

A. E. HOTCHKISS.

TOY CLOCK.

No. 184,711.

Patented Nov. 28, 1876.

Fig. 1.

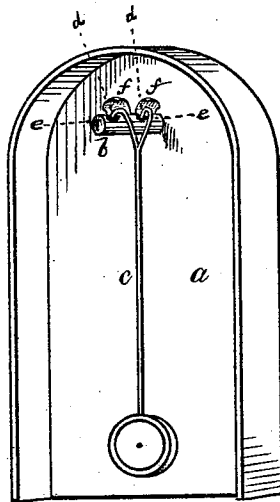
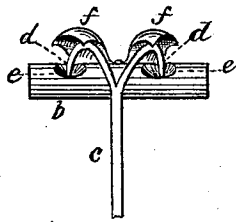


Fig. 2.



Witnesses

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ARTHUR E. HOTCHKISS, OF CHESHIRE, CONNECTICUT.

IMPROVEMENT IN TOY CLOCKS.

Specification forming part of Letters Patent No. 184,711, dated November 28, 1876; application filed August 25, 1876.

To all whom it may concern:

Be it known that I, ARTHUR E. HOTCHKISS, of Cheshire, in the county of New Haven and State of Connecticut, have invented certain Improvements in Toys, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

The invention relates to an improved device for constructing a toy clock.

I am aware that toy clocks have been produced with movements much simpler and cheaper than the ordinary clock-movements; but even these have been somewhat complicated and expensive, and generally liable to get out of order. To overcome these objections, and to provide a cheap, simple, and effective device for the purpose, has been the object of my invention, the construction of which I will now attempt to explain.

In the drawings, Figure I is a perspective. Fig. II is a detached view.

a is a clock frame or case. *b* is a bar at right angles to frame *a*. *c* is a pendulum suspended from the bar *b* by means of two points, *d d*, which are turned downward and placed, respectively, within the cavities *e e* on the bar *b*. *ff* are small disks or coverings over the top of the pendulum *c*, to prevent the points *d d* from becoming displaced when the device is being handled. I have shown these more distinctly in Fig. II.

It will be seen that the points *d d* form a common center of suspension of the pendulum *c*; also, that the pendulum, being thus suspended, is anti-friction, or nearly so, and

when set in motion by slightly tipping device to the right or left, the pendulum will continue to vibrate sufficiently long to serve the object of my invention.

It is obvious that the pendulum might be suspended by a single point in place of two points; but I use two points in order to cause the pendulum, when the device is in operation, to vibrate in the desired directions—*i. e.*, parallel with the front of the clock. To introduce more points of bearing would be only an equivalent to the above construction.

It is obvious, also, that a straight edge, shaped like a **V**, could be employed, together with a corresponding groove, in the place of the points *d d* and cavities *e e*; or their equivalent might be used to give the desired directions to the vibrations of the pendulum when in motion; but I have fixed upon the above as the best construction.

I do not claim, broadly, an anti-friction pendulum; but,

Having described my invention, what I claim is—

1. The toy-clock case or frame *a*, having bar *b* and cavities *e e*, in combination with pendulum *c*, having points *d d*, substantially as described.

2. The toy-clock case provided with bar *b*, having coverings *ff*, and the pendulum *c*, substantially as and for the purpose set forth.

ARTHUR E. HOTCHKISS.

Witnesses:

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