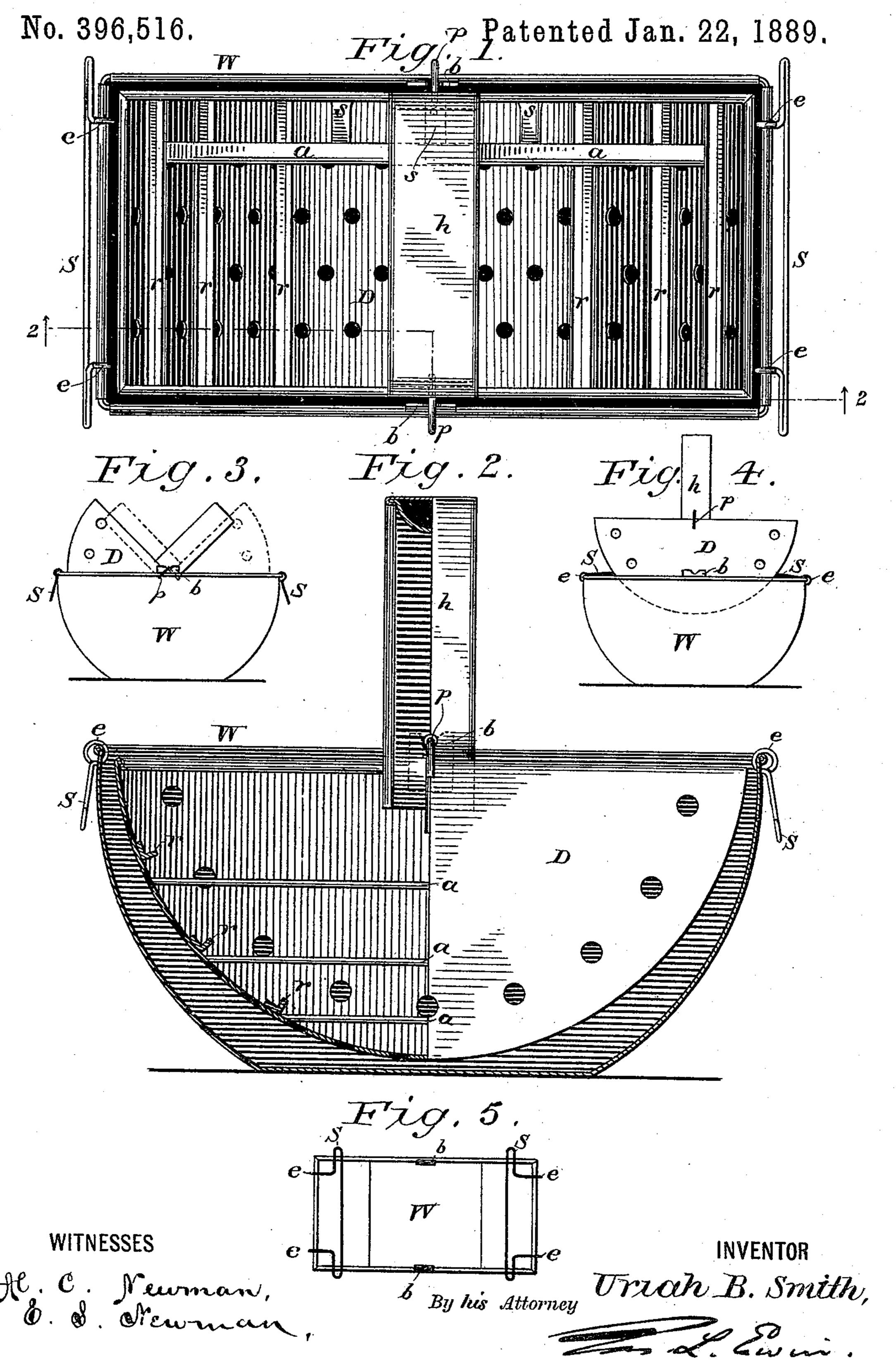
## U. B. SMITH.

## DISH WASHER AND DRAINER.



## United States Patent Office.

URIAH B. SMITH, OF WEST LIBERTY, IOWA.

## DISH WASHER AND DRAINER.

SPECIFICATION forming part of Letters Patent No. 396,516, dated January 22, 1889.

Application filed May 4, 1888. Serial No. 272,846. (No model.)

To all whom it may concern:

Be it known that I, URIAH B. SMITH, a citizen of the United States, and a resident of West Liberty, in the State of Iowa, have invented a new and useful Improvement in Dish Washers and Drainers, of which the following is a specification.

This invention relates to devices or portable apparatus to save labor and to avoid scalding or wetting the hands in cleansing and drying household "dishes" and the like, including fruit and vegetables, to the washing and draining of which my device is applicable.

