C. H. Amidon,

Wringer,

No. 36,761. Patented Oct. 28, 1862.

Fig. 2

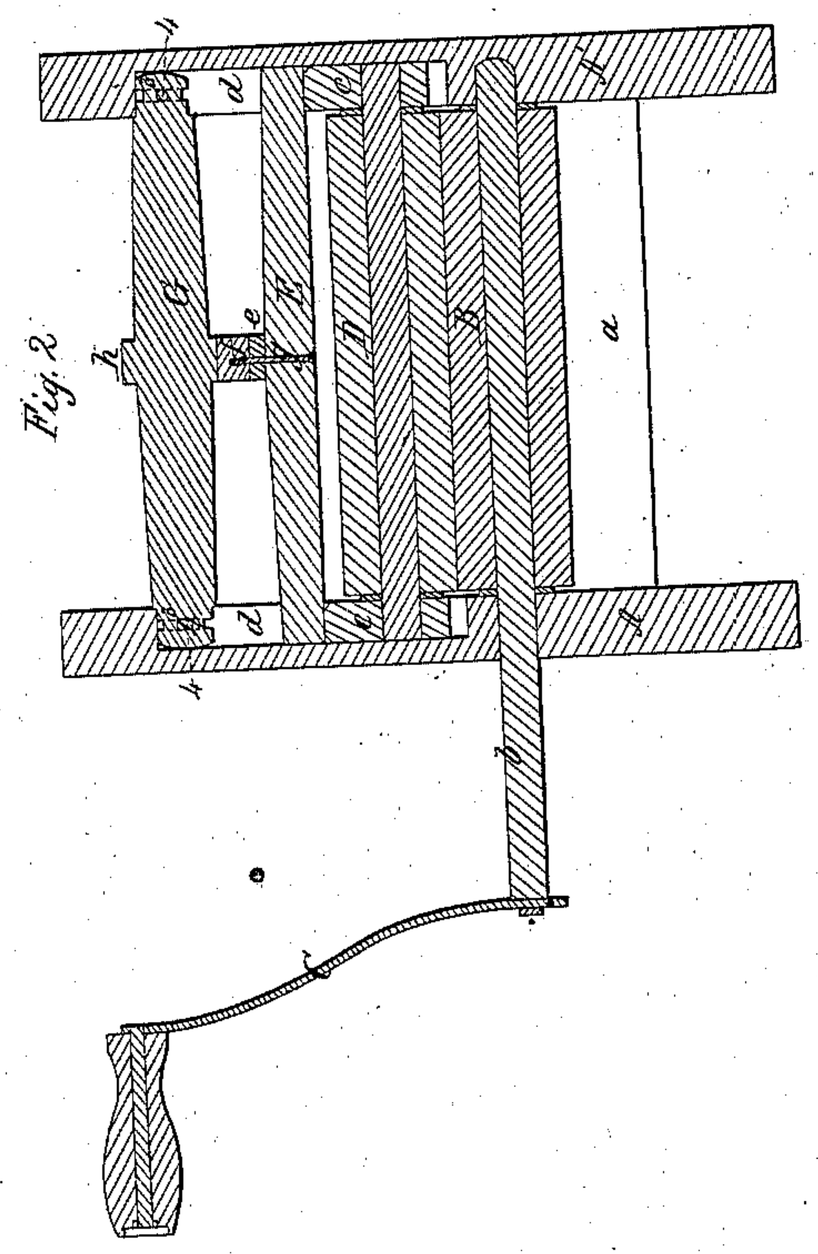
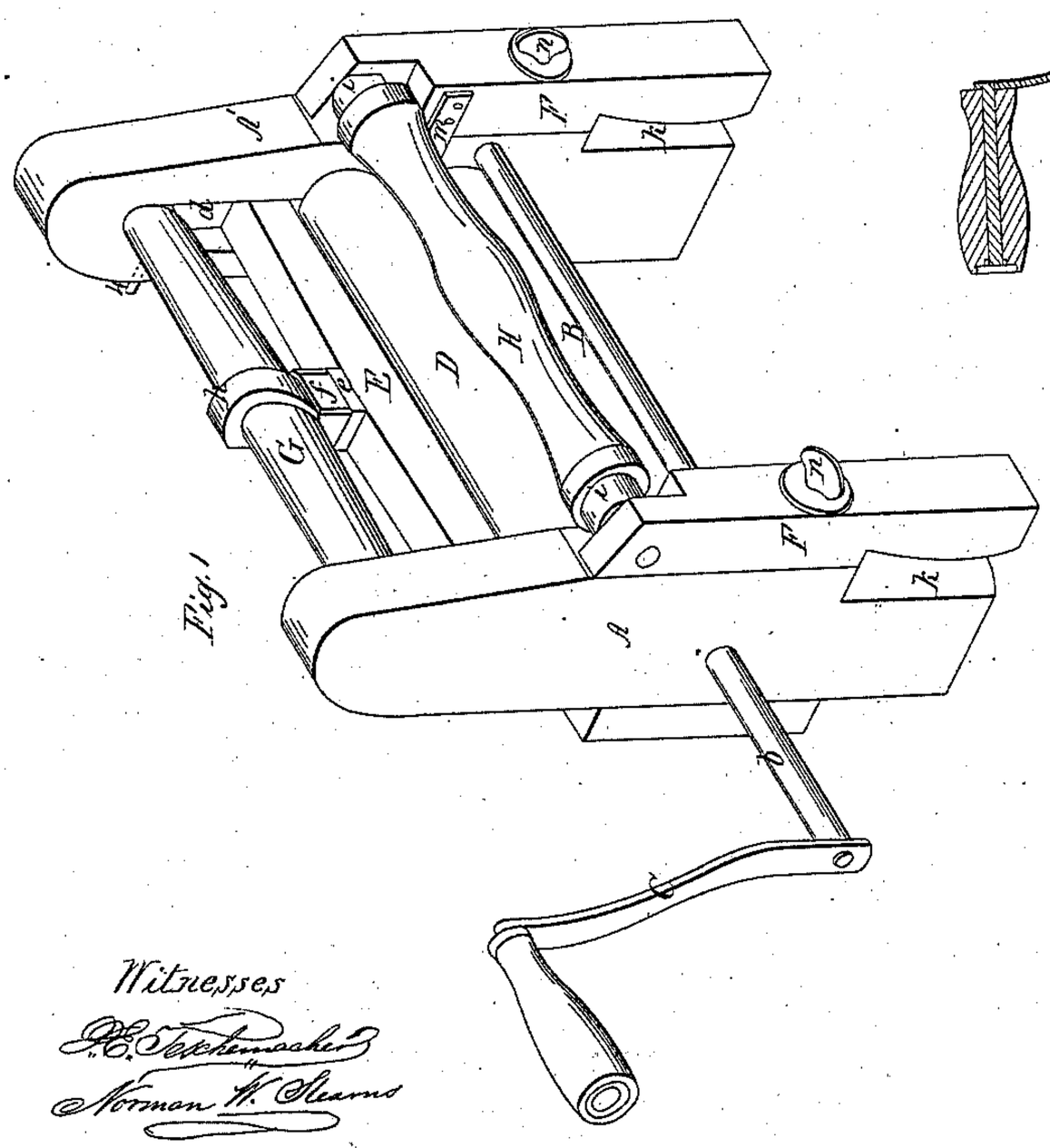


