

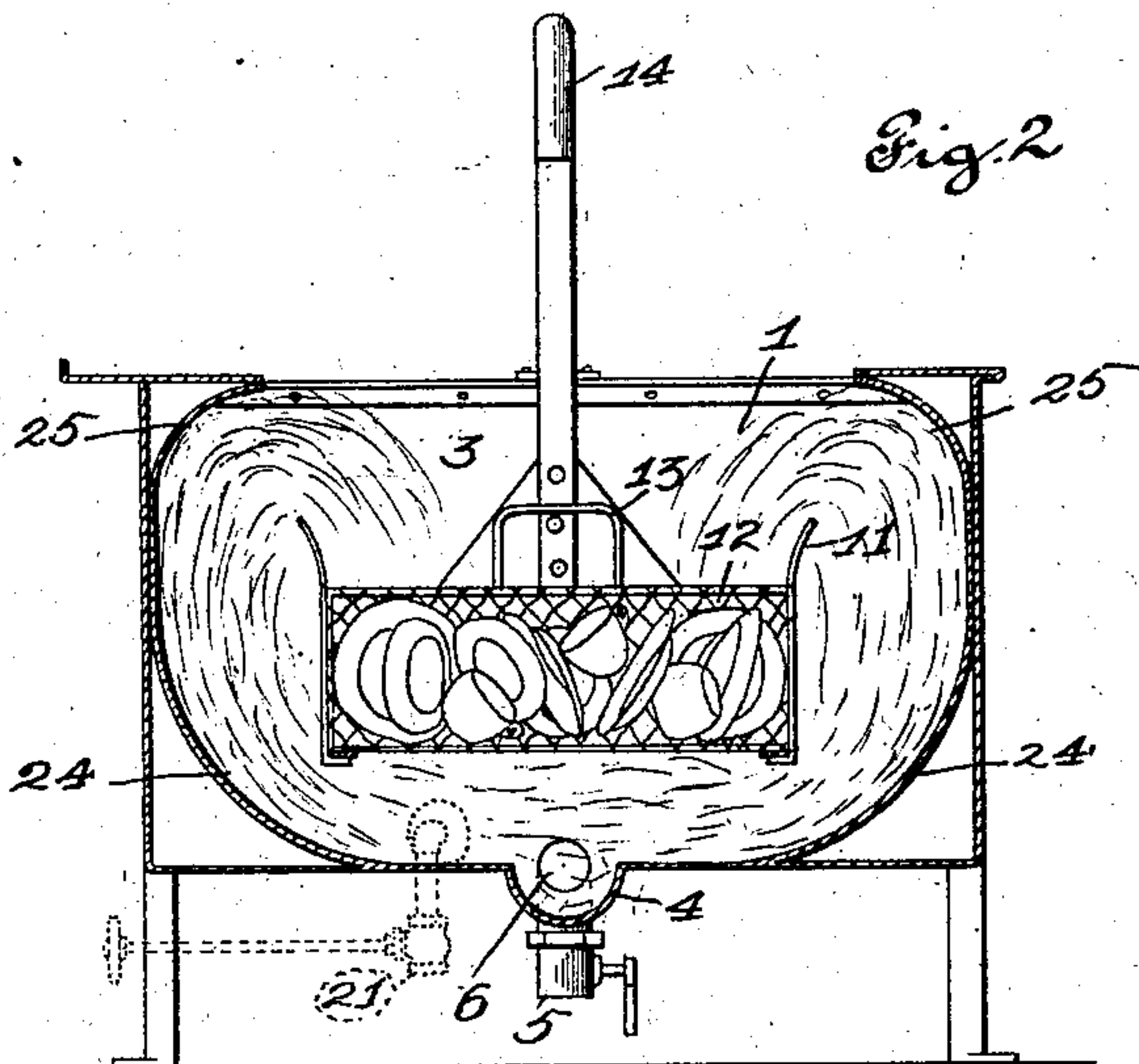
