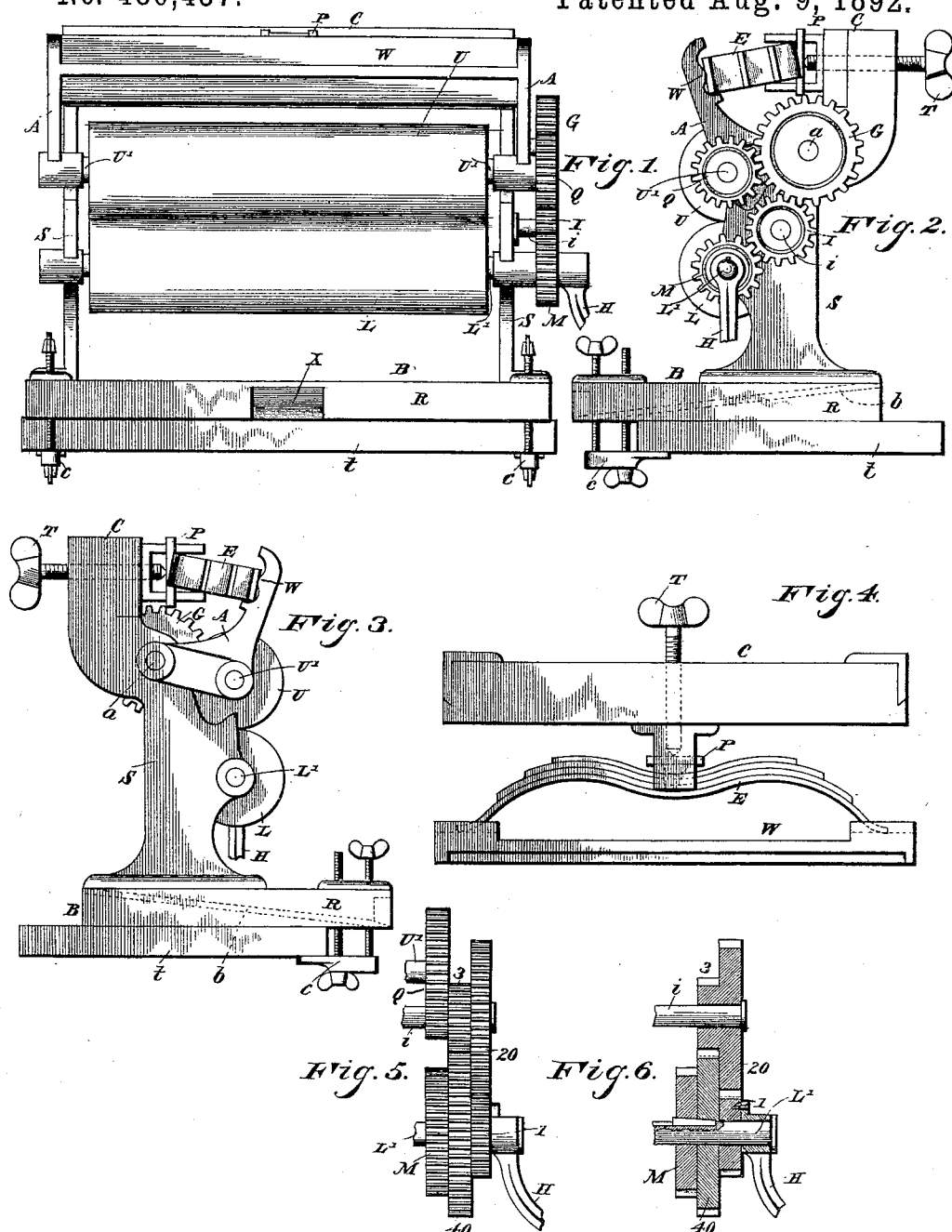


(No Model.)

J. W. FINEGAN.
WRINGING MACHINE.

No. 480,457.

Patented Aug. 9, 1892.



Witnesses;

J. M. Withrow.

N. T. Collamer.

By *His* Attorneys,

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Inventor
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UNITED STATES PATENT OFFICE.

JOHN WILLIAM FINEGAN, OF LOWELL, MASSACHUSETTS.

WRINGING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 480,457, dated August 9, 1892.

Application filed August 7, 1891. Serial No. 401,996. (No model.)

To all whom it may concern:

Be it known that I, JOHN WILLIAM FINEGAN, a citizen of the United States, residing at Lowell, in the county of Middlesex and State of Massachusetts, have invented a new and useful Wringing-Machine, of which the following is a specification.

