

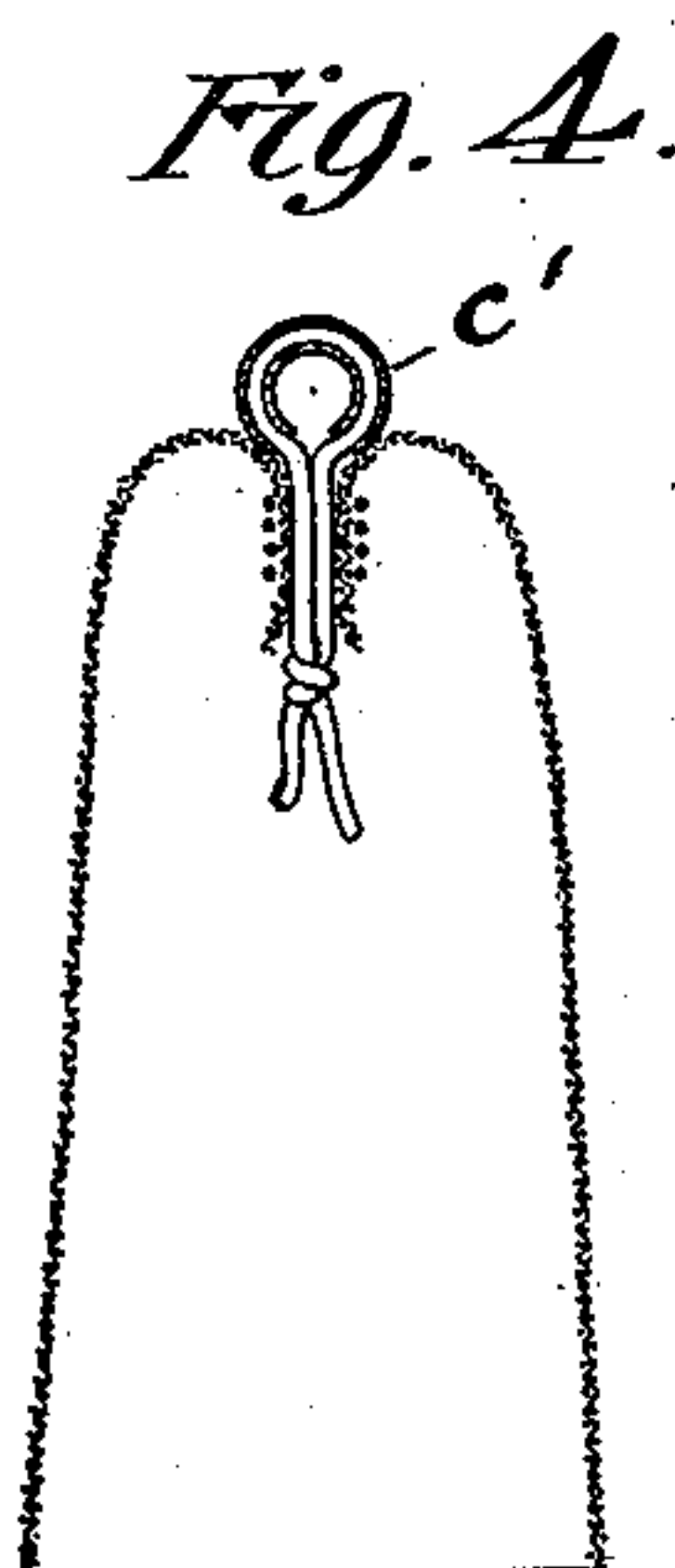
