

E. F. MILLER.
WASHING MACHINE.

(Application filed Dec. 27, 1901.)

(No Model.)

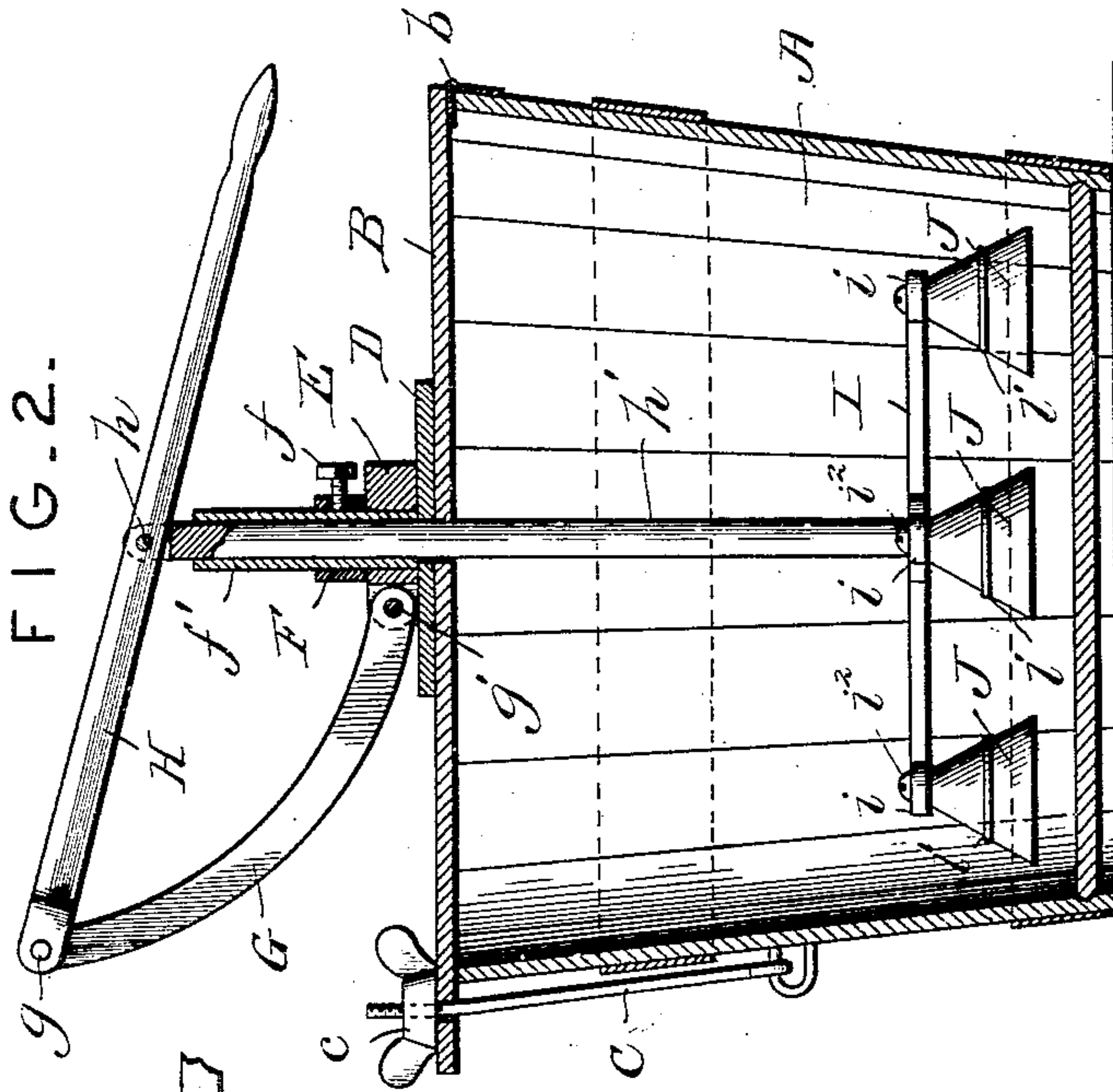


FIG. 2.

