

(Model.)

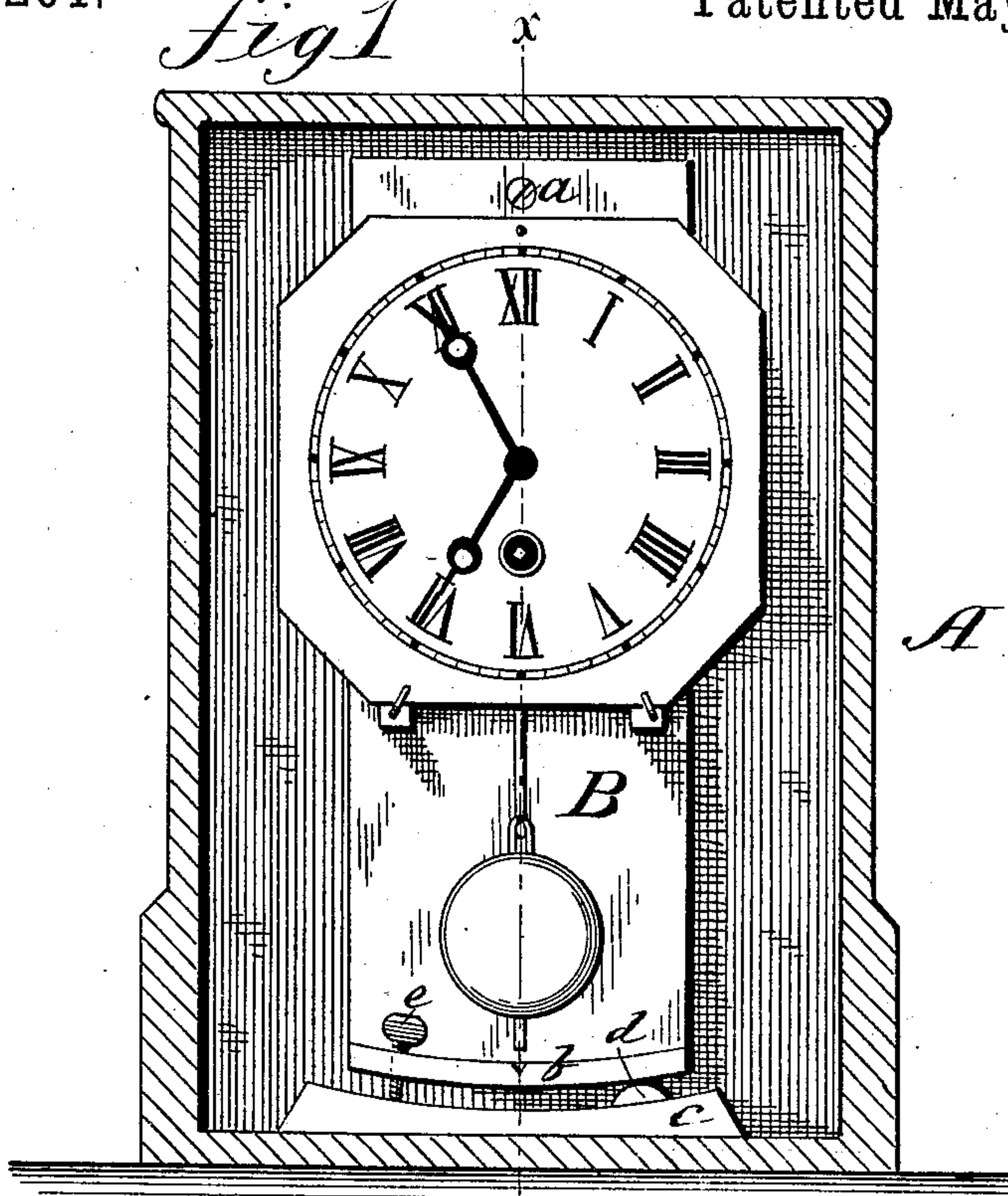
R. B. FREEMAN.

LEVELING DEVICE FOR CLOCKS.

