

D. B. Clement,

Wringer,

N^o 37,472.

Fig. 1

Patented Jan. 20, 1863

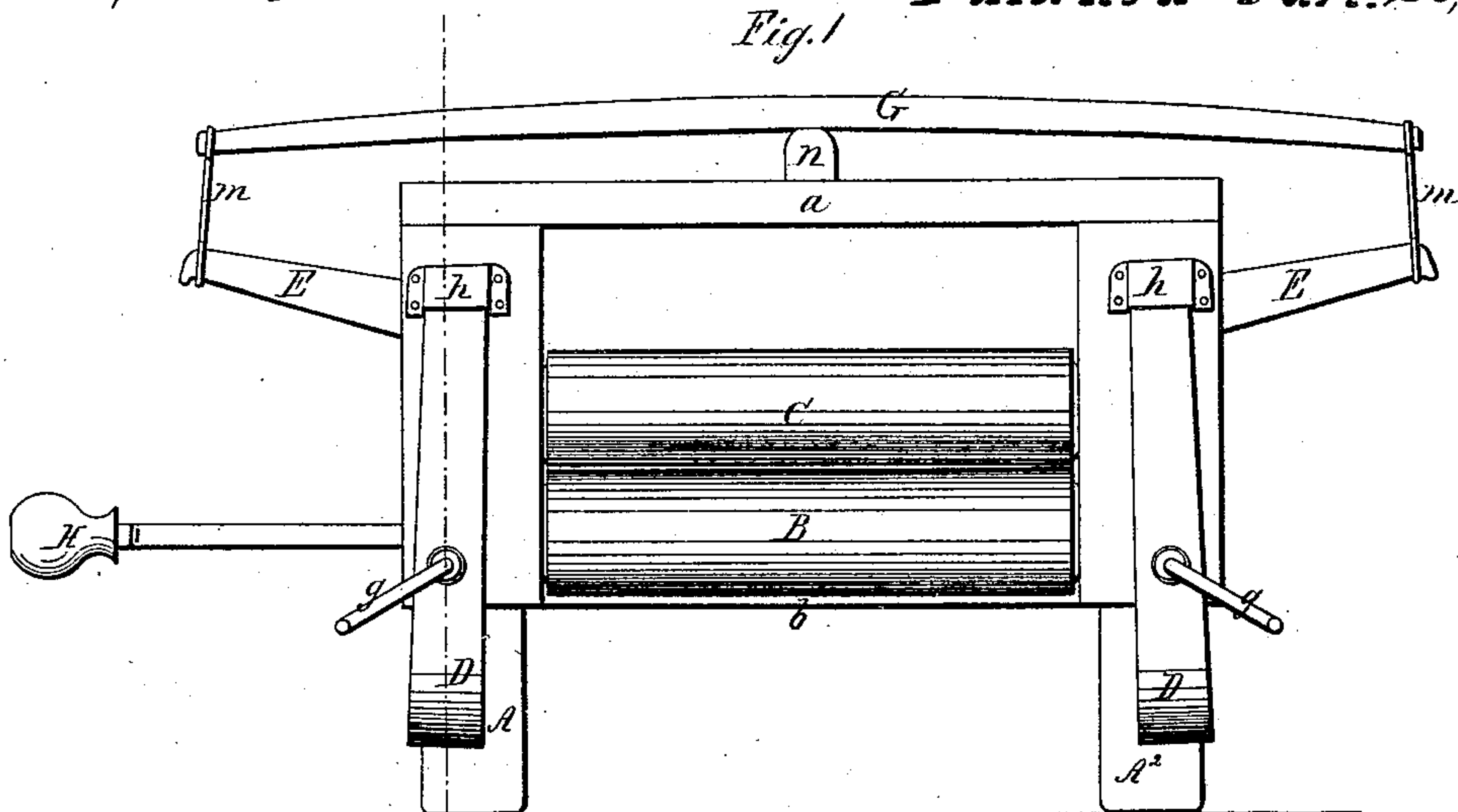


Fig. 2

