

(No Model.)

C. BURDICK & C. R. BROWN.

DISH WASHING MACHINE.

No. 367,361.

Patented Aug. 2, 1887.

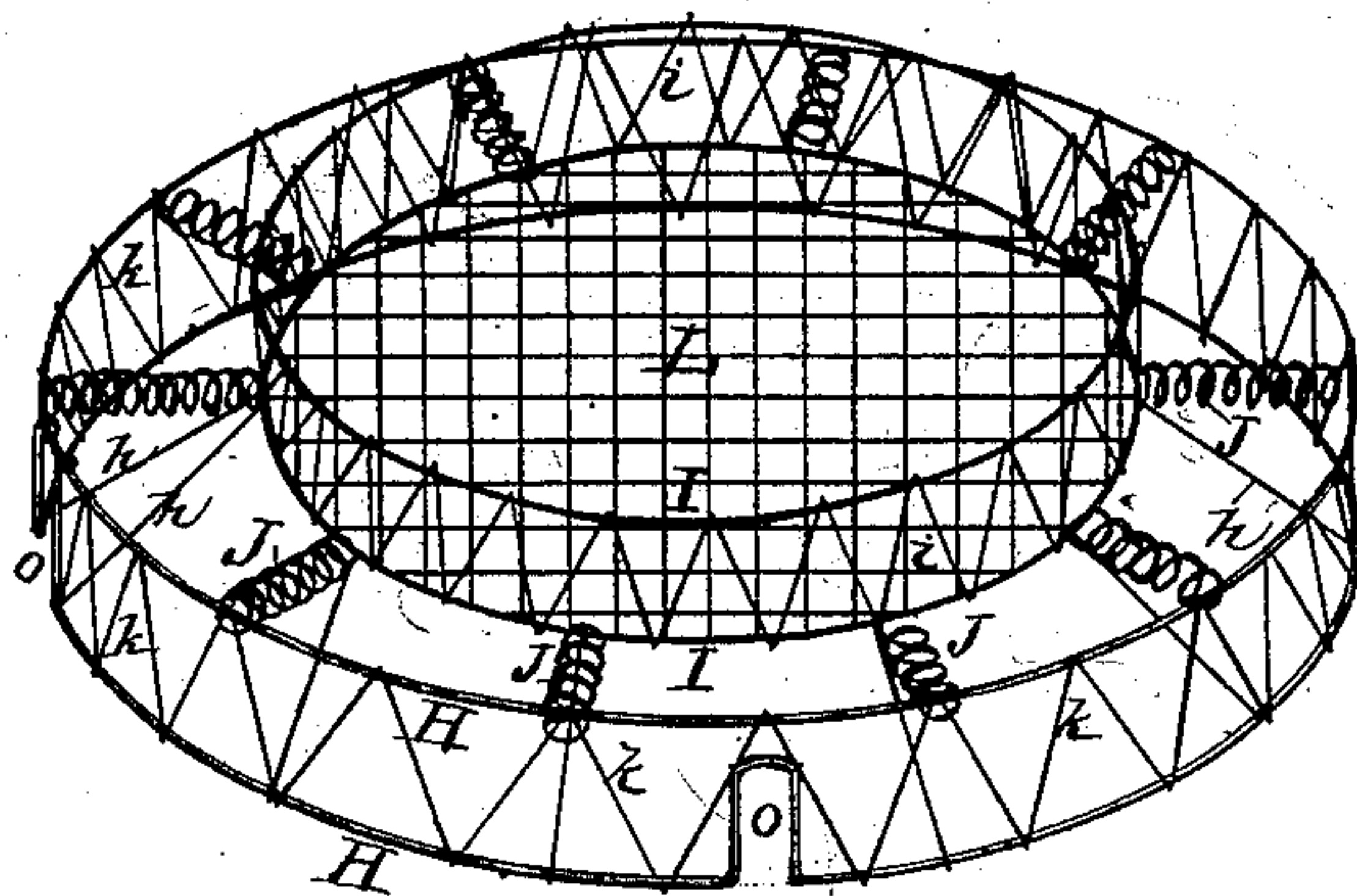


Fig. 2.

