

No. 712,063.

Patented Oct. 28, 1902.

C. D. HASKINS.
ANTICREEPING DEVICE FOR ELECTRIC METERS.

(Application filed Mar. 30, 1901.)

(No Model.)

Fig. 1.

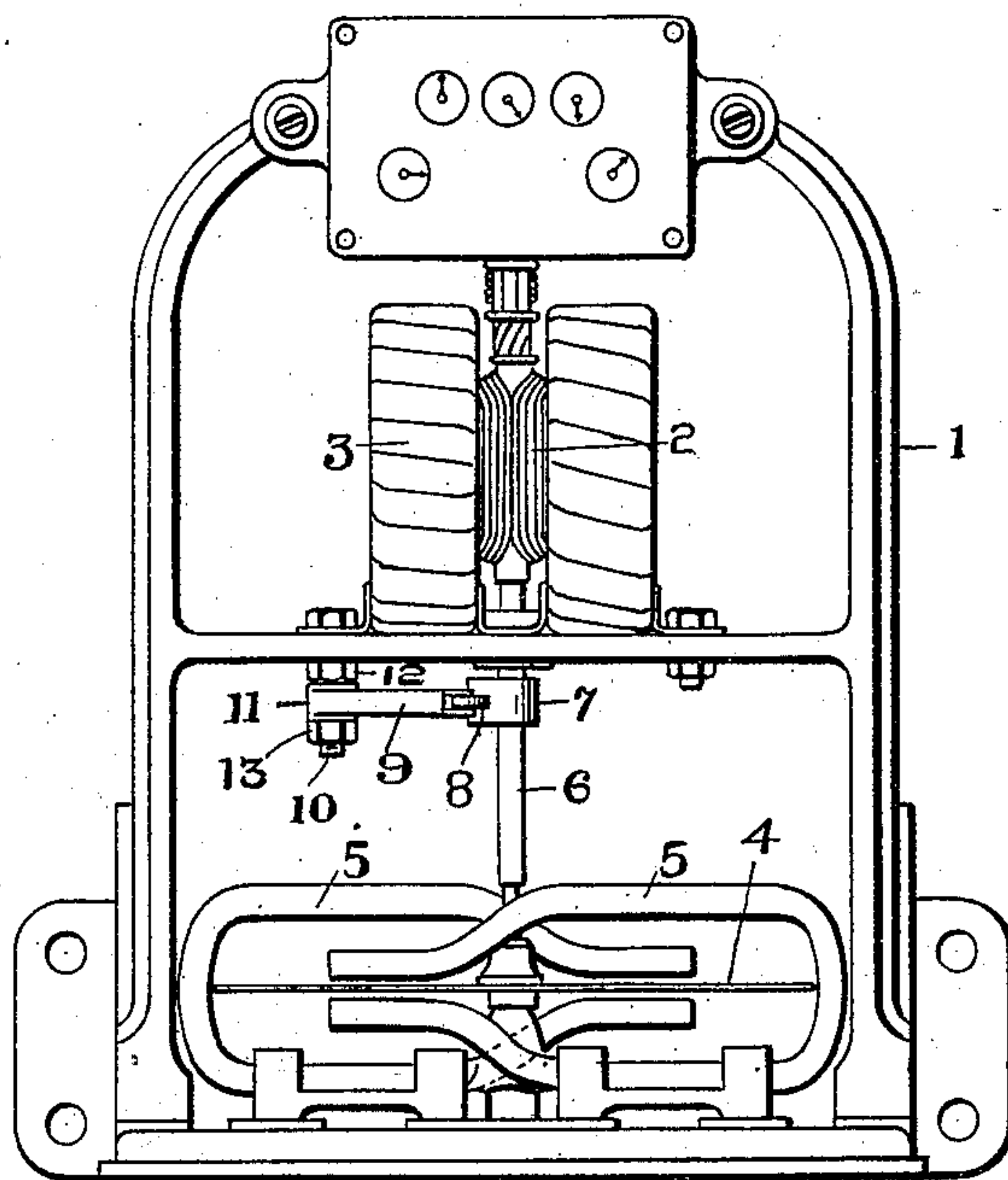
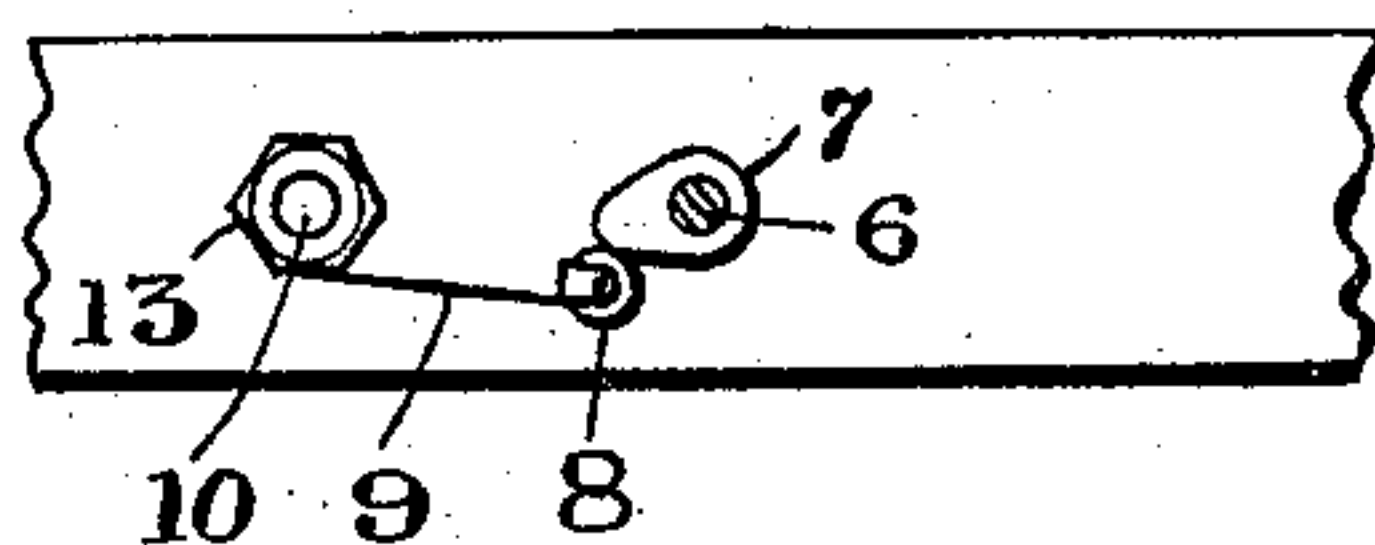


