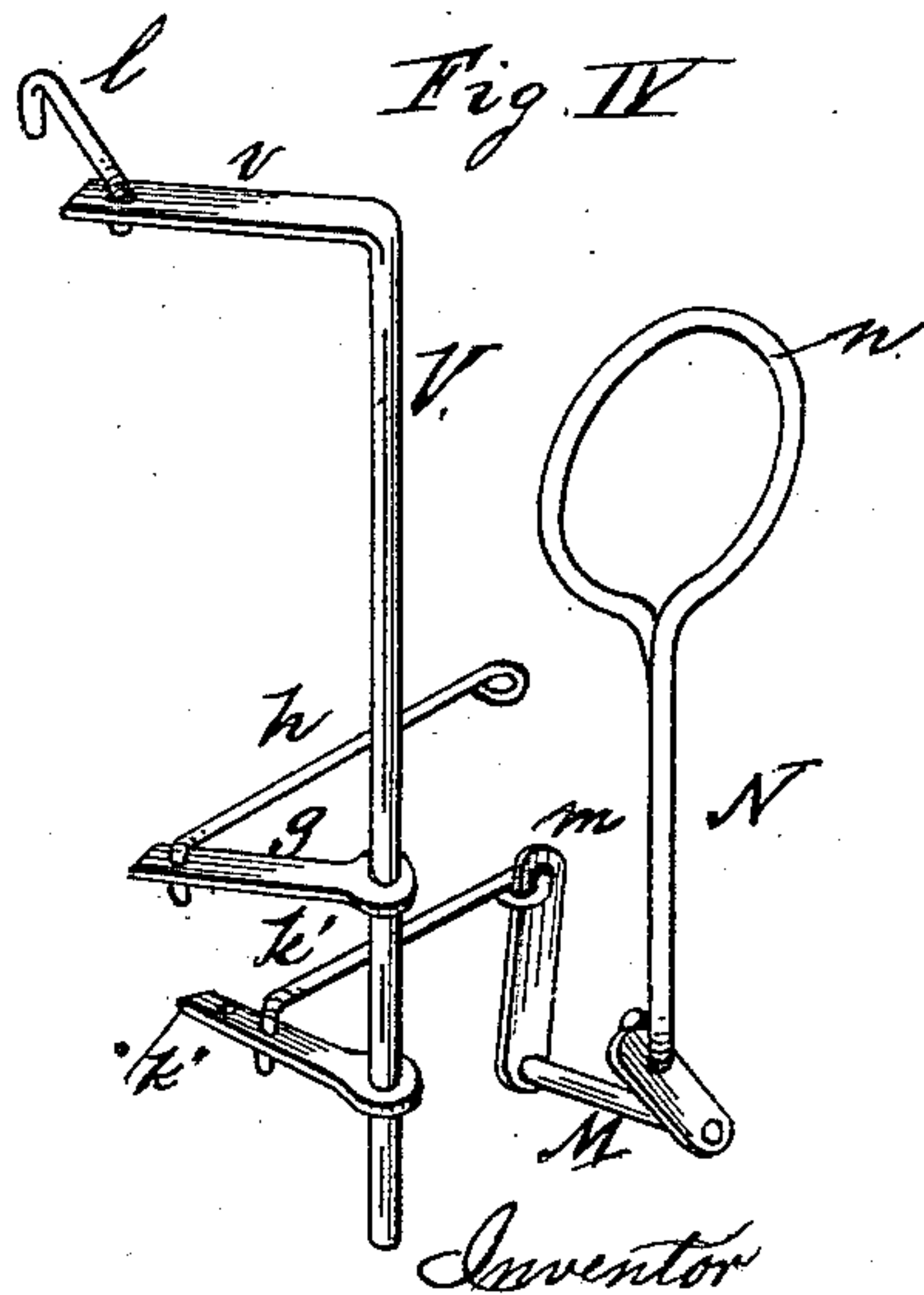
