

E. O. ROOD.
Washing-Machine.

No. 201,126.

Patented March 12, 1878.

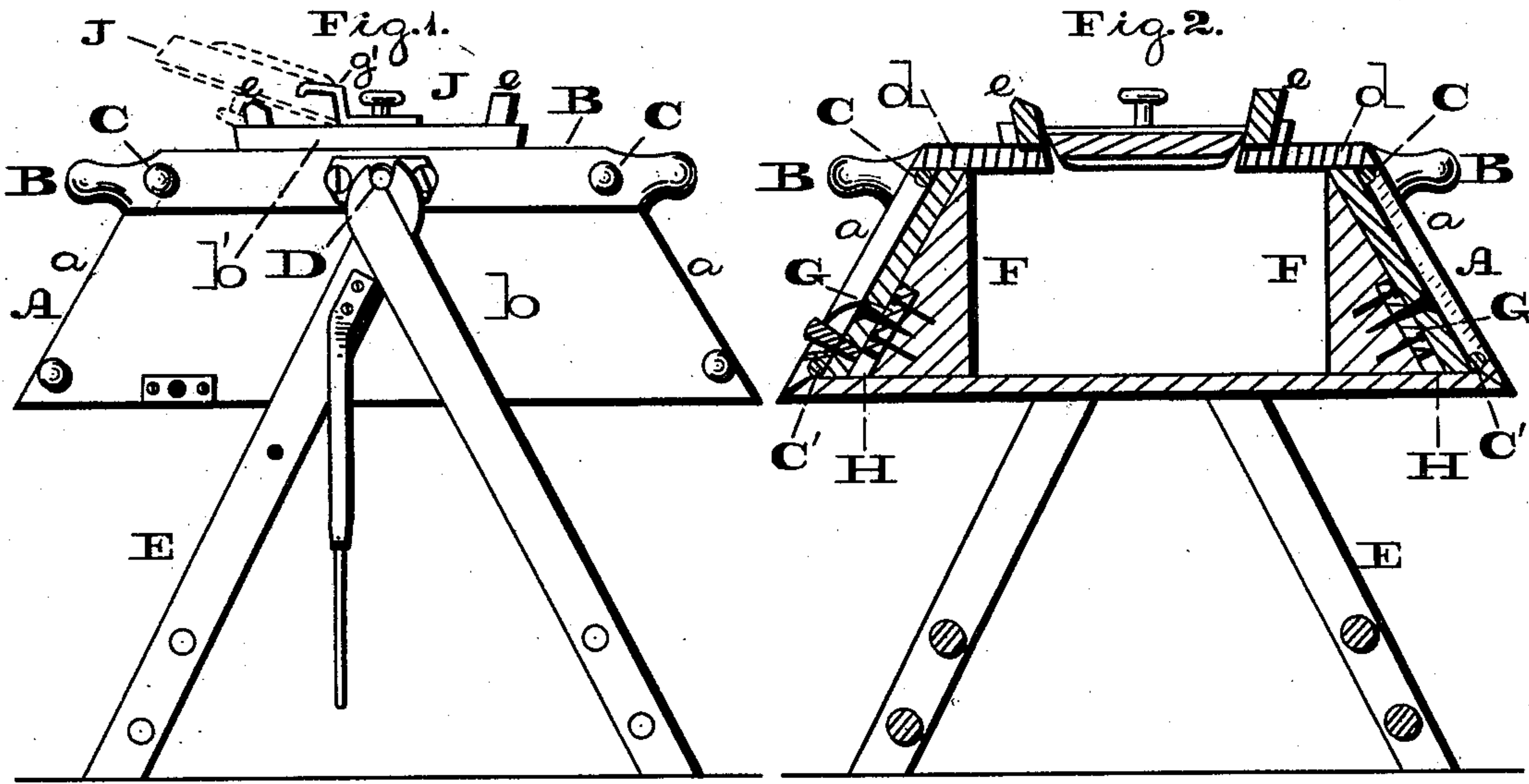


Fig. 5.

