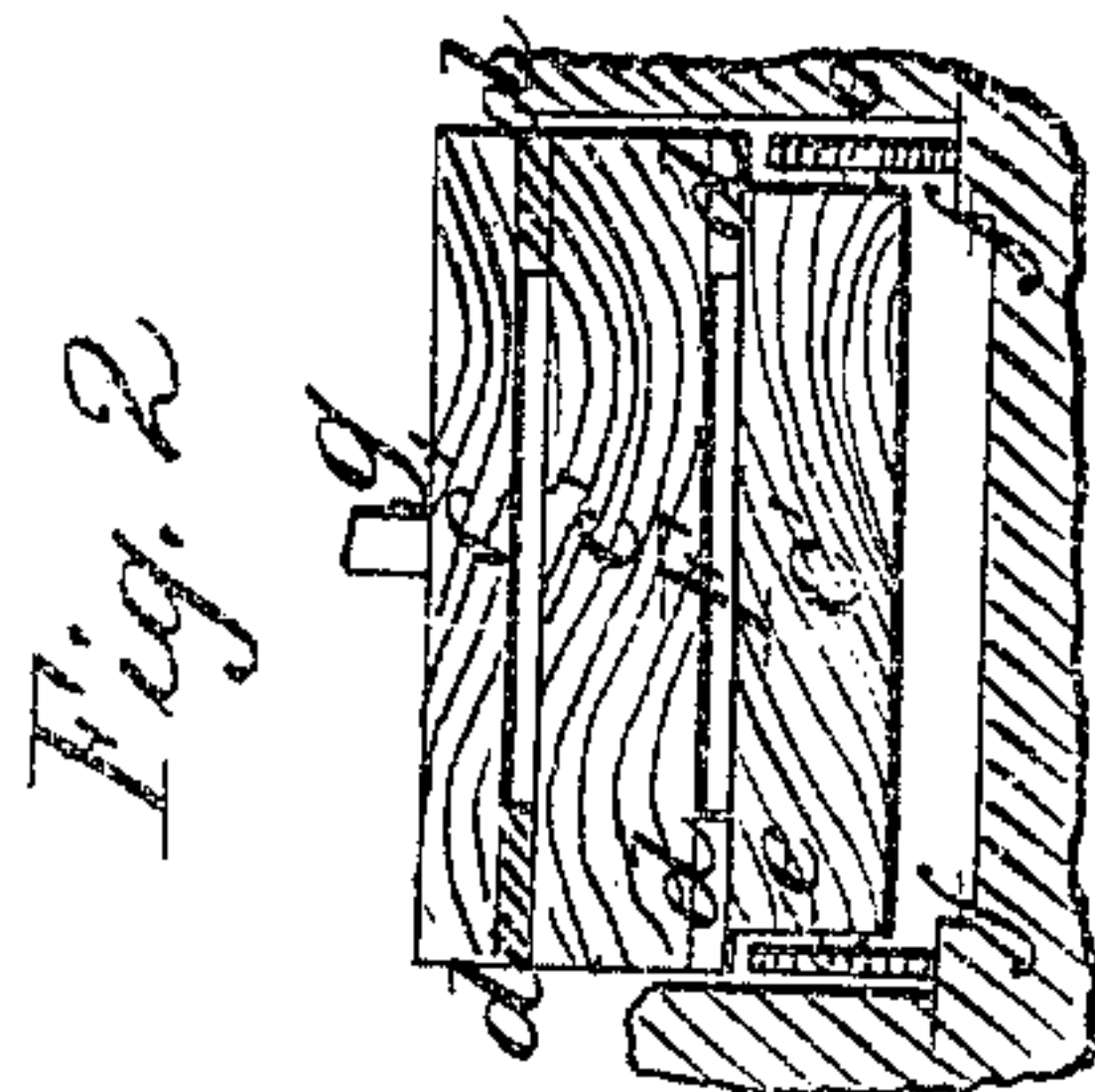
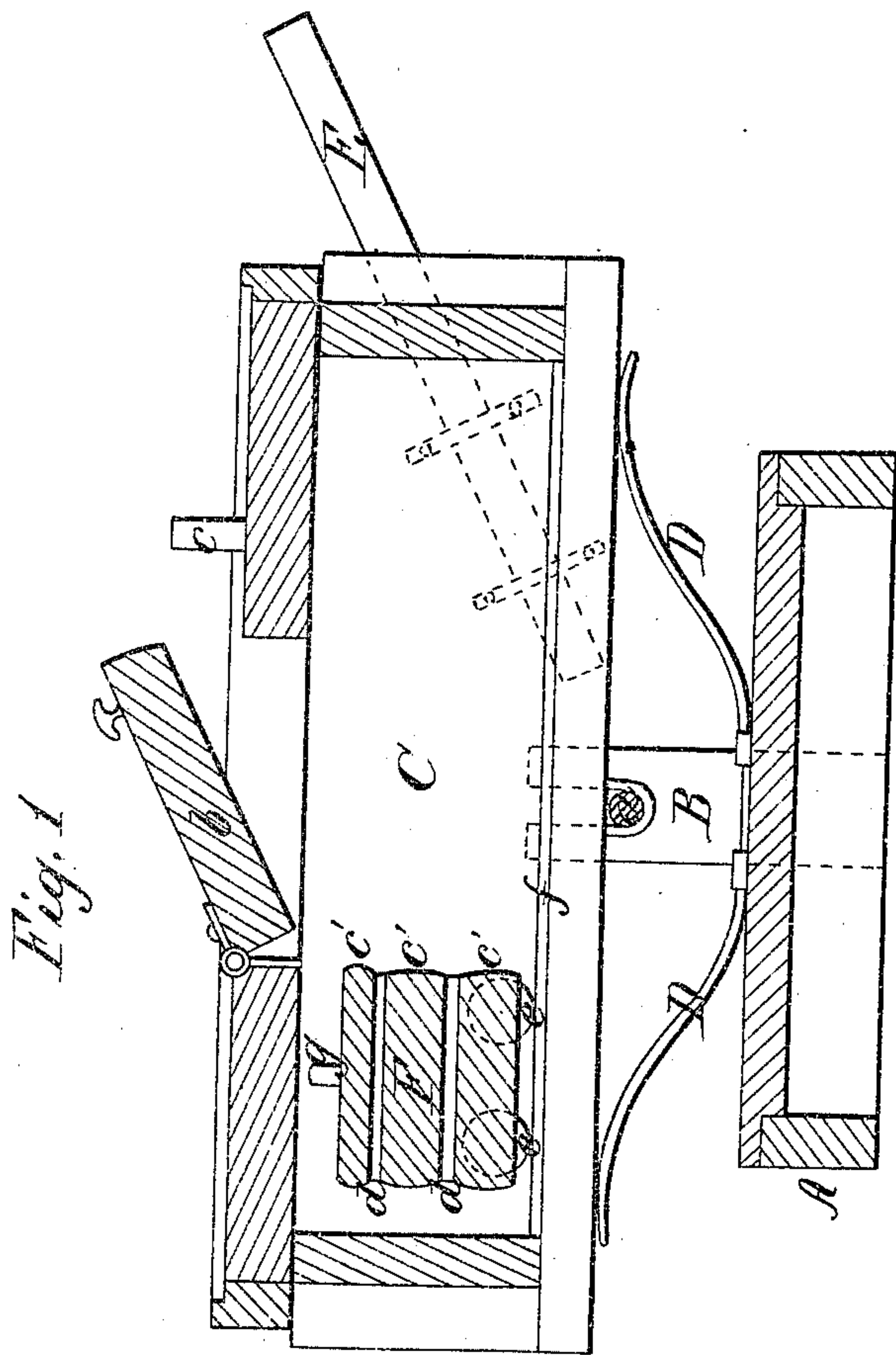


