

No. 667,670.

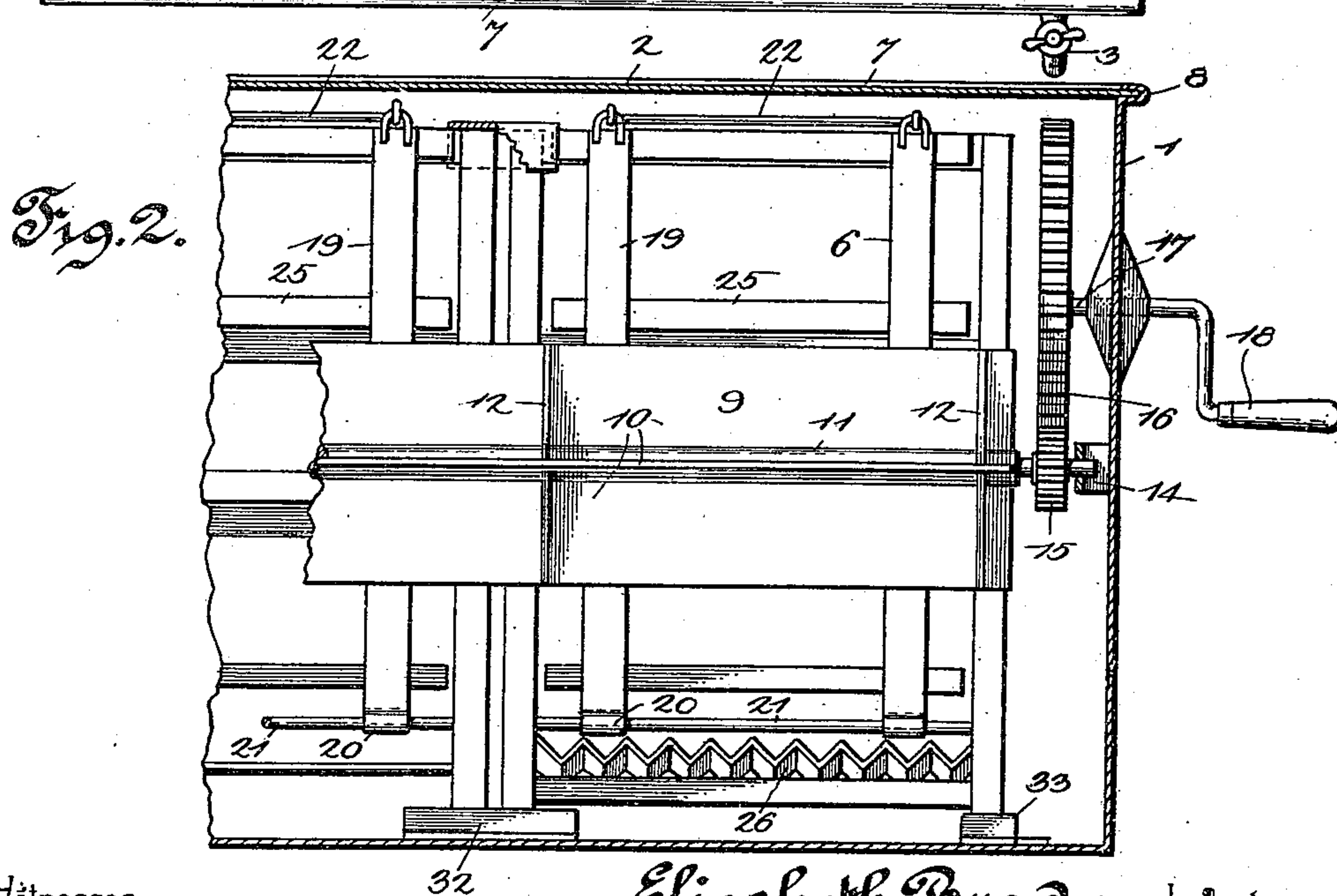
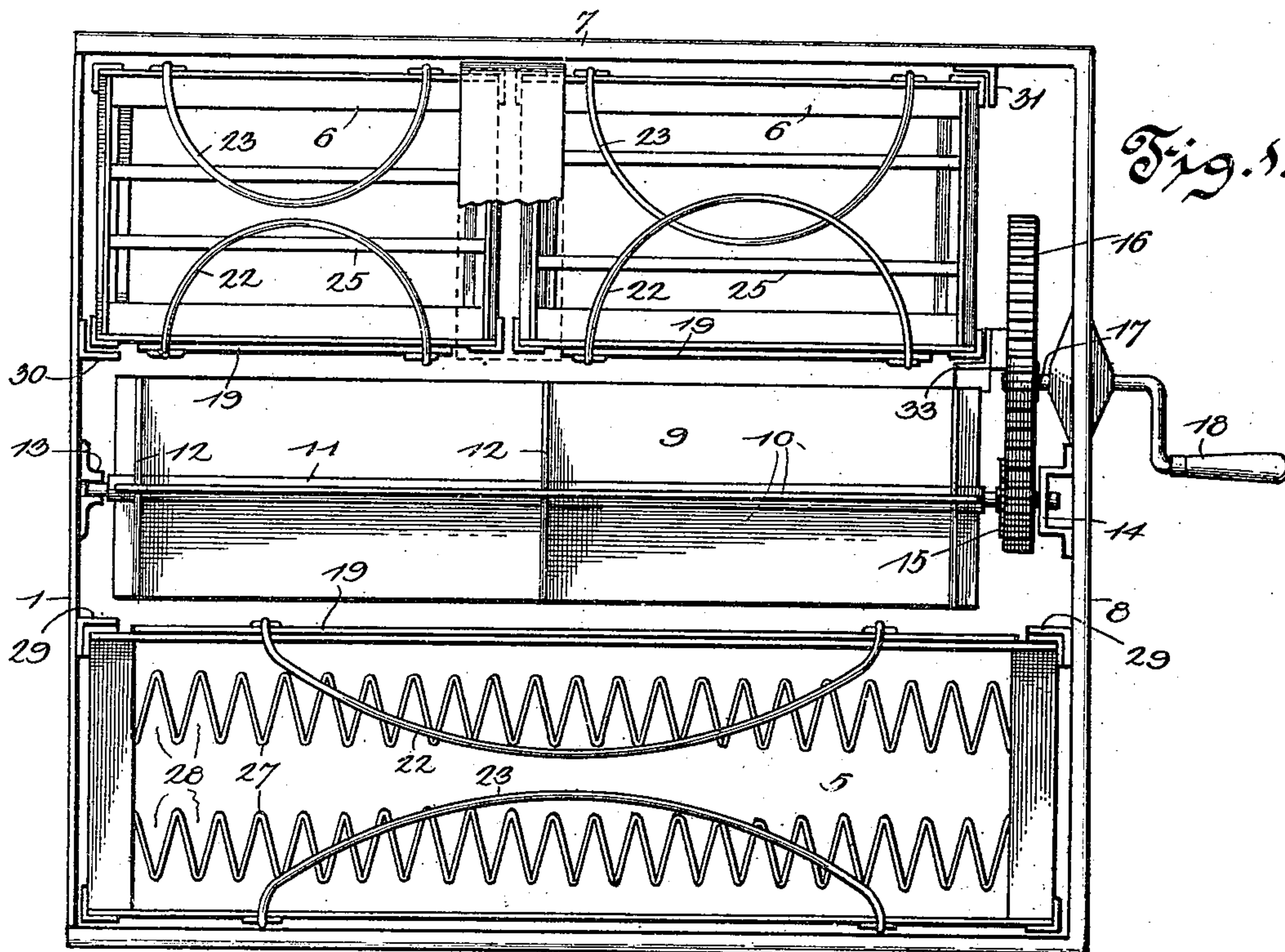
Patented Feb. 12, 1901.

