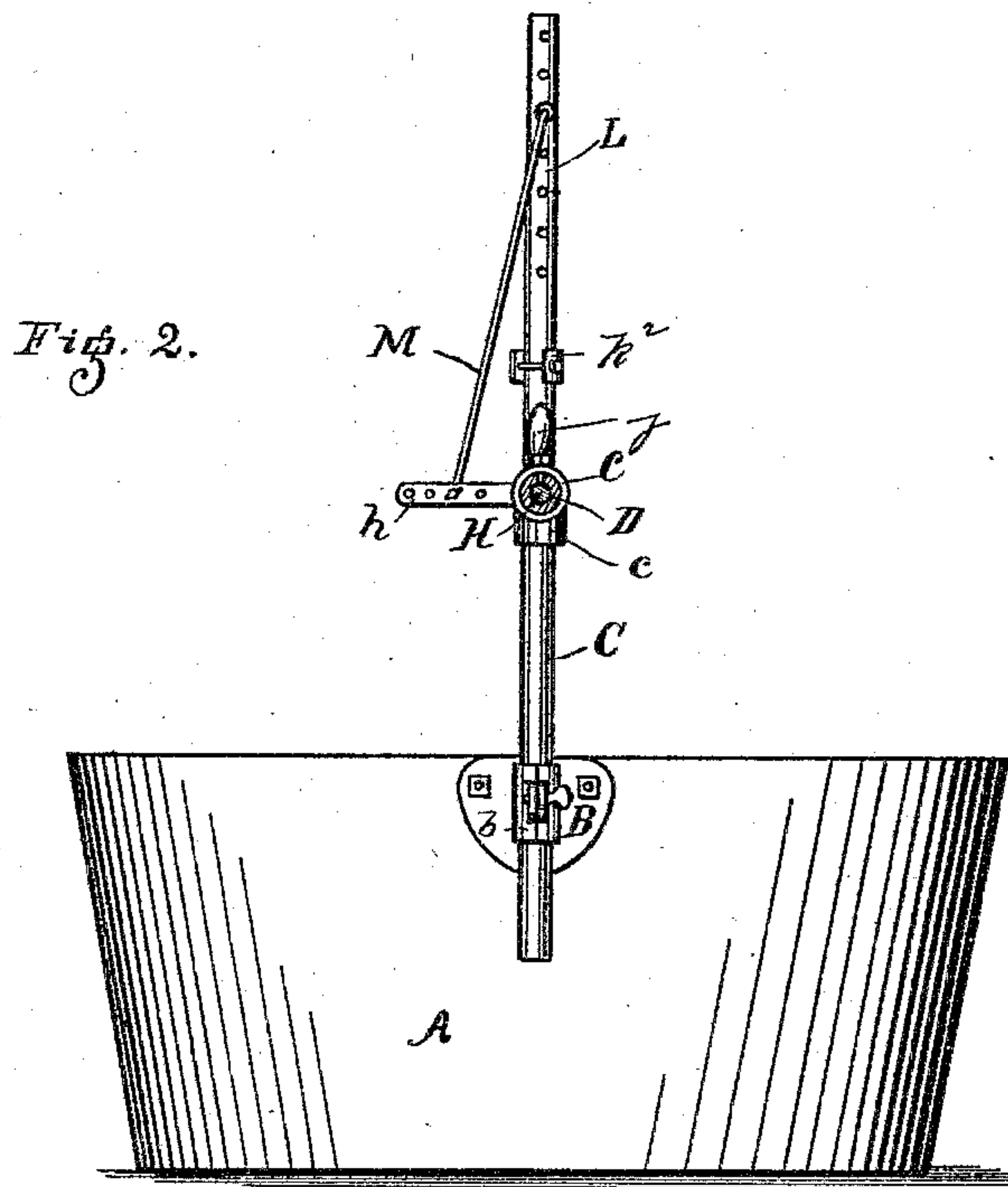