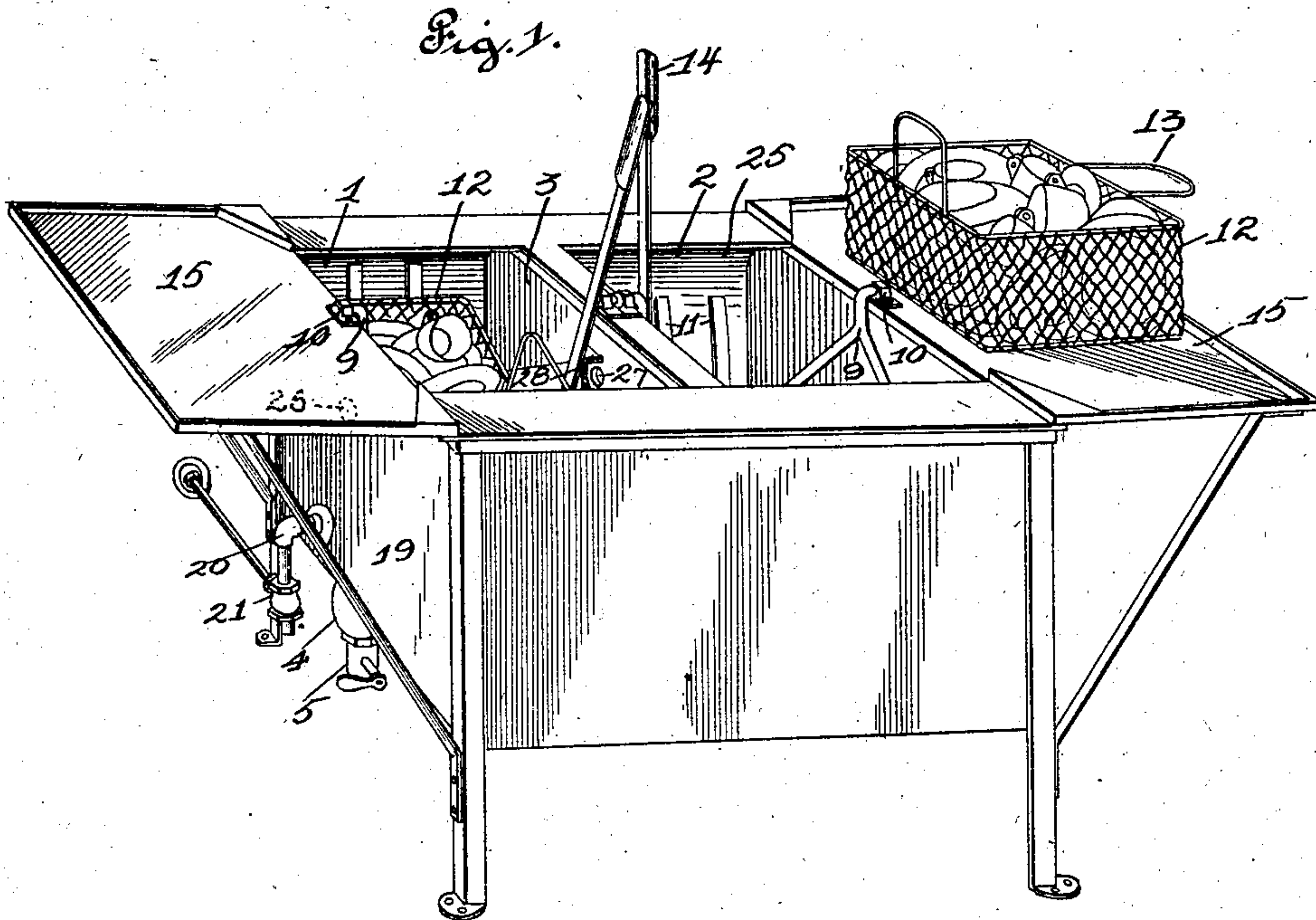
No. 726,016.