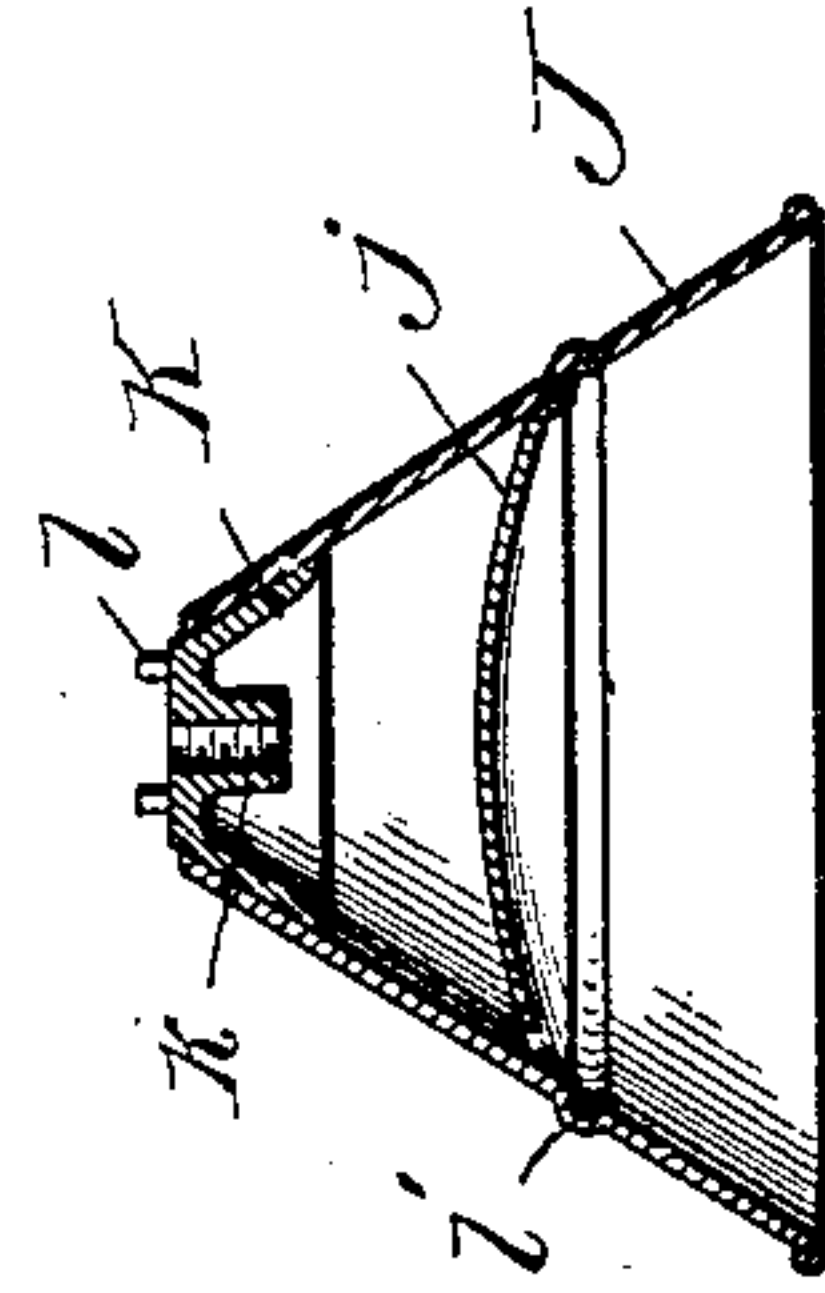


FIG. 3.

