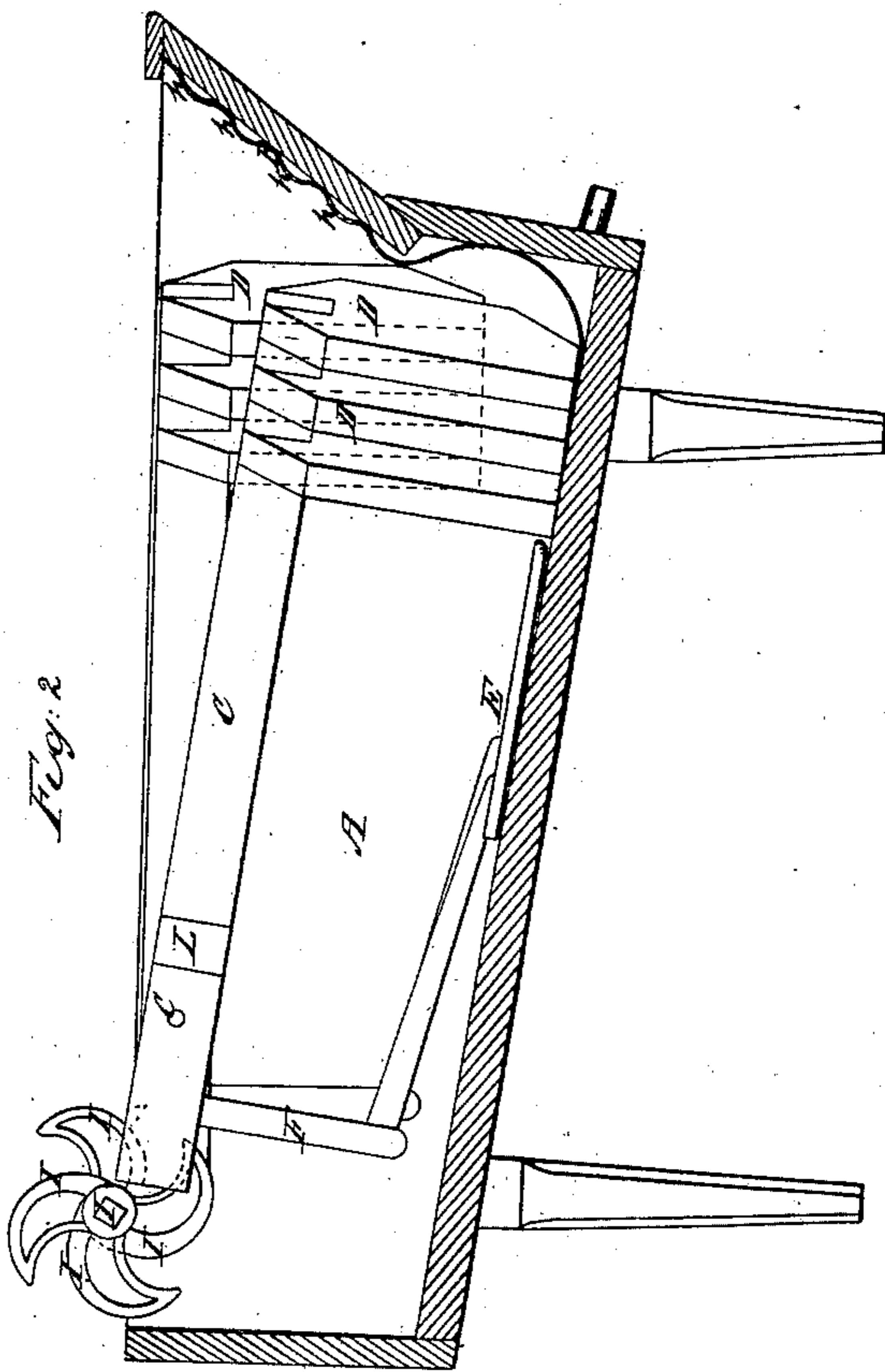
