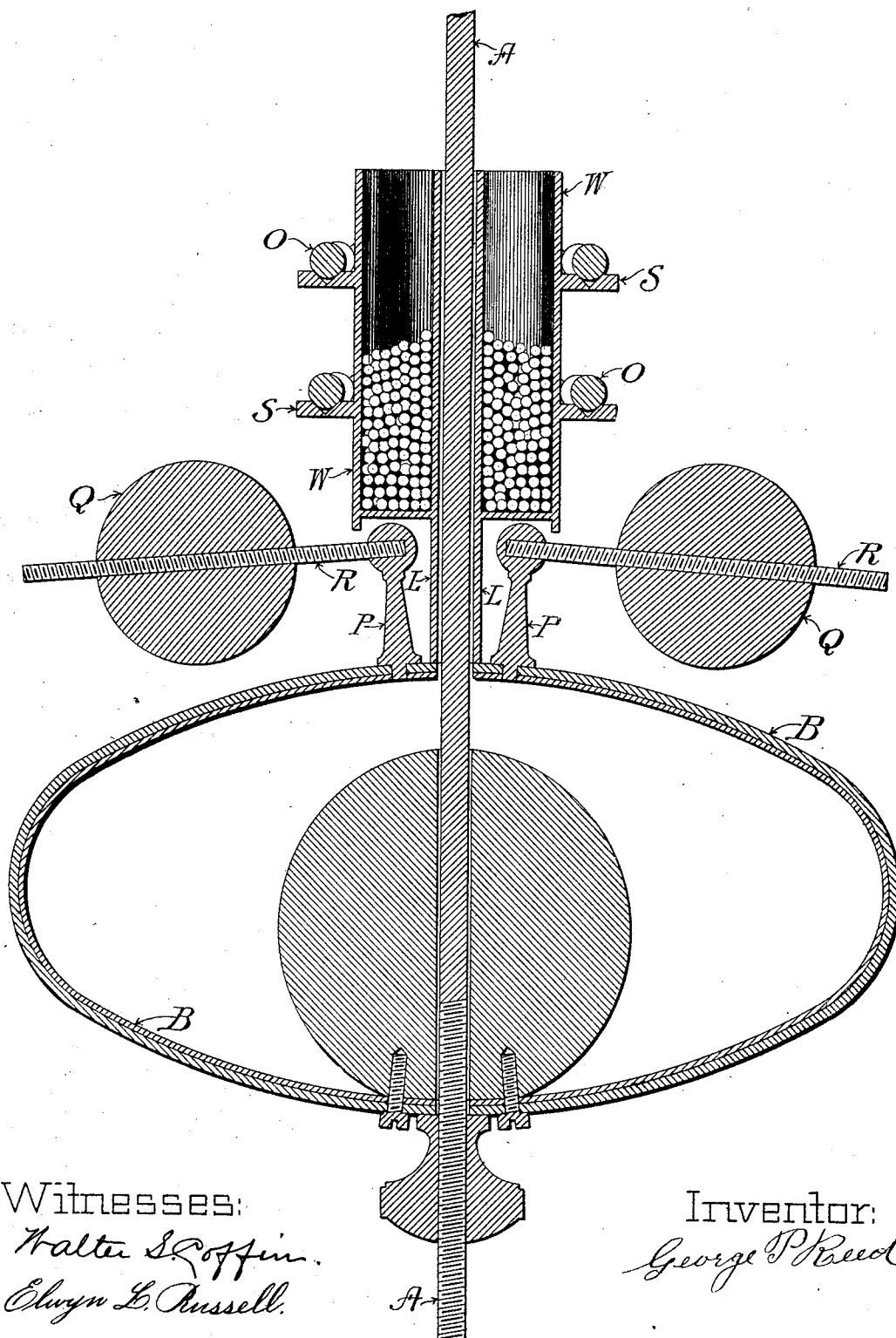


(No Model.)

G. P. REED.
CLOCK PENDULUM.

No. 415,735.

Patented Nov. 26, 1889.



UNITED STATES PATENT OFFICE.

GEORGE P. REED, OF MELROSE, MASSACHUSETTS.

CLOCK-PENDULUM.

SPECIFICATION forming part of Letters Patent No. 415,735, dated November 26, 1889.

Application filed May 29, 1889. Serial No. 312,560. (No model.)

To all whom it may concern:

Be it known that I, GEORGE P. REED, of Melrose, in the county of Middlesex, State of Massachusetts, have invented additional new and useful Improvements in Clock-Pendulums for the purpose of facilitating and obtaining a more accurate adjustment to the different degrees of temperature, of which the following is a description sufficiently full, clear, and exact to enable any one skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which is shown a sectional view of my invention, the pendulum-rod A being represented broken off.

W represents a variable and adjustable weight, consisting of a cylindrical or other form of cup, encircling the pendulum-rod A, to be filled with gunshot or other movable material, with or without its lower portion L made smaller and elongated, if requisite for convenience of space, as shown in view, with a socket or hole in the center of proper size to move freely up or down upon the rod.

The laminar ring or curve B is fitted, where required, near the free-acting ends with posts P, fixed to said ring or curve B, with screw-rods R connecting same, as shown, upon which move, by turning, the adjustable balls or weights Q. The cup or weight W rests upon and is supported by the laminar ring or curve B as the latter is affected by the different degrees of temperature.

S represents a shelf or shelves running

around and attached to the cup or weight W, to hold bullets, as shown in drawing, or circular disks or other removable weights.

To obtain a correct adjustment to heat or cold, it is only necessary to take from or add to the weight either inside or outside the cup, or turn the weights Q upon the screw-rods R, using one or all these devices for the purpose.

The cup or weight W may be constructed to be loaded wholly by the movable shot or other material inside or outside, or with both, without difference in the invention.

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

1. The variable and adjustable cup or weight W, in combination with the laminar ring or curve B and pendulum-rod A.

2. The variable and adjustable cup or weight W, with the socketed shelf or shelves S, in combination with the laminar ring or curve B and pendulum-rod A.

3. The adjusting balls or weights Q, screw-rods R, and posts P, in combination with the laminar ring or curve B and pendulum-rod A.

4. The variable and adjustable cup or weight W, with socketed shelf or shelves S, in combination with the adjusting balls or weights Q, screw-rod R, and posts P, the laminar ring or curve B, and pendulum-rod A, substantially as described.

GEORGE P. REED.

Witnesses:

EDWARD A. HUNTING,
JAMES LONGLEY.