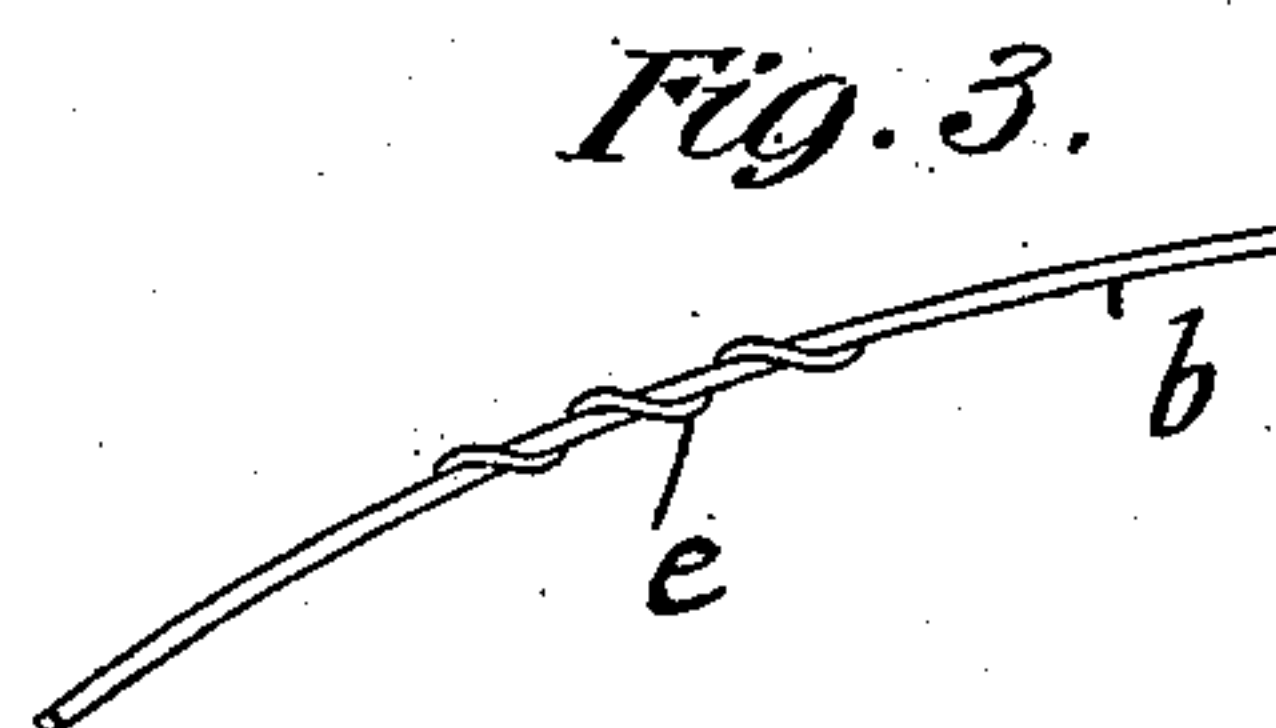
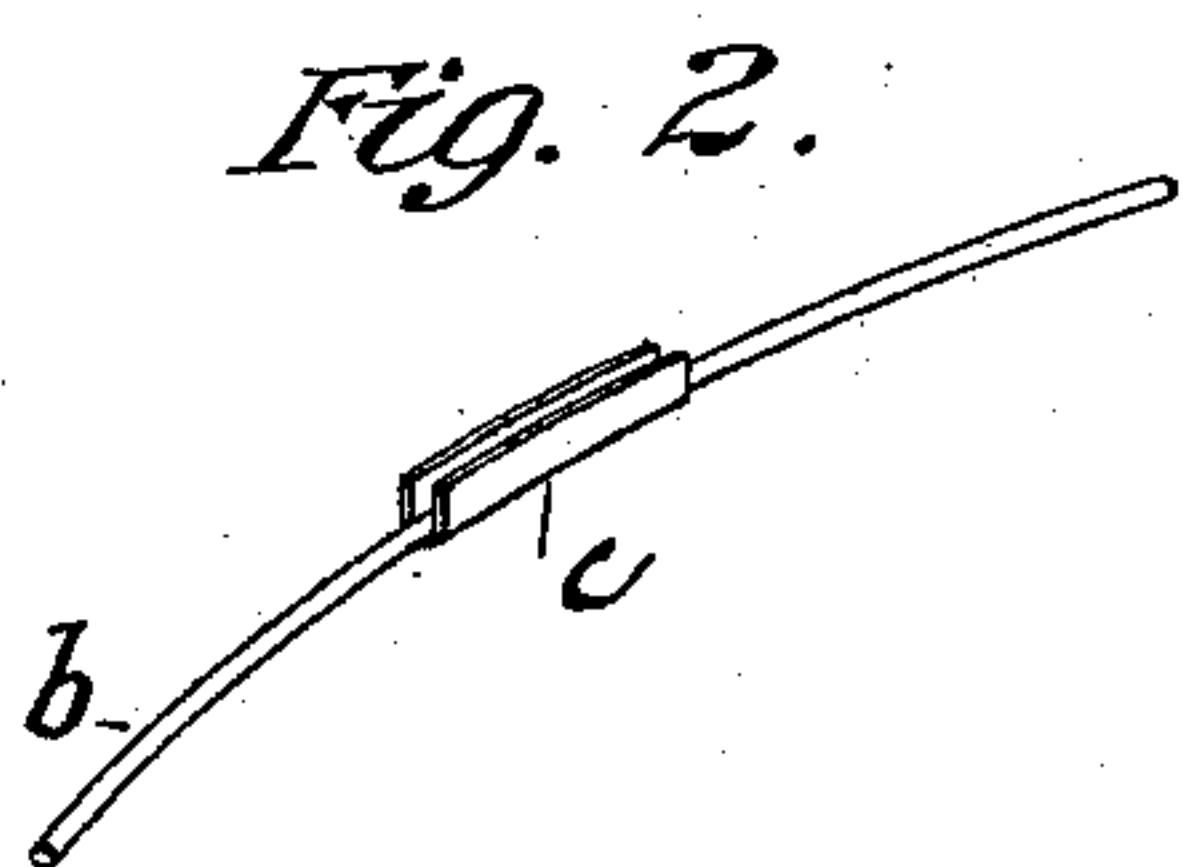
