J. S. MAUGHLIN & W. C. MARR. Improvement in Wringing Machines. Patented Feb. 27, 1872. No. 124,073. Fig. 1. Fig. 3. Fig. 4.

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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN CLOTHES-WRINGERS.

Specification forming part of Letters Patent No. 124,073, dated February 27, 1872.

Specification describing a new and Improved Clothes - Wringer invented by Joseph S. Maughlin and William C. Marr, of Onawa, in the county of Monona and State of Iowa.

Figure 1 is a side view of our improved machine, partly in section through the tub. Fig. 2 is an end view of the same, partly in section through the line x x, Fig. 1. Fig. 3 is a detail sectional view of the same, taken through the line y y, Fig. 1. Fig. 4 is a detail section of the same. Fig. 5 is a detail view of the crank.

Similar letters of reference indicate corre-

sponding parts.

Our invention has for its object to furnish an improved machine for wringing clothes, which shall be simple and compact in construction, convenient in use, and effective in operation in either capacity; and it consists in the construction and combination of the various parts of the machine as hereinafter more fully described.

A represents a tub, which may be an ordinary wash-tub, or a tub made expressly for the purpose. B are the end-bars or standards of the machine, which are connected together and held in their proper relative positions by rods C. Dare the washing-rollers, which are pivoted to and between the standards B. F is a framework, which straddles the wringing and upper washing-rollers, and slides up and down in guides attached to the standards B, so that the frame F may be pressed down upon the clothes passing between the rollers D to hold them while dirty spots are being rubbed. The frame F is provided with springs f', one end of each of which is securely attached to the frame F, and the other end rests upon one of the guides in which the frame F works, to raise and hold the frame out of the way when not in use. G are the rubber or wringer-rollers, the journals of which work in bearings in the standards B. One of the journals of the lower wringer-roller projects to receive the crank. To the projecting end of the other journal of said lower roller is attached a small gear-wheel, H, the teeth of which mesh into the teeth of the gear-wheel I, which is pivoted to the upper end of a short link or connecting-bar, J, the lower end of which is pivoted to the end of the journal of the lower wringer-roller. The gear-wheel I is formed with an inwardly-projecting rim or

flange, having internal gear-teeth formed upon it, into which mesh the teeth of the small gearwheel K attached to the journal of the upper wringing-roller. L is a spring attached to the standard B, which rests upon the outer edge of the gear-wheel I, to press it forward against the said gear-wheel K, so that the teeth of the gear-wheel K may always mesh into the internal teeth of the gear-wheel I however the upper roller G may rise and fall in adjusting itself to the varying thickness of the clothes being wrung. M are plates interposed between the ends of the wringer-rollers G and standards B, the edges of which are bent inward to slightly overlap the ends of the rollers G to prevent the clothes from working in around the journals of the said rollers G. N are short bars, the lower ends of which rest upon the journals of the upper wringer-rollers G. The upper ends of the bars N are notched to receive the upper rod C, and abut against the lower ends of the short bars O, which are also notched to receive the said rod U. The upper ends of the bars O rest against flanges, shoulders, or other stops formed upon or attached to the upper ends of the standards B. The adjacent ends of the bars NO incline inward, and rest against the outer side of loose collars P, placed upon the rod C, and against the other or inner sides of which rest the outer ends of the springs Q. The inner ends of the springs Q rest against beveled or cam collars R, which are placed upon the rods C, upon opposite sides of the stationary collar S, and are provided with thumb-pieces to enable them to be conveniently turned. The stationary collar S is formed upon or attached to the center of the rod C, and its opposite sides, against which the movable collars or cams R rest, are also made inclined or beveled, as shown in Fig. 1. The tension of the springs Q and the inclination of the bars NO should be so adjusted with respect to each other that the wringer-rollers G will press upon the clothes passing between them with about the same pressure whatever may be the thickness of said clothes, and however said thickness may vary. By this construction, by adjusting the position of the movable cams or collars R the pressure upon the clothes may be varied at will. Upon the outer ends of the projecting journals of the upper washing-roller

D and the wringer-roller G are formed round tenons, having stationary pins passing through their ends. T is the crank, in the end of which is formed a round hole to fit upon the end tenons of the said journals, said crank having grooves or slots formed in it upon the opposite side of said hole, of such a size and depth as to allow the crank to be slipped upon said tenons over the said pins, which pins strike against V-shaped lugs or projections upon the outer side of the crank, as shown in Fig. 5, so that the said crank may carry the said journals along with it in its revolutions. By this construction the crank can easily be shifted from one journal to the other, according as the washer or wringer is to be used, and will be held securely in place when in use. U is a detachable apron, which, when the machine is to be used as a wringer, is hooked upon the central rod C of the frame B C, and rests upon the edge of the tub A to guide the clothes as they pass from the wringer, and cause them to drop into a basket or other receiver placed at the side of the tub. The frame B C is secured in the tub by a cleat, V, attached to the bottom of the tub in a hole or recess, in which the projecting ends of the lowest or base rod C enters, and by the hook or catch W attached to the upper part of the side of the tub A, and which takes hold of the journal of the upper washing-roller D, as shown in Fig. 1. The water is drawn from the tub A, when desired, through the faucet X, which consists of a metallic socket, x¹, screwed into a hole in the lower part of the side of the said tub, and which has a flange

formed upon its outer end, to which is pivoted the stopper x^2 , which is held against the outer end of the socket x^1 by a spring x^3 , as shown in Fig. 2.

Having thus described my invention, I claim as new and desire to secure by Letters Pat-

ent—

1. The sliding-frame F, straddling the wringing-rolls, and provided with springs f' f', combined with standards B B, having guides thereon, as and for the purpose described.

2. The combination of spur-wheel I, having internally-toothed flange, the pinion K, the pinion H, swinging in link J, and the spring L, with standards B and wringing-rolls G, as and for the purpose described.

3. The wringing-rolls G G and standards B B, combined with intermediate plates M M, bent to overlap ends of rolls and prevent access of the clothes to the journals of said rolls.

- 4. The combination of standards BB, hooked at top, the notched bars O N, loose collars P P, rod C, springs Q, cam-collars R R, and stationary collar C, to vary pressure upon the clothes.
- 5. The crank T, having round hole in end, grooves on opposite sides of hole, and projections on its outer side, so that it may be placed on the wringer-journal and operate therewith, in the manner described.

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Witnesses:

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