

2 Sheets—Sheet 1.

WASHING MACHINE.

Patented Oct. 18, 1887.



(No Model.)

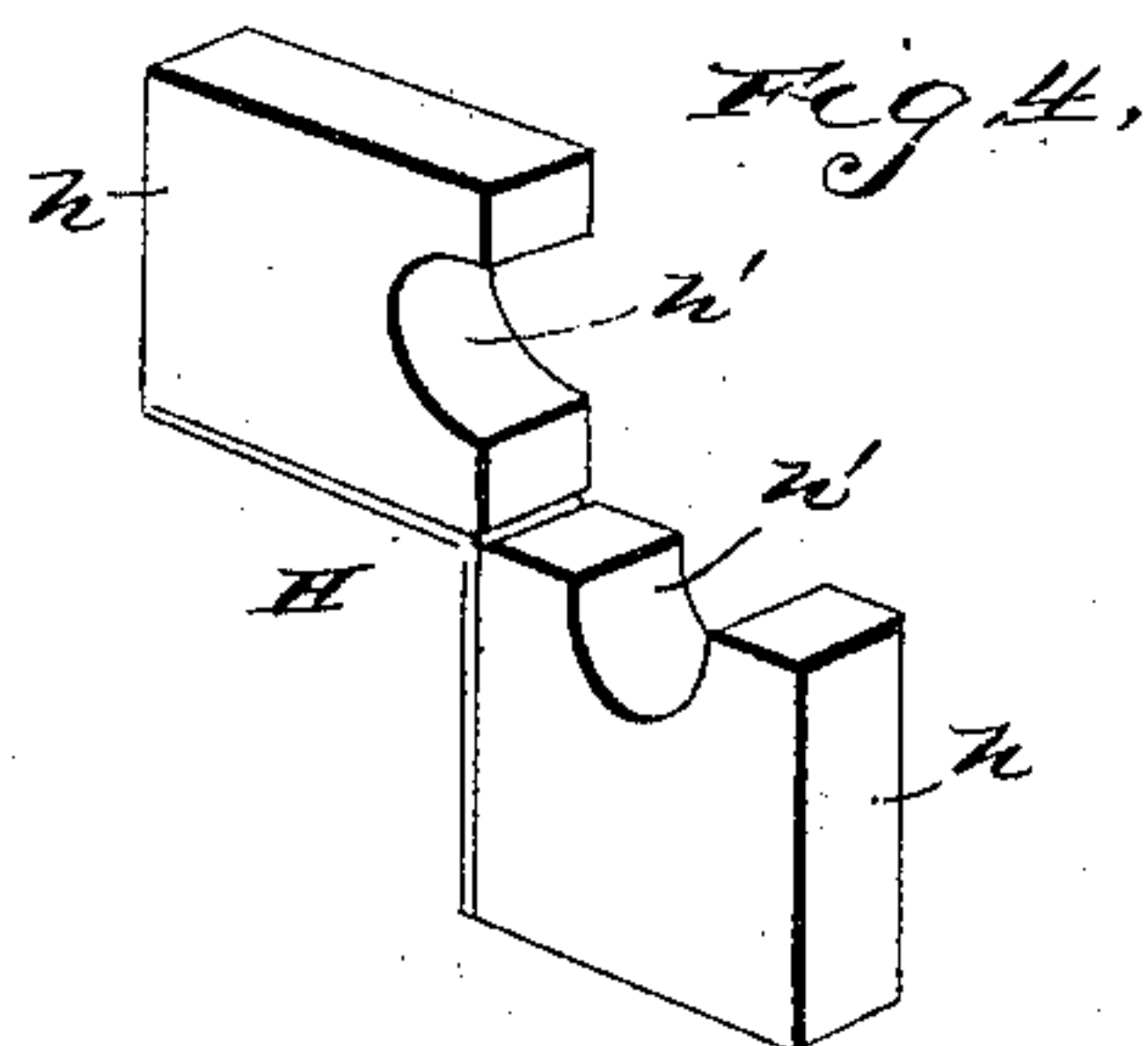
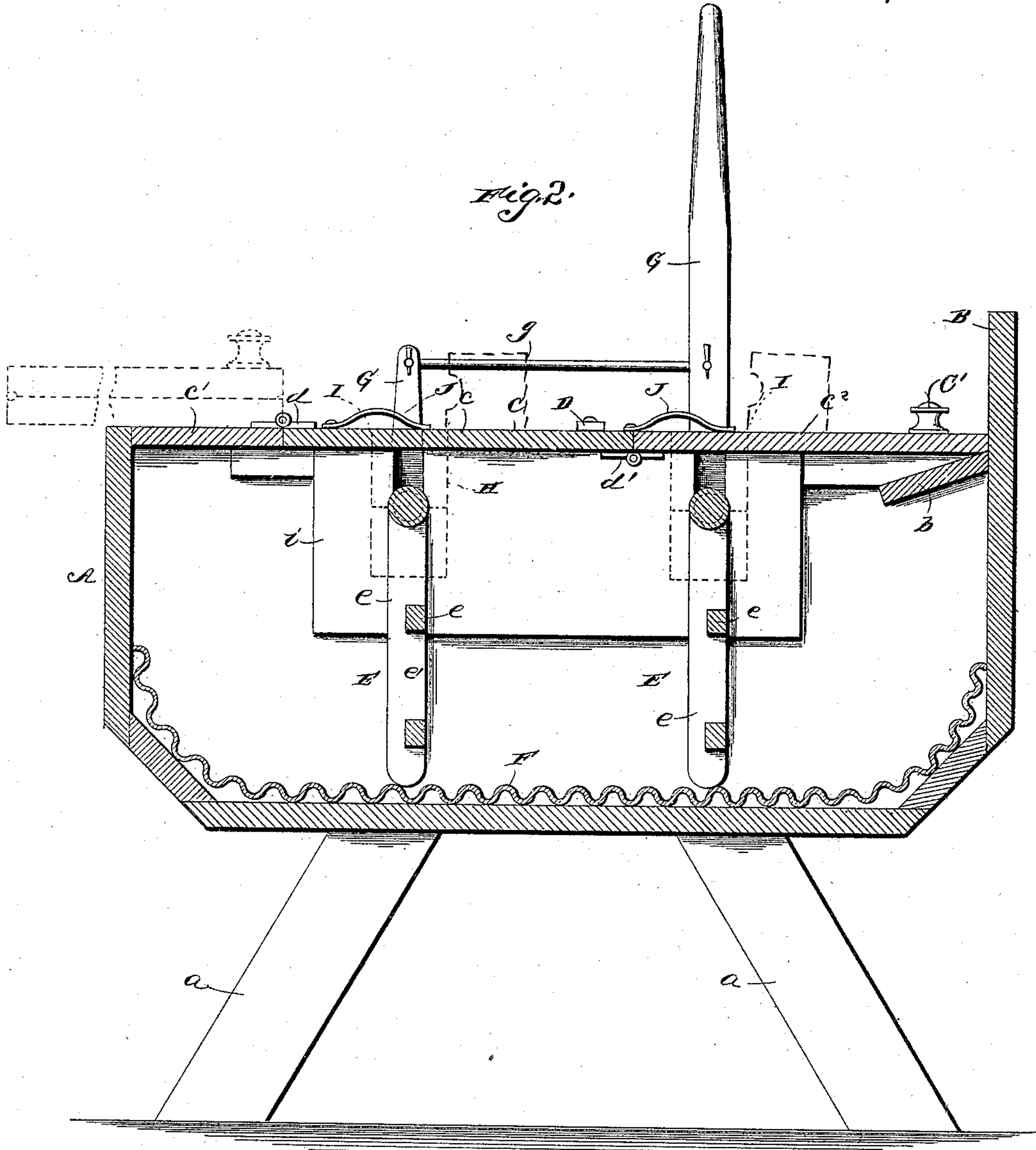
2 Sheets—Sheet 2.