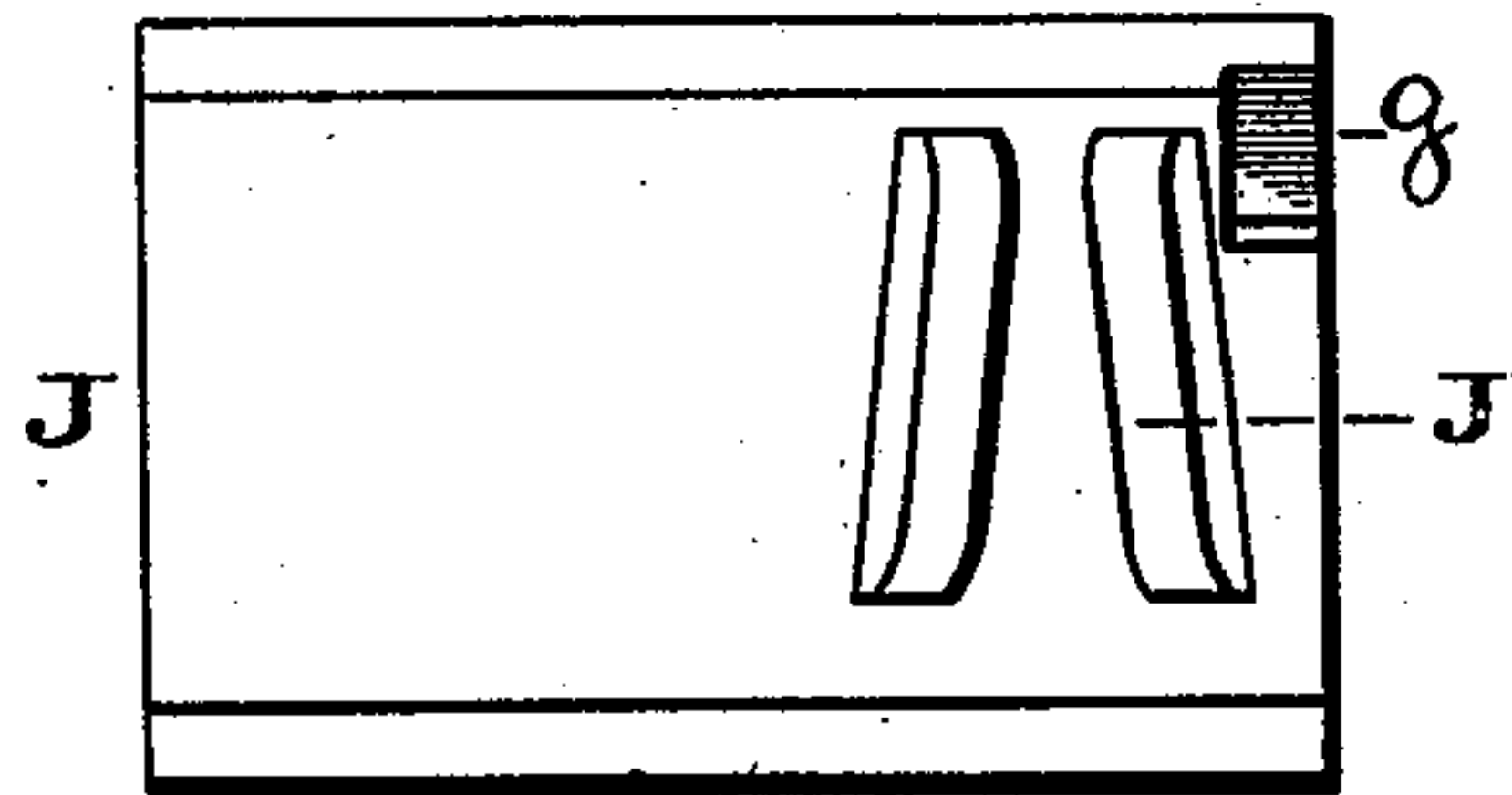


Fig. 6.