Fig. 2.



Witnesses;

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UNITED STATES PATENT OFFICE.

CARYL D. HASKINS, OF SCHENECTADY, NEW YORK, ASSIGNOR TO GENERAL ELECTRIC COMPANY, A CORPORATION OF NEW YORK.

ANTICREEPING DEVICE FOR ELECTRIC METERS.

SPECIFICATION forming part of Letters Patent No. 712,063, dated October 28, 1902.

Application filed March 30, 1901. Serial No. 53,605. (No model.)

To all whom it may concern:

Be it known that I, CARYL D. HASKINS, a citizen of the United States, residing at Schenectady, county of Schenectady, State of New York, have invented certain new and useful Improvements in Anticreeping Devices for Electric Meters, (Case No. 1,957,) of which the following is a specification.

My present invention relates to means for preventing the creeping of electric meters or similar devices, due to vibration or other causes.

In the specific embodiment hereinafter described as illustrating one form of my invention a cam is mounted upon the meter-shaft, this cam coöperating with a spring-mounted roller carried by some stationary part of the meter. When, due to rotation of the meter, the roller rides up one side of the cam, it produces a retarding effect upon the rotating member of the meter, while as it rolls down the succeeding portion of the cam-surface it causes an accelerating effect practically equal but opposite in character to the previous retarding effect. The number of revolutions of the meter is therefore not perceptibly affected by the presence of the cam and its coöperating roller, which together constitute an anticreeping device. The parts are adjusted, however, so that the retarding effect is sufficient to overcome any tendency to creeping of the meter which may exist.

For a better understanding of my invention reference is to be had to the following description, taken in connection with the accompanying drawings. As to its scope attention is directed more particularly to the claims appended hereto.

In the drawings, Figure 1 represents a meter to which is applied an anticreeping device made in accordance with my invention; while Fig. 2 is a view, partly in section, such as would be presented by looking upward at the anticreeping device shown in Fig. 1.

In Fig. 1 the anticreeping device is shown as applied to a meter of a type now in common use, and therefore requiring no special description. The frame of the meter is indicated at 1, the armature and field-magnet coils at 2 and 3, respectively, and the damping-disk and damping-magnets at 4 and 5, re-

spectively. The armature-shaft 6 has mounted thereon a cam 7, an end view of which is shown in Fig. 2. A small antifriction-roller 8, mounted in a spring-arm 9, coöperates with this cam. The arm 9 is shown as carried by an extension of the bolt 10, which is used for securing in place one of the field-coils 3. This spring-arm 9 is fastened to a perforated disk 11, which is clamped against the securing-nut 12 by means of an additional clamping-nut 13. By adjusting the arm 9 angularly about its support, so as to bring the antifriction-roller 6 inward or outward from the shaft carrying the cam 7, the amount of restraining force exerted by the spring-arm 9 and its roller 8 as the cam comes into engagement with the roller may be varied to suit the particular conditions required. Ordinarily the roller should be adjusted toward the cam only so much as is necessary to stop any tendency toward creeping of the armature-shaft. When load comes on the meter, the cam-surface acting on the antifriction-roller 8 deflects the spring 9, thereby storing up potential energy. When the roller passes over the portion of the cam having the greatest radius, the tension of the spring acts to accelerate the armature-shaft, thereby restoring the energy previously stored.

Since various modifications may be made in the embodiment of my invention as herein set forth without departing from the spirit thereof, I do not wish to be limited to the precise details shown.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination with a meter, of a device adapted to be held in yielding engagement with the rotating member of said meter and to intermittently restrain the rotation of the same.

2. In an electric meter, the combination with the rotating member thereof, of mechanical means for preventing creeping of said member arranged to alternately retard and accelerate the rotating member when the meter is in operation.

3. In an electric meter, the combination of relatively movable members, and an anticreeping device consisting of coöperating parts arranged to prevent creeping and to

alternately retard and accelerate the meter when the latter is in normal operation.

4. In an electric meter, the combination of a cam carried by the shaft of the meter, and
5 a coöperating roller supported by a stationary part of the meter.

5. In an electric meter, the combination of a cam carried by the shaft of the meter, and

a coöperating spring-mounted roller supported by a stationary part of the meter. 10

In witness whereof I have hereunto set my hand this 29th day of March, 1901.

CARYL D. HASKINS.

Witnesses:

BENJAMIN B. HULL,

EDWARD WILLIAMS, Jr.