

R. M. DIXON.
ATTACHMENT FOR INCANDESCENT LAMP MANTLES.
APPLICATION FILED APR. 19, 1906.

960,851.

Patented June 7, 1910.

Fig. 1.

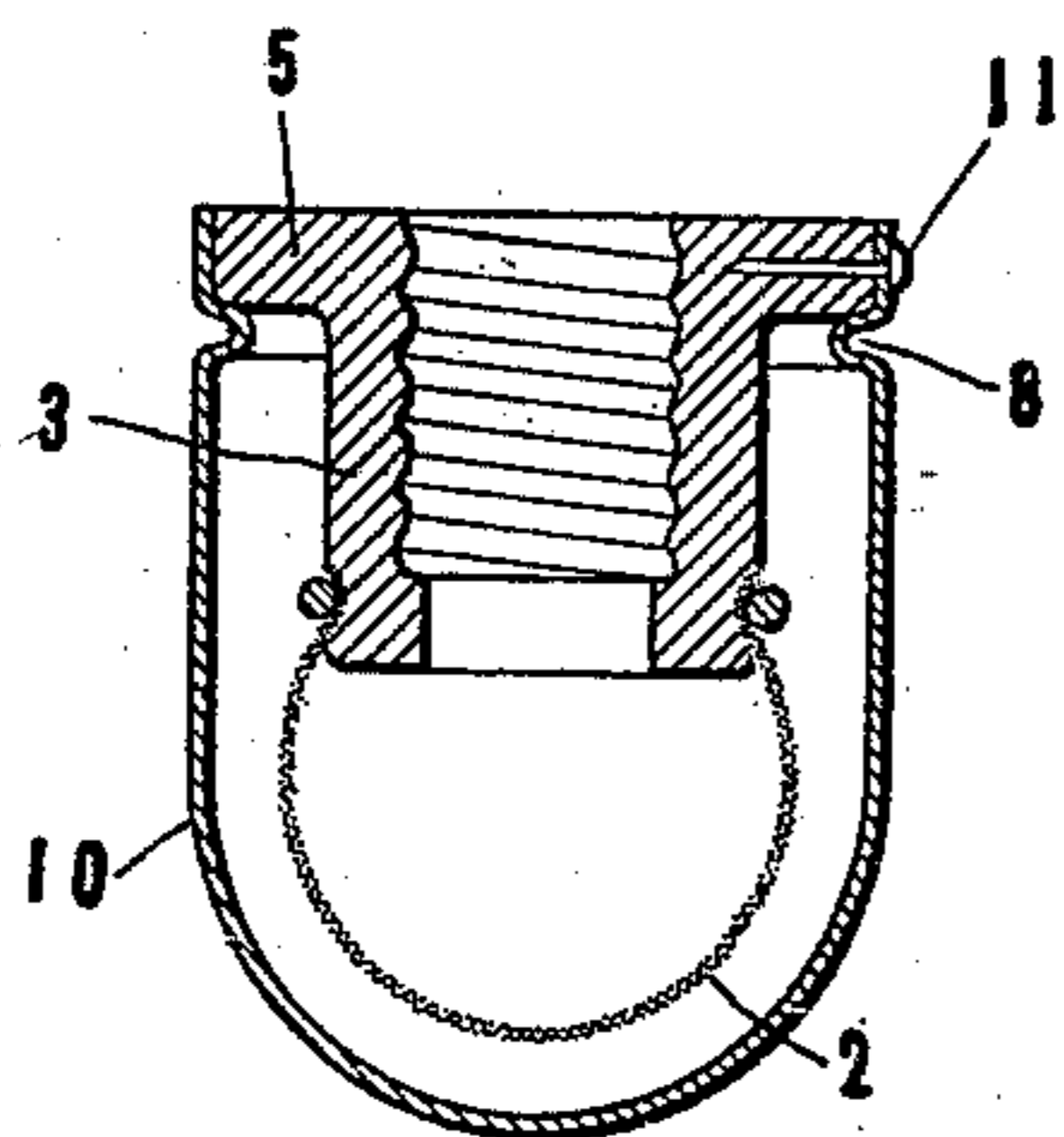


Fig. 2.

