

(No Model.)

2 Sheets—Sheet 1.

M. STONE.
BASKET FOR DISH CLEANERS.

No. 541,056.

Patented June 11, 1895.

Fig. 1

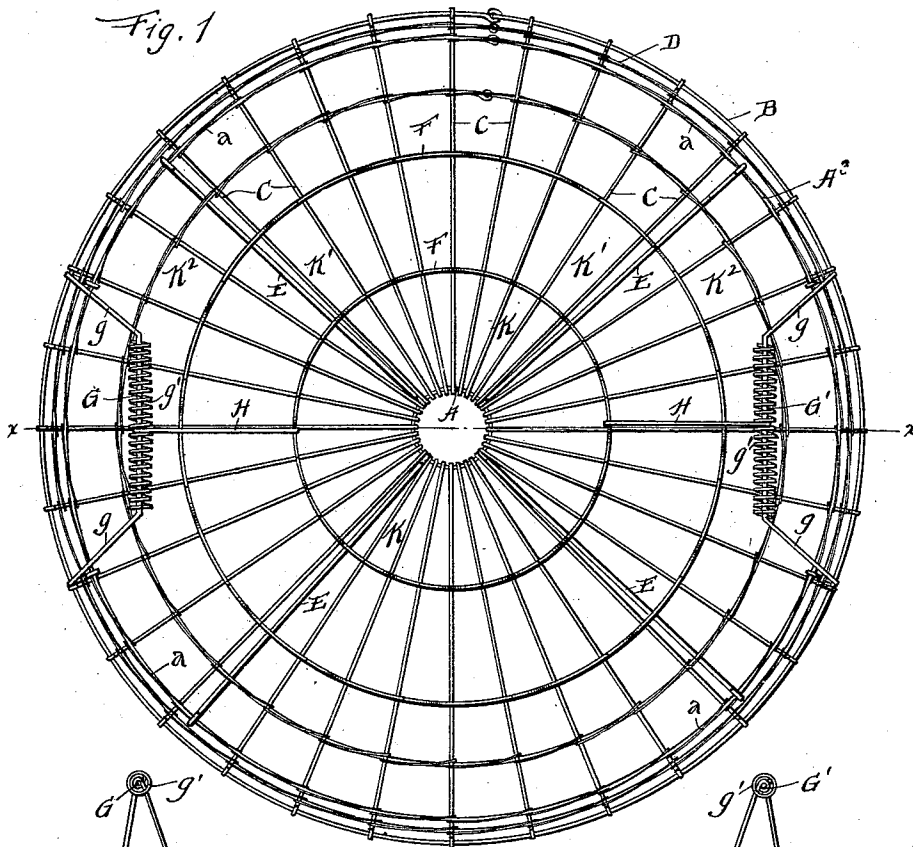
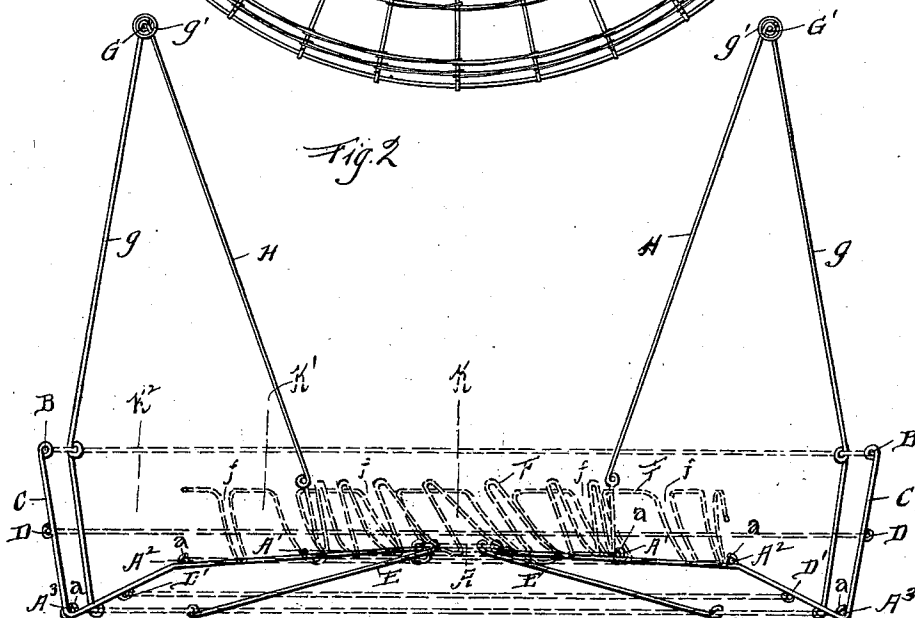


Fig. 2



WITNESSES:

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INVENTOR:

by Meivyn Stone

C. W. Anderson
his ATTORNEY.

(No Model.)

