

F. E. Clark.

Dish Washer.

N^o 97,604

Patented Dec. 7, 1869.

Fig. I.

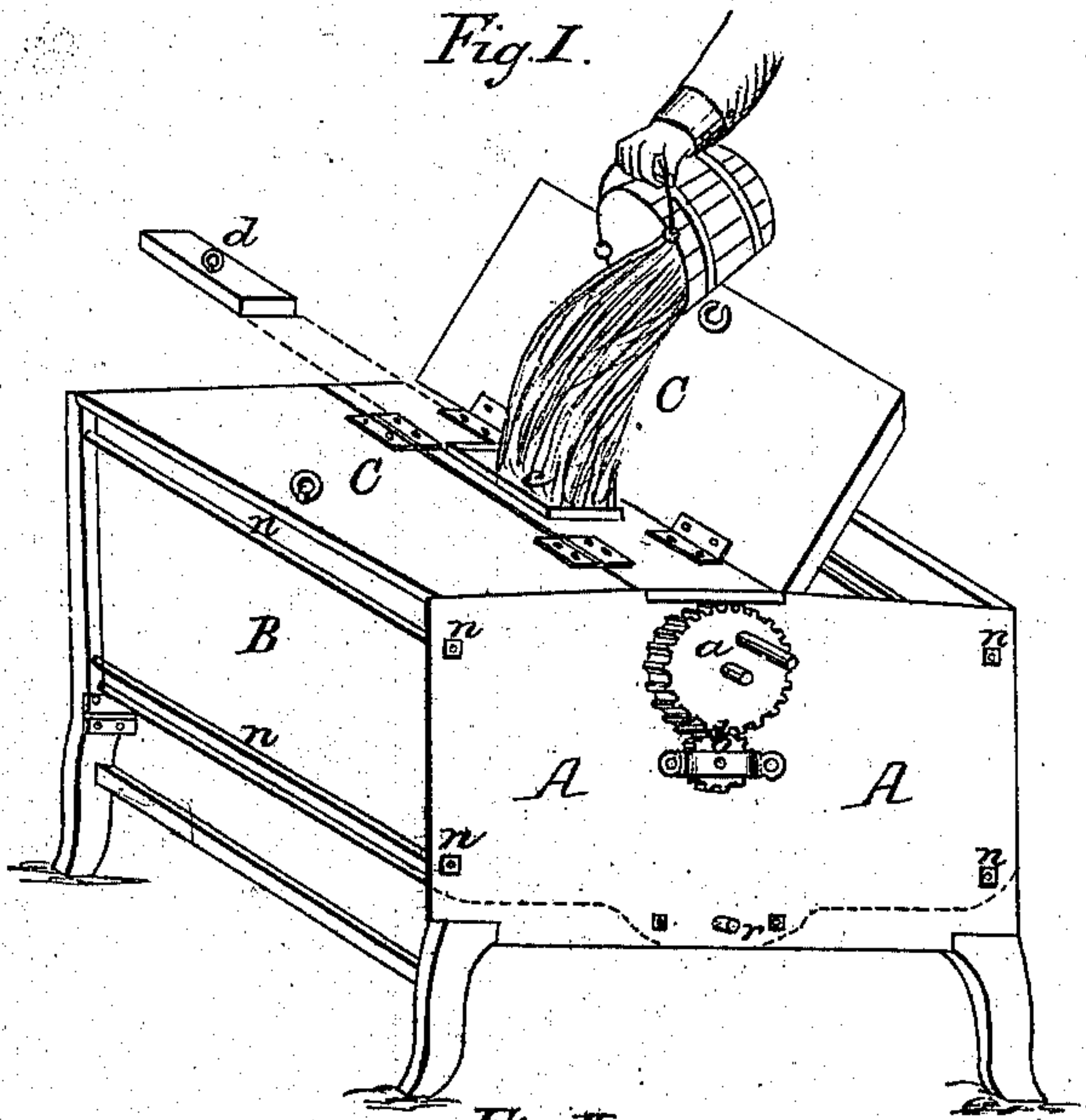


Fig. II.