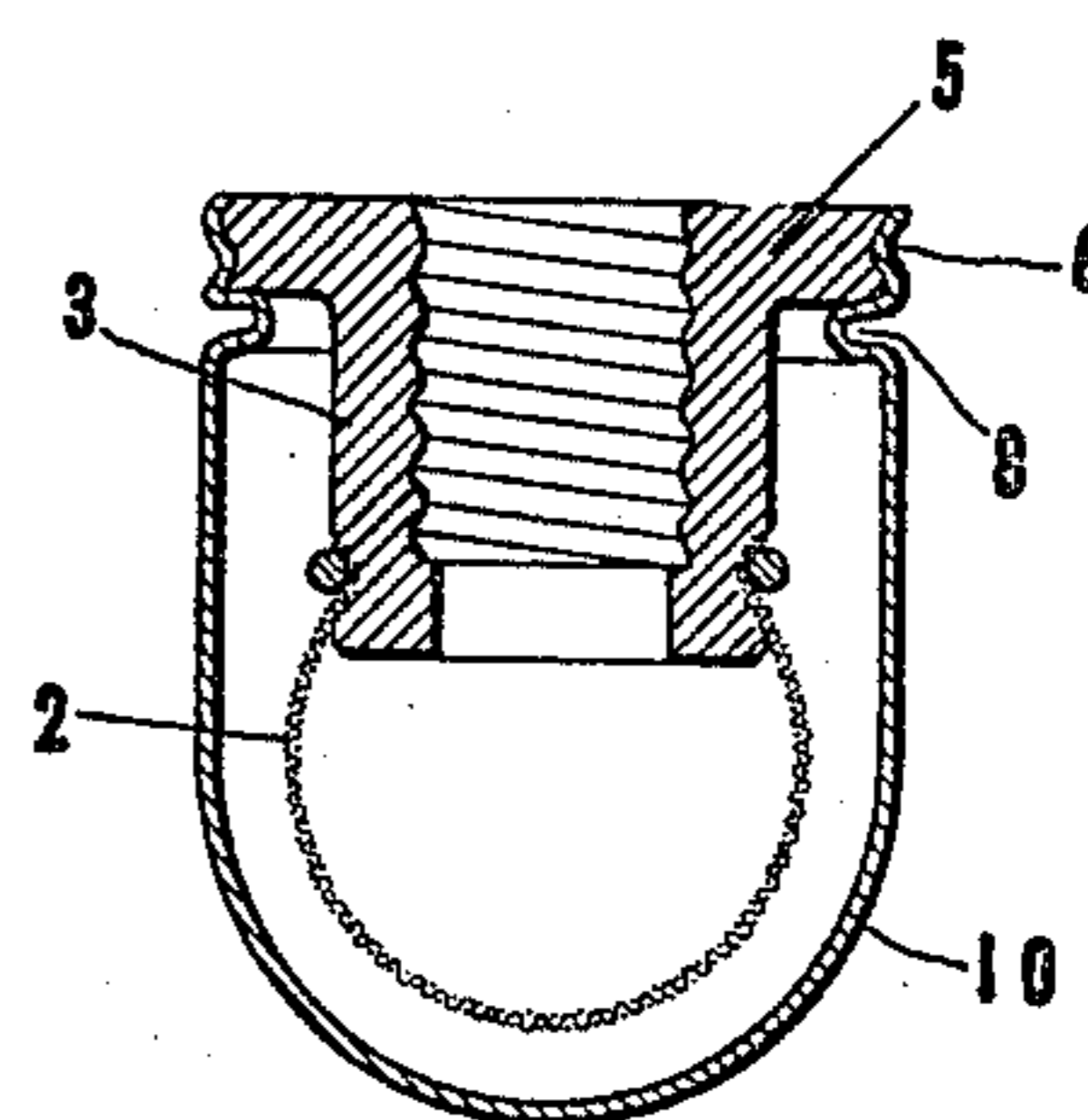


Fig. 3.

