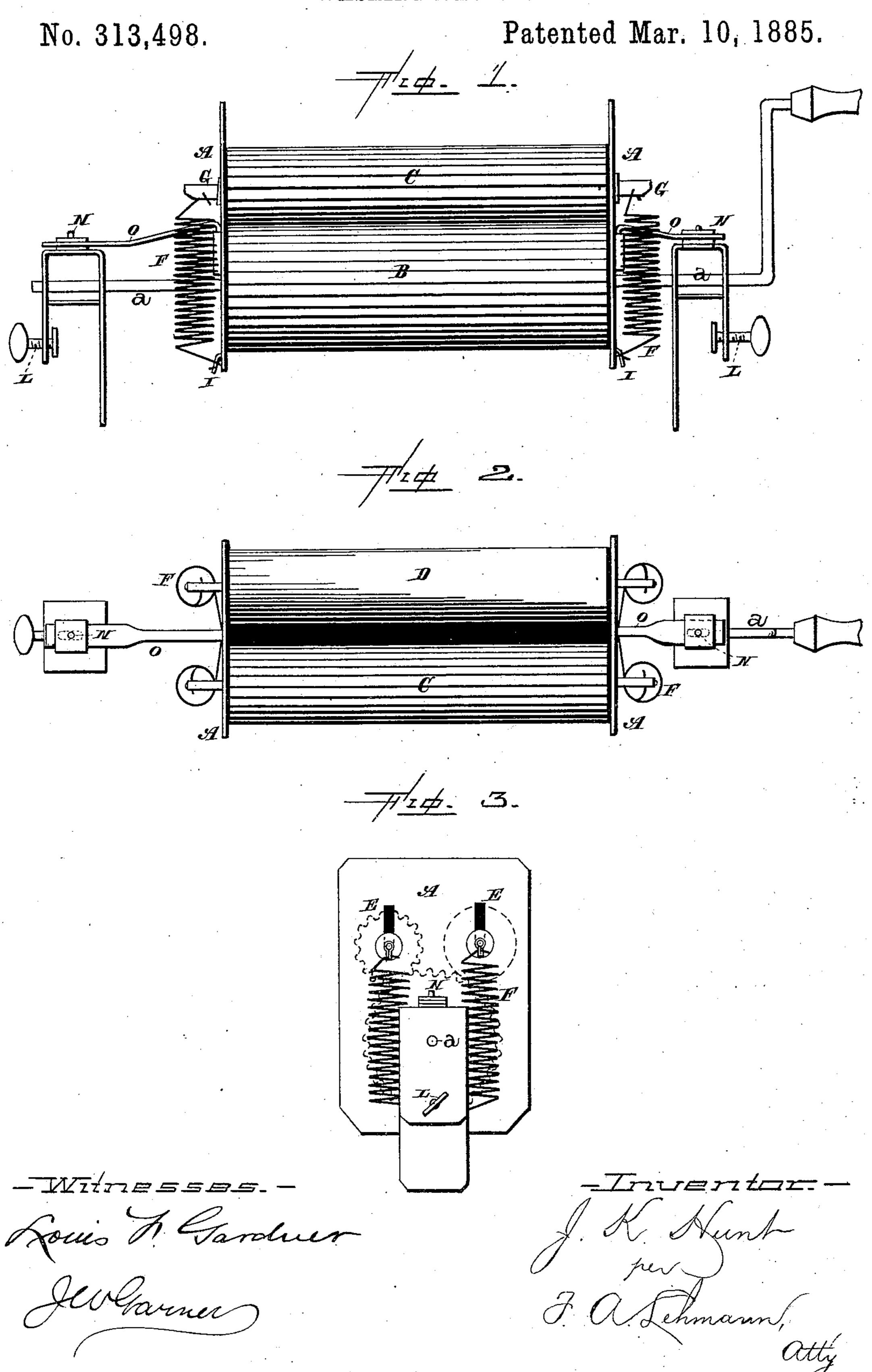
(Model.)

J. K. HUNT.

WASHING MACHINE.



United States Patent Office.

JOSIAH K. HUNT, OF BALDWIN, IOWA.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 313,498, dated March 10, 1885.

Application filed March 31, 1884. (Model.)

