

Richards & Alexander,

Dish Cleaner,

N^o 40,280,

Patented Oct. 13, 1863.

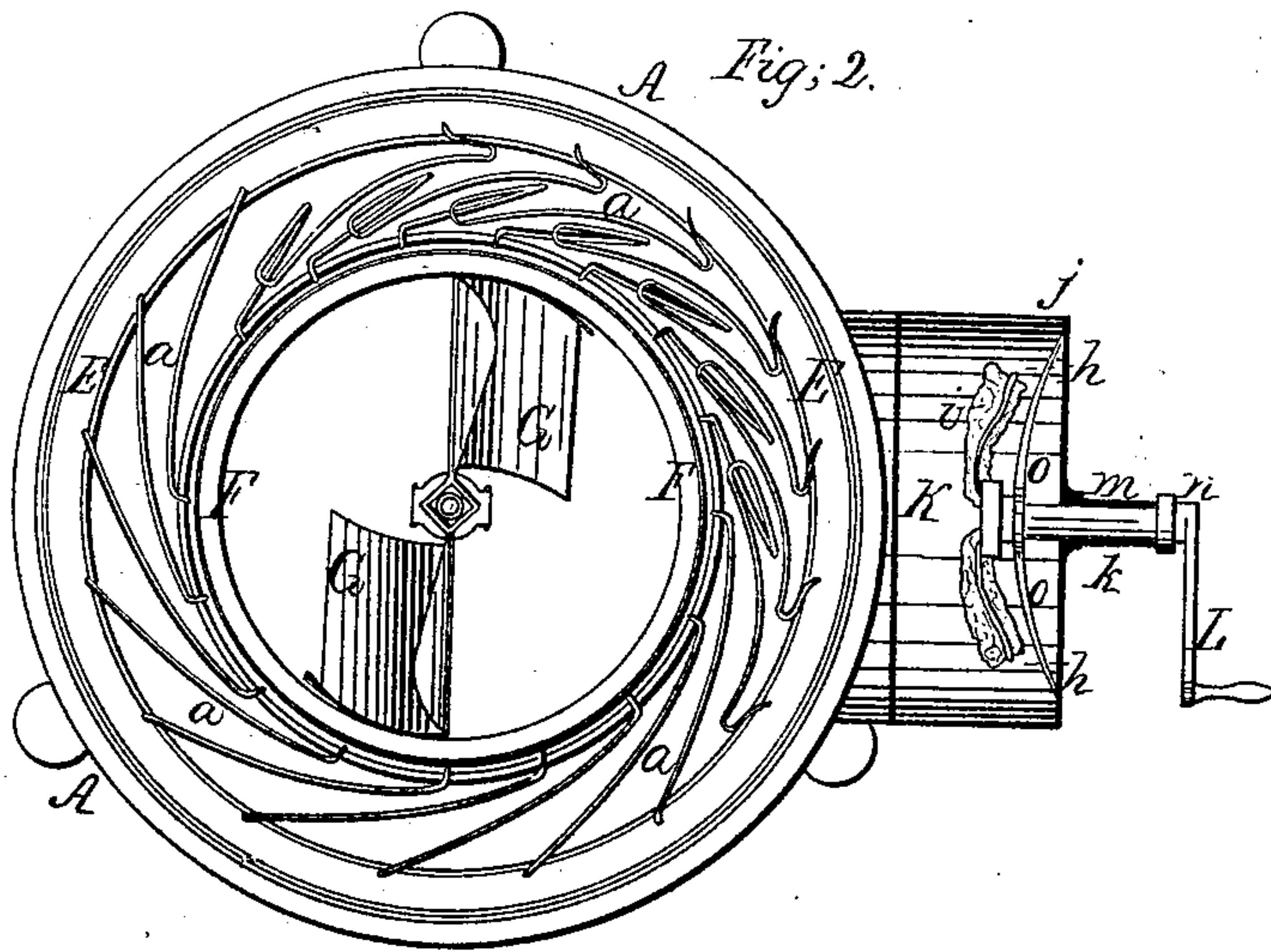
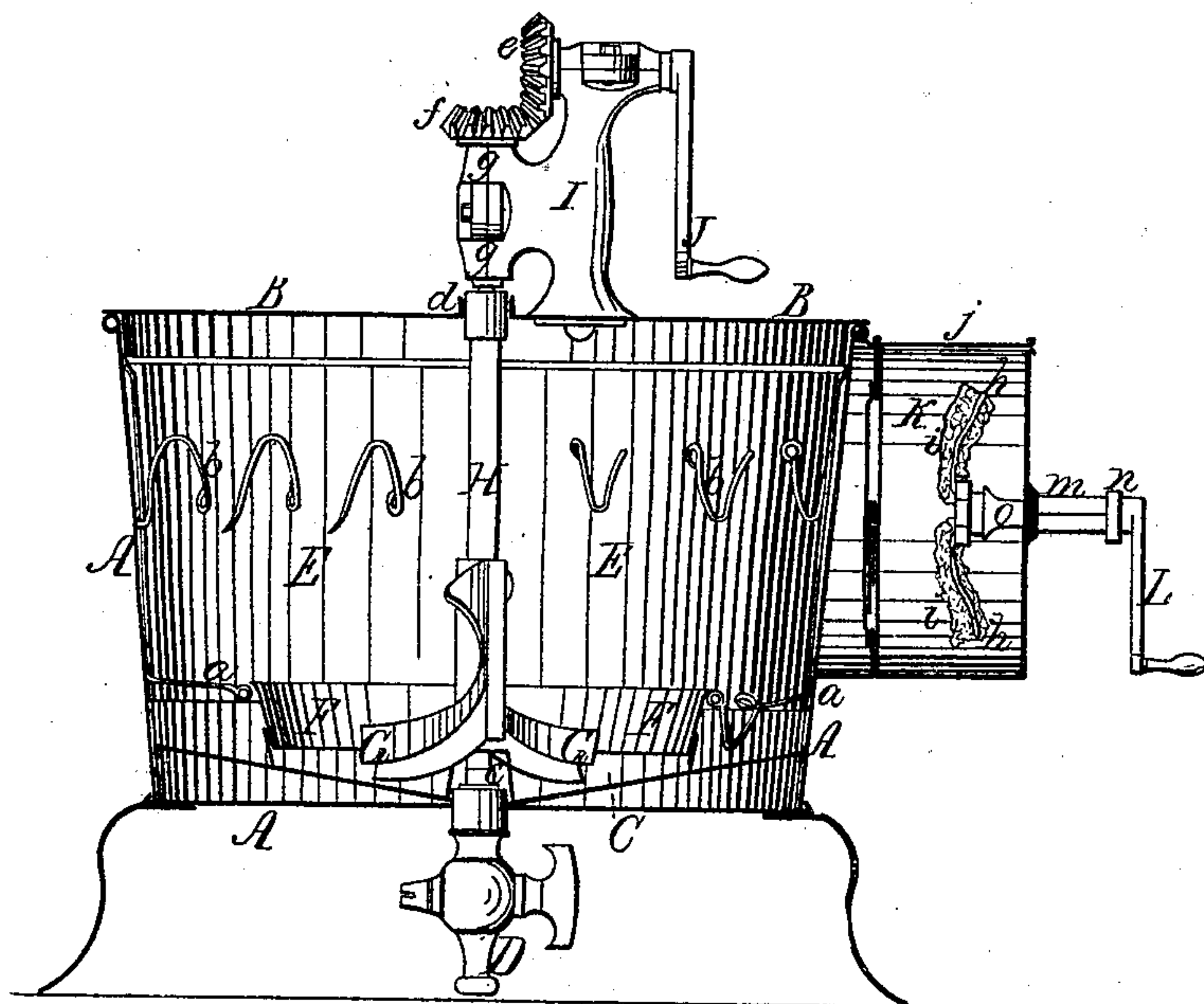