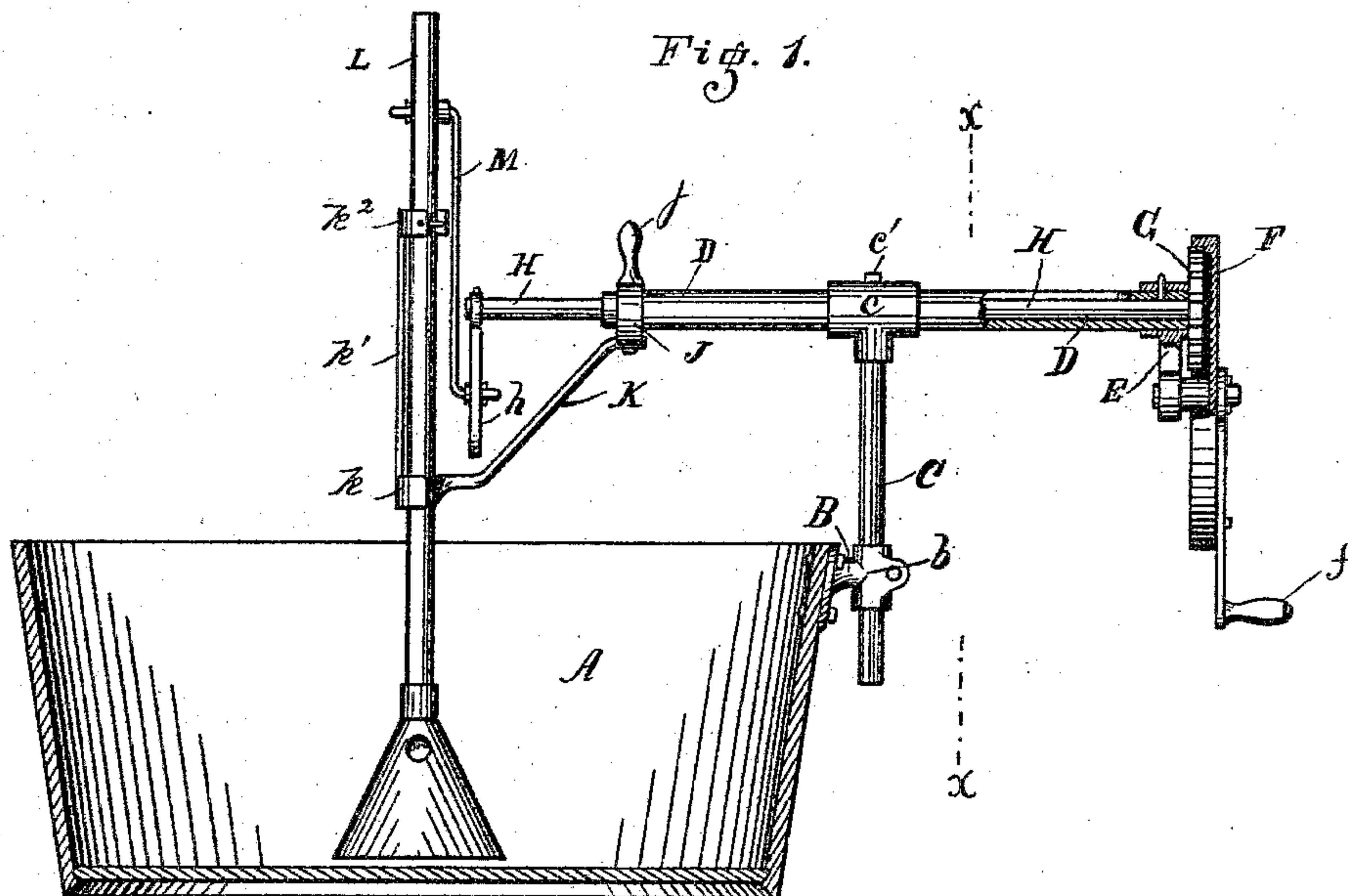


