

W. BROWN.  
WASHING MACHINE.

No. 20,932.

Patented July 20, 1858.

Fig. 2.

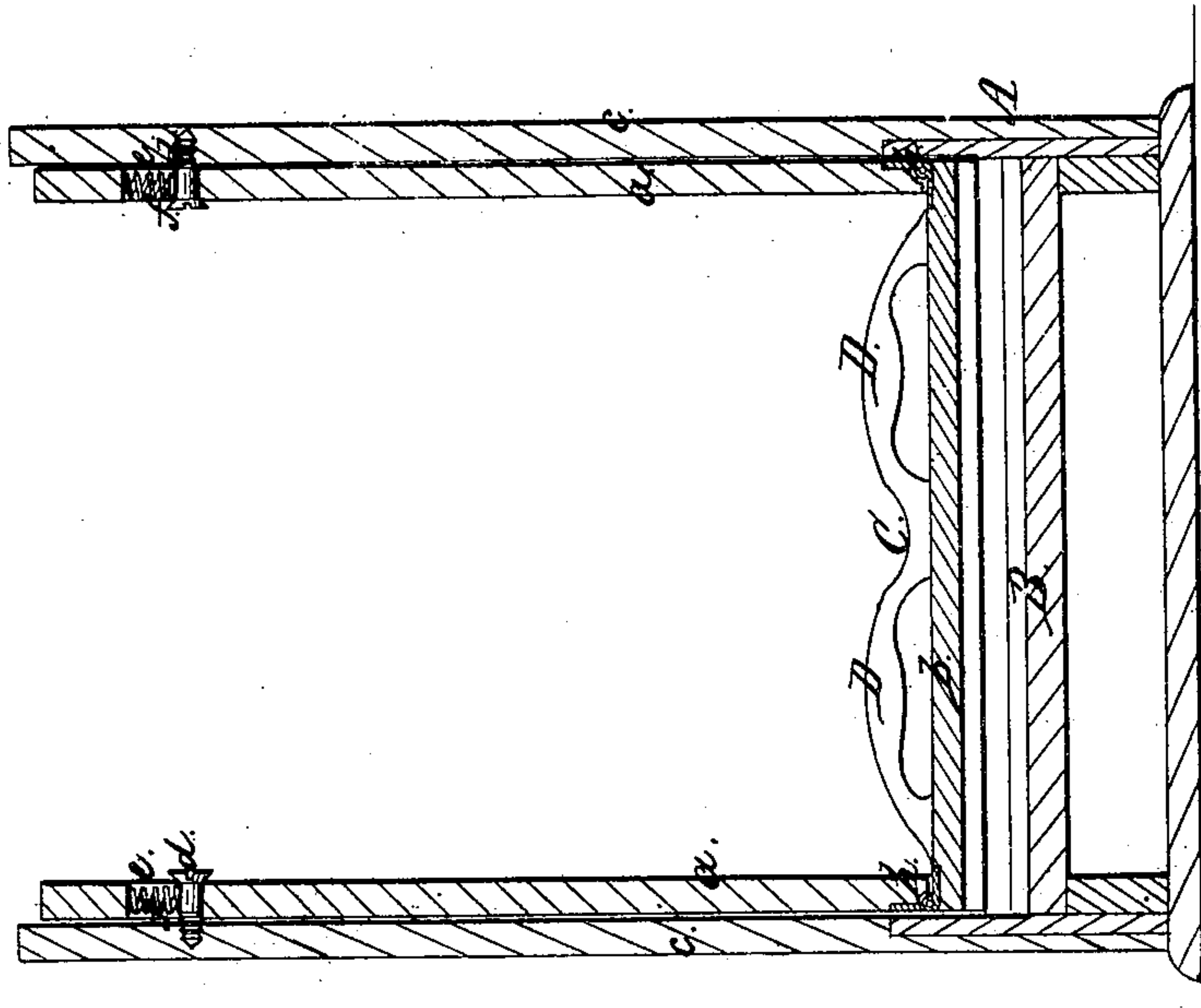
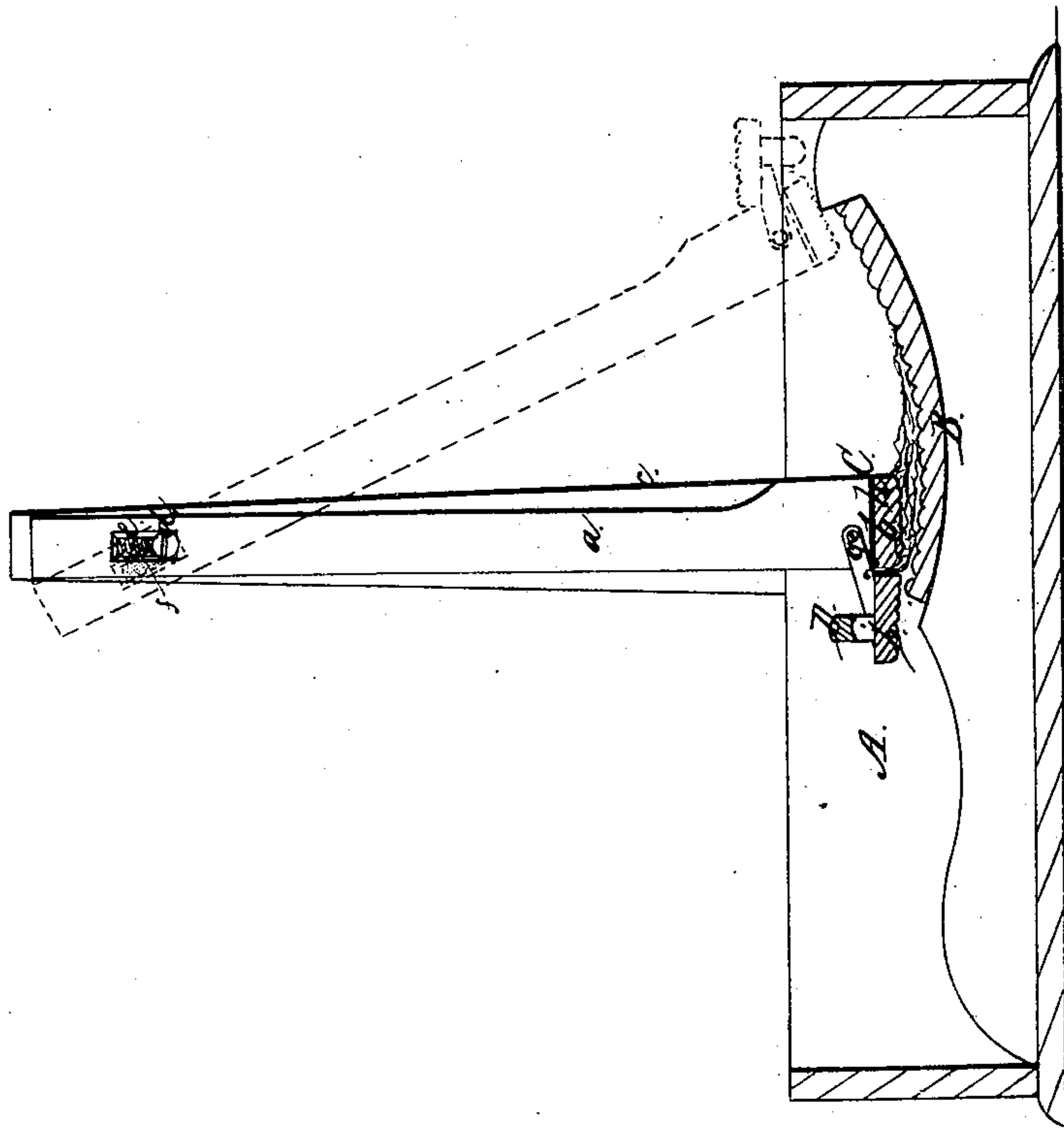


Fig. 1.



