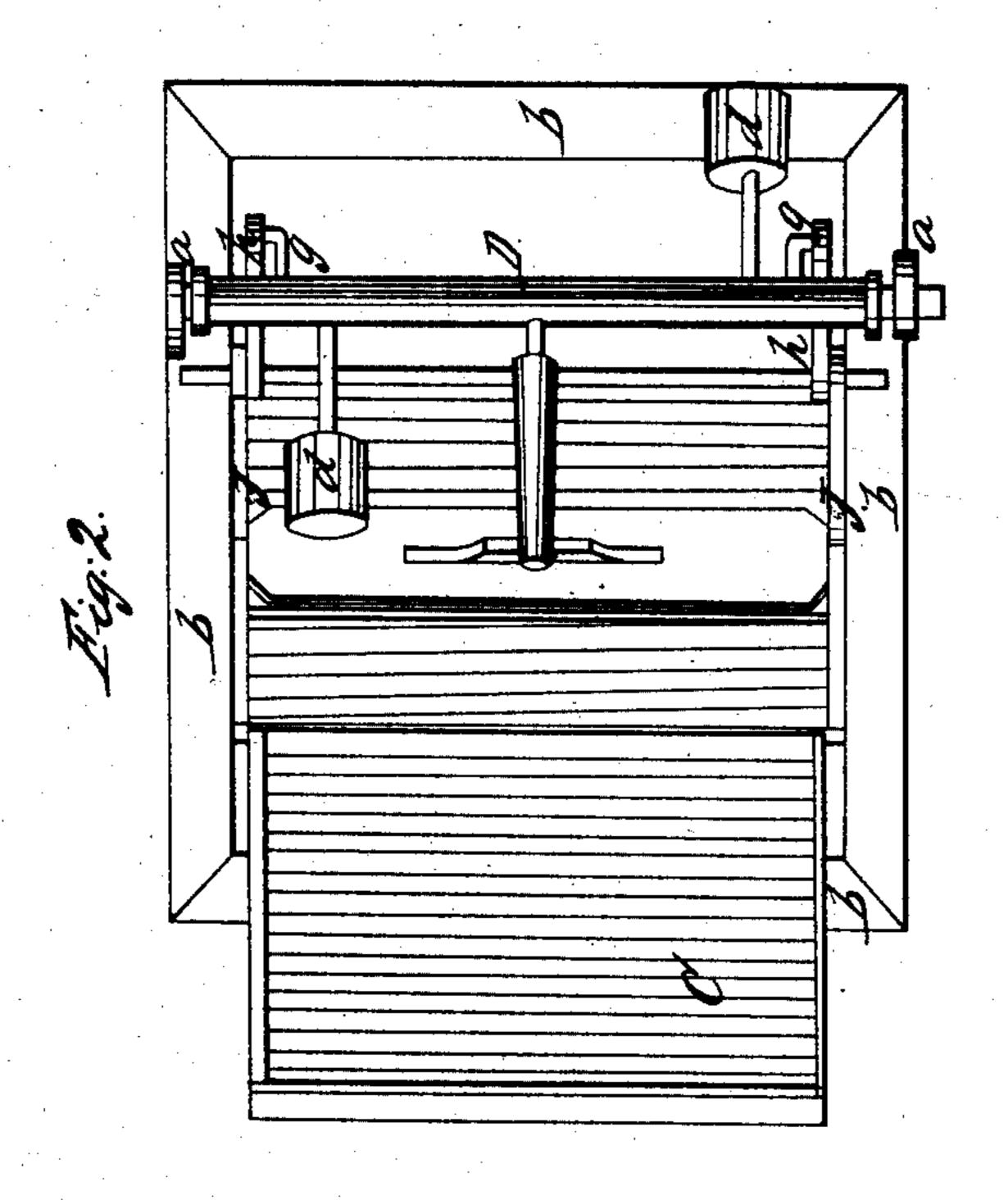
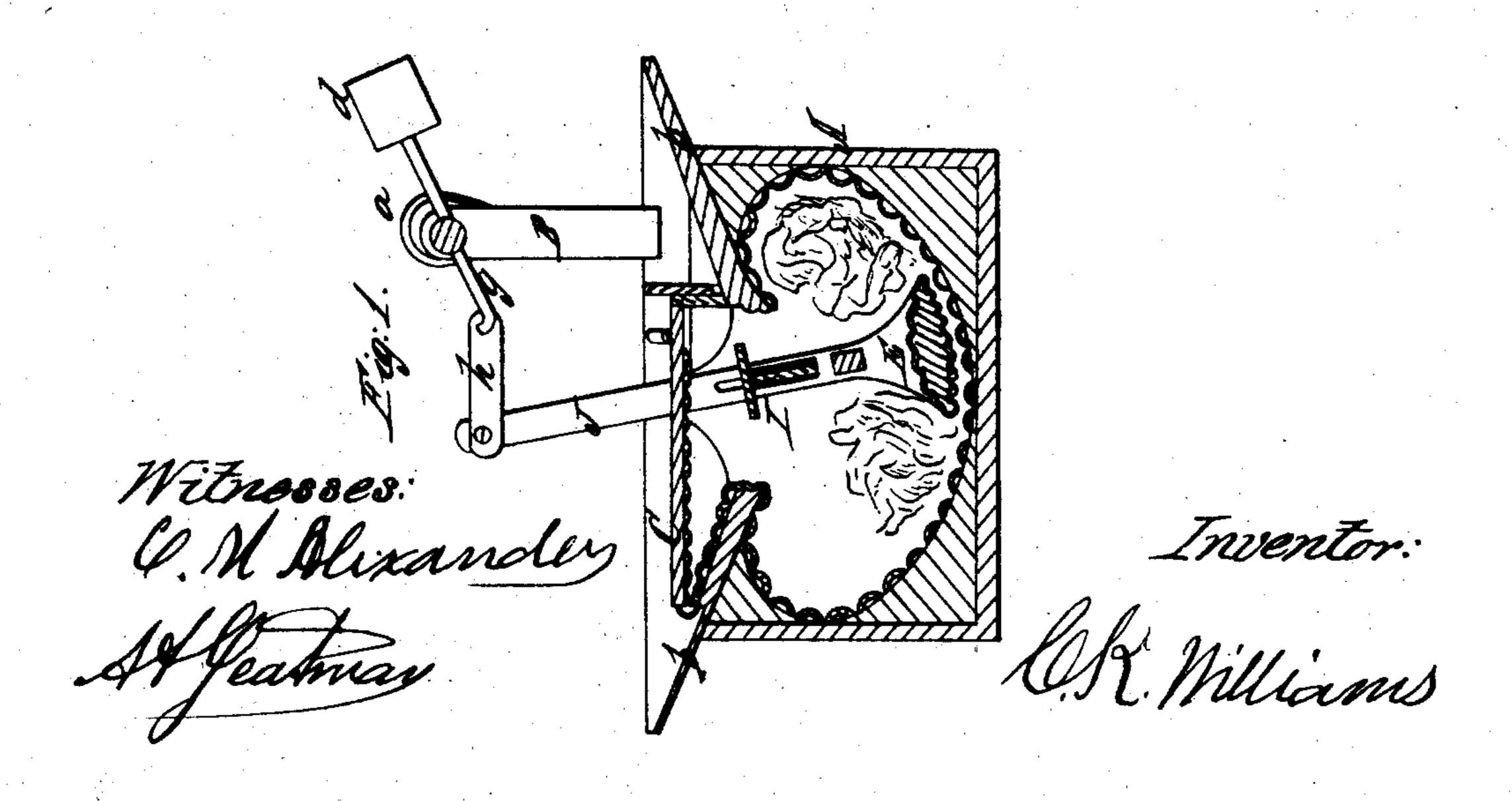
C.K.Milliams, Washing Machine, Patented Apr. 17, 1860.





