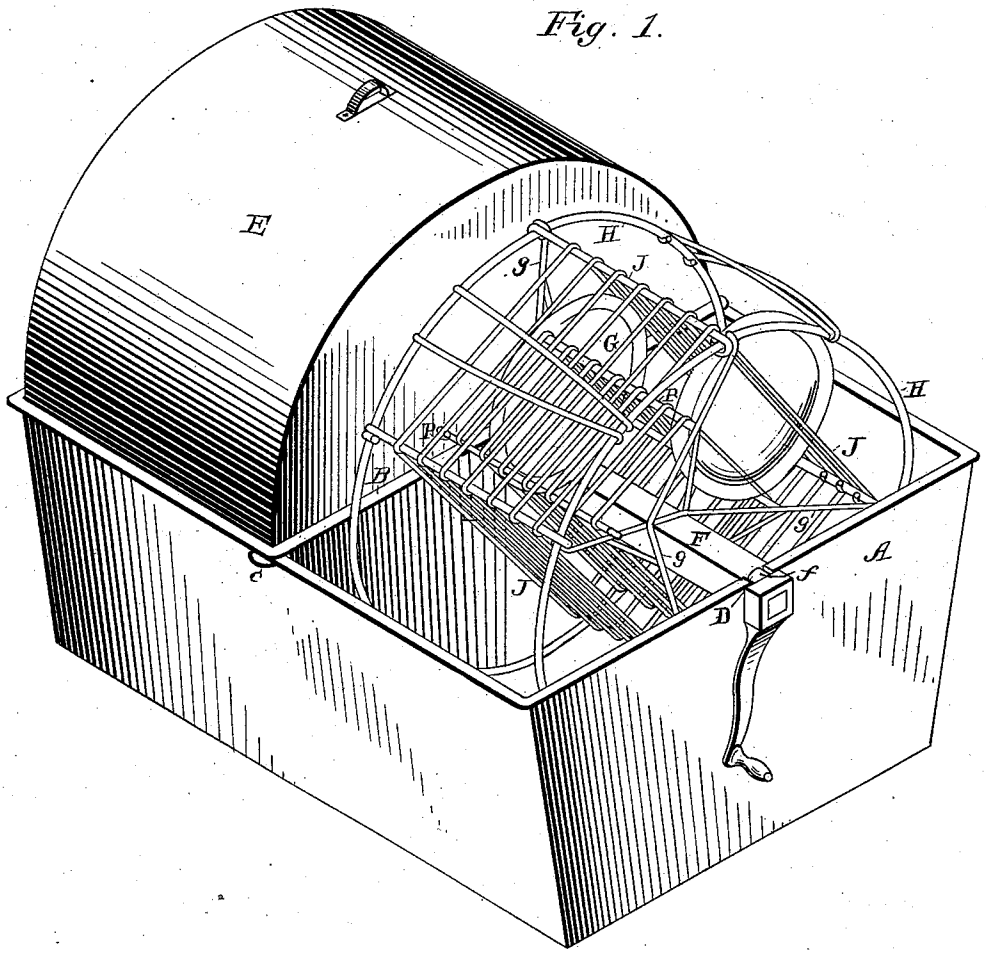
(No Model.) 3 Sheets—Sheet 1.

C. B. SAUNDERS.

DISH WASHER.

No. 352,155. Patented Nov. 9, 1886.

Fig. 1.



Witnesses

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(No Model.) 3 Sheets—Sheet 2.

