No. 847,495. PATENTED MAR. 19, 1907.

M. M. McKEE.

DISH WASHER.

APPLICATION FILED JUNE 23, 1905.

2 SHEETS—SHEET 1.

Fig. 3.

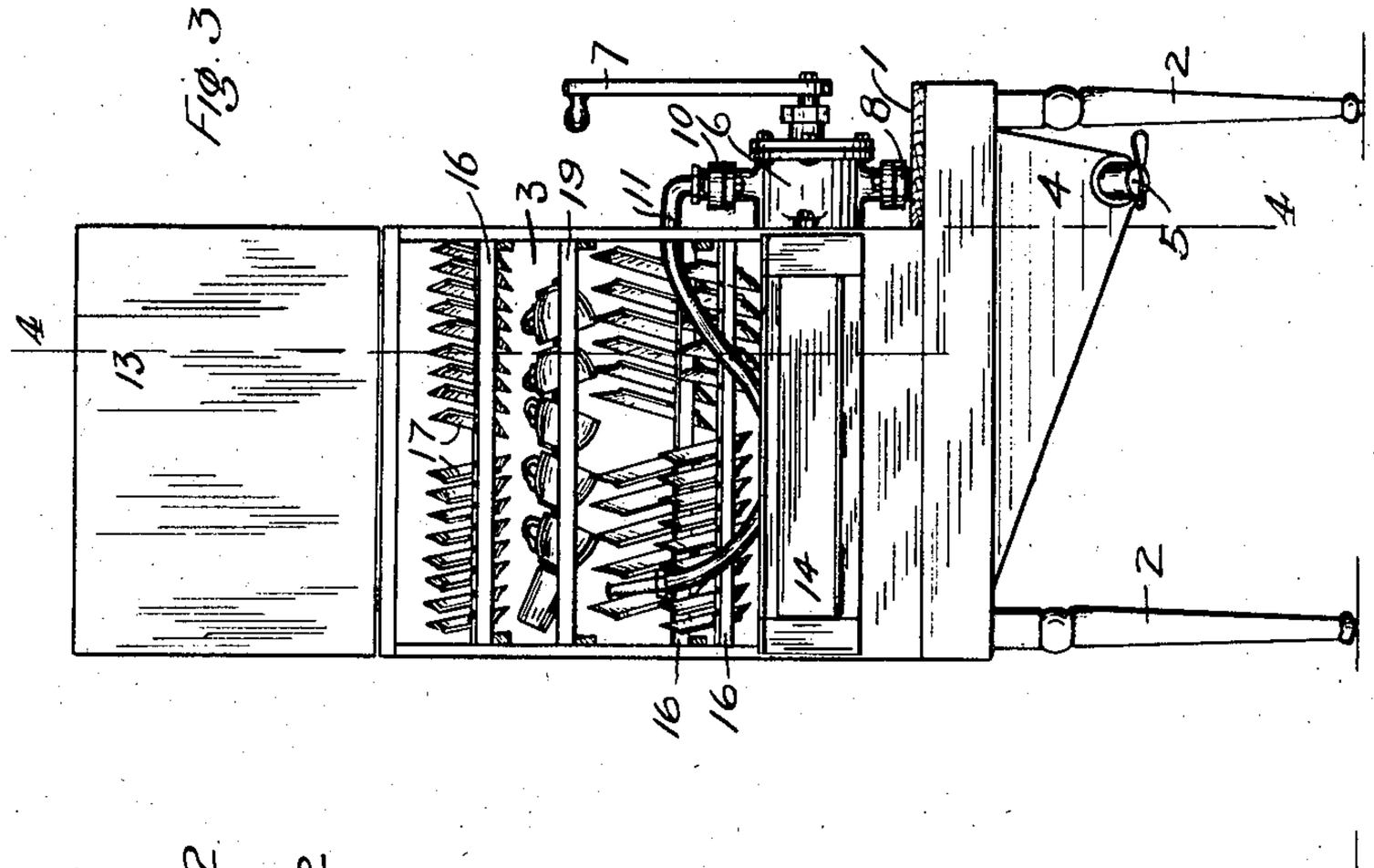


Fig. 2.

