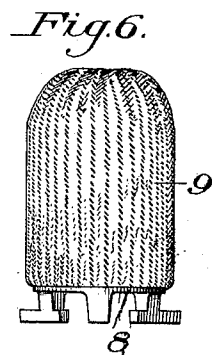
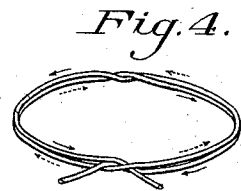
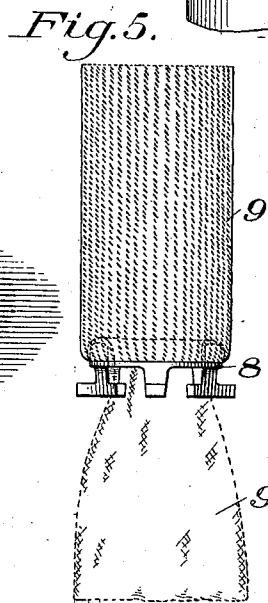
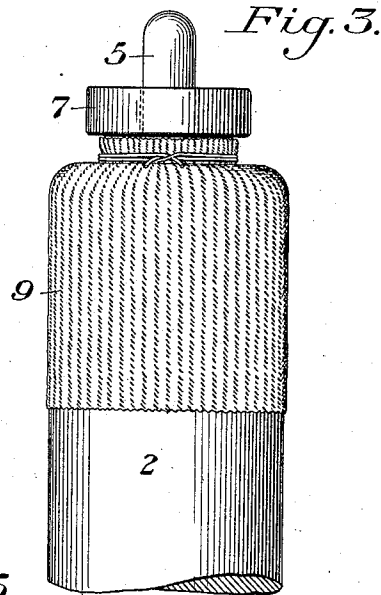
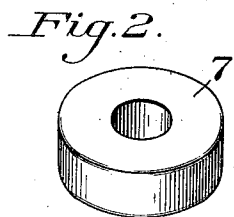
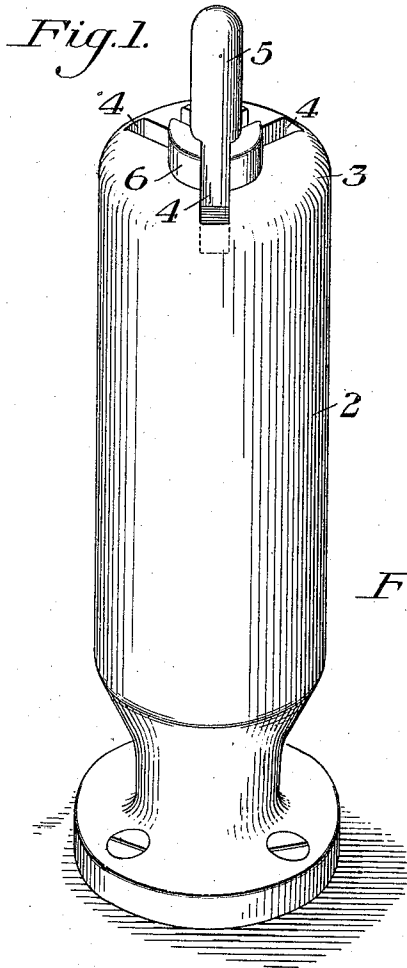


E. L. KNOEDLER.
MANUFACTURE OF INVERTED MANTLES.
APPLICATION FILED FEB. 17, 1911.

1,062,163.

Patented May 20, 1913.



WITNESSES

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UNITED STATES PATENT OFFICE.

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MANUFACTURE OF INVERTED MANTLES.

1,062,163.

Specification of Letters Patent.

Patented May 20, 1913.

Application filed February 17, 1911. Serial No. 609,194.

To all whom it may concern:

Be it known that I, ELMER L. KNOEDLER, a resident of Gloucester City, in the county of Camden, State of New Jersey, have invented a new and useful Improvement in Manufacture of Inverted Mantles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of the post which I employ; Fig. 2 is a similar view of the weighted ring used with said post; Fig. 3 is a partial side elevation showing the manner of tying the mantle on the base ring; Fig. 4 is a perspective view of the doubled loop employed in the string; Fig. 5 is a side elevation of the mantle tied to the ring, showing in dotted lines the position for shirring; and Fig. 6 is a side elevation of the finished mantle.

My invention relates to the manufacture of mantles for inverted incandescent gas lamps, and is designed to provide an improved method of and apparatus for tying the base of the mantle to the base ring.

