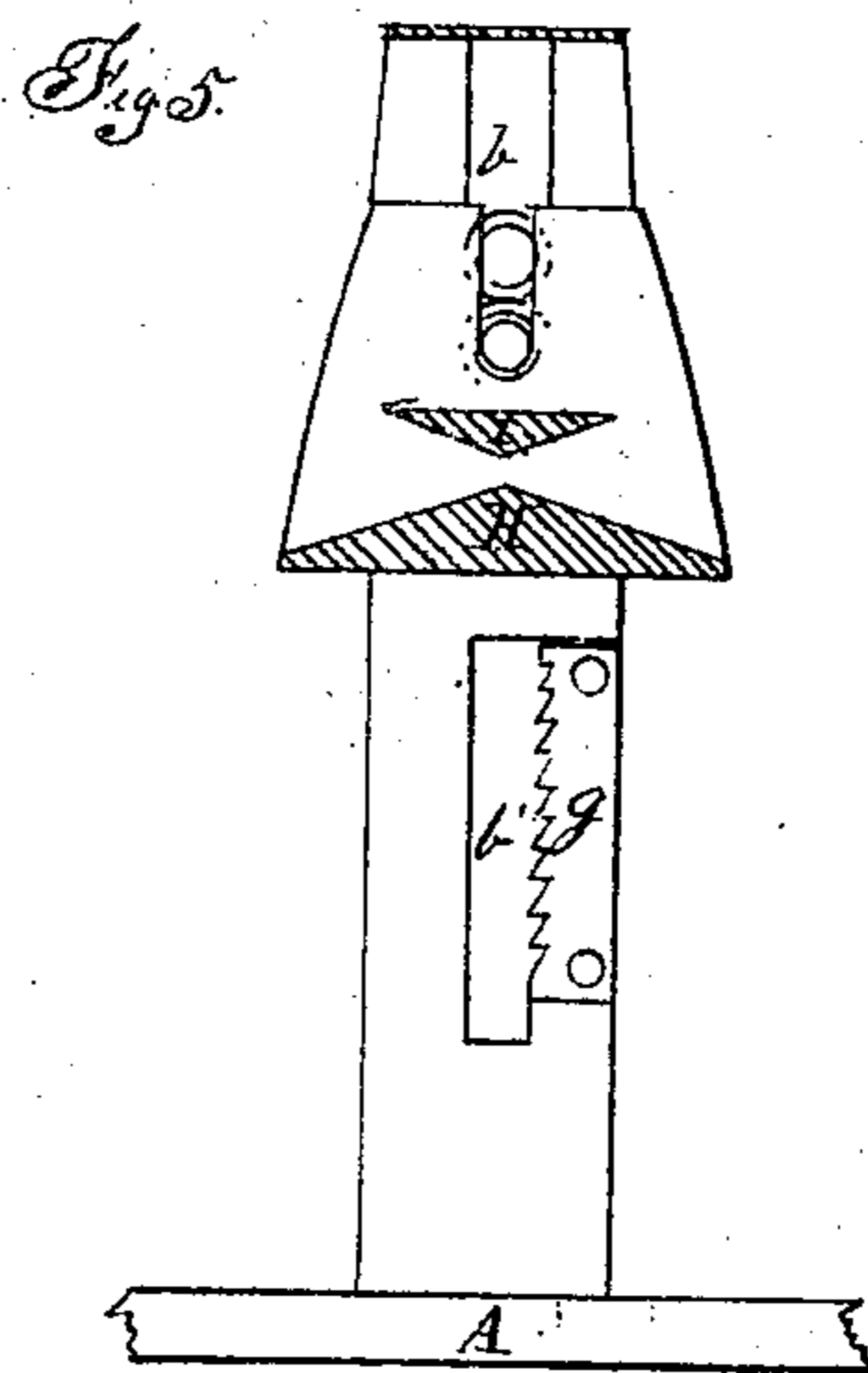
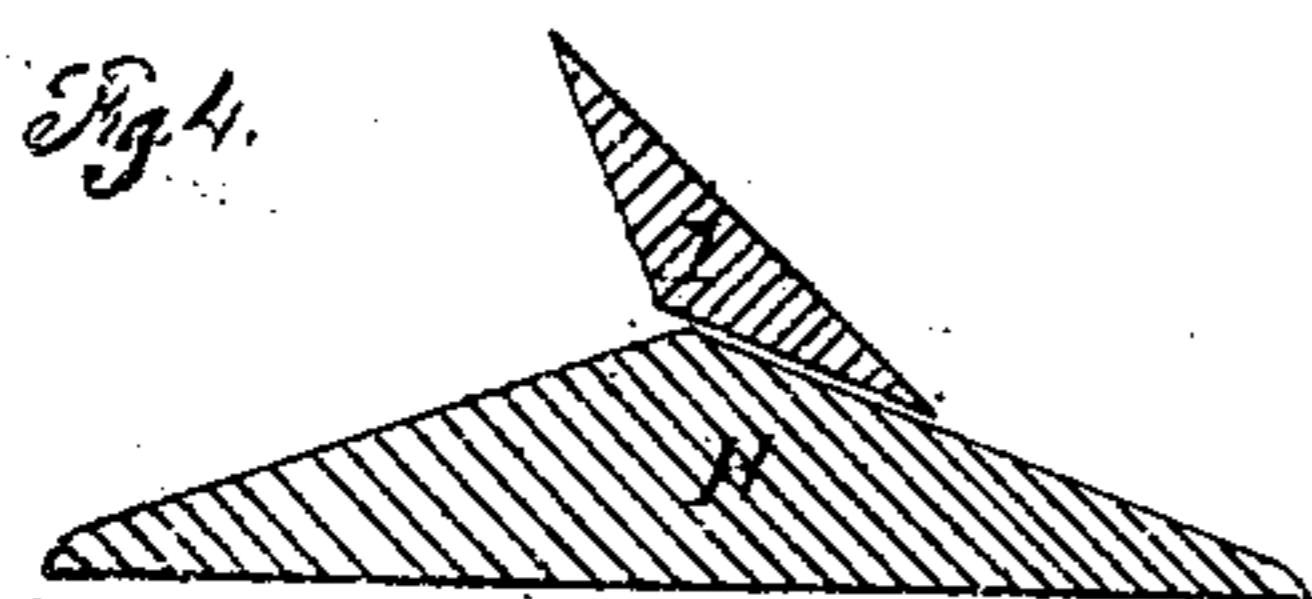
