

No. 681,113.

Patented Aug. 20, 1901.

J. DÜNNER.

MACHINE FOR WASHING PLATES OR OTHER DISHES.

(Application filed June 12, 1899. Renewed July 22, 1901.)

(No Model.)

Fig. 1.

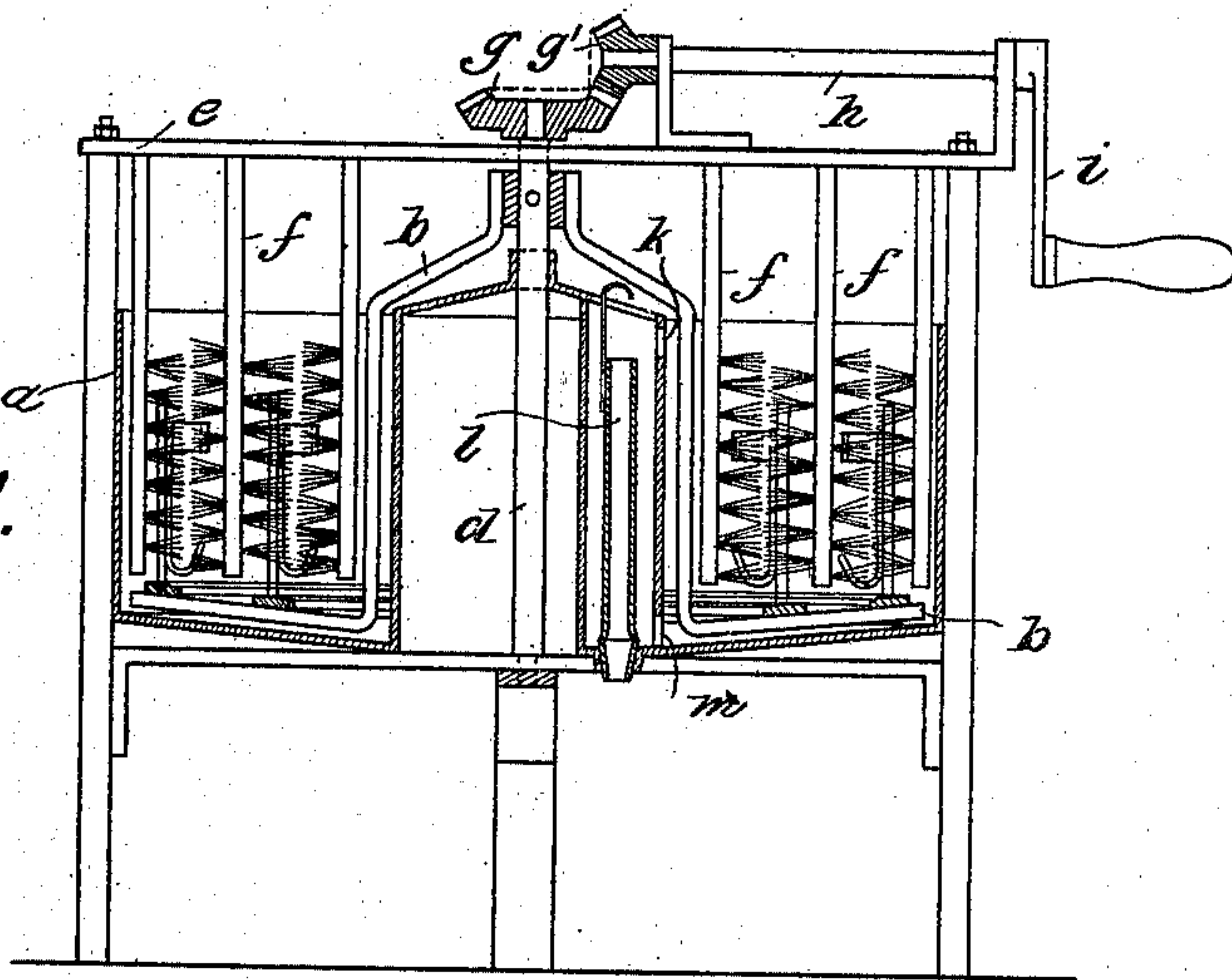


Fig. 2.