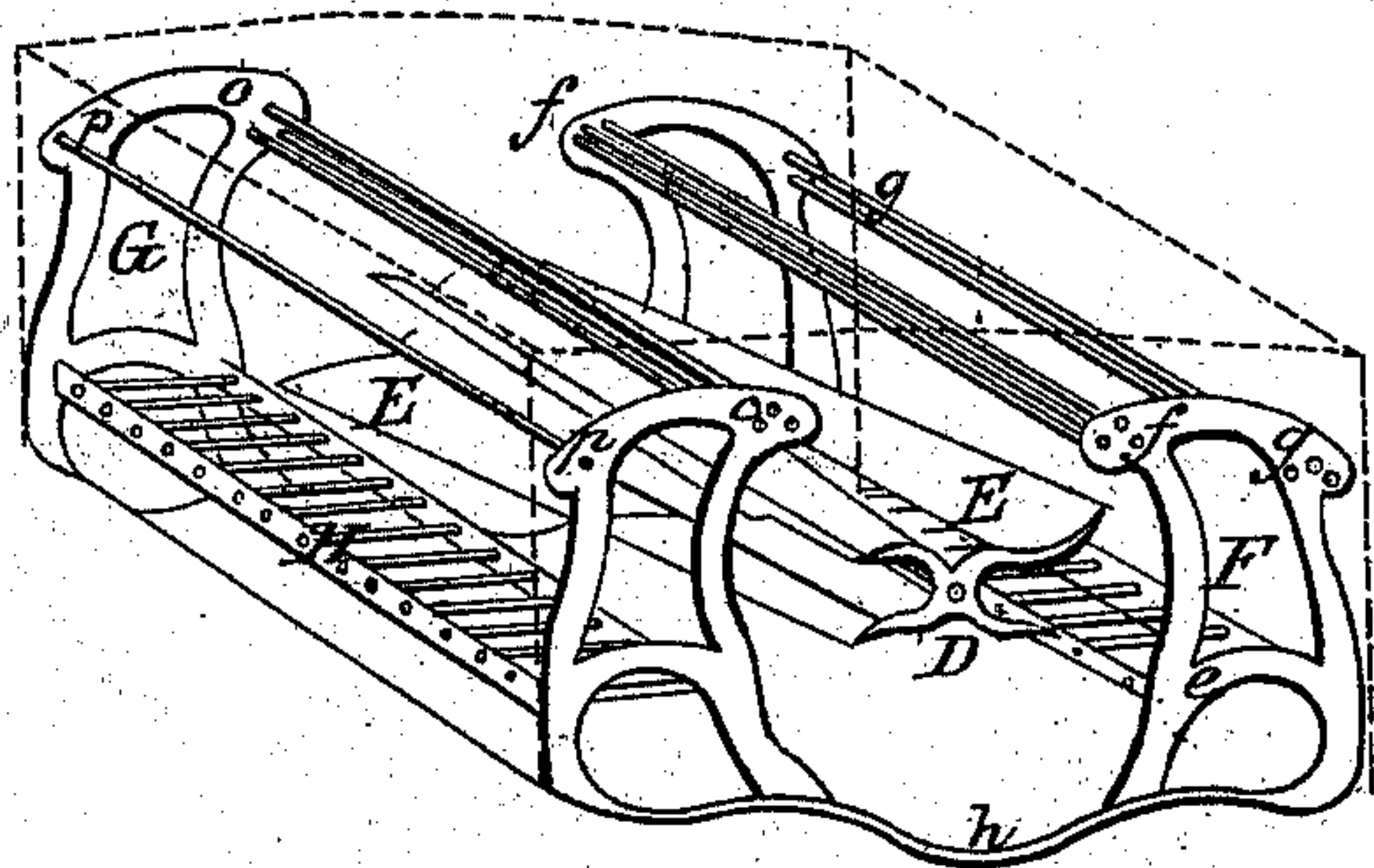


Fig. III.