**E. BRADY,
DISH WASHER.**

(Application filed Sept. 20, 1900.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses

J. Frank Culverwell.
J. F. Riley

Elizabeth Brady, Inventor.

By *Cashner & Co.*
Attorneys

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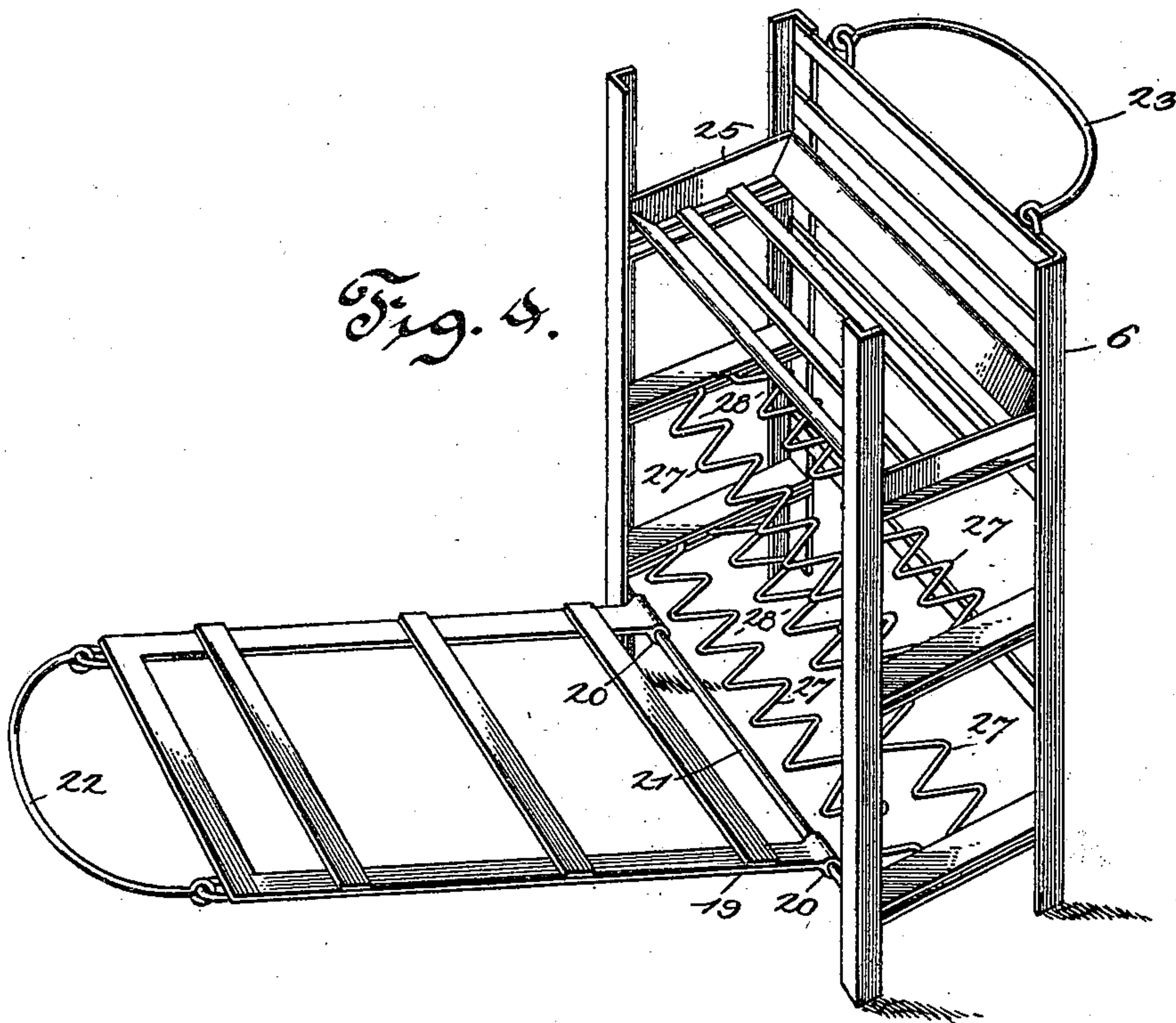
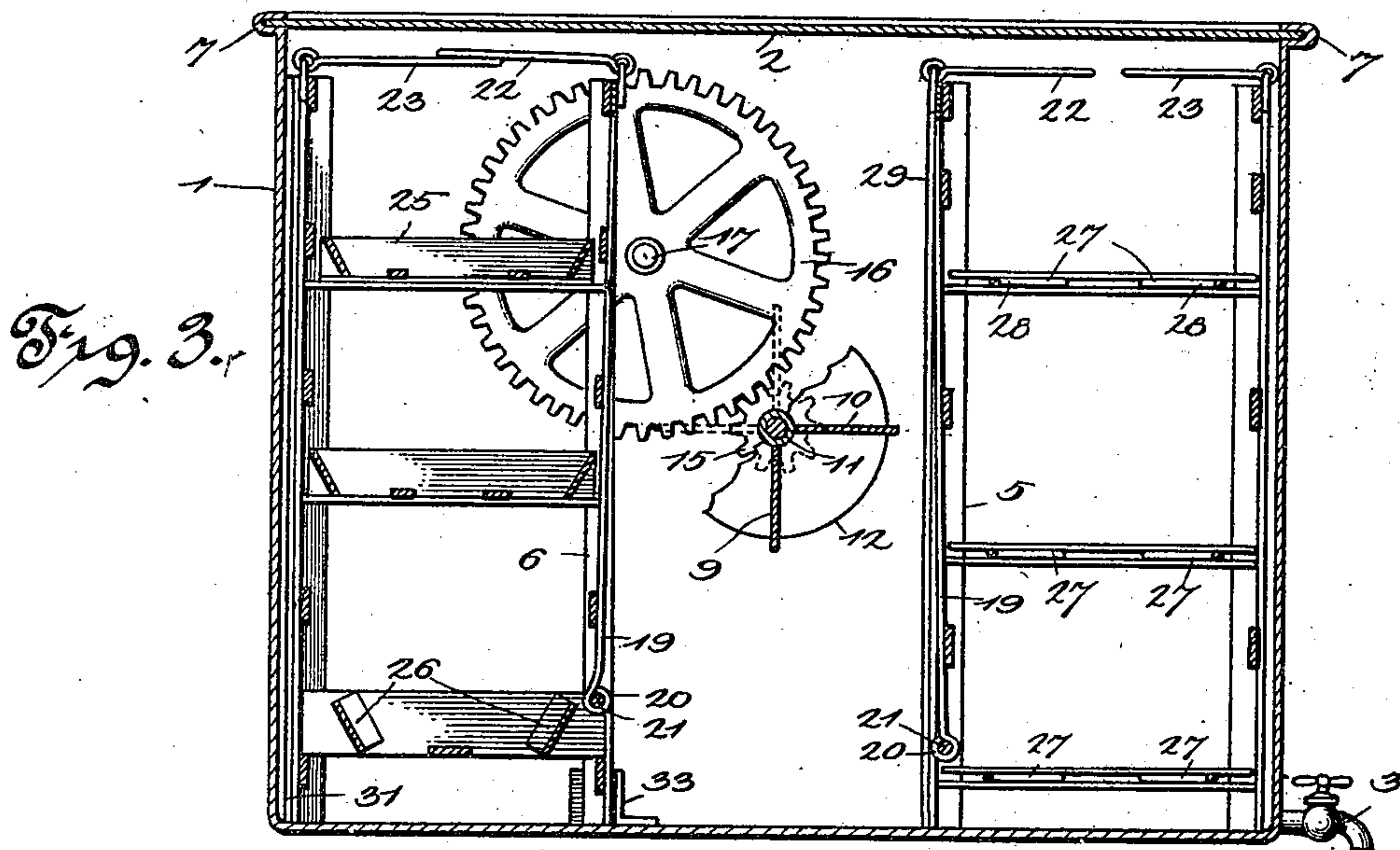
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Witnesses