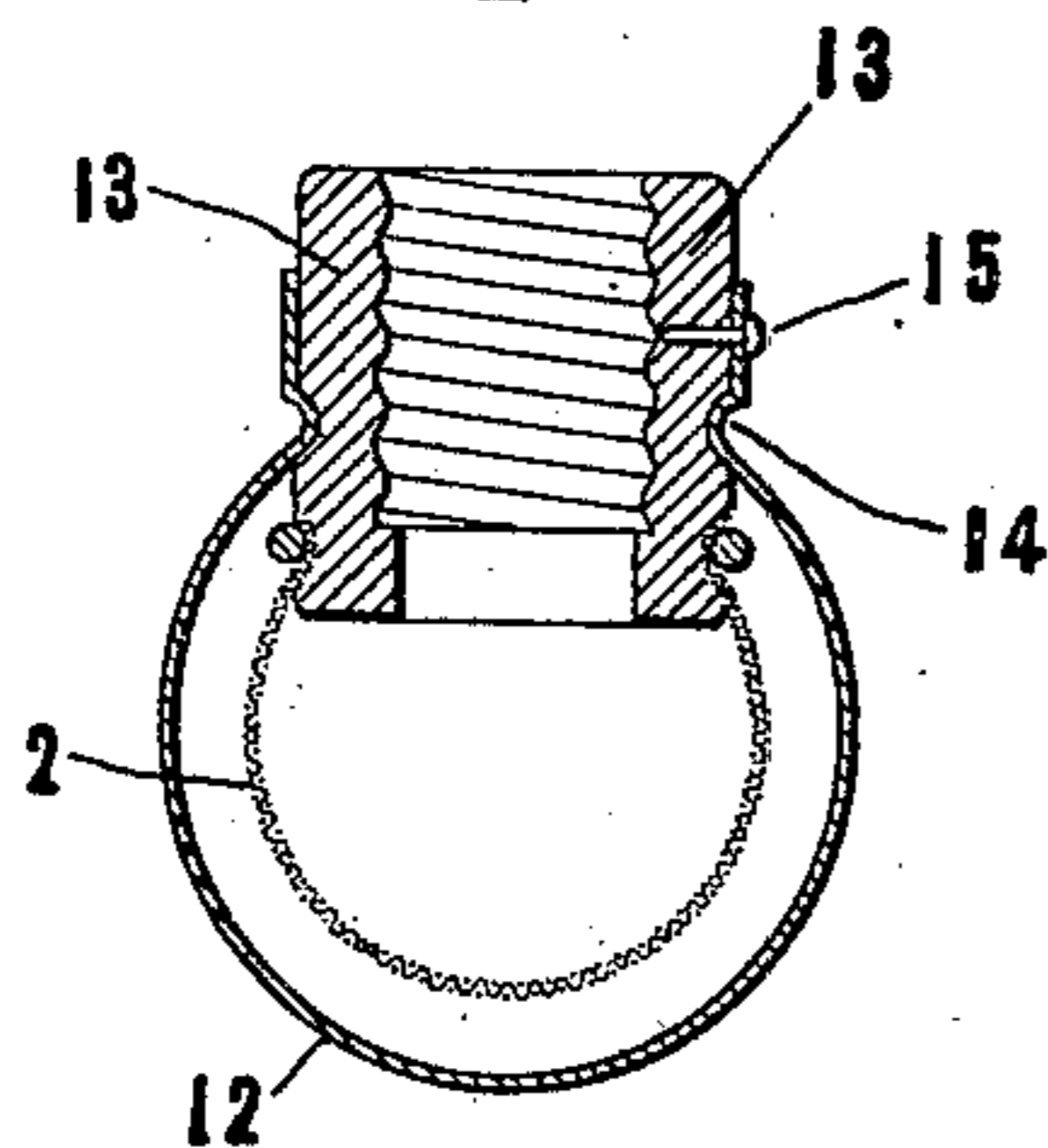


Fig. 4.

