

(Model.)

P. MAISONNEUVE.
WASHING MACHINE.

No. 303,442.

Patented Aug. 12, 1884.

Fig. 1.

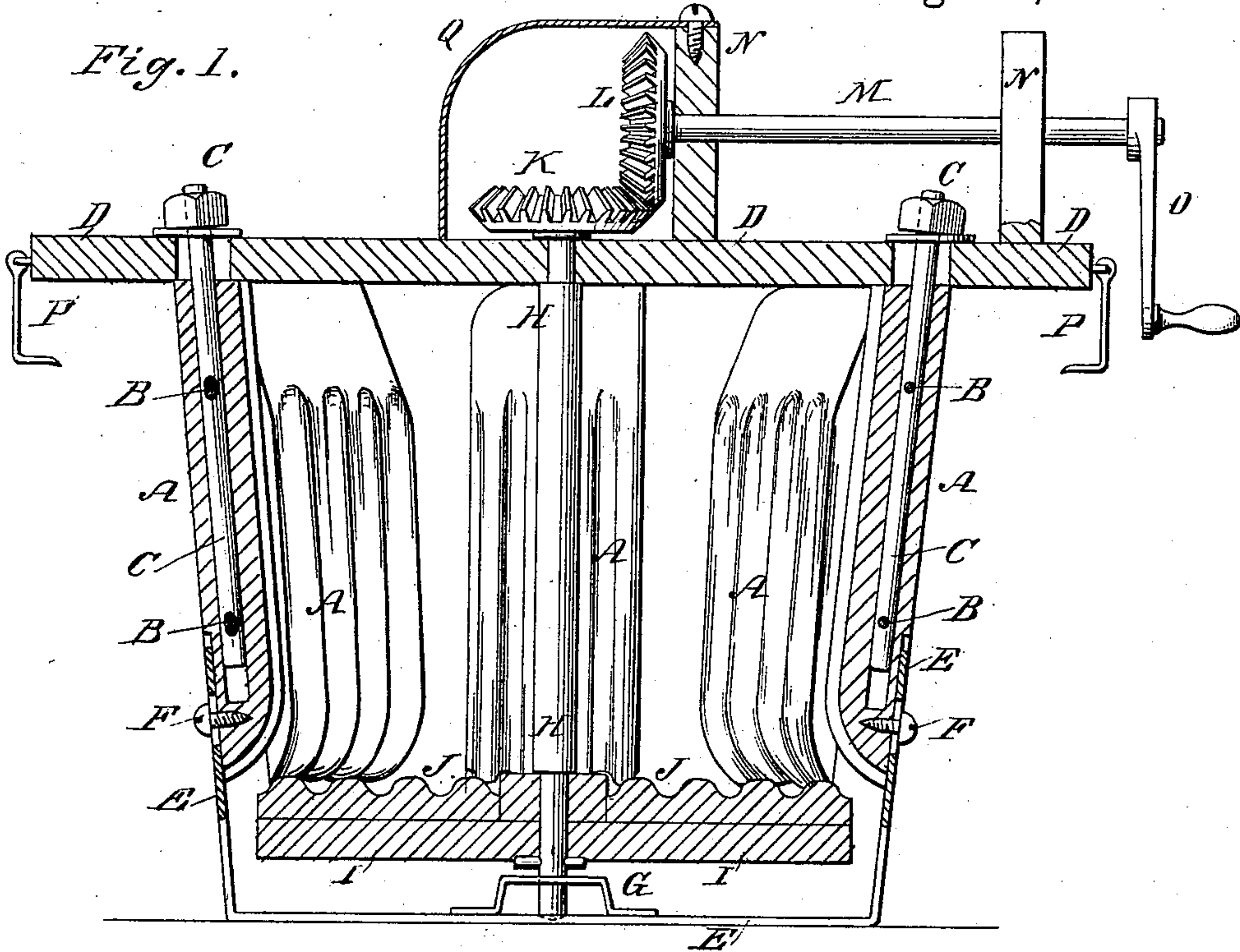
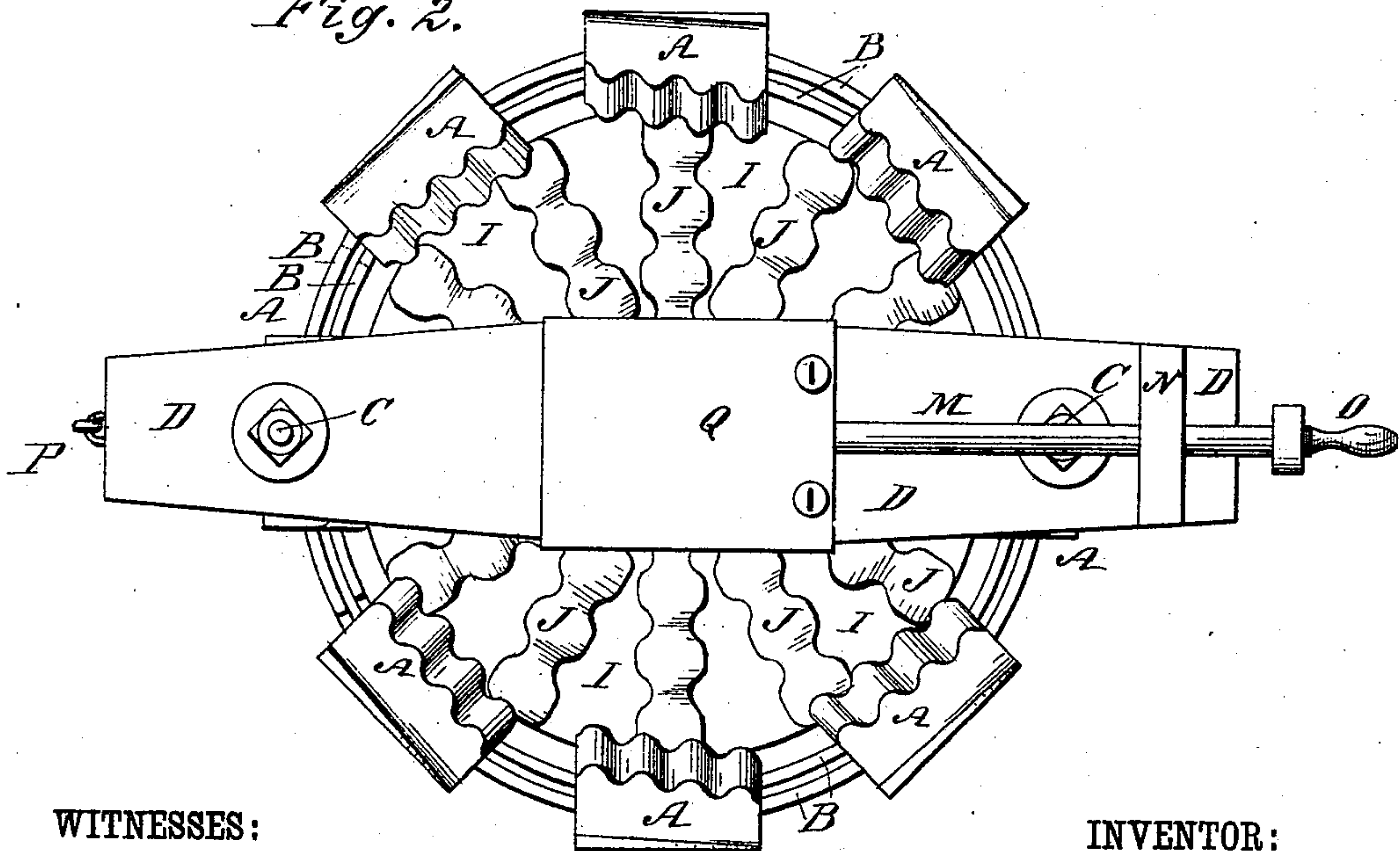


