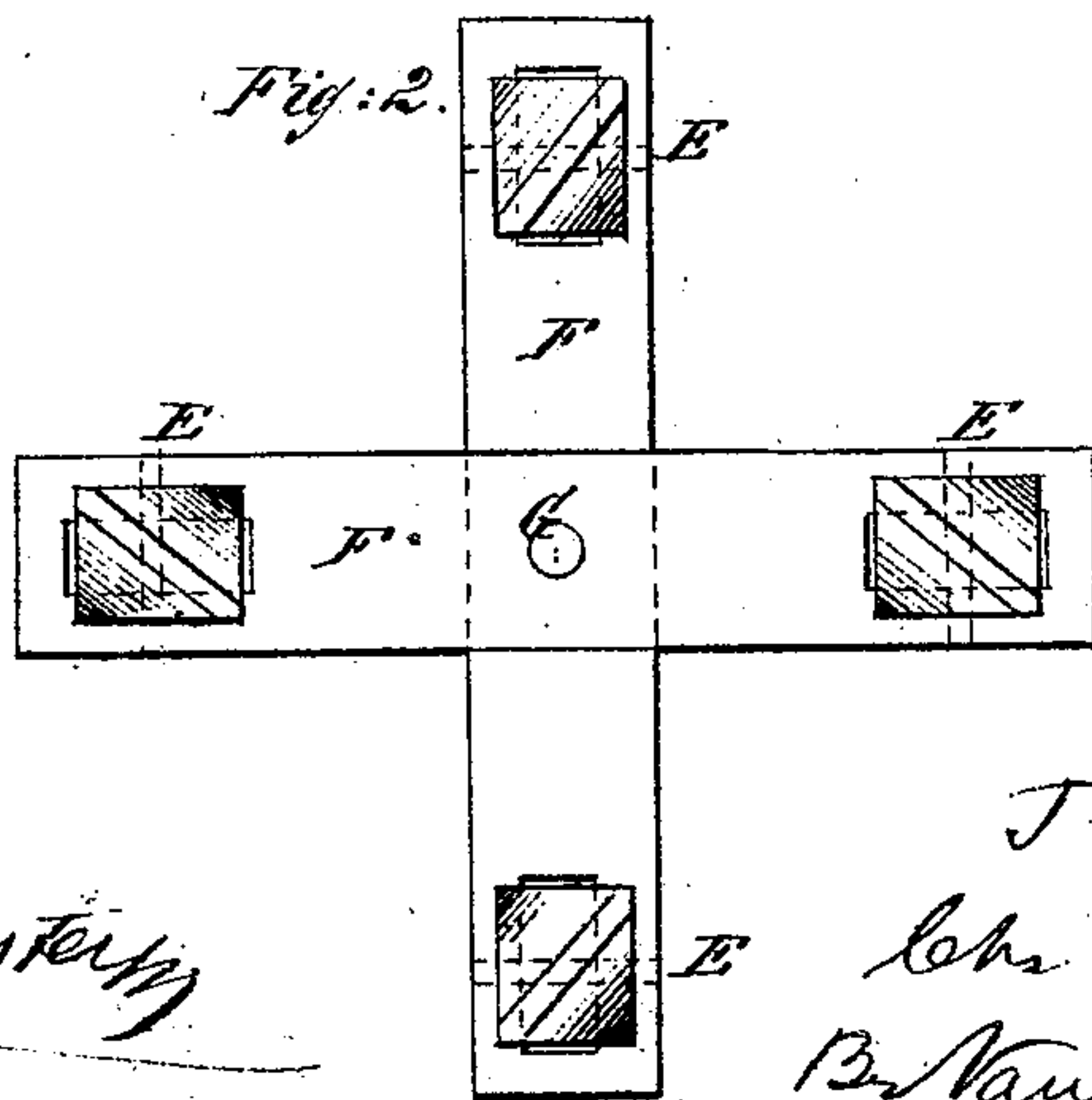
