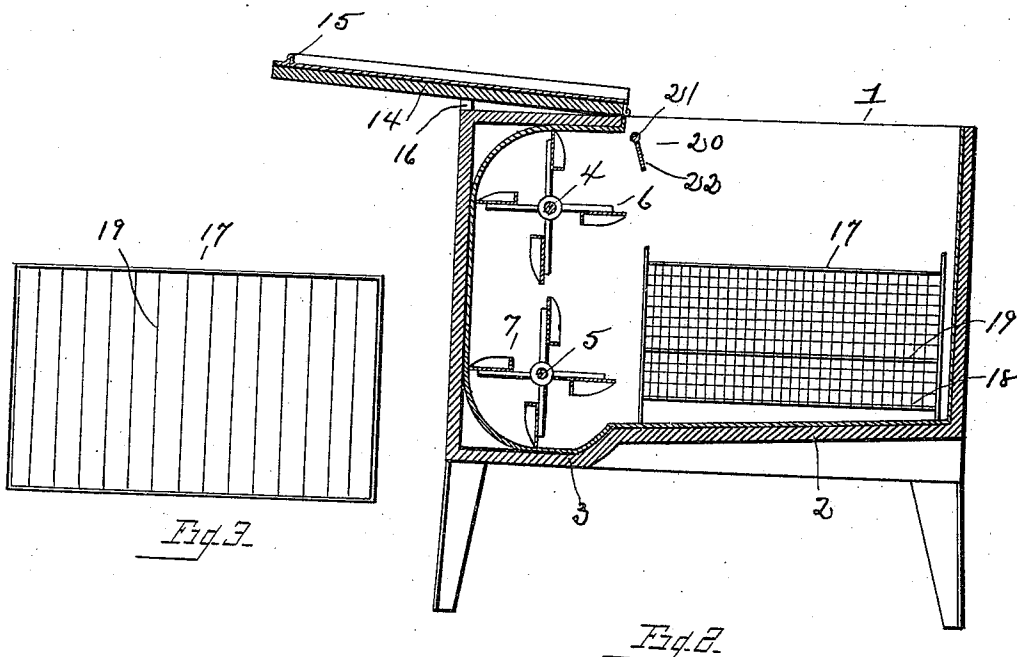
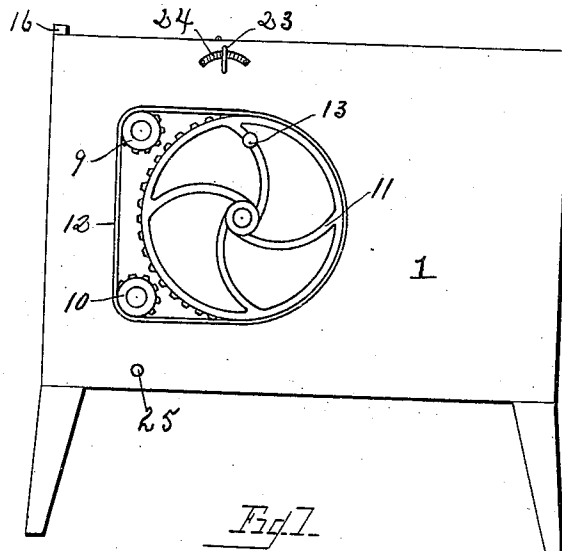


(No Model.)

J. S. HOYT.
DISH CLEANER.

No. 553,677.

Patented Jan. 28, 1896.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOEL S. HOYT, OF TOLEDO, OHIO.

DISH-CLEANER.

SPECIFICATION forming part of Letters Patent No. 553,677, dated January 28, 1896.

Application filed April 1, 1895. Serial No. 543,926. (No model.)

To all whom it may concern:

Be it known that I, JOEL S. HOYT, of Toledo, county of Lucas, and State of Ohio, have invented certain new and useful Improvements in Dish-Washers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form part of this specification.

My invention relates to a dish-washer, and has for its object to provide a machine of this character which shall be efficient in operation and of small dimensions, which shall not take up much room but be of a convenient size to form a household article.

The invention consists in a receptacle having a tray for the dishes in one end, the opposite end having a series of water-wheels therein in vertical alignment, the lower one acting to elevate the water, the upper one to receive and throw the water down upon the dishes.