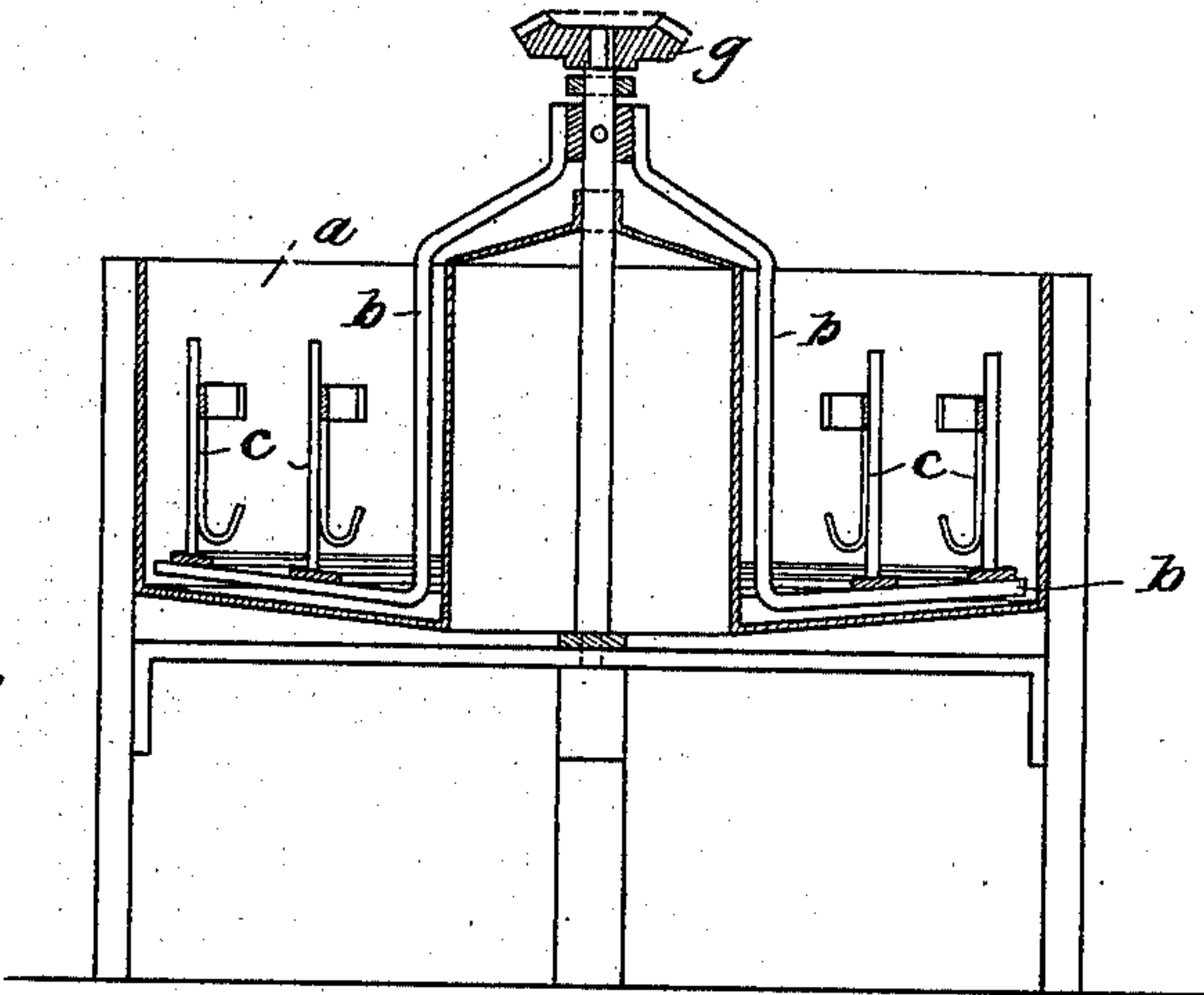