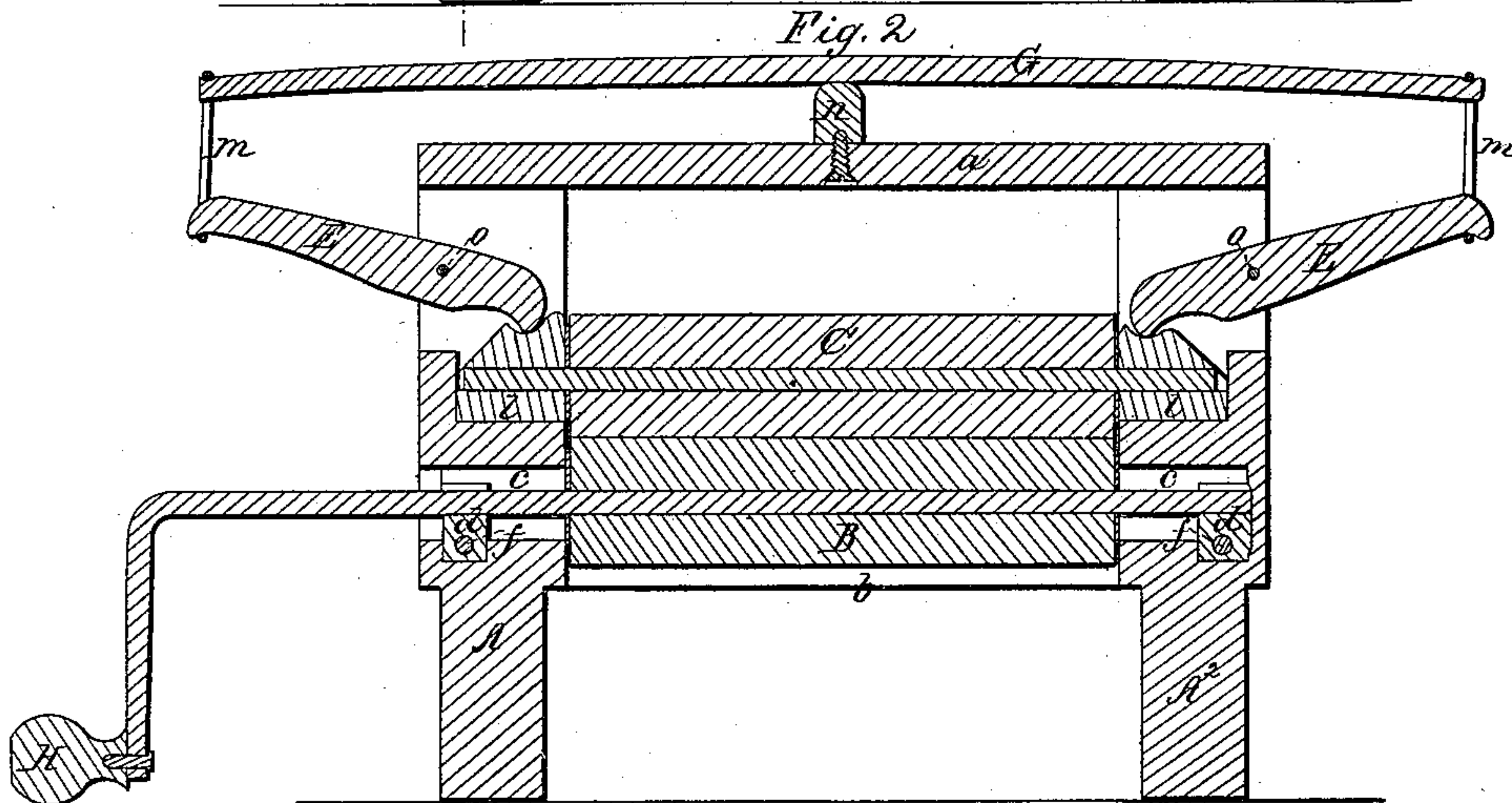
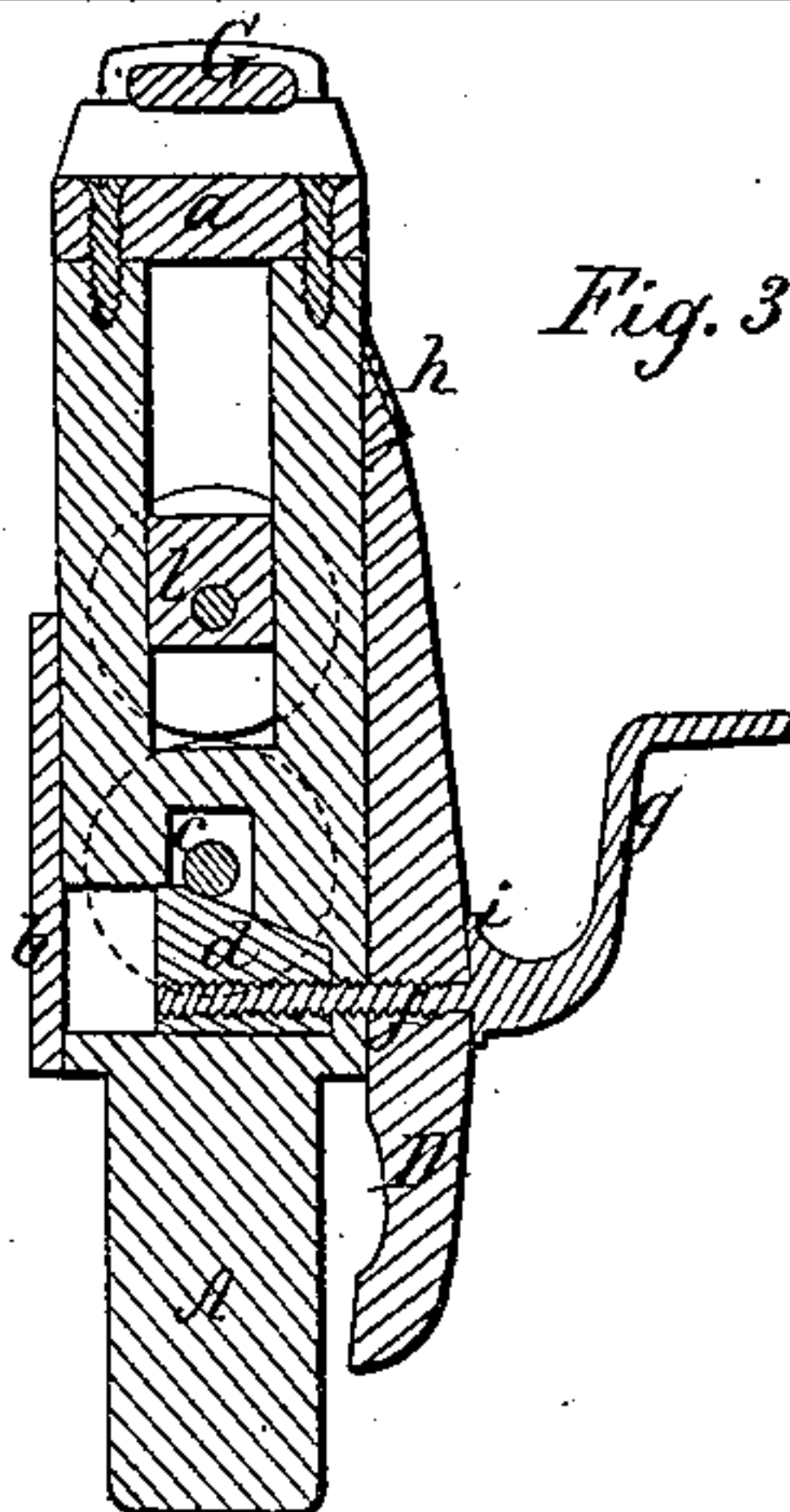


