

J. R. Terbill,

Washing Machine,

N^o 43,532.

Patented July 12, 1864.

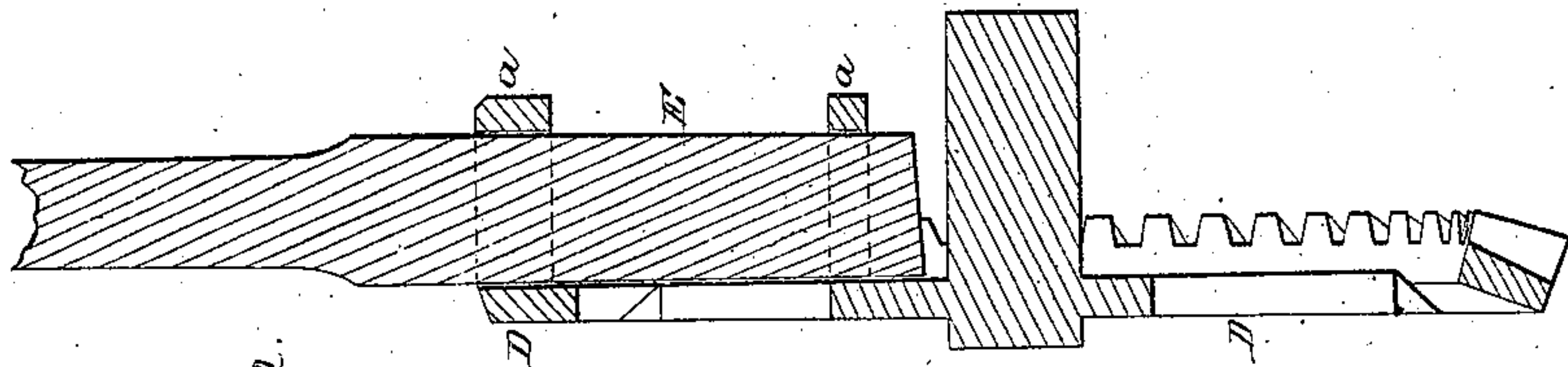
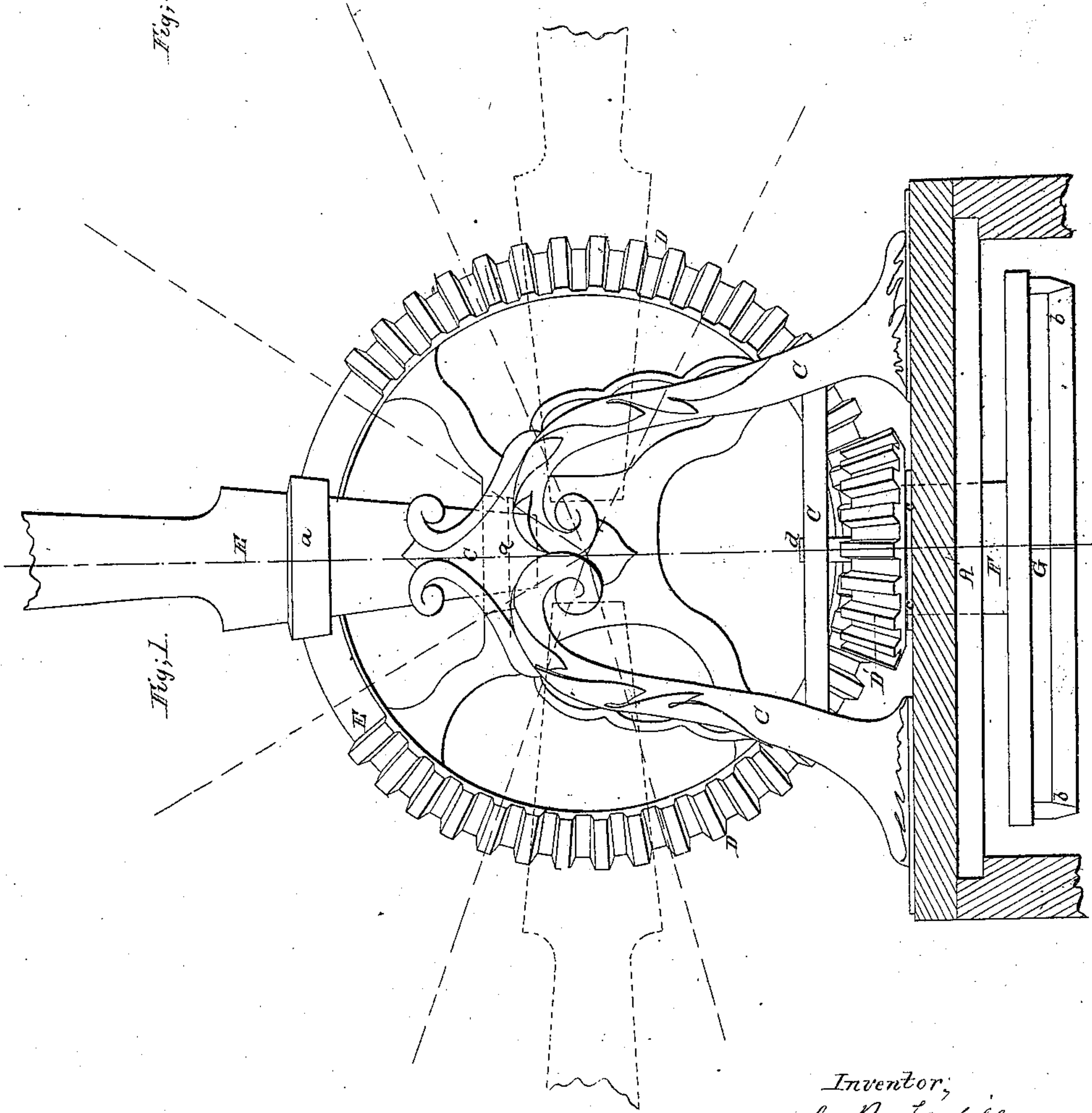