PATENTED APR. 21, 1903.

C. H. BLANCHARD.
DISH WASHING MACHINE.
APPLICATION FILED JULY 26, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses
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W. L. Quinn

Inventor
C. H. Blanchard
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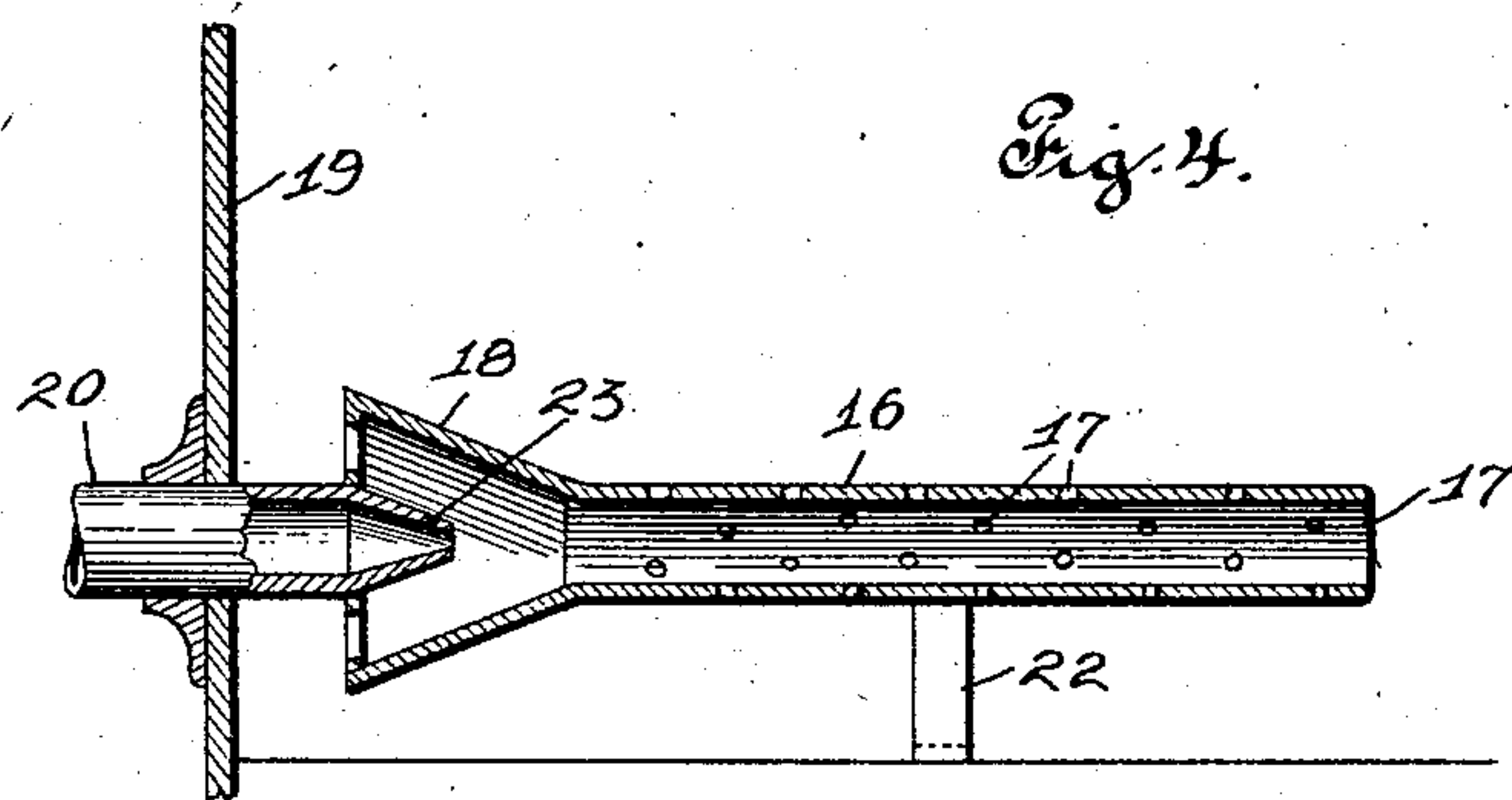
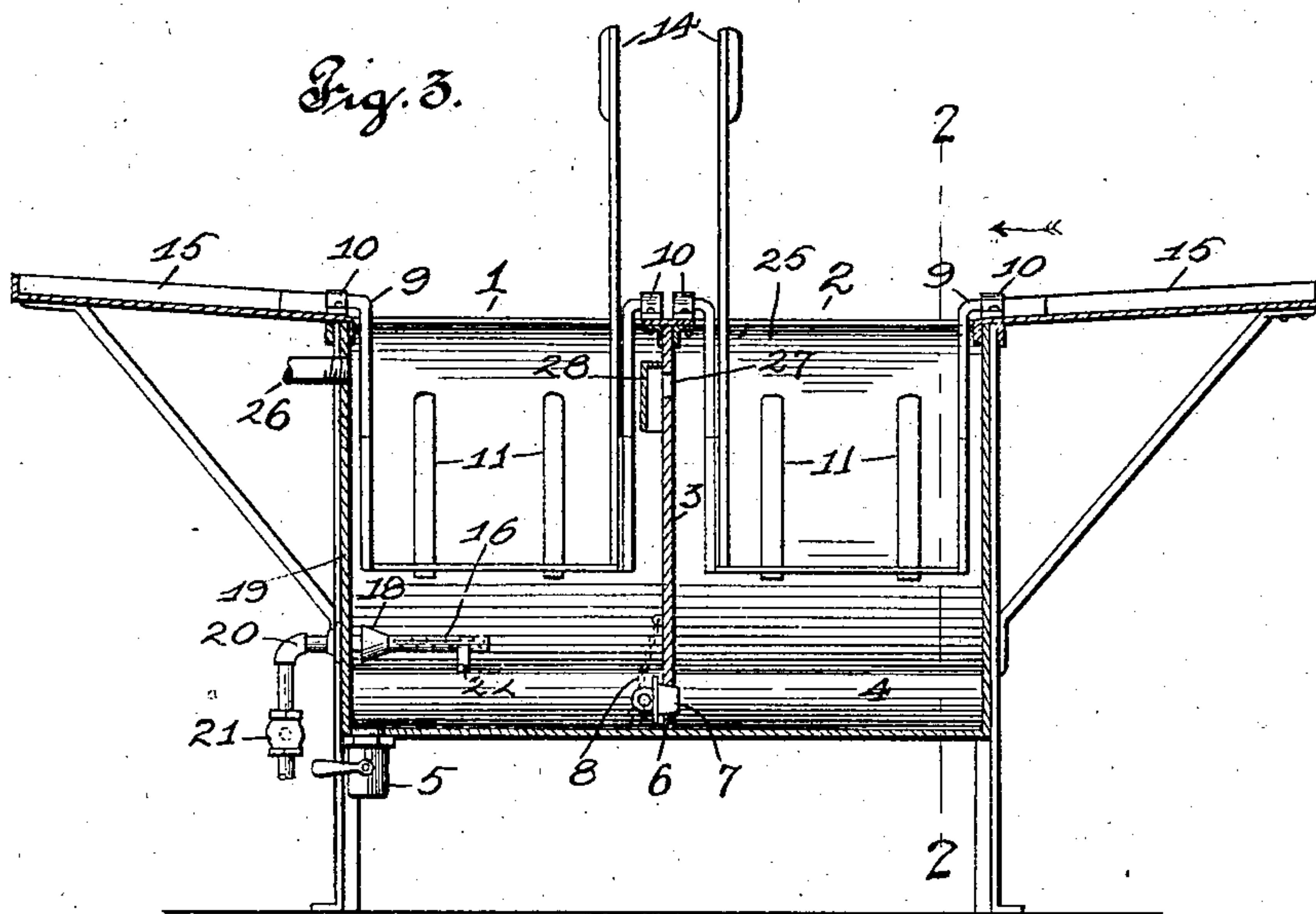
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2 SHEETS—SHEET 2.



Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES H. BLANCHARD, OF ST. LOUIS, MISSOURI.

DISH-WASHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 726,016, dated April 21, 1903.

Application filed July 26, 1902. Serial No. 117,205. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. BLANCHARD, of the city of St. Louis, State of Missouri, have invented certain new and useful
5 Improvements in Dish-Washing Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to dish-washing machines of that class in which the dishes to be cleaned are placed within a movable receptacle; and it consists in the novel construction, combination, and arrangement of parts hereinafter shown, described, and claimed.

15 My invention also relates to dish-washers which are provided with separate washing and rinsing compartments.

The object of my invention is to provide an improved dish-washer, which shall be very efficient and economical in operation as well as
20 reasonable in cost.

In the drawings, Figure 1 is a perspective view of a dish-washer embodying my invention having one of the dish-baskets removed
25 from the sink and placed conveniently upon one of the drain-boards with which the machine is supplied. Fig. 2 is a sectional elevation taken through one of the sinks on the line 2 2 of Fig. 3 and looking in the direction
30 indicated by the arrow. Fig. 3 is a sectional side elevation of the machine, taken through both the washing and rinsing compartments. Fig. 4 is a sectional detail view illustrating the construction of a noiseless steam water-
35 heater made use of in carrying out my invention.

1 and 2 indicate the washing and rinsing compartments, which I shall hereinafter term the "washing" and "rinsing" sinks, respectively, and which are preferably rectangular in shape and have their walls composed of sheet metal and two sinks separated by a vertical partition 3. Each of the sinks is provided with a central trough 4, which extends
45 throughout the width of each sink and is provided at one end with a drain-cock or other device 5. Said partition 3 not only separates the two sinks 1 and 2, but also extends downwardly into the trough 4 and divides it into
50 two separate troughs, which, however, are capable of being connected in the manner hereinafter described. The extension of the

partition 3 within the trough 4 is provided with an aperture 6, which is normally closed by a plug 7, and this plug is preferably provided with a chain 8, by means of which it is secured to the said partition. The connection between the plug 7 and chain 8 is preferably made by means of a common swivel-joint, so that the plug may be rotated without twisting the chain.

Each of the sinks is provided with a swinging cradle composed of the hangers 9, the upper ends of which are mounted in bearings 10 on the edges of the sinks, and the lower portions of said hangers are connected to the bottom of the cradle, and each cradle is provided with opposite vertical slats 11. Removably mounted in each of the cradles is a dish-basket 12, preferably made of wire-netting and provided with handles 13 on opposite edges. Each of the cradles is provided with an operating-handle 14, which extends upwardly therefrom to a position convenient for the operator.

The machine is provided with common drain-boards 15. The machine is preferably, also, provided with an improved steam water-heater, which consists of a tube 16, which is provided throughout its length with a series of perforations 17 and fitted with an enlargement 18 at one end, and this device is preferably supported within the bottom of the washing-sink 1 with its enlargement 18 closely adjacent the outer wall 19 of said sink. Projecting through said wall 19 is the steam-pipe 20, which is provided with a common valve 21 for controlling the supply of steam to the heater.

22 indicates any suitable support for the tube 16 within the sink 1. The steam-pipe 20 is provided with a nozzle 23, which projects a distance within the enlargement 18 of the perforated tube 16.

The lower and upper corners 24 and 25 of the washing and rinsing sinks are rounded at opposite points by means of pieces of sheet metal secured within the said sinks in any suitable manner for the purpose hereinafter mentioned.

