No. 672,481. Patented Apr. 23, 1901.

M. HERSKOVITZ.

INCANDESCENT MANTLE SUPPORT.

(Application filed Dec. 14, 1900.)

(No Model.)

Fig. 1.

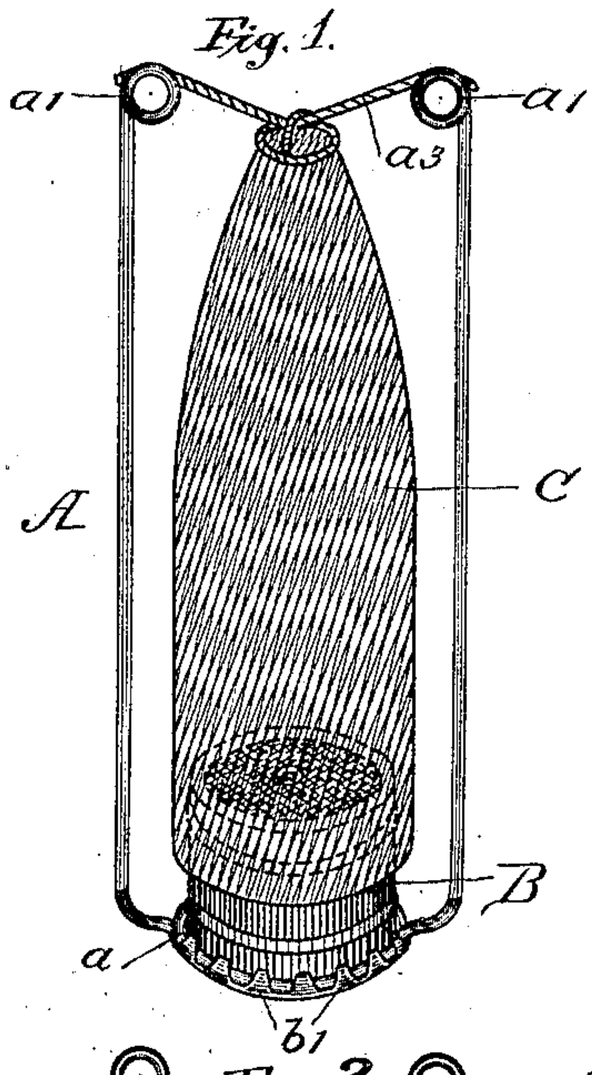


Fig. 2

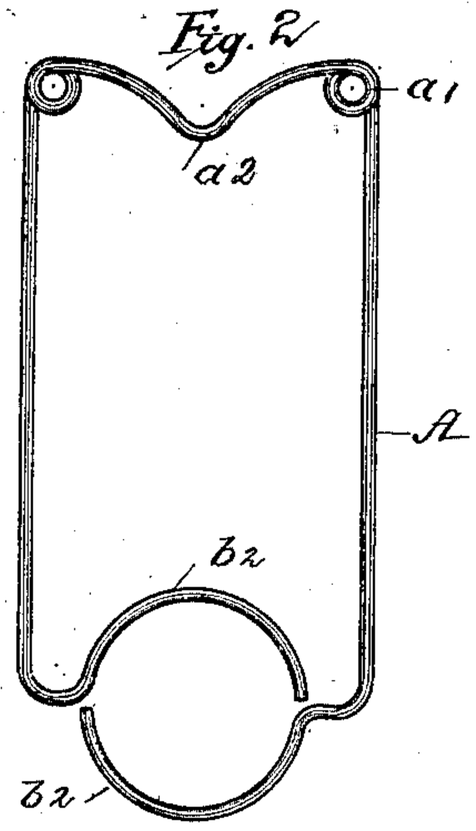


Fig. 3

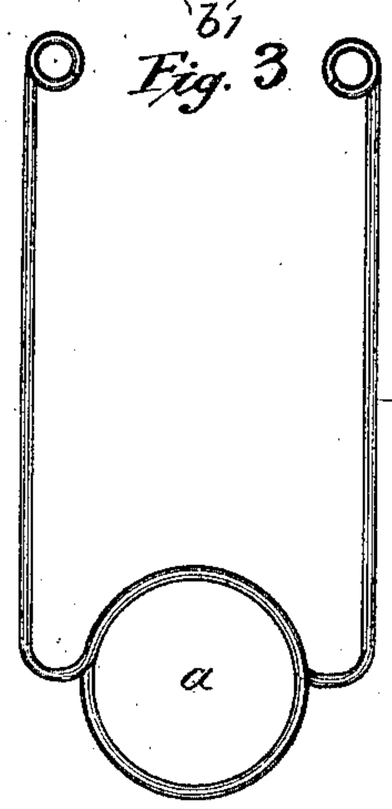


Fig. 4

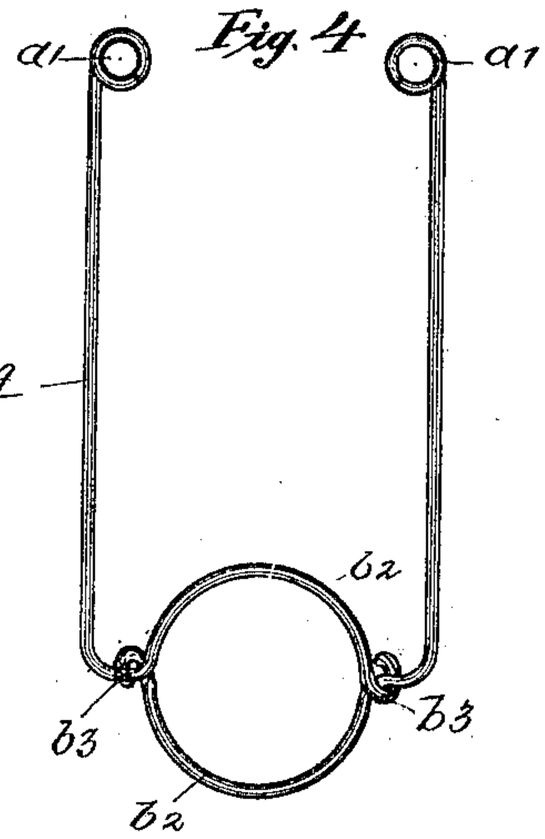


Fig. 5

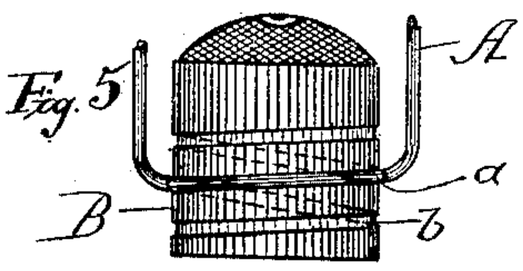


Fig. 6

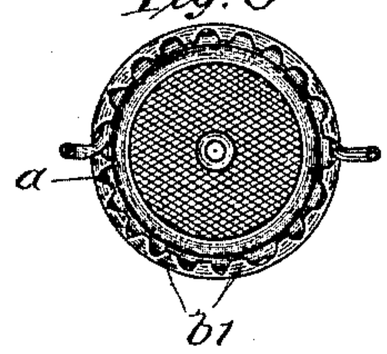
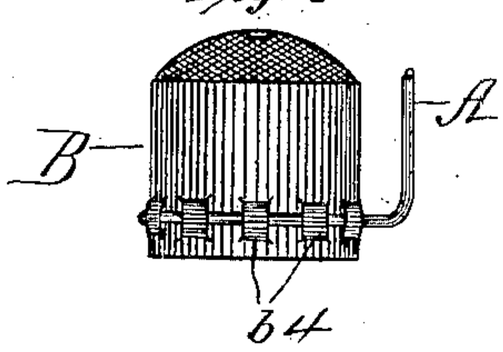


Fig. 7



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UNITED STATES PATENT OFFICE.

MAX HERSKOVITZ, OF CHICAGO, ILLINOIS.

INCANDESCENT-MANTLE SUPPORT.

SPECIFICATION forming part of Letters Patent No. 672,481, dated April 23, 1901.

Application filed December 14, 1900. Serial No. 39,834. (No model.)

To all whom it may concern:

Be it known that I, MAX HERSKOVITZ, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Incandescent-Mantle Supports; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to means for attaching and supporting incandescent mantles; and the object is to provide such means whereby the mantle standard or support will be firmly attached to the burner and the mantle yieldingly secured to its support. In packing and shipping these fragile mantles it is important to so support them that they may not come in contact with the sides of the box in which they are packed or be subjected to sudden jars or knocks, which are likely to injure their delicate filaments. It is also important to provide for the shrinking or contraction which takes place after they have been subjected to the heat of the burner. It is further desirable to so secure or attach the mantle-support that in applying or removing the mantle from the burner there will be no danger of injury to the filament from its support or from clumsy handling. It is also desirable to have the point of attachment of the mantle-standard to the burner as far below the flame as possible in order that the danger of damage from the intense heat will be minimized.

