T. G. U. FISK. Improvement in Clothes-Wringers.

No. 128,294. Patented June 25, 1872.

Fig. 1.

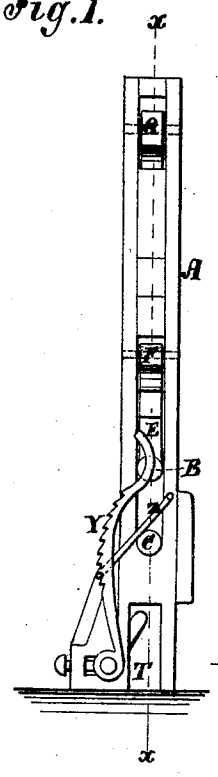


Fig. 2.

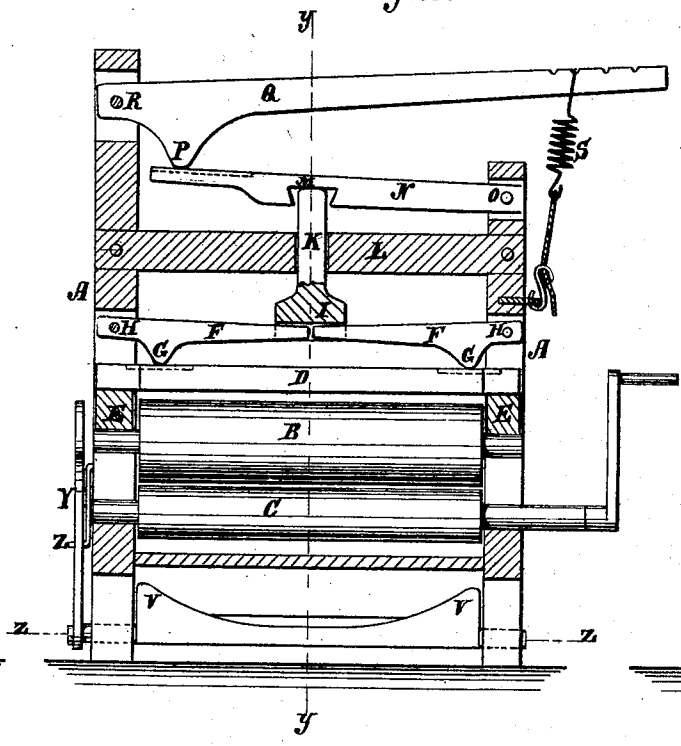


Fig. 3.

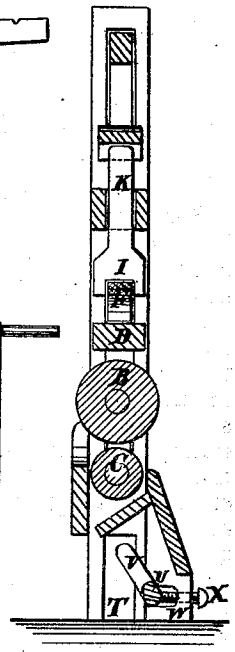
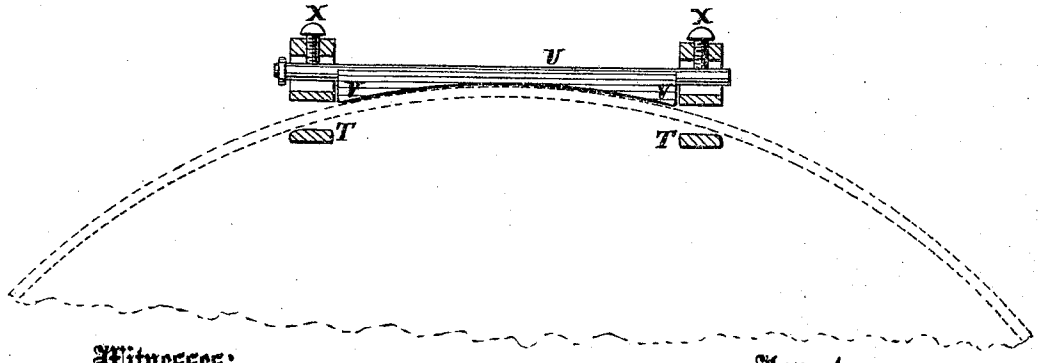


Fig. 4.



