(Model.)

S. HUFFMAN.

Clothes Wringer.

No. 234,577. **Patented Nov. 16, 1880.**

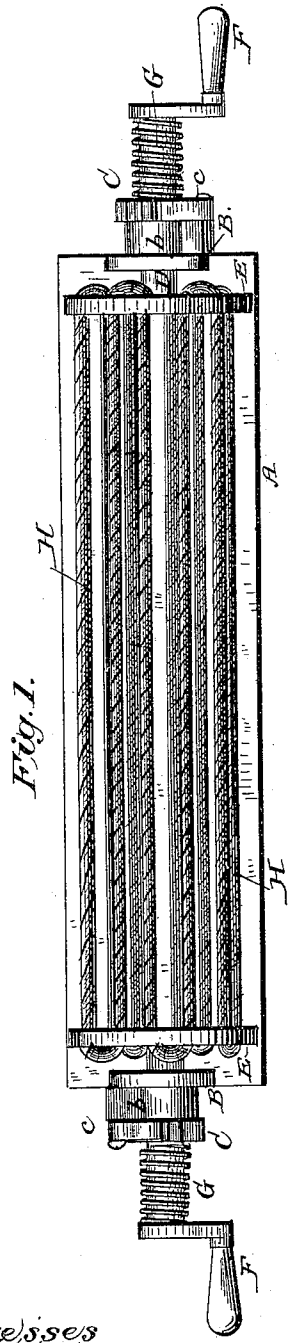


Fig. 1.

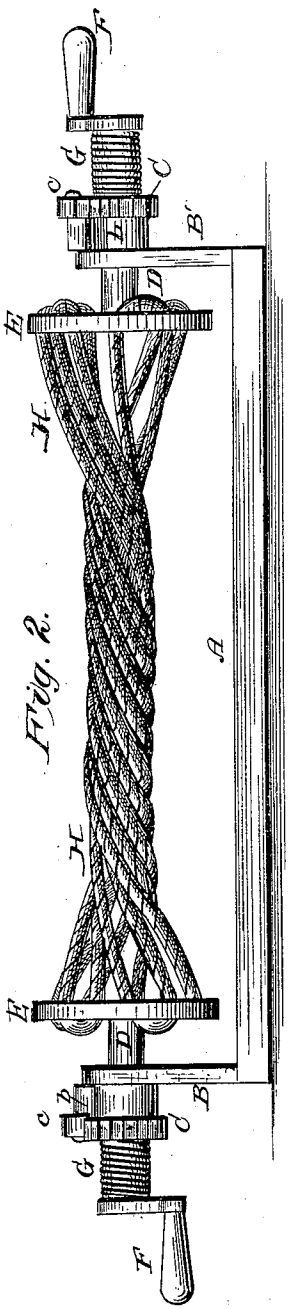


Fig. 2.

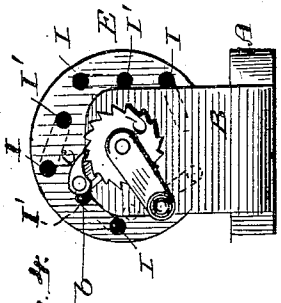


Fig. 4.

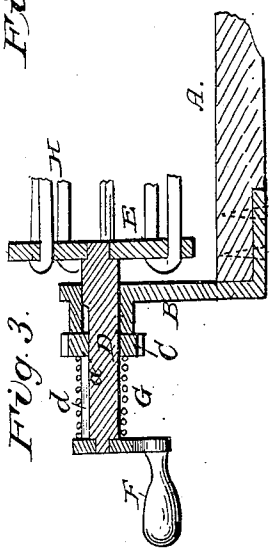


Fig. 3.

Witnesses
Fred. G. Dieterich
Albert F. Krause

Inventor
Samuel Huffman

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

SAMUEL HUFFMAN, OF MATANZAS, KANSAS.

CLOTHES-WRINGER.

SPECIFICATION forming part of Letters Patent No. 234,577, dated November 16, 1880.

Application filed April 12, 1880. (Model.)

