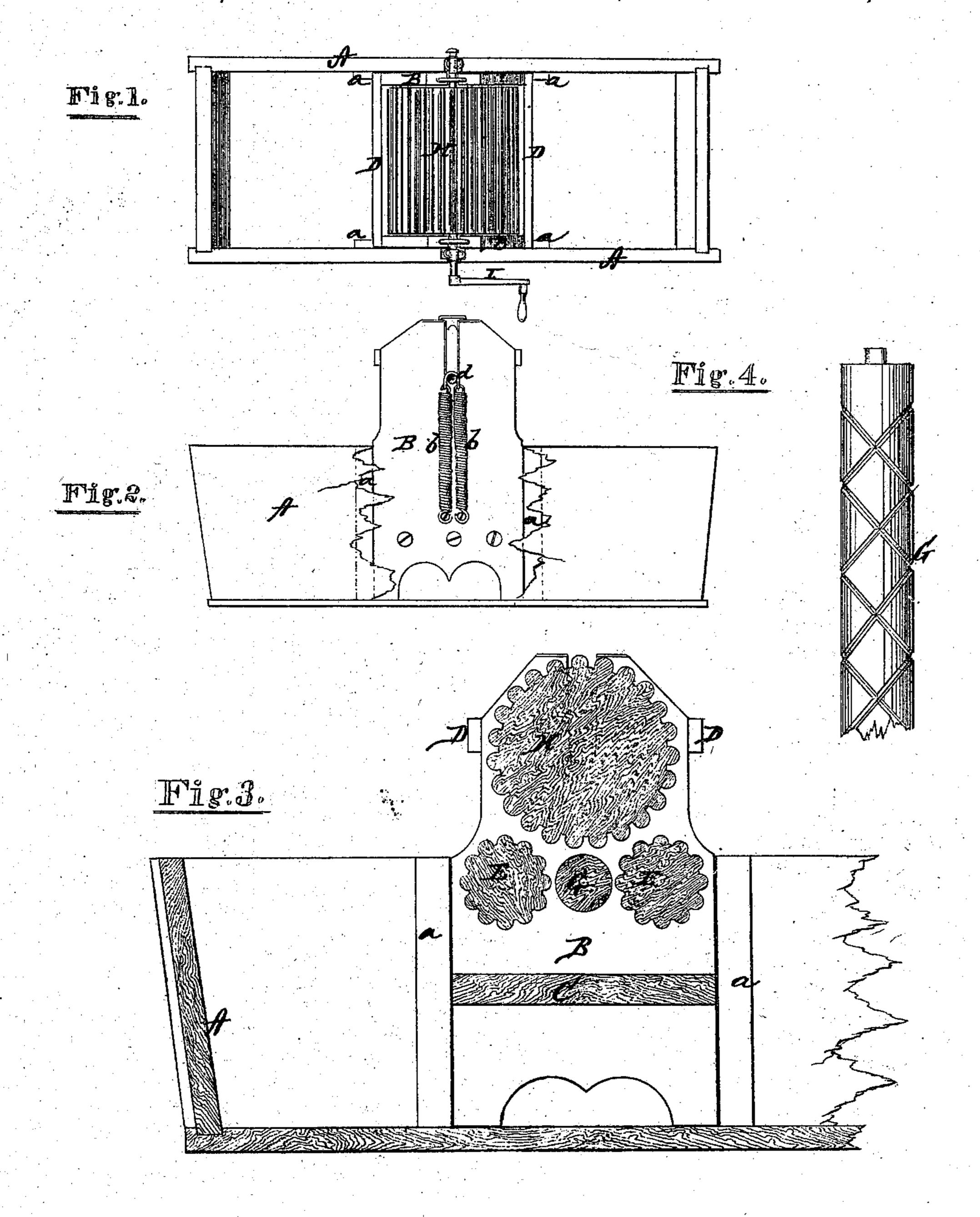
## A. RIGGS. WASHING MACHINE.

No. 108,054.

Patented Oct. 4, 1870.



Wittowosses. Charkenger. Edwel P. Masi

Torverovor; Abner Riggs Ehipmantformert Co Attys,

## Anited States Patent Office.

## ABNER RIGGS, OF FROSTBURG, MARYLAND.

Letters Patent No. 108,054, dated October 4, 1870.

## IMPROVEMENT IN WASHING-MACHINES.

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, Abner Riggs, of Frostburg, in the county of Alleghany and State of Maryland, have invented a new and valuable Improvement in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of my

washing-machine in plan view;

Figure 2 is a side view of the same, part of the side being broken;

Figure 3 is a longitudinal vertical section of the

machine; and

Figure 4 is a side view of one of the rollers used. The nature of my invention consists in the construction and arrangement of a washing-machine, as will be hereinafter 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.

A represents an oblong box of any suitable dimensions, in which the frame containing the washer is placed.

This frame is composed of two end pieces B B, connected a suitable height from the bottom by a board, C, and near the top by bars D D.

This frame is placed in the box A, between slats

a a, secured to the sides thereof.

In the end pieces B B, a suitable distance from and above the board, two fluted rollers, E E, have their journal-bearings. These rollers are placed at the same height from the board C, and a short distance apart.

Between these rollers is placed another roller, G,

which also has its journal-bearings in the side pieces B B, and is grooved spirally, in both directions, as shown in fig. 4, forming diamond-shaped figures around its entire surface.

Above the center roller G is placed a large fluted roller, H, the journals of which pass through vertical slots in the side pieces B B, and are held down by means of two spiral springs, b b, to each journal.

The two springs on each side of the machine are secured at their lower ends to the end piece B, and their upper ends attached to the clasp d, which passes over the journal of the roller, thus holding said roller down, and at the same time allowing it to yield upward to the pressure from the clothes.

A crank, I, is attached to one end of the journals of the roller H, by means of which it is turned.

The operation of this machine is readily seen, and

needs hardly any description.

After the clothes have passed between the large roller H and one of the smaller rollers E, they are spread out by the center roller G, thereby keeping them in uniform thickness while in the process of washing.

Having thus fully described my invention,

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

The combination of the box A, frame B C D, rollers E G H, springs b b, and clasps d d, all constructed and arranged substantially as and for the purposes herein set forth.

In testimony that I claim the above, I have hereunto subscribed my name in the presence of two witnesses.

ABNER RIGGS.

Witnesses:

J. W. FALLON, N. DEAN.