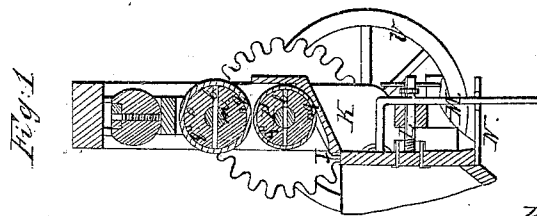
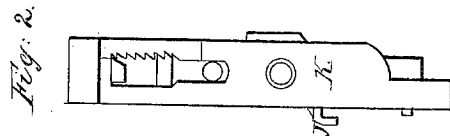
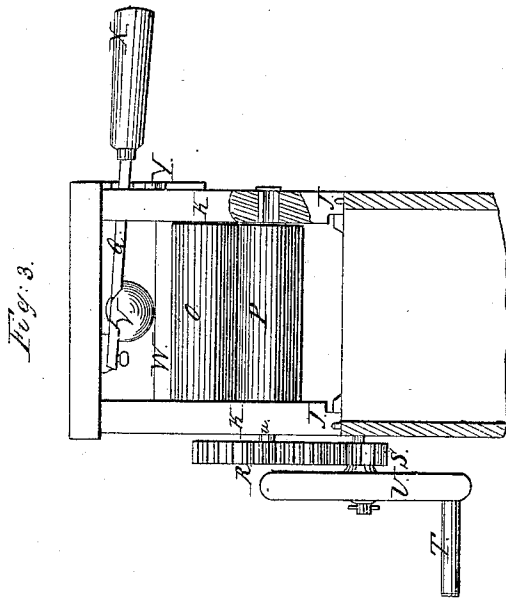


G. Palmer,

Winger,

N^o 61,353.

Patented Jan. 22, 1867.



Witnesses;
W. J. Retchum,
J. B. Adams.

Inventor,
George Palmer,
By his attorneys,
J. B. Woodruff & son

United States Patent Office.

GEORGE PALMER, OF LITTLESTOWN, PENNSYLVANIA.

Letters Patent No. 61,353, dated January 22, 1867.

IMPROVED CLOTHES-WRINGER.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, GEORGE PALMER, of Littlestown, Adams county, in the State of Pennsylvania, have invented certain new and useful improvements in Clothes-Wringers, and the mode of attaching the same to a washing machine or tub; and the following is a full, clear, and exact description of the same, reference being had to the drawings hereto annexed, in which—

Figure 1 represents a cross-section through the clothes-wringer, attached to the end of a washing machine.

Figure 2 shows a detached view of the clothes-wringer frame.

Figure 3 shows a face view of the clothes-wringer, mounted on the end of the washing machine.

The object of my invention is to make clothes-wringers work easy by reducing the speed of the presser-rollers while the crank handle or fly-wheel is turned more rapidly.

My invention consists in making the presser-rollers of different diameters and securing them to the iron rods in shafts by pins, and also placing metal ribs longitudinally in the outer surface of the wood-rolls to prevent the covering from wringing on the cone when covering of any elastic substance is used; the pressure on the clothes being effected by a hand-lever bearing on a rubber volute or other suitable spring, the lever being regulated and held in any desirable position for pressure on the clothes by a rack-bar, so that it can be instantly relieved when a larger or more bulky substance comes in contact with the rolls, whose power is increased by having a large spur gear-wheel on the lower roller and a small pinion on the balance-wheel or crank-shaft. Also, the mode of securing the wringing apparatus to a washing machine's pane, or to a tub, by means of the hooks, screw-clamps, or clamping-levers, and rack-bar.

To enable others to make and use my invention, I will describe it in detail, referring to the drawings and letters thereon.

I make the frame K K of hard wood in the ordinary manner, and secure it to the pane of a washing machine or tub, by having bent hooks J J in the frame to enter into holes in the frame or hook over the edge of the tub so as to stand upright in the proper position to press the clothes through after they are washed. The frame may be secured to a washing machine by a screw-bolt, L, or by a clamping-lever, M, and rack-bar, N, so that it can instantly be removed or replaced. I make my compressing-rollers O and P of tough wood, secured to the iron shafts *m n* by putting pins *ll* through them; they may be covered on their surface with rubber or other elastic substance, which is held from wringing round by inserting in the surface of the wood longitudinal strips of metal, *q q*, with slight projections above its surface. It is desirable that the driving or lower rollers P should be of less diameter than the other, O, and the surface harder; the effect being visible in the operation, it working easier and leaving the clothes dryer than when both of the rolls are alike. Another great advantage is derived by reducing the motion of the rolls O P by having a large gear-wheel, R, on the roller-shaft *n*, to be driven by a small pinion, S, on the crank T, on fly-wheel U, thus giving three or four times the power over those where the crank is attached to the roller-shaft. To adjust and regulate the pressure of the wringer-rollers on the clothes, and to obviate the necessity of using rollers which are very compressible, I use a hand-lever, Q, to which is attached a vulcanized rubber volute or other suitable spring V near its fulcrum *r*, the ball V resting on the bar W, above the rolls; the lever Q being so shaped as to form a catch, it working into the rack Y on the frame K, by which means the pressure can be instantly adjusted to any small thin article, or to a large and more bulky substance, so that the necessary degree of pressure can be easily effected on all of the variety of articles worn or used which require washing.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. Placing ribs of metal longitudinally in hard-wood rollers for clothes-wringers, when covered with elastic substance, substantially as herein set forth.
2. I claim, in combination with clothes-wringer rollers, as described, the pressure-lever Q, ball V, or other equivalent spring, and rack-bar Y, operating as and for the purposes herein specified.

GEORGE PALMER.

Witnesses:

W. J. KETCHUM,
J. B. WOODRUFF.