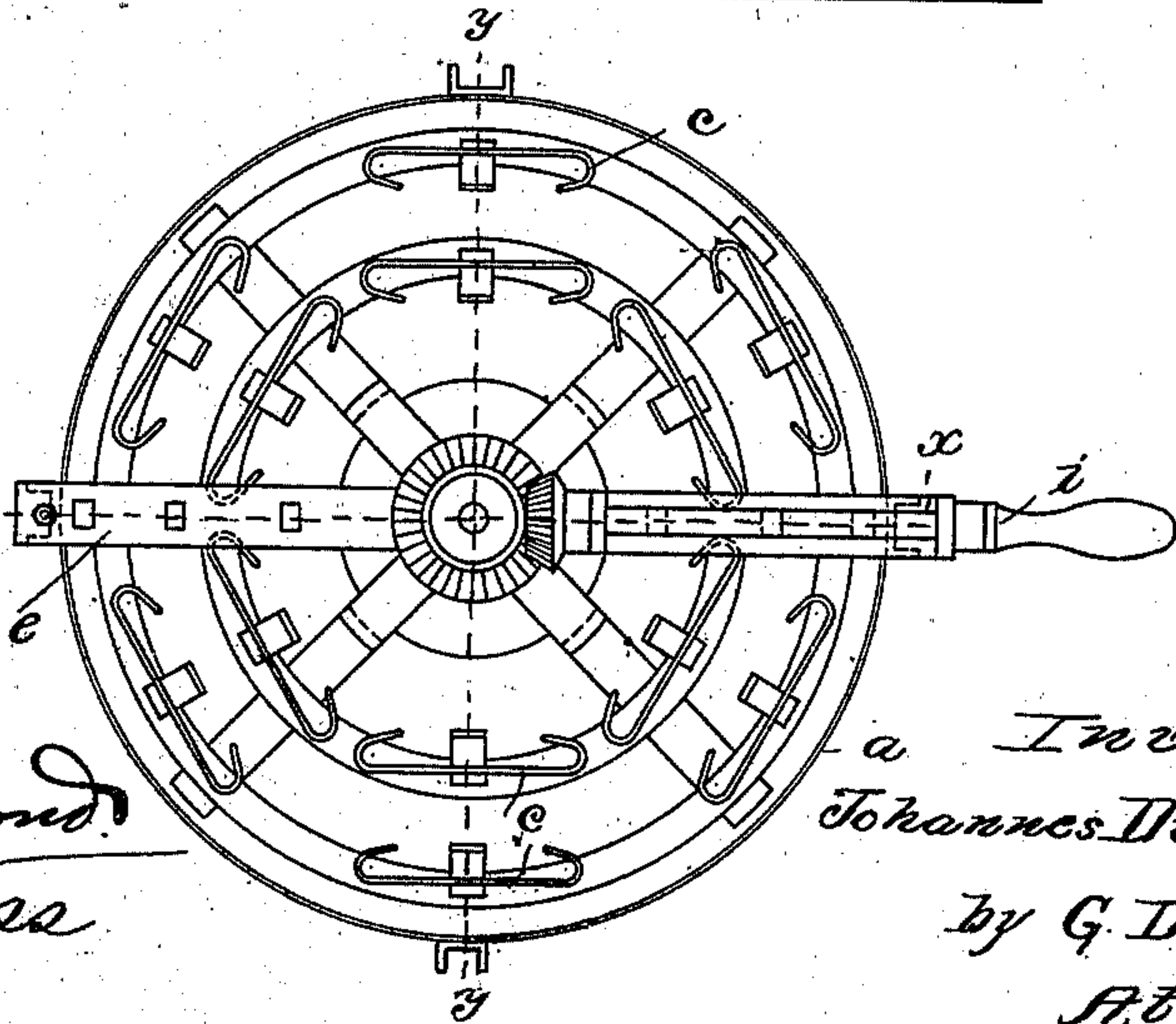