Fig. 3



Witnesses;

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Daniel B. Clement
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UNITED STATES PATENT OFFICE.

DANIEL B. CLEMENT, OF MILTON, ASSIGNOR TO HIMSELF AND DANIEL A. SCHERMERHORN, OF BOSTON, MASSACHUSETTS.

IMPROVED CLOTHES-WRINGER.

Specification forming part of Letters Patent No. 37,472, dated January 20, 1863.

To all whom it may concern.

Be it known that I, DANIEL B. CLEMENT, of Milton, in the county of Norfolk 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 front elevation of the machine; Fig. 2, a longitudinal vertical section through the middle of the same; Fig. 3, a transverse section on the line *xx* of Fig. 1.

My present invention consists in an improved construction of clothes-wringing machines, by which I obtain a cheap and durable machine, in which the necessary vertical motion of one of the rolls is allowed as an article is passed between the rolls, while one end of the roll may rise higher than the other end without affecting the pressure which the spring applies to either end of the roll, and in which, when the machine is not in use, the rolls may be readily relieved from the pressure of the spring which presses them together.

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*² are the standards of the machine, held together by a brace, *a*, at top, and by another brace, *b*, near the lower end. The axle of the lower roll, *B*, is extended at one end, and has a crank, *H*, by which it is operated. The journals of this roll pass through vertical slots *c* in the standards, and rest on bearings or inclined metal blocks *d*, which slide in recesses in the standards, and are moved transversely of the machine, or at right angles to the axis of this roll, by a hand-screw, *f*, which passes through each standard, and is turned by a crank, *g*. The journals of the roll resting on the inclined edge of the blocks will be raised or lowered as the blocks are moved in one direction or the other, or boxes for the journals to run in may rest on the blocks *d*. The screws *f* also pass through the clamps *D*, (a head, *i*, pressing on the front of the clamp,) by which the machine is to be clamped to a tub or other vessel or support.

The upper end of each clamp *D* is held under a shoe, *h*; this permits its lower end to move toward and from the lower end of the standard. The turning up of the hand-screws *f* to close the clamps onto the edge of the tub also draws the blocks *d* farther under the journals of the roll *B* and raises it. Immediately above the roll *B* is placed the roll *C*. These rolls are covered with vulcanized rubber as usual, to render them elastic. The journals of the roll *C* have their bearings in boxes *l*, which slide up and down in slots in the standards *A A*², and are pressed down to give the required pressure of one roll against the other in the following manner: A lever, *E*, is pivoted at *o* in each standard; its shorter end, which is rounded off to fit a corresponding hollow in the top of the box *l*, bears upon the box. Its outer end is connected by a link, *m*, to the end of a long spring, *G*, the middle of which rests on a block, *n*, on top of the brace *a*. The links *m* are of such a length as to bring the two rolls lightly in contact when the clamps are released from the tub, and the lower roll, *B*, is let down by moving back the blocks *d*; but when the screws *f* are turned up to tighten the clamps *D*, and the blocks *d* are drawn farther into the journals of the roll *B*, both rolls will be pressed together and raised, so that they are brought under the influence of the spring *G*. This offers a convenient way of relieving the rolls from being pressed hard together when not in use, (which is apt to injure their surfaces,) by the simple operation of unclamping the machine from the tub. Where a separate device is used for releasing the rolls from the pressure of the spring or springs usually employed, it is liable to be forgotten, and the machine is laid aside with the rolls pressed hard together, by which it is often spoiled. If the spring *G* should become weakened by use, a larger block, *n*, may be placed under its center, or the links *m* may be shortened. The spring *G* being pivoted on its center, the force which it applies is not practically affected by having one end of the roll *C* raised higher than the other end when an article is passed through the rolls which is thicker on one side than on the other.

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

1. Raising or lowering the journals of the lower roll, B, for the purpose of applying or releasing the pressure; in the manner substantially as set forth.

2. Moving the bearings *d* by the same

power which opens or closes the clamps D, substantially as described.

DANIEL B. CLEMENT.

Witnesses:

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