E. BLACKMAN.

BALANCE-SPRING HOOK.

No. 192,812. Patented July 10, 1877.

Fig: 1.

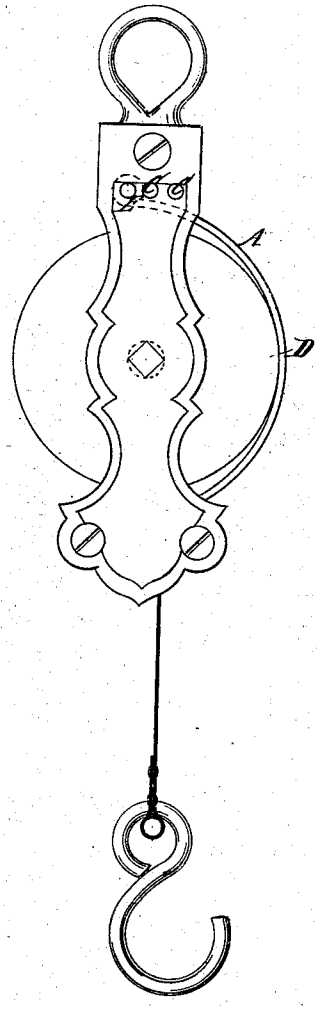
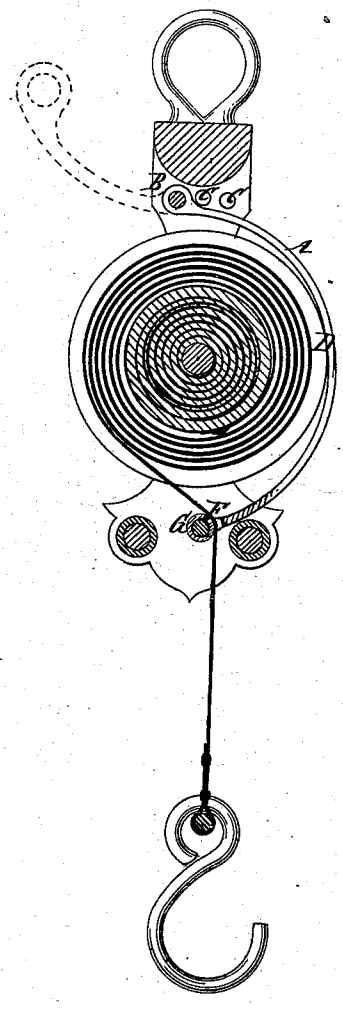


Fig: 2.



Witnesses:

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IMPROVEMENT IN BALANCE-SPRING HOOKS.

Specification forming part of Letters Patent No. **192,812**, dated July 10, 1877; application filed November 3, 1876.

To all whom it may concern:

Be it known that I, EBENEZER BLACKMAN, of the city, county, and State of New York, have invented a certain new and useful Improvement in Balance-Spring Hooks; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 is a side view. Fig. 2 is a side view in section.

The object of my invention is to produce a balance-spring hook for suspending chandeliers, pendants, lamps, bird-cages, flower-baskets, &c., which is simple and easily adjusted, and cheaply constructed, doing away with the cams, ratchets, levers, and frictions usually applied to such fixtures, and one that is not liable to get out of order.

I construct my spring-hook of metal, and in the usual form of such fixtures, with a frame and incased spring, and with a metal ribbon coiling around the outside of the casing of the spring, in the usual manner. I also construct a metal piece or band, A, Fig. 2, of yielding or spring metal, which I attach to the frame, as shown at B, Fig. 2, which is made adjustable by shifting to the different pin-holes, as shown at C, Figs. 1 and 2. This band of metal passes partly around the outside of the casing of the spring and ribbon, and rests upon the outer rim or edge, as shown at D, Figs. 1 and 2. The said band of metal has an eye or opening in the top, for the purpose of passing a pin through it to secure it to the frame, as shown at E, Fig. 1. Near the bottom in this band is a slot wide enough to allow the metal ribbon to pass through the band, as shown at F, Fig. 2. Below the slot in the band is a roller to relieve the friction on the metal ribbon, as shown at G, Fig. 2.

I also construct my brake-band of stiff metal, and allow the band to extend outward and up beyond the eye that attaches it to the frame; and I form an eye in the end of the brake-band to suspend the fixture by, as shown in dotted lines, Fig. 2. When this form is used the ribbon does not pass through the brake-band. The friction is obtained by means of the leverage made use of in the brake-band, and acts on the outer rim of the spring-casing, as before described.

Operation: The balance-spring being wound up, and the metal ribbon coiled around the casing, and the brake in its position, suspend the spring-hook by the eye in the top of the frame or brake band, and attach whatever article you wish to suspend to the hook in the bottom of the ribbon. The greater weight you suspend the greater will be the friction. To relieve the friction, raise up on the article suspended.

The advantage of this fixture is that it can be cheaply constructed, as a much smaller spring can be used in it than is used in other kinds, thereby cheapening the article.

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

1. A balance-spring hook held in position by a friction band or brake, acting by the weight of the article suspended on the outer rim or edge of the casing holding the spirally-wound spring and ribbon, as described.

2. A friction band or brake having an adjustable fulcrum-point, in combination with a balance-spring hook supported by a spirally-wound spring and ribbon, all arranged and operated substantially as described.

EBENEZER BLACKMAN.

Witnesses:
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JACOB DU BOIS.