To all whom it may concern:

Be it known that I, SAMUEL HUFFMAN, of Matanzas, in the county of Chautauqua and State of Kansas, have invented a new and useful Improvement in Clothes-Wringers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, in which—

Figure 1 is a plan view, showing the machine ready for use. Fig. 2 represents a side elevation; Fig. 3, a section of a portion of the device; and Fig. 4 is an end view, in which a side view of stop-wheel and head-plate with its perforations to receive the cords is shown.

In constructing my machine I secure to the base A two uprights, B B, provided with a sufficient thickness *b* to give bearing to the shaft D, through which shaft D moves when in use.

Shaft D has a head-plate, E, secured to one end and supports a crank, F, spring G, and the stop-ratchet C, as shown in Figs. 1, 2, and 3.

A pawl, *c*, is pivoted to the upright B at *b*, and prevents the head-plate from moving in a reverse direction from its ordinary movement by resting in the ratchet-wheel C. (Shown in Fig. 4.)

The head-plate E is secured to the end of shaft D, and is caused to rotate by turning crank F, thereby causing the cords H to wind around and compress and twist the clothes at the same time.

The two uprights and their connections are constructed alike. Therefore in describing one I describe the other, one being a duplicate of the other.

My wringer is so constructed as to allow the head-plates E and cords H to be rotated in the opposite direction from that in the act of wringing, and by this backward motion the clothes will roll and become more closely compact, thereby allowing the cords to cover and wring them better, which is a very essential motion when in practical use. The head-plates E E have cords woven through the perforations, as shown in Figs. 1, 2, and 3. The perforations I and I′ are shown in Fig. 4.

Fig. 1 represents the machine as ready to receive the clothes, and Fig. 2 shows the machine when in the process of wringing.

The perforations in plate E are in two concentric series, one series being nearer the center and another nearer the circumference of plate E. (Shown in Fig. 4.) The cords H form a double cylinder, one nearer the center than the other, and in wringing clothes the inside cylinder or circle of cords, I′, closes on the goods first, and the second circle of cords, I, closes in upon the goods filling the space between the cords I and compresses the portion of goods protruding through the space between the cords I′. This is a new feature in my machine.

The shaft D is provided with a groove, *d*, lengthwise in which the feather *a* in the ratchet-wheel C (shown in Fig. 3) rests while shaft D moves, but turns with shaft D, causing wheel C to rotate in the act of wringing. The feather in the ratchet-wheel is held by the groove in shaft D and attached firmly to the inside of ratchet-wheel C. The ratchet C is caused to slide on shaft D by the feather *a* resting in groove *d*.

When the machine is winding, as shown in Fig. 2, the cords winding into a rope shortens the space between the head-plates E E and causes them to move nearer to each other. This causes the shafts D D to move with the plates E E, while the uprights B hold the ratchets in place, and also the springs G, causing springs G to condense by compression between cranks F and ratchets C. When the motion of shaft D is reversed the springs G open or expand and draw shaft D and plates E back to the position shown in Fig. 1, thus adjusting the machine for receiving or giving out material.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a clothes-wringer, the two head-plates E, each perforated with holes in two concentric series, the holes of one series being nearer the center of the plate than those of the other series, in combination with the cord H, secured to said head-plates, substantially as described.

2. In a clothes-wringer, the combination of the cord-carrying head E, the rotating and sliding shaft D, to the inner end of which the

head is fixed, the ratchet-wheel C, feathered on said shaft, the pawl *c*, pivoted on the fixed standard B, and the spring G, mounted on the shaft between the crank F on its outer end and the wheel, all substantially as described.

3. The clothes-wringer consisting of the standards B, secured to the base A and supporting the rotating and sliding shafts D, having on their inner ends the head-plates E, connected by the cords H, the ratchet-wheels C, feathered in grooves in said shafts, the oppositely-acting pawls *c*, pivoted on the standards and engaging the wheels, and the coiled springs G, mounted on the shafts between their cranks F and said wheels, all substantially as described.

SAMUEL HUFFMAN.

Witnesses:
WM. R. CHIPLEY,
W. READ.