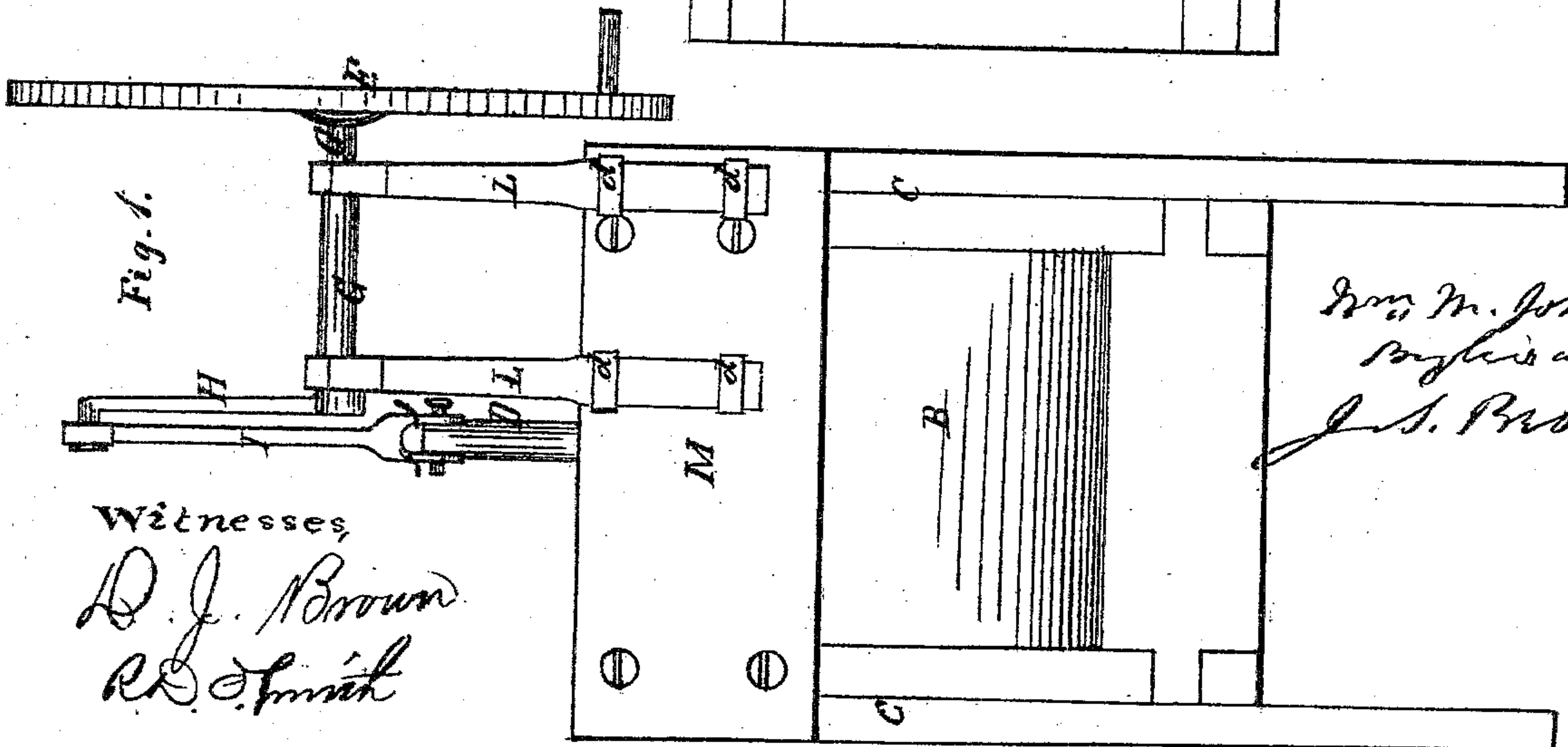
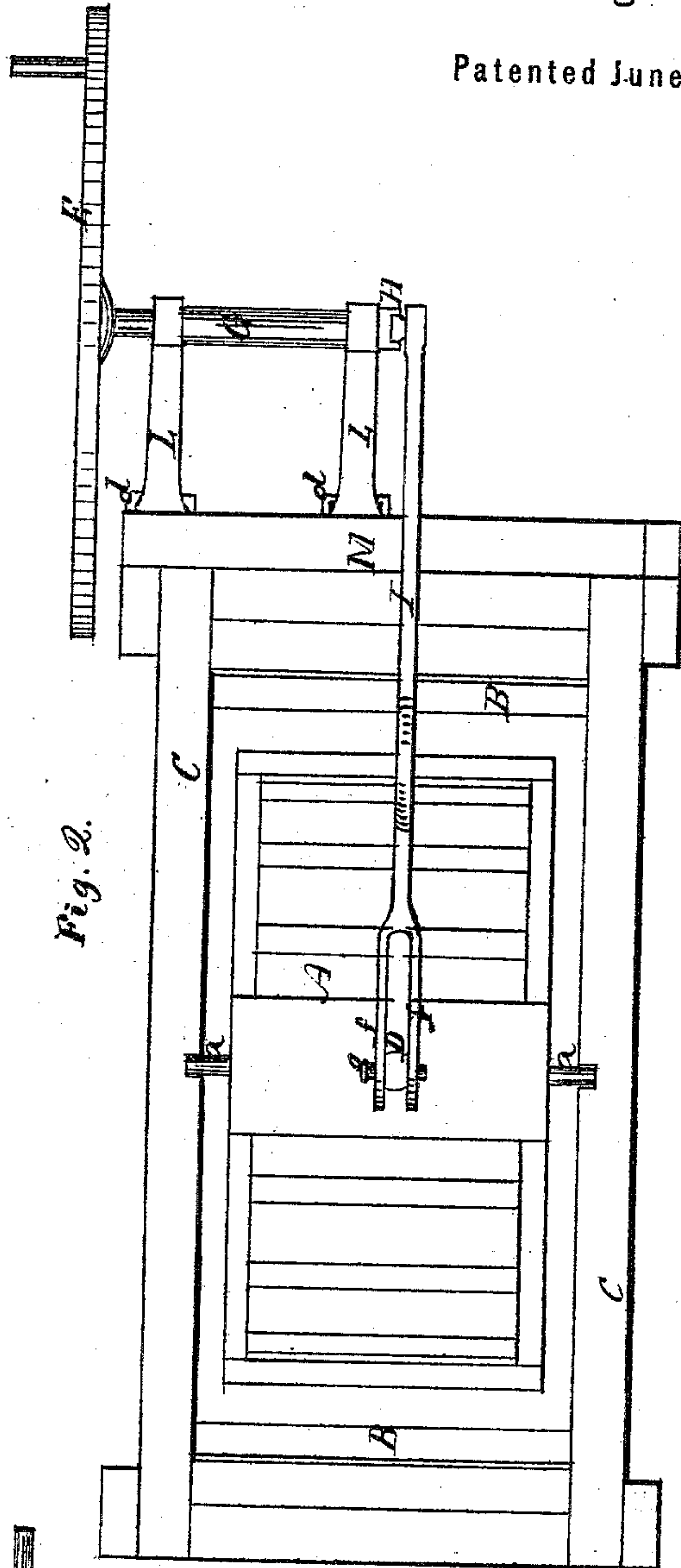