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Fig. 2

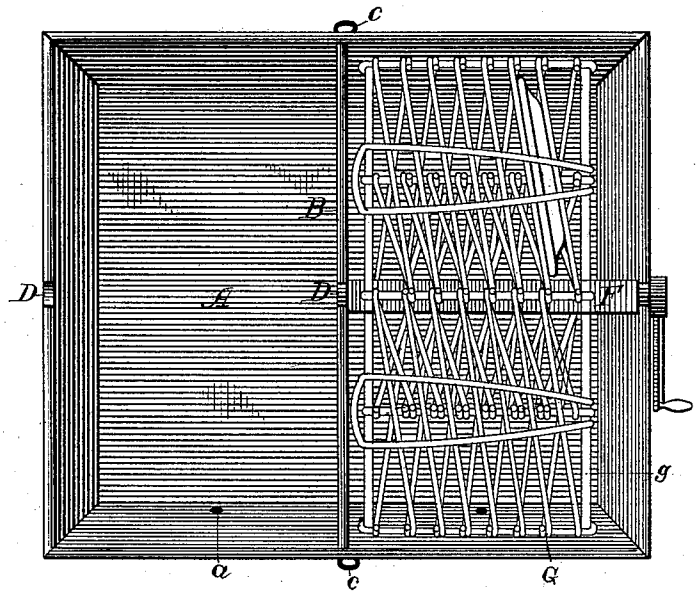
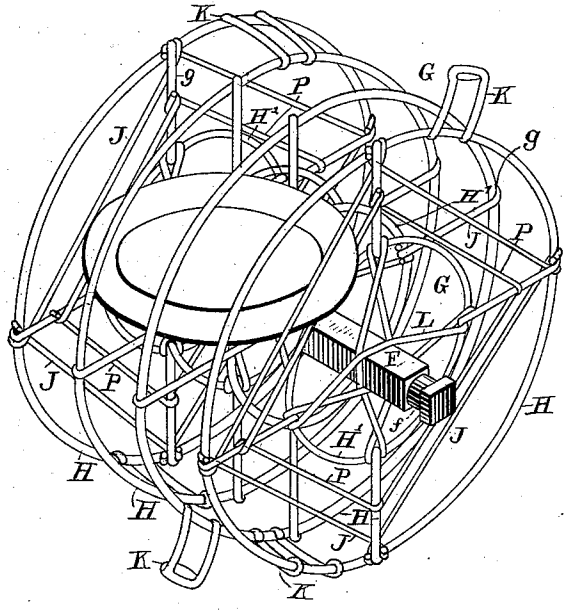


Fig. 3.



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DISH WASHER.

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Fig. 4.

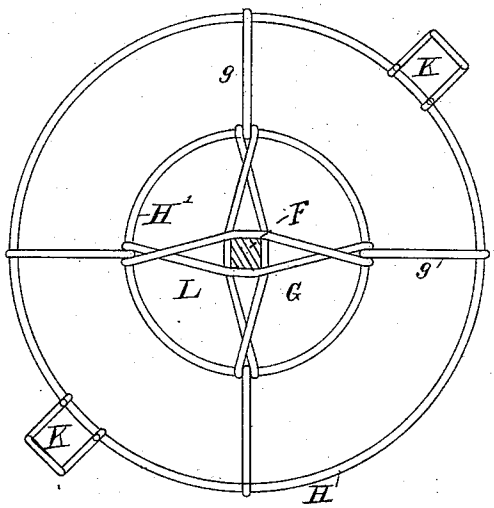
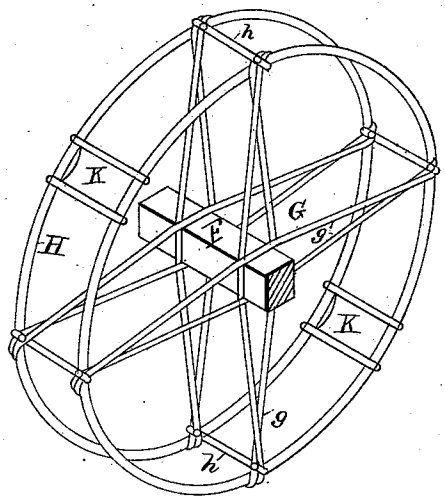


Fig. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES BERTRAM SAUNDERS, OF COLUMBIA, MISSOURI.

DISH-WASHER.

SPECIFICATION forming part of Letters Patent No. 352,155, dated November 9, 1886.

Application filed August 6, 1884. Serial No. 139,768. (No model.)

To all whom it may concern:

Be it known that I, CHARLES BERTRAM SAUNDERS, of Columbia, in the county of Boone and State of Missouri, have invented a new and useful Improvement in Dish-Washers, of which the following is a specification.

This invention is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a perspective view of my improved dish-washer. Fig. 2 is a top view of the device shown in Fig. 1, the cover being removed; Fig. 3, a perspective view of the revolving cage or tray. Fig. 4 is a side elevation of a single dish tray or cage in a modified form; and Fig. 5 is a perspective view of the same.

My present invention relates to an improvement in dish-washers, and has for its object ease and rapidity of inserting and removing dishes from the trays, securing them in position, and rinsing them.

