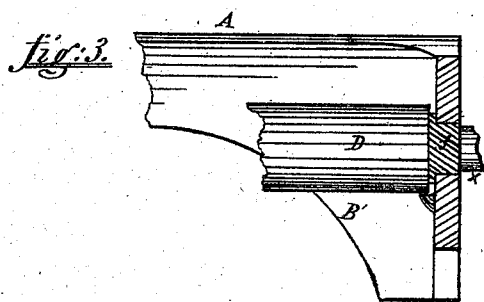
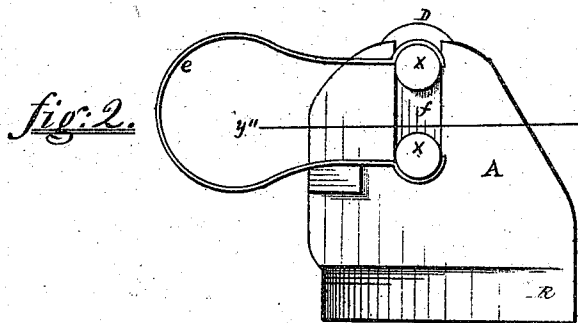
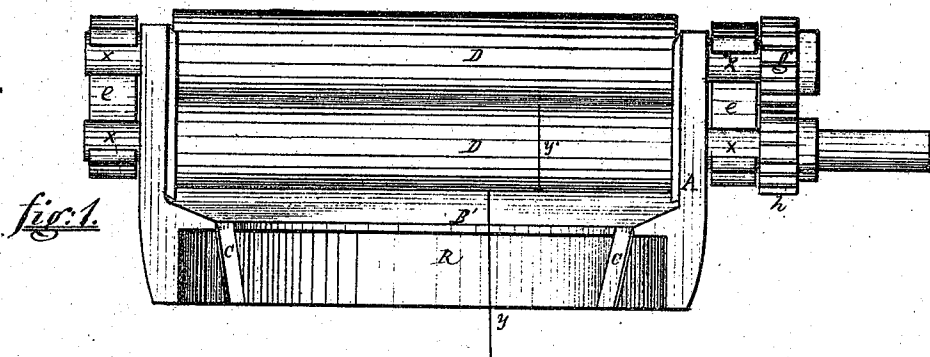


C. H. De Knight,

Winger.

No. 106,136.

Patented Aug. 9. 1870.



Witnesses

A. C. Johnston
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United States Patent Office.

CHARLES H. DE KNIGHT, OF PITTSBURG, PENNSYLVANIA.

Letters Patent No. 106,136, dated August 9, 1870.

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, CHARLES H. DE KNIGHT, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Clothes-Wringer; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of my invention consists in so constructing the base of the frame of a clothes-wringer that it shall be provided with a flange, which forms an arc of a circle corresponding to the exterior and top edge of the ordinary wash-tub, and combining with said flange another flange, which projects at a right angle inward over the top edge of the wash-tub, said inward-projecting flange being provided with spring clamps, which, in combination with the flange which is adapted to the exterior and top edge of the tub, are used for the purpose of holding the wringer in position upon the tub.

My invention also consists, in combination with the above, of guides and bearings, rollers, gearing, and springs, constructed, arranged, and operating substantially as hereinafter described.

To enable others skilled in the art to make and use my invention, I will proceed to describe more fully its construction and operation.

In the accompanying drawing, which forms part of my specification—

Figure 1 is a front elevation of my improvement in clothes-wringer.

Figure 2 is an end view of the same.

Figure 3 is a section of the frame, a roller and its guide or bearing at lines $y y'$ and y'' .

In the accompanying drawing—

A represents the frame of the clothes-wringer, which is provided with a flange, R, which forms an arc of a circle, and adapted to the exterior and top edge of the ordinary wash-tub.

B' represents a flange, which projects from the flange R inward over the top edge of the wash-tub; the upper surface of the flange B' is inclined, so that the water falling from the rollers D upon it will flow back into the tub.

To the flange B' are attached two spring clamps, C, which, in combination with the flange R, are used for the purpose of holding the frame upon the wash-tub.

D represents ordinary rollers used in wringers; the axis x is constructed of iron or brass, and the surface used for wringing covered with "India rubber," known as "vulcanized rubber."

The rollers D are pivoted in guides or bearings f , which are arranged in the frame so as to move up and down in it.

On the axis x of the rollers are gear-wheels g and

h , which are used for the purpose of imparting motion to the rollers D.

To the axis x of the rollers are attached springs e ; the form of their construction and the manner of securing them to the axis of the rollers, and their action upon them, will be readily understood by reference to figs. 1 and 2.

The crank for turning the rollers is attached to the axis of the lower-roller, and the rollers are operated and manipulated in the usual manner for wringing clothes with a wringing-machine.

The frame A may be made of cast-iron, and coated with zinc or tin to prevent it from oxidizing.

By constructing the frame for a clothes-wringer in the manner hereinbefore described, it can be made very light, strong, and durable, its peculiar form being well adapted to being easily molded, forming what is known and termed among molders as "plain casting."

The ease and facility of molding the frame and lightness of it will enable the manufacturer to furnish the public with a cheap, strong, and durable frame for clothes-wringers, the value and importance of which will appear in view of the fact that the frame of clothes-wringers is very liable to become wrecked and impaired by the strain thrown upon it by the clothes passing between the rollers under heavy pressure.

A frame constructed as herein described will be easily and securely held upon the tub, and can be removed from it with ease and facility, it not being necessary to work and manipulate either screw or levers so common in clothes-wringers.

Another very important advantage obtained by constructing the frame as hereinbefore described consists in preventing the water, which is pressed from the clothes, from dripping down on the outside of the wash-tub, which dripping wets the dress of the washer and floor of the wash-house, two things that are very annoying to the good house-wife and very trying upon the patience, and always increase her labor.

Having thus described the nature, construction, and operation of my improvement,

What I claim as of my invention is—

1. The frame A, the base of which conforms to the outer surface and top edge of the tub, over which projects a flange, B', to which is attached clamp C, the whole being constructed, arranged, and operating as herein described, and for the purpose set forth.

2. In combination with the above, the arrangement of the rollers D, guides and bearings f , and springs e , constructed, arranged, and operating as herein described, and for the purpose set forth.

Witnesses: C. H. DE KNIGHT.

A. C. JOHNSTON,
JAMES J. JOHNSTON.