UNITED STATES PATENT OFFICE.

CHAS. K. WILLIAMS, OF HADDONFIELD, NEW JERSEY.

WASHING-MACHINE.

Specification of Letters Patent No. 27,942, dated April 17, 1860.

To all whom it may concern:

Be it known that I, Chas. K. Williams, of Haddonfield, in the county of Camden and State of New Jersey, have invented 5 certain new and useful Improvements in Washing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the acompanying drawings and to the letters of reference marked thereon.

The nature of my invention consists in the peculiar construction of the bottom of the machine which enables the clothes, by the aid of the shoe, to be both rubbed, pressed and separated and also in the combination of other devices, all of which will be have in after fully set forth

be herein after fully set forth.

To enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation.

In the acompanying drawings Figure 1 represents a vertical cross section, Fig. 2 is

a plan view.

In Fig. 1 (A) represents the box, which 25 may be constructed either in the shape shown in the drawings or any other suitable form around the top of the box is nailed or otherwise secured four strips (b b b b) which are flared as represented for the purpose of con-30 veying the water back into the box when it splashes out. The bottom of the box (A) should be concave, and overlaid with ribbed zinc or any other suitable material. The zinc should extend up the sides of the box. 35 in the same manner, and then project over in a curve toward the center, thus forming in appearance almost an oval. The exact mode of construction can however be more perfectly understood by referring to Fig. 1.

(J J) represent two levers, between the lower ends of which is secured the shoe (E). Said shoe is convex on both sides, and also

ribbed with zinc, as fully shown.

(I) is an adjustable dividing board, which slides between the levers (J J) and is kept in its position by means of two narrow strips, tacked on the inner side of each lever, marked (i i) in Fig. 1.

(C) represents a hinged wash board cover, and is designed to be susceptible of use, either as an ordinary wash board, or as a cover to the machine when it is in operation.

(D) is a shaft, which is supported by uprights (B B).

 $(a\ a)$ are springs, one end of each being 55 attached to the uprights, and the other to the shaft (D), but it will be observed that they are made reciprocating by their curve passing over the shaft in opposite directions. On the under side of shaft (D) are pieces of 60 wire $(g\ g)$ with their lower ends bent from each other.

 $(h \ h)$ represent two elbows, which connect the levers $(J \ J)$ with the pieces of wire $(g \ g)$. It should be observed that the levers 65 $(J \ J)$ are pivoted on each side of the box as represented. $(d \ d)$ are two weights, for the purpose of giving a steady motion to shaft (D). Said shaft may be operated by means of a crank, or any other suitable device.

The operation of my invention is as follows: A sufficient quantity of water is placed in the box, also the articles to be cleansed, motion is then communicated to the shoe (E) by the shaft being worked to and fro. 75 As the shoe traverses the bottom and sides, it rubs the articles and also elevates them to the projections of the box, where they are well pressed. As the shoe descends it separates the articles, and turns them over, to 80 undergo a similar operation of rubbing, pressing and separating them. Two batches of clothing may be thus washed separately at the same time, by inserting the adjustable dividing board (I) as before shown. It 85 will be observed that this mode of washing closely resembles that done with the hands, and at the same time is free from those objections which are usually urged against washing machines.

Having thus fully described my invention what I claim as new and desire to secure by

Letters Patent is—

1. The arrangement of the adjustable dividing board I, with the levers J, J, the 95 board being secured so as to slide up and down between guides attached to the levers, substantially as, and for the purpose set forth.

2. The arrangement with the shaft D, of 100 the springs a, a, made to operate upon different sides of said shaft, and the weights d, d, when the same are used as and for the purpose described.

C. K. WILLIAMS.

Witnesses:

T. H. ALEXANDER, C. M. ALEXANDER.