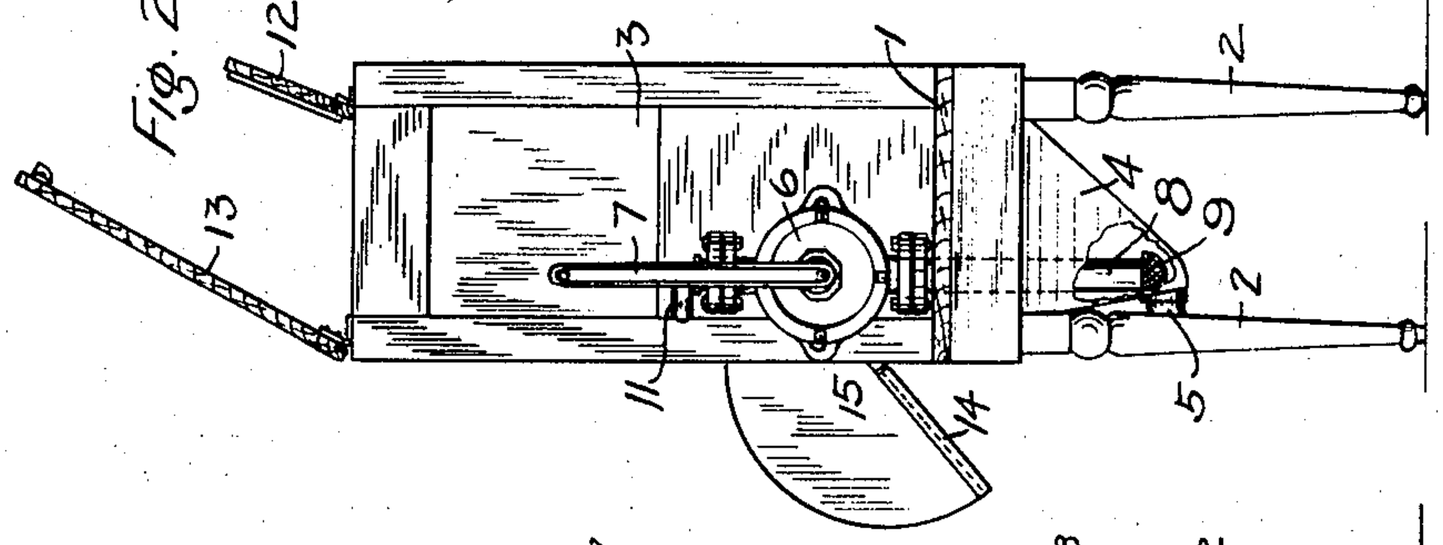
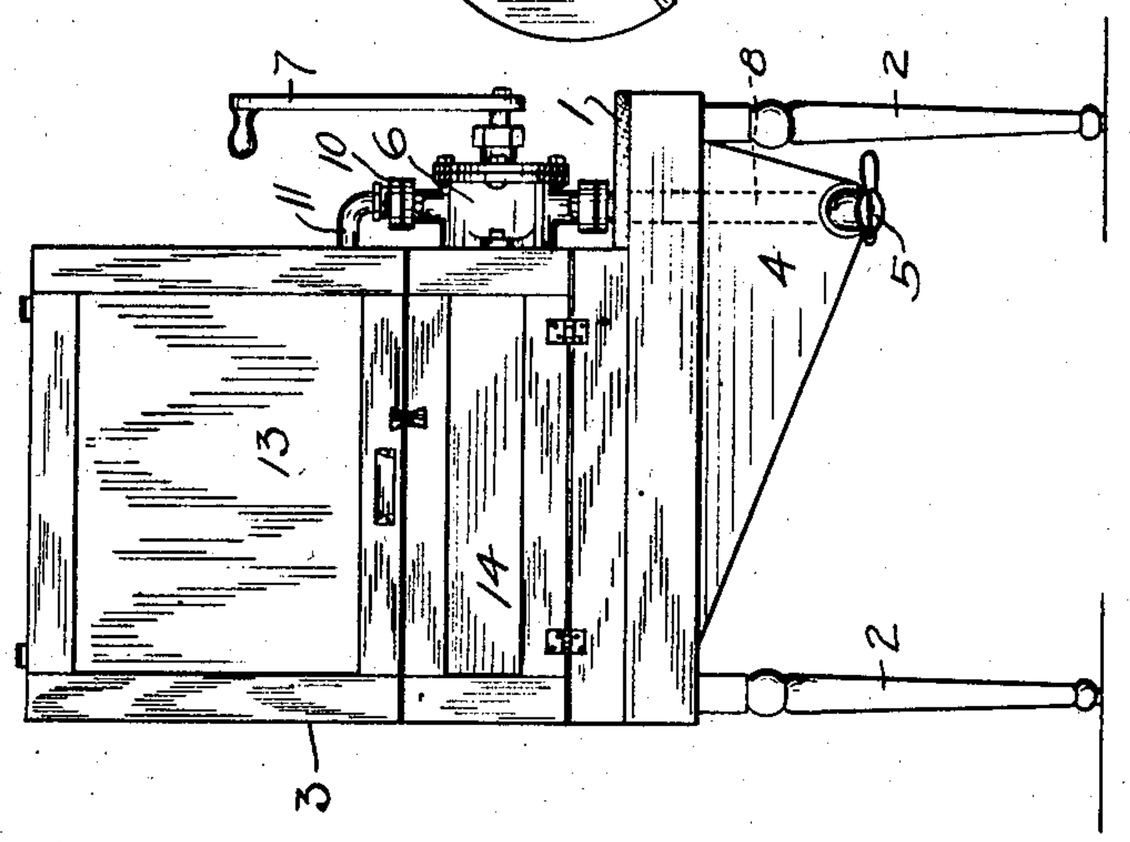


