

A. ROFF.
Carriage Spring.

No. 79,778.

Patented July 7, 1868.

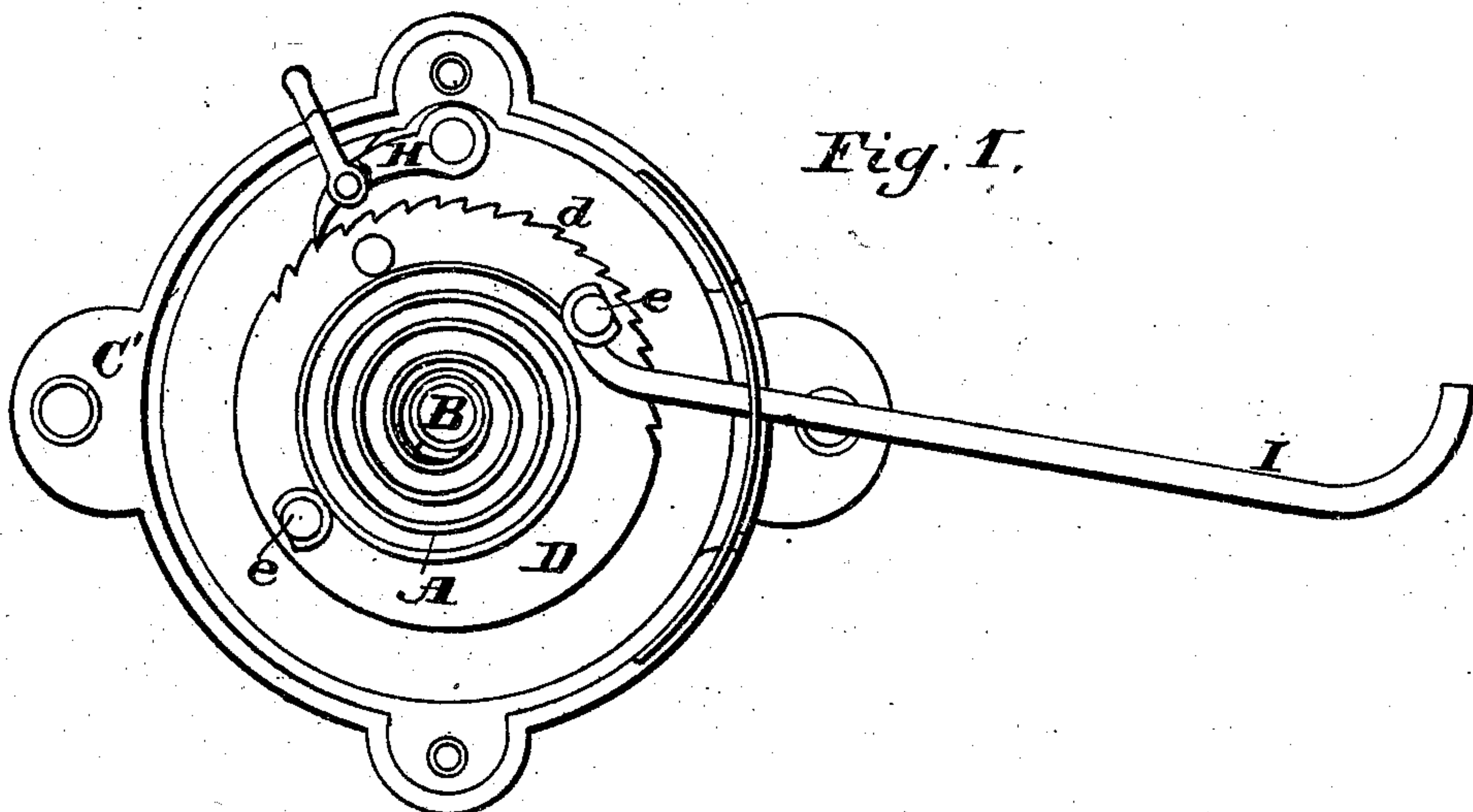


Fig. 1.