WILLIAM M. JOHNSTON.

Improvement in Driving Attachments to Washing-Machines.

No. 115,867.

Patented June 13, 1871.



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Sole and atty.
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Witnesses,

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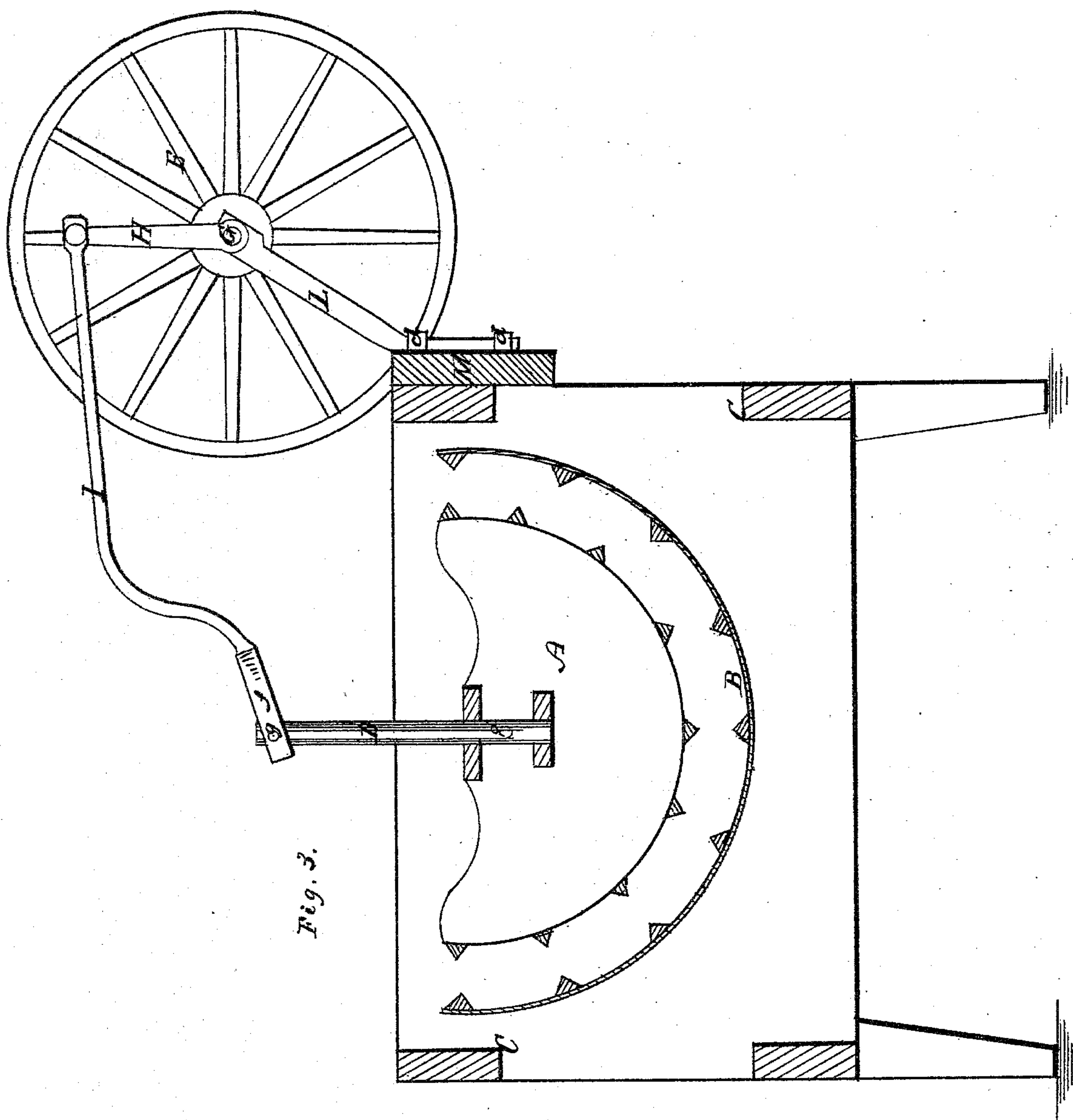