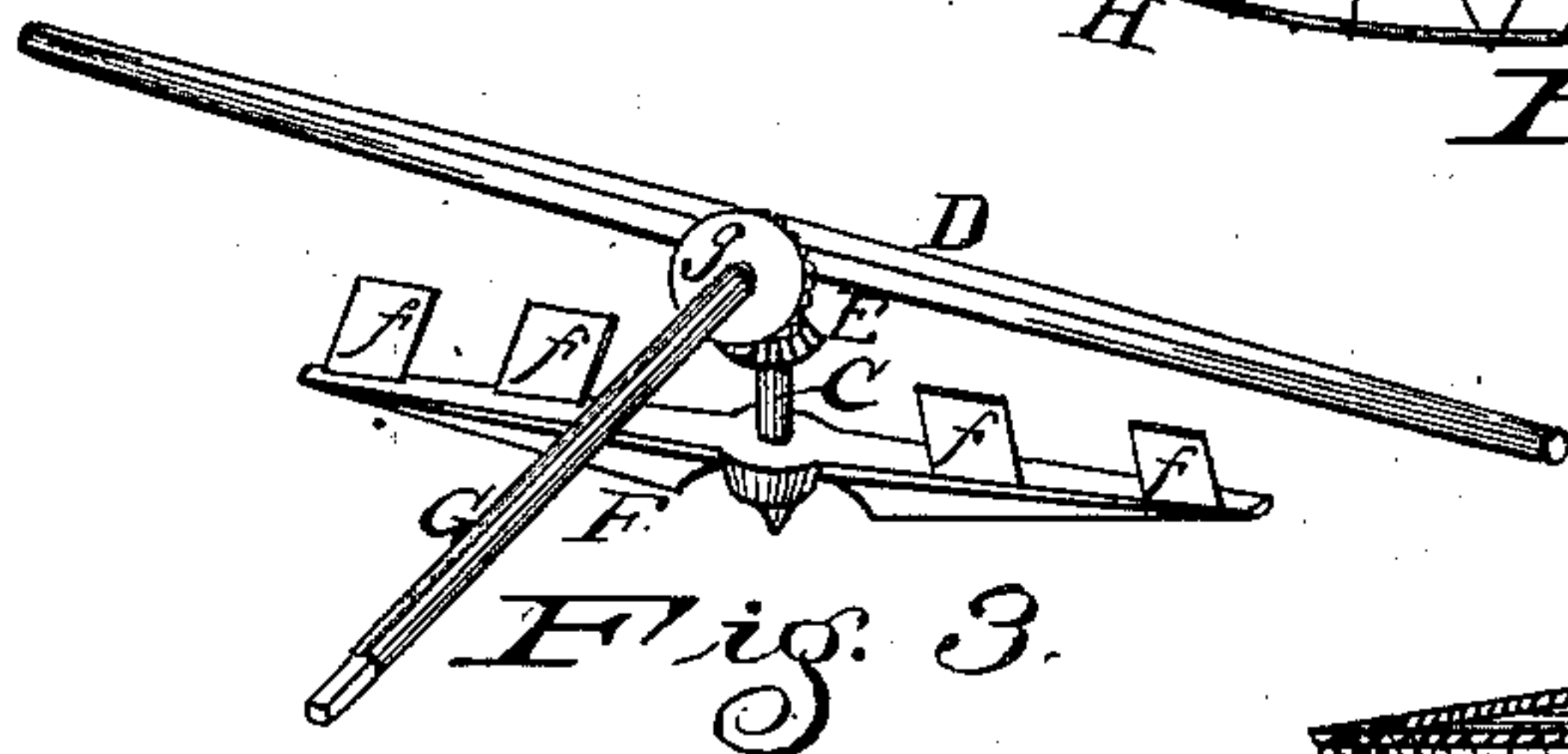


Fig. 3.