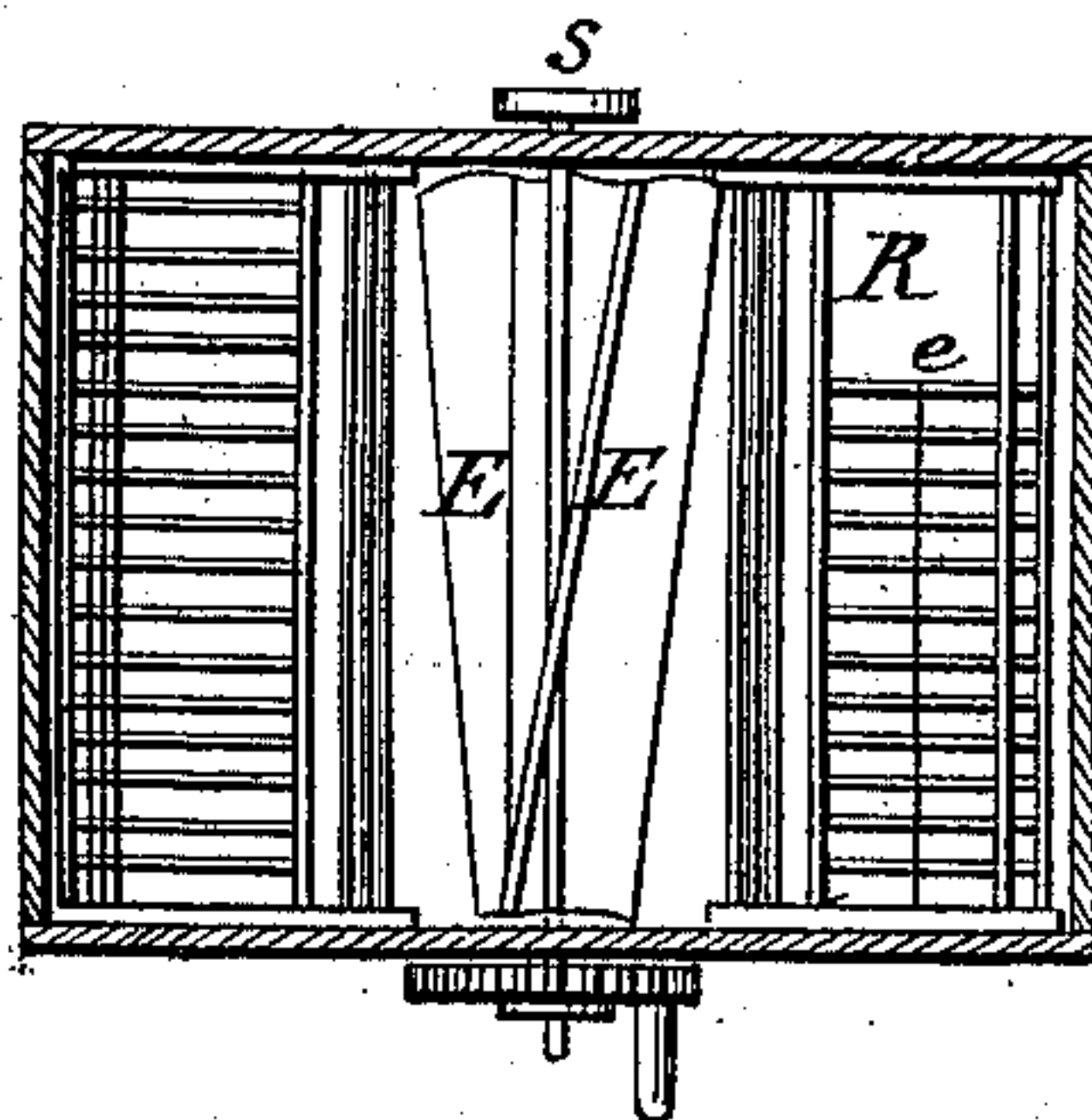