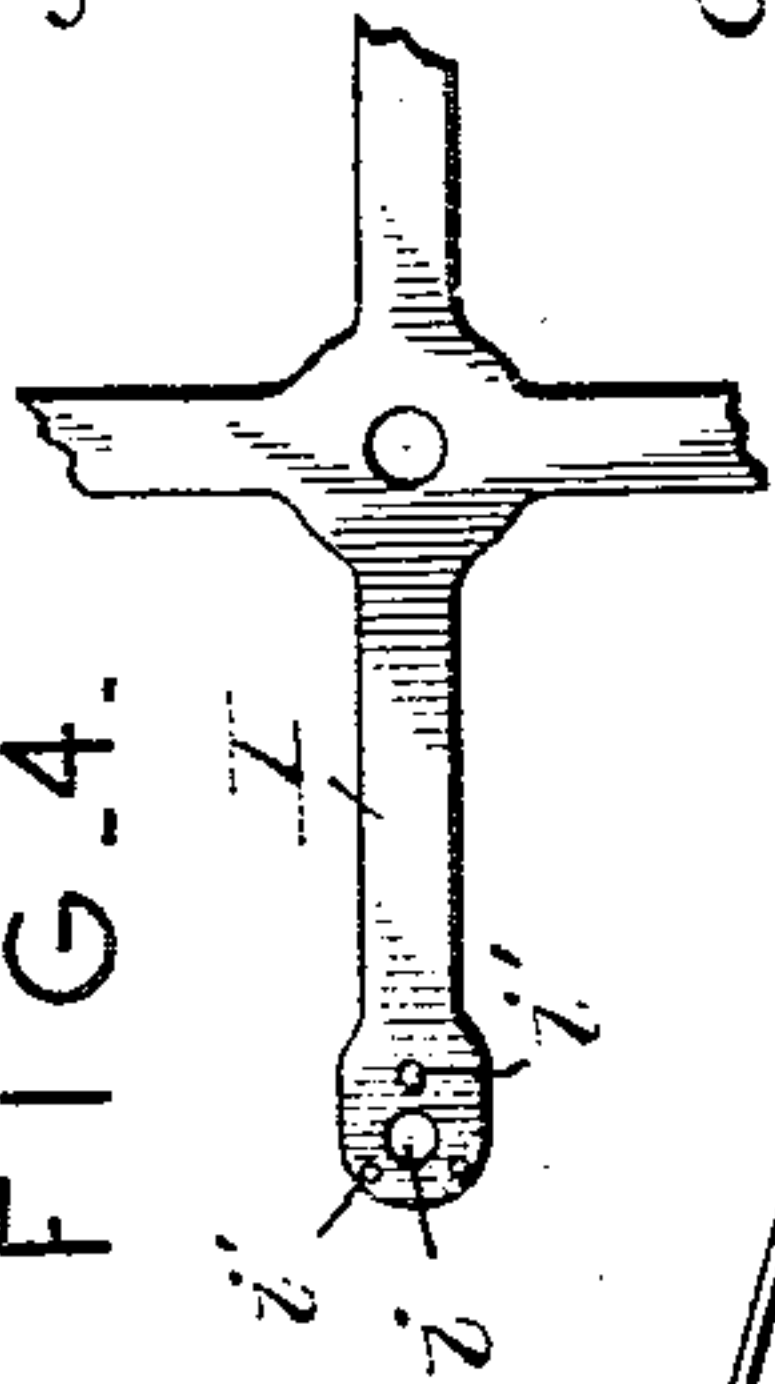
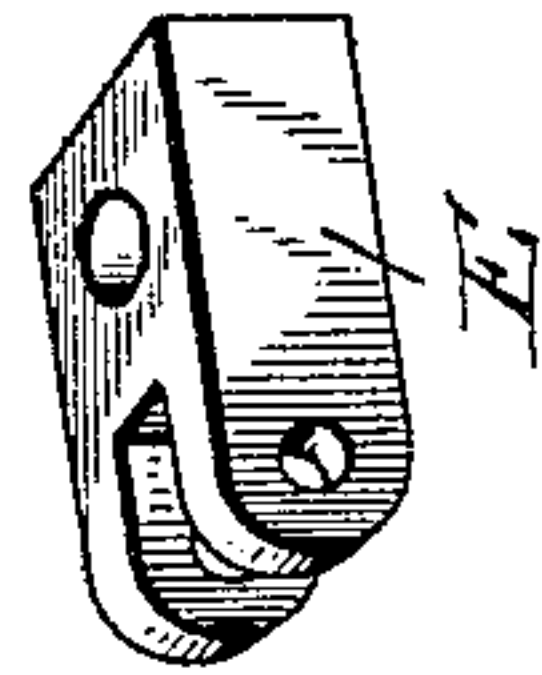


FIG. 4.