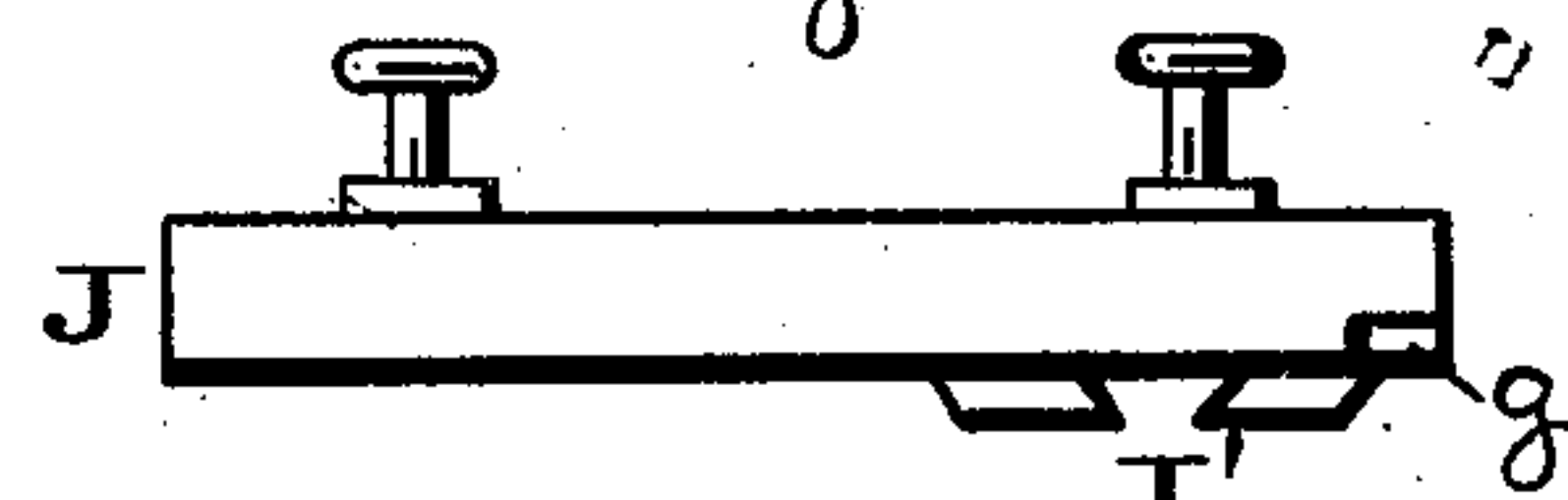


Fig. 7.

