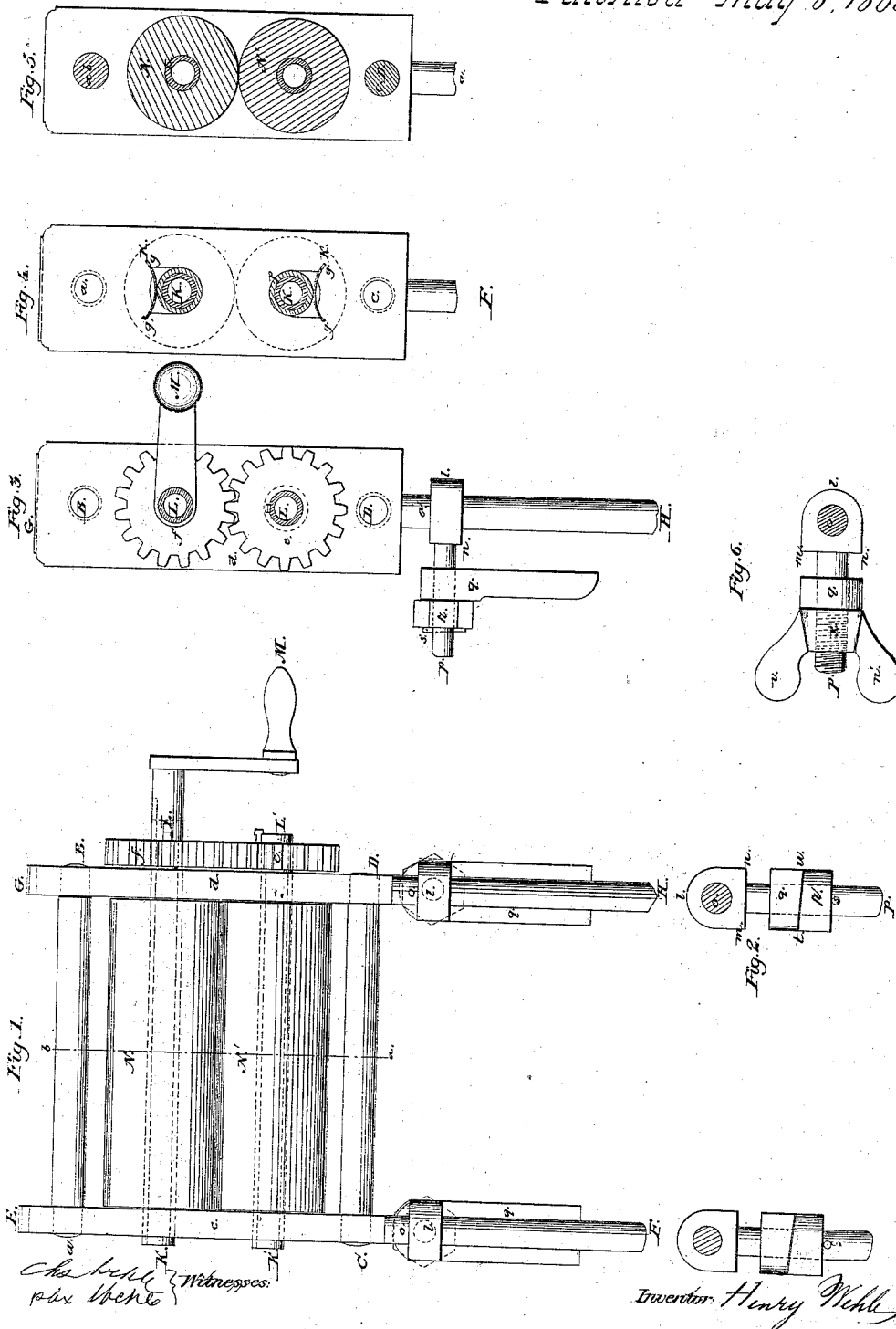


H. Wehle,

Wringer,

N^o 54,631.

Patented May 8, 1866.



UNITED STATES PATENT OFFICE.

HENRY WEHLE, OF HOBOKEN, NEW JERSEY.

IMPROVED CLOTHES-WRINGER.

Specification forming part of Letters Patent No. 54,631, dated May 8, 1866.

To all whom it may concern:

Be it known that I, HENRY WEHLE, of the city of Hoboken, in the State of New Jersey, have invented an Improved Clothes-Wringer; and I do hereby declare that the following is a full and exact description of the construction and operation thereof, reference being had to the accompanying drawings, forming part of this specification, and the letters of reference marked thereon.

The same letters denote the same parts in all the figures.