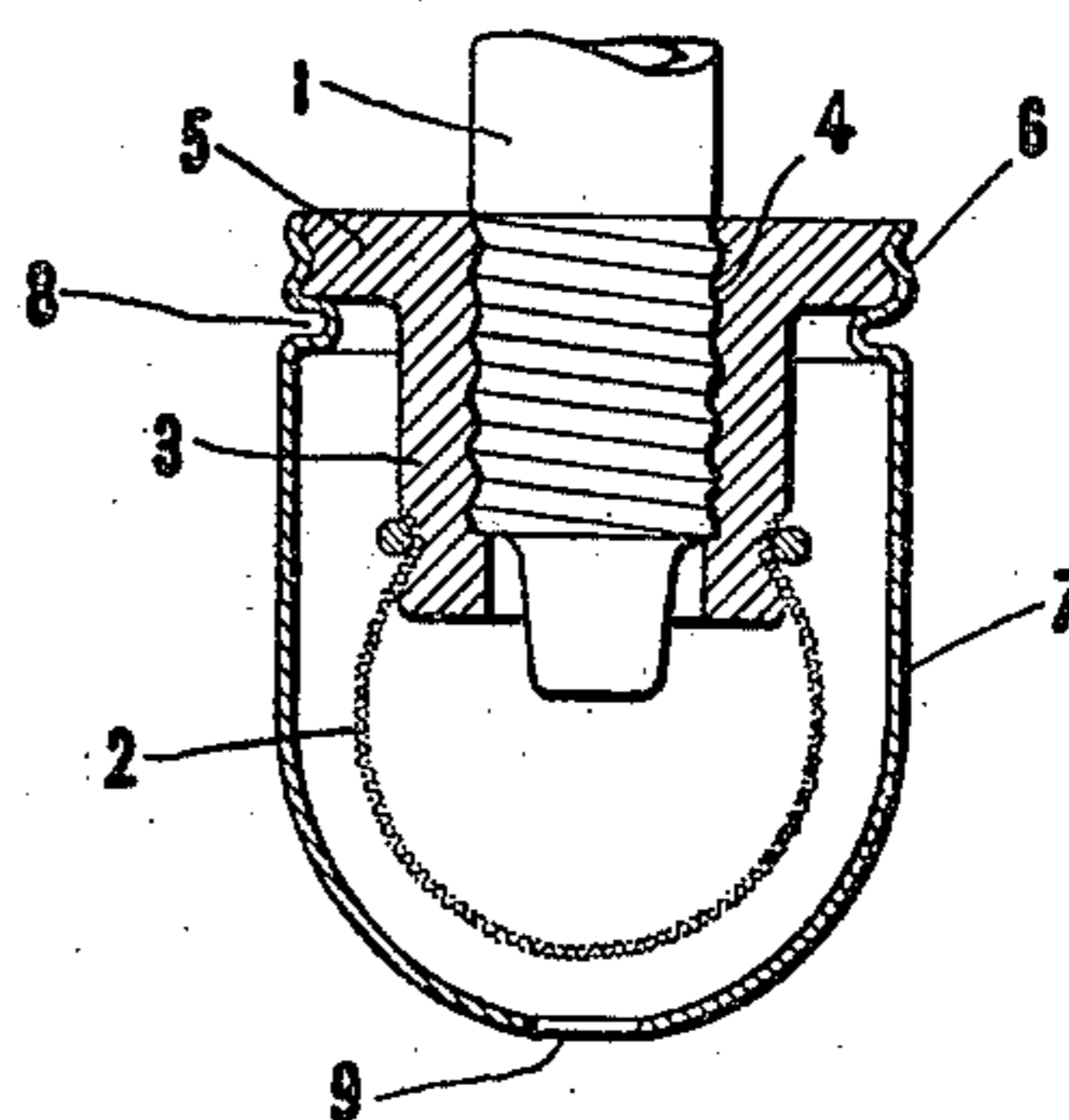
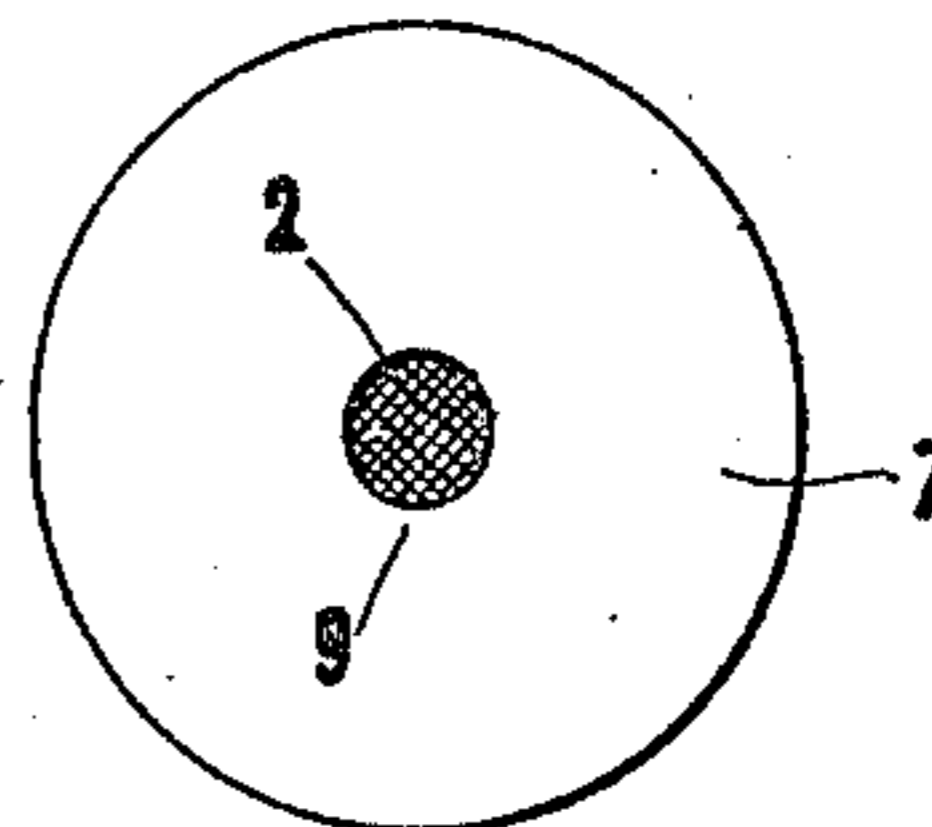