The present invention consists in certain novel combinations of parts, as hereinafter set forth and claimed, all of which have been embodied in a simple device composed of a stationary water-holder and a swinging dish-lolder, together with a pair of supports, by means of which the dish-holder may be supported upon the water-holder in elevated position to drain its contents.

A sheet of drawings accompanies this speci-

25 fication as part thereof.

Figure 1 of the drawings is a top view of my said dish washer and drainer. Fig. 2 represents a vertical section in the two planes indicated by the line 2 2, Fig. 1. Figs. 3 and 30 4 are small-scale outline elevations of the same, illustrating its operation; and Fig. 5 is a top view of the water-holder, as shown in Fig. 4.

Like letters of reference indicate corre-

35 sponding parts in the several figures.

The device is composed, as aforesaid, of a water-holder, W, (shown in plan in Figs. 1 and 5, in longitudinal section in Fig. 2, and in elevation in Figs. 3 and 4,) a dish-holder, 40 D, (shown in plan in Fig. 1, partly in longitudinal section and partly in elevation in Fig. 2, and in elevation and dotted outlines in Figs. 3 and 4,) and a pair of supports, S, (shown by end view and plan in effective position in Figs. 4 and 5.) The parts are designed to be made of suitable sheet metal, as tin (tin-plate) or copper, either plain or tinned, and of wire, as indicated in the drawings.

The water-holder W is conveniently made of oblong rectangular shape in plan, with vertical front and rear sides, a flat bottom, and curved ends, as shown. Its upper edge is

wired to stiffen it, and at mid-length of its front and rear sides a pair of pivot-bearings, b, projecting above its upper edge, are fix- 55

edly attached, as by solder.

The dish-holder D fits loosely within the water-holder, and is of semi-cylindrical shape, open at top and perforated for the free admission of water and for the escape therewith 60 of crumbs and the like. A central rigid handle, h, connects and braces its sides at top and provides at once for lifting and for oscillating it, and a pair of central pivots, p, attached to its front and rear sides, normally occupy said 65 bearings b. Attached stop-ribs r extend from front to rear on the curvilinear bottom of the dish-holder, and agitator-bars a are arranged within the same, being attached to its said "bottom" at their ends and to one side of the 70 holder by short stays s, Fig. 1. The bottom of the dish-holder is smooth externally, so as not to agitate the water outside thereof. Particles of food and the like may consequently settle to the bottom of the water-holder as 75 they escape through the perforations of the dish-holder.

The supports S have looped extremities e, by which they are pivoted to the edge wire of the water-holder at its respective ends, and 80 may serve as handles by which to carry the water-holder in its larger sizes. In their said effective position for performing their main function they rest upon the edge of the water-holder at a distance from its ends, and are 85 supported against displacement by said piv-

otal connections.

For washing dishes the water-holder W is filled two-thirds full of hot water, with or without soap. The articles to be washed are 90 then placed in the dish-holder D, and by rocking the handle h back and forth, as illustrated by Fig. 3, the dish-holder and its contents are caused to swing back and forth through the water. The ribs r keep plates and the like 95 from slipping, and the agitator-bars a throw the hot water laterally between the dishes. After continuing this operation about three minutes the dish-holder is raised and lowered vertically by the handle h two or three times 100 to insure the discharge of all crumbs. It is then lifted to its elevated position, and the supports S are turned into place beneath it, as illustrated by Figs. 4 and 5, in which con-

dition the washer may be left until the dishes are dry or sufficiently drained to be wiped.

Details which have not been specified may be of any approved description, and I do not 5 limit my respective claims to mechanical details except as therein expressly stated.

Having thus described my said improvement in dish washers and drainers, I claim as my invention and desire to patent under this

10 specification—

1. A dish washer and drainer having an open-topped water-holder with central open pivot-bearings at its upper edge, and an opentopped semi-cylindrical dish-holder within 15 said water-holder, having central pivots which rest in said bearings, a rigid handle at the top connecting the sides of the dish-holder at said pivots, and an externally-smooth bottom that is concentric with said pivots, provided with 20 stop-ribs on its inner surface and perforated for the free admission of water and the es-

cape therewith of crumbs and the like, substantially as hereinbefore specified.

2. In combination with an open-topped water-holder, a swinging dish-holder within the 25 same, perforated for the free admission of water and the escape therewith of crumbs and the like, and provided internally with agitator-bars near one side thereof, substantially as hereinbefore specified.

3. In combination with an open-topped water-holder and a swinging dish-holder perforated for the free admission of water and the escape therewith of crumbs and the like, a pair of supports which rest upon the upper 35 edges of the water-holder to support the dishholder in elevated position for draining the dishes, substantially as hereinbefore specified.

U. B. SMITH.

Witnesses:

L. W. SWEM,

G. H. Chesebrough.