Fig: 1.



Witnesses.
P. E. Wilson.
A. Moore.

Inventors.
Richards & Alexander
by atty. W. B. Doughton.

UNITED STATES PATENT OFFICE.

GILBERT RICHARDS, OF CUMMINGTON, AND LEVI ALEXANDER, OF
SHELBURNE FALLS, MASSACHUSETTS.

IMPROVED APPARATUS FOR WASHING DISHES AND THE LIKE TABLE FURNITURE.

Specification forming part of Letters Patent No. 40,280, dated October 13, 1863.

To all whom it may concern:

Be it known that we, GILBERT RICHARDS, of Cummington, in the county of Hampshire, and LEVI ALEXANDER, of Shelburne Falls, in the county of Franklin, both in the State of Massachusetts, have invented certain new and useful improvements in machines for washing table furniture, such as plates, cups and saucers, or other china or glassware; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a vertical section through the machine, and Fig. 2 represents a top plan with the covers removed to show the interior of the apparatus.

Similar letters of reference where they occur in the separate figures denote like parts of the apparatus in both of the figures.

We are aware that machines have heretofore been made for washing dishes and other table furniture, and that the wash-water has been thrown against the table furniture by a revolving wheel, which acted in a chamber separate from that in which the dishes, &c., were placed and washed. These things we do not claim, as they have failed from their bulkiness and impracticability as a useful household implement to go into general use. Our object has been to devise a neat, compact, efficient, and cheap machine for washing dishes, &c., and we have, as we believe, fully and entirely accomplished that object.

The nature of our invention consists in arranging the wheel that throws the water against the plates and other articles being washed in the same chamber with the plates, &c., so that it is unnecessary that the plates, &c., should be moved to bring them within the action of the water—or, in other words, placing the washing-wheel within the creel or frame that carries the dishes, &c., so that turning the wheel will throw the water against all the articles within the inclosed chamber while said articles remain stationary.

To enable others skilled in the art to make and use our invention, we will proceed to describe the same with reference to the drawings.

A represents an external case, made of tin or any other suitable metal or material, and

covered by a hinged cover, B, that may have a segment thereof also hinged, to give easy access to the interior of the case. The inner bottom, C, of the case (for there may be two) is made concave to drain or draw the water to the draw-off cock D, for emptying the case. Within this outer case, A, there is a frame or creel, E, for holding plates, dishes, cups, saucers, and other table furniture that is to be washed. This creel is furnished with eccentrically-arranged wires *a* and with hooks *b*, or other equivalent holding devices, in, on, or against which the articles to be washed may rest and be held while subjected to the dashing of the water. The creel, with its attachments, may be removable for the purpose of cleansing or drying it, or for the placing or removal of the dishes, &c., or the wires or hooks may be connected to the outer case itself without using the frame E.

F is a circular curb concentric with the outer case and creel, within which curb the wings or buckets G, arranged on a vertical shaft, H, revolve, said shaft having a suitable step or lower support at *c* and an upper support at *d* to steady it.

On the lid or cover B is a stand, I, for supporting a small horizontal shaft, which has upon one of its ends a crank, J, and upon its other end a bevel-gear, *e*, that works into another bevel-gear, *f*, on the upper end of a short vertical shaft that turns in a suitable bearing, *g*, on the stand I. The short vertical shaft has a stem or four-sided shank upon its lower end, which fits into a pod or socket in the upper end of the vertical shaft H, so that on raising the cover B the two shafts disconnect, and when the cover is let down they will connect, and the buckets or wings be rotated by the gearing *e f*.

On the outside of the case A may be arranged a small chamber, K, in which a single plate or other article that may need to be rubbed or scoured may be placed and acted upon. In this chamber there is arranged to revolve a series of arms, *h*, having upon them sponge *i*, or other soft and pliable substance, against which the dish or plate to be rubbed or scoured may be held by the hand and pressed against the rubbing or scouring substance. The upper half of the case that forms the chamber K is hinged, so that it may be

raised up or swung back to gain access to the chamber, as well as to remove the rubber or scourer to cleanse or dry it. The lid *j*, also, that covers the chamber *K* may be hinged.

The rubbers *i* may be turned by a crank, *L*, on the outer end of the shaft *k*, on which said rubbers are placed. The shaft *k* is supported and turned in a sleeve, *m*, one half of which is on the hinged and the other half on the fixed portion of the outer case of the chamber *K*, and when the two halves are brought together a ring, *n*, may be slipped over them to hold them tightly together. A bent spring, *o*, is so arranged as to make the rubbers *i* yielding when the plate, dish, or other article is held against them.

When the plates, dishes, cups, saucers, tumblers, and other table furniture are properly placed in the creel or chamber of the outer case, *A*, and the hot water thrown in and the lid closed down, the crank *J* is turned, which causes the buckets or wings to revolve, and

by their curvature and the position of the articles to be washed the water is thrown by a continuous dash against the articles, by which means they are thoroughly washed and cleansed.

Having thus fully described the construction and operation of our dish-washing machine, what we claim therein as new, and desire to secure by Letters Patent, is—

The arrangement of the wheel or buckets *G* within the chamber that contains both the dishes, &c., and the washing-water, so that by rotating said wheel or buckets a continuous stream of water shall be jetted or thrown against them, while the dishes or other articles remain stationary, substantially as described.

GILBERT RICHARDS.
LEVI ALEXANDER.

Witnesses:

THOMAS HENDERSON,
A. PERRY PECK.