

S. C. LAWLOR.

WRINGER.

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984,819.

Patented Feb. 21, 1911.

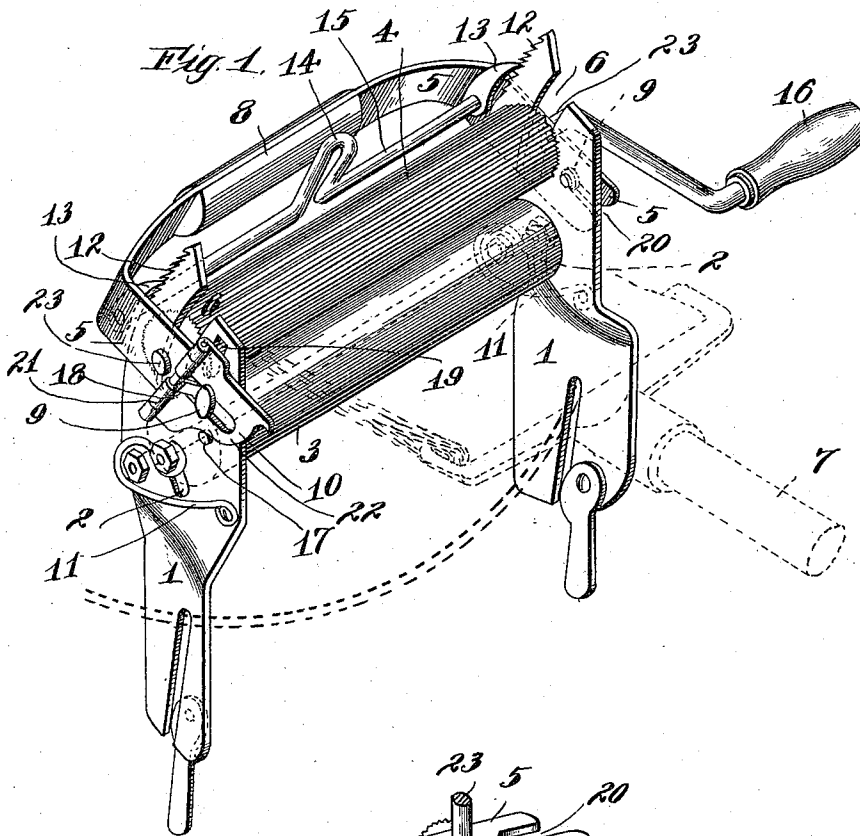


Fig. 2.

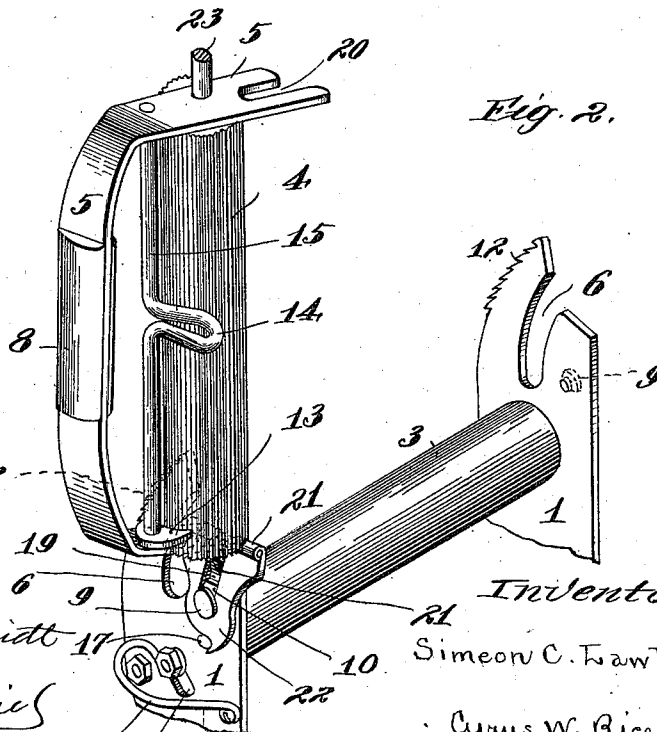
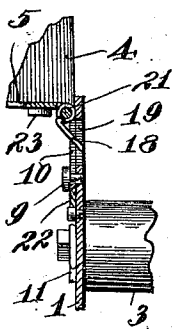


Fig. 3.



Witnesses:

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WRINGER.

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To all whom it may concern:

Be it known that I, SIMEON C. LAWLOR, a citizen of the United States, and a resident of the city of Duluth, in the county of St. Louis and State of Minnesota, have invented certain new and useful Improvements in Wringers, of which the following is a specification.

My invention relates to wringers to wring the water from cloths, etc., and its object is to provide such a wringer that shall be simple and economical in construction and easy of operation. These objects are attained by, and my invention is embodied in, the following described mechanism illustrated by the accompanying drawings, in which—

Figure 1 is an isometric projection of my wringer; Fig. 2 is a like view of a portion of the same showing the rollers in their open position; and Fig. 3 is a detail view showing in vertical section on line 3 of Fig. 2 the hinge 21 and adjacent parts.