Fig. 3.



Witnesses:-
Jas. Richmond
Robert Voss

Inventor:
Johannes Dünner
by G. Dittmar
Attorney.

UNITED STATES PATENT OFFICE.

JOHANNES DÜNNER, OF BERNE, SWITZERLAND.

MACHINE FOR WASHING PLATES OR OTHER DISHES.

SPECIFICATION forming part of Letters Patent No. 681,113, dated August 20, 1901.

Application filed June 12, 1899. Renewed July 22, 1901. Serial No. 69,314. (No model.)

To all whom it may concern:

Be it known that I, JOHANNES DÜNNER, manufacturer, a citizen of Switzerland, residing at Berne, Switzerland, have invented certain new and useful Improvements in Machines for Washing Plates or other Dishes; and I do hereby 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.

The objects of this invention are to construct a machine for washing plates and other dishes which will be very efficient, simple in its operation, and assure a thorough cleaning of the plates, the machine being especially designed for hotels, eating-houses, and the like.

The invention consists in an improved machine in which the plates are moved in hot water between suitable brushes and in the arrangement and combination of the parts thereof, as will be hereinafter more fully described.

In the accompanying drawings like letters of reference indicate similar parts in all the views in which they occur.

In the said drawings, Figure 1 is a section on line *x x* of Fig. 3, showing the arrangement of the brushes. Fig. 2 is a section on line *y y* of Fig. 3 with the brushes removed to more clearly show the brackets, and Fig. 3 is a plan view.

The machine consists of a tank *a*, which can be filled with hot water and in which is supported a frame *b*, having brackets *c* to receive the plates. This frame is carried by a vertical shaft *d*, with which it is allowed to turn freely. The mechanism which serves to rotate the frame *b* is secured to a support *e*, and from this support brushes *f* extend downward in the tank *a*. These brushes are so arranged that the plates held by the brackets *c* can be moved between said brushes in such a manner that the plates are touched and rubbed on both sides by the former.

By means of the angular gears *g g'*, the shaft *h*, and the crank *i* the frame *b* can be quickly rotated, and thus the plates held in the brackets *c* are cleaned not only by the brushes *f*, but the hot water, too, assists the cleaning, as the plates are moved at considerable speed through same.

The brackets *c* are so arranged upon the frame *b* that the plates take a position such as to afford the least possible resistance to

the water and brushes when turning with the frame *b*.

The greasy substances which during the washing operation accumulate on top of the water constantly flow off at *k* and escape down the hollow stopper *l*, and the tank *a* is emptied through openings *m* and the one closed by the hollow stopper.

Having thus described my invention, what I claim is—

1. In a device of the character described, the combination of a receptacle for hot water, a rotary frame having a plurality of brackets adapted to support the dishes in a vertical position, arranged in series of two each and substantially radial to its axis, and a single diametric line of brushes through which the dishes have to pass in revolution, whereby the latter are cleansed on both sides, substantially as described.

2. In a device of the character described, the combination of a receptacle for hot water, the support *e* at top thereof, a vertical shaft *d* in said support, a rotary frame *b* rigid on said shaft and having a plurality of radially-disposed brackets *c* arranged in series of two each, adapted to support the dishes in a vertical position, a series of stationary brushes, arranged in a single diametrical line with respect to the receptacle through which the dishes have to pass in revolution, the shaft *h* transversely mounted on support *e*, said shaft served at one end with a crank *i*, and bevel-gearing adapted to transmit motion from said shaft *h* to the vertical shaft *d* as and for the purpose set forth.

3. In a device of the character described, the combination of a receptacle for hot water, having a divided portion with outlets, as described, a rotary frame having a plurality of brackets adapted to support the dishes in a vertical position, arranged in series of two each and substantially radial to the axis of the frame, and a cross-bar *e* on top of the receptacle and a series of stationary brushes *f* depending therefrom through which the dishes have to pass in revolution, whereby the latter are thoroughly cleansed on both sides, substantially as described.

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

JOHANNES DÜNNER.

Witnesses:

C. HANSLIN,
O. HUBER.