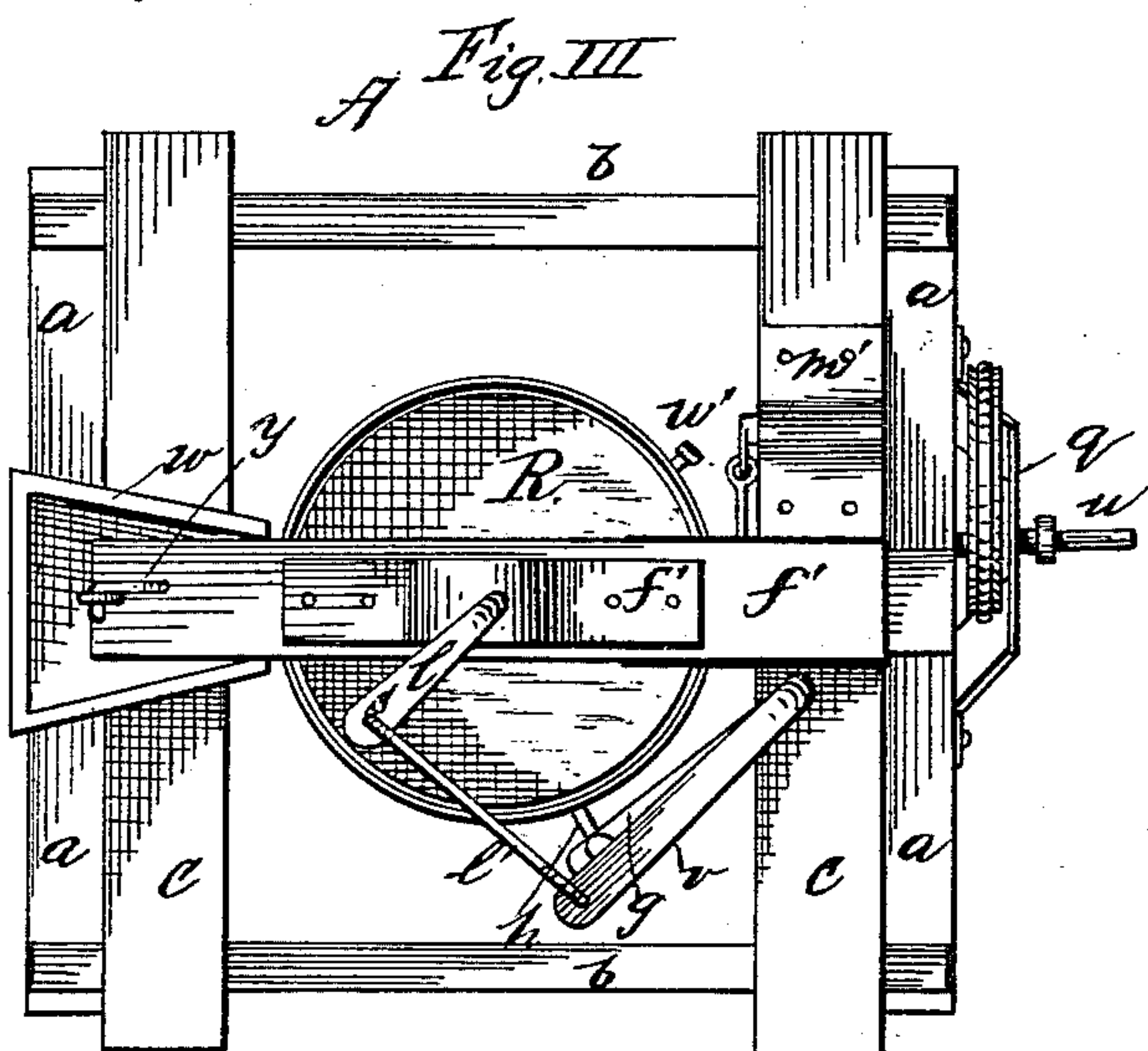
