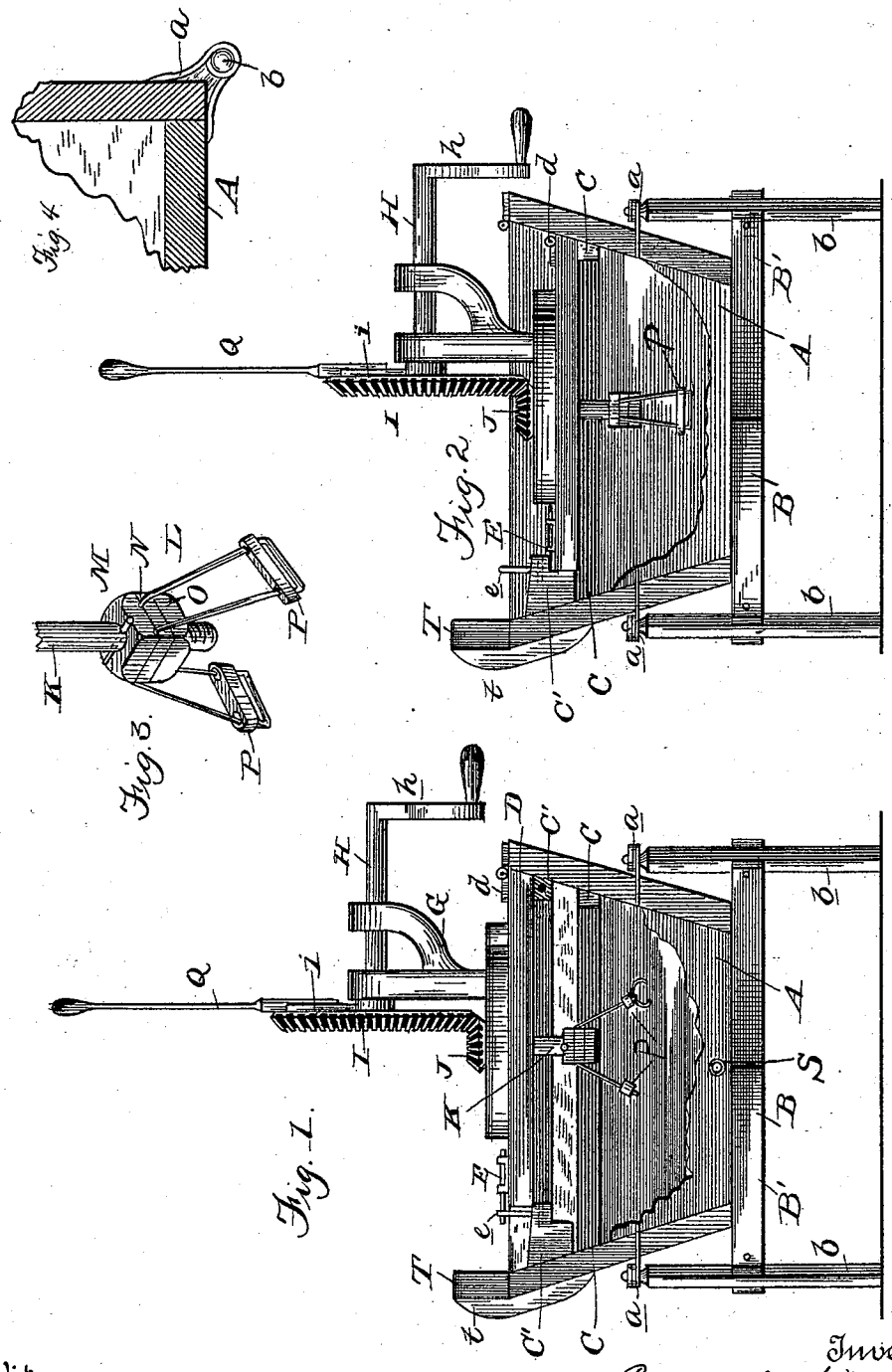
(Model.)

E. A. KIBBE.

WASHING MACHINE.

No. 499,232. Patented June 13, 1893.



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UNITED STATES PATENT OFFICE.

EDSON A. KIBBE, OF SENECA, KANSAS.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 499,232, dated June 13, 1893.

Application filed September 8, 1891. Serial No. 405,128. (Model.)