Fig. 2.



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PAUL MAISONNEUVE, OF CHICAGO, ILLINOIS.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 303,442, dated August 12, 1884.

Application filed September 8, 1883. (Model.)

To all whom it may concern:

Be it known that I, PAUL MAISONNEUVE, of Chicago, Cook county, and State of Illinois, have invented a new and Improved Washing-Machine, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a sectional side elevation of my improvement. Fig. 2 is a plan view of the same.

The object of this invention is to facilitate the washing of clothes.

The invention consists in a washing-machine constructed with corrugated staves connected with each other and with a top cross-bar by open annular rods and bolts, and provided with an adjustable base-bar to regulate the height of the machine, and a rotary bottom provided with radial semi-cylindrical corrugated cleats and rotated by shafts and gear-wheels, as will be hereinafter fully described.

A are eight (more or less) staves, placed at equal distances apart, and connected by open annular rods B, which are passed through holes in the upper and lower parts of the said staves, and have their ends overlapped within one of the said staves. The stave A, within which the ends of the rods B are overlapped, and the opposite stave are perforated longitudinally to receive the bolts C, the upper ends of which pass through holes in the end parts of the cross-bar D, and have nuts screwed upon them. The bolts C have holes formed through them to receive the annular rods B, so that the said rods can be clamped in place by tightening the nuts of the said bolts.

