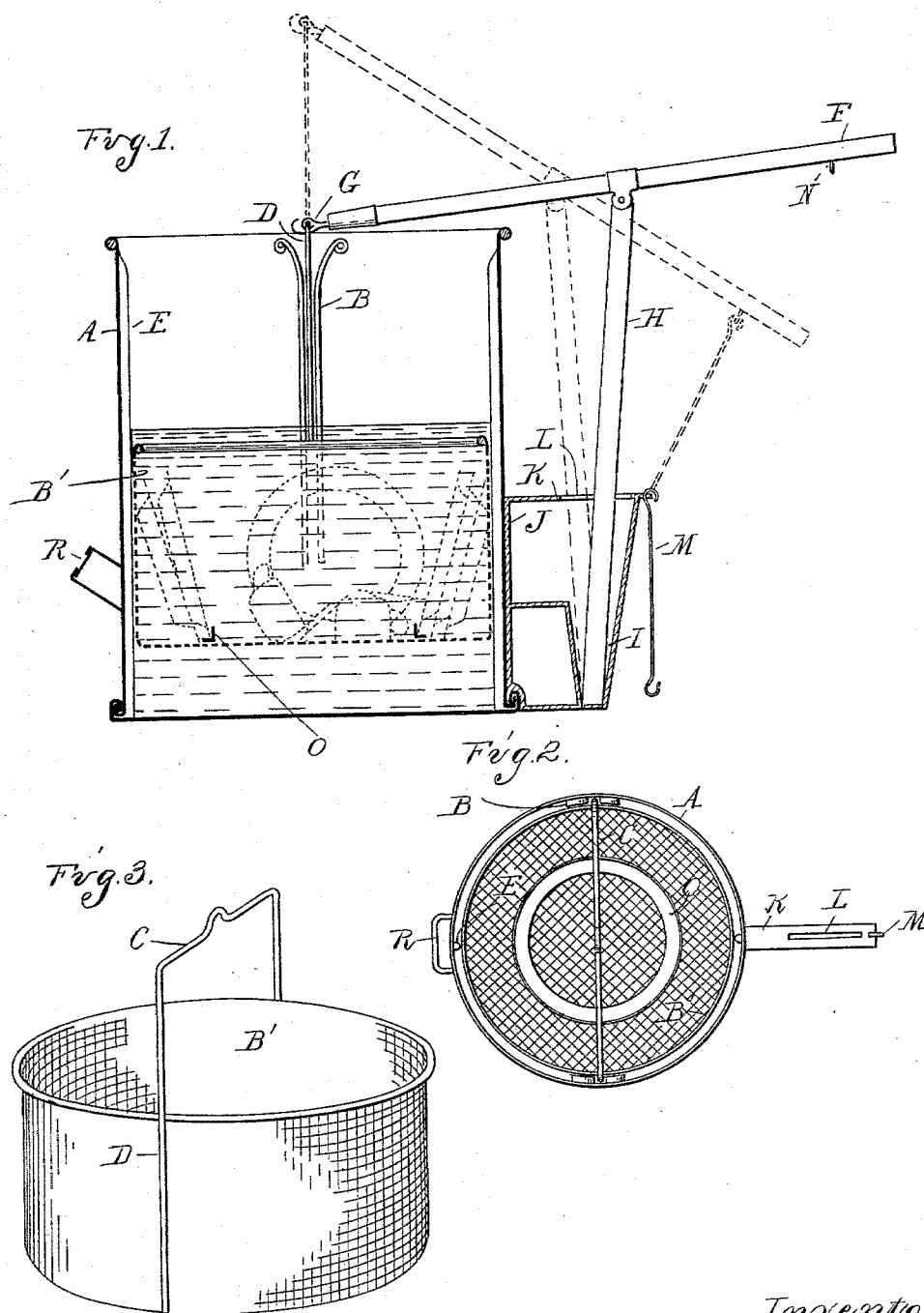


(No Model.)

J. E. DURAND.
DISH CLEANER.

No. 563,914.

Patented July 14, 1896.