The operation is as follows: The drain-cock 5 is first closed, and then the washing-sink 1 is suitably supplied with a volume of water, and if it is desired to heat said water the

steam-valve 21 is opened, thereby allowing steam to be discharged violently under the usual pressure through the nozzle 23 into the heating-tube 16 and into its enlargement 18, thereby heating and moving forward the water contained in said tube, and part of said water will be discharged through the apertures or perforations 17 and also through the free end of said tube. This creates a circulation through the said tube in a manner similar to the action of the well-known steam-injector, and additional water will be drawn into the tube through its enlargement 18, and in this manner the operation is continued as long as desired.

I have found that this construction provides a "noiseless" water-heater and is also very efficient. Heretofore the noise caused by discharging steam at high pressure into a body of cold water has been very annoying, and I invented my improved device for the purpose of doing away with all such noise.

The dishes to be washed are first placed in the wire basket 12, and then said basket is deposited upon the cradle within the washing-sink 1 with the ends of said basket in contact with the vertical slats 11. Then the cradle containing the basket of dishes is swung back and forth by means of its handle 14, thereby forcibly bringing said dishes into contact with the hot water and also causing large volumes of water to be thrown into contact with the rounded corners 24, and said water striking said rounded corners will be deflected upwardly and strike the upper opposite rounded corners 25 and be thereby deflected inwardly and outwardly and dropped in large volumes directly upon the dishes contained within said basket, and this operation will be repeated as long as said swinging movement of said cradle is continued. The heavy material from the plates, such as small pieces of meats, will be collected in the still-water trough 4 and will not be thrown onto the dishes. After the dishes have been washed the basket should then be removed from the sink 1 and placed in the rinsing-sink and supported by the cradle therein contained. The construction of the cradle in the rinsing-sink is identical with that contained in the washing-sink, with the exception that the handle 14 is placed upon the opposite side of the cradle. The operation of rinsing is almost identical with that of washing and is performed by swinging the cradle in a manner identical with that in which the washing-cradle is swung. The rinse-water will be thrown over the dishes in the same manner as the wash-water and as specially illustrated in Fig. 2.

The division-piece between the sinks in the trough 4 avoids the necessity of providing two separate drain connections for each sink. When it is desired to drain the sinks, all that is necessary is to first open the drain-cock 5 and permit all the soiled water to evacuate the washing-sink and then remove the plug 7 from the aperture 6 in the division-piece between the sinks, and obviously the rinse-water will flow from said aperture and pass through the trough in the bottom of the washing-sink and finally make its exit through the drain-cock 5. Said drain-cock may be connected to the sewer in any known manner, or the waste-water may be discharged into any suitable slop-receptacle.

The sink 1 is provided with the usual overflow 26, and the partition 3 is provided with an aperture 27, and the latter is hooded or shielded by means of a shield 28, which is preferably made of metal and soldered in position over the said aperture 27. The purpose of this hood is to prevent the splashing of the dirty dish-water into and through said aperture 27 and into the clean rinsing-water contained within the rinsing-sink 2.

It will be observed that the overflow 26 is in a plane slightly above that in which the aperture 27 is located. By such construction when clear water is heated in the washing-sink 1 it may be allowed to flow into the rinsing-sink through said aperture 27.

I do not herein claim the water-heating device, but reserve my rights to the same, as I intend to claim the same in a subsequent application to be filed at an early date.

I claim—

1. A dish-washer having two sinks separated by a partition, a trough located below both of said sinks and forming a refuse-receptacle, a division-piece upon said partition extending into said trough and dividing the same, said division-piece having an aperture, a plug for said aperture, and a drain-cock for said trough, whereby a single waste-cock is made to act for both sinks, all in combination with a suitable means for holding and washing the dishes, substantially as described.

2. In a dish-washer having two sinks, the partition 3 having the aperture 27 and a hood 26 arranged over said aperture, substantially as described.

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

CHARLES H. BLANCHARD.

Witnesses:

M. G. IRION,
JOHN C. HIGDON.