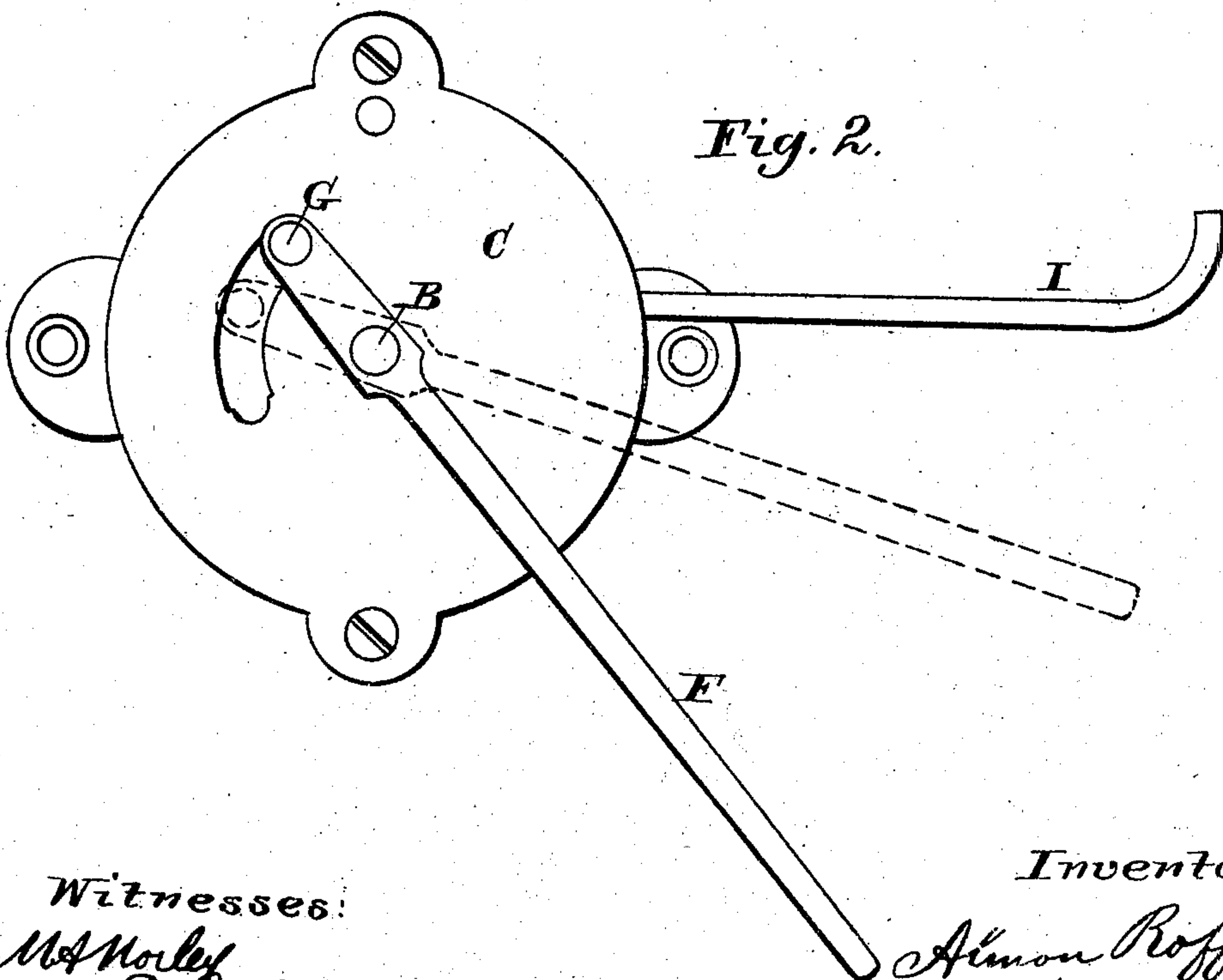


Fig. 2.

Witnesses:
M. H. Morley
A. M. Stout & Co.

Inventor:
Almon Roff
Daniel Breed & Co.

United States Patent Office.

ALMON ROFF, OF SOUTHPORT, CONNECTICUT.

Letters Patent No. 79,778, dated July 7, 1868.

IMPROVEMENT IN ADJUSTABLE SPRINGS.

The Schedule referred to in these Letters Patent and making part of the same.

TO WHOM IT MAY CONCERN:

Be it known that I, ALMON ROFF, of Southport, in the county of Fairfield, and State of Connecticut, have invented an Adjustable Spring; and I do hereby declare that the following is a full and exact description thereof, reference being had to the annexed drawings making a part of this specification, and to the letters of reference marked thereon.

My invention consists in an adjustable spring, where a variation of the power or resistance of the spring is often desired.

My adjustable spring may be constructed as follows:

A coiled spring, A, may be attached to a central pin, B, held by two disks or plates of metal C C'. Two other plates, D, are attached to the coiled spring, and provided with a ratchet-edge, d, and connected by bolts, e, so as to revolve with the coiled spring upon the central pin or pivot B.

Whenever it is desired to increase the power or tension of the spring, the removable lever F is placed upon the central pin B and the bolt G, as seen in fig. 2, and then moved through a partial revolution, as shown in red lines. The ratchet is caught by the dog H, fig. 1, and the spring thus held, under greater or less tension, as desired.

The plate C' may be attached by screws at its edge, or otherwise, as may be found most convenient, and the weight thrown upon the arm I. When used upon a carriage, the spring may be fastened directly to the axle as a central attachment. In case a heavy person is to ride with a very light person or child, one of the springs may readily be brought under high tension, so as to balance the carriage; and the same can be done to balance a spring-bedstead.

This adjustable spring may be applied to a great variety of purposes; and I propose to vary the construction somewhat, in order to adapt the same to the purpose required.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

The adjustable spring A, provided with a ratchet and dog, for increasing or diminishing its tension, substantially in the manner and for the purpose set forth.

ALMON ROFF.

Witnesses:

DANIEL BREED,
EDM. F. BROWN.