Fig. 2.



Fig; 1.

Witnesses
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UNITED STATES PATENT OFFICE.

J. R. TERBILL, OF CHICAGO, ILLINOIS.

IMPROVED WASHING-MACHINE.

Specification forming part of Letters Patent No. 43,531, dated July 12, 1864.

To all whom it may concern:

Be it known that I, J. R. TERBILL, of Chicago, Cook county, State of Illinois, have invented a new and Improved Washing-Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Fig. 1 is a side elevation of my invention. Fig. 2 is a section through the rocking spur-wheel, detached from the wash-box.

Similar letters of reference indicate corresponding parts in both figures.

The nature of my invention consists in the employment of a circular oscillating rack, which is cast with loops on it for receiving a removable lever, in conjunction with a horizontal rubber which has a vertical driving-shaft carrying a pinion-wheel that engages with said rack, said pinion-wheel being supported upon and its shaft kept in position by a flanged tubular bearing fixed to the top of the wash-box, all as will be hereinafter described.

To enable others skilled in the art to make and use my invention, I will describe its construction and operation.

In the accompanying drawings, A. represents the top of the wash-box B, and C C represent supporting standards for the axle of a large spur-wheel, D. These standards may be made of metal, and cast very light and strong, with ornamentation, as represented in Fig. 1. The large spur-wheel D is provided with two loops, *a a*, one of which is shown projecting from the circumferential rim of the wheel D, and the other is arranged near the axle of this wheel. These two loops are adapted for receiving the tapering or wedge-shaped end of a lever-handle, E, which may be made of any desired length, and which is used, as will be hereinafter described, for operating the machine. The teeth of the large spur-wheel D engage with those of a horizontal pinion D', which is keyed on the shaft F of a horizontal rubber, G, that is provided with slats *b b* on its bottom, as shown in Fig. 1. The shaft F passes through a metal collar, *c*, and the bottom of the pinion driving-wheel D' bears upon this collar, and is thus relieved of a great

amount of friction which would exist if the pinion-wheel rested upon the wooden top A of the wash-box. The shaft of the rubber is made of wood, and has a metal pin, *d*, fitted tightly in its upper end, which pin enters a hole through the cross-bar C of the standard C, and thus centers and keeps the shaft F in its proper position. It is desirable to have the wheel D considerably larger than the pinion which is driven by it, for the reason that a small driving-wheel applied to the pinion would not by my arrangement rotate it. The proportions which I have represented in the drawings will be found to answer a very good purpose.

By means of the lever-wheel D it will be seen that I am enabled to operate the machine when the handle E is in an upright position, and when the operator becomes tired of this position he can bring the handle E down to a horizontal position on either side of the machine, and operate the machine in this way. While this is the case, I have a very long lever applied to my machine which, when it is not in immediate use, can be removed and set aside out of the way.

It will be seen from the above description of my improved machine that the use of a circular rack, D, with the removable straight lever E, enables me to operate the rubber when said lever is arranged in the three several positions indicated by red lines, Fig. 1. It will also be seen by arrangement that the pinion-wheel D' can be made to rest upon the top of a flanged tube, *c*, which is fastened to the top of box A. This brings the bearing of shaft F so close to the wheel D' that there will be very little lateral strain upon said shaft; and while this is the case the cross-bar C can be cast with the frame C so near the pinion-wheel D' as to constitute an upper bearing for the shaft F. This shaft F will thus be held very steady in position, and hence there will be little or no friction, nor wobbling motion, incident to the use of a long shaft. By making the shaft F so short and protecting it by means of the tubular sleeve or tube *c* I give great strength to the parts and am enabled to employ such a rubber, G, as I may desire. It will also be seen that my machine is very simple, as well as very strong, dura-

ble, and compact. When the work of washing is over, the lever E is lifted out of its sockets and laid aside out of the way.

I claim—

1. The combination and relative arrangement of the toothed ring D, with the loops *a a* on it, for receiving lever F, pinion-wheel D', and the upper bearing, C, for this pinion, as shown and described.

2. The toothed level wheel or ring D, cast

with loops *a a* on it, in combination with the removable lever E, pinion D', collar-bearing C, and vertical rubber-shaft carrying a horizontal rubber G, all arranged and operating substantially as described.

J. R. TERBILL.

Witnesses:

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