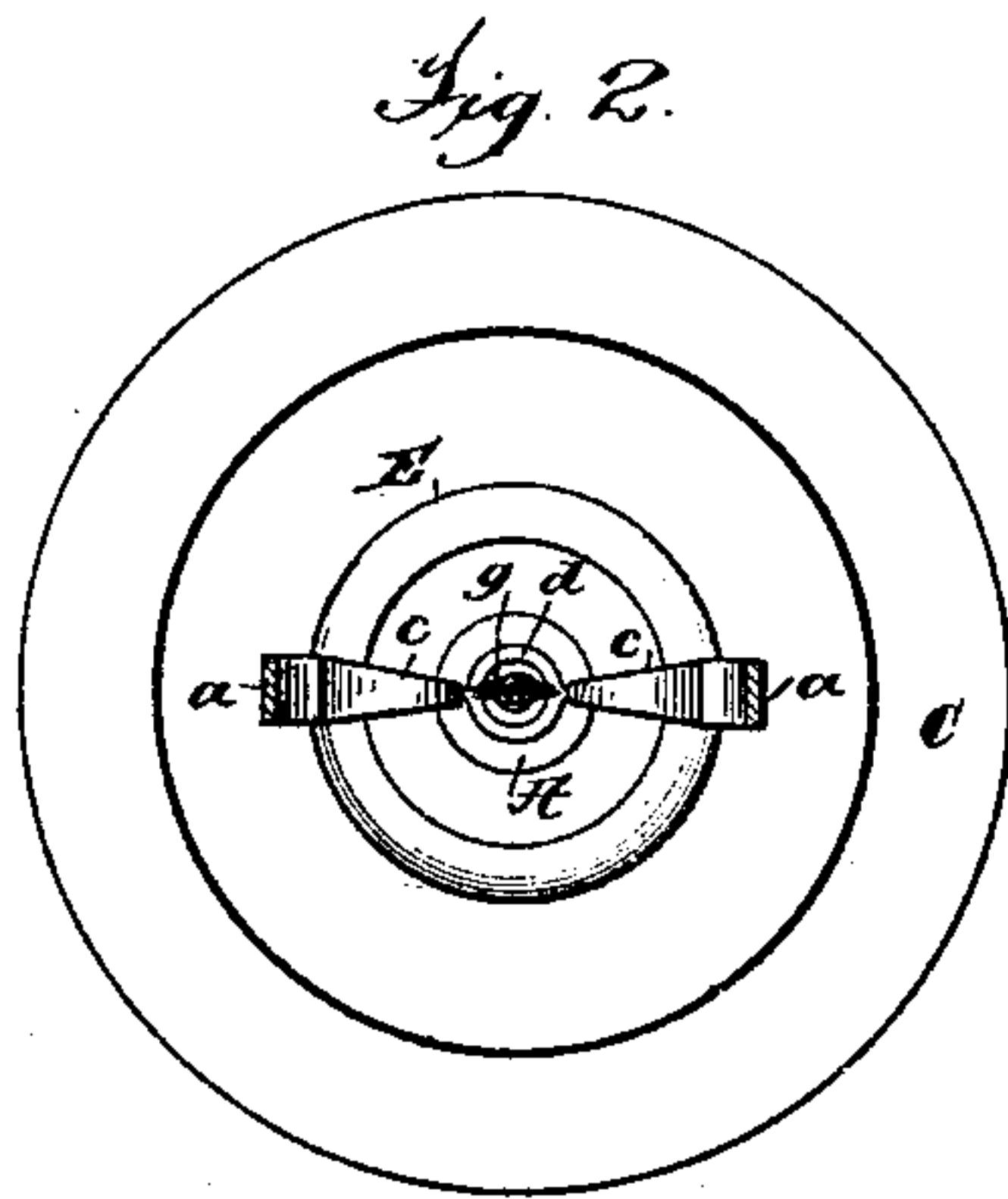
