## I. Trelling.

## Combined Sink and Mishwasher.

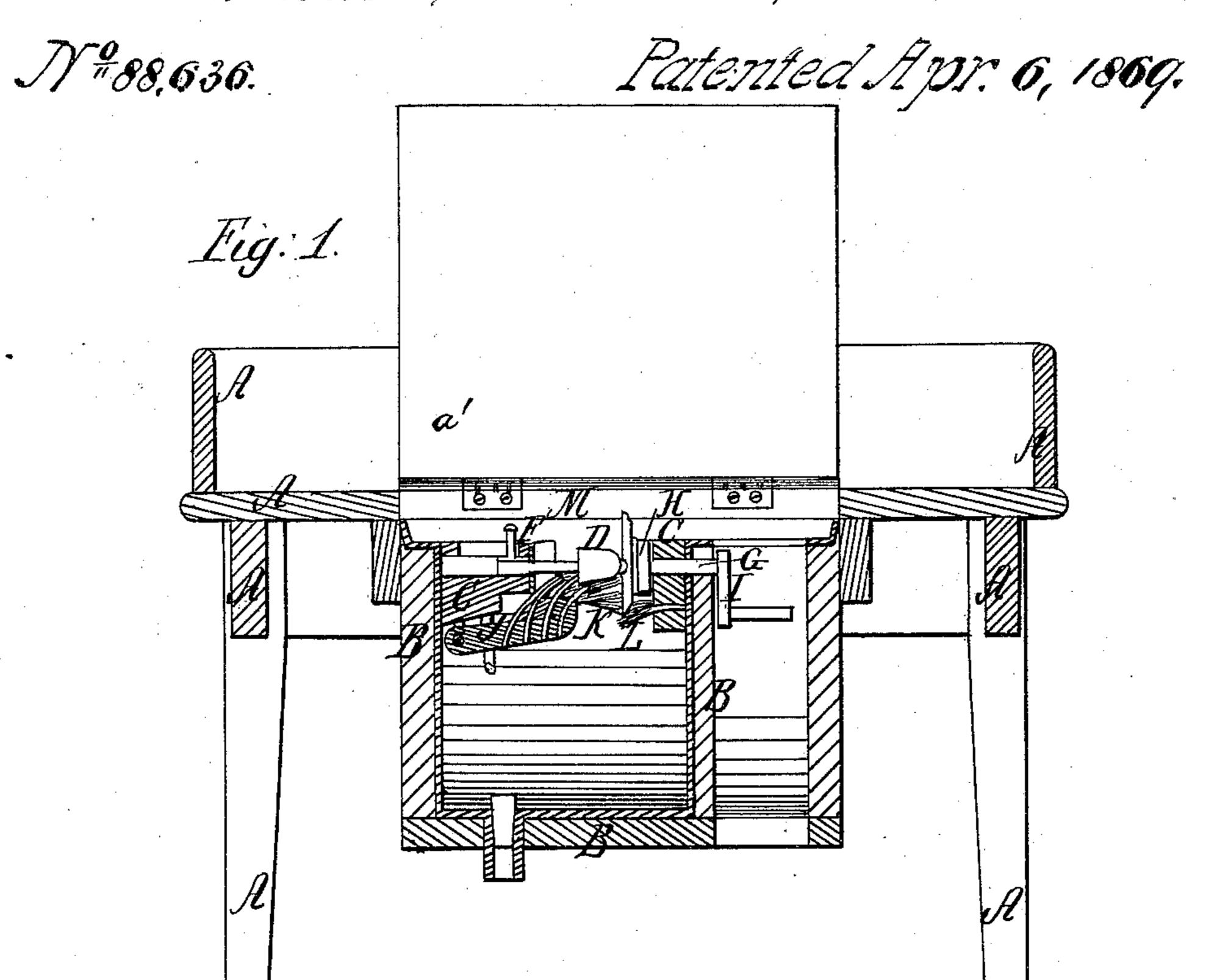
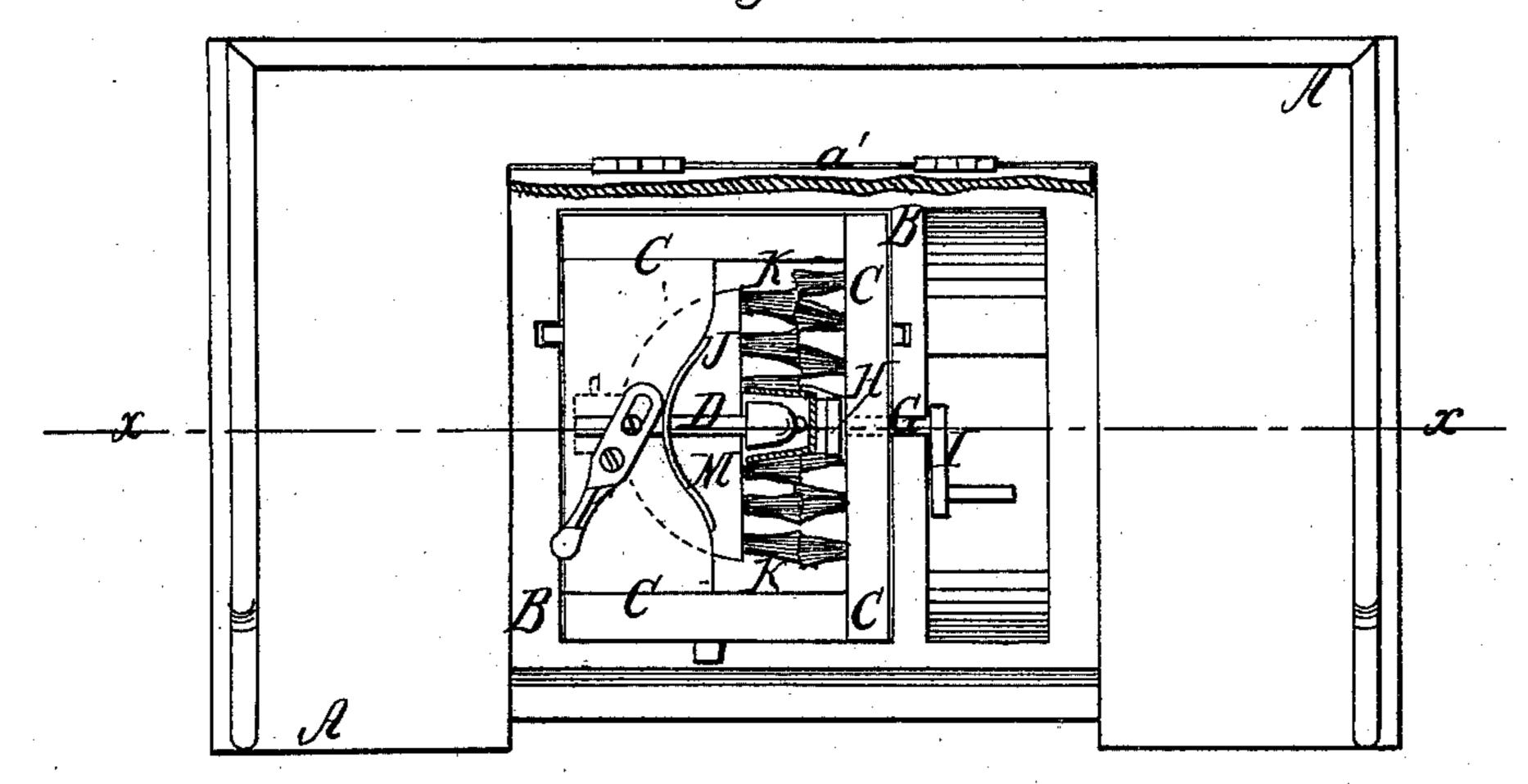