In slot bearings 2 in the ends of the frame 1 (adapted to be attached to a bucket, etc., indicated in Fig. 1,) rotate the journals of one wringer roller 3. The journals 23 of the cooperating wringer roller 4 rotate in bearings in an operating lever 5 which is fulcrumed at 9 on the frame. Near its fulcrum on one side of the wringer, the main or handle portion, or roller-carrying member 8 of the operating lever 5 is hinged at 21 to a fulcrum portion or member 22 on an axis transverse to that of the fulcrum and of the rollers. The journals of the roller 4 travel in the open slots or guides 6 in the frame, which guides are so disposed that by pressing the handle 8 downward the journals of the roller 4 are carried by the guides obliquely toward the roller 3, thus imparting greater pressure on the material to be wrung (as a mop carried by the mop-handle 7) than if the rollers were moved toward each other directly. To permit such oblique motion of the roller 4 and to allow the operation of the hinge 21 the operating lever at its fulcrum end is provided with the closed slot 10 and the open slot 20 elongated in the longitudinal direction of the lever, by which slots the lever turns and slides on its fulcrum the lugs 9 on the frame, the lug on which the closed slot bears having a head to prevent the detachment of the fulcrum member 22. Ratchets 12 on the

frame are engaged by pawls 13 (pivoted on the lever and released by the handle portion 14 of the pawl-carrying spindle 15) to retain the roller 4 in a desired fixed position against the pressure of the roller 3 caused by the springs 11 tending to move the journals of the roller 3 in their slot bearings 2 toward the roller 4. One of the rollers (as the roller 4 as shown) is preferably provided with a crank 16 to turn it. A suitable lug or stop 17 on the frame prevents, as shown, the turning of the lever 5 too far when raised on its fulcrum to its highest position on the fulcrum, and to prevent the lever from turning either way on its fulcrum a tongue 18 of the roller-carrying member 8 of the lever is adapted to enter a slot 19 in the frame when such member 8 is raised on its hinge 21 to separate the rollers, the lever being first raised on its fulcrum to its highest position.

My wringer is operated as follows: The operating lever 5 is raised on its fulcrum to its highest position where it is stopped by the lug 17. In this position the journals 23 of the roller 4 are at the open ends of the slot guides 6. The free end of the roller-carrying member 8 is then raised to separate the rollers on the hinge 21 to the position shown in Fig. 2, the journals 23 passing out of the slot guides 6, and the tongue 18 entering the slot 19 locks the lever from turning on its fulcrum. The material is then laid on the roller 3, the free end of the member 8 lowered, the journals 23 entering the slot guides 6, and the lever is then pressed down.

Not confining myself to the details of construction shown further than as set forth in the claims, I claim:

1. In a wringer, the combination of a frame, a wringer roller rotatable in a bearing in the frame, an operating lever fulcrumed on the frame and having a cooperating second roller-carrying member at one end a fulcrum member pivoted to said roller-carrying member on an axis transverse to the axes of the rollers, a cooperating wringer roller rotatable in a bearing in the roller-carrying member, and a guide adapted to carry by the operation of the lever one roller obliquely toward the other roller.

2. In a wringer, the combination of a frame, a wringer roller rotatable in a bear-

ing in the frame, an operating lever fulcrumed on the frame by a bearing sliding transversely the fulcrum axis and having a cooperating second roller-carrying member and at one end a fulcrum member pivoted to said roller-carrying member on an axis transverse to the axes of the rollers, a cooperating second wringer roller rotatable in a bearing in the roller-carrying member, and a guide adapted to carry by the operation of the lever one roller obliquely toward the other roller.

3. In a wringer, the combination of a frame, a wringer roller rotatable in a bearing in the frame, an operating lever fulcrumed on the frame by a bearing sliding transversely the fulcrum axis and having a cooperating second wringer roller-carrying member and at one end a fulcrum member pivoted to said roller-carrying member on an axis transverse to the axes of the rollers, a cooperating second wringer roller rotatable in a bearing in the roller-carrying member, a guide adapted to carry by the operation of the lever one roller obliquely toward the other roller, and a lock to automatically fasten the lever from turning on its fulcrum during the separation of the rollers by the raising of the roller-carrying member on its pivotal connection with the fulcrum member.

4. In a wringer, the combination of a frame, a wringer roller rotatable in a bearing in the frame, an operating lever fulcrumed on the frame and having a cooperating second roller-carrying member and at one end a fulcrum member pivoted to said roller-carrying member on an axis transverse to the axes of the rollers, and a cooperating wringer roller rotatable in a bearing in the roller-carrying member.

5. In a wringer, the combination of a frame, a wringer roller rotatable in a bearing in the frame, an operating lever fulcrumed on the frame and having a cooperating second roller-carrying member and at one end a fulcrum member pivoted to said roller-carrying member on an axis transverse to the axes of the rollers, a cooperating wringer roller rotatable in a bearing in the roller-carrying member, and a curved slot guide so disposed in the frame as to press by the operation of the lever one wringer roller obliquely toward the other wringer roller.

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

SIMEON C. LAWLOR.

Witnesses:

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