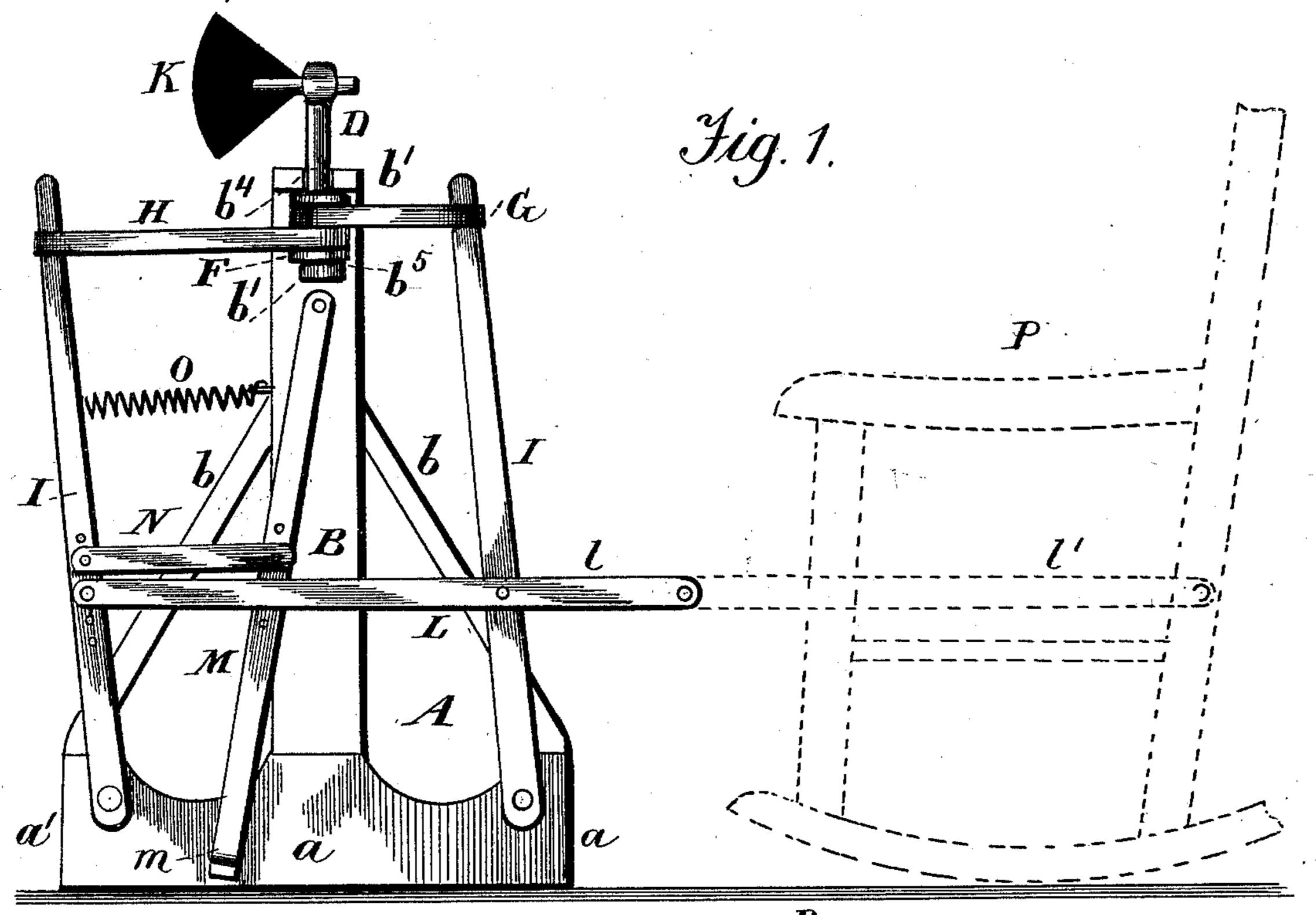
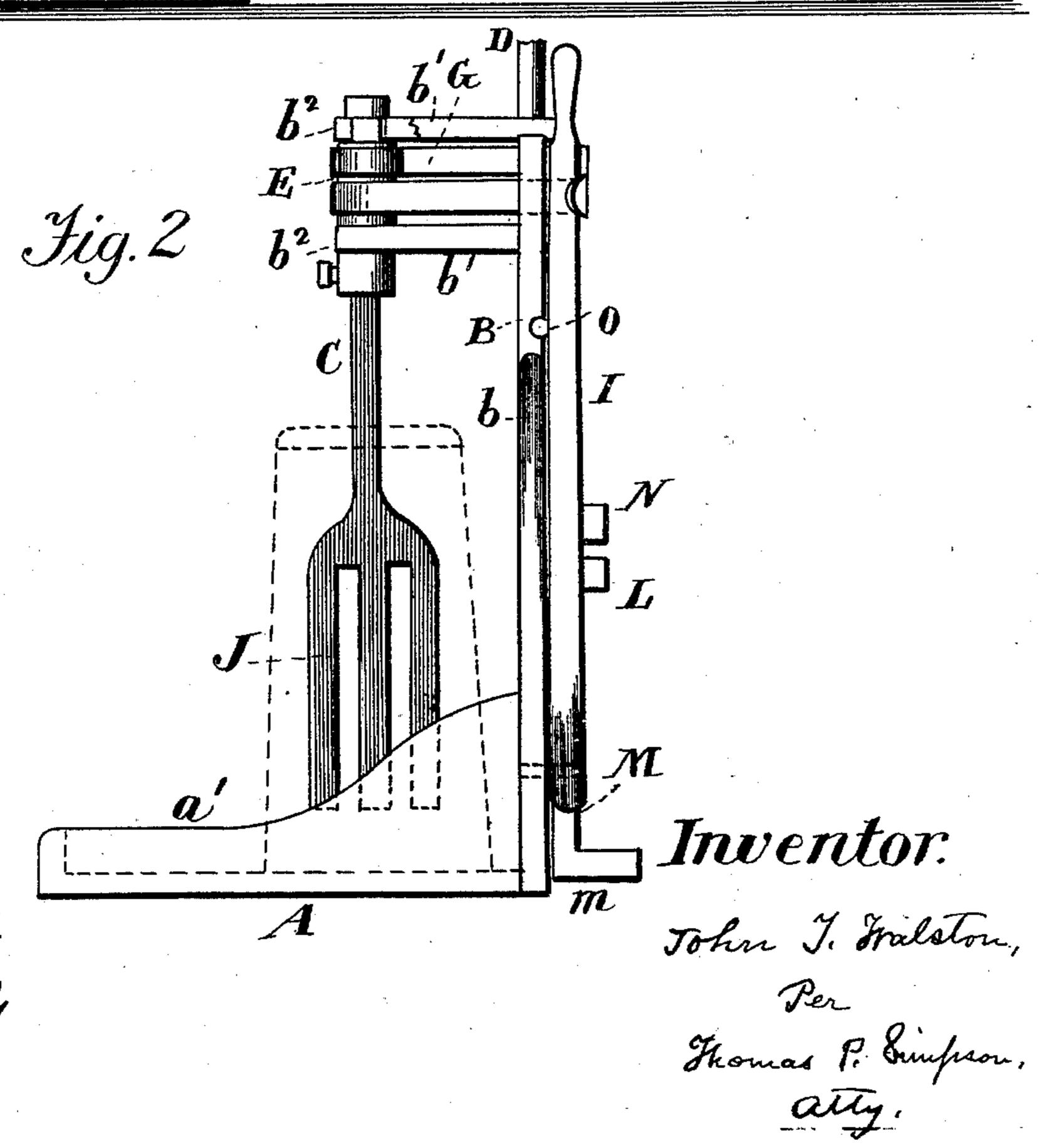
(No Model.)