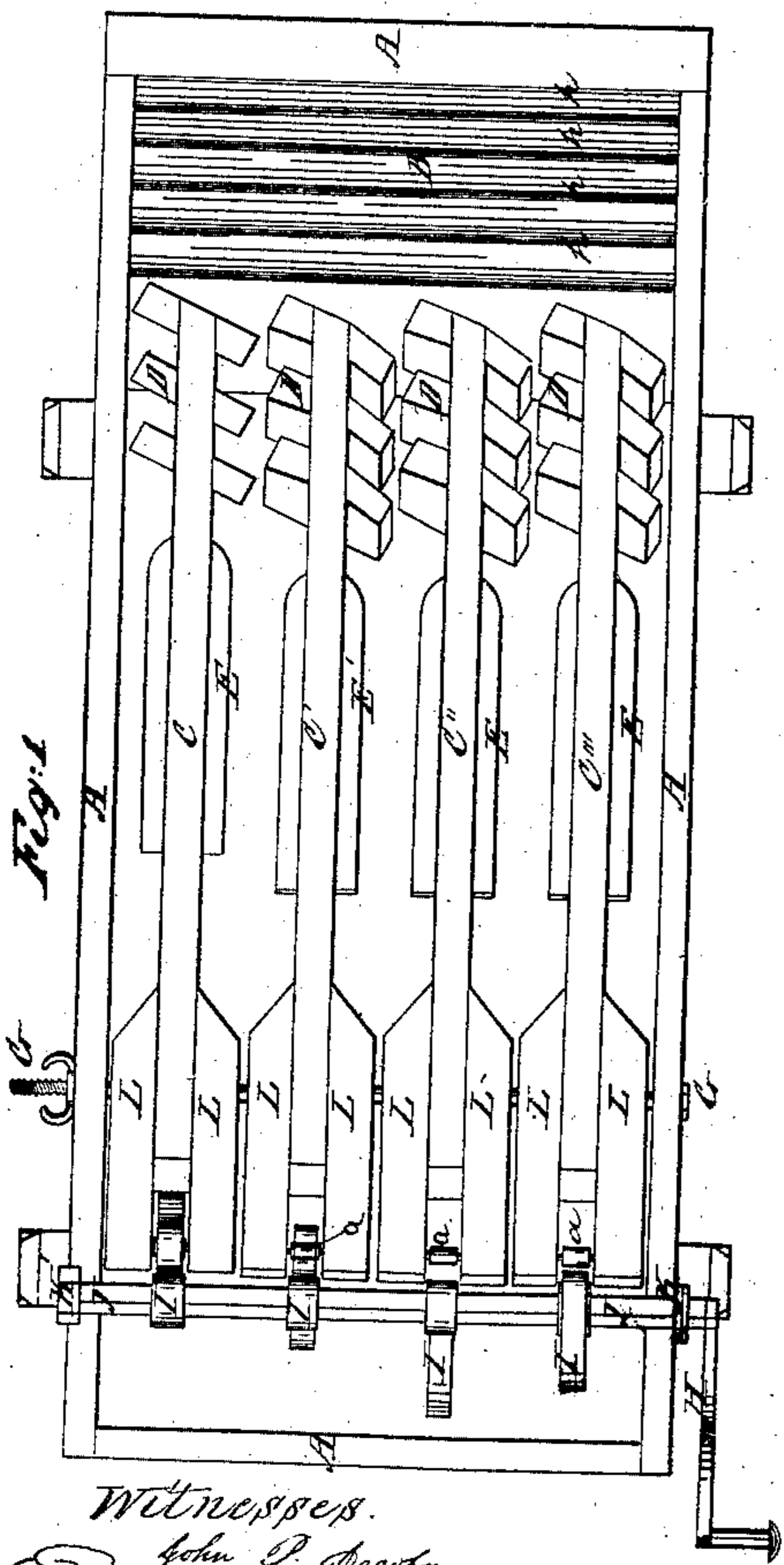
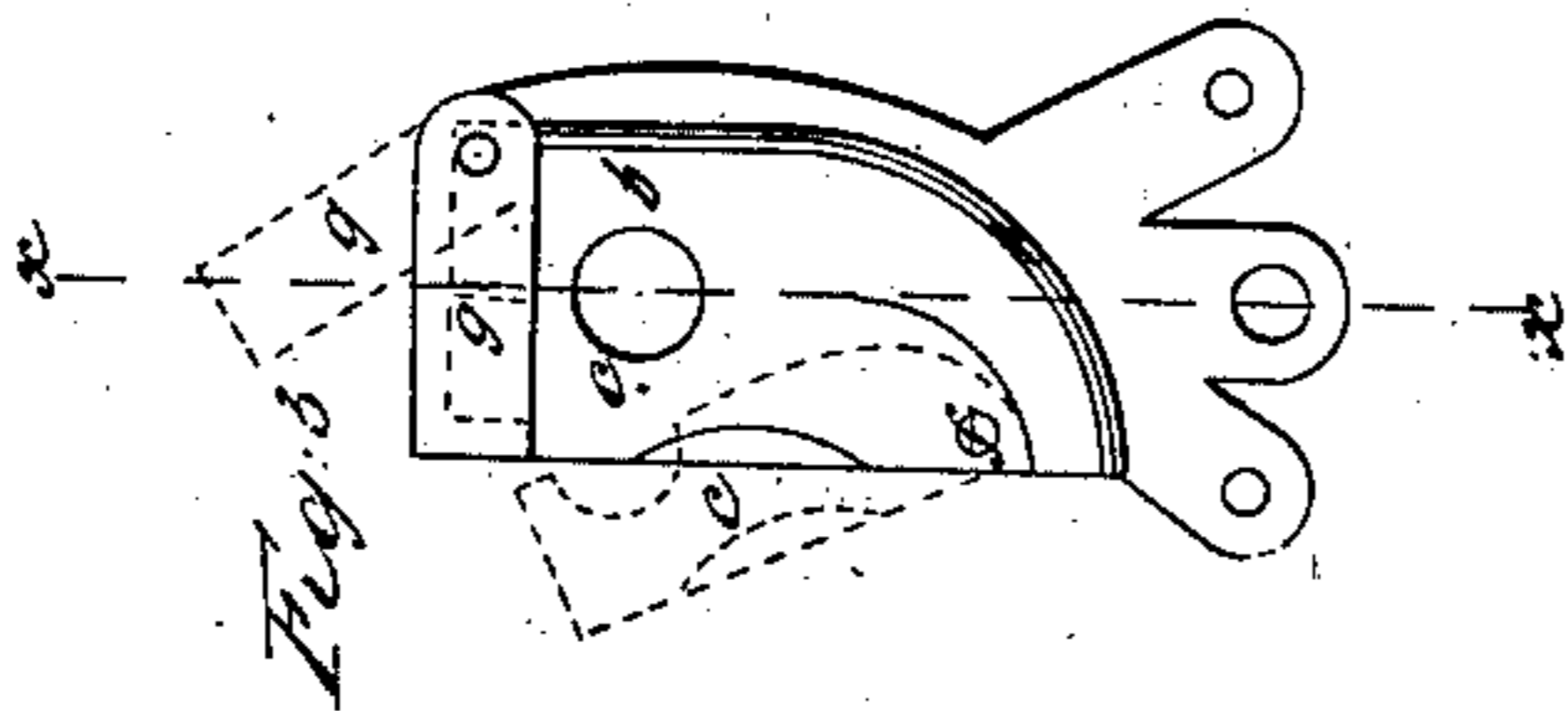