Fig. 1.



Witnesses
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2 SHEETS—SHEET 2.

Fig. 4

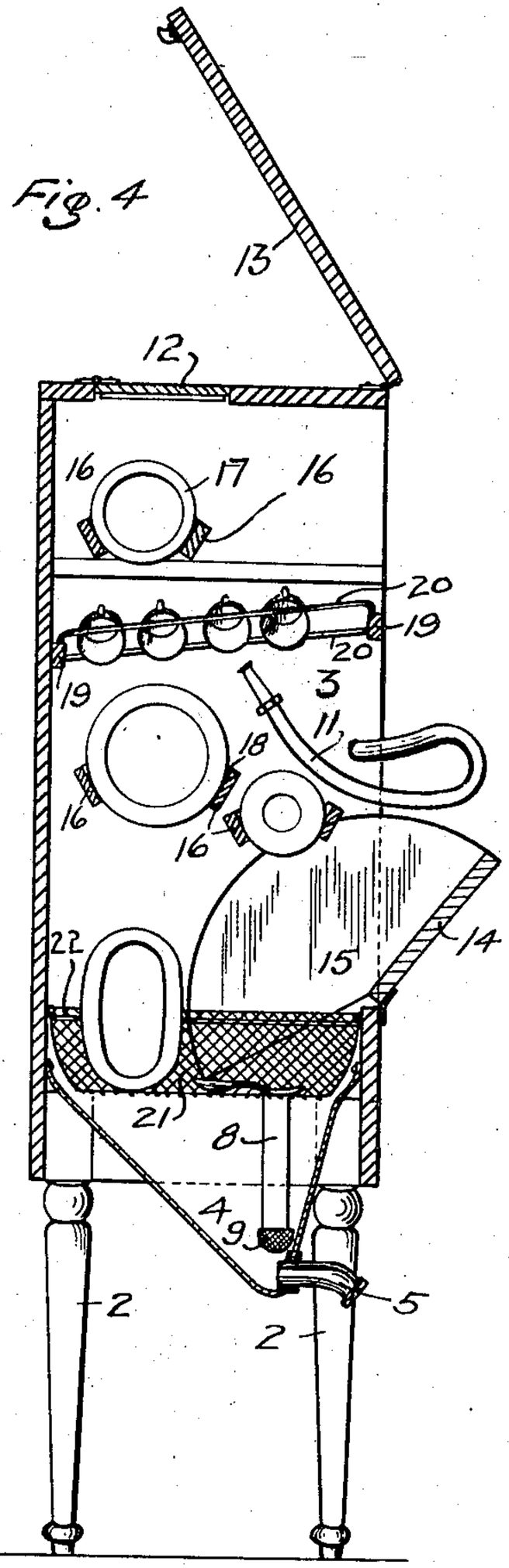


Fig. 5

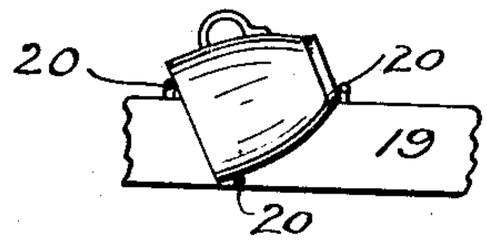


Fig. 6

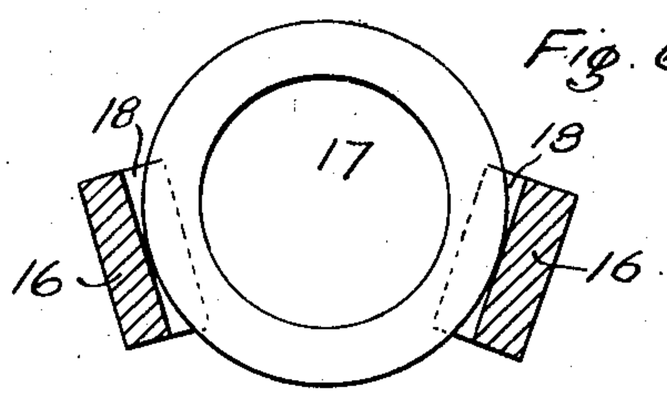
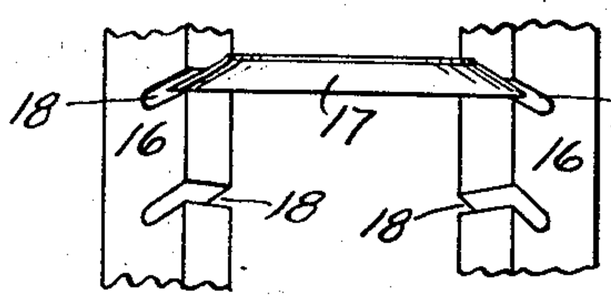


Fig. 7



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DISH-WASHER.

No. 847,495. Specification of Letters Patent. Patented March 19, 1907.

Application filed June 23, 1905. Serial No. 266,618.

To all whom it may concern:

Be it known that I, MARY MEIS McKEE, a citizen of the United States of America, residing at Tacoma, in the county of Pierce and State of Washington, have invented certain new and useful Improvements in Dish Washers and Cabinets, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to dish washers and cabinets, and has for its object to provide a cabinet in which dirty dishes may be placed where they may be washed, dried, and stored without further handling.

Further objects are to improve means of holding the plates, means of holding cups and glasses, arrangements of parts whereby all articles may be reached by the washing-water without difficulty, and the construction of the cabinet.

I attain these objects by the devices illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of my device used as a cabinet. Fig. 2 is a side view thereof, showing it arranged for drying the dishes. Fig. 3 is a front elevation showing it arranged for washing the dishes. Fig. 4 is a cross-section thereof on line 4 4, Fig. 3. Fig. 5 is a side view showing a cup in the cup-rack. Figs. 6 and 7 are respectively front view and plan showing a dish in the dish-rack.

Similar numerals of reference refer to similar parts throughout the several views.

My device is shown in the drawings in the form of a table 1, supported on legs 2 and supporting a cabinet 3 thereon. The table, however, is cut away under the cabinet, leaving an open space, under which the tank 4 is suspended. This tank 4 is arranged with all of its sides inclined and converging to a point which is preferably directly under the hereinafter-mentioned pump. The tank 4 has a very large drain-valve 5 at this lowest point.

