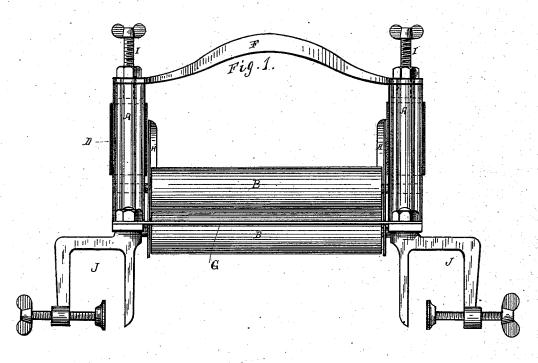
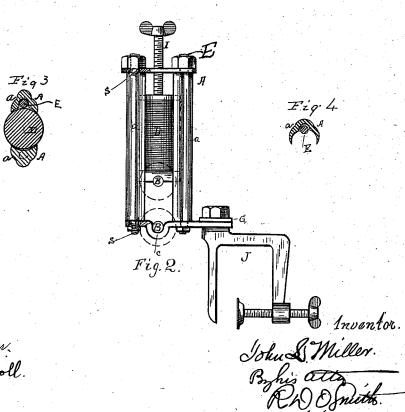
## J. L. MILLER.

WRINGER.

No. 381,158.

Patented Apr. 17, 1888.





Attest. J. C. Tinner. F. H. Ingersoll.

## UNITED STATES PATENT OFFICE.

JOHN L. MILLER, OF YORK, PENNSYLVANIA.

## WRINGER.

SPECIFICATION forming part of Letters Patent No. 381,158, dated April 17, 1888.

Application filed November 1, 1884. Serial No. 146,986. (No model.)

To all whom it may concern:

Be it known that I, John L. Miller, of York, in the county of York and State of Pennsylvania, have invented new and useful Im-5 provements in Clothes-Wringers; and the following is a full and accurate description of the

In the accompanying drawings, Figure 1 is a perspective view of my wringer. Fig. 2 is 10 an end elevation of the same. Figs. 3 and 4 are details showing modifications of construc-

The frame of my wringer I prefer to make of iron protected by a coating of zinc, ordi-15 narily called "galvanized iron." The principal parts are the posts A, each of which is composed of two parallel sections, a a, concave within and standing opposite each other, so as to constitute a post with a vertical slot 20 in the inner side to admit the journals of the rollers BB. The post A may be made separate from said saddle and secured thereto by bolts or screws, as in Figs. 2, 3, and 4. There will then be a longitudinal slot along the inner 25 face, and it is desirable to make the post with a corresponding slot on the outer side also, because then separate patterns for the right and left hand posts will not be required. The saddle c serves as a bearing for the journal of the 30 lower roller. The post A, having the sections a a concave on their inner sides, constitutes a hollow post, within which the cylindrical solid rubber spring D may be placed to produce the requisite pressure with elasticity, and being 35 so completely inclosed, protected, and supported by the post A the spring D will be rendered as durable as any other part of the

structure. The sections a a may be cast each with a stud 40 or spurs, at each end, to pass through the

saddle and arch, respectively, and receive a nut, or an ordinary machine-screw passing into a screw-socket in said section may be employed; or, better still, a tie bolt, E, may pass down from the ends of the arch F and through the 45 saddle c, thus binding the whole together. In Fig. 3 one side shows the tie-bolt and the other side shows a solid section to receive the machine-screw or be provided with the studs.

The arch F connects the posts A at their 50 tops, and a plate, G, secured at its ends to the saddles c, similarly unite the posts at their bottoms.

The shield-plates H prevent the edges of clothes from getting over the ends of the roll- 55 ers as they pass through.

Screws I serve to regulate the tension of the

springs D. There is a swinging clamp, J, pivoted to a lateral extension of the saddle c, at each end of 60 the wringer, by means of which attachment

may be made to the edge of the tub.

Having described my invention, I claim-1. A wringer-frame composed of posts A A, whereof each is composed of two concave sec- 65 tions, a a, secured at top and bottom to archplate F and saddle c, respectively, as described, combined with rollers B B and the solid rub. ber springs D, incased within said posts, and with the adjusting screws I, as set forth.

2. A wringer-frame composed of the posts A A, each composed of concave sections a a; the connecting plates F G, saddles c c, combined with the bolts E, rollers B B, springs D D, and tension screws I, as set forth.

J. L. MILLER

Witnesses:

R. Hoffheins, J. A. METZELL.