2 Sheets—Sheet 2.

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Fig. 3.

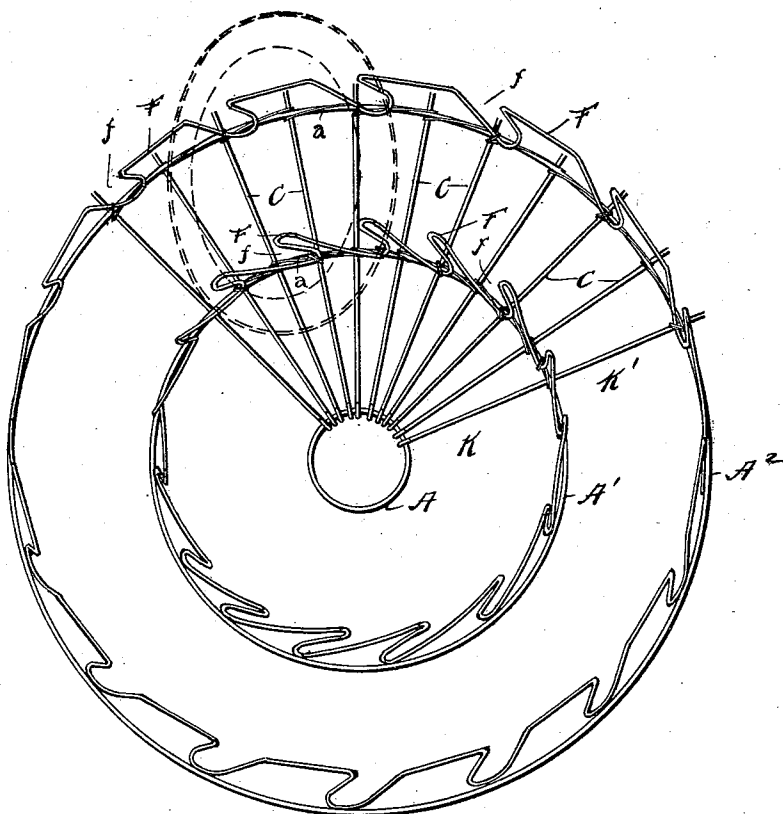
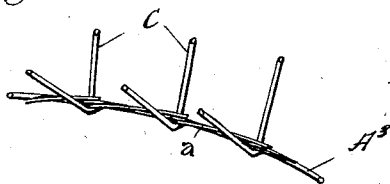


Fig. 4.



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UNITED STATES PATENT OFFICE.

MELVIN STONE, OF SAN DIEGO, CALIFORNIA, ASSIGNOR OF ONE-HALF TO
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BASKET FOR DISH-CLEANERS.

SPECIFICATION forming part of Letters Patent No. 541,056, dated June 11, 1895.

Application filed September 29, 1894. Serial No. 524,485. (No model.)

To all whom it may concern:

Be it known that I, MELVIN STONE, a citizen of the United States, and a resident of San Diego, in the county of San Diego and State of California, have invented certain new and useful Improvements in Baskets or Crates for Dish-Washing Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as 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 letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of a plan view of the invention. Fig. 2 is a profile section on line $x x$, Fig. 1. Fig. 3 is a perspective view of a section of basket, showing racks with dishes therein in dotted lines. Fig. 4 is a detail to show binding-wires.

The object of this invention is to provide a strong, durable, convenient and effective crate or basket designed for use in connection with dish washing machines, and which is capable of being readily inserted into and removed from the washer or rinser with its load of dishes.

A further object is to provide a device of this character, which, while especially designed to hold flat dishes, such as plates or saucers, is capable of holding other forms of dishes, each dish being held in such a manner as to receive most effectively the sprays, jets, or currents from the washer, and to facilitate its draining and drying.

With these objects in view the invention consists in the novel construction and combination of parts, all as hereinafter described, and pointed out in the appended claims.

As will more fully appear by reference to the accompanying drawings, the crates or baskets are made up of wire, and are preferably constructed in the following manner:

To form the frame, I employ a series of concentric rings or hoops of heavy wire, the small central ring or hoop being designated by the letter A, and the intermediate and outer ones by the letters A' , A^2 , A^3 , respectively. The ring A' is somewhat below the plane of the central ring A, the ring A^2 still lower, while the outer ring A^3 is placed a still greater dis-

tance below the plane of the ring A^2 . A few inches above the ring A^3 , and either in the vertical plane thereof or slightly outside of such plane as shown, is a ring B which forms the upper edge of the lateral wall of the crate or basket. The filling of this frame consists of a series of wires C whose inner end portions are secured to the central ring A by having their ends bent around such ring, from which the wires radiate in all directions. Each wire passes under the rings or hoops A' , A^2 , A^3 , and from the latter is bent upwardly, and its upper end portion secured to the ring or hoop B, being bent over such ring and secured against movement. Said wires are secured to each of the rings or hoops A' , A^2 , A^3 , by means of small binding wires a , wrapped around said wires and the rings or hoops.