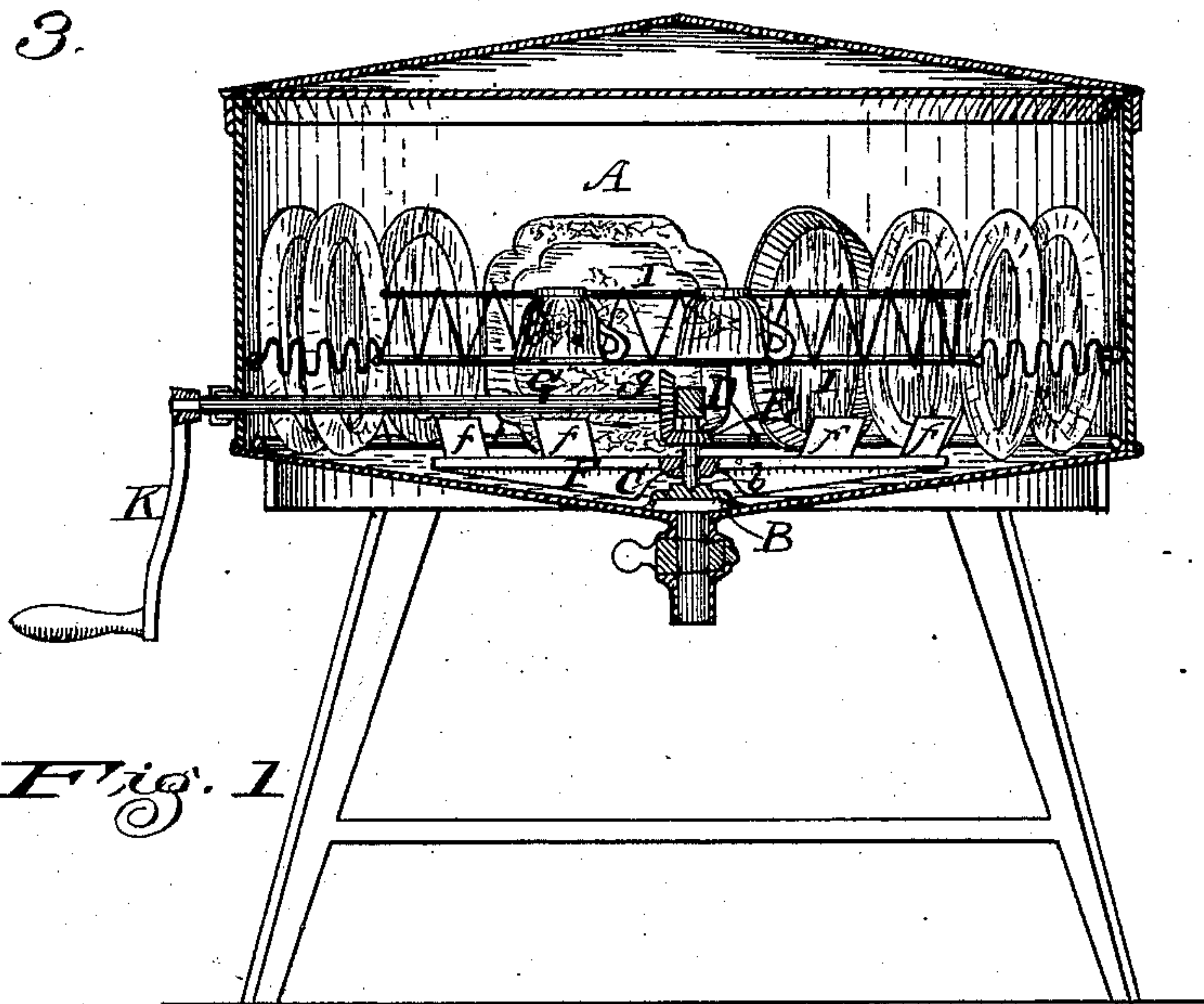


Fig. 1.

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UNITED STATES PATENT OFFICE.