Fig. 3.

Witnesses,
D J Brown
R D Smith

William M. Johnston,
Deft's attorney,
J. S. Brown

UNITED STATES PATENT OFFICE.

WILLIAM M. JOHNSTON, OF WILMOT, OHIO.

IMPROVEMENT IN DRIVING ATTACHMENTS TO WASHING-MACHINES.

Specification forming part of Letters Patent No. 115,867, dated June 13, 1871.

To all whom it may concern:

Be it known that I, WILLIAM M. JOHNSTON, of Wilmot, in the county of Stark and State of Ohio, have invented a Detachable Driving Attachment for Washing-Machines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing making part of this specification—

Figure 1 being a front elevation of a washing-machine provided with my detachable driving attachment; Fig. 2, a plan or top view of the same; Fig. 3, a longitudinal vertical section thereof.

Like letters designate corresponding parts in all the figures.

My invention is particularly applicable to washing-machines of the class represented in the drawing, in which a movable rubber, A, is vibrated or rocked in a concave stationary rubber, B, which contains the clothes and water. The rocking rubber A turns on pivots or journals *a a*, which have their bearings in the side of the concave rubber or tub, and a handle, D, extends upward from it, to be seized by the operator in washing.

It is often desirable, if not necessary, to operate the rubber A by hand, and any driving-gear connected therewith at such times is an incumbrance and impediment. The movable rubber also should be readily removable for inserting, examining, and taking out the clothes. But, on the other hand, it is very desirable to do the principal labor of washing by means of a driving-gear operated by a crank or its equivalent, so that the power may be applied more efficiently and expeditiously than by the hand direct.

It is the object of my invention to produce such a detachable driving attachment, which can readily be applied to any washing-machine of the kind described or of any kind to which the driving attachment may be applicable, so as to produce, as it were, a new article of manufacture, and that at little expense.

The accompanying drawing represents such an attachment substantially as I contemplate employing it. The driving apparatus consists

of a crank or crank and wheel, E, upon the shaft G of which is another crank, H; and a connecting-rod, I, extends therefrom to the handle D of the movable rubber A. The revolution of the crank-wheel produces the required washing movement of the rubber.

Now, to make this driving attachment, thus represented in its simplest elements, quickly and readily attachable and detachable, as required, the bearings L L of the driving-shaft G are inserted in loops or sockets *d d* attached to a board or plank, M, which is screwed, as shown, or otherwise secured to the end of the frame or tub of the washing-machine. The board or plank M is for the purpose of applying the driving attachment to different washing-machines already made more readily; but it is not the means of detaching the gear, the latter operation being effected simply by withdrawing the bearings L L from their sockets, or the equivalent thereof. At the other end of the connecting-rod I is a fork, *f f*, which embraces the handle D of the movable rubber. Transverse holes in the fork-arms *f f* and in the handle enables a simple pin, *g*, to couple them together, and the pin can be withdrawn in a moment to detach the driving apparatus, and as readily inserted to attach it again to the handle; or a mortise in the handle, to receive the flattened end of the connecting-rod, may be used instead of the fork; or any other simple and convenient means of attaching and detaching may be employed. The connecting-rod I is suitably curved so as not to interfere with the sides of the rubber A in its vibrations.

What I claim as my invention, and desire to secure by Letters Patent, is—

The separate driving attachment for washing-machines, constructed and arranged substantially as herein described, in combination with the sockets *d d*, so as to be instantaneously attached and detached, for the purposes herein specified.

WM. M. JOHNSTON.

Witnesses:

JAS. W. UNDERHILL,
E. R. UNDERHILL.