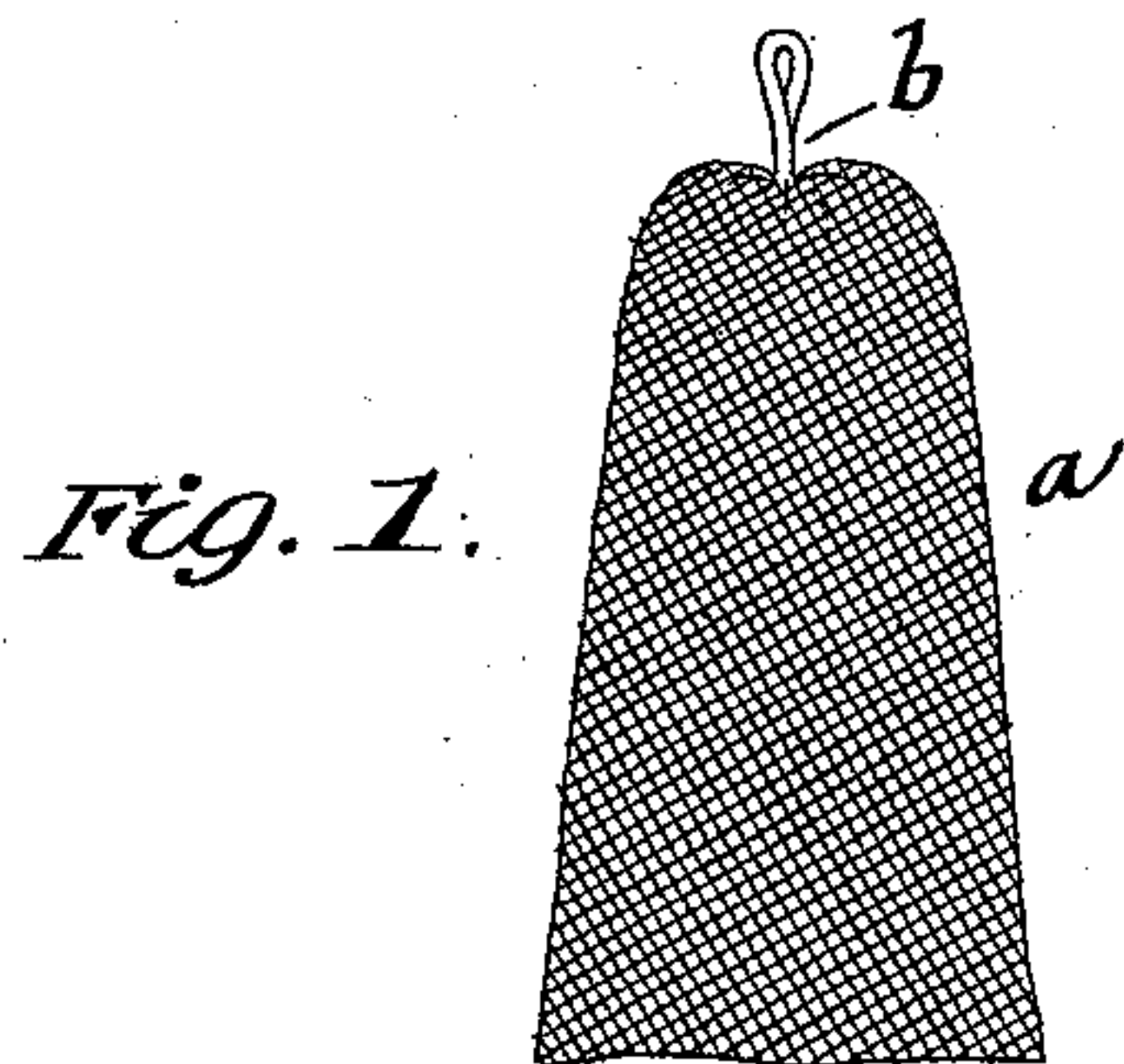
No. 692,692.