Fig. 5.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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ATTACHMENT FOR INCANDESCENT-LAMP MANTLES.

960,851.

Specification of Letters Patent.

Patented June 7, 1910.

Application filed April 19, 1906. Serial No. 312,547.

To all whom it may concern:

Be it known that I, ROBERT M. DIXON, residing at East Orange, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Attachments for Incandescent-Lamp Mantles, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates broadly to incandescent lamp mantles and the like.

One of the objects is to provide simple, inexpensive and practical means adapted to protect a mantle and render the same susceptible of free handling without injury.

Another object is to provide a non-complicated device adapted to aid in the efficient ignition of a mantle.

Other objects will be in part obvious and in part pointed out hereinafter.

The invention accordingly consists in the features of construction, combinations of elements and arrangement of parts, which will be exemplified in the embodiment hereinafter described and the scope of the application of which will be indicated in the following claims.

In the accompanying drawing, wherein are shown one or more embodiments of the several features of my invention, Figure 1 is a sectional elevation of one of the same; Fig. 2 is a similar view of an embodiment in which a different means of attachment is employed; Fig. 3 is a similar view of an embodiment in which the means of attachment is similar to that shown in Fig. 1; Fig. 4 is a similar view of the embodiment of this invention which is at present deemed preferable; Fig. 5 is a bottom plan of the parts shown in Fig. 4.

Similar reference characters refer to similar parts throughout the several views of the drawing.

In order that the several features of this invention may be most readily understood, it may here be noted that in the use of incandescent lamp mantles these parts are usually exposed to a considerable degree of

handling between the time of their completion and their mounting in position, and this handling is often by careless and unskilled parties. The coating which is ordinarily applied to the surface of a mantle as a means of protection is, in itself, inefficient as, if the surface of the mantle be touched, its life is decreased even though this coating be present. It may also be noted that in order to permit the ready burning out of the coating which is customarily applied to the surface of the mantle, it is desirable that the same be ignited by means of a strong, clean flame in such manner that the matter applied thereto is entirely consumed and no soot deposited.

The above, as well as the provision of a unitary device susceptible of hard usage and adapted, upon being placed in position upon a gas nozzle and ignited to be in condition for immediate and efficient use as a source of light, are among the aims of this invention.

Referring now to the accompanying drawing, there is shown in Fig. 4 a member 1 which may be termed a gas nozzle and may be considered typical of any means adapted to conduct gas into operative relation to a mantle 2. The latter part is preferably of the pendent type having a substantially closed lower end, although many of the advantages of my invention may be attained in its application to mantles of various other types. It may here be noted that by the term "mantle," as used throughout this description and the following claims, is meant any device adapted to be used in conjunction with a source of heat to serve as a source of light and irrespective of whether or not this part be provided with an extraneous coating.

