C. H. WILLIAMS.

Dish-Washing Machines.

No. 143,484. Patented Oct. 7, 1873.

Fig. 1.

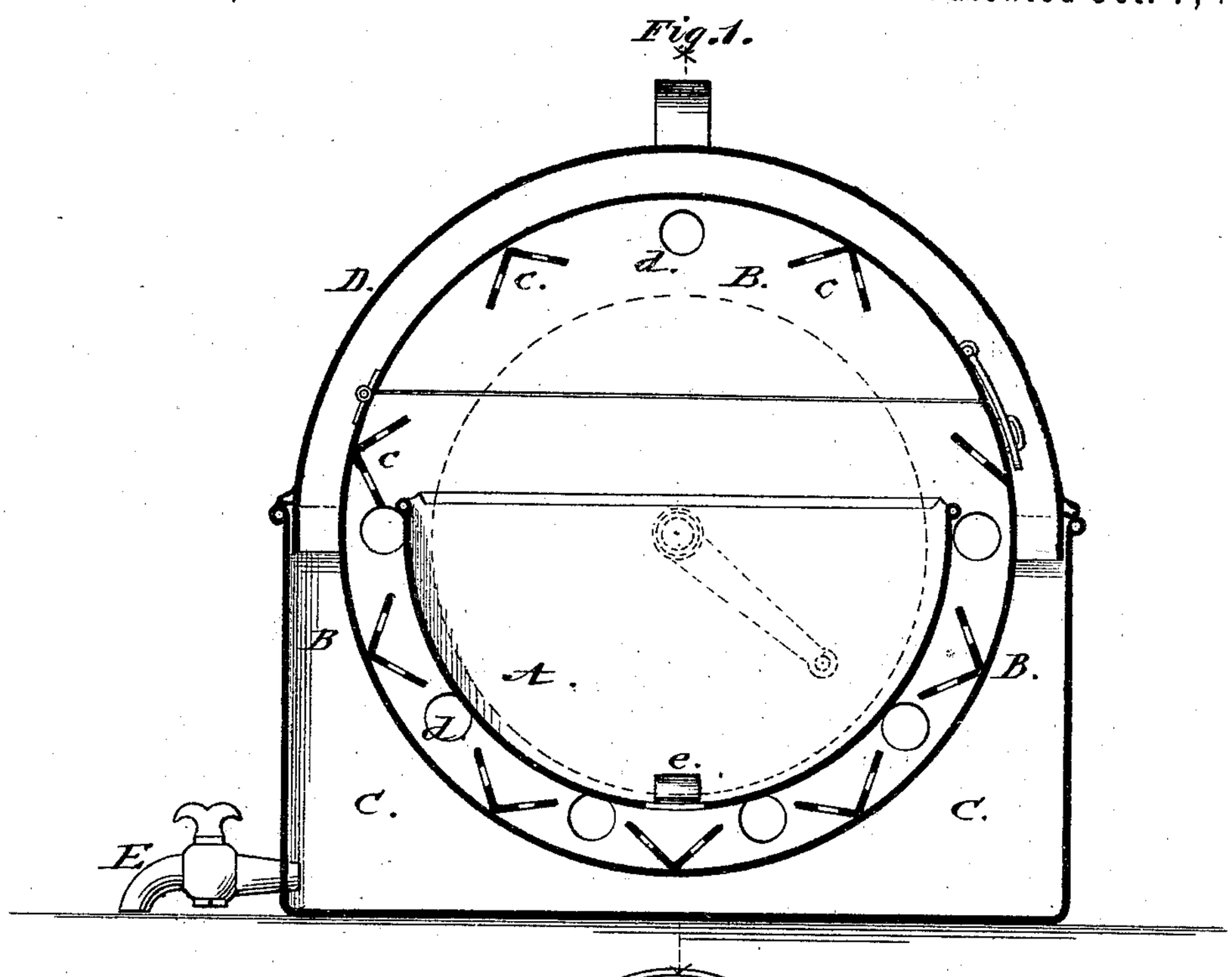
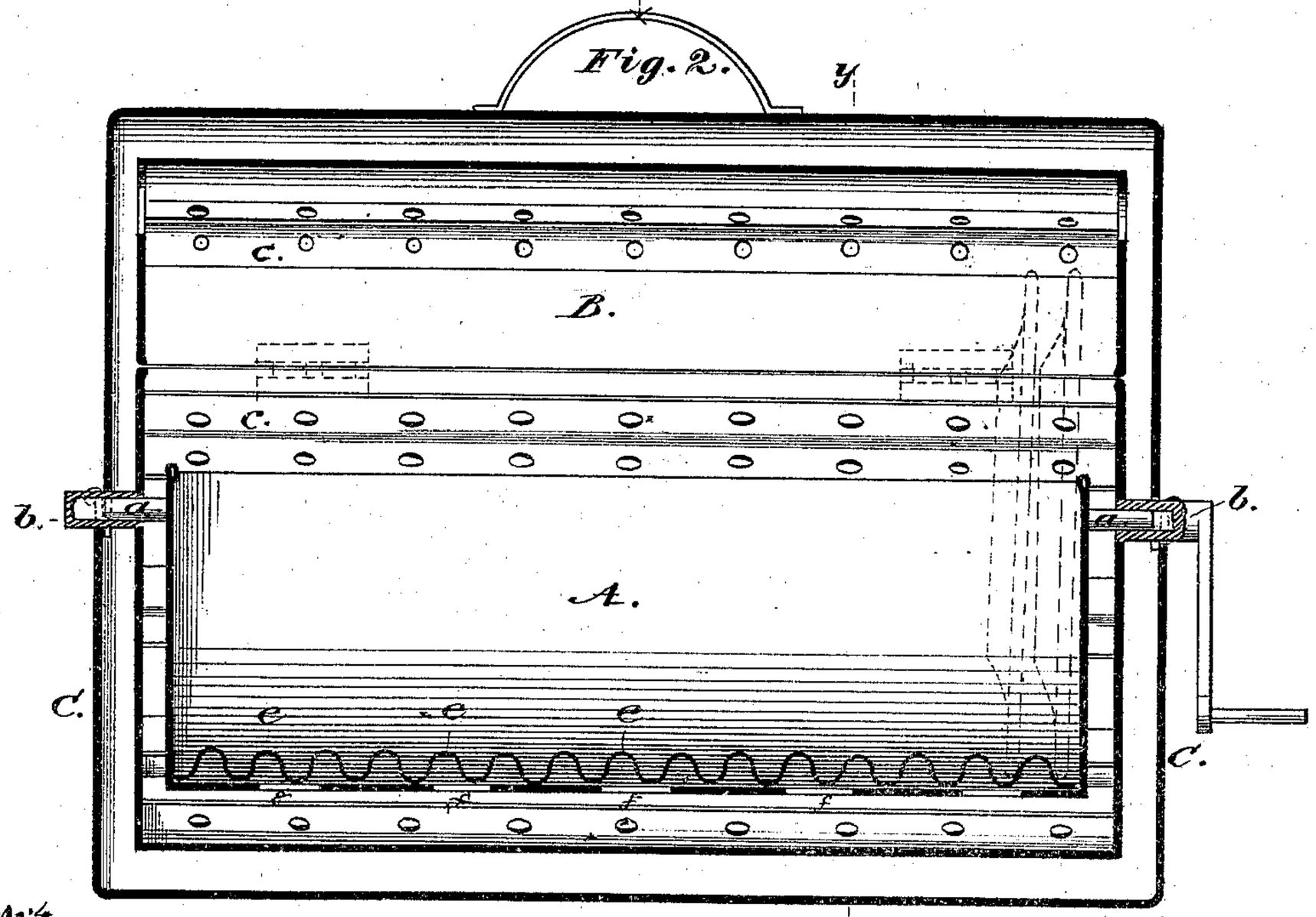


Fig. 2.