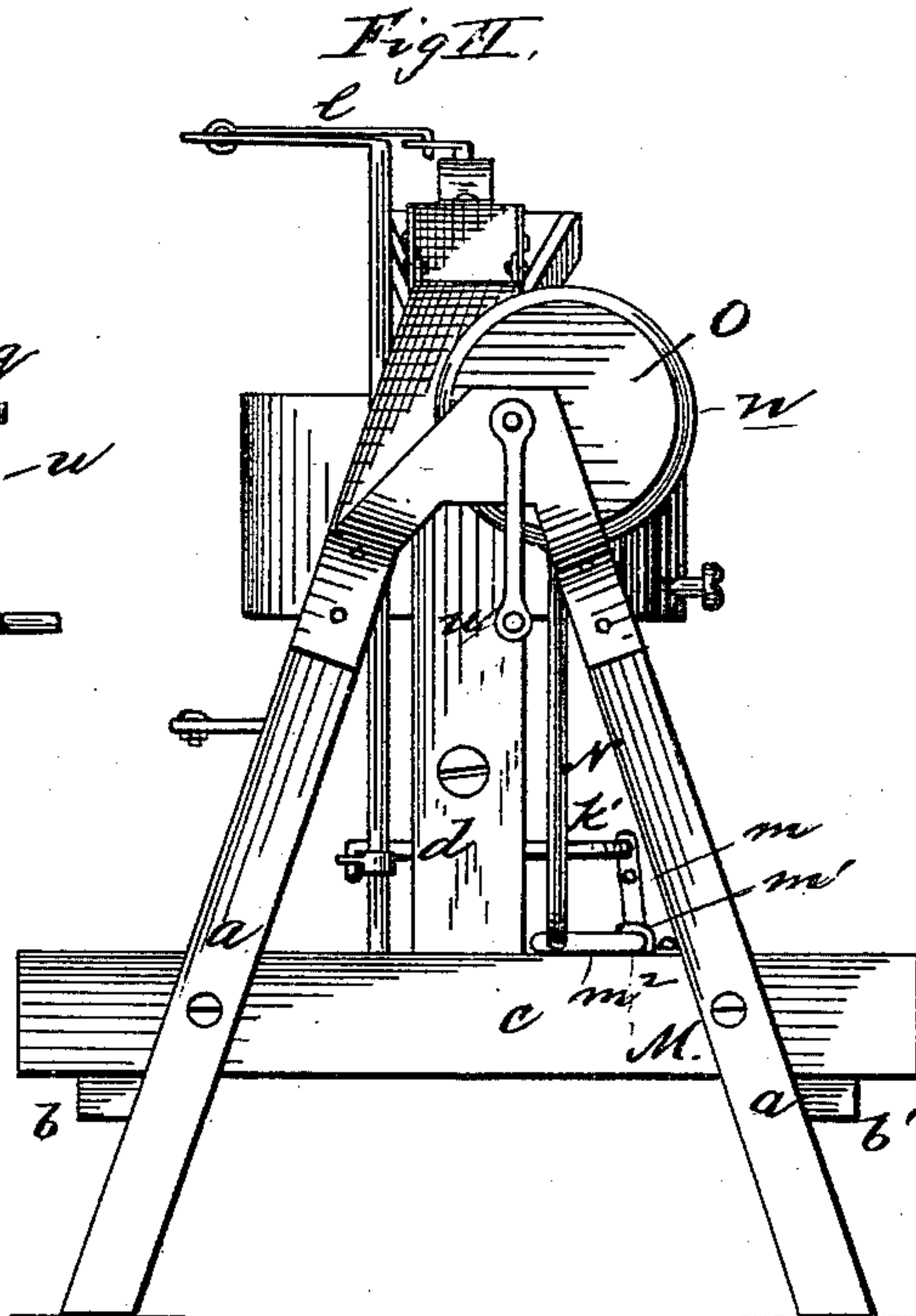
