

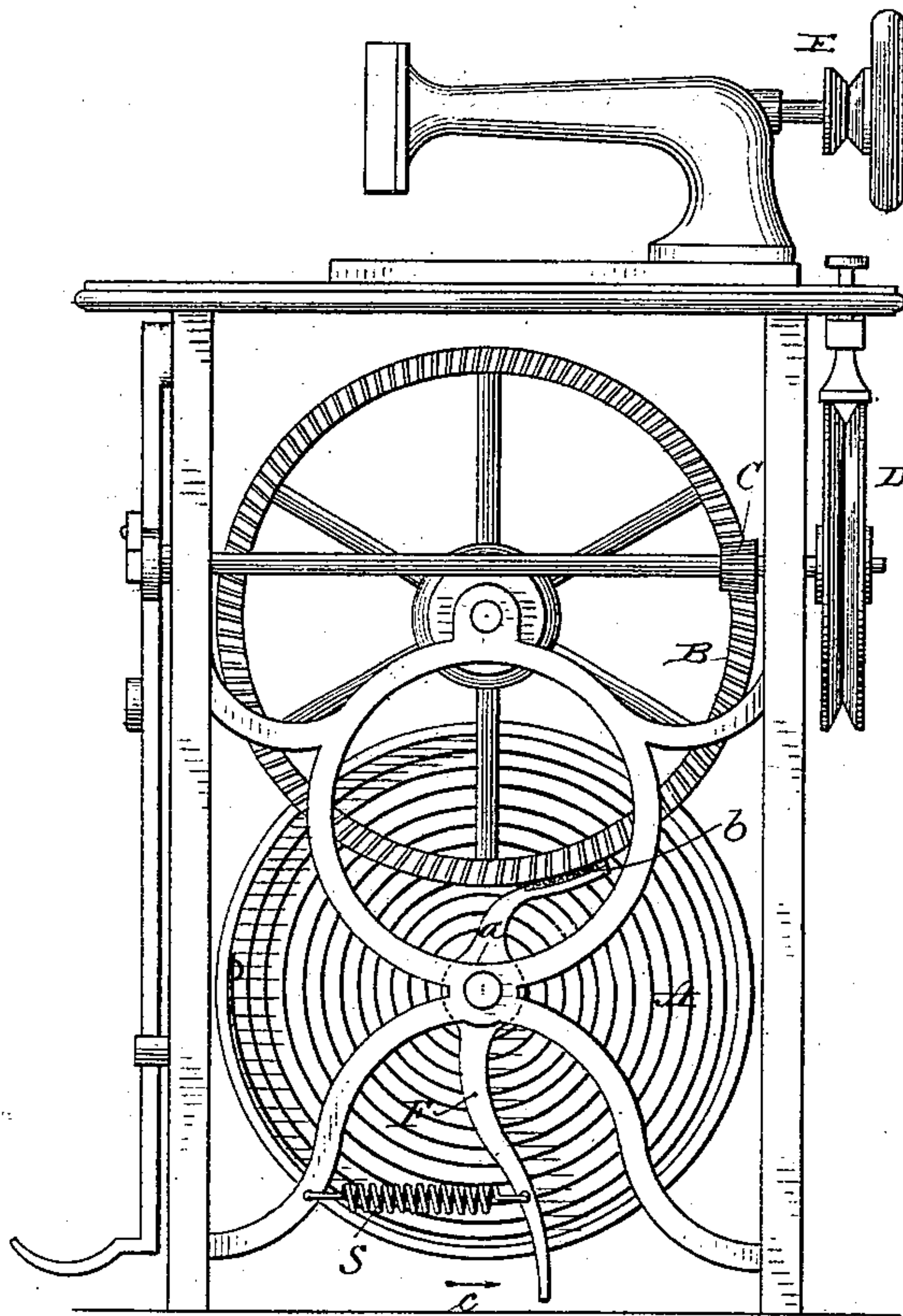
(No Model.)

C. L. KIDDER.  
SPRING MOTOR.

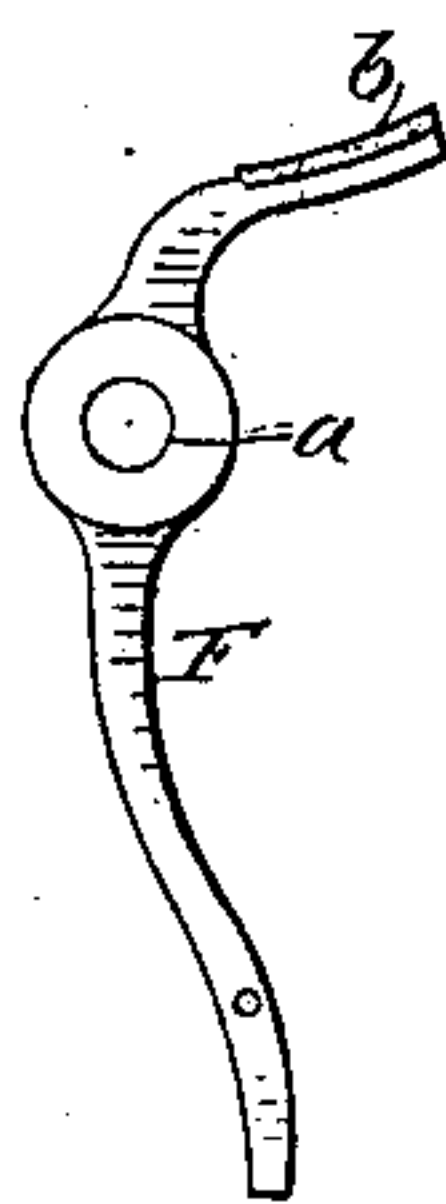
No. 309,961.