To all whom it may concern:

Be it known that I, EDSON A. KIBBE, a citizen of the United States, residing at Seneca, in the county of Nemaha and State of Kansas, have invented certain new and useful Improvements in Washing-Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

This improvement relates to that class of washing machines known as agitators, and is designed to provide a washing machine that may be cheaply made, easily operated and convenient in use and at the same time be durable and thus not likely to get out of order.

The invention consists in the peculiar construction, arrangement and combinations of parts hereinafter more fully described and then definitely claimed.

In the accompanying drawings—Figure 1 represents a side view of my improved washing machine, with parts broken away to show other parts. Fig. 2 is a similar view of the upper part showing the cover and operating parts in a different position. Fig. 3 is a perspective view of the agitator, detached. Fig. 4 is a detail view of part of the tub with the socket attached.

Referring now to the details of the drawings by letter—A represents the body of the machine, setting on a stand B, having legs *b*, pinned into notches cut in the ends of the arms of a cross-shaped top B′, said legs having their upper ends fitting into sockets *a* attached to each corner of the body or tub as shown in Fig. 4 on a larger scale. This construction admits of the use of a separate stand, which may be of the "knock down" order, and thus be readily packed away for transportation or storage. On the inside of the tub are two sets of cleats C C′, of which three sides of the upper set C′ are adapted to be removed for a purpose hereinafter explained. In order that they may be readily removed and as readily replaced, the three removable sides are provided with dowel pins (shown in dotted lines), each pin fitting in a hole in the cleat next to it, and as the sides of the tub are inclined, the cleats cannot descend beyond a certain point, which is governed by their length, and will thus remain in the desired position. Resting on the upper set C′, in Fig. 1, is the top D, hinged to the upper edge of the tub at *d* and provided with a bolt E which shuts into a staple *e* on the fixed side cleat of the upper set of cleats. The hinges are provided with removable pintles so that they may be readily disconnected. Rising from the top D and screwed fast thereto is a standard G, carrying a shaft H having a crank *h* on its outer end and a bevel gear wheel I on its other end, which wheel meshes with a pinion J on a shaft K, whose lower end carries the agitator L formed of strong wire, or iron rods, secured in place by a collar M, plate N, and nut O, as shown. These agitators carry weights P, having holes or slots through them to receive the agitators and are arranged to slide on said agitators for a purpose hereinafter described. The wheel I is provided with a socket *i*, to receive a lever Q, so that the machine may be operated either by hand or crank, as desired.

Where a large "wash" is desired, the parts are arranged as in Fig. 1, with the top hinged to the tub and resting on the upper set of cleats, but where there are but a few things to be cleansed, the pintles of the hinges are removed and the upper set of cleats also, (excepting the fixed one that carries the staple *e*) and then the cover and operating parts are set on the lower set of cleats C, as shown in Fig. 2. When in this position, a small "wash" can be readily done with but a comparatively small quantity of water.

The weights will be found very useful to secure collars, wristbands, &c., to the agitators, by raising the weights slightly, putting the collars, &c., through the loops, and dropping the weights down upon them to hold them in place. As the agitators are spread outward toward the bottom, considerable centrifugal force is generated when the machine is operated, and thus the power of the weights is considerably increased and the articles under them are securely held.

I prefer to make the tub of metal and distinct from the stand, so that it may be removed therefrom and set on a stove to heat the water when necessary. For convenience in handling the same, I provide the tub with handles not shown and to allow of the ready emptying of the water, I use a spout S to carry

away the water. I also provide the tub with a wringer board T at one side secured thereto by the cleats *t*.

To prevent rusting, I have the iron parts galvanized.

As the machine is provided with both lever and crank it can be operated by either, at the will of the operator, and thus either a rotary or oscillating motion may be given to the agitators.

What I claim as new is—

1. A washing machine provided with a top carrying the agitator, a tub in which the agitator works and two sets of cleats attached to said tub, whereby said top and the agitator carried thereby may be supported in either of two positions for operating, substantially as described.

2. A washing machine provided with two different sets of cleats at different heights, the upper set of which is removable, and a top carrying an agitator constructed to rest on either at will, substantially as described.

3. The combination with a washing machine having a tub A provided with sockets *a*, of the stand B on which the tub rests having recesses at the opposite corners, legs *b* pinned into said recesses in the stand and fitting into the sockets on the tub, all substantially as described and shown.

In testimony whereof I affix my signature, in presence of two witnesses, this 5th day of September, 1891.

EDSON A. KIBBE.

Witnesses:
T. J. W. ROBERTSON,
A. M. WHITE.