Mantle 2 is mounted upon a supporting member 3 which is preferably screwthreaded upon the outer surface of the gas nozzle, as shown at 4, thus adapting the same for ready attachment and detachment, or for adjustment with respect to the flame if such adjustment be desired.

Member 3 is provided with an outwardly extending portion 5 which, in this case, is formed integral therewith, although many

of the advantages of my invention could be attained in a construction in which these parts are separate. Upon member 5 is secured, as by a coarse rolled thread 6, a shield 7 having the following characteristics. This member is formed of such material as to give it sufficient rigidity and strength to protect the mantle 2 positioned therein, and yet is preferably of a non-vitreous, non-brittle type so as to preserve the desired lightness, durability and other features which will hereinafter be set forth. This shield preferably extends substantially about the mantle, as shown in Fig. 4 of the drawings, so as to protect the same upon all sides and is provided with a corrugation or projecting portion 8 adapted to take against the lower shoulder formed by the part 5 when secured in position thereon, as by the thread 6. The latter device is so disposed as to permit the turning of the member 3 into operative relation to the gas nozzle 1 without a tendency to detach the shield.

Another feature of my invention deals with the formation of the shield 7, irrespective of its shape or precise disposition with respect to the mantle, of a combustible substance, as celluloid, thus adapting it upon being ignited to transmit a strong, clean flame to the mantle and thoroughly consume the coating or other matter which may obtain thereon.

In the embodiment of the features herein shown in which the member 7 has, among other functions, the protection of the mantle as well as its ignition after it is mounted in place, there is provided an opening 9 adapted to permit of the ready ignition of the shield and to afford a vent for whatever gases may be generated by its combustion, thus doing away with any explosive tendency in this step. It is to be understood that these openings may vary in number and disposition and many of the advantages of my invention be retained.

In the use of the above-described embodiment of my invention, assuming the same to be in assembled condition, the entire unit comprising the mantle 2, supporting member 3 and shield 7 is attached to the gas nozzle 1, as by means of the thread 4, this step being accomplished without the necessity for the handling of parts other than the shield 7. The latter part is then ignited, as at the opening 9, and quickly and thoroughly consumes any foreign substance which may have been applied to the mantle and leaves it in condition for immediate use.

It will thus be seen that I have provided a device which is well adapted to achieve the several objects of my invention and in which the advantages hereinbefore noted are, among others, present to a marked degree.

In the embodiment disclosed in Fig. 1 the shield 10 is retained in position on the projecting portion 5, as by means of a pin 11, thus doing away with the necessity of employment of the threads 6, and the shield is shown imperforate, thus adding in a slight degree to protection against mechanical injury.

In Fig. 2 is shown a modification of my invention, differing from that shown in Fig. 4 chiefly in the use of an imperforate shield 10 such as that shown in Fig. 1.

In the form shown in Fig. 3, a shield 12 is employed which is secured in place upon the supporting member 13, as by means of a projection or corrugation 14 resting within a groove therein, this attachment being rendered more certain as by means of the pin 15. Shield 12 differs from those above described in that it is of substantially globular form, thus being similar in contour to the type of mantle in connection with which I prefer to embody my invention.

The method of use of the several embodiments last above described is substantially identical with that first set forth.

As many changes could be made in the above construction and many apparently widely different embodiments of my invention could be made without departing from the scope thereof, I intend that all matter contained in the above description or shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense.

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

1. In a device of the class described, in combination, a mantle, a member upon which said mantle is directly supported, and a colloidal shell rigid with relation to said mantle secured upon said member and disposed about and adapted to protect said mantle and arranged to enable said supporting member to be directly attached to a burner.

2. In a device of the class described, in combination, a mantle, means from which said mantle is supported, and translucent combustible means rigid with relation to said mantle supported from said first means and disposed closely about and substantially inclosing said mantle and arranged to enable said supporting means to be directly attached to a burner.

3. In a device of the class described, in combination, a unitary device comprising a supporting member adapted to be mounted adjacent a gas conduit, a mantle secured directly thereto, and a combustible member permanently disposed closely about said mantle and secured to said supporting member and arranged to enable said supporting member to be directly attached to a burner.

4. In a device of the class described, in

combination, a mantle, a member provided with a shoulder, and a combustible bulb permanently disposed closely about and adapted to protect said mantle and secured to said first member against said shoulder and arranged to enable said supporting member to be directly attached to a burner.