The invention further consists in the parts and combination of parts, as shown in the drawings, described in this specification, and pointed out in the claim.

In the drawings, Figure 1 is a side elevation of a dish-washer constructed in accordance with my invention. Fig. 2 is a sectional elevation of the same, showing the combined cover and draining-board opened. Fig. 3 is a detail view of the dish-rack.

1 designates the receptacle preferably having an inside metal lining, the bottom of the same being formed of two frames, a slightly-inclined portion 2 and a circular portion 3 forming a well in one end of the receptacle. Journaled in the sides of the receptacle are shafts 4 and 5, which carry a washing-wheel 6 and an elevator 7, the washing-wheel and elevator being constructed alike, but by reason of the form of the end of the receptacle they have different action. The lining of the receptacle is curved from the bottom of the well to a point midway the height of the elevator, then upward vertically to midway the height of the washing-wheel and then

curves around the same. Therefore the action of the elevator is to carry the water in the well and throw the same upward to the washing-wheel which catches the same and carries it to the top of the wheel and throws the same into the opposite end of the receptacle, it being understood that wheels 6 and 7 are formed with buckets and which in connection with the curved portion of the lining of the receptacle form a receptacle to carry the water. To revolve the wheels there is secured upon the ends of the shafts 4 and 5 sprocket-wheels 9 and 10, respectively, over which and a large sprocket-wheel 11 runs a sprocket-chain 12, the sprocket-wheel 11 having a handle 13 by which to turn the same. It will thus be seen that by revolving wheel 11 a rapid motion is imparted to wheels 9 and 10, and consequently to the elevator and washing-wheel. The top of the receptacle is preferably closed above the wheels 9 and 10, the remaining portion comprising a hinged cover 14, which is also preferably lined with metal and formed with a flange 15 which, when the cover is closed, fits inside the receptacle to form a tight joint between the cover and receptacle and when the cover is opened prevents water from flowing off the same onto the floor and causes the same to flow into the receptacle, it being understood that the cover when opened is held at an angle by means of a rest 16, and this serves the purpose of a draining-board.

17 designates the dish-receptacle preferably formed of wire and having a slatted partition 18 near the bottom of the same and a partition 19 substantially midway of the same, the slats of the two partitions being in a vertical line, whereby the dishes may be placed on edge in the receptacle, and the slats will serve as a guide to hold them in position.

20 designates a deflector comprising a rod 21 pivotally secured in the sides of the receptacle, having a wing 22 depending thereupon, the wing being held at any preferred angle by means of a right-angled portion 23 of the rod 21, which engages a segment 24 and thereby holds the deflector in an adjusted position.

In operation, the dish-receptacle being filled with dishes it is placed in the receptacle 1, it

being understood that the well of the receptacle is previously filled with soapy water. The sprocket-wheel 11 is now revolved, turning the elevator and washing-wheels 6 and 7, elevating and throwing the water down upon the dishes in the dish-receptacle, which are soon cleaned under the action of the water. Clean hot water is now poured upon the dishes, the top is opened and the dish-receptacle is placed thereon, the water draining down into the receptacle until the dishes are dry, or if desired, the dirty water may be drawn off and hot water poured into the well, when by revolving the wheels the operation of drying is the same as in washing, it being understood that the action of the heat of the dishes dries the same when the water has drained off. The angle of the deflector will cause the water when leaving the washing-wheel to be thrown down in any direction desired.

In order to withdraw the water from the receptacle 1 there is an opening 25 closed

preferably by a plug in the receptacle at the bottom of the well.

What I claim is—

In a dish washer, a receptacle, a rack for the dishes in one end of the same, the opposite end being curved at the top and bottom, an elevator wheel journaled in the lower portion of like radius of the lower curved portion, and a washing wheel journaled above the elevator, of like radius to the upper curved portion of the end of the receptacle, and means for revolving the elevator and washing wheels in unison, whereby the water is elevated above the dishes and thrown down upon the same.

In testimony that I claim the foregoing as my own I hereby affix my signature in presence of two witnesses.

JOEL S. HOYT.

Witnesses:

CARROLL J. WEBSTER,
MAUD SCHUMACHER.