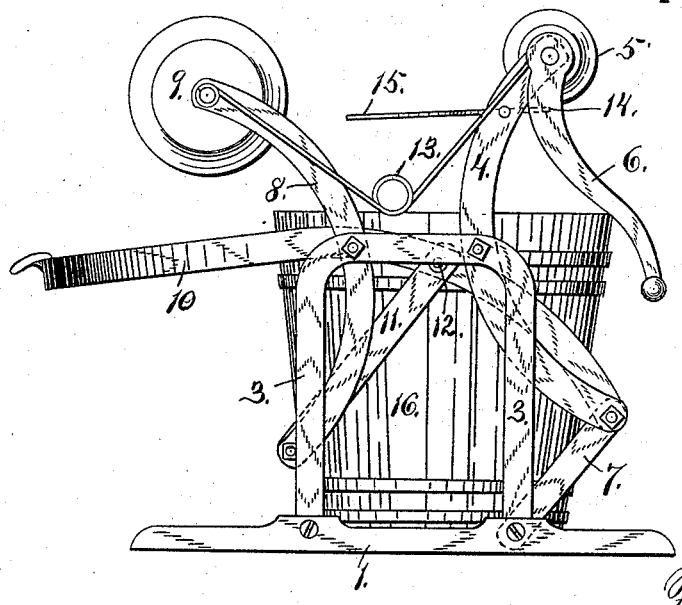

Fig. 1.

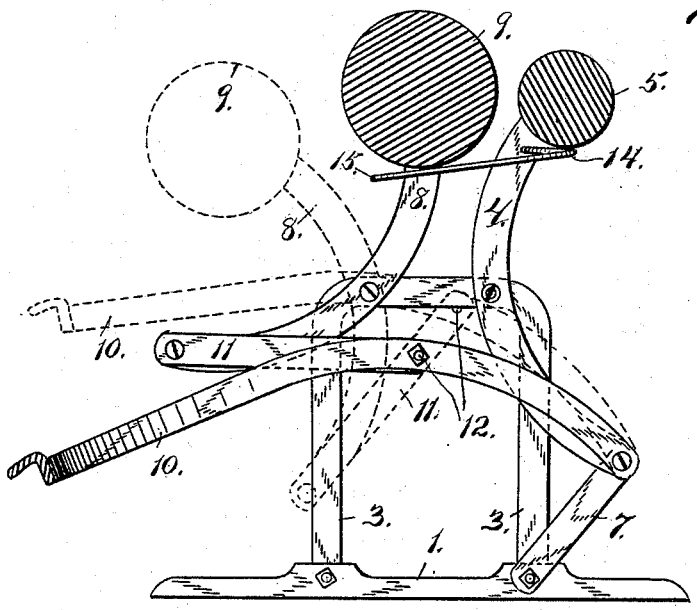

Fig. 2.

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(No Model.) 2 Sheets—Sheet 2.

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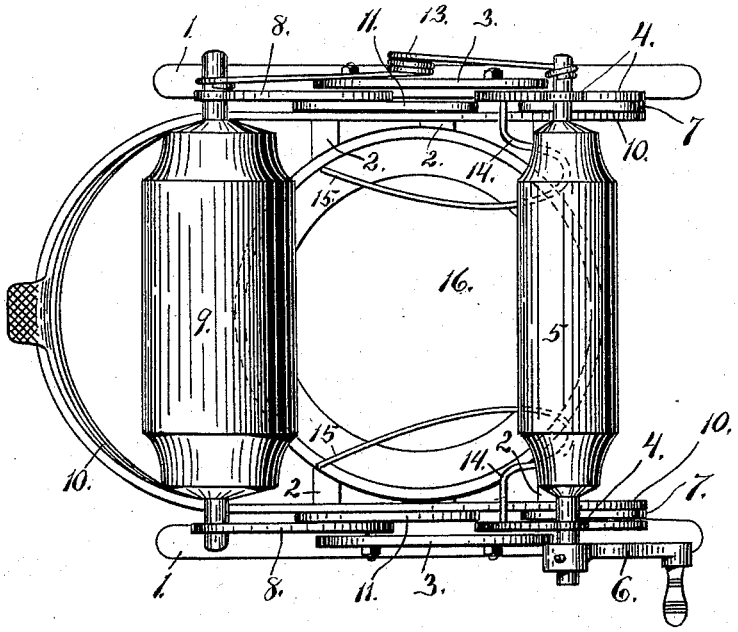

Fig. 3.

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UNITED STATES PATENT OFFICE.

HERMANN KELLER, OF BUFFALO, NEW YORK.

MOP-WRINGER.

SPECIFICATION forming part of Letters Patent No. 526,449, dated September 25, 1894.

Application filed September 8, 1893. Serial No. 485,099. (No model.)

To all whom it may concern:

Be it known that I, HERMANN KELLER, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to that class of mop wringers in which the rolls are pressed together by a foot-treadle its object being to connect the foot-treadle with the rolls by a simple and effective system of leverage.

