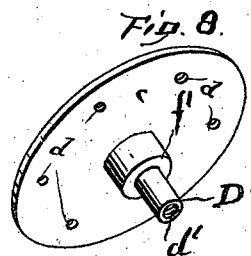
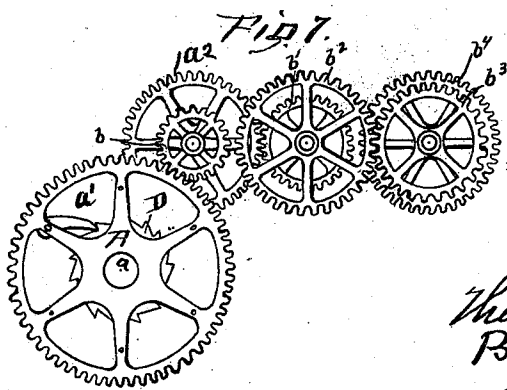
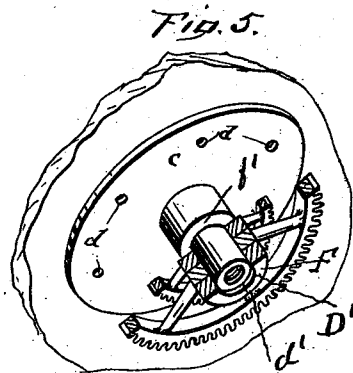
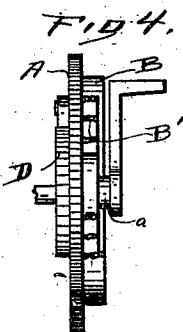
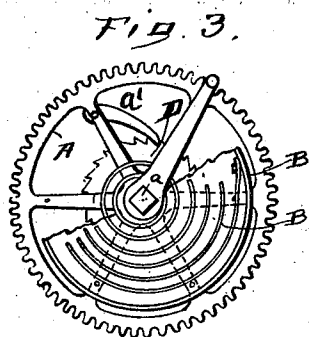
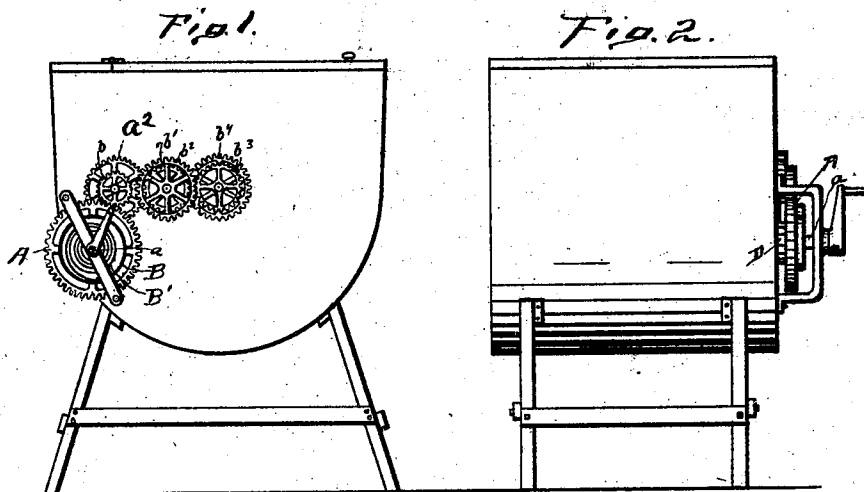


(No Model.)

T. L. EVERHART.
SPRING MOTOR.

No. 502,288.

Patented Aug. 1, 1893.



WITNESSES:
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UNITED STATES PATENT OFFICE.

THEODORE L. EVERHART, OF BAKERSVILLE, OHIO.

SPRING-MOTOR.

SPECIFICATION forming part of Letters Patent No. 502,288, dated August 1, 1893.

Application filed May 4, 1893. Serial No. 472,970. (No model.)