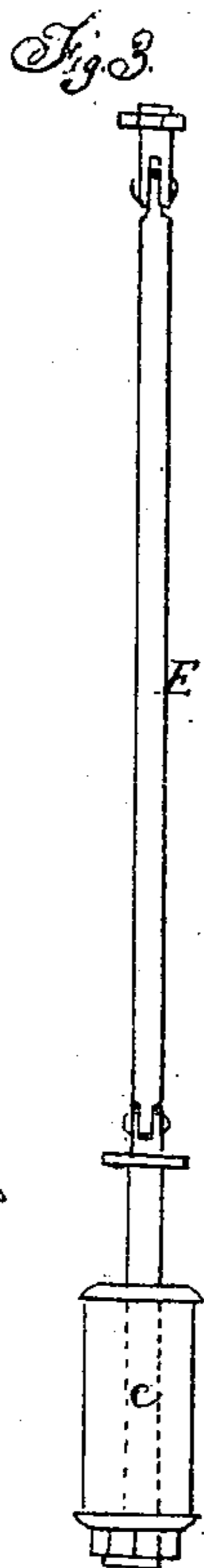
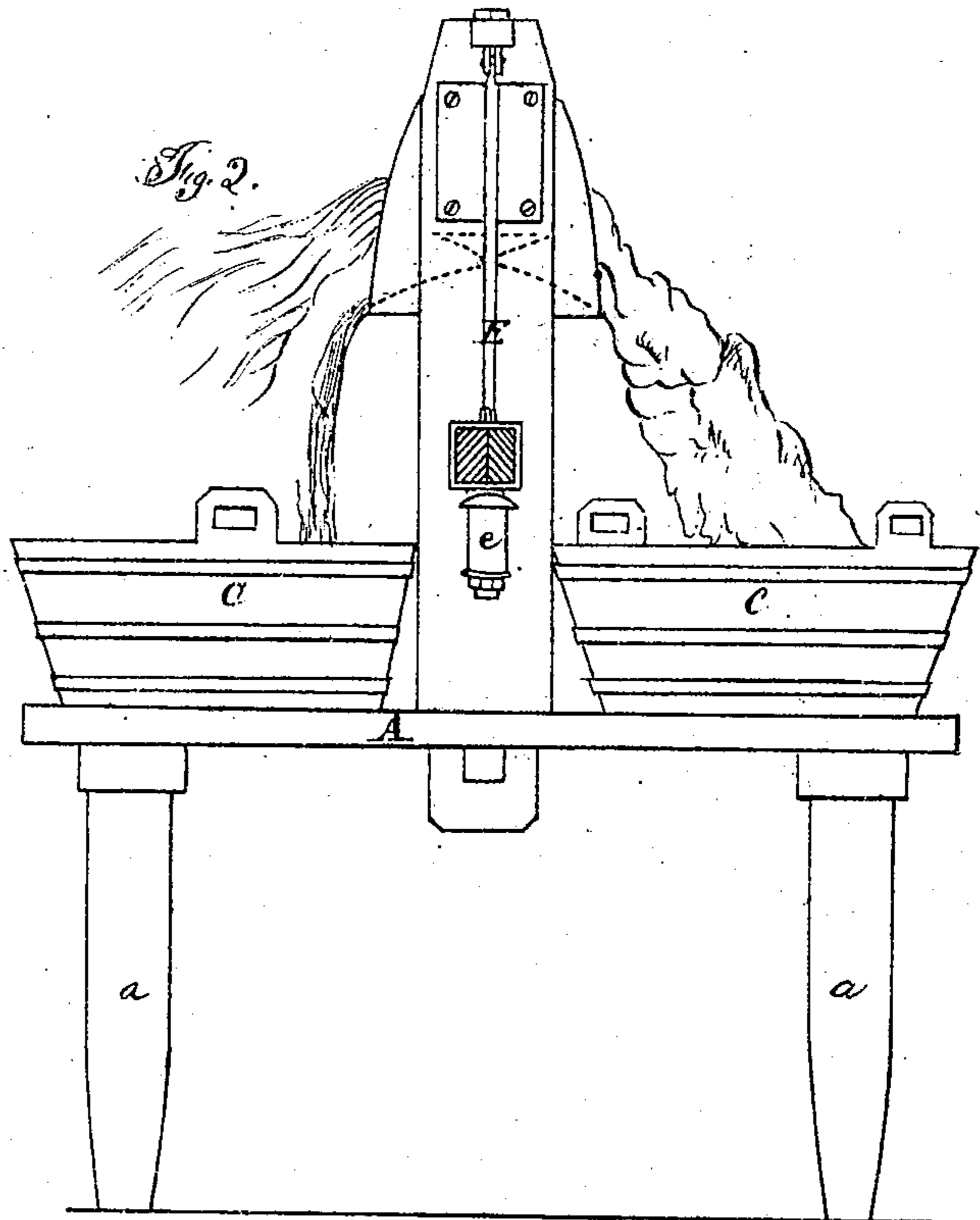
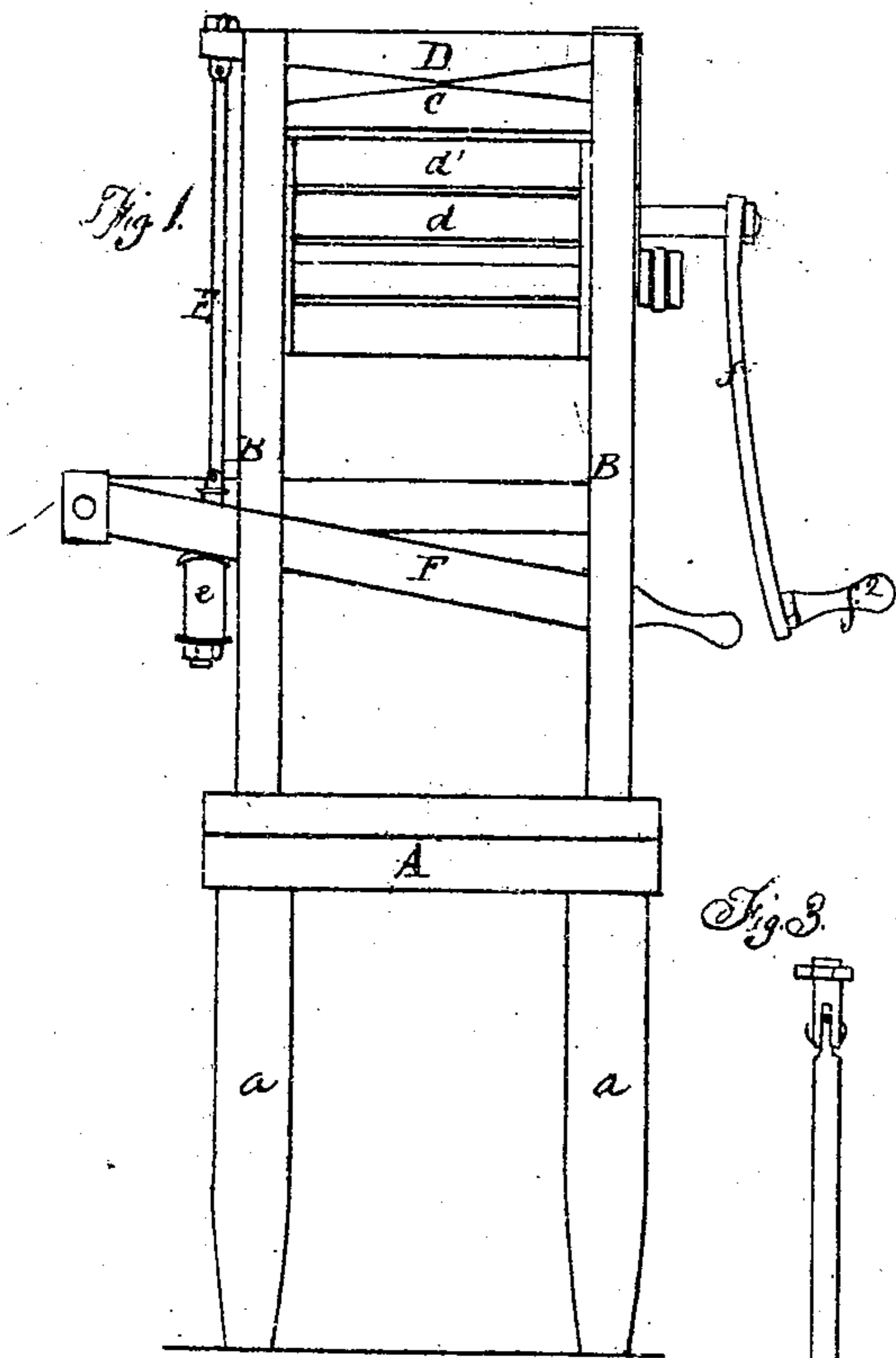