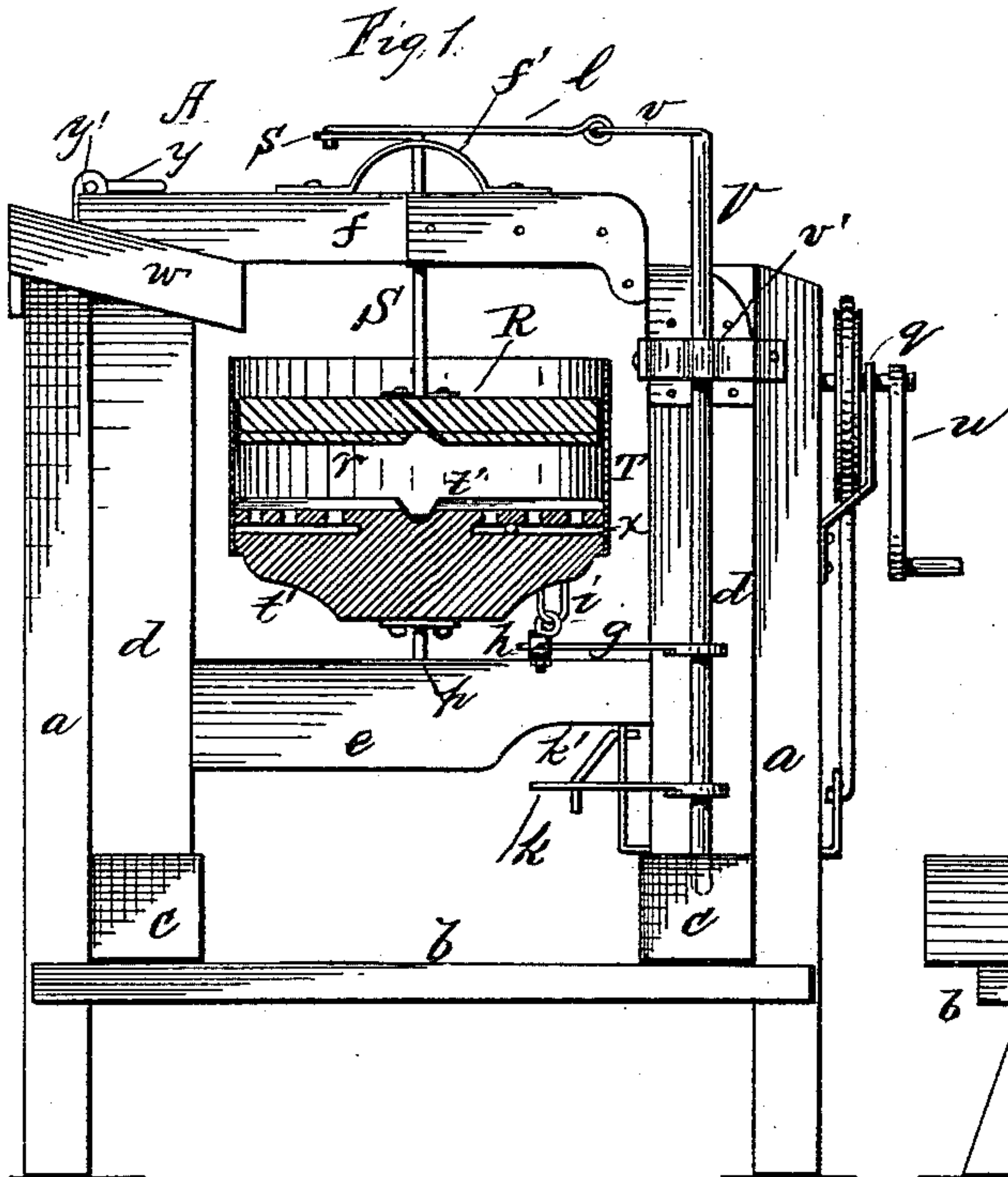