# UNITED STATES PATENT OFFICE.

W. BROWN, OF DUNCANNON, PENNSYLVANIA.

## WASHING-MACHINE.

Specification of Letters Patent No. 20,932, dated July 20, 1858.

*To all whom it may concern:*

Be it known that I, WILLIAM BROWN, of Duncannon, in the county of Perry and State of Pennsylvania, 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, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1, is a vertical longitudinal section of a washing machine constructed with my improvements. Fig. 2, is a vertical transverse section of the same.

Similar letters of reference, in each of the several figures indicate corresponding parts.

The nature of my invention consists 1st in so hinging the forward portion of the rubber to the rear portion of the same, that its gravity shall cause it to fasten the ends of the clothes between its edge and the edge of the said rear portion, also that it may be capable of being thrown up and back upon top of the rear portion of the rubber, and thus afford convenience for introducing the clothes underneath the rubber and also for removing the same from under the rubber after they have been washed, and likewise answer as a hand board, when thus thrown up and back, whereon to wash light articles without the necessity of bending the back to wash the same on the fluted concave.

It consists, 2nd, in hinging the rubber to the lower ends of the uprights by which it is vibrated, in combination with the providing of said uprights with slots and springs at the point upon which they vibrate. By thus hinging the rubber and suspending its uprights, each end of the rubber has a chance to rise independently, and thus when any bunching of the clothes occurs at one end and not at the other both ends of the rubber are not thrown up, and thus the whole surface of the rubber is kept in operation, no matter in what condition the clothes may be under it. In fact the rubber is capable of molding or accommodating itself to any change in the condition of the clothes under it.

To enable others, skilled in the art, to

make and use my invention, I will proceed to describe its construction and operation.

A, represents the wash tub. B, a concave fluted wash board, concentric with the axis upon which the rubber vibrates.

C, is the rubber; it consists of two uprights *a, a*, and two fluted boards *b, b'*. The uprights *a, a*, are connected to standards *c, c*, of the tub by means of pivots *d, d*, which are fixed in the standards and extend through oblong vertical slots *e, e*, of the uprights *a, a*, of the rubber, said slots being furnished with springs *f, f*, which rest upon the pivots *d, d*, as shown. By this ordinary method of suspending the uprights, the rubber is caused to exert a gentle yielding pressure and has vertical play up and down. The fluted board *b*, of the rubber is connected by hinges *g*, to the lower end of the uprights, as shown. It is by thus hinging this board and arranging the uprights of the same so as to be capable of rising and falling, that the rubber is rendered flexible and enabled to mold itself to the bunching of the clothes at either side of the tub. The fluted board *b'*, is connected to the board *b*, by means of hinges *h*, in the manner shown, or by butt hinges placed across the line of junction between the two boards *b, b'*. It is by thus hinging this board that its gravity is rendered available for fastening the ends of the clothes between its edge and the edge of the board *b*, as illustrated in red in Fig. 1. Thus having the clothes fastened is very desirable as the washing or rubbing action, as the rubber vibrates, will be very similar to that performed with the human hands. And furthermore it is by hinging the board *b'*, to *b*, as stated that said board *b'*, can be thrown up and back, as shown in red, and thus be out of the way when clothes are being placed under the rubber or removed from under the same, or answer as a hand wash board whereon to wash light articles without the necessity of stooping or bending the back to perform the same on the concave.

D, is a handle on top of the hinged board *b'*, of the rubber, this handle serves as a means whereby to move the rubber, and also to adjust the same by.



This machine is superior to many others in use on account of its being so extremely simple and yet capable of performing all that is performed by more complicated machines.

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

1. The manner herein shown and described of hinging the forward portion *b'*, of the rubber to the rear portion *b*, of the same, for the purposes set forth.
2. The manner herein described and shown

of bringing the rubber *b*, *b'*, to the uprights, in combination with the manner of suspending the uprights *a*, *a*, by means of slots, pivots and springs; for the purpose set forth.

The above specification of my improvement in washing machines signed by me this 10th day of June 1858.

WM. BROWN.

Witnesses:

G. Y. ATLEE,  
W. ATLEE.