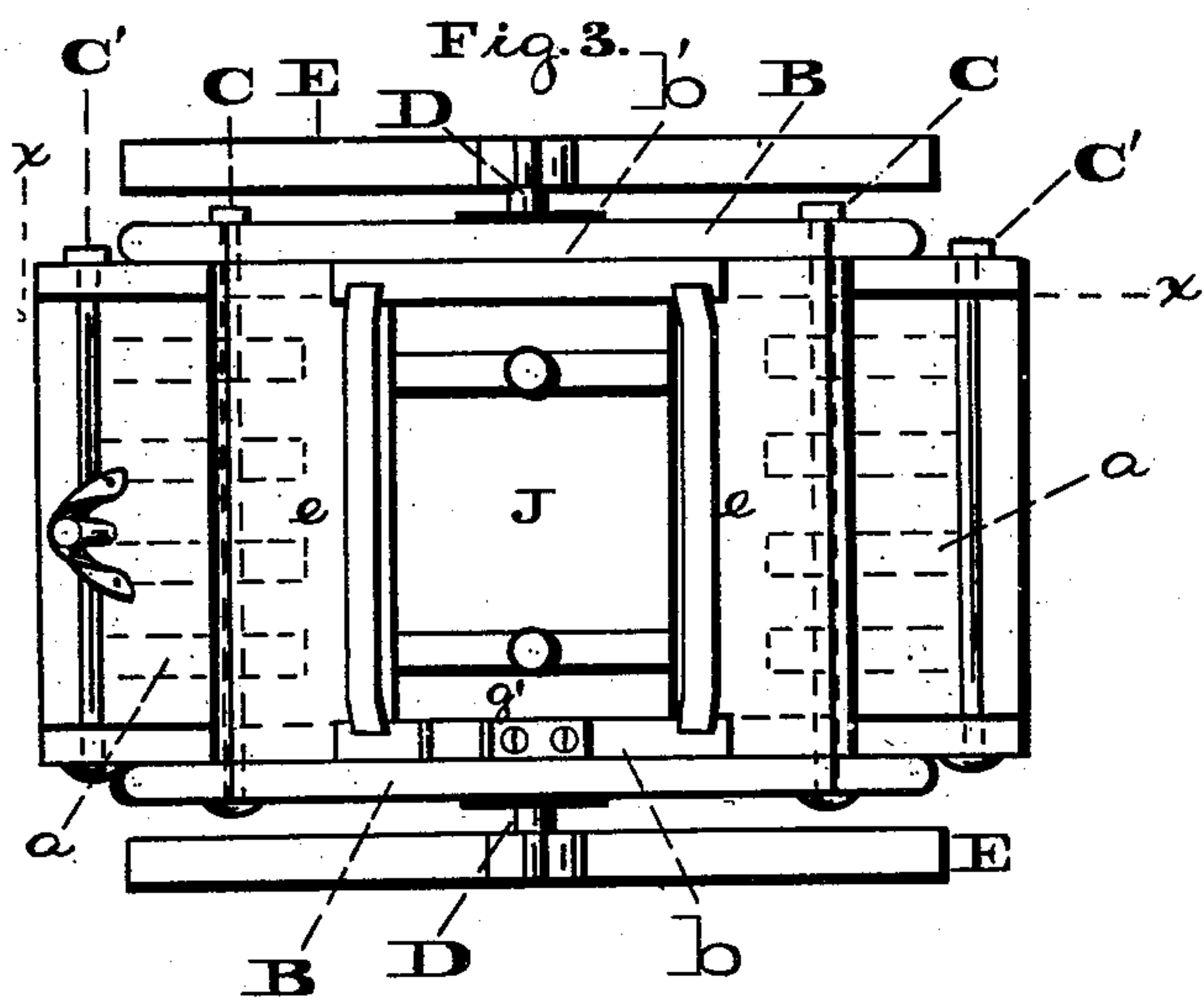
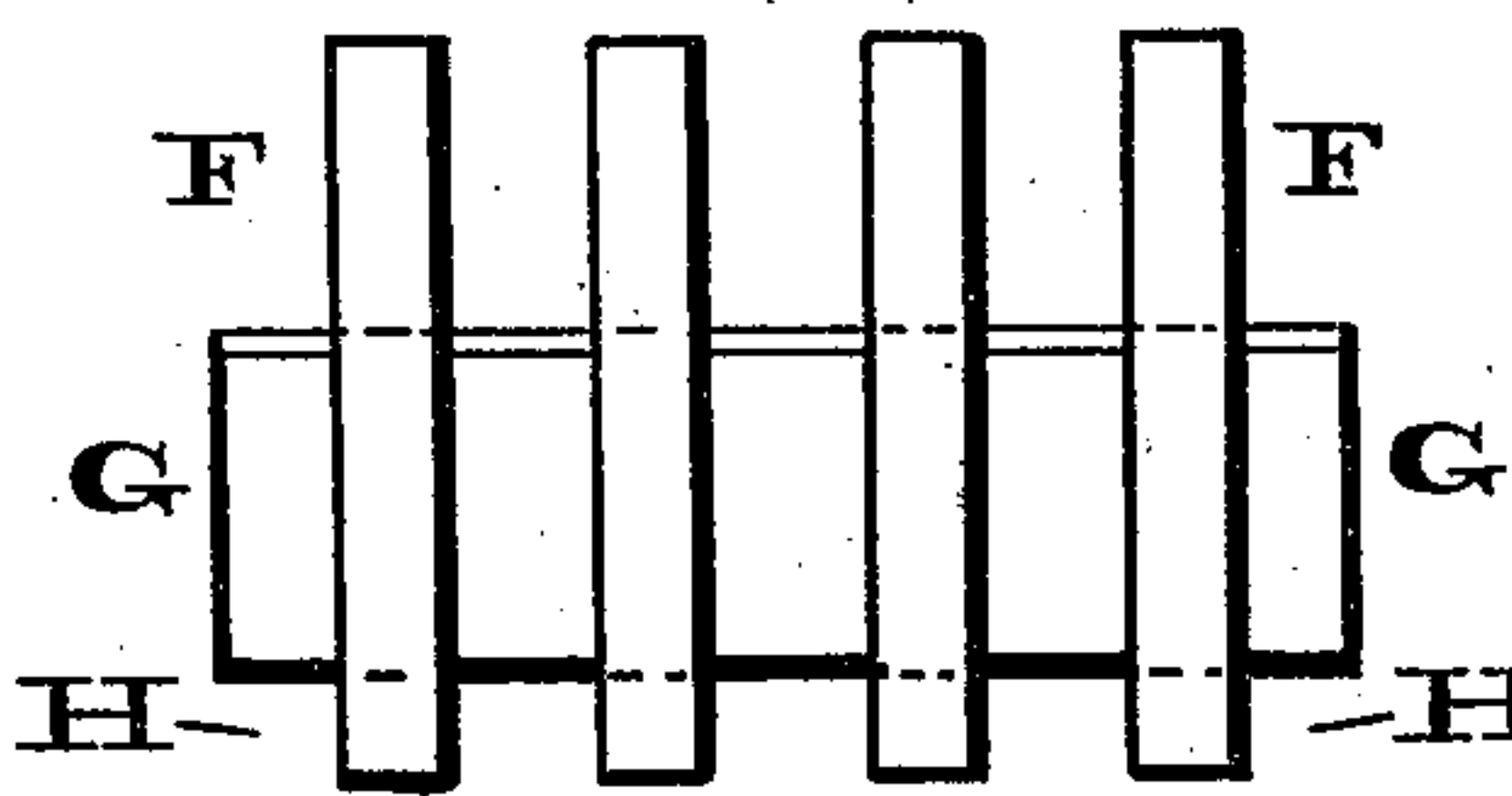