(No Model.)

C. DODSON.
WASHING MACHINE.

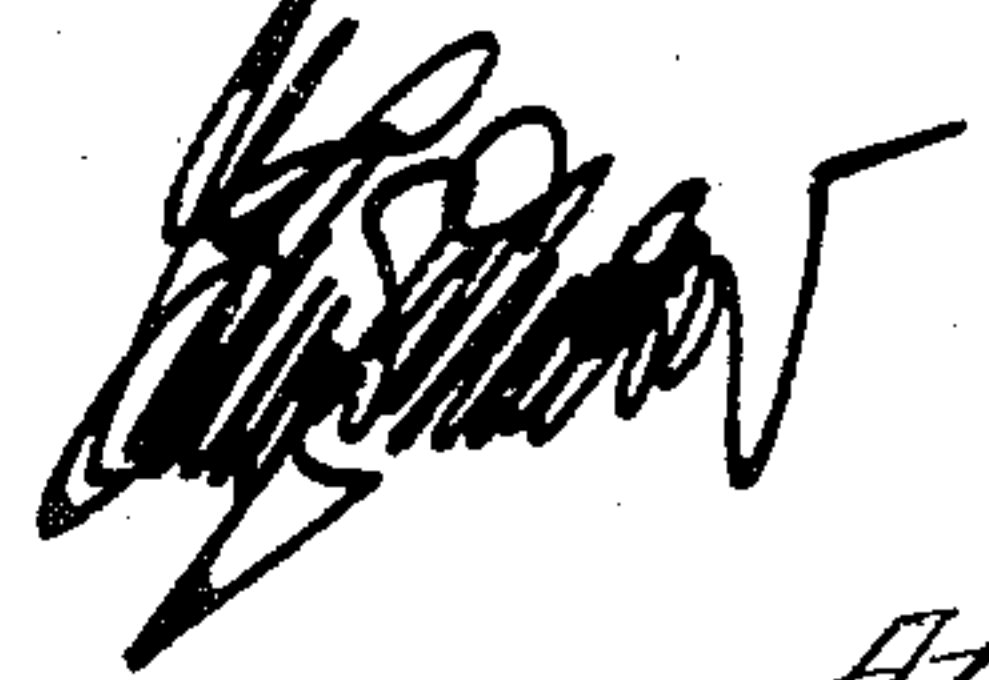
No. 277,243.

Patented May 8, 1883.



Witnesses
E. M. Johnson
H. H. Taylor

By

Carrofton Dodson

Atty.

UNITED STATES PATENT OFFICE.

CARROLTON DODSON, OF FALL RIVER, KANSAS.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 277,243, dated May 8, 1883.

Application filed February 1, 1883. (No model.)

To all whom it may concern:

Be it known that I, CARROLTON DODSON, a citizen of the United States of America, residing at Fall River, in the county of Greenwood and State of Kansas, 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to oscillating washing-machines, its object being to produce a strong, cheap, and easily-operated machine of this class, in which the clothes to be washed shall be subjected to short successive rubbings in opposite directions, so that they may be efficiently washed, and there will be no liability of tearing the clothes, such as attends those machines in which the clothes are subjected to continuous rapid friction in one direction.

The invention consists in certain novel combinations of devices, which will be hereinafter particularly described, and pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a side elevation of my improved washing-machine, the tub and rubbing devices being shown in diametric sections. Fig. 2 is an end view of the machine in the direction of the operating-crank. Fig. 3 is a plan view of the machine; and Fig. 4 is a detail view, illustrating the devices for transmitting the motion from the crank to the tub and rubber.

The letter A indicates the frame of the machine, composed of the legs *a a*, tie-bars *b*, sills *c c*, vertical standards *d*, the tub-supporting beam *e*, and the hinged top bar, *f*.

The tub T has a thick wooden bottom, *t*, the upper surface of which is provided with radial ribs *t'*, and this bottom is centrally pivoted by means of a pin, *p*, fixed thereto, and stepped in a socket formed in the beam *e*.