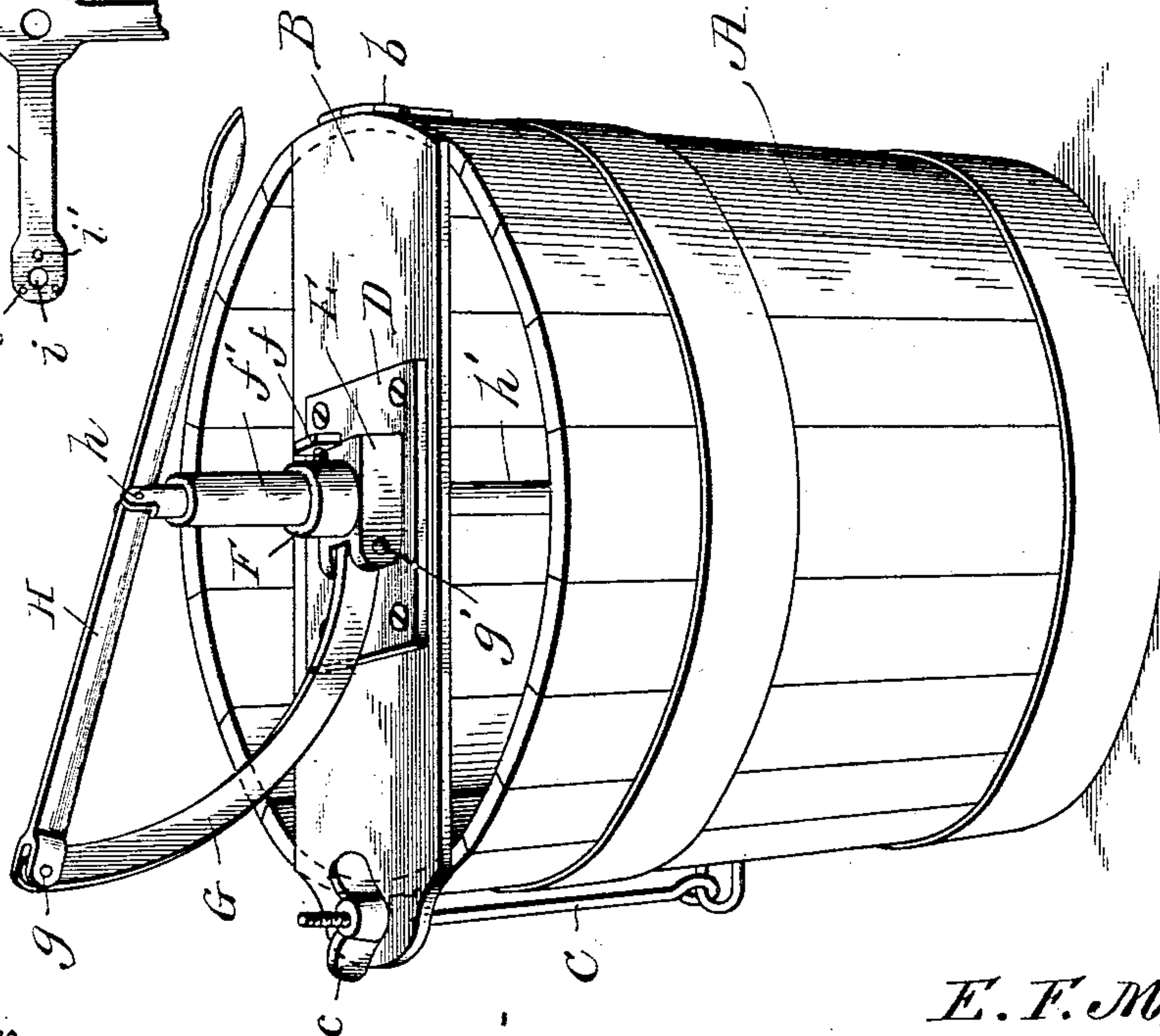


FIG. 1.