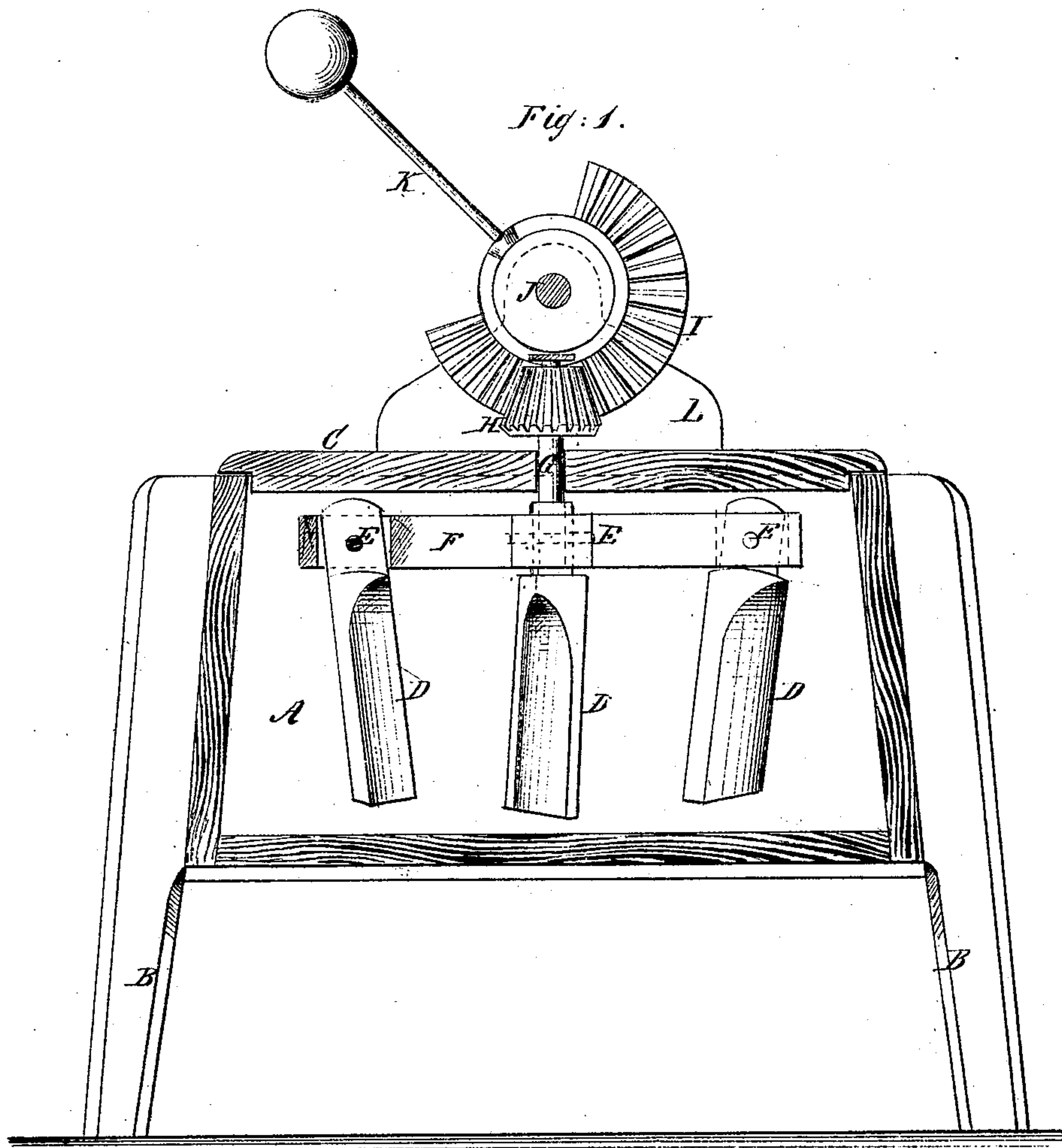