To that end, the invention consists in forming a double loop of the cord which will largely prevent ununiform contraction of the mantle on the ring, and equalize the side drawing action on the mantle.

It further consists in using a weighted ring to yieldingly hold the refractory base ring in position on the base and further in the construction and arrangement of the parts, as hereinafter more fully described and set forth in the claims.

In carrying out my invention, I employ a cylindrical post 2, preferably of wood or similar material, which may be secured to a suitable base. The upper end of this post has a rounded edge 3, and its top is provided with three radial grooves or recesses 4, to receive the radial legs of the usual base ring of the mantle. In the center of the post is provided a vertical cylindrical pin 5 with a rounded top, the lower portion of this pin having an enlarged annular portion 6, which is cut through by the radial slots 4. This enlarged portion 6 is finished to loosely fit the interior of the mantle ring. With this post device, I employ the weighted ring 7 of Fig. 2, this being preferably of metal to

give it the desired weight, and having a hole to slip loosely over the pin 5.

In the use of the device, the mantle ring shown, for example, at 8, in Fig. 6, is slipped down over the pin 5 and around the enlargement 6, with its legs in the radial grooves or recesses of the post. The weighted ring is then dropped on the pin and rests on the enlargement 6 to yieldingly hold the mantle ring in place, and the mantle blank in the form of a knitted cylinder is then drawn over the ring 7 and the post. This action stretches the mantle, the post being of larger diameter than the normal size of the mantle. The mantle blank is drawn down until its upper end is properly positioned around the mantle base ring, and the tying cord is then drawn around this base ring with two loops, as shown in Fig. 4. These loops are then drawn tight and as they are drawn by the knot at one side, the left hand portion of one loop will move in one direction, while the left hand portion of the other loop will move in the other direction, this being the same on the right hand side. It is therefore evident that by using the two loops, the sidewise draw on the mantle is equalized, so that there is no tendency to pull the mantle around toward the knot. If a single loop is used, as the knot is drawn tight, the mantle fabric is drawn around toward the knot and the mantle fabric must then be pulled back and equalized by the operator. The double loop formation does away with this difficulty and equalizes the draw at the different points, thus pulling the mantle fabric equally toward the axis of the ring. The knot is then tied by the operator, the ring 7 removed, the mantle pulled off and turned back into the position shown in Fig. 5, where 9 is the mantle and 8 the mantle ring. The mantle can then be pushed back through the ring in the position shown in dotted lines in Fig. 5, for the shirring operation, and after shirring, it is pushed back giving the mantle of Fig. 6.

The advantages of my invention result from the double looped cord employed in tying and from the use of the weighted ring for holding the mantle ring yieldingly in place. If positive locks or hold-down devices for the legs are employed, it has been found that the legs are liable to break off,

thus destroying the ring and reducing the output. The weighted ring holds the mantle ring yielding in place, and at the same time, does not cause breakage. The plural
5 looped cord equalizes the radial inward draw and prevents the puckering resulting from a single cord drawing the mantle material around circumferentially toward the knot.

10 Changes may be made in the form and arrangement of the post, the cord, etc., without departing from my invention.

The novel form of tie herein shown and described forms the subject matter of a
15 divisional application Serial No. 750,053, filed February 24th, 1913.

I claim:

1. In mantle manufacture, a cylindrical post of larger diameter than the normal
20 diameter of the mantle, a central boss on the top of said post for engaging the inner wall of the mantle ring for centering said ring, a pin extending upwardly from said boss, said post being provided with top slots
25 for receiving the mantle ring legs; substantially as described.

2. In mantle manufacture, a cylindrical

post of larger diameter than the normal diameter of the mantle, a central boss on the top of said post for engaging the inner wall
30 of the mantle ring for centering said ring, a pin extending upwardly from said boss, said post being provided with top slots for receiving the mantle ring legs, and a weighted ring cooperating with said pin for re-
35 taining the mantle ring in position on the post; substantially as described.

3. In mantle manufacture, a cylindrical post of larger diameter than the normal diameter of the mantle, a central boss on the
40 top of said post for engaging the inner wall of the mantle ring and extending slightly above the mantle ring when in position on the post, said post being provided with top
45 slots for receiving the mantle ring legs, and a weighted ring supported on the top of said boss for retaining the mantle ring in position, substantially as described.

In testimony whereof, I have hereunto set my hand.

ELMER LUVESTUS KNOEDLER.

Witnesses:

J. H. JOHNSON,
J. R. IRELAND.