Witnesses.
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UNITED STATES PATENT OFFICE.

CHARLES H. WILLIAMS, OF SYRACUSE, NEW YORK.

IMPROVEMENT IN DISH-WASHING MACHINES.

Specification forming part of Letters Patent No. **143,484**, dated October 7, 1873; application filed October 22, 1872.

To all whom it may concern:

Be it known that I, CHARLES H. WILLIAMS, of the city of Syracuse, New York, have invented a new and useful Improvement in Machines for Washing Dishes; and I do hereby declare that the following is a full and exact description of the said invention.

Figure 1 is a transverse section on line *y y* of Fig. 2. Fig. 2 is a longitudinal vertical section of the dish-washer.

My invention consists of a semi-cylindrical box of sheet metal or other suitable material, suspended upon bearings at either end, and incased within a complete cylindrical box provided with buckets, of a peculiar form, to lift and throw or splash, and also perforations in its ends to allow the water to flow in from a tub which incases the whole mechanism to be used in washing or cleansing dishes.

To enable others to manufacture and use the machine, I proceed to describe its construction and operation.

The complete cylinder has extending from its ends, in a line with its axis, hollow journals, which rest in suitable bearings formed in the ends of the tub or case of the machine. To one of these journals is attached a crank or other suitable mechanical device, to which the power is to be applied to revolve the said cylinder. The buckets, which are composed of sheet metal, are V-shaped in their sections, and extend inward from the inside of the cylinder. They are perforated to more thoroughly agitate the water as it is lifted over the semi-cylindrical vessel containing the dishes to be cleansed. The semi-cylinder has journals extending from its ends, which find their bearings in the hollow journals of the complete cylinder. The dishes are secured by three or more corrugated straps fixed in the bottom and sides of the semi-cylinder.

The dishes are intended to be kept stationary in their cradle by their own gravity, while the complete cylinder is caused to revolve about them, to lift the water which flows in from the tub through openings to drench and cleanse the same. The water which falls into the semi-cylindrical cradle is allowed to pass out and mingle with the less turbid water in the cylinder and tub, to be again thrown over the dishes until they are deemed sufficiently clean.

I am aware that machines have been invented and are now in use for cleansing dishes by throwing water over them by buckets framed in a revolving cylinder while they remain stationary; but they differ materially from my invention, for which I claim several advantages.

The cradle in my device is not a frame composed of wire, but a complete cylinder, which is easy of construction, and which will deflect the water onto the dishes to more thoroughly cleanse them. The case which contains the buckets in my device is formed of a complete cylinder, when closed, and prevents the violent splashing of the water against the cover of the tub, and thence through the joints into the room. The buckets, which present V-sections, are perforated to break and shower the water down against the dishes to be washed.

A is the semi-cylindrical cradle, with journals *a a* resting in the hollow journals *b b* of the complete cylinder or case B. *c c c* are the V-shaped buckets, which extend inward from the concave surface of the cylinder. *d d d* are openings formed in the cylinder or case, to allow the water from the covered tub C to flow in. D is the cover of the tub, which is provided with a latch or fastening, and a handle, to make it more portable. The cylinder B has a segment of itself cut off and hung with hinges, and is provided with a fastening to prevent its being thrown open while being revolved in the operation of cleansing the dishes. The corrugated straps *e e e* hold the dishes in their proper places during the process of washing. *f f* are openings in the bottom of cradle A. The cock E is used to draw off the dirty water from the tub.

I claim—

1. The sheet-metal cradle A, with its corrugated supports *e e e* and openings *f f f*, supported by journals *a*, which rest in hollow journal *b*, all arranged as described, for the purpose set forth.

2. The revolving cylinder B, having V-shaped perforated buckets *c*, in combination with the cradle A, the whole being supported by hollow journals *b b*, bearing in the ends of the closed tub C, all arranged as and for the purpose set forth.

CHAS. H. WILLIAMS.

Witnesses:

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