To all whom it may concern:

Be it known that I, J. K. Hunt, of Baldwin, in the county of Jackson and State of Iowa, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in roller washing-machines; and it consists, first, in the combination of the end pieces, the rollers, braces secured to the end pieces, and boxes which serve both as journals for the lower roll and as a means for fastening the machine to the tub; second, in the arrangement and combination of parts, which will be more fully decombination of parts, which will be more fully declaims.

The object of my invention is to so construct a washing machine as to dispense with all that portion of the frame usually used which extends parallel with the rolls, and which not only adds to the weight and cost of the machine, but which serves to hide the work from the operator, and to so construct the boxes by which the machine is attached to the tub that they shall serve as a journal for the large roll at the same time.

Figure 1 is a side elevation of a washing-machine embodying my invention. Fig. 2 is a plan view. Fig. 3 is an end view.

A represents the two flat metallic bearings or end pieces in which the large roll B and the two small rolls C D are journaled. These end pieces will be made of any desired width, and, being pressed tightly against the ends of the rolls, serve as guides to prevent any water from being forced endwise off the ends of the rolls.

For the purpose of allowing the two small rollers to have a vertical adjustment, so that they can accommodate themselves freely to the thicknesses of the articles being washed, suitable slots, E, are made through each of the end pieces where the journals of the small rolls pass through them. The large roller B is made corrugated in the usual manner, and one

of the small rolls is also made corrugated, while the other one is made smooth. Where both of the top rolls are made corrugated, the corrugations follow the track of each other, and consequently the machine washes very little faster than if a single top roll is used. Where one of the top rolls is made smooth and the other corrugated, the smooth one strikes all those spots that are missed by the corrugations, and hence washes more thoroughly and rapidly 60 than can be done where two corrugated rolls are used.

In order to keep the two top rolls pressed downward upon the large one B, twin or double spiral springs F are used, which have their 65 upper ends attached to boxes G, which are applied to the journals of the two small rolls CD. The lower end or middle portion of the springs catch under the hook or projection I on the lower end of each end piece, and hence 70 each spring is comparatively independent of the other. By this construction each top roll C D can adjust itself vertically independently of the other. The middle portion of the spring, where it catches under the hook or projection, 75 being loose, it can give or move endwise in case one of the springs is stretched beyond a certain degree, and thus the springs are prevented from becoming strained to such an extent as to lose the necessary elasticity.

The boxes by means of which the machine is secured to the edges of the tub are made to serve the double purpose of bearings for the outer ends of the journal a of the large roll B and as clamping devices to fasten the ma- 85 chine in position.

Passed through the outer prong or arm of each box is a suitable clamping-screw, L, which is made to catch against the outer side of the tub, and thus hold the machine in position.

In order to adjust the boxes to different sizes of tubs, each box is clamped by a thumb or set screw, N, to a brace, O, which is secured to the outer side of the end piece, A. The outer end of each brace is slotted where the 95 screw N passes through it, and hence the boxes can be adjusted back and forth relative to each other to the length of the two slots.

pass through them. The large roller B is | By means of the above construction it will 50 made corrugated in the usual manner, and one | be seen that no part of the frame-work of the 100

washer extends over or under the rolls, so as to interfere with the work that is being done,

or upon which the clothes can catch.

By dispensing with all that part of the frame 5 which usually extends parallel with the rollers above and below them, not only is the cost of the machine greatly reduced, but the operator is enabled to watch the passage of each piece of clothing back and forth between the rollers.

Having thus described my invention, I

claim—

1. In a roller washing-machine, the combination of the rollers, the end pieces, A, having the slots E, the springs F, the boxes, the braces, and the journal a of the lower roll, the boxes being adjustable upon the braces and journal, substantially as shown.

2. The combination of the rollers, the end pieces, the braces, and the boxes which serve 20 both as a means for clamping the machine to the tub and as bearings for the lower roll, substantially as specified.

3. The combination of the rollers, the slotted end pieces, the springs, the slotted braces, 25 and the boxes provided with clamping-screws whereby the boxes can be adjusted back and forth upon the braces, substantially as shown.

In testimony whereof I affix my signature in

presence of two witnesses.

JOSIAH K. HUNT.

Witnesses:
GEORGE C. DOWNER,
ALFRED BURDICK.