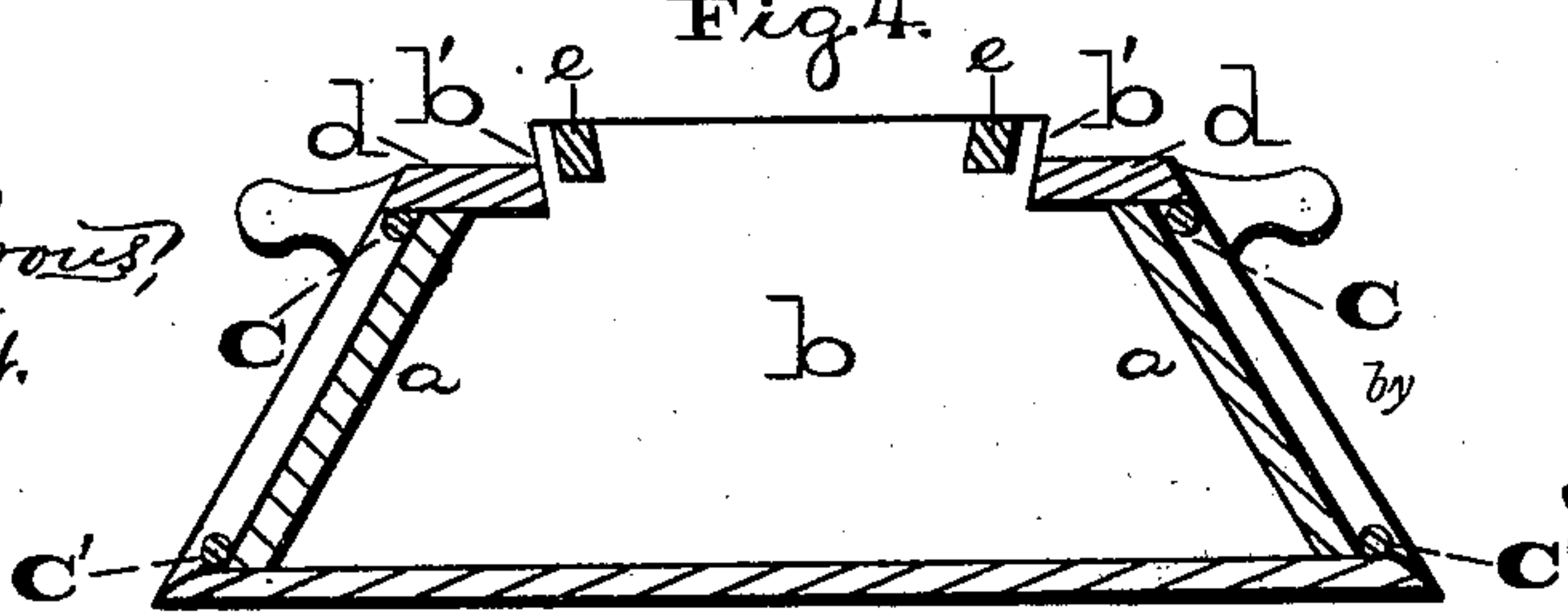


