

H. Bailey,
Washing Machine,

N^o 32, 113,

Patented Apr. 23, 1861.

Fig. 1.

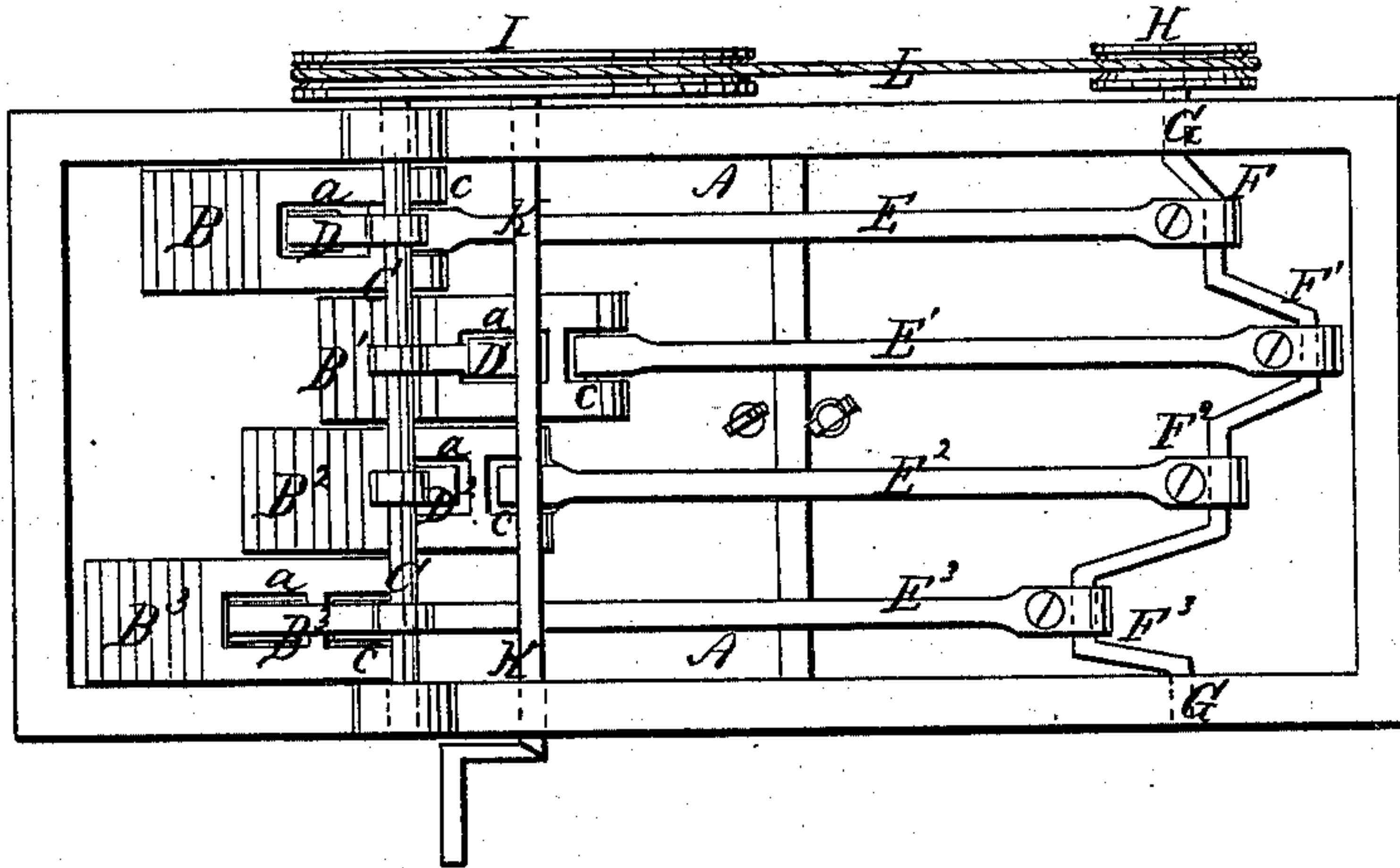
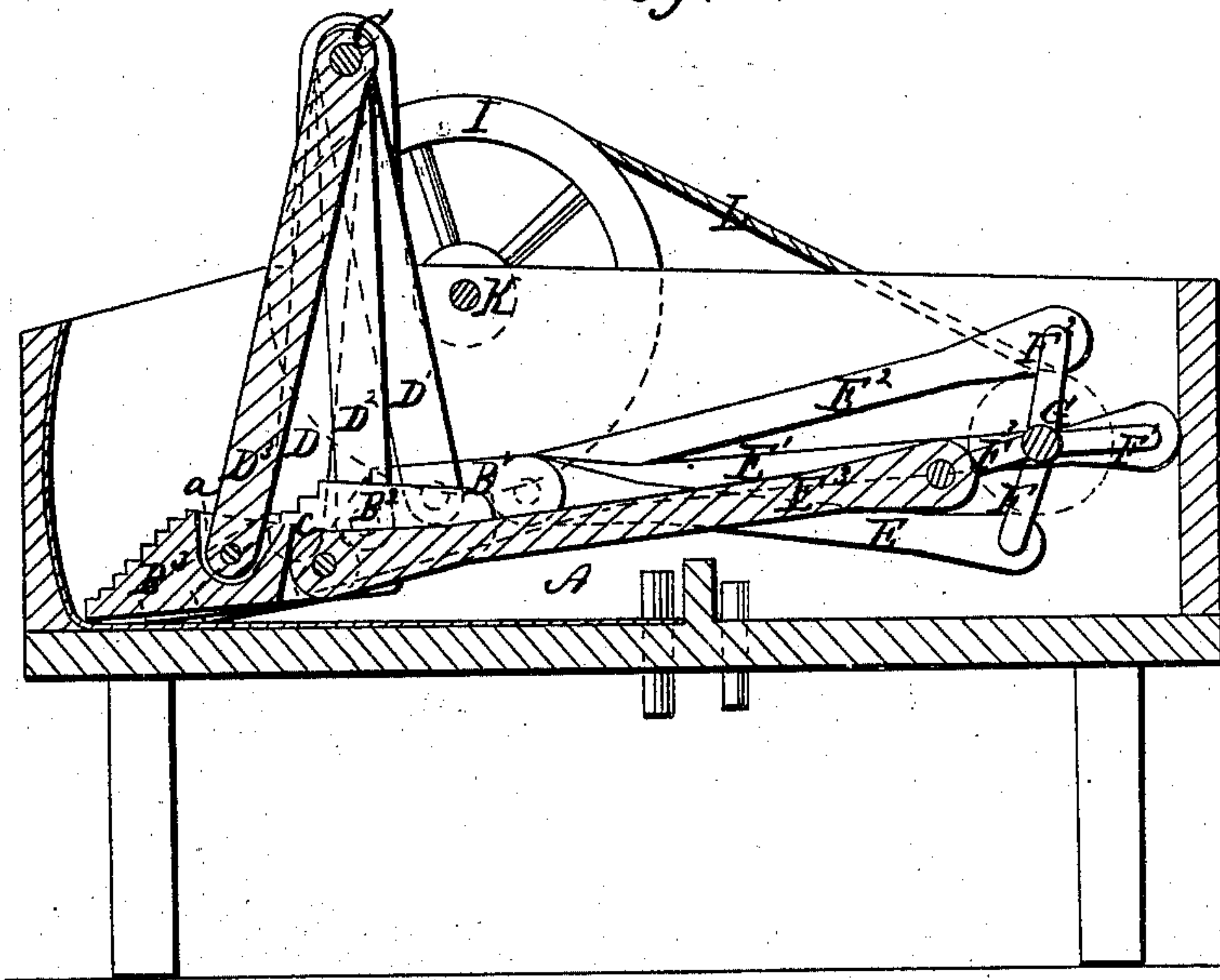


Fig. 2.