F. E. OILAR & J. CORY.

WASHING MACHINE.

No. 371,852.

Patented Oct. 18, 1887.



Witnesses
W. B. Taylor
R. W. Bishop,

By their Attorneys,

Inventors
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UNITED STATES PATENT OFFICE

FRANK E. OILAR AND JEREMIAH CORY, OF MELVERN, KANSAS.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 371,852, dated October 18, 1887.

Application filed March 23, 1887. Serial No. 232,151. (No model.)

To all whom it may concern:

Be it known that we, FRANK E. OILAR and JEREMIAH CORY, citizens of the United States, residing at Melvern, in the county of Osage and State of Kansas, have invented a new and useful Improvement in Washing-Machines, of which the following is a specification.

Our invention relates to improvements in washing-machines; and it consists in certain novel features, hereinafter described and claimed.

In the annexed drawings, which fully illustrate our invention, Figure 1 is a plan view of our improved machine. Fig. 2 is a longitudinal vertical sectional view. Fig. 3 is a cross-section taken on line xx , Fig. 1; and Fig. 4 is a detail view of one of the journal-boxes for the beater-shaft.

Referring to the drawings by letter, A designates the tub or body of the washing-machine, which is supported upon legs a , of any desired number or pattern. The tub is, as shown, preferably rectangular, though it will be understood, of course, that the shape or size of the tub forms no part of our invention. At one end of the tube we provide the wringer-rail B, and projecting inward from the said rail is an inclined shelf b , which directs the water from the clothes passing through the wringer into the tub. This inclined shelf b is arranged just below the upper edges of the sides of the tub, and receives and supports the end of the lid or cover C. This lid or cover C is made in sections, as clearly shown, one section, c , being hinged to a rigid support, c' , secured to the end of the tub, and the other section, c^2 , being hinged to the section c . The hinges d , which connect the section c with the fixed support c' , are secured to the upper faces thereof, while the hinges d' , connecting the sections c c^2 , are secured to the lower faces of the same. By this arrangement we are enabled, when removing the clothes from the tub, to fold the lid into a small compass, as shown in dotted lines, Fig. 2, the section c resting on the support c' and the section c^2 resting on the section c . The section c^2 is provided with a knob or handle, C' , as shown, for convenience in operating.

D designates buttons pivotally secured on the upper edges of the sides of the tub, in position to be turned over the edges of the lid, and thereby prevent the same being forced open by the

action of the clothes and water thereon in the operation of washing.

E E designate a pair of beaters, which oscillate simultaneously within the tub and force the clothes back and forth across the corrugated wash-board F, secured in the bottom of the tub. These beaters E consist of bars e , arranged at right angles to each other, and having the open spaces e' between them. The upper bar or shaft of each beater has its ends extended past each side of the beater and made cylindrical, so as to form journals e^2 , and these ends or journals are inserted in the sides of the tub, or rather in journal-boxes supported by the sides of the tub. The journals e^2 at one end of the beater-shaft of each beater are extended past the side of the tub and provided with levers or crank-arms G. These levers G are joined by a pitman or connecting-rod, g , and one of them is made of a convenient length to serve as an operating-lever.

H designates the journal-boxes. They are made in two sections, h , hinged together, and provided in their contiguous edges with the semicircular notches or recesses h' . These journal-boxes are placed in recesses I, formed in the sides of the tub, and are prevented from falling out of said recesses by means of guards i , secured upon the inner and outer faces of the sides of the tub. Springs J bear upon the upper ends of the journal-boxes, and serve to allow the beaters to accommodate themselves to the quantity of clothes in the tub, while at the same time preventing their entire displacement. These springs are pivotally secured upon the upper edges of the sides of the tub, so that when so desired they can be turned around from off the journal-boxes to permit the removal of the same.

In operation the clothes are placed in the tub, together with water and soap or bleaching material. The beaters are then placed in position, the lid closed, and the beaters simultaneously operated by means of the levers G and pitman g . As the beaters oscillate, they force the clothes back and forth across the wash-board, thoroughly cleansing the same. When the washing is finished, the wringer is secured to the wringer-rail and the clothes passed therethrough in the usual manner.

The manner of securing the beater-shafts in

the journal-boxes is as follows: The boxes are raised to the position shown in dotted lines in Fig. 2, and the upper half swung over on the upper edge of the sides of the tub. The journals 5 of the beater-shafts are then secured in place by resting them in the notch in the edge of the lower half of the journal-boxes and bringing the upper half down upon them. The journal-boxes then adjust themselves in the recesses I, and the springs J are turned so as to 10 bear thereon.

By the use of our machine the clothes are quickly and thoroughly cleansed, with a minimum expenditure of labor.

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

The combination, with the tub having the corrugated wash-board F in its bottom, of the beaters composed of a series of bars arranged 20 at right angles to each other, the upper cross-bars being extended to form journals, and means for simultaneously operating said beaters, substantially as specified.

In testimony that we claim the foregoing as 25 our own we have hereto affixed our signatures in presence of two witnesses.

FRANK E. OILAR.
JEREMIAH CORY.

Witnesses:

W. B. WILLIAMS,
M. J. WILLIAMS.