

O. LONVAL.
Washing-Machines.

No. 133,323.

Patented Nov. 26, 1872.

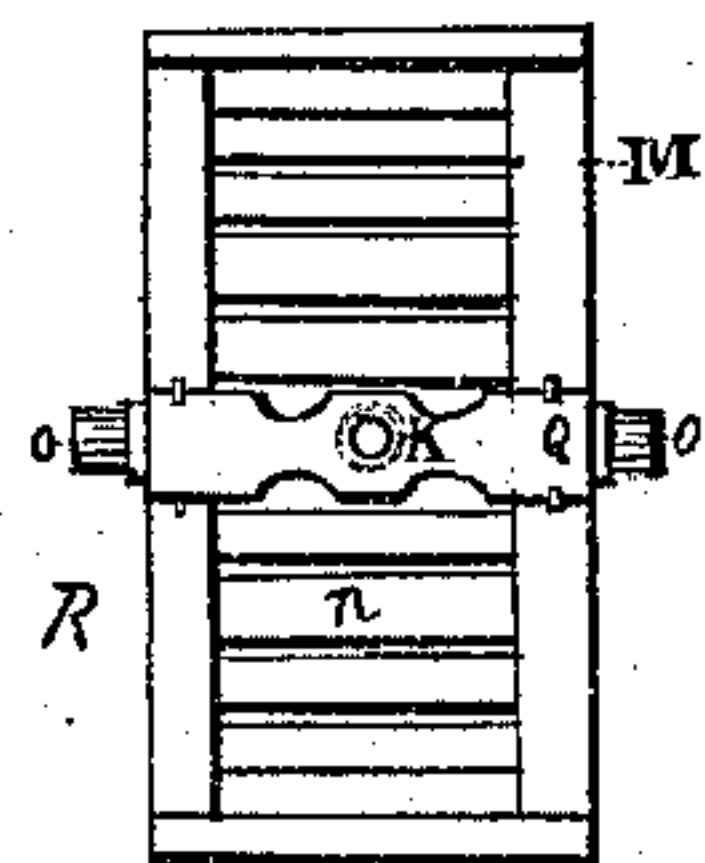


FIG. 3