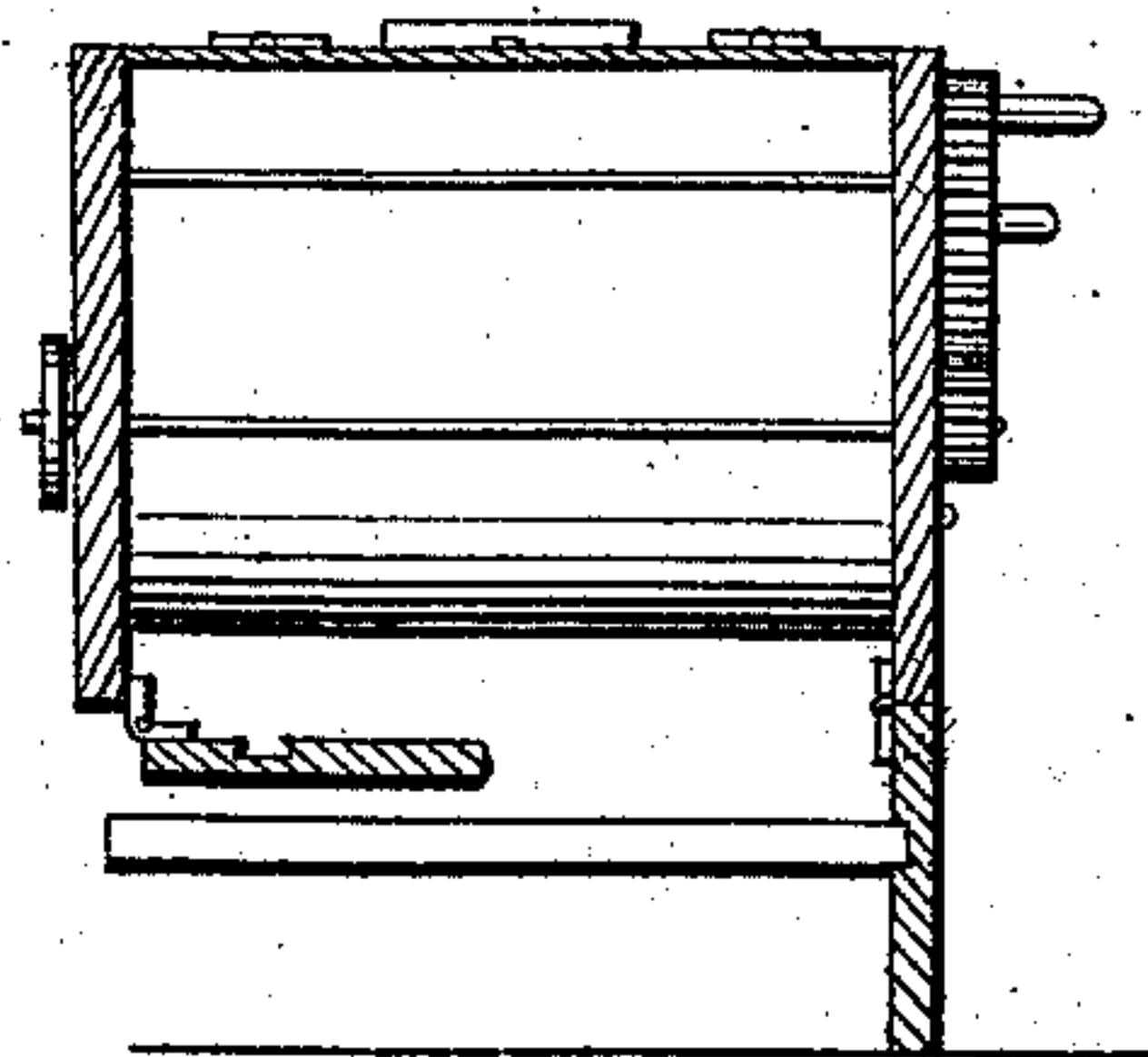