Moore Jr & Reynolds,

Washing Machine.

No. 95,825.

Patented Oct. 12. 1869.



Witnesses.
C. Mahlers
J. Langmeier

Inventor.
J. S. Moore
Chas. H. Reynolds
B. Van Santen & Hauff
their attys

United States Patent Office.

JOHN S. MOORE, JR., AND CHARLES H. REYNOLDS, OF BROOKLYN, E. D.,
NEW YORK.

Letters Patent No. 95,825, dated October 12, 1869.

IMPROVED WASHING-MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, JOHN S. MOORE, Jr., and CHARLES H. REYNOLDS, both of Brooklyn, E. D., in the county of Kings, and State of New York, have invented a new and useful Improvement in Washing-Machines; and we do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which drawing—

Figure 1 is a vertical section of our improvement.

Figure 2 is an under-side view of the beaters.

Similar letters indicate corresponding parts.

This invention relates to washing-machines in which the beaters are pendent from the top downward, and have a rotary motion imparted to them.

Our invention consists in the construction of the beaters, and in their peculiar arrangement with their centre of motion, and in so connecting them with the beater-arms or frame, that they can swing or yield during the operation of washing, so that they will not oppose an entirely rigid and unyielding force to the clothes with which they are brought in contact.

The letter A designates the tub, supported upon suitable legs or supports B.

The tub is wider at bottom than at top, toward which it gradually tapers, so that during the agitation of the water and suds, in the operation of washing, they will be counteracted in their tendency to fly upward.

C is the cover of the machine, and through the cover passes the vertical shaft G, to whose lower end, beneath the cover, is attached the beater-frame, consisting of arms F, arranged horizontally, and at right angles with each other.

To the outer ends of the arms F, I suspend the beaters D, which, in this example, are four in number.

The beaters are suspended from said arms upon hinges or pivots E, in such a manner that they are allowed to yield and swing away from and toward the centre of motion.

The beaters are made with flattened faces, and said faces are so arranged and placed, as to be about at an angle of forty-five degrees with the centre of motion about which they revolve, so that they come against the fluids in the tub and against the clothes at an inclination which facilitates their movements through and past the same, both forward and backward, the outer

and the inner faces of the beaters being parallel with each other, so that the angle of impact is the same for each face.

This construction and arrangement facilitates the movements of the beaters, and enables them to glance through and past the contents of the tub, and in order to facilitate their movements still more, and to prevent the liability of strain upon the joints of the beaters and upon the arms F, we have so fitted and arranged the beaters in the arms F, as to allow the beaters to swing outward and inward, according to the direction of the resistance encountered by them.

In this example, this result is accomplished by enlarging the mortises, which are made in the arms F, to receive the jointed ends of the beaters, but we do not confine ourselves to that mode of accomplishing it.

The beaters are made of unequal length, so as to accommodate them to the unevenness of the layers of clothes in the tub.

The beaters have an oscillating rotary motion imparted to them, by means of a bevel-pinion, I, secured on the upper end of the vertical shaft G, which receives motion from a segmental bevel-gear, H, mounted on a horizontal shaft, J, which shaft J is supported in a standard, L, that rises from the cover.

Motion is given to the segmental gear, by means of a handle, K, inserted therein, as is shown in fig. 1.

Any other convenient mode of giving motion to the gear may be used, at the pleasure of the maker.

It will be observed, that the beaters, in consequence of their construction and the angular position of their faces, agitate and impel the water and the clothes, first, in an inward direction, and then in an outward direction, as they are oscillated back and forth, by means of the segmental gear H, so that a high degree of agitation of the fluid is constantly produced and maintained in the tub.

What we claim as new, and desire to secure by Letters Patent, is—

The beaters, connected to their points of suspension, that they can swing or yield toward or from their centre of motion, substantially as and for the purpose described.

JOHN S. MOORE, JR.
CHAS. H. REYNOLDS.

Witnesses:

E. F. KASTENHUBER,
C. WAHLERS.