# W. S. Douglas. Clothes-Wringer.

N<sup>o</sup> 73584

Patented Jan. 21, 1868.



Witnesses  
John D. Bloor  
Edwin James

Wm S Douglas  
per Holmead & Hollingshead  
Attorneys

# United States Patent Office.

WILLIAM S. DOUGLAS, OF RICHMOND, VERMONT.

Letters Patent No. 73,584, dated January 21, 1868.

## 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, WILLIAM S. DOUGLAS, of Richmond, county of Chittenden, and State of Vermont, have invented certain new and useful Improvements 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 annexed drawings, and to the letters of reference marked thereon, making part of this specification, in which—

Figure 1 is a front view of the wringer attached to a table.

Figure 2 is a side view.

Figure 3 is a plan view of spring and spring-rod.

Figure 4 is an end view of the tilting and drip-boards.

Figure 5 is an end view of the upright, showing how a portion of the mechanism has its bearing, and also the arrangement of ratchet-plate which retains the lever that regulates the pressure of the rollers.

The nature of my invention consists in arranging, in uprights which are attached to a table, tub, or washing-machine, a bevelled-faced lever and follower, in combination with two wringing-rollers. The lever and follower are bevelled from their centres toward their ends. The great advantage of this arrangement is, that it enables the wringing-rollers to readily accommodate themselves to articles of uneven thickness, and still bear with the same pressure throughout their entire length.