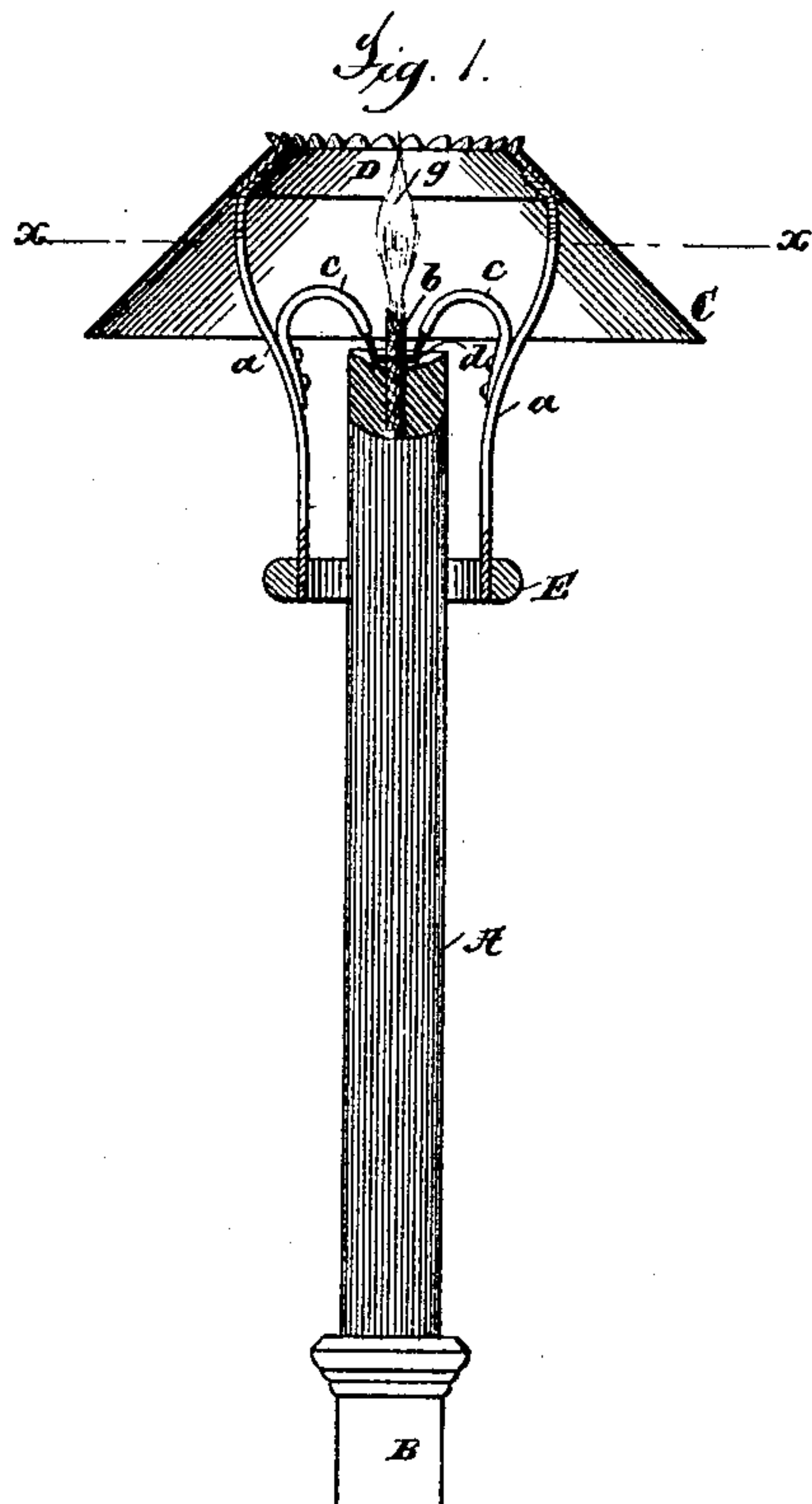


