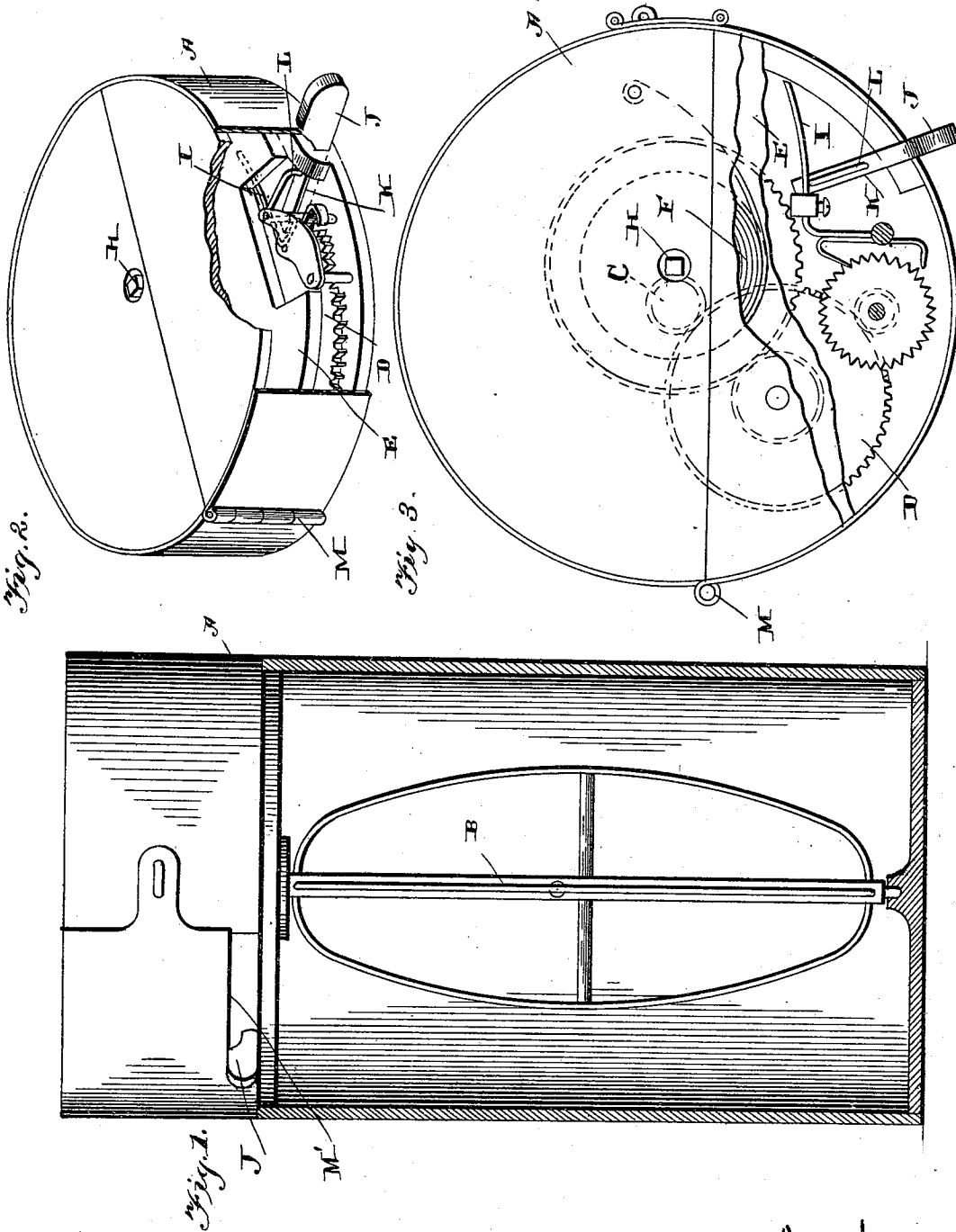


(No Model.)

J. KENT & C. R. GLASS.
MOTOR.

No. 506,119.

Patented Oct. 3, 1893.