J. Frankfurterwell.

J. H. Riley.

Elizabeth Brady, Inventor.

By C. A. Snow & Co.
Attorneys

UNITED STATES PATENT OFFICE.

ELIZABETH BRADY, OF PERU, INDIANA, ASSIGNOR OF ONE-HALF TO
SAMUEL A. KING, OF SAME PLACE.

DISH-WASHER.

SPECIFICATION forming part of Letters Patent No. 667,670, dated February 12, 1901.

Application filed September 20, 1900. Serial No. 30,594. (No model.)

To all whom it may concern:

Be it known that I, ELIZABETH BRADY, a citizen of the United States, residing at Peru, in the county of Miami and State of Indiana, have invented a new and useful Dish-Washer, of which the following is a specification.

The invention relates to improvements in dish-washers.

The object of the present invention is to improve the construction of dish-washers and to provide a simple and comparatively inexpensive one adapted to enable a large number of knives, forks, and dishes to be conveniently handled without the hands of the operator coming in contact with the water and capable of thoroughly washing, rinsing, and drying the dishes.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a plan view of a dish-washer constructed in accordance with this invention, the cover being removed. Fig. 2 is a longitudinal sectional view of a portion of the dish-washer. Fig. 3 is a transverse sectional view. Fig. 4 is a detail perspective view of one of the removable racks.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a casing having a sliding top or cover 2 and provided at its bottom with a faucet 3 to enable the liquid contents of the dish-washer to be readily drawn off, so that after the dishes have been thoroughly cleaned the dirty water may be drawn off to enable clean boiling water to be poured over the dishes for rinsing them. The dishes are supported by removable racks 5 and 6, located at opposite sides of the casing and adapted to be readily taken out when the cover is removed. Any form of cover may be employed; but it is preferable to provide ways 7 at opposite sides of the casing to receive the side edges of the cover, and one of the end edges of the cover is received within a groove 8 of one of the end walls of the casing.

The racks 5 and 6, which receive and support the dishes and other articles to be washed

and dried, are located at opposite sides of a combined fan and agitator 9, adapted to agitate the water and suds and cause the same to circulate through the racks and wash the contents of the same, and after the operation of washing and rinsing has been completed the fan is adapted to produce a circulation of air through the dishes for the purpose of drying them. The combined fan and agitator consists of a series of longitudinal blades 10, mounted on a horizontal shaft 11 and supported at intervals by disks 12, preferably located at the ends and center of the combined fan and agitator.

