

(No Model.)

G. BURKHARDT.

WASHING MACHINE.

No. 318,413. *Fig. 1.*

Patented May 19, 1885.

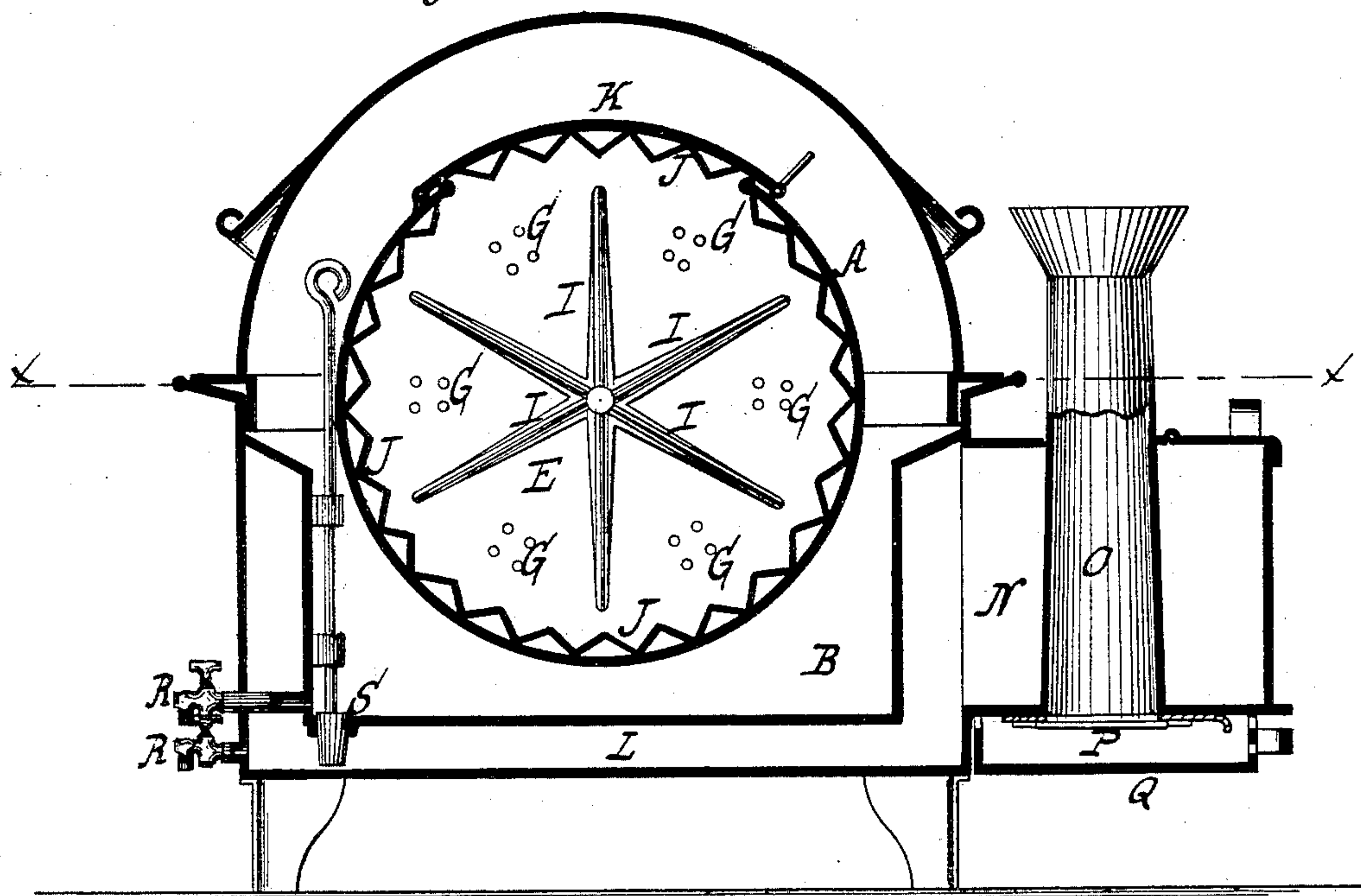


Fig. 2.