To that end my invention consists of two rolls between which the mop is compressed, suitably mounted in a framework and adapted to be moved to and from each other by a knee joint interposed between a treadle-frame and the rolls substantially as described. This construction with other details I will now proceed to minutely describe and then claim what I believe to be novel.

In the drawings: Figure 1 is a side elevation of my improved mop-wringer showing the treadle-frame ready to be pushed down and the rolls separated. Fig. 2 is a central vertical section showing the treadle frame depressed and the rolls in close proximity, the open position being shown in dotted lines. Fig. 3 is a top plan view of Fig. 1.

Referring to the drawings, 1. 1. are the sides of the base connected together by the cross-strips 2 upon which the pail rests. Upon the sides 1. 1. are mounted the similar upright frames 3. 3. of any suitable configuration. In the rear upper corners of the frames 3. 3. (see Figs. 1, 2 and 3) are rigidly secured the two upright arms 4 4 between the top ends of which is journaled the smaller roll 5 having the hand crank 6 with which to turn it in its bearings. The upper end of the arm 4 curves upwardly and outwardly and its lower end curves downwardly and outwardly its lower end being connected with the sides 1. 1. of the base by the braces 7. 7. The other pair of curved upright arms 8. 8. are loosely pivoted in the forward upper corners of the frames 3. 3. and have journaled between their upper ends the larger roll 9. A yoke shaped treadle-frame 10 has its rear downwardly curving ends pivoted at the junctions of the arms 4. 4. with the braces 7. 7.

Two lever arms 11. 11. loosely connect the treadle frame 10 at the points 12, 12, with the lower ends of the upright arms 8. 8. forming with the treadle frame what are known as knee-joints on either side.

A wire spring 13 its outer ends connected to the journals of the rolls 5 and 9, serves to assist in the opening of the rolls when the treadle frame is thrown down. Wire guards 14. 14 secured in the upright arms 4. 4. and extending first under the roll 5 and then out and across the space between the rolls when they are separated, serve to guide and hold the mop when it is inserted between the rolls and compressed and wrung out by the same, their outer free ends 15. 15. diverging as shown.

In operation the pail 16 is placed upon the cross-pieces 2 between the frames and the rolls 5 and 9 separated by throwing the treadle-frame up to its highest position as shown in Fig. 1, in which position the lever arms 11. 11. and the lower ends of the upright arms 8. 8. are nearly at right angles with the sides of the treadle-frame but off the center. In this position as the treadle frame is pushed down by the foot (the mop having been previously placed in position between the guards 14. 14.) it carries with it the upper pivoted ends of the levers 11. 11. of the knee-joint causing an outer thrust to be exerted at their lower ends, which are pivoted to the lower ends of the upright arms 8. 8. carrying the roll 9. As this downward movement is continued it throws the roll 9 toward the mop lying against the roll 5 until the levers 11. 11. are nearly in line with the sides of the treadle frame as clearly shown in Fig. 2 in which position a powerful compression is exerted by the rolls upon the mop. The crank 6 is then turned from right to left or in positive rotation causing the mop to be drawn up between the rolls and freeing it of its water which drops into the pail placed beneath.

The positive and powerful action of the knee-joint, as shown, makes my improved wringer an extremely effective one.

The driving roll 5 being of considerably smaller diameter than the driver roll 9 causes the mop to pass up between these rolls much more easily than if the rolls were of equal diameter or the moving roll of smaller diameter than the driver roll, thus enabling the driving roll to move the driver roll without the necessity of cog-wheels.

I claim—

1. A mop wringer consisting of the two similar upright frames 3 3 mounted on either side of a suitable base, the two rolls 5 and 9 journaled between the upper ends of the two pairs of upright arms 4. 4 and 8. 8 the pair of arms 8. 8 being loosely pivoted and the other pair 4. 4. being rigidly secured to the upright frames 3. 3. the treadle frame 10 to operate the rolls pivoted at one end to the rigid upright arms 4. 4. the other pair of pivoted upright arms 8. 8. being pivotally connected to the treadle frame 10 by the intermediate lever arms 11. 11 forming a knee-joint and the crank 6 attached to one of the rolls for turning the same all combined and operating substantially as shown and described.

2. A mop wringer consisting of the two similar upright frames 3 3 mounted on either side of a suitable base, the two rolls 5 and 9 journaled between the upper ends of the two pairs of upright arms 4 4 and 8 8, the pair of arms 8. 8. being loosely pivoted and the other pair 4. 4. being rigidly secured to the upright frames 3. 3. the treadle frame 10 to operate the rolls pivoted at one end to the rigid upright arms 4. 4. the other pair of pivoted upright arms 8 8 being pivotally connected to the treadle frame 10, by the intermediate lever arms 11. 11 forming a knee-joint, the crank 6 attached to one of the rolls for turning the same and the separating spring 13 connected to the rolls 5 and 9 all combined and operating substantially as shown and described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HERMANN KELLER.

Witnesses:
W. T. MILLER,
O. E. HODDICK.