WITNESSES.
Geo. E. Trech.
Roland C. Fitzgerald

INVENTORS
John Kent
C. R. Glass
By Lehigh Valley Patent & Drafting Co.

UNITED STATES PATENT OFFICE.

JOHN KENT AND CHARLES RICE GLASS, OF CHAMBERS COUNTY, ALABAMA.

MOTOR.

SPECIFICATION forming part of Letters Patent No. 506,119, dated October 3, 1893.

Application filed June 20, 1893. Serial No. 478,258. (No model.)

To all whom it may concern:

Be it known that we, JOHN KENT and CHARLES RICE GLASS, of Chambers county, Alabama, (post-office, West Point, Georgia,) have invented certain new and useful Improvements in Churn-Motors; and we 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

Our invention relates to an improvement in churn motors and it consists in the novel features of construction, as will be more fully described hereinafter and especially referred to in the claims.

The object of our invention is to provide a cover for churn bodies particularly constructed as hereinafter described to contain a spring motor.

Referring to the accompanying drawings: Figure 1, is a side elevation of our improved churn dasher and operating mechanism shown in position in a churning vessel, the latter being shown in section. Fig. 2, is a perspective view of the dasher and operating mechanism, a portion of the mechanism casing being broken away. Fig. 3, is an enlarged detached view of its escapement and its controlling mechanism.

A designates a casing which is preferably circular in form and which is adapted to rest upon the upper end of a churning jar so as to close the same, while the dasher B depending from its under side occupies an operative position within the vessel. The upper end of the dasher is provided with a pinion C, which connects with a train of gear D, which train is actuated by the coil spring F, arranged immediately beneath the top of casing A and over partition E, which separates the casing and the gearing, as shown. The spring is provided with a ratchet mechanism similar to those employed in clock motors which prevents the same from uncoiling, excepting as it is liberated by the turning of its spindle H. This spindle being in direct communication with the train of gear is held from rotating by the same and can only move when the escapement I is allowed to vibrate. For

the purpose of preventing this escapement from vibration we provide a bolt J which moves longitudinally in the groove K, in the bottom of casing A, which bolt projects outward therefrom so as to be readily adjusted. Projecting from this bolt is a stop L, which is adapted to engage the escapement lever, as shown, and thus hold it from vibrating.

The dasher being placed within the churn and everything being ready the bolt is withdrawn, thereby releasing the escapement and permitting it to vibrate and set in motion the gearing and the dasher is thereby rotated. The movement of the latter may be continued as long as desired and may be readily stopped by pushing inward the bolt which again throws the lever to one side and holds it in permanent engagement with the gearing.

A portion of the top of the casing together with a portion of its side are hinged as shown at M, so as to swing outward and expose the gearing and other parts, so that they may be readily cleaned or repaired. The lower edge of this swinging side is cut upward as shown at M' and through this cut out portion extends the bolt for regulating the escapement.

The end of the swinging portion is provided with a hasp, which fits over a staple secured to the stationary casing side, and by this means the stationary and swinging portions of the casing are hinged together.

The main spring is wound up by means of a key applied to its end through the top of the casing, as will be clearly understood.

A churning mechanism constructed as herein shown and described is very simple, comparatively cheap, and is self operating, as it requires no attention after having been set in motion until the desired work has been accomplished.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination of a casing adapted to serve as a cover for a churn body, the said casing consisting of transverse sections hinged together, a motor within the casing with a part in each section, whereby when the sections are separated each carries a part of the motor to permit ready access thereto, substantially as shown and described.

2. The combination of a motor, a casing
therefor adapted to serve as a cover for a
churn body, the said casing having a hori-
zontal partition to form a compartment for
5 the spring and a gearing containing compart-
ment, whereby a large spring when spread
can be used without interfering with the gear-
ing, substantially as specified.

In testimony whereof we affix our signatures
in presence of two witnesses.

JOHN KENT.
CHARLES RICE GLASS.

Witnesses:

T. W. HOUSTON,
WILL ROWE.