2 Sheets—Sheet 1.

I. SCOVILLE & P. BARTLETT.

Washing-Machine.

No. 197,229. Patented Nov. 20, 1877.

Fig. 1.

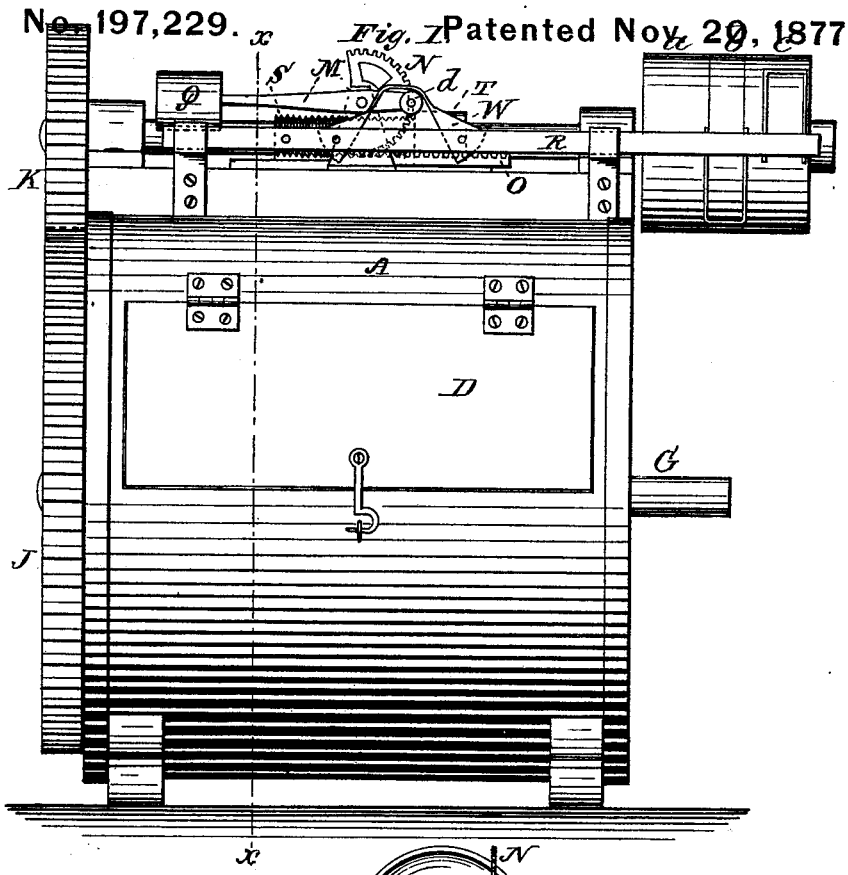
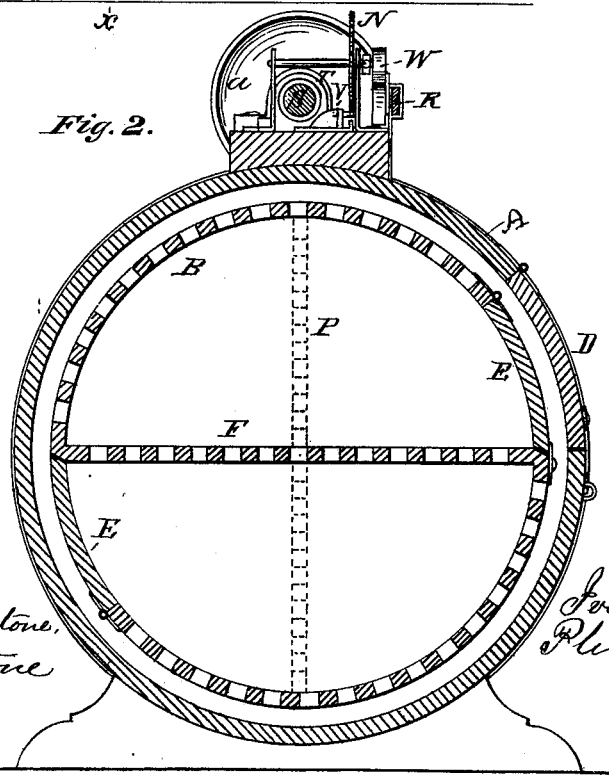


Fig. 2.



Witnesses:
John H. Redstone,
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Inventors.
Ives. Scoville,
Pliny Bartlett.