## J. T. WALSTON. CHURN MECHANISM.

No. 509,780.

Patented Nov. 28, 1893.





Witnesses. A. Ruppert. H. A. Daniel,

. THE NATIONAL LITHOGRAPHING COMPANY, WASHINGTON, D. C.

## United States Patent Office.

JOHN THOMAS WALSTON, OF BELL'S DEPOT, TENNESSEE.

## CHURN MECHANISM.

SPECIFICATION forming part of Letters Patent No. 509,780, dated November 28, 1893.

Application filed December 5, 1892. Renewed October 18, 1893. Serial No. 488,550. (No model.)

To all whom it may concern:

Be it known that I, John Thomas Wals-TON, a citizen of the United States, residing at Bell's Depot, in the county of Crockett and 5 State of Tennessee, have invented certain new and useful Improvements in Churn Mechanism; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the so art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The special object of the invention, to produce a mechanical motor, involves the combination of mechanism so that the dasher may be conveniently vibrated by hand, by the foot or by connection with a rocker as

20 hereinafter fully described.

Figure 1 is a front elevation, showing the mechanism connected with a rocker. Fig. 2 is a side elevation.

In the drawings, A represents the support-25 ing frame of the motor having the base  $\alpha$ with the upwardly projecting sides a' a' a' within which is held the vessel containing the cream.

B is a flat upright at the back of the frame, 30 reinforced by the braces b b, and provided with the horizontal parallel arms b'b'. These arms have open bearings  $b^2b^2$  at one end while the top one has an open bearing  $b^4$  at the other end, and the lower arm, a step bearing  $b^5$  on

35 the upper side.

C and D are vertical shafts arranged to turn in said bearings, being connected by two belts on the corresponding fast pulleys E F. The belts G H are not endless but are 40 fastened at one end to the pulley E, carried in opposite directions around the pulley F, and each secured at the other end to one of the levers I I fulcrumed at the lower ends to !

the frame. By moving these levers I I back and forth by the hand, the shaft C is vibrated 45 and with it a churn dasher J, or a shaft of any kind; also a fan K on the shaft D. The bottom-pivoted levers I I are connected by an end-pivoted bar L while the left-hand lever is also connected with the top-pivoted treadle 50 M by a pivoted bar N, the said left-hand lever being also connected with the upright B by a spiral spring O. By this means, the dasher-shaft and fan are both very conveniently operated.

When it is desired to operate by means of a rocking chair P, I put on the crossbar L which is provided with an extension l and a pivoted link l', the latter to be connected with the rocking chair as shown in the draw- 60

ings or in any other preferred way.

In churning, I use a dasher-fork Q having three prongs q q q and one central shank q', the latter being readily secured by screws or pins in the socket c of the shaft C.

Having thus described all that is necessary to a full understanding of my invention, what I claim as new, and desire to protect by Letters Patent, is—

The combination of the churn frame A hav- 70 ing the base a with upwardly projecting sides a', the upright B having arms b' b' with open bearings  $b^2$   $b^4$  and step-bearing  $b^5$ , the beltconnected pulleys E F, and the levers I, I, the latter connected with the pulleys by bands 75 G H one of whose ends is attached to a pulley and the other to a lever; whereby a dasherfork may be rotated in a churn placed on the base a as and for the purpose set forth.

In testimony whereof I affix mysignature in 80 presence of two witnesses.

JOHN THOMAS WALSTON.

Witnesses:

B. W. Brown, T. F. Evans.