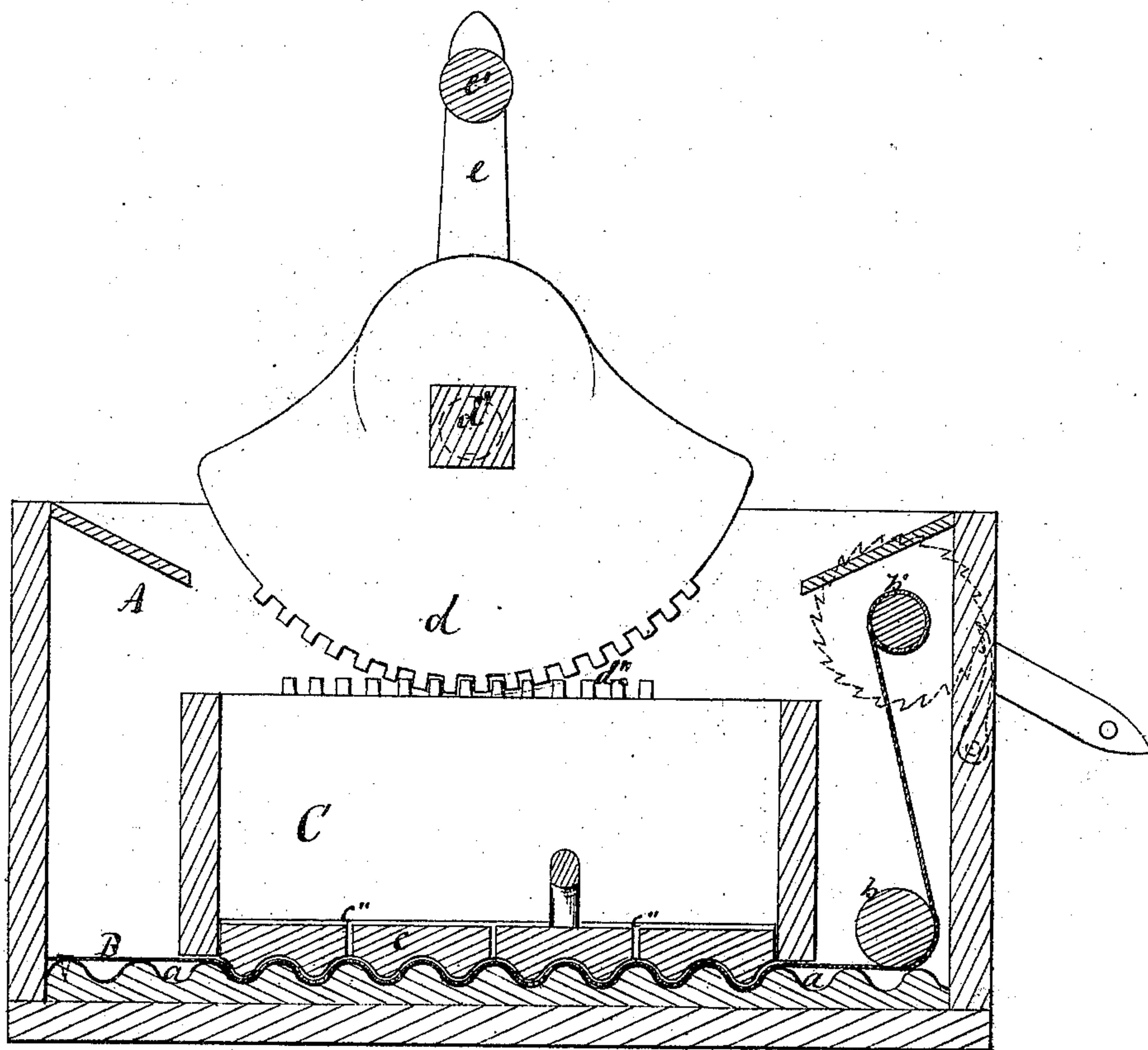


T. R. Evans,
Washing Mach.

No. 98,941.

Patented Jan. 18, 1870.



Witnesses
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THOMAS R. EVANS, OF BLACKSBURG, VIRGINIA.

Letters Patent No. 98,941, dated January 18, 1870.

IMPROVED WASHING-MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, THOMAS R. EVANS, of Blacksburg, in the State of Virginia, have invented a new and useful Improvement in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and letters of reference marked thereon, making a part of this specification, in which the figure is a longitudinal vertical section.

To enable those skilled in the art to make and use my invention, I now proceed to describe its construction and operation.

Similar letters, in the drawings, refer to like parts.

This invention relates to a washing-tub, having a corrugated stationary bottom, upon which the clothes are laid, and covered with an apron, drawn tightly enough to keep them from gathering in wads, over which apron and the clothes plays, back and forth, a horizontal rubber, enclosed in a reciprocating case, and vertically adjustable in such case, to suit the quantity of clothes in the tub, the said case being operated by pinions, set on a shaft in the upper part of the tub, which pinions receive a vibratory motion from handles affixed to their shaft, and engage with racks placed along the upper edges of the case.

In the drawing—

A is the tub; and *a* its corrugated stationary bottom.

To the lower corner of the tub is fastened one end of a cloth apron, B, which passes under a roller, *b*, at the other lower corner of the tub, and thence extends vertically upward and wound around a second roller, *b'*, placed at the upper corner of the tub.

The roller *b'* bears a crank at one end, by means of which the apron can be drawn as tightly as may be necessary, to keep the clothes, when placed under it, and subjected to the action of the movable rubber *c*, from gathering into wads.

In order to place the clothes on the stationary rubber, the apron may be unwound from the rubber *b'*, to the desired extent.

C is the reciprocating case, moving on friction-roll-

ers, affixed either to its under side or to the bottom of the tub.

The case C should be as much shorter than the inside of the tub as its due reciprocation requires, and should extend across the tub, and freely play therein. The case rests on the bottom of the tub, upon friction-rollers, and contains the adjustable upper rubber *c*, which lies upon and runs over the apron and clothes, and is kept down upon them with due pressure by pins in the sides of the case, or weights, or springs. This process cleanses the clothes.

The rubber *c* is provided with any suitable number of transverse slots, *c'*, for the purpose of allowing the water to penetrate the clothes from above.

The case C and upper rubber receive their motion from pinions *d d*, either half or wholly round, which are placed on a shaft, *d'*, extending crosswise of the top of the tub, and engage with racks *d''*, attached to the upper edges of the case.

The shaft *d'* is provided with arms, *e*, projecting perpendicularly from each end, which arms are connected by a handle, *e'*, of which the operator takes hold, and vibrates it back and forth, the arms *e* giving great lever-power.

Inclined suds-boards, *h*, are placed at the upper corners of the tub, to keep the water from flying out.

This apparatus does its work in the most easy and thorough manner, and, from the simplicity and cheapness of its construction, recommends itself at once.

I claim, as my invention—

1. The combination of the adjustable upper rubber *c* with the reciprocating case C, segment-pinion *d*, and levers *e e'*, as and for the purpose described.

2. The combination of the adjustable upper rubber *c*, reciprocating case C, pinion *d*, levers *e e'*, and apron B, as and for the purpose set forth.

3. The combination, with the means to give motion, of the lower rubber *a*, upper rubber *c*, apron B, case C, pinions *d*, and lever *e*, combined and arranged as explained.

Witnesses:

THOMAS R. EVANS.

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