2 Sheets—Sheet 2.

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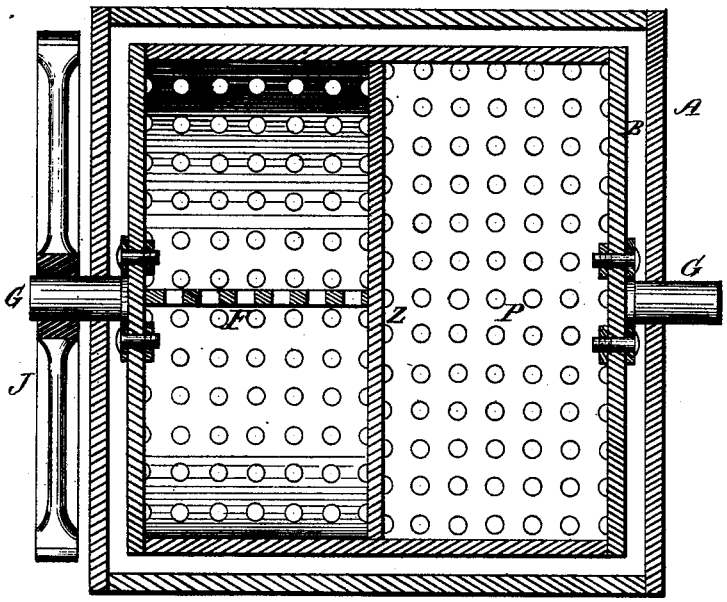
Fig. 3.



Witnesses:
John H. Redstone
A. E. Redstone.

Inventors:
Ives Scoville.
Pliny Bartlett.

UNITED STATES PATENT OFFICE.

IVES SCOVILLE AND PLINY BARTLETT, OF OAKLAND, CALIFORNIA.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **197,229**, dated November 20, 1877; application filed February 26, 1877.

To all whom it may concern:

Be it known that we, IVES SCOVILLE and PLINY BARTLETT, both of Oakland, in the county of Alameda and State of California, have jointly invented certain new and useful Improvements in Washing-Machines, of which the following is a specification, reference being had to the accompanying drawings.

Figure 1 is a side elevation, and Fig. 2 a sectional view taken on line *x x* of Fig. 1. Fig. 3 is a sectional plan view.

A is the main cylinder or barrel; B, the inside cylinder; G, the journal upon which the inside cylinder revolves; D, the door of the outside cylinder; E, the door of the inside cylinder. F and P are partitions set at right angles, a solid partition, Z, dividing the cylinder B through the center, so that, in connection with the partitions F and P, four equal compartments are formed.

The cylinder B is revolved by the gear K and J, being operated by the tight pulley *b*, in connection with the loose pulleys *a* and *c*, and the shifting-gear, composed of the screw-rod S, the nut T, the stops V, and the adjusting-weight Q.

The rack O operates the weight-rod M by means of the segment N throwing the adjusting-weight Q over the center, and the lever *d* operating in the yoke W.

The following is the operation of the same: The pulleys *a*, *b*, and *c* form the ordinary arrangement of tight and loose pulleys, known as "shifting-pulleys," and the shifter R keeps the belts which run in opposite directions—the one on the tight and the other on a loose pulley, and when the screw S has moved the nut T until it strikes the projection V, it moves the rack O, operating the segment N, until the weight Q passes over the center and drops down, suddenly shifting the belt by means of the shifting-bar R, which is a well-known and common attachment for shifting belts on tight and loose pulleys.

While the nut T is carried by the screw S from one projection or stop V to the other, the machine is revolving in one direction; but as soon as it touches the other projection V and moves the rack O, the weight Q commences rising, and is soon carried over the center by the action of the segment N, operating in connection with the rock O, when it falls down, suddenly shifting the belt, in the manner described. Thus the cylinder B is revolved alternately in opposite directions, so that in case the clothes become wound together and knotted when revolving in one direction, they unwind when running in an opposite direction.

The partitions F and P are set at right angles, so as to balance the weight of the clothes, and allow only half of the same to be lifted at a time as the wheel revolves. These partitions not only serve the purpose of dividing the clothes in separate parcels, but serve other purposes.

As the machine revolves and the partitions assume a nearly perpendicular position, the clothes drop and roll down, and the suds are expelled and pressed through the clothes by their own weight, at the same time avoiding any rubbing or friction calculated to tear the clothes.

In the ordinary cylinder or barrel machine, partitions are slid in to receive and hold the clothes while they are taken from the machine; but by this plan of the fixed partitions constructed with perforations, the same thing is accomplished, and the clothes are allowed to drain perfectly dry.

The process of washing will be more fully understood by stating the fact that the clothes are drawn through the water as the partitions revolve with the machine, the perforations allowing a strong current to be forced through the clothes.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

The cylinder A of a washing-machine, having arranged therein a rotary cylinder, B, perforated as shown, and divided into compartments by perforated partitions F P, arranged at right angles to each other, and a solid partition, Z, said partition being constructed and arranged within the cylinder substantially as and for the purpose set forth.

IVES SCOVILLE.
PLINY BARTLETT.

Witnesses:
JOHN H. REDSTONE,
ALBERT E. REDSTONE.