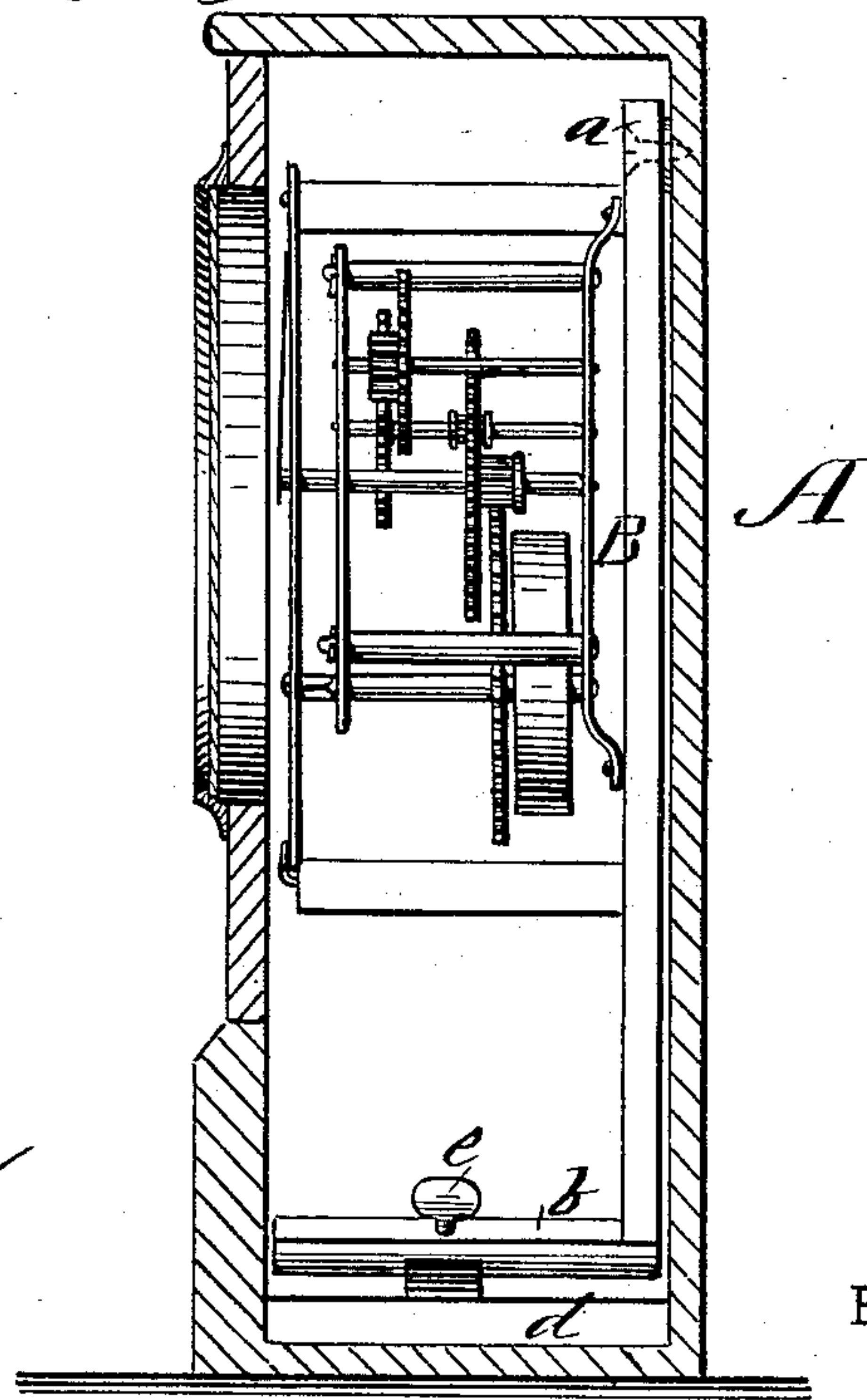
No. 277,261.

Patented May 8, 1883.

*fig 1*



*fig 2*



WITNESSES:

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BY

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# UNITED STATES PATENT OFFICE.

RALZA B. FREEMAN, OF BLOSSBURG, PENNSYLVANIA.

## LEVELING DEVICE FOR CLOCKS.

SPECIFICATION forming part of Letters Patent No. 277,261, dated May 8, 1883.

Application filed December 14, 1882. (Model.)

*To all whom it may concern:*

Be it known that I, RALZA B. FREEMAN, of Blossburg, in the county of Tioga and State of Pennsylvania, have invented a new and Improved Leveling Device for Clocks, of which the following is a full, clear, and exact description.

The object of my invention is to provide for the ready and convenient leveling of pendulum-clocks, so that they may be arranged for running correctly when placed on mantels or other supports.

The invention consists in an adjustable back carrying the works and other parts, as herein-  
after described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a front elevation of a clock of my improved construction with the front or door of the case removed. Fig. 2 is a vertical section on line *x x*, Fig. 1.

The case A may be of any ordinary or suitable construction. Within the case is a back board or plate, B, on which are fastened all the movements, dials, bells, calendars, &c. The back board or plate, B, is hung by a pivot, *a*, at its upper end, that allows a movement, so that the back may be oscillated. At its lower end it is provided with a flange, *b*, extending above a curved piece or block, *c*, that is fixed upon the bottom of the case A. On the block *c* is a pad, *d*, of rubber or other suitable material, with which the flange *b* comes in contact, so as to prevent any accidental movement of the movable back. In the flange *b* is a set-screw, *e*, by which the back is to be clamped in place when set up. Any suitable device—such

as a cam or catch—may be used in place of the screw. The board B or its flange will be provided with a mark for indicating the line upon which the pendulum should hang in order that the clock may run correctly, and when the clock-case is placed upon a mantel or other support the back B can readily be adjusted in any direction until the pendulum is brought to its proper place.

This device is simple and does not add materially to the expense of the clock, while it provides for the correct adjustment of the pendulum by any person.

I am aware that a balance-lever has been suspended concentrically with an escapement-wheel, so that however much the clock may be tilted the pendulum will automatically adjust itself, so as to remain plumb and beat uniformly with the motion of the escapement; but

What I do claim as new and of my invention is—

1. The swinging clock-work supporter B, having the flange *b* at its lower end, in combination with a screw, *e*, and fixed piece *c* on the clock-case, whereby the clock-work back B may be clamped in its perpendicular position after the case has been placed where it is intended to remain, as described.

2. In clocks, the combination of the friction-pad *d* with the adjustable back B, substantially as and for the purpose set forth.

RALZA B. FREEMAN.

Witnesses:

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