In order to brace or strengthen the lateral wall and to prevent small dishes from going through, a wire D is usually run around the crate or basket about midway between the hoops A^3 and B, and outside of the wires C, being secured to said wires by a binding or lacing wire. A similar strengthening and guard wire D' , is usually placed underneath the wires C, between the hoops A^2 , A^3 , and in addition to such wire the bottom may be further strengthened by four or more heavier radial wires or rods E, which run directly from the ring A to the outer ring A^3 .

Secured to each of the rings A' , A^2 , is a rack F formed preferably from heavy wire bent in somewhat zig-zag form to form a series of oblique notches or holders f , which are designed to receive and support flat dishes, such as plates and saucers. Both racks are provided with an equal number of these notches or holders, those of the inner rack being sufficiently nearer together to compensate for the smaller diameter of the hoop A' . These racks are usually secured to the hoops by binding wire, as indicated.

In order to enable the crate or basket to be readily handled and to be easily and quickly placed into or removed from a washer or rinser, I provide the handles G, G' , which usually consist each of a piece of comparatively heavy wire bent to form two downwardly diverging legs g , which are rigidly secured to the hoops B and A^3 , the bend uniting

the two legs forming the hand-grasp, which is usually wound with a spiral g' . Extending from each hand grasp is an inward brace H, which is secured at its lower end to the inner rack F.

The basket or crate, as thus constructed, has a central circular chamber K and surrounding concentric annular chambers K', K². Owing to the arrangement of the bottom hoops it will be apparent that the floors of the chambers K, K', have a slight downward and outward incline or slope, while the bottom of the outer chamber K² has a decided downward and outward incline. This incline or slope of the bottom is of great importance, since it holds the dishes placed in said chambers in such a manner that they readily and quickly drain, and are thereby enabled to dry quickly from the heat of the water which they retain.

The plates and other flat dishes are placed in the notches or holders f across the chamber K' in the manner indicated in the drawings, where they are held in nearly radial relation, and obliquely with respect to the vertical, each piece being held singly and with its entire surface exposed to the action of the water.

In a washing machine employing a plurality of inwardly directed sprays or jets, these jets strike the surfaces of the dishes and are converged between adjacent pieces in a very effective manner. Cups, tumblers, vegetable and side dishes are placed in the outer chamber K², or it may be in the other chambers when these are not occupied with flat pieces. The racks F will support a dish between them in such a manner as to cause it to be thoroughly and quickly cleaned and drained, as will also the outer chamber.

Owing to the facility with which the crate or basket may be handled, a great many pieces may be washed and dried in a very short time. One basket may be filled and washed, and set to one side to dry, while another crate or basket is filled and washed.

In some instances the crates or baskets are made square or oblong instead of circular, in which event the mode of construction is the same, with the exception that the hoops of the frame are bent to conform to the desired form of the basket.

After the basket has been entirely constructed, it is provided with a coating of tinning or other similar material which, in addition to protecting the wire from oxidation, acts in the nature of solder to secure the various wires firmly together and prevents their

slipping upon each other, in this manner greatly adding to the strength and durability of the basket.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A crate or basket for the purpose hereinafore described, comprising a frame composed of a series of concentric wires or hoops placed in different planes, a series of filling wires radiating from the central of said wires or hoops and secured to each thereof, and forming therewith an inclined bottom, said filling wires running continuously from said central wire or hoop to the upper edge of said lateral wall, and a vertical or nearly vertical, lateral wall circular concentric notched dish-holding racks secured to intermediate hoops or wires, and handles attached to the frame, substantially as specified.

2. A crate or basket for the purpose hereinafore described, and comprising the frame hoops or wires A, A'—A², A³, an upper outer hoop B, the filling wires C radiating from the inner hoop or wire A and secured to each intermediate and outer hoop, the binding wires, the bracing and guard wires D, D', and E, the concentric racks F, secured to the frame wires or hoops A', A², and having a series of radially aligned, oblique, holding teeth or notches, and the vertical handles secured to the frame at opposite sides and having each an inward and downward brace to the frame, said crate or basket subsequent to its construction having applied thereto a coat of tinning or similar compound, substantially as specified.

3. A crate or basket for the purpose hereinafore described, comprising an openwork frame and filling, forming a downwardly and outwardly inclined bottom, and a surrounding flared or vertical wall, a pair of circular concentric, dish-holding racks secured to said bottom and having aligned holding notches or teeth, oblique to the radial planes said racks together with the lateral wall forming a central chamber K, and outer chambers K' and K², and vertical handles attached to the frame at opposite sides, substantially as specified.

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

MELVIN STONE.

Witnesses:

GEORGE N. PARMELEE,
PHILLIP O. MASI.