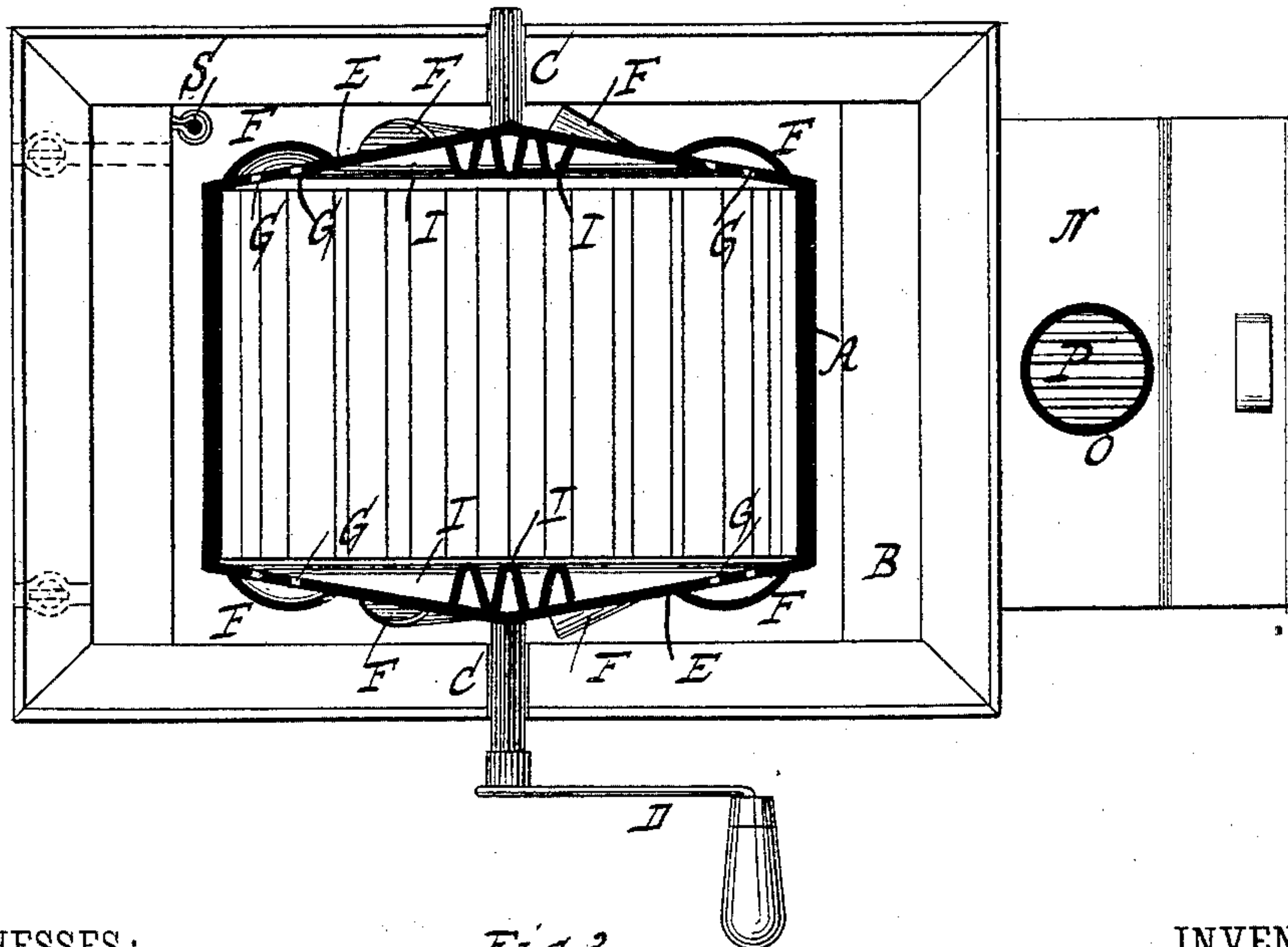
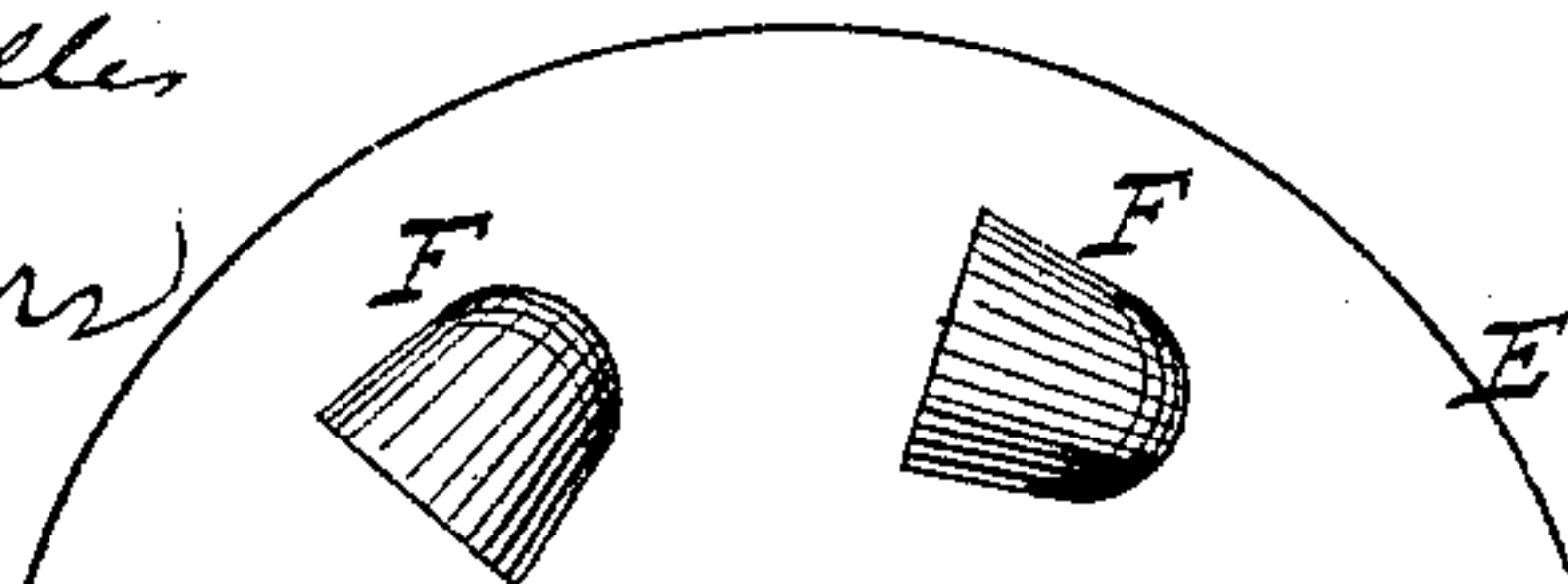