Witnesses

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UNITED STATES PATENT OFFICE.

EDWARD F. MILLER, OF LANARK, ILLINOIS.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 704,071, dated July 8, 1902.

Application filed December 27, 1901. Serial No. 87,409. (No model.)

To all whom it may concern:

Be it known that I, EDWARD F. MILLER, a citizen of the United States, residing at Lanark, in the county of Carroll and State of Illinois, 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 invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of my invention is to provide a cheap, durable, and effective machine for washing clothes.

My improvement consists, essentially, in the peculiar construction of the pounders and the mechanism for operating them more particularly pointed out in the specification and claims.

Reference is had to the accompanying drawings, in which—

Figure 1 is a perspective view of my machine as used. Fig. 2 is a central section showing the pounders in elevation. Fig. 3 is an enlarged vertical section of one of the pounders. Fig. 4 is a detail bottom plan view of cross-arms to which the pounders are attached. Fig. 5 is a detail perspective view of a bifurcated pivot-block.

In the drawings, A represents a receptacle, to which my improved apparatus is attached.

B is a supporting-bar hinged at *b* and is secured by means of a bolt C and nut *c*. Upon the said bar is secured a plate D, to which is fastened a sleeve *f'*, over which sleeve the pivot-block E is placed, where it rotates freely. A collar F is placed over the sleeve and by means of the set-screw *f* holds the block E in position.

A link G is pivoted at one end to the block at *g'* and at the other end to a lever H at *g*. At H is pivoted a rod *h'*, which works in the sleeve *f'* and supports at its lower end the cross-arms I.

The pounders J are cone-shaped and are made, preferably, of tin, having the edges rolled to form a blunt smooth surface, which comes in contact with the clothes and agitates them without injury. Midway of the body of the pounder on the inner side is formed a groove *l'*, in which a curved disk *j* is soldered. This disk strengthens the pounder and prevents the passage of air and water into the space above it.

K is the connecting-framework, made of iron and having a central inner extension *k*, provided with a screw-threaded aperture to receive the bolt *i'*, working in the aperture *i*. Upon the iron *k* are cast integral therewith three lugs *l*, adapted to enter the recesses *i'*, and are placed at equal distances apart, so that the pounders may be secured in different positions and by means of said lugs prevented from working loose.

I form the link *g* about twice the length of the rod *h'* above the support *b* when the lever is in its lowest position, thereby permitting an easy vertical movement of the rod.

In operation a vertical movement of the pounders is produced by raising the lever *h*, and as the rod rotates within the sleeve while the block *e* rotates without it a complete lateral rotation of the pounders is effected by a corresponding lateral movement of the said lever. By this means every portion of the clothes in the receptacle may be reached. They are cleansed by agitation from contact with the pounders and by the air which is forced through them at the same time.

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

1. In a washing-machine, a rod having a pounder at one end, and means for operating said rod, comprising a lever pivoted to the other end thereof, a support for said rod, a sleeve rigidly secured to the support, a pivot-block surrounding said sleeve and held in place by a collar, and a link pivoted to said lever at one end, and at the other end to said pivot-block, substantially as specified.

2. In a washing-machine, a rod having a pounder at one end and means for operating said rod, comprising a lever pivoted to the other end thereof, a support for said rod, a sleeve rigidly secured to said support, a pivot-block mounted to rotate on said sleeve but held against longitudinal movement thereon, and a link connected to the lever and to the pivot-block, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

EDW. F. MILLER.

Witnesses:

HENRY MILLER,
CHAS. E. LOWMAN.