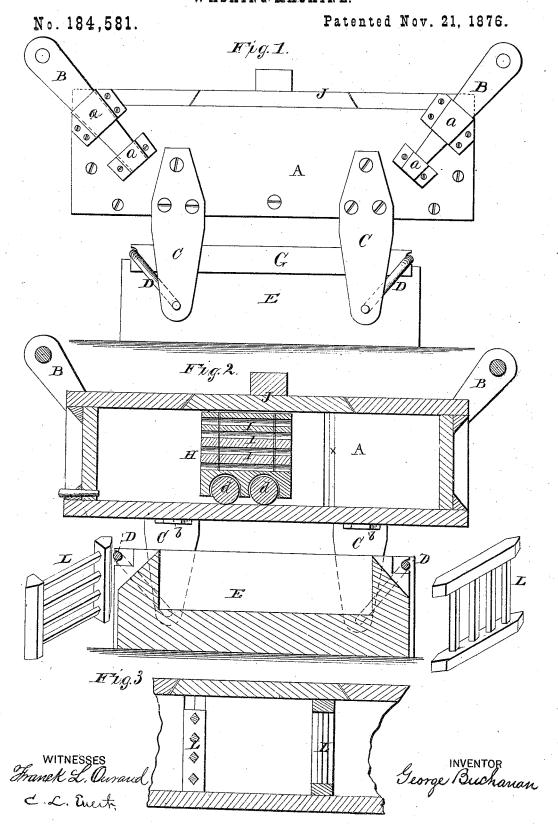
## G. BUCHANAN. WASHING-MACHINE.



## UNITED STATES PATENT OFFICE.

GEORGE BUCHANAN, OF WASHINGTON, PENNSYLVANIA.

## IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 184,581, dated November 21, 1876; application filed October 31, 1876.

To all whom it may concern:

Be it known that I, GEORGE BUCHANAN, of Washington, in the county of Washington, and in the State of Pennsylvania, have invented certain new and useful Improvements in Washing-Machine; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a washing-machine, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side elevation, and Fig. 2 a longitudinal vertical section, of my washingmachine. Fig. 3 shows it used as a churn.

A represents a rectangular box of any suitable dimensions, provided at each end, on both sides, with sockets a a for the insertion of handles B B. These handles can thus be used at either end of the box, or at both ends, as may be desired. On each side of the box A are secured two metal plates or castings, C C, extending a suitable distance below the bottom of the box, and each plate or casting is provided with a flange, b, which extends under and is fastened to the bottom of the box. The lower ends of the two plates or castings C, at each end of the box, are placed upon the ends of a stirrup, D, and this stirrup is suspended at the end of a base, E, in the notched ends of two metal bars, G G, fastened to the sides of said base. The box A can thus obtain a rocking motion, and very little exertion is required to keep it in mo-

By the use of the base-block E the machine may be placed on any floor, however rough and uneven, without detriment to the working of the machine.

Within the box A is placed a block, H, mounted upon rollers d, so that it will easily move from end to end of the box. This block is perforated with a number of holes, i, in the direction of its movement.

The block H is further provided with an

interior cavity extending from the top downward for a suitable distance, and in this cavity are placed several smaller blocks, I I, one or more of which may be used at pleasure, or can be removed if the block is too heavy.

By this means the block can be made as heavy or as light as desired without changing the shape or size of the outside block.

The smaller blocks I I are corrugated or perforated, and should be so placed that the holes will range with the holes in the outside block.

The ends of the box A are covered on top, and in the center is a lid, J, to be opened and closed at pleasure. About half the amount of clothes to be washed should be put in one end, and the other half in the other end, of the box with the perforated block in the middle, so that rocking will run the block suddenly right and left against the clothes at each end, squeeze out the dirt, the water passing back through the perforations in the block, and thereby causing a much harder squeeze to be given to the clothes.

This machine may equally as well be used as a churn by removing the block H, and inserting two racks, L L, in vertical grooves x, made for that purpose in the sides of the box A.

By now rocking the box, as before, the churning is soon done, and when the milk is churned the racks are removed and the machine rocked again, and the butter will collect in one solid lump.

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

1. The combination of the elongated box A, plates or supporters C C, stirrups D D, and base or stool E, substantially as and for the purposes herein set forth.

2. In combination with a rocking box, the perforated block H moving upon rollers, and provided with interior removable blocks I I, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 23d day of October, 1876.

GEORGE BUCHANAN.

Witnesses:

ALVAN DONNAN, JOHN WHITE DONNAN.