My invention also consists in a novel arrangement of lever, spring, ratchet, and pawl, in combination with a rod and lever, whereby the pressure can be regulated at pleasure, and the wringing-rollers are thus permitted to readily accommodate themselves to articles of the finest as well as of the heavier and coarser quality.

My invention also consists in arranging below the wringing-rollers a tilting and drip-board, which are nearly triangular in shape, and operate so as to form, as it were, a reversible trough, whereby the water liberated by the action of the rollers is discharged into a vessel, on whichever side of the wringer the operator may elect.

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

A is a wash-table, which is supported on suitable legs, *a a*. About midway of the table are firmly secured two uprights, B B. These uprights, B B, are slotted in their upper ends, as shown at *b*, fig. 5. In these slots *b b* work the wringing-rollers and follower. C C are tubs, which are placed on the table A, and receive all the water liberated by the action of the wringer. In the slots *b b* of the uprights B B work the follower *c* and the wringing-rollers *d* and *d'*. To the upper end of one of these uprights, B, there is hinged the lever D, which works in a slot in the upper portion of the other upright, B. To the free end of the lever D there is firmly secured a rod, E, which passes down through the lever F, and has attached to its lower end a spring, *e*. This lever, F, has its bearing in a metallic support, *f*, which is attached to the end of a stationary lever, G, which is firmly secured to the uprights B B. In the other uprights, B B, there is, in addition to the slot *b*, a lower slot, *b'*. In one of those slots, *b'*, works the free end of the lever F. To the lever F is attached a stationary pawl, which gears in a ratchet-plate, *g*, arranged on the edge of the slot *b'*, as clearly shown in fig. 5. By means of this ratchet-plate and pawl, the lever F, which regulates the pressure of the wringing-rollers, and by which the degree of pressure can be readily regulated at pleasure, is securely held at any desired point. Immediately below the wringing-mechanism is attached a stationary drip-board, H. Above this board H is a tilting-board, I, which works on the board H, and can readily be turned so as to form, in connection with the same, an angular trough on either side of the wringer. Immediately above the board I is arranged the wringing-roller *d*, which is covered with rubber or other suitable material. Through this roller, *d*, passes the crank-rod *g*. This crank-rod *g* has its bearings in the uprights B B, and has attached to its outer end a crank, *f*<sup>1</sup>, having a handle, *f*<sup>2</sup>. Immediately above the roller *d* is the roller *d'*, which is in every way similar in construction to the roller *d*. This roller, *d'*, also has a rod passing through and projecting sufficiently far beyond the ends of the roller to furnish bearings for the same in the slots *b b*. Above the ends of this slot, and also working in the slots *b b*, are arranged two loose blocks. These blocks form seats or rests for the follower *c*. It will be observed, by reference to fig. 1, that the lever D and follower *c* are both bevelled, the bevel extending from the centre in each-direction, so that the only point of contact is at their immediate centre.

The operation is as follows: The articles are placed between the rollers  $d$  and  $d'$ . The lever is then drawn down until the desired degree of pressure is attained, when the pawl is caused to engage in the ratchet-plate  $g$ , which retains the lever in position. Motion is then imparted to the machine by means of the crank  $f^1$ ; the water liberated by the action of the rollers falling on the tilting and drip-board  $H$   $I$ , and from thence passing to the tub  $C$ . Simply by turning the roller  $i$ , on the end of the shaft which passes through the tilting-board  $I$ , the direction of the liberated water is entirely changed.

It will be observed that when clothes of uneven thickness are placed between the rollers  $d$  and  $d'$ , the bevelling of the lever  $D$  and follower  $c$  will readily allow the rollers to so accommodate themselves to the same, that the pressure will be exactly the same at every point throughout their entire surface, their angular centres permitting the lever and follower to act on the principle of the hinged joint.

Having thus fully described my invention, what I claim therein as new, and desire to secure by Letters Patent, is—

1. Regulating the pressure of the wringing-rollers  $d$  and  $d'$  by means of the levers  $D$  and  $F$ , rod  $E$ , and spring  $e$ , when the same are combined and arranged substantially as described.

2. I claim, in combination with the above, the tilting and drain-boards  $H$  and  $I$ , when the same are constructed and arranged substantially as described.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

WM. S. DOUGLAS.

Witnesses:

S. W. HATCH,

HENRY ALDRICH.