Fig. IV.



Witnesses
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United States Patent Office.

FRANCES E. CLARKE, OF FLINT, MICHIGAN, ASSIGNOR TO THOMAS D. CLARKE, OF SAME PLACE.

Letters Patent No. 97,604, dated December 7, 1869.

IMPROVED DISH-WASHER.

The Schedule referred to in these Letters Patent and making part of the same.

I, FRANCES E. CLARKE, of Flint, in the county of Genesee, and State of Michigan, have invented certain Improvements in Dish-Washing Machines, of which the following is a specification:

Nature and Objects of the Invention.

The nature of my invention relates to machines for washing and drying dishes, and consists in the combination and arrangement of the several parts, as hereinafter more fully described.

Description of the Accompanying Drawings.

Figure I is an oblique view of an upright machine, embodying my invention.

Figure II is the inside of the machine, showing the position of the racks, and the manner in which the dishes are held in their position, in juxtaposition to the water-wheel.

Figure III shows the position of the transverse bars of the two racks, and the shape of the water-wheel in the centre.

Figure IV is a front view of the machine, and shows the construction of the legs.

General Description.

A represents the two sides of the vessel, which should be substantially constructed of wood or metal, zinc or galvanized iron.

B represents the two ends of the vessel and bottom, which consists of one sheet of metal, zinc, or galvanized iron, secured by metallic bars, *n*, on both ends and at the bottom, passing through the wooden sides A.

C C are the two lids on top, fastened with brass hinges.

a is the crank-wheel, and

b, the pinion-wheel, attached to the axle, and which should have four revolutions to one of the crank-wheel.

c is the strainer, on top, through which the water (hot) is poured, and through which the steam escapes, after the dishes are washed.

d is the plug, or cover, which is to be placed over the strainer while the wheel is being turned, to prevent the water from escaping.

D is the axle, which runs through the vessel, in the centre, and E E the paddles of the water-wheel, which are so constructed as to throw the water to the right and left alternately, and so wash both sides of the dishes, and, in the revolution of the wheel, also to throw the water up and around into the top of the vessel, by means of each alternate paddle having a turned edge, thus not only dousing the dishes thoroughly with water, but also throwing it in numerous streams against and around them, so as to exciverate them completely.

The efficacy of the whole operation depends on

this particular kind of wheel. The angle at which the paddles are placed, as well as the shape and number of them, are all essential.

In operating, the crank is turned, for about one or two minutes, to the right, and then for the same time to the left, thus washing the dishes on both sides of the machine.

F is the rack on the right-hand side of the machine, adjustable by a centre-bar, *e*, to accommodate the size of the dish, the fluted tin in the bottom being made to hold in their place the dishes placed in front.

The space R, at the end of the plate-rack, is for tureens, or other large dishes of such shape as not to be conveniently placed in the rack, and which are secured by two upright rods, secured to the front rack-bar, to keep them in their place.

The three rods *f*, in front top of said rack, form a scalene triangle, which holds cups, mugs, and tumblers. It has a movable slide to adjust them to the size of the dishes.

The three rods *g*, in rear top of said rack, form the knife, fork, and spoon-rack, the front space being for the latter, and the back space for the former. Spoons are placed, bowl upward, with concave side to front; knives and forks, handles upward. This rack has also a movable slide, to adjust it to large or small things. The vacant space in rear of the back bar of this rack can be used to hold platters, the dishes in front keeping them from slipping out at the bottom.

The rack G, on the left of the water-wheel, is for plates in front bottom, which, like saucers, &c., are placed between the rods, so that their lower end is held in the fluted bar secured to the bottom of the machine. It has a cup-rack, *o*, like the one to the right of the wheel.

The rod *p*, in rear top, holds platters put behind it, their lower end resting on top of plate-rack H, or on the bottom of the machine, according to size or convenience. Water-pitchers, large bowls, and such like bulky dishes, can be placed on top of the dishes held in the rack H, to wit, plates and saucers. All plates, platters, and saucers, are to be placed in a vertical position, with their edge toward the wheel, and other dishes in such manner as to present their opening, in whole or in part, to the wheel. All the racks incline toward the wheel, as also the bottom of the machine, to facilitate drainage.

The centre, *h*, of the bottom, is curved sufficiently to hold the quantity of water necessary for the operation, and the paddles come close to it in their revolutions, the water quickly returning by reason of the said inclination.

The dishes are placed in the machine as already described, and the lids then shut down. A pailful of hot water is poured in through the strainer *c*, and, if the

dishes are very dirty or greasy, a small quantity of soap is added to the water, the machine all shut up, and the crank then turned to the right for a few minutes, and then to the left. The water is then drawn off by means of a plug, *r*, on the side of the machine, near the bottom. Another pailful of clear, hot water is then poured in, the machine again covered up, and the crank turned each way for a minute or two, when the water is again let off, and the dishes permitted to dry, which will occur very soon, in consequence of their heated condition produced by the hot water, but can be hastened by giving the crank a few revolutions.

Claim.

What I claim as my improvement is—
The vessel A B C, provided with strainer *c*, wheel E, and adjustable racks F G H, *f g*, when constructed and arranged to operate as herein described, for the purpose specified.

FRANCES E. CLARKE.

Witnesses:

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M. J. LACEY.