H. CAMP.
Clock-Pendulum.

No. 221,213. **Patented Nov. 4, 1879.**

Fig. 1

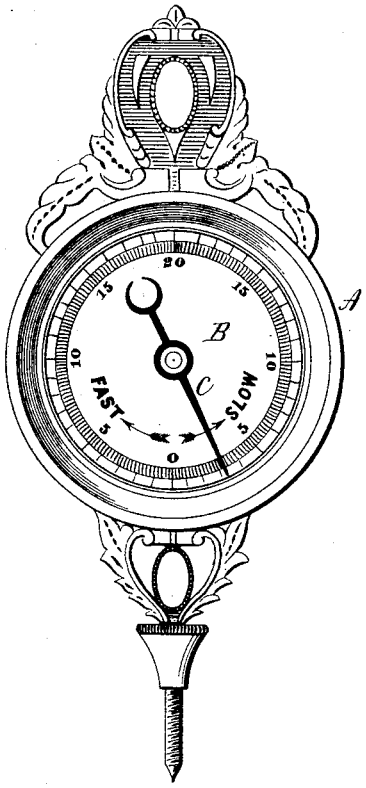
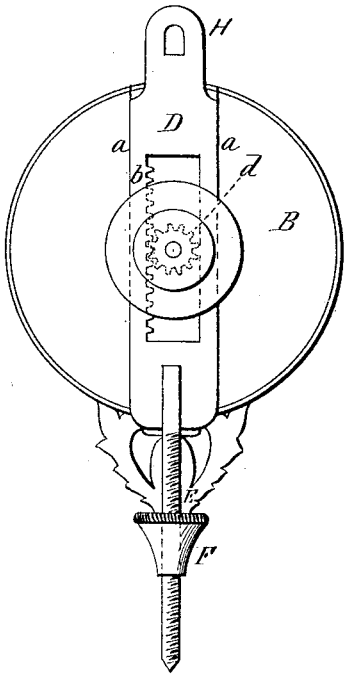


Fig. 2



Witnesses.
J. N. Chumway
Jos. C. Earle

Hiram Camp Inventor
By Atty.
Wm. C. Earle

UNITED STATES PATENT OFFICE.

HIRAM CAMP, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO THE NEW HAVEN CLOCK COMPANY, OF SAME PLACE.

IMPROVEMENT IN CLOCK-PENDULUMS.

Specification forming part of Letters Patent No. **221,213**, dated November 4, 1879; application filed October 2, 1879.

To all whom it may concern:

Be it known that I, HIRAM CAMP, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Clock-Pendulums; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a front view; Fig. 2, a rear view.

This invention relates to an improvement in that part of a clock-pendulum commonly called the "bob."

In the usual construction the bob is placed upon the rod and adjusted by means of a nut below the pendulum, so that by turning the nut either to the right or left the bob will be raised or lowered accordingly. While the adjustment is of the simplest possible character, comparatively few persons know which way to turn the nut to produce the desired result, or to what extent to turn the nut.

The object of this invention is to combine, with the common adjusting device, an indicator which will show not only which way the nut is to be turned, but will also indicate to what extent it is turned; and the invention consists in the construction, as hereinafter described, and particularly recited in the claim.

A represents the body of the bob, which may be of any desirable shape or design. On the face is a dial, B, graduated or divided so as to show regular divisions, and on a shaft in the center is a pointer, C, arranged to be turned around the dial. On the dial, at one side of the zero-point, is the word "Fast," and on the opposite the word "Slow," or other marks, indicating that if the pointer be turned in one direction the result will be to cause the clock to run faster, and in the opposite direction to run slower.

On the back of the pendulum is a vertical slide, D, arranged in suitable guides *a*, and provided with a toothed rack, *b*, working in a pinion, *d*, on the pointer-shaft. The lower end of the slide D is provided with a threaded spindle, E, and corresponding nut F, substantially as pendulums of common construction, and so that the bob will rest upon the nut, as shown. The upper end of the slide is provided with a loop, H, or other means for attachment to the rod.

By turning the nut the bob is accordingly raised or lowered, and in such movement the pinion engages the rack *b*, and so that it is rotated and accordingly turns the pointer C. This movement of the pointer not only indicates the result which will follow the movement of the bob, but will show what was the extent of that movement, so that subsequent adjustments may be governed by the first movement—that is to say, the first adjustment, being a certain number of points, produces a result which is determined by the subsequent running of the clock, and if the proper adjustment is not attained, the first result being known, the second adjustment is easily proportioned to the first.

I do not broadly claim a dial and indicator on a pendulum-bob; but

What I do claim is—

The combination of the bob with dial and pointer arranged thereon with vertical slide engaging with a pinion on the pointer-shaft and an adjusting-nut on which the bob rests, substantially as and for the purpose described.

HIRAM CAMP.

Witnesses:

E. E. KIMBERLY,

H. H. CHAMBERLAIN.