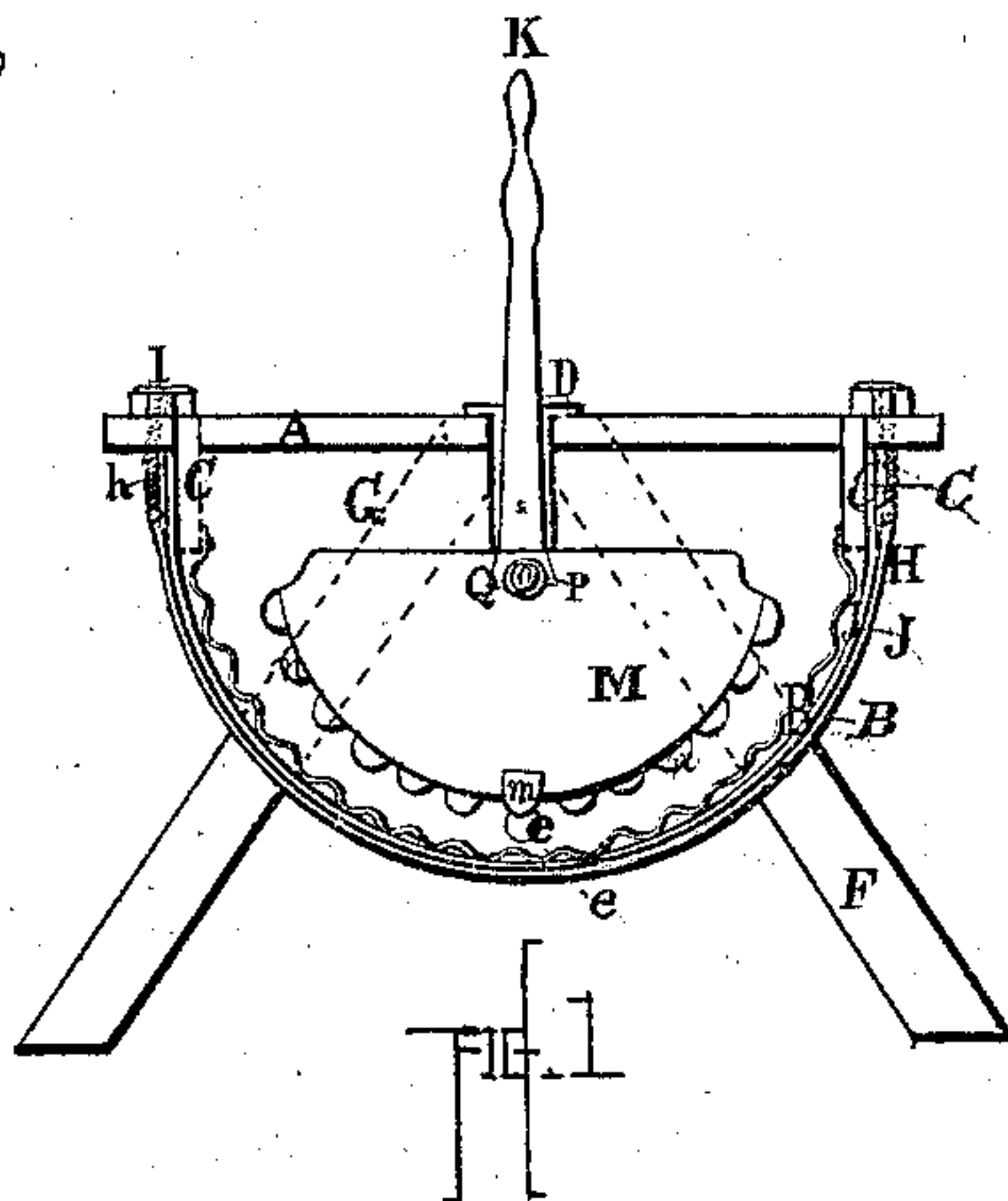


FIG. 1

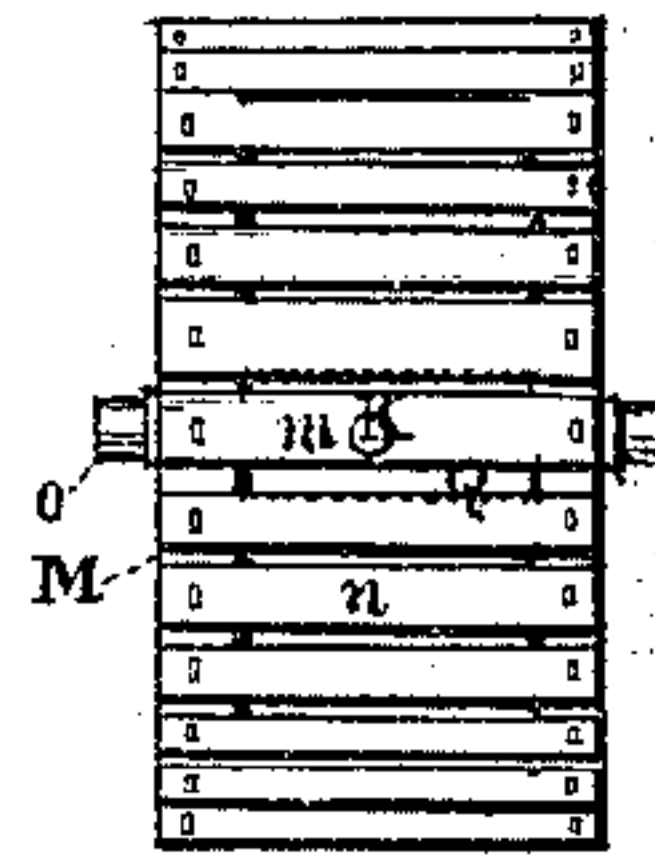


FIG. 4

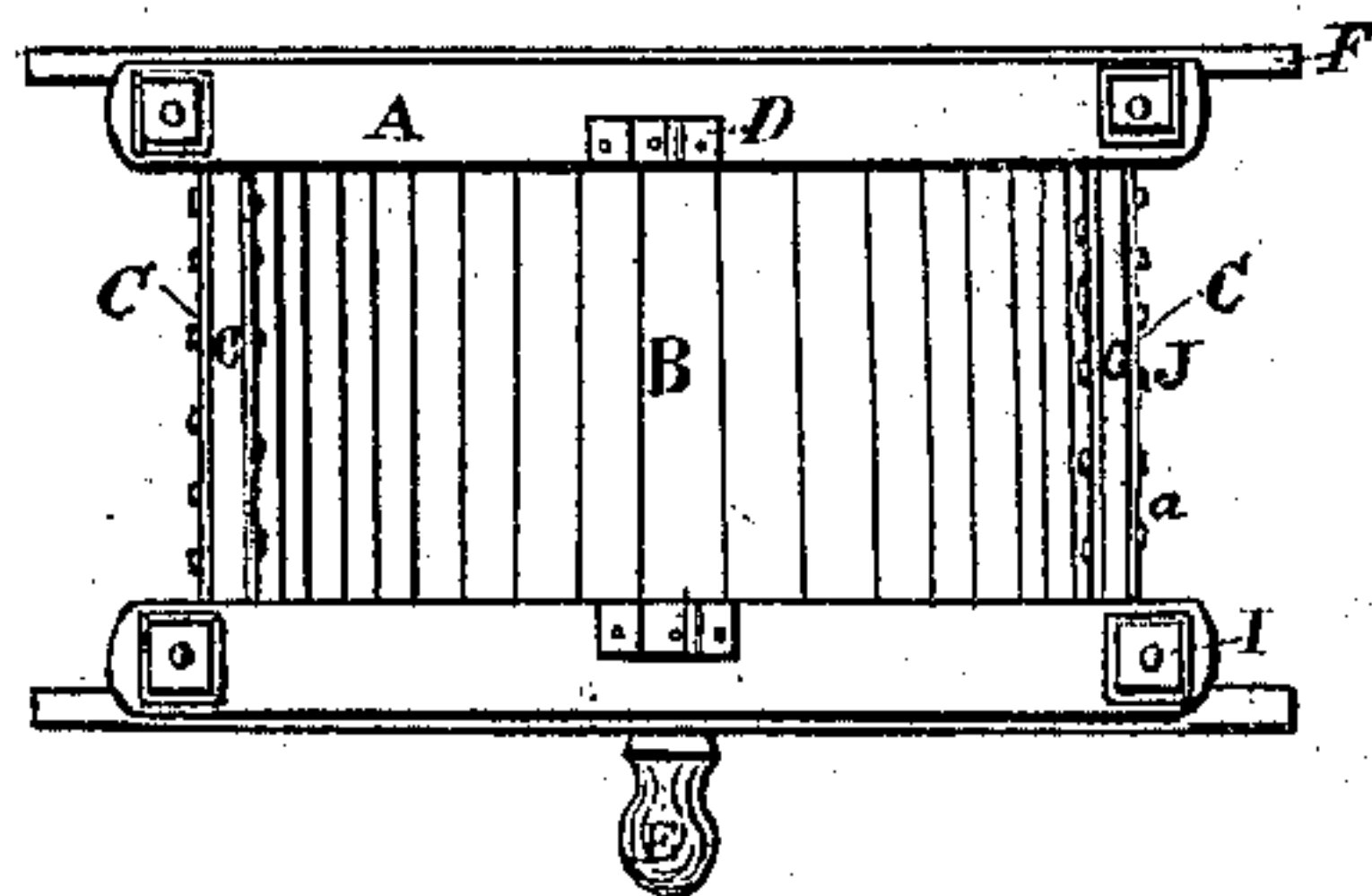


FIG. 2

WITNESSES
Jerome A. Kinsman
L. L. Pollard

Inventor
Olivier Lonval
By his Attorney
Thos. H. Dodge

UNITED STATES PATENT OFFICE.

