J. M. WILKINSON.

Converting Motion.

No. 167,377. Patented Aug. 31, 1875.

Fig. 1.

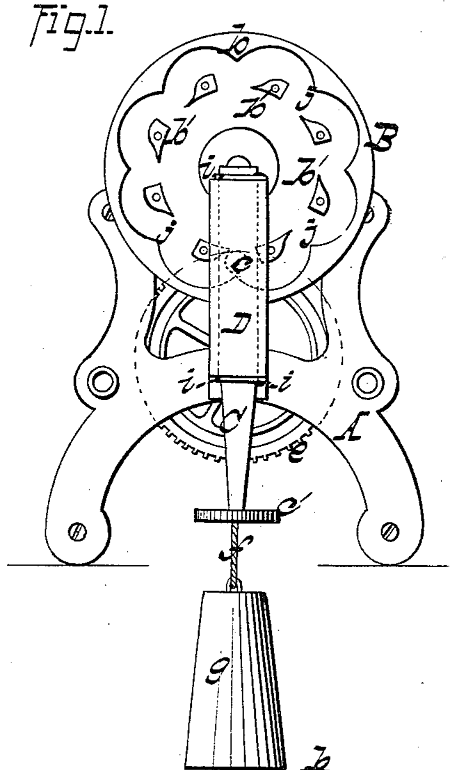
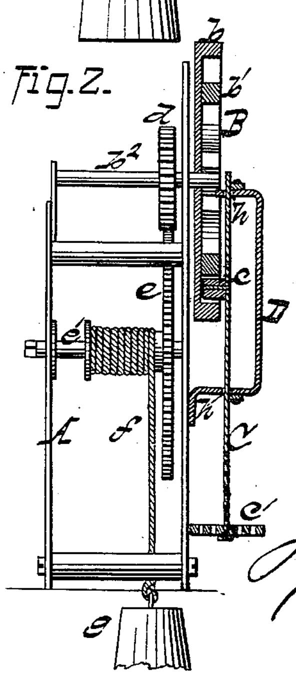


Fig. 2.



WITNESSES:

Jas. E. Hutchinson

J. W. Hister

INVENTOR.

J. M. Wilkinson

Edson Bros.

Attorneys.

UNITED STATES PATENT OFFICE.

JOHN M. WILKINSON, OF JACKSON, TENNESSEE.

IMPROVEMENT IN CONVERTING MOTION.

Specification forming part of Letters Patent No. **167,377**, dated August 31, 1875; application filed July 13, 1875.

To all whom it may concern:

Be it known that I, J. M. WILKINSON, of Jackson, in the county of Madison and State of Tennessee, have invented certain new and useful Improvements in Churns; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification, in which—

Figure 1 is a side elevation, and Fig. 2 a vertical section, of my improved churn.

Like parts in the two figures are designated by like letters.

This invention relates to a certain improvement in motors for churns; and it consists of a scalloped wheel having a series of cams, in combination with a perforated frame or bar to receive the dasher-staff or supporting-frame gearing, chain, or cord and weight, substantially as hereinafter more fully set forth.

In the annexed drawing, A refers to a frame, upon which the operative mechanism of the churn is mounted. B is the driving-wheel, scalloped upon the inner circumference of its peripherical flange *b*, by which the dasher, as the wheel is in motion, receives a vertical vibratory motion in performing the operation of churning. b^1 b^1 are a series of cam-projections, projecting from the face of the wheel B, and so arranged, with reference to the scallops of the peripherical flange *b*, as to insure the engagement therewith of the frictional roller *c* of the dasher-staff C with the perforated dasher *c'*. The axis b^2 of the wheel B, which has its bearing in the frame A, has a pinion, *a*, gearing with a larger-toothed wheel, *e*, whose axis *e'* has a drum or cylinder, around which a cord or chain, *f*, with a weight, *g*, may be wound for operating the wheel B and the intermediate gearing. In lieu of the cord and weight a spring may be used for the purpose just stated. A frame, D, fastened at its lower end to the frame A, is provided for the dasher-staff C to work in, it being provided with slots *h h* to receive and permit of the movement of the staff therein. Hooks or other suitable fastenings *i i* confine the staff C in place in its frame D.

The dasher-staff C may be made in two parts, and adjustable so as to vary its length when occasion requires.

It will be remarked that the scallops of the wheel B are connected or brought together, so as to form acute angles *j j*, and they each forming a long gradual circle to give the downward stroke of the dasher-staff sooner than obtained in the ordinary way.

In lieu of the scalloped flange *b* and cam-projections b^1 b^1 the wheel B itself may be grooved in a manner to correspond to the shape of such flange, it having been first made of the required thickness.

I am aware that, broadly, a scalloped wheel, as a means for converting motion, and a cord and weight or spring, as a motor, are not new.

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

The scalloped wheel B, having the cams b^1 b^1, in combination with the supporting-frame A, perforated frame D, to receive the dasher-staff C, gearing *d e*, chain or cord *f*, and weight *g*, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JOHN MARION WILKINSON.

Witnesses:

I. R. CHAPPELL,

F. B. SNIPES.