Figure 1 represents a longitudinal view of the clothes-wringer. Fig. 2 shows one of the constructions of the improved clasps or fasteners whereby the wringer is fastened to the wash-tub. Fig. 3 represents a side view showing the operation of the wheels *e f* and the improved clasp or fastener. Fig. 4 represents a side view showing the friction-boxes *h* and the operation of the springs *g g'*. Fig. 5 is a transverse section of the machine. Fig. 6 shows another construction of the improved clasps or fasteners.

A B C D E F and G H is the frame of the machine, and is formed by the two horizontal side pieces, E F and G H, and the two vertical rods A B and C D. N N' are the india-rubber rollers which rest in the frame. K L are the shafts of the rollers. *e f* are two cog or gear wheels attached to the rollers. M is the crank. *g g'* are strong metal springs. *h* are the friction-boxes. *o* is the lower part of one of the perpendicular side pieces. *l m n p* is the link, with a ring, *l m n*, on its end, by which it turns around *o*. *q* is a washer with a longitudinal extension. *r* is a smooth nut; *s*, the pin that holds the smooth nut *r* on the link. *x v w*, Fig. 6, is a screw-nut.

The shaft K L is a cylindric metal pipe, that of galvanized iron being best adapted for the purpose, because the outer surface of galvanized-iron pipe is rifted and fissured. On both ends the shaft is turned off in a lathe, so as to form smooth axles on the ends: The india-rubber properly hardened is then put around the shaft in the usual manner, cemented on it with india-rubber cement or some similar substance, and the cement, locating itself in the rifts and fissures of the outer surface of the shaft, will attach the india-rubber to the shaft in a very firm manner.

The axles run in the friction-boxes *h*, and the friction-boxes may be so constructed that they cover the tube-holes of the shaft, (not shown in the drawings.)

When the rollers are put in the frame the wheels *e f* are attached, the shafts being left sufficiently long to attach the wheels thereon.

On one of the shafts the crank M is attached; or, if it is desired to work the machine by steam or other mechanical power, a pulley of the usual construction may be attached.

There are four springs, *g g'*, two to each roller. They press on the friction-boxes *h*, and thereby operate on the rollers, and by means of these springs the rollers become self-adjustable.

When an article is to be wrung out, it is inserted between the two rollers N N', which are set in motion by the crank M and wheels *e* and *f*. The cloth or linen will, on going through the rollers, receive the united pressure of the four springs, and if the article is very thick it will force the rollers in an opening direction. The springs will, adjusting themselves to the rollers, slightly stretch in the direction of *g'* to K, still retaining and exercising on the rollers their spring-power. As soon the pressure of the cloth or linen against the rollers N is lessened the springs will resume their original position.

The construction of the improved clasp or fastener, as shown in Fig. 2, is as follows: Around *o*, the lower end of each one of the side pieces, goes the ring *l m n*, carrying with it the link *l m n p*. Around this link goes the longitudinal washer *q*. The outer surface of this washer, on the side where it is joined by the smooth nut *r*, is an inclined plane corresponding to the inclined plane of the smooth nut *r*, which nut is supported on the link *l m n p* by the small pin *s*.

When the wringer is placed on the wash-tub the staves or side of the tub will come between the lower parts, *o*, of the side pieces and the longitudinal washers *q*. If the smooth nuts *r* are then turned in the direction of *t* to *u* they will, by reason of the elevation of the washers at *u* and the elevation of the nuts at *t*, press the washers *q* toward the staves or side of the wash-tub, and thus hold the wringer tightly attached to the tub. If it is desired to remove the wringer from the wash-tub, the

smooth nuts *r* need only to be turned backward and the wringer will be loose.

The other construction of the clasps or fasteners, as exhibited in Fig. 6, varies only a little from the above-described.

The links *l m n p* are, on their ends near *p*, screw-tapped. The washers *q* have not inclined planes, and instead of using the smooth nuts *r*, with the pins *s*, the screw-nuts *x v w* are applied. The operation of these screws and nuts is in the usual well-known manner, and does not need to be described.

The side pieces and rods may be from wood or metal, or partially wood and partially metal. The wheels and the fasteners or clasps should be from metal.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The hollow metallic shafted rollers *K L*,

substantially as herein described, and for the purpose specified.

2. The mechanism for fastening the clothes-wringer to the wash-tub, as shown in Fig. 2, consisting of the links *l m n p*, the longitudinal washer *q*, the smooth nut *r*, and pin *s*, substantially as described, and for the purpose specified.

3. The mechanism for fastening the clothes-wringer to the wash-tub, as shown in Fig. 6, consisting of the link *l m n p* and the washer *q*, in combination with the nut *x v w*, substantially as described, and for the purpose specified.

HENRY WEHLE.

Witnesses:

CHAS. WEHLE,
ALEX. WEHLE.