This invention relates to wringing-machines; and the object of the same is to effect certain improvements in the manner of mounting and actuating the movable roller.

To this end the invention consists in the construction substantially as hereinafter more fully described and claimed, and as illustrated on the accompanying sheet of drawings, wherein—

Figure 1 is a front elevation of this improved wringer. Figs. 2 and 3 are respectively right and left end elevations. Fig. 4 is a detail in plan showing the spring, the two bars, and the screw. Fig. 5 is an edge elevation of the operating-gears adapted to be applied to the device and portions of their supports and shafts, the idlers being omitted. Fig. 6 is a central vertical section of the gears shown in Fig. 5, gear Q being omitted.

Referring to the said drawings, the letter B designates the base from whose ends rise standards S, in bearings of which is journaled the shaft L' of the lower roller L.

A are L-shaped arms pivoted at *a* to the standards S and carrying in their elbows bearings for the shaft U' of the upper roller U.

T is a thumb-screw passing horizontally through a cross-bar C, which connects the upper ends of the standards and bearing at its tip against a plate P, and E is an elliptical or other shaped spring located between this plate and a bar W, which connects the upper ends of the arms A. The said bar W is formed with sockets at its ends, in which the ends of the said spring E are freely located, as fully shown in Fig. 4. By these means the tension of the spring can be regulated, as desired, and such spring turns the arms A around their pivots *a* and forces the upper roller down upon the lower with a yielding pressure. The tip of the screw T bears against a plate P, bearing against the center of the spring E, while the ends of said spring have free movement in the sockets of the bar W, as heretofore described, so that, no matter

how the arms A may rock, the spring always bears properly against the bar.

H is a crank-handle keyed upon the shaft of the lower roller, and this shaft carries the main gear M, which intermeshes with an idle-gear I, journaled on a stub-shaft *i* on the right support S. The idle-gear I intermeshes with another idle-gear G, preferably somewhat larger than the first and which is journaled on one of the pivots *a*, and this large gear intermeshes with the driven gear Q, keyed on the shaft of the upper roller U. The roller-gears M and Q are of such size that they will not strike each other when the rollers are pressed tightly together; yet it will be seen that the two idle-gears cause the rollers to turn in opposite directions and at the same rate of speed.

In Figs. 5 and 6 I have shown a system of power-gears which may be employed when it is desired to exert greater power in turning the rollers. In this case the handle H is connected to a small gear 1, which is loose on the shaft of the lower roller. This gear meshes with a large gear 20, loose on the stub-shaft *i*. This gear has a small gear 3, fast on its hub, which meshes with a large gear 40, that is secured to the main gear M, and said main gear is connected by the idle-gears (not here shown) with the driven gear Q on the upper roller in the same manner as above described. Thus it will be seen that the small gear 1 turns the large gear 20 more slowly, and the hub 3 of this gear turns the large gear 40 still more slowly, thus twice decreasing the speed and hence increasing the power or purchase.

In the present case I have shown the base B as having an inclined bottom *b* and as having raised edges R across its ends and across the lower edge of the bottom *b*, the edge R across the lower side of the bottom being provided with an exit-opening X for the passage of water which may run off the rollers. The device is further shown as secured to a table-top *t* by means of screw-clamps *c* of any approved pattern, and the exit-opening X stands beyond the edge of the table-top, so that the water running off the bottom may fall into a tub beneath. I do not limit myself, however, to the use of this particular base, nor of the other precise details of construction herein described, as considerable change may be

made therein without departing from the spirit of my invention; and the shape, size, and proportion of parts, together with their materials and their ornamentations, are matters of no importance with respect to the principle of the invention.

What is claimed as new is—

In a wringer, the combination of a base, standards rising therefrom, a roller journaled in said standards, a crank-handle on the shaft of said roller, L-shaped arms pivoted at one end to said standards and their other ends connected by a bar extending transversely across the machine, an upper roller journaled in the elbows of said arms, a cross-bar connecting the top of the standards, a set-screw extending horizontally through said cross-bar, a leaf-spring having its ends freely engaging the said bar, extending transversely

across the machine, and arranged in a substantially horizontal position to thereby normally force the roller carried by the said L-shaped arms downward against the roller journaled in the standards, a plate bearing against the central portion of said spring and having the tip of the screw bearing against its face, and means for causing the upper roller to rotate simultaneously with and opposite to the direction of rotation of the lower roller, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JOHN WILLIAM FINEGAN.

Witnesses:

HARRISON W. STREETER,
SIMON B. HARRIS.