OLIVIER LONVAL, OF MILLBURY, MASSACHUSETTS.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 133,323, dated November 26, 1872.

To all whom it may concern:

Be it known that I, OLIVIER LONVAL, a citizen of Three Rivers, Province of Quebec, Lower Canada, but now residing in Millbury, in the county of Worcester and Commonwealth of Massachusetts, 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 same, reference being had to the accompanying drawing which forms a part of this specification, in which—

Figure 1 represents a side view of the machine with one of the pieces removed. Fig. 2 represents a top or plan view of the machine with the rubbing-rocker removed. Fig. 3 represents a top or plan view of the rubbing-rocker, and Fig. 4 represents a bottom view of the same.

To enable those skilled in the art to which my invention belongs to make and use the same, I will proceed to describe it in detail.

The machine is made with strong wooden sides G, to the upper edges of which are fastened top rails A and end pieces C, while between the side pieces G is secured the corrugated-metal bottom B, the upper ends of which are fastened to the inner lower edges of the end pieces C. Below the corrugated-metal bottom B is a smooth-metal bottom or case, J, which extends entirely around the bottom edges of the side pieces G and over the outer sides of the pieces C, its ends being notched to pass up between the ends of the side rails A, where they are securely fastened to the outer upper edges of the end pieces A, as indicated at *a*, Fig. 2. The bottom J is also fastened to the edges of the side pieces G, and also to the ends of the end pieces C. Strong metal clasps or bands H are at each side of the machine, are also passed around over the outer edges of the metal bottom J, while their upper ends *h* are made with screw-threads, and pass up through holes in the ends of the rails A, and have nuts I on their ends whereby the edges of the metal bottom J can be tightened or drawn close and firm against the edges of the side pieces G when desired to keep the bottom water-tight. As the ends of the metal bottom J extend up between the ends of the rails A so as to completely cover the outer sides of the end pieces C, wringers can be attached readily to the ends of the machine without liability of injury to the end

pieces. Then, again, by extending the ends of the metal bottom up between the ends of the rails A water-tight joints are secured, even though the upper edges of the corrugated bottom B become loosened by use. Upon the inner sides of the pieces G are central vertical slots D for the reception of the journals O of the slatted rubbing-rocker R, which has tight side pieces M and slats *n* attached to the bottom and curved ends thereof.

The slatted rubbing-rocker R is operated by a handle, K, which, in this instance, extends down through the axle Q and into the bottom slat *m*, which is set into the side pieces M, as indicated in Fig. 1. By this arrangement the connection of the handle with the rubbing-rocker is made very secure and firm. Washers P are placed upon the inner ends of the journals to prevent friction on the sides.

The operation is as follows: Rubbing-rocker R is removed, and the articles of clothing to be washed are placed in the machine, with water and soap in sufficient amounts. The rubbing-rocker is then replaced, when the operator, by means of the handle K, gives the rubbing-rocker a back-and-forth motion, whereby the clothes are well and perfectly washed in a very short time. The rubber, resting on the articles, rubs them by the motion between its slats *n* and the corrugated bottom B, while the water and suds will be thrown through the openings between the slats *n* back upon the articles, thus facilitating the washing operation. As the rubber can rise and fall freely there is no danger of its getting clogged or of its tearing the articles being washed. The machine is supported by four legs, F.

Having described my improvements in washing-machines, what I claim therein as new and of my invention, and desire to secure by Letters Patent, is—

The combination, with the sides G provided with vertical slots D D, of the corrugated bottom B, smooth-metal bottom or case J, end pieces C, holding and tightening straps H, nuts I, and rubbing-rocker M provided with slats *n*, handle K, and journals O, said parts being constructed and combined together, substantially as shown and described.

OLIVIER LONVAL.

Witnesses:

E. E. MOORE,
THOS. H. DODGE.