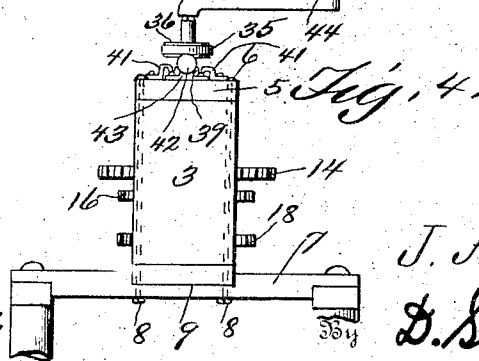
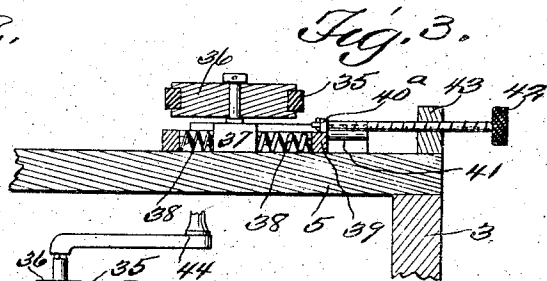
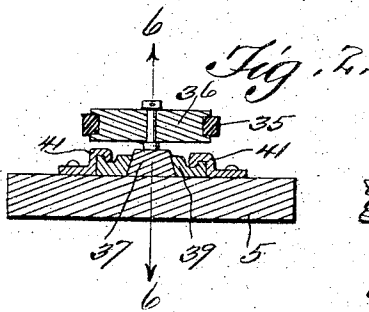


1,054,991



Francis J. Bowen.

L. Durm

J. A. Scott
D. Swift & Co.

Attorney

UNITED STATES PATENT OFFICE.

JASON A. SCOTT, OF ALTOONA, ALABAMA.

GOVERNOR MECHANISM FOR SPRING-MOTORS.

1,054,991.

Specification of Letters Patent.

Patented Mar. 4, 1913.

Application filed April 29, 1911. Serial No. 624,198.

To all whom it may concern:

Be it known that I, JASON A. SCOTT, a citizen of the United States, residing at Altoona, in the county of Etowah and State of Alabama, have invented a new and useful Governor Mechanism for Spring-Motors; and I 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 appertains to make and use the same.

This invention relates to a new and useful governor mechanism particularly adapted for use in connection with spring motors or the like.

As an object of the invention it is the aim to provide a governor mechanism comprising two friction wheels, one including a cushion band, and which is carried by a stub shaft of a yieldably mounted member, while the other is carried by the driving shaft (to which any suitable device to be operated, such as a churn dasher may be connected) of the spring motor. The yieldably mounted member is mounted and guided in a cross head block having means for adjusting the same, there being means also carried by the block for regulating the yielding action of said member.

In practical fields the invention may necessitate alterations, to which the patentee is entitled, provided the alterations fall within the scope of what is claimed.

The invention comprises further features and combination of parts, as hereinafter set forth, shown in the drawings and claimed.

In the drawing:—Figure 1 is a vertical sectional view of a spring motor, showing the improved governor mechanism as applied thereto. Fig. 2 is a sectional view on line 2—2 of Fig. 1. Fig. 3 is a sectional view on line 6—6 of Fig. 2. Fig. 4 is an end view of the spring motor, showing the improved governor mechanism in end elevation.

Referring to the drawings 1 designates a frame, which comprises the vertical members 2 and 3, which are connected by the longitudinal members 4 and 5, which are secured in place by the bolts 6. These bolts extend vertically through the members 2 and 3, and also through the transverse bars 7, and provided with nuts 8. The bars 7 are recessed as shown at 9, to receive the restricted ends of the lower longitudinal

member 4. The transverse bars 7 are provided for the purpose of engaging the churn receptacle, in order to firmly support the motor.

Journalled in suitable bearings of the members 4 and 5 are the shafts 10, 11, 12 and 13, on which are mounted the chain of gears 14, 15, 16, 17, 18 and 19. The gear 14 is loosely mounted on the shaft 13, and is provided on one face with a spring tensioned pawl 20, adapted to coöperate with a ratchet 21 which is secured on the shaft 13, in order to move therewith. A spring 22 is provided, one end of which is anchored to the shaft 13, as shown at 23, while the other end of the spring is secured at 24 by means of a slot and screw connection 25, to a cylinder 26, which is bolted by means of the bolt 27 to the member 5. When the shaft 13 is rotated to wind the spring, the ratchet thereon slips by the pawl on the gear 14, and when the spring has been sufficiently wound, the ratchet, the shaft 13 and the gear 14 rotate together, which transmits motion to the remaining gears, thus imparting motion to the shaft 10 which carries the dasher 28.

The dasher comprises a tubular rod 29, which is threaded to the shaft 10. To this tubular rod the dasher 28 is secured by means of a threaded member 30 and the nut 31. The member 30 is connected to the tubular rod as shown. The opposite wings of the dasher 28 are offset relatively with regard to one another, as shown in the drawings. The end portions of the wings are provided with apertures 32. A dasher of this character when operated with medium speed thoroughly agitates the cream.

On one end of the shaft 10 a friction wheel or disk 33 is provided having a fiber friction band 34, and with which the cushion band 35 of the wheel or disk 36 coöperates. The wheel 36 is journalled upon a stub shaft of a yieldably mounted member 37. This yieldably mounted member is movably and yieldably mounted as shown at 38 in a cross head block 39, there being suitable means 40 for regulating the yielding action of the means 38. The cross head block is mounted and guided between the guides 41 the same being adjustable by means of the screw 42, which is threaded in a suitable bearing 43 of the member 5. When this screw is rotated in one direction or the other, the fric-

tional contact between the two wheels or disks is increased or decreased, so as to regulate the driving action of the shaft 10.

5 A suitable handle 44 is provided for winding the spring, by connecting the same to the shaft 13, as shown in the drawings, and after the spring has been sufficiently wound the crank handle may be removed, thus allowing the spring to unwind, so as to
10 impart action to the chain of gears and thence to the dasher

The invention having been set forth, what is claimed as new and useful is:—

15 In combination, a driven shaft, a frame in bearings of which said shaft is journaled, a pair of overhanging guides secured to said frame, a cross head block slidable on said frame and provided with grooves to receive the overhanging guide, the cross head block
20 having an elongated slot therein with under

cut longitudinal walls, a member dove-tailed between said walls, resilient means acting between the ends of said slot and said member, a friction roller revoluble with said driven shaft, a wheel revolubly carried by said member and provided with a friction band to frictionally contact with said roller, said resilient means constituting means to hold the wheel yieldably against said roller, and a device threaded in said frame and swiveled to said cross head block for adjusting said block. 21 30

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JASON A. SCOTT.

Witnesses:

TOM B. WAGNON,
R. W. SAYE.