Fig. 3.

WITNESSES:

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UNITED STATES PATENT OFFICE.

GUSTAV BURKHARDT, OF HOMER, ILLINOIS.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 318,413, dated May 19, 1885.

Application filed May 8, 1884. (No model.)

To all whom it may concern:

Be it known that I, GUSTAV BURKHARDT, a citizen of the United States, residing at Homer, in the county of Champaign and State of Illinois, have invented new and useful Improvements in Washing-Machines, of which the following is a specification.

This invention relates to that class of washing-machines comprising a revolving clothes drum or cylinder; and it consists in the novel features of construction hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a longitudinal section of a washing-machine embodying my invention. Fig. 2 is a horizontal section thereof in the plane of the line *x x*, Fig. 1. Fig. 3 is a detail view of the drum.

Similar letters indicate corresponding parts.

The letter A designates the clothes-drum, which is supported in a suds-box, B, by means of gudgeons C, one of which is provided with a crank-handle, D, for imparting a revolving motion to the drum. The heads E of the drum are both provided on the outer surface with a circular range of scoops, F, opening in like directions, and with holes G at points opposite to the scoops, so that if the proper motion is imparted to the drum air, together with the water in the suds-box, is caught up by the scoops, and thence forced into the drum through the holes, thus percolating through the clothes in the required manner. The heads E of the drum are conical in shape, thereby facilitating the operation of the scoops, and are provided on the inner surface with radial ribs I, the inner edges of which are in the line of the base of the cone, as shown in Fig. 2, so that these ribs act on the clothes with a tendency to throw it outward toward the side of the drum. The side of the drum A is provided with transverse corrugations J, which tend to carry the clothes upward, so that by the ensuing agitation thereof every portion of the clothes is exposed to the action of the air or water, or both, in the drum. Access is had to the drum through an opening in the side, provided with a cover, K, which also is corrugated, and is provided with means for closing it water-tight.

On the bottom and sides of the suds-box B is a water-jacket, L, and on one side thereof is a chamber, N, which communicates with the jacket, and through which passes a heating-flue, O, so that if this chamber is supplied with water the water thence flows into the jacket in a heated condition, thereby warming the water in the suds-box. The hot water may be let into the suds-box from the jacket L through a hole in the bottom of the box, provided with a valve, S, and the height of the water both in the jacket and the suds-box may be regulated by means of cocks R, connected to such parts, respectively. The heating-flue O is provided with a fire-grate, P, and ash-pan Q, so that a fire may be built in it, and the water-heating chamber N is provided with a suitable lid.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a washing-machine, the combination, with a suds-box, of a closed revolving drum having conical heads E, provided with holes G, and a circular range of buckets, F, secured to and projecting outwardly from the exterior surfaces of the drum-heads, for lifting up the suds from the box and discharging the same therefrom into the drum through the holes, and a series of radial ribs, I, secured to the under surfaces of the drum-heads with their inner edges approximately in line with the base of the conical heads, substantially as described.

2. The combination of the suds-box, an outer jacket therefor on the bottom and part of the sides, a heating-chamber upon one side communicating with the jacket, a heating device, substantially such as described, located mainly beneath the heating-chamber and part thereof passing therethrough, a valve controlling communication between the suds-box and the jacket, and closed revolving drum seated in the suds-box, substantially as described.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

GUSTAV BURKHARDT. [L. S.]

Witnesses:

J. B. SAMUEL,

G. F. TINCHER.