CHARLES BURDICK AND CHARLES R. BROWN, OF CLEVELAND, OHIO.

DISH-WASHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 367,361, dated August 2, 1887.

Application filed October 1, 1886. Serial No. 215,043. (No model.)

To all whom it may concern:

Be it known that we, CHARLES BURDICK and CHARLES R. BROWN, both of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Dish-Washing Machines, of which the following is a specification.

This invention relates to machines for washing dishes; and it consists in the construction and combination of parts, as hereinafter described, and pointed out in the claim.

In the accompanying drawings, Figure 1 is a vertical section of our machine, showing the working parts and the dishes arranged in the basket. Fig. 2 is a detached perspective view of the basket, and Fig. 3 is a detached perspective view of the dasher and the mechanism for operating it.

A represents a round or cylindrical vessel having a concave bottom, in the center of which is provided an outlet or discharge opening having a suitable cock or gate for closing said opening, and said vessel is supported upon a suitable frame and legs, also provided with a suitable lid or cover. Over the aforesaid discharge-opening is fixed a small bridge, B, having a step, *b*, in which stands a short vertical shaft, C, whose upper end is journaled in a cross-bar, D, supported crosswise near the bottom of the vessel in the sides thereof. On the said vertical shaft C is placed a bevel-pinion, E, and also upon said shaft is fixed a rotary dasher, F, consisting of a bar having upon each side of its center of motion one or more upwardly-slanting flat fingers *f f*. The length of the said dasher is about equal to two-thirds the diameter of the vessel A, thus leaving a space surrounding its circle of rotation for the occupancy of dishes, as seen in Fig. 1.

G is a counter-shaft, having its inner bearing in the aforesaid cross-bar D, above the bearing of the vertical shaft, its outer end passing out through the side wall of the vessel A, and provided with a suitable bearing and stuffing-box. To the outer end of said counter-shaft is applied a crank, K, for giving motion to the said shafts and thence to the dasher.

The basket consists of hoops H H of a diameter sufficiently less than the vessel A to admit them to set within it. Said hoops are united by cross-wires *k k*, and thus form a suitable rim for sustaining the inner framework. The lower hoop is provided with break-openings *o o* to straddle the shafts and let the said hoop rest on the bottom of the vessel. Smaller hoops, I I, united by cross-wires *i i*, are fixed equidistant within the circle of the outer hoops, H H, and are supported on the level of the upper hoop, H, by diagonal rods *h h*, and at suitable intervals between the upper hoop, H, and lower hoop, I, are fixed coiled wires J J, spanning the annular space between said hoops. A suitable wire-work floor, L, is made within hoops I, which stands above the rotary dasher and its operating mechanism, as seen in Fig. 1. By this construction the plates, platters, and other usually most soiled dishes are placed in the annular space, with their edges between the meshes of the coiled wires J J, which hold them apart from one another and allows the water to be freely dashed between them. The lighter and more delicate ware, and that less soiled, is placed on the floor within the hoops I I, where the water has less force, but is sufficient to cleanse them without danger of breakage.

From the foregoing the operations of this machine are obvious. The dishes which require the greater amount of washing are placed in the outer circle, where the greatest force of the water is expended, which force may be made commensurate with the degree of resistance to overcome by giving greater rapidity to the movements of the dasher and giving greater centrifugal force to the water thrown from it, while the dishes within the inner hoops will only receive more copious showers from the water thrown over upon them.

Having described our invention, we claim as follows:

The combination, with a cylindrical vessel, A, having a discharge in the bottom, of a rotary dasher, F, attached to a vertical short shaft, C, stepped in a bridge, B, its top end journaled in cross-bar D, and having bevel-

gear E, and operated by a bevel-gear, *g*, on
crank-shaft G, and a basket composed of hoops
H H and cross-wires *k k*, hoops I I, and cross-
wires *i i*, and having wire floor L, the said
5 hoops H H and I I being joined together by
the diagonal braces *h h* and the coils J J, the
vessel A having a removable lid, all con-

structed and arranged to operate substantially
as described.

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