On the table 1 and beside the cabinet 3 is secured the pump 6, having a handle 7 placed in such convenient position that it may easily be operated with the right hand, while the left hand directs the stream of water from the pump. The kind of pump which is used is largely immaterial, though I prefer to have one which throws a stream whenever the handle is moved in either direction. A suction-pipe 8 leads directly down from the pump through the table 1 into the tank 4 near this lowest point and is provided with the strainer 9 at its lower end. A delivery-pipe 10, connecting with a rubber hose 11, is secured to its upper end. The hose 11 passes through the side of the cabinet and is provided with a suitable nozzle at its end.

The cabinet 3 consists of a box having three stationary vertical sides and a top and front formed of hinged panels. There is no bottom to the cabinet 3 as it connects directly with the tank 4 under it. The top of the cabinet has a hinged panel 12, which does not, however, extend entirely across the top and which may be opened at will to allow the steam to escape quickly when the dishes are to be dried.

The front of the cabinet is formed of two panels 13 and 14. The panel 13 extends down from the top about two-thirds of the cabinet. This panel 13 is kept closed only while the dishes are being stored and while my device is being used as a dish-cabinet. The panel 14 is hinged at its lower edge and is adapted to form an apron. In Fig. 2 this panel is shown swung down as far as it will go and in the position in which it is placed when the dishes are being dried; but in Fig. 4 it is shown in use as an apron, in which position it is placed when the dishes are being washed and in which it is adapted to prevent the splashing of water from the dishes out of the cabinet. This apron is provided with sides 15, which engage the sides of the cabinet 3 and which may have any suitable means of holding the panel 14 in any desired position.