The horizontal shaft is journaled in suitable bearings 13 and 14, and it is provided at one end with a pinion 15, meshing with a gear-wheel 16, which is mounted on a short shaft or extension 17 of a crank-handle 18. The gearing is located within the casing and the crank-handle is arranged on the exterior thereof, its short shaft or extension being journaled in suitable bearings of the casing and extending through the same, as clearly indicated in dotted lines in Fig. 2 of the accompanying drawings. When the crank-handle is turned, the combined fan and agitator is rapidly rotated. The bearing 13 is open at the top, and the combined fan and agitator is adapted to be readily removed from the casing by lifting one end out of the bearing 13 and withdrawing its other end out of the bearing 14.

The rack 5 extends from one end of the casing to the other and is substantially twice the length of the other racks 6, which are approximately one-half the length of the casing, as clearly illustrated in Fig. 1 of the accompanying drawings. The racks may be constructed in a variety of ways, and they consist, essentially, of a frame having a series of horizontal supports or shelves to receive the dishes and having a hinged door 19 at one side. The door 19, which is provided at its bottom with eyes 20 to receive the pintle 21, is provided at its top with a hinged bail 22. The opposite side of the rack is provided with a similar hinged bail 23, and these two bails or handles 22 and 23 are adapted to be readily grasped for lifting the rack and for holding the hinged door closed while placing the rack

in the casing and when removing it therefrom. The racks are composed of vertical corner-posts and horizontal connecting-bars, and they permit the water to pass readily through them. The racks may be provided with removable trays 25, and they may have fixed corrugated supports 26, forming a series of recesses and adapted to support dishes and plates in an upright position, so that a large number may be arranged within the rack in such a manner that the water will have access to all portions of them. The corrugated supports 26 consist of strips of sheet metal set at an angle, and the racks may be provided with horizontal supports 27, having tapering recesses 28, and preferably constructed of wire, as clearly shown in Fig. 4; but they may be made of sheet metal or other material.

The continuous rack 5 is retained in position at one side of the casing by vertical flanges 29, preferably formed by securing L-shaped strips to the inner faces of the end walls of the casing. The shorter racks 6 are held in position by vertical flanges 30 and 31 and by bottom flanges 32 and 33, and these flanges also consist of L-shaped strips secured to the interior of the casing. The flange 30 is located at one end of the casing, and the other flange 31 is located at one side of the same, and it operates to space the shorter racks from the gearing. The flange 33, which is arranged on the bottom of the casing, is L-shaped, and it has one of the arms arranged in alinement with the flange 31, as clearly shown in Fig. 1 of the accompanying drawings. The flange 32 extends longitudinally of the bottom of the casing and is engaged by the adjacent ends of the shorter racks 6.

The racks rest upon the bottom of the casing, and after they have been placed therein, with the dishes to be washed, boiling water is poured over them. The crank is then turned to rotate the combined agitator and fan, which will force the soapy water through the dishes. The water is then drawn off through the faucet, and clean boiling water is poured over the dishes, and the crank is rotated to rinse them. The water is then drawn off, and the steam is permitted to escape, and the crank is again rotated to cause the agitator to operate as a fan to produce currents of air to assist in drying the dishes. When the racks are removed from the casing, the

dishes will be polished by the cooler atmosphere coming in contact with the hot surfaces of the said dishes.

It will be seen that the device is simple and comparatively inexpensive in construction, that it is adapted for both washing and drying dishes and analogous articles, and that it will enable a large number of dishes to be handled without liability of breaking them. It will also be apparent that the dishes may be arranged in the racks in different positions, so that they will be thoroughly exposed to the currents of water and air produced by the combined agitator and fan.

What I claim is—

1. A device of the class described comprising a casing, a removable rack adapted to receive the articles to be washed and provided at one side with a door hinged at the bottom and adapted to be swung down to a horizontal position when the rack is removed, and handles connected with the top of the door and with the opposite side of the rack and arranged to be simultaneously grasped, substantially as and for the purpose described.

2. A device of the class described comprising a casing, an agitator, flanges located at opposite sides of the agitator, and the removable racks adapted to receive the articles to be washed and provided each at one side with a door hinged at the bottom and adapted to be swung downward to a horizontal position when the latch is removed, and handles connected with the doors and with the opposite sides of the racks and arranged to be simultaneously grasped, substantially as described.

3. A device of the class described comprising a casing, a rack composed of vertical pieces and horizontal connecting-pieces, and having one side open, a pintle located at the bottom of the open side of the rack, a door provided at its bottom with eyes receiving the pintle, handles hinged to the top of the door and to the top of the opposite side of the rack, and means for agitating the water, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ELIZABETH BRADY.

Witnesses:

G. E. WESTCOTT,
TABELLE DRAKE.