It consists of a circular tray having centrally a transverse shaft, to the one end of which a crank is intended to be applied, on which shaft a series of wires are disposed in a peculiar manner, by means of which cups, plates, &c., may be placed as found desirable, all of which will now be fully set forth in detail, and pointed out in the claims.

In the drawings, A is a tank, of suitable size, formed preferably of tin or sheet metal having the upper edge of the sides flaring upwardly somewhat. This is provided with a partition, B, which divides it into two equal parts. Handles C are provided at the ends or sides, and openings *a* for plugs should be made at the bottom of the compartments for removing the water. Semicircular recesses D are provided centrally in each of the end pieces at the top, and also in the partition B, the three designed to be placed in a straight line as bearings for the shaft F, which operates the dish-cage. A lid or cover, E, preferably semicircular in form, having its edge lined with leather or felt, if desired, is designed to be fitted to one of the compartments, but may be interchangeable, so as to fit either. The shaft F has bearings *f* at suitable distances along its length, to fit within the semicircular openings D in the walls and partition of the tank, one end being somewhat prolonged, so as to receive thereon a crank for the purpose of manipulating the same. Upon this shaft F is provided a cage or dish-receiving device, G, composed of radial arms or wires *g*, singly or in pairs, of suitable length, secured at their outer ends to the rim of the circular hoops H. Two or more of these transverse wires are placed at right angles to each other, the wires of each pair being somewhat separated centrally and a shaft inserted therein.

Wires P are used to connect the radial wires. These connecting-wires may be simply wrapped about the radial wires or soldered thereto. The radial wires *g* may also be wrapped about the shaft or soldered thereto. It will be best in some instances to have the radial wires pass directly through the shaft, thus dispensing with wire wrappings or solder. I design to have the hoops H of a somewhat heavier material than the wires *g*. A series of wires, J, in the form of cords, extends from the point of the hoop to which the wires *g* are secured to the point of the hoop where the adjoining wires *g* are secured. Inwardly from these cords one or more parallel cords, P, are provided. A cage can be made of two sections, as shown in Fig. 5, secured together by transverse wires *h;* or three or four, or more, of these sections may be placed upon the shaft and secured together at their periphery by means of the transverse wires. Instead of the transverse wires, hinged loops or keepers K may be used to unite the several sections together. One of the sections on the end of the shaft is designed to be detachable therefrom in placing plates between the wires of the tray, and afterward secured in position by means of the wire loops K. If found desirable, a similar hoop, H′, may be placed within the end of the sections inwardly from the hoops H to assist in strengthening the same, and also to prevent the dishes from moving laterally. This construction is shown in Figs. 3 and 4, which, as will be noticed, is also provided with the curved wires L, so disposed as to hold the section in position upon the shaft. The two outer sections of this tray I also design to be formed somewhat smaller than the inner sections.

The operation of this device will be readily understood from the foregoing description.

The cages or trays are filled with dishes and

secured in position, as shown, after which one portion of the tray is placed within one of the compartments of the devices shown in Fig. 1, containing a sufficient quantity of hot water, the cover placed in position, and by means of a crank revolved for a short time, after which the cover is removed and the tray placed within the opposite compartment, containing a quantity of hot water, and also revolved for a short time, after which the dishes may be removed from the tray and allowed to dry on suitable plate-drainers, and the process repeated as often as desired, according to the number of dishes.

It is obvious that in the mere mechanical detail of the structure of the cage there may be a very wide degree of change over what is above described without departing in any sense from the scope of this invention.

What I claim is—

1. The herein-described dish-washing device, consisting of a tank having two water-compartments, a transverse shaft bearing upon it, a wire cage or tray composed of radial arms secured to hoops at their outer ends, and transverse connecting-wires forming receptacles or racks to receive and hold dishes during the process of washing, and into which they are readily placed and from which they can be readily removed, substantially as described.

2. The rotary open wire cage composed of radial arms secured to hoops at their outer ends, and transverse connecting-wires forming racks or receptacles to receive and hold the dishes, into which they can be readily placed and from which they can be readily removed, substantially as described.

3. In a wire dish-washing cage made of radial arms, exterior hoops and transverse connecting-wires, the hinged retaining-wires, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand, this 12th day of July, 1884, in the presence of witnesses.

CHARLES BERTRAM SAUNDERS.

Witnesses:

JAS. L. WILCOX,

HUGH M. HALL.