Fig. 1



Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES H. AMIDON, OF GREENFIELD, MASSACHUSETTS.

IMPROVED WRINGING-MACHINE.

Specification forming part of Letters Patent No. **36,761**, dated October 28, 1862.

To all whom it may concern:

Be it known that I, CHARLES H. AMIDON, of Greenfield, in the county of Franklin and State of Massachusetts, have invented certain Improvements in Clothes-Wringing Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view of the machine; Fig. 2, a longitudinal vertical section through the middle of the machine.

My invention consists in the manner in which I arrange the cam, block, and spring in connection with a turning shaft that acts as shaft and brace both, and with a rising and falling cross-bar that conveys the pressure to the wringing-roll, so that said roll may yield freely at either end without undue pressure at the other end.

That others skilled in the art may understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings, A A′ are two standards, held together near the lower end by a wide brace, *a*. The lower roll, B, has permanent bearings, and is revolved by a crank, C, on its shaft *b*. The upper roll, D, has the bearings of its shaft in movable boxes *c*, which are free to rise and fall in recesses *d* in the standards. A rigid bar, E, rests on the boxes *c*. A rubber spring, *e*, and a block, *f*, are attached to the middle of this bar E by a screw, *g*. A shaft, G, rests at each end in the recesses *d*. It has a cam, *h*, formed on it which bears on the block *f*, so that by simply turning this shaft more or less pressure is applied to the spring *e* and through the bar E to the boxes of the roll D. That the shaft G may assist in bracing and strengthening the machine and prevent the tops of the standards A A′ from spreading, a groove, 3, is turned out in it near each end, and a pin, 4, passes through the side of each standard and enters this groove; or the top of each recess *d* may be so formed that a portion of the standard will project down into the groove 3. The spring *e*, being applied at the middle of the length of the bar E, permits one end of the roll D to rise higher than the other without materially affecting the amount of pressure at any part of the length of the roll.

To the edge of each standard A A′ is attached by a set-screw, *n*′, a clamp, F. Its lower end, as well as a portion of the standard, is cut away to form a notch, *k*, to fit over the edge of a tub. A shaft, H, has its bearings in the head of each clamp F. It has a cam, *i*, formed on it near each end, which, as the shaft is revolved, bears against the standard and presses out the top end of the clamps and close the lower ends of them tighter onto the tub, the clamps pivoting on the set-screws *h*, which pass through tapering holes in the clamps which allow of this motion. The set-screws are only used to adjust the notch or opening *k* to suit tubs of different sizes; but the clamping or releasing of the machine is performed by the shaft H and cams *i*. A cleat, *m*, is attached to the side of each clamp to prevent its lateral movement. This is a simple and very convenient method of clamping the machine to the tub, a partial revolution of the shaft H only being required.

The pressure of the spring *e* may be regulated in other ways. For example, a rigid bar may extend across from one standard to the other, and a screw or wedge may be used to apply the requisite pressure to the block *f*; but I prefer the shaft G and cam *h* as being the most convenient to operate.

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

In combination with a turning-shaft G, that serves as a shaft and brace both, and the rising and falling cross-bar E, the arrangement of the cam *h*, block *f*, and spring *e*, intermediately placed on said shaft and cross-bar, for the purpose of making pressure on the upper roll, E, and allowing said roll to rise at either end without producing undue pressure at the other end, in the manner and for the purpose herein set forth and explained.

CHARLES H. AMIDON.

Witnesses:

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