Within the cabinet are placed a series of dish and cup holding devices, each of which may be easily removed from the cabinet. In Figs. 3 and 4 I have shown a small rack 16, adapted to hold small sauce-dishes 17 near the upper end of the cabinet. Below it is placed a cup-rack adapted to hold cups, glasses, goblets, and similar articles. Below the cup-rack is a rack similar to the rack 16, but adapted to receive plates, while beside it is another similar rack adapted to receive saucers. In the bottom of the cabinet is a wire basket having straight wires across its upper edge, which is adapted to hold miscellaneous objects, such as platters, glass fruit-dishes, knives, forks, spoons, &c. The saucer, sauce-dish, and plate racks are all of

similar construction and are designated by numeral 16. They consist of two parallel bars extending across the cabinet and having notches 18 cut therein at convenient intervals. The pairs of bars are set at an angle, as shown in the drawings, so as to prevent the plates from slipping through. The notches 18 are cut into the bars at an angle corresponding with the usual angle which the rim of the plate makes to the bottom thereof. Further, the notches 18 on each side of the center of the cabinet are cut so that the plates, &c., face the center, as shown in Fig. 3.

The cup-holding rack consists of front and rear bars 19, connected together by several sets or series of three wires 20. Each series of three wires is arranged practically as shown in Fig. 5. The series on each side of the center of the cabinet are also reversed, so that the cups, glasses, &c., will face toward the center.

The basket 21 is made of wire and is preferably constructed rather deep, the horizontal wires 22 passing across the top of the basket, so as to hold large platters, &c., in vertical position.

It will be observed that all the dishes, cups, &c., are held so as to be practically vertical, each dish being supported separate from all the others and each dish being readily gotten at.

The operation of my dish-washer is as follows: I place in the tank 4 a small quantity of boiling water, with soap-powder mixed therein. Then I close up the cabinet tight, so that the steam from the water will act on the dishes and soften the dirt thereon. In a few minutes I open the panel 13 and the apron 14 into the positions shown in Fig. 4. Then I operate the pump-handle 7 with the right hand, holding the nozzle of the hose 11 with the left hand. The pump sucks the boiling soapy water through the pipe 8 and delivers it through the nozzle, which I direct against any of the articles in the cabinet. The force of the stream of water will depend directly on the force applied to the pump-handle 7. I can thus gage the amount of physical effort necessary to put into the operation of dish-washing, with the difficulty met in removing dirt from the dishes. The dirty water falls directly from the dishes into the tank 4 and is strained by the strainer 9 and is used over and over again so long as I continue washing the dishes. When I am satisfied that all of the dirt has been removed from all the dishes, I open the drainage-valve 5 and draw off all the water and refuse. I then close the valve 5 and pour in more clean boiling water, which I apply to the dishes as before, thus rinsing them thoroughly. This water is also drawn off and a third quantity of boiling water is applied for the purpose of polishing the dishes. As soon as they have all been thoroughly polished with this last application of water I open the top panel 12 and allow the steam that is within the cabinet to escape into the room. The dishes quickly become dry through the action of the current of air which is formed by opening the top 12. As soon as the dishes are dried, which usually takes a very few minutes, the cabinet is closed tight again and the water is drawn off.

It will be readily seen that by keeping my dishes in the same cabinet in which they are washed I not only save them from damage due to rehandling, but I also have them securely protected from contamination due to dust collected in ordinary dish-closets, for my cabinet being tightly closed will not admit of any material amount of dust, and since it is washed out with three waters every time the dishes are washed it is evident that it and everything contained therein becomes thoroughly sterilized. My cabinet, therefore, is a distinct advance toward promoting the health of the family.

Having now described my invention, what I claim is—

1. A dish-washing cabinet having a compartment wherein dishes may be washed and stored, a removable panel on its upper side adapted to allow the steam to escape rapidly after the dishes are washed, a lower panel on the front side adapted to form an apron, an upper removable panel on the front side, removable racks within said compartment to hold the dishes in vertical position, a tank to hold the wash-water and to receive the drip-water from the dishes, a pump in communication with the water in said tank, and a hose and nozzle connected with said pump and adapted to direct the flow of water delivered thereby to the dishes stored within said cabinet.

2. A dish-washing cabinet having a lower front panel hinged at its lower end to form an apron, the remainder of the front thereof hinged so as to be withdrawn from the front whereby access may be had to the interior of said cabinet, and means for forcing a stream of water to any part of said cabinet whereby the dishes therein may be cleaned.

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

MARY MEIS McKEE.

Witnesses:

JAMES H. DEGE,

BELLE R. McKEE.