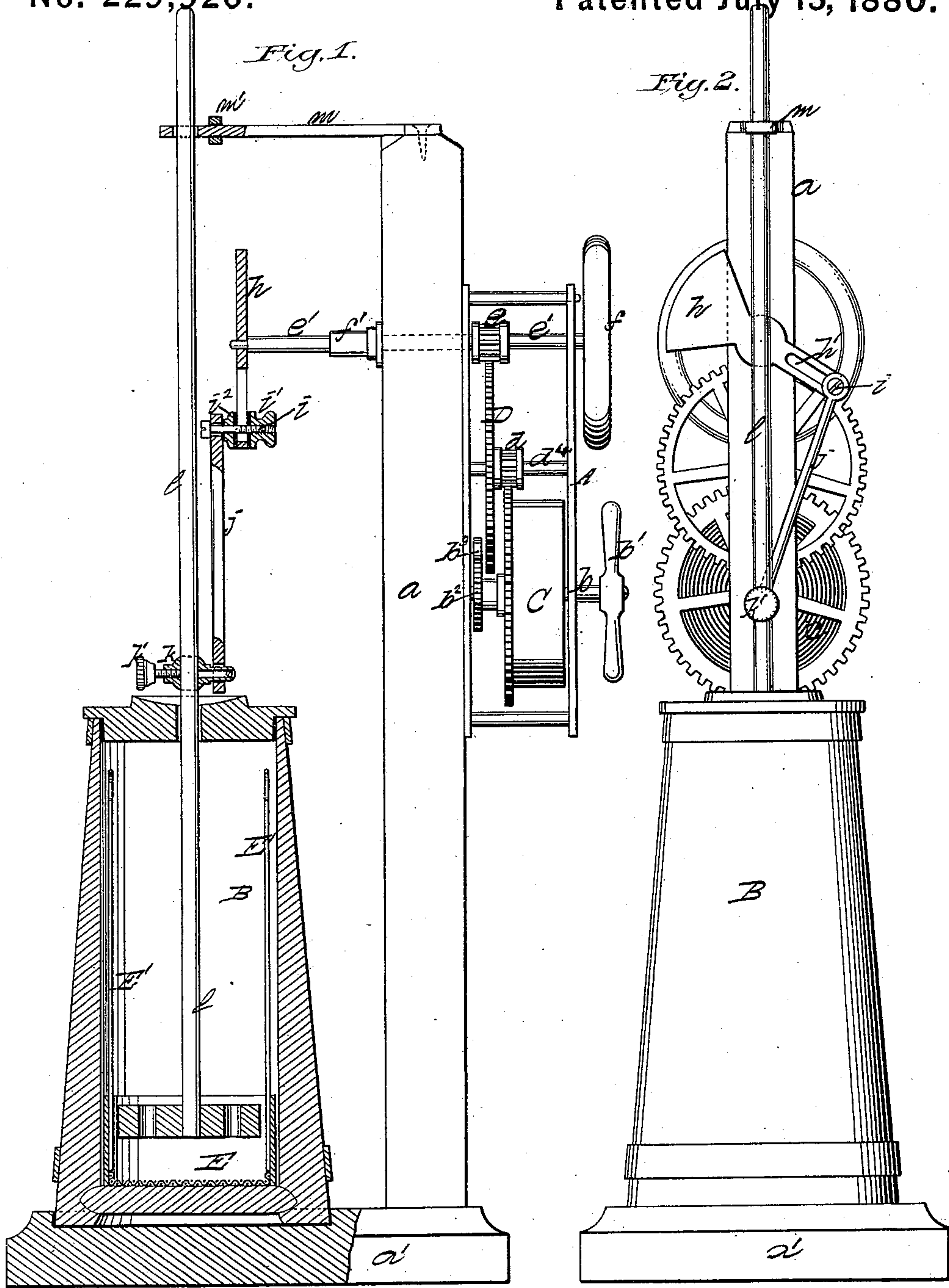


(Model.)

J. H. TABLER.  
Spring Motor for Operating Churns, &c.

No. 229,926.

Patented July 13, 1880.



WITNESSES  
*Villette Anderson.*  
*Dr. A. C. Lewis.*

INVENTOR  
*J. H. Tabler*  
*by V. W. Anderson*  
his ATTORNEY



# UNITED STATES PATENT OFFICE.

JOHN H. TABLER, OF LEXINGTON, KENTUCKY, ASSIGNOR OF ONE-HALF OF  
HIS RIGHT TO JAMES M. HOCKER, OF SAME PLACE.