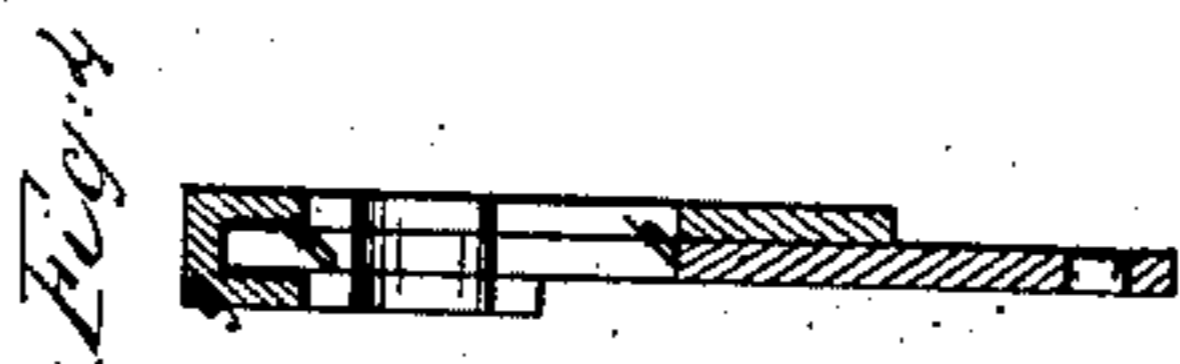