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UNITED STATES PATENT OFFICE.

THOMAS G. U. FISK, OF MACON CITY, MISSOURI.

IMPROVEMENT IN CLOTHES-WRINGERS.

Specification forming part of Letters Patent No. 128,294, dated June 25, 1872.

Specification describing a new and Improved Clothes-Wringer, invented by THOMAS G. U. FISK, of Macon City, in the county of Macon and State of Missouri.

My invention consists of a novel arrangement of levers and a weight or spring with the rollers, whereby the requisite pressure is obtained on the rollers and at the same time such a wide range of movement of the one roller toward and from the other is allowed that the action is alike, or nearly so, upon small quantities or large masses of clothes; and the increased pressure common to rollers governed by screws and the springs of the common arrangements, by which so many rollers are burst, is avoided, and thus the necessity of gearing the rollers together by cogs is avoided.

My invention also consists of a long cam-shaped clamping-roller, combined with the frame in such manner as to fasten the frame to the tub readily, said roller being provided with a notched lever and a hook for fastening it to cause the said roller to bind the tub and frame together, all as hereinafter described.

Figure 1 is an end elevation of my improved wringing-machine. Fig. 2 is a sectional elevation taken on the line *x x* of Fig. 1. Fig. 3 is a sectional elevation taken on the line *y y* of Fig. 2; and Fig. 4 is a horizontal section on the line *z z* of Fig. 2.

Similar letters of reference indicate corresponding parts.

A represents the housings of the frame, and B and C represent the rollers. The upper roller, like those of other wringing-machines, has its journals arranged in slots in the housing to rise and fall. For pressing this roller downward, I arrange the beam D above it, with its end entering the slots of the housings and having a bearing-block, E, at the under side of each end, resting on the top of the journals; and also this bar I arrange two short levers, F, with cam-shaped projections, G, on the under sides, bearing on the top of said beam, the said levers being pivoted in the slots of the posts at one end, as shown at H, and the other end meeting at the center of the space between the housings, under the lower end I of a vertical push-bar, which latter works up and down through a mortise in a permanent beam, L, of the frame of the machine. The upper end of this bar enters a transverse under-cut notch M of a long lever, N, pivoted to one of the housings at O and extending across to the other housing, where the cam-shaped projection P of another lever, Q, bears on it, said lever Q being pivoted to the housing at R and extending across and beyond the other housing, where a coiled spring, S, is connected to pull downward and cause a downward pressure on the upper roller through the medium of the levers. The lower end of said spring is connected to the frame of the machine. The end connected to the lever is adapted to shift toward or from the fulcrum, to vary the pressure. This arrangement allows a wide range of movement for the upper roller without materially varying the pressure, so that when the quantity of clothes passing between the rollers increases they will not be subjected to great pressure and locked, so that the one not geared to the one having the crank will be stopped as when the range of the spring is but short and often broken or burst open, as is often the case. A weight may be substituted for the spring S. The notch M is undercut in the manner shown to prevent the upper end of bar K from cramping in it, as the lever vibrates on it. I may dispense with the lever N by having the pivot P set directly on the top of bar K, suitably broadened for the purpose, or I may lengthen lever N and attach the spring to it, so as to dispense with lever Q. Instead of the set or clamp-screws commonly used with the slotted lower ends T of the frame, for fastening on the top of the tub, I propose to use an eccentric or cam-shaped roller, V, for binding against the tub when the part V is turned against it, as shown in Fig. 3; and I mount the journals of it in slotted bearings, W, with set-screws acting against them, to adjust the roller to tubs of different sizes or thickness of the staves. This roller has a notched lever, Y, for pressing it against the tub, and a hook, Z, is provided for holding it. I prefer to make the upper roll the largest, on account

of its being turned by friction, as it turns easier thereby.

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

1. The combination in a clothes-wringer of a cam-shaped roller, V V, notched lever Y, and hook Z, as and for the purpose set forth.

2. The combination, with roll B, of the blocks E, beam D, cam-levers F G, slide I K, beam L, notched lever M N, and spring cam-lever P Q, as and for the purpose set forth.

THOMAS G. U. FISK.

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