Having the foregoing and other objects of simplicity and economy of construction in view, I have produced the mantle-support which forms the basis of this application, which is described hereinafter in detail, and which is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a preferred form of my invention. Figs. 2, 3, and 4 are perspective views of a modified form of mantle-support alone. Fig. 5 is a view in elevation showing one manner of securing the mantle-support to a burner-cap. Fig. 6 is a top plan view of a burner-cap shown in Fig. 1, and Fig. 7 shows a modified manner of attaching the support to a cap.

Referring to the drawings in detail, A represents a mantle standard or support which may be formed from a single piece of wire, as shown in Figs. 1, 2, and 3, or from two pieces secured together, as shown in Fig. 4. When made from one piece of wire, as shown in Figs. 1, 3, and 5, the wire is bent to form a circular loop or ring a of such diameter as to fit snugly around the burner-cap B, either upon the surface near the lower edge of the cap or resting in a helical groove b. In the former case the standard is secured firmly to the cap by bending over the ring portion a a plurality of lugs b', formed on the lower edge of the cap, and in the latter case the ring portion is simply screwed into the helical groove b, as shown in Fig. 5. When the standard is made in two pieces, as shown in Fig. 4, the lower ends of the wire are each bent to form a half-circle b^2 and an eye b^3, and when placed together form a ring, with the eyes embracing the adjacent portions of the opposite piece. It may be then attached to a burner-cap by either of the methods above described. If the eyes b^3 are not formed, a simple and economical attachment is effected by passing the lower ends of the standard-pieces through the loops b^4, which are punched out of the sides of the cap, as shown in Fig. 7. The standard A is bent outwardly and upwardly from the ring portion to form two parallel members, at the ends of which are formed eyes a' by coiling the wires. Between the folds of these coils is secured by frictional engagement an asbestos cord a^3, from which the mantle C is suspended in the manner shown in Fig. 1. This cord may be stretched taut between the two eyes or it may be slack, and the latter I consider preferable, because it allows for the spreading of the members as they become hot without danger of breaking the cord. Furthermore, a certain amount of flexibility in the attachment of the mantle to its support is desirable in order to relieve it from the shock of impact of objects striking against the standard or the packing-box. Flexible attachment at the top is further desirable because as the mantle becomes shortened, as it does from shrinkage, it moves upwardly on the burner-cap, thereby getting away from its protecting influence, and by allowing the support at the top to yield the por-

tion of the mantle surrounding the cap is increased. By making the cord a^3 longer than is absolutely necessary to bridge the space between the two eyes it can be readily adjustable from time to time, thus lowering the point of suspension of the mantle, so that its lower end can be always kept around the cap no matter what the shrinkage may be.

By not having any portion of the standard directly over the mantle, the heat zone of which is approximately a vertical column, with its greatest intensity at its center, I am able to prolong the life of the standards, as it is in the overhanging portion of the ordinary standard that the greatest impairment takes place.

In Fig. 2 I have shown a modified form of my improved standard, in which, in addition to the eyes a', the wire connects the eyes and is bent downwardly at a point half-way between the members, and the lower ends are bent to form half-circles b^2. With this form of standard it is important to use an asbestos cord for connecting the mantle, said cord being placed over and resting in the bent portion a^2. This form is not desirable except where a very rigid or strong support is required.

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

1. A mantle-support having two members provided with eyes at their upper ends, a flexible connection between the two eyes and a mantle, and means for supporting said members on a burner.

2. A mantle-support having two members provided with eyes at their upper ends, a flexible connection between said eyes and a mantle, and a cap adapted to support said members on a burner.

3. A mantle-support having two members provided with eyes at their upper ends, a flexible connection between said eyes and a mantle, and a burner-cap having integral portions adapted to embrace said members and support same on a burner.

4. A mantle-support, having two members bent to form eyes and having portions bent to form a ring adapted to embrace a burner-cap substantially as described.

5. A mantle-support having two members having portions adapted to embrace a burner-cap, and means for flexibly connecting the upper ends of said members with a mantle.

6. A mantle-support having two members having portions adapted to embrace a burner-cap, and a flexible and adjustable connection between said members and a mantle.

7. A mantle-support, composed of a single wire bent to form a ring adapted to embrace a burner-cap, and comprising two parallel members each terminating in an eye, substantially in the manner shown.

8. A mantle-support, composed of a single wire bent to form a ring adapted to embrace a burner-cap, and comprising two parallel members bent to form eyes, and having means connecting said eyes, said means adapted to have a mantle suspended therefrom, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

MAX HERSKOVITZ.

Witnesses:
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