To all whom it may concern:

Be it known that I, THEODORE L. EVERHART, a citizen of the United States, residing at Bakersville, in the county of Coshocton and State of Ohio, have invented certain new and useful Improvements in Spring-Motors; and I do declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon, in which—

Figure 1, is an end view showing my motor applied to a rotary churn. Fig. 2, is a side view showing the motor applied to a churn. Fig. 3, is a detached view of the master wheel and its different parts properly arranged. Fig. 4, is an edge view of the master wheel and its different parts, showing the winding handle attached. Fig. 5, is a detached view of one of the posts or studs, showing a portion of a wheel and pinion properly located thereon, and illustrating the friction collar. Fig. 6, is a detached view of one of the tension screws. Fig. 7, is an enlarged view showing the position of the different wheels properly arranged to form a train of gear wheels showing the spring and its barrel removed from the master wheel. Fig. 8, is a detached view of one of the posts or studs.

The present invention has relation to spring motors, and it consists in the different parts and combination of parts hereinafter described and particularly pointed out in the claim.

Similar letters of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings A represents the master wheel which is loosely mounted upon the winding shaft *a*, which winding shaft is properly journaled in the end of the churn; or other suitable frame work, and its outer end provided with a suitable bar for journaling and holding the outer end of the winding shaft. To one side of the master wheel A, is located the spring barrel B, which spring barrel contains the power spring B', one end of said powerspring being securely attached in the ordinary manner to the winding shaft, and its opposite end attached to the barrel B. Upon the winding shaft *a*, is se-

curally attached the ratchet D, which ratchet is provided with the ordinary detent or dog *a'*, and is attached in the ordinary manner. 55

The master wheel A, meshes with the pinion *b*, and communicates rotary motion to the pinion *b'*, by means of the wheel *a''*, and the wheel *b''*, the wheel *b''*, communicating rotary motion to the pinions *b''*, and the wheel *b''*. 60 In this instance the wheel *b''*, is shown provided with cogs which are for the purpose of meshing with a pinion located upon a shaft, and when applied to a churn, as in this instance, the shaft referred to may be an ordinary churn dasher shaft. In the event belt gearing should be employed, it will be understood that the wheel *b''*, should be a belt wheel in place of the cog wheel herein shown. The studs D', are each provided with the collar or flange *c*, which collar or flange is provided with the apertures *d*, which apertures are for the purpose of receiving screws to securely attach said collars and studs to the end of the churn in this instance, or to a frame properly provided. Upon each of the studs D', is loosely mounted the train wheels and pinions, which train wheels and pinions being located substantially as shown in Figs. 1 and 7. The outer end of the studs are provided with screw threaded apertures such as *d'*, which screw threaded apertures are for the purpose of receiving the tension screws E said tension screws being provided with a flange such as *e*. 80

Upon the outer ends of the studs D, are located the collars F which collars are formed of such a thickness that their outer faces will extend a short distance past and beyond the ends of the studs D', and are so formed for the purpose hereinafter described. For the purpose of rotating the screws E, their outer ends are provided with the rings *f* or their equivalents, which are for the purpose of rotating the screws E. The object and purpose of rotating the screws E, and their flanges *e*, are to provide a means for pressing the collars F, against the faces of the train wheels or pinions, and thereby binding said wheels and pinions between the collars F, and the shoulders *f'*. The collars F, together with the screws E, are provided upon each of the studs D', and also the screw threaded apertures *d'*. 85 90 95 100

The object and purpose of providing the collars F, and the screws E, upon each of the

studs D', are to provide a means for governing the motor proper.

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

5 The combination of the master wheel A loosely mounted upon a winding shaft, a powerspring located within a barrel, a ratchet and detent, a dog, a train of gear wheels, the
10 studs D' provided with the attaching flanges c, having apertures d, the screw threaded apertures d' formed in the outer ends of the

studs D', the collars F located upon the ends of the studs D', screws E provided with the flanges e, all arranged substantially as described and for the purpose specified. 15

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

THEODORE L. EVERHART.

Witnesses:

LEANDER SWIGERT,
HENRY LIESER.