(No Model.)

C. C. WORTHINGTON.
SHADE FOR CANDLES OR TAPERS.

No. 377,345.

Patented Jan. 31, 1888.



Attest:

Geo. H. Bott

J. A. Hovey

Inventor

Charles C Worthington

Wm B Phillips

Atty.

UNITED STATES PATENT OFFICE.

CHARLES C. WORTHINGTON, OF IRVINGTON, NEW YORK.

SHADE FOR CANDLES OR TAPERS.

SPECIFICATION forming part of Letters Patent No. 377,345, dated January 31, 1888.

Application filed May 4, 1887. Serial No. 237,097. (No model.)

To all whom it may concern:

Be it known that I, CHARLES C. WORTHINGTON, a citizen of the United States, residing at Irvington, county of Westchester, and State of New York, have invented certain new and useful Improvements in Shades for Candles or Tapers, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

This invention relates to a self-adjusting shade, which is especially adapted to be used in connection with a candle or taper, it being the object of the invention to provide a shade for this purpose which will adjust itself so as to always be maintained in proper position with relation to the flame of the candle as the flame is gradually lowered by the burning of the candle.

A full understanding of the invention can best be given by describing it in connection with the accompanying drawings, which illustrate a shade constructed according to the invention and applied to an ordinary candle or taper, and in which—

Figure 1 is a sectional elevation of the shade and its supporting devices, and Fig. 2 a horizontal section taken upon the line *x x* of Fig. 1.

Referring to said figures, it is to be understood that A represents an ordinary candle or taper, and B the upper portion of any suitable form of candlestick. The shade C is also of common form, and is supported at its upper end upon a metallic ring, D. The ring D, which supports the shade, is provided with two arms, *a*, which extend downward and are connected to the opposite sides of a ring, E, which surrounds the candle, but is of sufficient size to leave considerable space between its interior and the candle. The arms *a* are provided with inwardly-extending arms *c*, which are connected to the opposite sides of a small metallic ring, *d*, which is of just sufficient size to move freely over the wick *b* of the candle, and which rests upon the upper portion of the material of which the candle is composed, and within the cup-shaped depression formed on the end of the candle as the mate-

rial is melted away. The ring *d*, as will be observed, does not extend to or come into contact with the edges of the candle, and thus has no tendency to melt down the edges and cause the candle to "run over." The ring *d* will preferably be made of platinum, or some other metal which is a poor absorbent of heat, so that it will not become very highly heated, and thus melt away the material of the candle too rapidly. The ring E will be made of considerable weight, so as to balance the shade and prevent it from being easily rocked by jarring or currents of air. The operation of the shade and its support when thus constructed is as follows: The ring E will be passed over the upper end of the candle and the ring *d* over the wick, as is shown in Fig. 1. The candle, being then lighted, will burn in the usual manner, and, as its material is gradually consumed and the flame *g* lowered, the ring *d* will move downward with the flame, thereby gradually lowering the shade, so that it will always be maintained in proper relation to the flame, the wick *b* serving to guide the ring *d*, so as to prevent the shade from moving laterally out of proper position.

This construction is especially adapted for use in those cases where the candle-wick is of considerable size and strength; but even where the wick is quite small and frail it will usually be sufficient to afford the necessary guide for the ring *d*.

The particular advantage of this construction is due to its extreme simplicity and to the fact that the shade and its supporting devices are entirely disconnected from the candlestick, and can therefore readily be applied to any candle where it may be desired to use them without particular trouble, and also the fact that it has no tendency to cause the candle to run over.

What I claim is—

1. A shade-support for candles or tapers, having the depending arms *a* connected to the weighted ring E, which surrounds the candle, and having the arms *c* connected to the ring *d*, which rests within the cup-shaped depres-

sion at the end of the candle and surrounds and is guided by the wick, substantially as described.

2. A shade-support having an arm or
5 arms, *c*, connected to the ring *d*, which rests within the cup-shaped depression at the end of the candle and surrounds and is guided by the wick of the candle, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

CHAS. C. WORTHINGTON.

Witnesses:

J. A. HOVEY,
GEORGE H. BOTTS.