(Model.)

F. T. ROOTS.  
POUNDER WASHING MACHINE.

No. 295,199.

Patented Mar. 18, 1884.



Attest:

Alfred B. Benedict  
Emanuel Gory

*Inventor.*

Francis T. Roots  
By Geo. J. Murray  
Atty



# UNITED STATES PATENT OFFICE.

FRANCIS T. ROOTS, OF CONNERSVILLE, INDIANA.

## POUNDER WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 295,199, dated March 18, 1884.

Application filed June 5, 1883. (Model.)

*To all whom it may concern:*

Be it known that I, FRANCIS T. ROOTS, a citizen of the United States, residing at Connorsville, county of Fayette, State of Indiana, have invented certain new and useful Improvements in Pounder Washing-Machines, Churn-Dashers, &c., of which the following is a specification.

The object of my invention is a motor for household purposes—such, for instance, as churning, washing, meat and vegetable chopping, &c.

It consists in certain details of construction and combination of parts, which render it readily adaptable to the different uses for which it is intended, as will be fully described in connection with the accompanying drawings, and particularly pointed out in the claims.

In the accompanying drawings, in which like parts in the different views are indicated by similar reference-letters, Figure 1 is a side elevation of my motor arranged on a tub to operate a pounder washing-machine. The tub and driving end of the motor are shown in vertical section. Fig. 2 is a view taken at right angles to the view shown in Fig. 1 and through line *x x* of that figure. In this view the driving-shaft has been given a quarter-revolution, to show the means of connecting the pitman to the driving-crank and the vertically-reciprocating plunger-rod.

To the outside of the tub A is secured a bracket, B. This consists of a plate perforated to receive bolts for securing it to the tub, and a perforated boss, *b*, to receive the standard C, which supports the motor. The boss *b* is vertically slotted, and has lugs projecting outwardly from it to receive a thumb-screw, by which the split boss is clamped upon the standard C, to hold it in place, or loosened to adjust it to the desired position. The standard C is preferably a piece of metal tubing, provided at the top with a cross-head, *c*, which is the ordinary hollow T-union.

Through the cross-head *c* passes a hollow tube or sleeve, D. The top of this tube is longitudinally slotted to receive a screw, *e'*, which permits sleeve D to slide longitudinally in cross-head *c*, but preventing it from turning.

Keyed upon the outer end of sleeve D is a depending bracket in the shape of a crank-arm, E. From the lower end of this arm pro-

jects horizontally a pin, *e*, upon which is journaled the interiorly-toothed cog-wheel F, the teeth of which mesh into the teeth of a pinion, G, which is keyed upon the end of the shaft H, which extends through sleeve D, and is provided at its opposite end with a crank-arm, *h*.

Upon the inner end of the sleeve D is secured a collar, J, from the under side of which projects a bracket-arm, K, the end of which is turned into an eye, *k*. From this eye a bar, *k'*, extends up, and has another eye or hook, *k<sup>2</sup>*, at the top, which, in connection with eye *k*, serves to retain and guide the plunger-rod L. The plunger-rod L and crank-arm *h* are each provided with a series of holes to receive the cranks on pitman M. By placing one of the journals or cranks of the pitman nearer to or farther from the axis of shaft H the stroke or throw of the plunger may be regulated, and by means of the holes in the handle or plunger-rod it may be adjusted higher or lower.

Projecting up from collar J is a handle, *j*, by means of which the sleeve D is slipped forward or back in the cross-head, or the cross-head and standard C turned round to bring the pounder to work in any part of the tub.

To use my motor after it is properly set for the work desired, the operator takes hold of the handle *j* with one hand to steady the machine and guide the plunger to its work, and with the other rotates the wheel F by means of crank-handle *f*.

Instead of attaching my motor to a tub, or other vessel, it may be secured to a stationary post or stand, and a tub, churn, or chopping block or vessel, as desired, brought under it. The clothes-pounder can, of course, be changed for a churn-dasher or chopping-knives.

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

1. The combination, substantially as specified, of the standard C, provided with a cross-head, *c*, sleeve D, movably mounted in the cross-head, and provided with guides, reciprocating plunger L, adapted to slide in said guides, pitman M, crank-shaft H, and means for rotating said shaft.

2. The combination of standard and cross-head C *c*, slotted sliding tube or sleeve D, bracket B *b*, screw *e'*, and bracket K *k k<sup>2</sup>* with crank-shaft H, cog F, pinion G, plunger-



rod L, and pitman M, arranged substantially as and for the purpose specified.

3. The combination, substantially as specified, of the bracket B *b*, the standard C *c*, ad-  
5 justably secured therein, the sleeve D, adjustably secured in the cross-head *c* of the standard, and provided at one end with plunger-

guides and at the other end with driving mechanism, crank-shaft H, the plunger, and means for connecting the shaft with the plunger.

FRANCIS T. ROOTS.

Witnesses:

EDWARD K. HILL,  
PHILIP J. REIFEL.