Patented Feb. 4, 1902.

K. V. MORAN.
INCANDESCENT GAS MANTLE.

(Application filed Apr. 11, 1901.)

(No Model.)



WITNESSES:

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INCANDESCENT GAS-MANTLE.

SPECIFICATION forming part of Letters Patent No. 692,692, dated February 4, 1902.

Application filed April 11, 1901. Serial No. 55,333. (No model.)

To all whom it may concern:

Be it known that I, KATHERINE V. MORAN, a citizen of the United States, residing at the city of New York, in the borough of Manhattan and State of New York, have invented certain new and useful Improvements in Incandescent Gas-Mantles, of which the following is a full, clear, and exact description.

This invention relates to incandescent gas lighting, and has special reference to the means for supporting the mantle or tassel of incandescing material upon the bracket, arm, or fixture from which it is suspended over the burner. It has been customary heretofore to attach a thread or cord of asbestos in the form of a loop to the upper end of the mantle or tassel and to pass this loop over the supporting-hook when mounting the mantle or tassel. In the tassel form of burners the cotton or base of the element is not burned out until it is applied to the burner for final use, and such tassels fitted with supporting-loops are commercially packed in boxes for convenience in handling and shipping, so that when it is desired to use one of the mantles or tassels it is often found that the little loop of asbestos cord has become distorted or closed up, so that it cannot readily and conveniently be adjusted to the supporting-hook on the fixture. This fact has been the source of a great deal of trouble in the use of such burners, it often being necessary to use a pointed tool to open the loop and to hold it open while it is being passed over the supporting-hook. My invention is intended to obviate this difficulty by constructing the loop in such a manner that it is sure to be found open when required for use and to be easily adjustable to the fixture. For this purpose I incorporate with the supporting thread or cord of asbestos a strip of ductile metal, such as lead or copper, applied or interwound preferably with that portion of the thread or cord which forms the loop only, and in forming the loop I use a tool with which it can be given a substantially circular shape, which shape will be retained until the mantle is adjusted to the fixture and burned.

I will describe my invention more in detail

with reference to the accompanying drawings, in which—

Figure 1 is a side elevation of a mantle or tassel, showing an ordinary asbestos cord or loop attached thereto. Figs. 2 and 3 show two different ways of applying the metal reinforcement to the supporting cord or thread, and Fig. 4 is a sectional view of the mantle with the loop and its reinforcement applied thereto.

a indicates the mantle itself, and *b* an asbestos cord used for supporting it above the fixture. The loop is made ordinarily by bending a length of cord upon itself, tying a knot in the meeting ends, and passing the knotted end through the end of the mantle, after which the loop is held by a binding-thread, which embraces the edge of the mantle and the ends of the loop. Such a cord, as before stated, is liable to collapse and close the loop even more than is shown in Fig. 1, and to avoid this before forming the cord into a loop I apply to its middle portion a strip of soft metal, which may be either in sheet form or in wire form. In Fig. 2 the sheet form *c* is shown. It is bent lengthwise to form a gutter or groove, in which the middle portion of the cord is deposited. Then the groove is closed up by pressing the edges of the metal down upon the cord. The cord and metal are then bent at the middle point to form a loop, and the bend is given a circular shape, as shown at *c'* in Fig. 4, by means of a suitable tool. Then the ends of the loop are knotted together in the usual manner to attach to the head of the mantle. In Fig. 3 the metal is in the form of a wire *e*, which can best be applied by wrapping it several times around the middle portion of the cord, as shown. Then the loop is formed as before and applied to the mantle.

It will now be seen that such handling and disturbing as a mantle will ordinarily receive on its way from the maker to the consumer will not readily distort the loop, and it will always be found open and in condition to be easily adjusted to the fixture on the gas burner, which is supplied with a hook adapted to receive the loop.

Very shortly after the mantle is put into

use the intense heat of the flame will melt the metallic portion of the loop, allowing it to fall away and leaving the incombustible asbestos cord to support the mantle while in use. I
5 therefore wish to call attention to the fact that the scope of my invention reaches to a supporting loop or device for incandescing mantles of any size, shape, or manufacture, consisting of a thread or cord of incombusti-
10 ble material capable of supporting the mantle and reinforced by stiffening material which is adapted to be burned out or dissipated by the heat of the flame when the mantle is put into use.

15 Having described my invention, I claim—

1. The combination with an incandescing mantle, of a supporting cord or thread therefor of separate material, and having a stiffening or reinforcing material incorporated
20 therewith.

2. The combination of an incandescing mantle, of a separate supporting thread or

cord made up of metal and of material indestructible by heat and attached to said mantle, for the purpose set forth. 25

3. The combination with an incandescing mantle, of an independent supporting thread or cord in the form of a loop attached thereto, said loop being reinforced by a suitable metal strip. 30

4. The combination with an incandescing mantle, of a loop attached thereto for supporting the same, said loop consisting of an asbestos thread or cord having its middle or bent portion surrounded by a metallic strip 35 for retaining the shape of the loop, for the purpose described.

In witness whereof I subscribe my signature in presence of two witnesses.

KATHERINE V. MORAN.

Witnesses:

FRANK S. OBER,

WALDO M. CHAPIN.