Fig. 2.



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## THOMAS IRELAND, OF NEGAUNEE, MICHIGAN.

Letters Patent No. 88,636, dated April 6, 1869.

## IMPROVED COMBINED SINK AND DISH-WASHER.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, Thomas Ireland, of Negaunee, in the county of Marquette, and State of Michigan, have invented a new and useful Improvement in Combined Sink and Dish-Washer; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical section of my combined table, sink, and dish-washer, taken through the line x x of

fig. 2. Figure 2 is a top view of the same, the sink-cover

being removed.

Similar letters of reference indicate corresponding

parts.

My invention has for its object to furnish an improved apparatus, by means of which the laborious and disagreeable operation of dish-washing may be greatly facilitated, and which shall at the same time be simple in construction, conveniently operated, effective in operation, and inexpensive; and

It consists in the construction and combination of the various parts of the apparatus as hereinafter more

fully described.

A is an ordinary table which may be provided with an upwardly-projecting flange, extending around the

rear side and end edges of said table.

The middle part of the table is cut away, the cut-away portion a being hinged at its rear edge to the remaining part of the table-top, as shown in figs. 1 and 2, so that it may be turned up to allow access to the sink and dish-washing machine, and turned down when the machine is not in use to form a part of the table-top.

In the opening in the top of the table is secured a sink, B, of such a depth as to contain a sufficient amount of water. The sink B should be made water-tight, and may, if desired, be lined with zinc or other

suitable non-corrosive material.

In the bottom of the sink B is formed a hole for

convenience in drawing off the water.

O is the frame of the dish-washing machine, which fits into the mouth of the sink B, and is supported in place by pins or projections upon its sides which enter notches formed in the upper edge of said sink B, so that the said frame may be conveniently turned back or entirely removed from the sink when desired.

D is a conical centre, having a rubber button or projection attached to its forward end to form a pivot upon which the dishes may revolve while being washed.

The stem of the centre D enters a socket in the frame C, and is provided with a coiled spring, E, by which it is drawn and held back when not forced forward to hold the dish being washed.

To the stem of the centre D is attached a pin which passes up through a slot in the frame C, and enters a slot in the inner end of the hand-lever E, which is pivoted to the top of the frame C, and by means of which the centre D is pushed forward to receive and hold the dish to be washed.

G is a shaft, working in bearings in the frame C, in line with the centre D, and upon the forward end of which is formed a small disk, H, the face of which is covered with leather, against which the bottom of the dish to be washed is placed, and which adheres to said dish with sufficient force to revolve it upon the centre D.

To the outer end of the shaft G is attached a crank, I, by means of which the said shaft G is operated, and which works in a compartment formed for it at the end of the sink B, as shown in figs. 1 and 2.

J is a float, the rear end of which is pivoted to the lower side of the frame C, and which is kept from dropping down too far by a long staple attached to said frame C, and through which the said float passes.

The forward part of the float J is made broad, and to it are attached cloths or cleaners K, which, as the said float is held up by the water, rest against the outer side of the revolving dish being washed, and clean it.

To the side of the frame C, directly opposite the end of the float J, is attached another set of cleaners, L, which rest against and clean the bottom and under side of the dish being washed.

To the centre D are attached cleaners M, by which the interiors of cups, bowls, tumblers, &c., are cleaned

while revolving upon the said centre.

When the machine is being used the sink B must be kept so full of water that the cleaners may all be kept wet. The cleaners or cloths, K L M, are all detachably secured in their places, so that they can be conveniently renewed when required.

I am aware that machines have been constructed for washing bottles in which the bottles were caused to revolve against the surface of surrounding brushes by means of a disk, and centre like the ones described. These, therefore, I do not desire to claim; but

What I do claim as new, and desire to secure by

Letters Patent, is—

An improved dish-washing machine, formed by the combination of the frame C, centre D, spring E, lever F, disk H, shaft G, crank I, float J, and cleaners K L M, with each other, and with the sink B, or equivalent vessel, substantially as herein shown and described and for the purpose set forth.

THOMAS IRELAND.

Witnesses:

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