Patented Dec. 30, 1884.

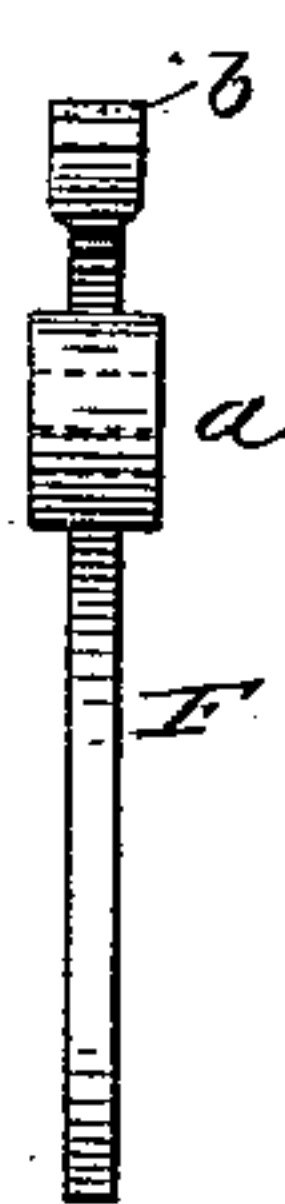
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



WITNESSES:

*Ernest Abshagen*  
*Robt. H. Marshall*

INVENTOR

*Charles L. Kidder*

BY

*J. A. Henderson*  
his ATTORNEY

# UNITED STATES PATENT OFFICE.

CHARLES L. KIDDER, OF NEW BRUNSWICK, NEW JERSEY, ASSIGNOR TO  
THE MOTOR SEWING MACHINE COMPANY, OF NEW YORK, N. Y.

## SPRING-MOTOR.

SPECIFICATION forming part of Letters Patent No. 309,961, dated December 30, 1884.

Application filed August 27, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES L. KIDDER, a citizen of the United States, residing at New Brunswick, in the county of Middlesex and State of New Jersey, have invented a certain new and useful Improvement in Spring-Motors, of which the following is a clear and exact description, reference being had to the accompanying drawings, and to the letters of reference marked therein, which form part of this specification.

My invention is to be applied to and to be used in connection with my spring-motor, which latter forms the subject-matter of two separate patents which have been allowed to me under date of April 23, 1884, Serial No. 120,715, and August 5, 1884, Serial No. 130,221.

Referring to the drawings, A represents the spring which gives the propelling power to the mechanism. B is a large crown-wheel, which forms a part thereof. The power is in this instance transmitted to a sewing-machine by means of a pinion, C, engaging the said crown-wheel, and two pulleys, D and E.

In order to regulate the speed of the mechanism, I apply a pendent brake, F, to the underside of the crown-wheel B. This brake F is pivoted at *a*, being slipped over the main shaft of the spring-motor. A washer, *b*, of rubber, leather, or other suitable material is fastened to the face of the brake. The lower part of the lever or brake F extends downwardly and may be actuated upon by means of the right foot of the operator as soon as any pushing or pressing motion is applied to the

end of the same in the direction, as indicated by the arrow in the drawings. A retracting-spring, S, removes the pressure of the brake from the edge of the crown-wheel B, as soon as the foot of the operator releases its hold of the end of the lever or brake F.

I am aware that brakes have heretofore been applied to spring-motors for the purpose herein alluded to, but those are all constructed in the manner of a treadle, necessitating the operator to bear down upon the same, whereby the brake may be operated by means of compound levers.

It is obvious that my appliance performs the work in an easier way, as hardly any strain is thereby given to the operator.

Figure 1 is a front view of the entire machine. Fig. 2 is a front view of the brake, removed from the machine. Fig. 3 is an edge view of the same.

Having thus set forth my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

In a spring-motor, a brake, F, for controlling the speed of the mechanism while running down, so constructed as to swing freely upon the main shaft *a*, and act upon the periphery of the driving-wheel B when pressed laterally toward the right-hand side of the machine by the foot of the operator, and being drawn away from contact with said wheel by a spiral spring when the pressure of the foot is removed.

CHAS. L. KIDDER.

Witnesses:

JAS. HENDERSON,  
ERNEST ABSHAGEN.