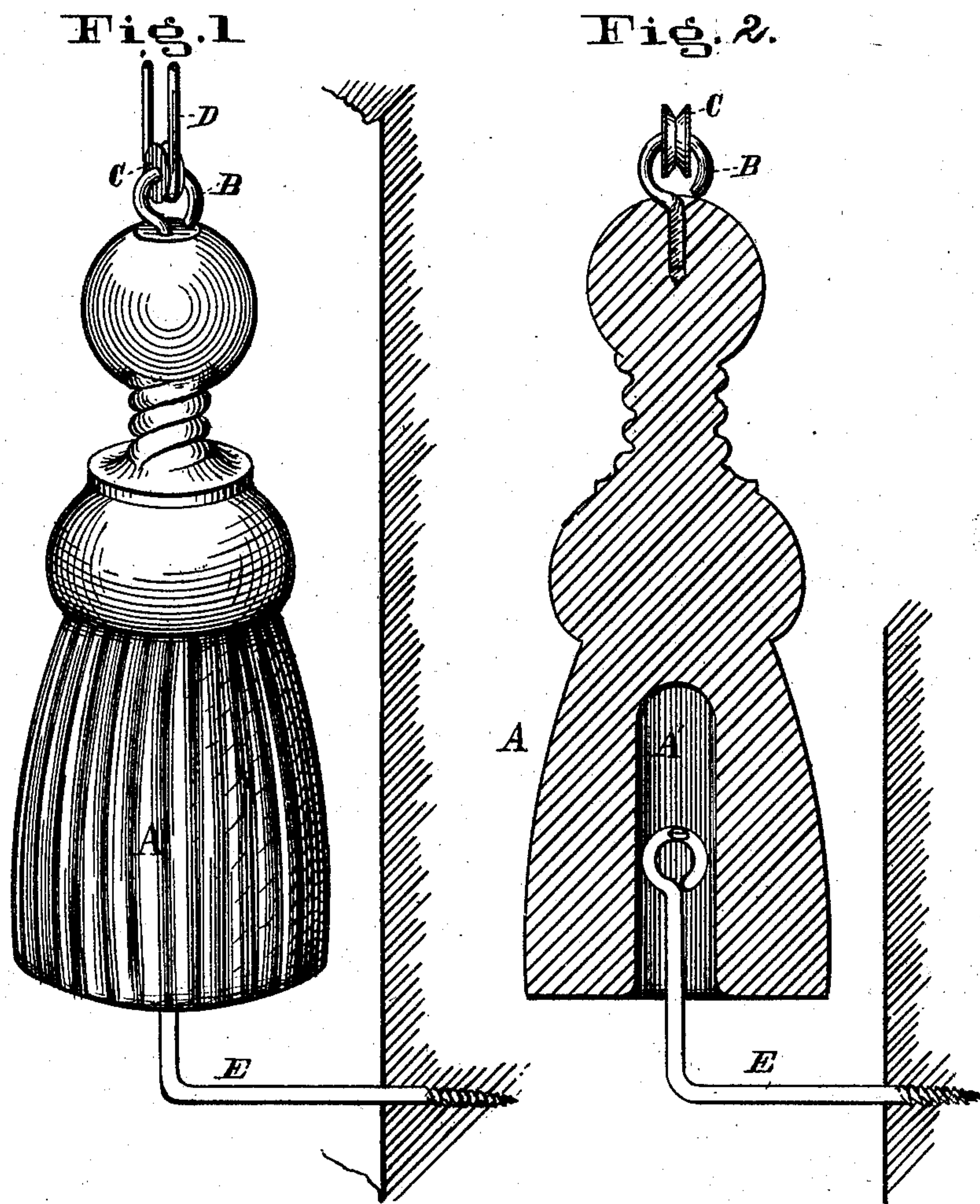


T. VAN KANNEL.  
Curtain-Cord Tightener.

No. 203,569.

Patented May 14, 1878.



Attest  
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# UNITED STATES PATENT OFFICE.

THEOPHILUS VAN KANNEL, OF CINCINNATI, OHIO, ASSIGNOR TO ARCH V. STEWART, OF SAME PLACE.

## IMPROVEMENT IN CURTAIN-CORD TIGHTENERS.

Specification forming part of Letters Patent No. 203,569, dated May 14, 1878; application filed September 10, 1877.

*To all whom it may concern:*

Be it known that I, THEOPHILUS VAN KANNEL, of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Automatic Curtain-Cord Tighteners; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which they appertain to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

In the drawings, Figure 1 is a side elevation of my improvement. Fig. 2 is a vertical section of Fig. 1.

The nature of my invention relates to that class of curtain-cord tighteners wherein an endless cord passes over a grooved pulley attached to the curtain-roller above, and consists in hanging a weight to be shaped into any desirable and pleasing form, such as a tassel, a globe, or a fruit-piece, &c. This weight is provided with a roller or other grooved part to receive the ordinary endless cord on which it is suspended. To prevent the same from causing any damage by falling, should the cord break, and to keep the cord from twisting, a hole is cast in the body of the weight, of such shape as to admit a wire having an eye or hook turned on its end, which is screwed or driven into the window-frame.

In construction my invention is as follows: A is the body of the weight, which is here represented a tassel, and is made of cast-iron or other heavy material. B is a wire hook screwed into the top of part A, and receives a grooved roller, C. At A', Fig. 2, is shown a cavity running a considerable distance up the body of the weight, but being oblong in shape in a transverse section. E is a wire, bent as shown in the drawing, one end being driven or screwed into the window-frame. This wire has its outer end turned into an eye, e, so that the weight can move vertically with freedom, but is prevented from turning around by the eye in wire E.

A further object of the wire E is, that should

the cord break, the weight would be caught and held by said wire E, and thus prevent any damage.

The operation of this invention becomes obvious from the foregoing. The endless cord passing over the grooved pulley of the curtain-roller reaches down to a point near the window-sill. The hook B is unscrewed, its grooved roller C hung on the cord, and the hook again replaced.

When thus suspended the wire E is placed in position, as shown in the drawing. The weight of the tassel thus causes sufficient friction to hold the curtain in any desired position.

Among the advantages of this device may be mentioned that all the natural stretch of the cord is at all times automatically taken up, also any variation in the length of the cord caused by atmospheric changes. As the strain on the cord is always uniform, an over-strain cannot occur. Should the grooved pulley above not be true, the resistance given by the weight will still remain uniform. In case the cord slips out of the grooved pulley above the curtain will not drop, as in other cases, but the weight, taking up the slack of the cord, will at once check or entirely stop the fall of the curtain.

The device is very durable, as will be seen from an examination. It is susceptible of being manufactured in a great variety of forms and styles, thus giving a wide range for gratifying taste.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The weight A, having the recess A', in combination with the wire E, the construction being such that the weight is kept from falling when the cord is broken.

In testimony that I claim the foregoing as my own I have affixed my signature in presence of two witnesses.

THEOPHILUS VAN KANNEL.

Witnesses:

A. V. STEWART,  
W. S. MOSER.