Fig. 4.



Witnesses:
Lewis F. Brown,
No. P. Grant.

Inventor:
E. O. Rood
Attorney.

UNITED STATES PATENT OFFICE.

EDWIN O. ROOD, OF LODI, ILLINOIS.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **201,126**, dated March 12, 1878; application filed September 20, 1877.

To all whom it may concern:

Be it known that I, EDWIN O. ROOD, of Lodi, in the county of Kane and State of Illinois, have invented a new and useful Improvement in Washing-Machines, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a side elevation of the machine embodying my invention. Fig. 2 is a central longitudinal vertical section thereof. Fig. 3 is a top or plan view thereof. Fig. 4 is a longitudinal vertical section thereof in line *x x*, Fig. 3. Fig. 5 is a view of the under side of the cover. Fig. 6 is a side view of the cover. Fig. 7 is a face view of the inner bars of the tub.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of a tub so constructed and mounted that, with the ordinary amount of clothes and water, it balances about halfway between a horizontal and the position in which it is brought to a stop, whereby sufficient speed can be produced to keep the water and clothes in one end until the tub reaches an almost inverted position, when all of the water and clothes fall forcibly together.

The tub is provided with longitudinally-extending handles, and bolts are passed transversely through the handles and tub for firmly securing said parts.

It further consists of the construction of the upper part of the tub to form a tight joint for the cover, and provide means for attachment of a wringer.

It also consists in constructing the cover, whereby it forms a table for soaping and preparing the clothes, said cover or lid being held in a reversed position by a fixed hook on the tub and the knobs or pins, which, constituting the handle of the cover, rest on the top of the tub, and assist to firmly support the cover.

It also consists of a mode of constructing and connecting the inner bars of the tub, whereby rust and lodgment of dirt will be prevented.

Referring to the drawings, A represents a swinging tub whose ends *a* are sloping, so that the base of the tub is longer than the top thereof. B represents longitudinally-extending handles projecting from the upper portion of the tub, and secured to the sides thereof

by bolts C, which pass through the handles and sides of the tub, and they are held by nuts, or have their points headed after the manner of rivets, thus firmly connecting the handles to the tub, and clamping the side and end pieces of the tub.

The handles extending along the sides of the tub also serve to brace said sides, and form a firm connection for the gudgeons or axis D of the tub A, said gudgeons being secured to the middle of the lengths of the handles, and mounted on a properly-constructed supporting-frame, E.