*C. Roberts,*

*Washing Machine,*

*N<sup>o</sup> 28,409.*

*Patented May 22, 1860.*



*Witnesses.*  
*John P. Jacobs*  
*man*

*Inventor*  
*Clark Roberts*

# UNITED STATES PATENT OFFICE.

CLARK ROBERTS, OF WINCHESTER, ILLINOIS.

## WASHING-MACHINE.

Specification of Letters Patent No. 28,409, dated May 22, 1860.

*To all whom it may concern:*

Be it known that I, CLARK ROBERTS, of Winchester, in the county of Scott and State of Illinois, have invented a new and useful  
5 Machine for Washing Clothes; and I do hereby declare that the following is a full and clear description of the construction and operation of the same, reference being had to the annexed drawing, making a part  
10 of this specification, in which—

Figure 1, is a plan; Fig. 2, is a side elevation, with one side removed; Fig. 3, is a side elevation of the opening bearing standard; and, Fig. 4, a transverse vertical section of  
15 the same, through the line *x, x*, Fig. 3.

There have been many inventions and improvements in machines for the purpose of washing clothes, all intended to save labor and to clean clothes without destroying  
20 them, none of which seem to have entirely answered the purpose to the satisfaction of the public. The one for which I now desire to obtain a patent, I have had in practical use, and have found to answer every purpose, as well for coarse as fine clothes. It  
25 consists simply of a peculiar arrangement and combination of levers, to which are attached beaters or pressers, with turners, shovers or stirrers, in a tub of ordinary and  
30 cheap construction, simple in its nature and parts, not easily put out of order, and requiring very little labor to operate.

I will now proceed to describe it in such manner, that others skilled in the art may  
35 be enabled to make and use my invention.

It is needless to describe particularly the construction of an ordinary oblong, rectangular tub, longer at the top than at the bottom, deeper at one end than the other,  
40 and the lower or deeper end of which is constructed like an ordinary wash board.

The advantage of having a washboard at the lower end will be readily perceived, for, by the peculiar construction and arrangement of the levers in combination with the  
45 turners, they can be all laid back over the operating shaft, by which operation you will have an ordinary wash tub, (A,) with the wash board (B,) attached to the lower end, and thereby be enabled, without any  
50 additional trouble or expense, to wash any particular portion of the article, which you may find, upon examination, has not been thoroughly cleansed; as also to wash any  
55 small pieces, such as collars, cuffs or lace as may be wanted.

My invention consists in the peculiar combination and arrangement of the arms or levers (C,) to the lower ends of which beaters or pressers (D,) are attached, with the turn-  
60 ers, punchers or stirrers (E,) the upper ends of which are suspended, by means of pivots, to hangers or blocks (F,) the upper ends of which blocks are rigidly secured to the upper ends of the corresponding arms or  
65 levers; these are placed in the oblong rectangular tub (A), which is made of suitable dimensions, and are mounted on an axle (G,) which passes through the sides of the tub, and through the arms or levers (C,) near their upper ends, forming a pivot on  
70 which they turn; these arms or levers (C,) are operated by means of cams (I,) attached to a horizontal shaft (J,) in this instance, having four sides to correspond with the  
75 number of levers to be operated, from each of which a cam projects, so as to act consecutively upon the different levers, by pressing upon small friction rolls (*a*), arranged  
80 and mounted in their rear ends for that purpose, thus depressing those ends in regular succession, one after the other, as the shaft (J,) is turned, which is done by means of a  
85 crank or handle (H); as the upper end of one of the arms or levers is depressed by its corresponding cam, the lower end, to which the beaters or pressers are attached, will be raised, and the hanger or block, fastened to  
90 its upper end will force the stirrer or turner, which is pivoted to it, forward, the lower end of which, coming in contact with the clothes, which are placed in the lower end  
95 of the tub, will shove them down, pressing and squeezing them against the wash board, and causing the top portion to roll over and over or turn; the cams being so arranged at  
100 equal distances apart, on the several different sides of the shaft, that, as the operation continues, they will successively raise the several levers, one after another and keep  
up an even and continuous motion.