The rubber R is in the form of a wooden disk, fitting in the tub, and having its under surface provided with radial ribs *r*. To the upper surface of this rubber is fixed centrally a vertical shaft, S, extending through a bearing in the hinged bar *f*, and an upper bearing in the

arched brace *f'*, the upper end of said shaft being provided with a laterally-projecting arm, *s*. This projecting arm *s* is connected by a link, *l*, with a laterally-projecting arm, *v*, at the top of a vertical shaft, V, which extends downward through a bearing, *v'*, and is stepped at its foot in one of the sills *c*. From this shaft projects laterally an arm, *g*, which is connected by link *h* with a staple, *i*, projecting from the bottom of the tub.

From the shaft V, below the beam *e*, projects an arm, *k*, and from this arm *k* a link, *k'*, extends under the beam *e*, and is connected with the top of an arm, *m*, which projects upwardly from a rock-shaft, M, which is mounted in a bearing, *m'*, on the same sill, *c*, in which the vertical shaft V is stepped. From this shaft M an arm, *m²*, projects inwardly, and is pivoted to an eccentric-rod, N, connected by a strap, *n*, to an eccentric, O, the shaft of which has its bearings in a bracket, *q*, and the adjacent leg of the machine, the outer end of said shaft being provided with an operating-crank, *u*.

It will be observed that the arm *s* projects from the shaft S in a direction opposite to that in which the staple *i* is situated from the center of the tub, so that when the arms *v* and *g* are vibrated in the same direction reverse oscillating motions will be communicated to the tub T and rubber R through the connections hereinbefore described. When the eccentric O is rotated by means of its crank *u* motion will be communicated through the eccentric-rod N, arm *m²*, shaft M, arm *m*, link *k'*, and arm *k* to the vertical shaft V. It is thus given an oscillating movement, which is communicated through the arms *g v'*, links *l h*, shaft S, and arm *s* to the tub and rubber, as before described—that is, in reversed directions.

At one side and above the tub is arranged a trough, *w*, by which the tub may be supplied with water conveniently while the machine is in operation, and to which a clothes-wringer may be attached, and the tub is also provided with a plug, *w'*, by which the water which collects in the space *x* may be drawn off.

As before stated, the top bar, F, is hinged, and at the end opposite that at which it is hinged it is provided with a hook, *y*, which is adapted to engage with a staple, *y'*, rising from the bottom of the trough *w*, so that the said bar may be securely held in a horizontal posi-

tion or disengaged from the staple and raised, when desired.

The arm *k* is provided with a longitudinal series of holes, with either of which the link *k'* may be engaged by means of a hook formed on the end of said link, so that oscillations of greater or less extent may be communicated to the tub and rubber, as desired, and according to the nature of the articles in process of washing.

In commencing to wash, the link *l* is disengaged from the arm *s* and the hook *y* from the staple *y'*, and the bar *f* and rubber are raised so as to take the rubber out of the tub, in order that the clothes may be placed therein. The clothes being then soaked and placed in the tub, the rubber and bar *f* are replaced and secured in position, as shown in Fig. 1, the link *l* is re-engaged with the arm *s*, and the machine is ready for operation by the crank *u*, as hereinbefore described. After giving the first washing, the foul water may be drawn off by

removing the plug *w'* and fresh water supplied through the trough *w*; and additional water may be supplied through said trough at any time during the washing.

Having now described my invention and explained the operation thereof, I claim—

The combination, with the tub *T*, rubber *R*, and shaft *S*, having arms *s*, of the vertical shaft *V*, having the arm *v*, connected with said arm *s* by an intermediate link, the arm *g*, connected with the tub by a link, the arm *k*, the shaft *M*, having the arm *m*, connected with said arm *k* by an adjustable link, the eccentric, and eccentric-rod connected with said shaft for rocking the same, substantially as described.

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

CARROLTON DODSON.

Witnesses:

J. A. SOMERBY,
CHAS. SPRINGLE.