E is a bar, the end parts of which are bent upward to fit into recesses in the outer sides of the lower ends of the staves, that receive the bolts C, and are slotted longitudinally to receive the screws F that secure them to the said staves, so that the bar E can be readily adjusted to regulate the height of the machine and cause the projecting end parts of the cross-bar D to rest upon the edge of the wash-tub in which the machine may be placed.

In a bearing, G, attached to the middle part of the base-bar E, revolves the lower end of a

vertical shaft, H, the upper part of which revolves in a bearing in the center of the cross-bar D.

To the lower part of the shaft H is attached the center of a circular plate, I, so that the said plate will be carried around by and with the said shaft H in its revolution. The plate I forms the bottom of the machine, and to its upperside are attached radial semi-cylindrical cleats J, which are corrugated, as shown in Figs. 1 and 2. The inner sides of the staves A are also corrugated, as shown in Figs. 1 and 2, and the said staves are made thinner at their forward edges to give their inner sides an inward inclination, as shown in Fig. 2, to cause the said staves to act more effectively upon the clothes being washed as they are being carried around by the revolution of the bottom I.

To the upper end of the vertical shaft H, above the cross-bar D, is attached a beveled gear-wheel, K, into the teeth of which mesh the teeth of the beveled gear-wheel L, attached to the inner end of the horizontal shaft M. The shaft M revolves in bearings N, attached to the cross-bar D, and to its outer end is attached a crank, O, by means of which the said shaft is rotated.

To the ends of the cross-bar D are hinged hooks P, to be hooked upon the edge of the wash-tub into which the machine may be placed, or into eyes attached to the said tub. The gear-wheels K L are covered with a cap, Q, to prevent the clothes being washed from being caught by the said wheels, and which is attached to the inner bearing, N, and rests upon the cross-bar D.

In using the machine it is placed in and secured to a wash-tub. A suitable amount of soap and water are placed in the said tub, and the clothes to be washed are placed within the machine. The crank O is then turned to rotate the bottom I, which carries the clothes around and causes them to rub against the corrugated inner surface of the staves A, against which they are held by centrifugal force, so that the said clothes will be washed quickly and thoroughly.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with the body of a washing-machine, of the adjustable base-bar secured

to said body, whereby the machine may be adjusted vertically to fit tubs of different depths, substantially as described.

2. The combination of the staves A, transversely perforated near each end, and one or more of said staves provided with a vertical perforation intersecting the transverse perforations, and the annular rods or bars passing through said transverse perforations and having their ends overlapped within one of the staves, with the perforated bolt-rod provided at its upper end with a nut, and extending into the vertical perforations, and there receiving the said overlapped ends of the annular rods, whereby when the said nuts are tightened the overlapped ends of the annular rods will be firmly clamped in place, substantially as set forth.

3. In a washing-machine, the combination, with the staves A, of the base-bar E, having upwardly-projecting slotted ends, and the screws F, substantially as herein shown and described, whereby the height of the machine can be regulated, as set forth.

4. The combination, in a washing-machine, of the staves A, transversely perforated near each end, and one or more of said staves provided with a vertical perforation intersecting the transverse perforations, and the annular rods or bars passing through said transverse perforations and having their ends overlapped within one of the staves, with one or more perforated bolt-rods provided at their upper ends with nuts, and extending into the vertical perforations, and one of said rods there receiving the said overlapped ends of the annular rods, and a cross-piece carrying the driving mechanism, and having openings near each, through

which pass the upper ends of said bolt-rods, whereby when said nuts are tightened the overlapped ends of the annular rods will be firmly clamped in place and the cross-piece and its mechanism secured to the top of the machine, substantially as set forth.

5. In a washing-machine, the combination, with the staves A, the top bar, D, and the adjustable base-bar E, provided with a bearing, G, for the lower ends of shaft H, of the rotary bottom I, provided with radial corrugated cleats J, the upright shaft H, the beveled gear-wheels K L, and the crank-shaft M O, substantially as herein shown and described, whereby the said bottom can be rotated, as set forth.

6. In a washing-machine, the cross-bar D, carrying the driving-gears K L and their shafts, and a cover, Q, secured to cross-bar D, and upright N, for inclosing said gear-wheels, whereby the clothes are protected from injury when inserted in the machine during its operation.

7. The combination, with the corrugated staves A, rounded at their lower ends, of the horizontally-rotating bottom I, provided with corrugated radial cleats rounded at their outer ends, whereby the clothes will be carried around against the corrugated staves and be prevented from being caught between the lower ends of the staves and the outer ends of the cleats, substantially as set forth.

PAUL ^{his} X MAISONNEUVE.
mark.

Witnesses:

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