Witnesses
[Signature]
[Signature]

Inventor
John E. Durand
By *[Signature]* Attys.

UNITED STATES PATENT OFFICE.

JOHN E. DURAND, OF JACKSON, MICHIGAN, ASSIGNOR TO JOHN L. HUBBARD, OF SAGINAW, MICHIGAN.

DISH-CLEANER.

SPECIFICATION forming part of Letters Patent No. 563,914, dated July 14, 1896.

Application filed September 27, 1895. Serial No. 563,868. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. DURAND, a citizen of the United States, residing at Jackson, in the county of Jackson and State of Michigan, have invented certain new and useful Improvements in Dish-Washing Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to the construction of a dish-washing machine; and it consists in a device embodying a pail or tank vessel having vertical guides therein, a perforated dish-holder or basket having ribs engaging the guides, a lever for actuating the dish-holder and a fulcrum-bar for the lever detachably supported in a socket on the vessel.

The invention further consists in the construction, arrangement, and combination of the various parts, all as more fully hereinafter described.

In the drawings, Figure 1 is a vertical central section through my improved device. Fig. 2 is a top plan view with the operating-lever removed, and Fig. 3 is a detached perspective view of the dish-holder detached.

A is a vessel, pail, or tank, preferably metallic, having an open top. On opposite sides within are the separated vertical guides B, preferably V-shaped at the top, as shown in Fig. 1.

B' is a dish-holder or basket. This I preferably make of wire or open work, so that the water may pour readily through it. It may be made in any way to accomplish this result. This dish-holder fits loosely within the vessel A, so as to freely reciprocate therein.

C is a fixed bail for the dish-holder, having its vertical legs D preferably extending to at or near the bottom thereof on the outside. These vertical legs engage between the guides B and thus guide the dish-holder in its reciprocations. Between the pairs of guides B, I preferably arrange guides or rub-irons E to prevent any tendency of the dish-holder to wobble.

F is a lever, having a suitable hook G, preferably the double hook, as shown in Fig. 1, adapted to engage with the top of the bail C.

This lever has pivoted to it the fulcrum-bar H. This bar at its lower end detachably engages in the tapering socket I, secured to one side of the receptacle on the bracket J. This bracket J has an arm K, having a guide-slot L, through which the bar H passes and is guided in its oscillation.

M is a hook on the end of the arm K, adapted to engage with an eye N on the lever.

O is a ring-shaped flange on the bottom of the dish-holder.

The parts being thus constructed they are intended to operate as follows: The operator fills the basket or dish-holder, the ring O serving to hold plates, &c., in position against accidental displacement and assists in properly packing. The bail is then engaged with the double hook G on the lever F, and the lower end of the post or bar H is engaged in the socket I, being passed through the slot L in the bracket K. The operator now moves the lever up and down, which at the opposite end raises and lowers the dish-holder in the water of the pail or receptacle, the quick reciprocations therein serving to wash the dishes, and as previously described, the dish-holder is guided in its vertical movements by the vertical portions D of the bail engaging in the guideways B and by means of the rubbing-iron or guide strips E. When the dishes are sufficiently washed, the operator may depress the lever F sufficient to raise the dish-holder free from the water in the receptacle and it may be held in this position, so that the dishes may be drained by engaging the hook M with the eye N on the lever F, as shown in dotted lines in Fig. 1. When the dishes are drained, the dish-holder may be removed, and, if desired, the lever and its fulcrum-bar. When these parts are removed, the receptacle may be used for any other purpose, and for convenience of handling, either with or without the dish-receptacle, I arrange the handle R at one side. The bracket may be used for the handle on the opposite side.

What I claim as my invention is—

A dish-washer comprising a receptacle having a bracket on its side formed with an open-end tapering socket therein, a dish-holding

crate in the receptacle, free to move in a vertical direction, a lever for raising and lowering the crate, a fulcrum-bar H pivotally secured to the lever, and loosely seated in the
5 tapering socket, and means for locking the lever with its crate-carrying arm in an elevated position, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN E. DURAND.

Witnesses:

M. B. O'DOHERTY,
O. F. BARTHEL.