## SPRING-MOTOR FOR OPERATING CHURNS, &c.

SPECIFICATION forming part of Letters Patent No. 229,926, dated July 13, 1880.

Application filed March 16, 1880. (Model.)

*To all whom it may concern:*

Be it known that I, JOHN H. TABLER, of Lexington, in the county of Fayette and State of Kentucky, have invented a new and valuable Improvement in Spring - Motors for Operating Churns, &c.; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a vertical section of this invention. Fig. 2 is a front view of the same.

This invention has relation to improvements in spring-motors for operating churns, &c., with vertically-reciprocating dashers or pitmen, the object of which is to effect the thorough and expeditious churning of the cream or milk without the aid of manual labor; and they consist of the detail construction and arrangement of mechanism for operating the dasher, for regulating the stroke of the dasher, and for detachably confining the dasher-staff, substantially as hereinafter more fully set forth.

In the accompanying drawings, A refers to a frame affixed in an elevated position to the upright *a*, planted in a base or board, *a'*, also adapted to receive, in a recess formed therein, the churn-body or receptacle B.

C is a cogged or toothed drum arranged on a shaft, *b*, but turning independently of the shaft, which shaft is hung in the frame A, and provided at one end with a handle or lever, *b'*, and at its other end with a ratchet, *b<sup>2</sup>*, engaged by a spring-pawl, *b<sup>3</sup>*, hung to the upright *a*. Within this drum is located a spring, *c*, coiled around the shaft *b*, and adapted to act on the drum so as to turn or rotate it. The handle *b'* is to turn the shaft *b* and wind up or compress the spring *c*, and thus impart motion to the drum C, whose cogs or teeth engage a trundle-wheel or pinion, *d*, on a shaft, *d'*, journaled in the frame A. On the same shaft *d'* is a larger toothed or gear wheel, D, gearing with a second trundle-wheel or pinion, *e*, on a second shaft, *e'*, hung in the frame

A and carrying on one of its projecting ends 50 a balance-wheel, *f*. The shaft *e'* passes through the post or upright *a*, and bears in a sleeve or box, *f'*, fastened to said post.

*h* is a weighted arm affixed about centrally of its length to one end of the shaft *e'*, and provided with an elongated slot, *h'*. This slot receives a pin, *i*, which connects an arm or link-bar, *j*, to the slotted arm *h*, the bar *j* being swiveled to a cross-head, *k*, of the dasher-staff *l*. The pin *i* is provided with a thumb-nut, *i'*, on one side of the slot of the arm *h*, and on the other side of said slot with a disk, washer, or plate, *i<sup>2</sup>*, to fasten the pin in the slot. The slot in the arm *h*, with the pin and thumb or adjusting nut *i'* and disk or washer *i<sup>2</sup>*, permit the adjustment of the link-bar *j* with the dasher-staff cross-head *k*, so as to regulate or shorten or lengthen the stroke of the dasher, as occasion may require.

The cross-head *k* is provided with a set-screw, *k'*, fastening the dasher-staff therein. The upper end of the dasher-shaft plays and is guided in a plate, *m*, fastened to the upper end of the post *a*. This plate or bar is slitted in the direction of its length, cutting it through its aperture, which receives the upper end of the dasher-staff, into two parts, but not entirely severed from each other, thus permitting them to act as springs to automatically spring themselves apart to receive and to allow the withdrawal of the dasher-staff, as desired.

Fitted on the slitted or spring bar or plate *m* is a ring or clasp, *m'*, adapted to slide on said bar and clamp its parts together around the dasher-staff.

This churn permits the churning of the cream or milk in the most thorough and expeditious manner without the aid of manual labor, it only being necessary to wind up the spring by the lever or handle *b'*, the action of which will run the churn.

Having thus fully described my invention, I claim and desire to secure by Letters Patent—

1. In a churn, the combination, with its operating clock mechanism, of the shaft *e'*, having the slotted arm *h*, pin *i*, provided with the thumb or adjusting nut, *i'*, disk or washer *i<sup>2</sup>*,

link-bar *j*, cross-head *k*, and dasher-staff *l*, substantially as and for the purpose specified.

2. The dasher-staff guide consisting of the perforated plate or bar *m*, slitted into two  
5 connected parts through its perforation or aperture, and provided with the ring or clasp *m'*, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN H. TABLER.

Witnesses:

ROBERT F. ARNETT,  
JOHN A. G. WILLIAMSON.