5. In a device of the class described, in combination, a mantle, a member from which said mantle is supported, and a horny member threaded upon said supporting member and permanently disposed closely about and adapted to protect said mantle and arranged to enable said supporting member to be directly attached to a burner.

6. In a device of the class described, in combination, a mantle, a member from which said mantle is supported, a member threaded upon said supporting member and disposed closely about and adapted to protect said mantle, and a gas nozzle threaded within said supporting member, the threads being disposed in the same direction as those first mentioned.

7. In a device of the class described, in combination, a mantle, a member from which said mantle is supported, a combustible member threaded upon said supporting member and disposed closely about and adapted to protect said mantle, and a gas nozzle threaded within said supporting member, the threads being disposed in the same direction as those first mentioned.

8. In a unitary device of the class described, in combination, a mantle, and a combustible member permanently mounted adjacent said mantle and adapted upon being ignited to ignite the same.

9. In a unitary device of the class described, in combination, a mantle, a combustible member permanently mounted adjacent said mantle and adapted upon being ignited to ignite the same, and supporting means to which both said mantle and said combustible member are secured.

10. In a device of the class described, in combination, a unitary device comprising a member adapted to be mounted adjacent a gas conduit, a mantle directly secured to said member, and a combustible member secured to said first member and adapted upon being ignited to ignite said mantle.

11. In a device of the class described, in combination, a unitary device comprising a member adapted to be mounted adjacent a gas conduit, a mantle directly secured to said member, and a celluloid member secured to said first member and adapted upon being ignited to ignite said mantle.

12. In a device of the class described, in combination, a unitary device comprising a member adapted to be threaded upon a gas nozzle, a mantle secured to said member adapted to assume a position in operative relation to said gas nozzle, and a combustible

member secured to said first-mentioned member and adapted upon being ignited to ignite said mantle.

13. In a unitary device of the class described, in combination, a mantle, a member upon which said mantle is supported, and combustible means permanently rigid with relation to said mantle disposed about and adapted to protect the same, said means being adapted upon being ignited to ignite said mantle.

14. In a device of the class described, in combination, a unitary device comprising a supporting member adapted to be mounted adjacent a gas conduit, a mantle secured directly thereto, and a combustible protective member disposed closely about said mantle and secured to said supporting member, said combustible member being adapted upon being ignited to ignite said mantle.

15. In a device of the class described, in combination, a unitary device comprising a supporting member adapted to be mounted adjacent a gas conduit, a mantle secured directly thereto, and a celluloid protective member disposed closely about said mantle and secured to said supporting member, said celluloid member being adapted upon being ignited to ignite said mantle.

16. In a unitary device of the class described, in combination, a mantle, a member upon which said mantle is supported, and a combustible member rigid with relation to said mantle secured to said first member and disposed closely about said mantle.

17. In a device of the class described, in combination, a unitary device comprising a member provided with a thread adapted to co-act with a gas nozzle, a pendent mantle secured to said member, and a combustible member rigid with relation to said mantle disposed about and adapted to protect the same and provided with a threaded connection with said first member, said several threads being disposed in the same direction.

18. In a device of the class described, in combination, a unitary device comprising a member provided with a thread adapted to co-act with a gas nozzle, a pendent mantle secured to said member, and a celluloid member rigid with relation to said mantle disposed about and adapted to protect the same and provided with a threaded connection with said first member, said several threads being disposed in the same direction.

19. In a device of the class described, in combination, a mantle, a member upon which said mantle is supported, and combustible means provided with an opening and permanently disposed closely about and adapted to protect said mantle.

20. In a device of the class described, in combination, a unitary device comprising a member adapted to be detachably mounted adjacent a gas conduit, a pendent mantle

secured directly to said first member, and a combustible protective shield disposed about said mantle and secured to said first member.

21. In a device of the class described, in
5 combination, a mantle, a member from which said mantle is supported provided with an annular flange, and a member threaded upon said supporting member and disposed closely about and adapted to pro-

tect said mantle, said last member having 10 an inwardly projecting surface adapted to abut against said flange.

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

ROBERT M. DIXON.

Witnesses:

ELMER E. ALBEE,
A. C. VAN NEST.