The ends of the shaft (J,) are placed in bearings or standards (K,) and (K'); the front bearing (K,) which sustains the end to which the crank or handle (H) is attached, is strengthened for that purpose, and  
105 is of peculiar construction, being composed of several parts, although of great strength; these parts are united simply by pivots, the more readily to enable the standard (K,) to be opened, and the shaft (J,) to be un-  
110 shipped when occasion may require. Fig. 3,

represents this standard or bearing detached, in black ink, and open in red.

*b*, is the part of the bearing which is to be rigidly secured to the tub; *c*, shows the hinged or movable portion of the bearing, and is attached to the rigid portion by means of the pivot (*f*); the strength of this bearing will be perceived by an observation of the hinged cap (*g*), which is doubled, and closes over the rigid as well as the pivoted portions of the bearing, when they are brought together to support the shaft, thus giving it the strength of a solid bearing, although having the advantage of being easily opened, and therefore more convenient and serviceable for the fitting in and taking out of the shaft (*J*).

The levers or arms (*C*, *C'*, *C''*, *C'''*), are kept in position, and prevented from swaying by means of braces (*L*), secured to them on either side.

The operation of the machine is as follows: Sufficient water or suds being put in the tub (*A*), the clothes to be washed are placed in the lower end, against the ribs or wash board, partially beneath the lower ends of the levers or arms (*C*), but in front of the feet of the turners or stirrers (*E*), and the operation commences by turning the crank (*H*), and, as the shaft (*J*), turns, the first cam (*I*), is pressed against the friction roll (*a*), in the upper end of the first lever (*C*), depressing that end and raising the other. As the upper end of the lever (*C*) is depressed the turner or stirrer (*E*) below it, which is pivoted to the hanger or block (*F*), which projects below from the upper end of the lever (*C*), to which it is rigidly attached at right angles, will be pressed forward, along the bottom of the tub, toward its lower end, and the under portion of the clothes will be caught by the foot or lower end of the turner or stirrer (*E*), and forced or pressed against the lower end of the tub, so as to prepare that part of the clothes for the blow of its puncher or beater (*D*) the beater (*D*)

then falls, rubbing and squeezing the clothes between it, (the beater (*D*)) and the wash board (*B*), and against the ribs (*h*), squeezing and pressing the clothes down. As the lever (*C*) falls, its accompanying turner or stirrer (*E*) is drawn back to its original position, at which time the next lever (*C'*) commences to rise, and the next turner or stirrer (*E'*) will, in turn, be forced down, and, catching the clothes which have fallen or been pressed forward, will press them back against the end, squeezing them in like manner as the first; and so on, in rotation, continuously and alternately rubbing, pressing and squeezing successively, while the machine is in operation. The practical effect of this conjoined action of the levers (*C*) and punchers or stirrers (*E*), from their peculiar arrangement and construction, in combination with each other, being to keep the clothes continuously in motion in different directions, constantly changing or shifting their surfaces or exposed parts, while the rubbing, pressing and squeezing is going on. This is to be kept up until the tub of clothes is thoroughly cleansed and the operation perfected; which will be found to take but a comparatively brief period, and be anything but a laborious or expensive operation, and without injury to the articles washed.

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

1. The peculiar construction and arrangement of the levers in combination with the turners or stirrers substantially as described and for the purposes set forth.

2. A hinged or opening shaft bearing, fastened and secured by a swinging cap (*g*), substantially as described.

In testimony whereof, I have hereunto set my hand to this specification.

CLARK ROBERTS.

Witnesses:

N. HOWARD,

W. J. WOODWARD.