On the inner face of the sloping ends there are secured bars F, which project longitudinally. The backs of each set of bars are recessed for the attachment of a strip, G, which occupies only a portion of the length of the recesses, so as to leave at the rear of the bars, between the bottom thereof and the upper face of the bottom of the tub, spaces H.

The strips G are nailed or screwed to the bars F from the rear faces of the former, and the strips and bars are secured to the ends *a* of the tub by nails or screws passed through the outside of said ends *a* into the strips or bars, or both. By these provisions water will not reach the nails or screws, and rusting of the latter is prevented, the clothes, consequently, not being liable to come in contact with rust.

The longitudinally-extending sides *b* of the tub are extended, at at *b'*, above the top pieces *d* thereof, and the inner faces of the extensions are grooved near their ends for the reception of transversely-extending pieces *e*, which, with the extensions *b'*, form a mouth for the introduction of the water and clothes and reception of the lid J, whose sides adjacent to the pieces *e* are beveled, said pieces also being beveled; but to a less extent than the lid J, whereby a tight joint for the lid will be produced without the necessity of packing, and only the upper edge of the lid will touch the pieces *e*, the advantages whereof are that the lower portion of the lid, when in contact with hot water, may swell without materially affecting the upper portion of the lid, and the consequent tight joint of the lid, and in case of shrinkage the lid may not lose its effectiveness.

The extensions *b'* and pieces *e* projecting above the top pieces *d*, and forming the mouth

of the tub, also provide means for attachment of the wringer.

The under side of the lid J has secured to it two wedging-pieces, forming a soap holder or tray, J', whereby convenient means are provided for soaping and preparing the clothes preparatory to introduction into the tub.

It will be seen that, owing to the gudgeons or journals being secured to the top of the tub, and also to the shape of the tub, the bottom whereof is longer than the top, when the clothes and water are placed in the tub and their weight is shifted to one of the ends of the tub, the latter will be balanced at or about an angle of forty-five degrees. Consequently, when the tub is swung or operated, sufficient speed is attained to keep the clothes and water at the rising end of the tub until the tub reaches a vertical or almost vertical position. Then the clothes and water, as elevated, fall forcibly to the opposite or lower end, and strike the bars F, after which they again rise, and the operations are repeated, the clothes being successively dashed to opposite ends of the tub, and unfailingly striking the bars F with out loss of concussion.

Owing to the bars of each set being separated, the water will be forced through the clothes after the latter come in contact with the bars, and thus the washing will be quickly and reliably performed.

The water dashing freely through the spaces H prevents lodgment of dirt in the bottom of the tub, and also provides means for thoroughly cleaning said bottom from end to end.

Additional bolts C' may also be passed through the lower portion of the side pieces of the tub for securely holding the bottom of the tub, the bolts C C' being outside of the pieces a a, and free from exposure to the water.

In order to use the soap-holder, the lid J is removed and inverted and rested by its handles, knobs, or pins on one of the pieces e, (see dotted lines, Fig. 1,) said lid being notched at g to engage with and be held by a hook, g', secured to the side piece of the tub.

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

1. The tub A, in combination with the handles B extending longitudinally on the sides of the tub, and with the bolts C passed through said handles and sides, substantially as and for the purpose set forth.

2. The side pieces b, with upward extensions b', the upwardly-projecting transverse pieces e fitted thereto, and the top pieces d, combined and operating substantially as and for the purpose set forth.

3. The lid J, provided with handles on its upper side, and a soap-holder, J', on its lower side, in combination with the tub formed with the projecting top pieces e, and having the fixed hook g', whereby the lid may be supported in a reversed position by said hook g' and the handles bearing on one of the said pieces e of the tub, substantially as and for the purpose set forth.

4. In a washing-machine, the bars F, in combination with the strip G, said bars being recessed upon their rear edges to receive said strip, so as to secure a flush rear surface with an opening, H, below, the bars G being connected to the tub, substantially as and for the purpose set forth.

EDWIN O. ROOD.

Witnesses:

C. F. IRWIN,
HENRY B. HOYT.