Witnesses;

Edw Halp
Arthur Neill

Inventor;

Henry Bailey

UNITED STATES PATENT OFFICE.

HENRY BAILEY, OF COLUMBIA, MAINE.

WASHING-MACHINE.

Specification of Letters Patent No. 32,113, dated April 23, 1861.

To all whom it may concern:

Be it known that I, HENRY BAILEY, of Columbia, in the county of Washington and State of Maine, have invented a new and useful Improvement in Fulling-Stock Washing-Machines, and do hereby declare the same to be fully described in the following specification and illustrated in the accompanying drawings, of which—

Figure 1, is a top view; and Fig. 2, is a longitudinal section of a washing machine provided with my invention and having its cover removed.

My invention consists in a peculiar application and arrangement of each vibratory beater or stock of the suds reservoir with respect to the swing bar of such beater and its crank and connecting pitman.

By such invention, the stock or beater during its advance is tipped or has another movement such as will depress its toe toward and against the bottom of the suds reservoir in order that it may run close to such bottom, however the latter or the stock may wear, the main object of this being to prevent the clothes while being washed from getting underneath the stocks and catching between them and the bottom so as either to impede the action of such stocks or cause injury to the clothes.

In the drawings, A, denotes the suds reservoir or tub of the washing machine. Within it, four or any other suitable number of beaters or stocks B, B', B², B³, are arranged side by side each being shaped as shown in the figures.

Each beater is suspended from a horizontal rod C, by one of four swing bars, D, D', D², D³, so applied to the rod as to render each capable of being swung thereon with a pendulous movement. Each beater is also hinged to its swing bar which extends into a mortise *a*, made in the beater, a pin *b*, being introduced laterally through the beater, the mortise and the bar. Besides the said mortise, *a*, there is another mortise, *c*, made in the rear end or heel of each beater and for the reception of the front end of one of

four pitmen E, E', E², E³, a pin, *d*, being passed laterally through the pitman, the beater and the mortise. Thus, the pitman is hinged to the heel of the beater while the beater, in like manner is hinged to its swing bar the same being so as to enable the beater, the swing bar and the pitman to work in one plane which is perpendicular to the bottom of the reservoir or tub and parallel to its sides.

The four pitmen at their rear ends embrace respectively four bell cranks, F, F', F², F³, of a shaft, G, arranged at the rear part of the suds reservoir or tub and provided with a pulley, H, around which and another and larger pulley, I, fixed on a driving shaft, K, an endless band, L, travels, the whole being arranged as shown in the drawings.

The shaft, G, should be so placed in the tub that when the wrist of each crank may be at its lowest position while the crank may be in revolution, the axis of such wrist shall be a little lower than that of the joint pin of the hinge of the pitman and the beater operated by such wrist. Under such circumstances, the action of the crank and connecting pitman on the beater will tend to elevate its heel and depress its toe preparatory to the latter being brought into contact with the mass of clothes which may be in front of it and in the tub. This depression of the toe on the bottom of the tub prevents the clothes from getting under, raising and clogging the toe of the beater or stock, a difficulty often experienced when the beater is applied rigidly to its swing bar and works in a circular path. Thus, with my invention, the beater has a compound motion composed of the pendulous and tilting movements.

The arrangement of the four bell cranks is such, that each stands at a right angle with that next to it, while not only the first and third, but the second and fourth of them project from the opposite side of their shaft.

I do not claim a washing machine consisting of a tub or vessel, and a series of fulling stocks or beaters, the latter being placed

within the said vessel and provided with machinery for operating each of them with a pendulous movement, but

I claim in such a machine—

- 5 The arrangement and application substantially as described of each stock or beater with respect to its swing bar pitman and crank whereby by the conjoint action of the said parts, the beater during its forward

motion over the bottom of the tub is caused 10 to receive a tilting movement, by which its toe is borne downward on such bottom substantially in manner and for the purpose as set forth.

HENRY BAILEY.

Witnesses:

JOTHAM LIPPINCOTT,
A. A. LIPPINCOTT.