*G. Bradshaw.*

*Washing-Machine Pounder.*

*N<sup>o</sup> 90, 231.*

*Patented May 18, 1869.*



*Witnesses*  
*Geo. Rothwell*  
*Phil. J. Larnier*

*Inventor*  
*Geo. Bradshaw*  
*By W. D. S. & Co.*  
*Atty.*

# United States Patent Office.

GEORGE BRADSHAW, OF SANDOVAL, ILLINOIS.

*Letters Patent No. 90,231, dated May 18, 1869.*

## IMPROVED WASHING-MACHINE.

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, GEORGE BRADSHAW, of Sandoval, in the county of Marion, and State of Illinois, have invented a new and useful Improvement in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, sufficient to enable others skilled in the art to which my invention appertains, to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a longitudinal vertical central section of my improved washing-machine, and

Figure 2 is a front view of the beater.

My invention is an improvement in that class of washing-machines which consists essentially of an oscillating tub, in which is placed a beater, mounted on rollers, so as to traverse the tub from end to end as it is oscillated.

The invention in this case consists of the construction, arrangement, and combination of parts as hereinafter described.

Similar letters of reference indicate corresponding parts in the two figures.

In the drawings—

A represents a platform, of any suitable construction, from the sides of which rise standards B B.

In the tops of these standards are formed bearings for a shaft, *a*, attached to the under side of a tub, or box C.

D D are flat springs, secured to the upper side of the platform A. The ends of the tub, or box C, rest on these springs.

I prefer to make the tub rectangular, and with a closed top, a space being left to give access to the interior, which space is covered by a hinged lid, *b*.

*c* is a vertical projection, extending entirely across the top of the box.

E is a lever, fitted in straps, (shown in dotted lines,) on one side of the box.

F represents the beater, which is made of separate sections, *c'*, between which are interposed flat transverse strips *d* at the ends, whereby an open structure is produced, through which water passes readily.

The beater is provided with rollers *e*, which run on ways, *f*, fixed at the sides of the bottom of the tub.

*g* is a handle, secured on top the beater F.

The operation of my improved washing-machine is as follows:

The clothes to be washed are placed in the tub, together with water or soap-suds, after which the cover is shut down.

Now, by means of the handle, an up-and-down motion is given to the box, which causes the beater to move back and forth rapidly and forcibly, pounding the clothes at each end of the tub.

The springs D serve to render the motion of the box easy, and materially lighten the labor of operating the machine.

The object of placing the rod, or shaft, at the bottom of the tub is to render the motion of the box strictly up and down.

It is evident that if the trunnions were situated above the bottom, the box would have a swinging or rocking movement.

By the up-and-down motion the stroke of the beater is made more rapid and strong, and consequently more effective, and the labor of operating the machine is lessened.

It will be seen that the friction-rollers at the bottom of the beater not only perform the ordinary functions of friction-rollers, but they also prevent the tearing of the clothes between the bottom of the beater and the bottom of the box C, the pounding of the clothes being done at the ends of the box C.

I am aware that oscillating boxes, loose beaters, and springs have been used heretofore in washing-machines, as in the patents of T. King, July 3, 1849, and J. W. Woodward, September 17, 1867, and others, and therefore I do not claim them broadly; but

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

The combination and arrangement of the box C, with ways *f*, open beater F, provided with friction-rollers *e*, performing the double function described, rod *a*, lever E, and springs D, all constructed and operated in the manner and for the purpose set forth.

GEORGE BRADSHAW.

Witnesses:

H. R. SHERMAN,  
WILLIAM STEWART.