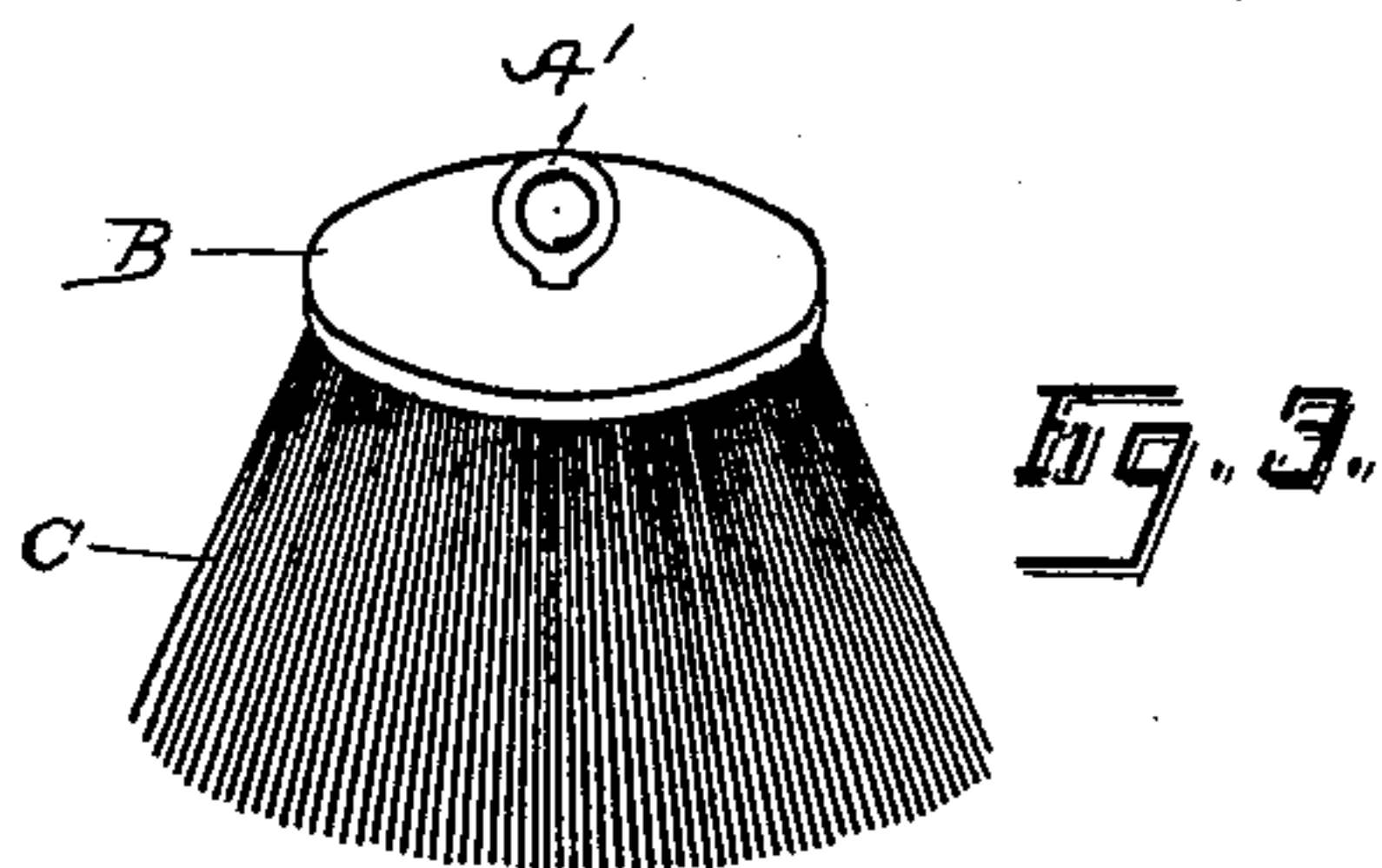
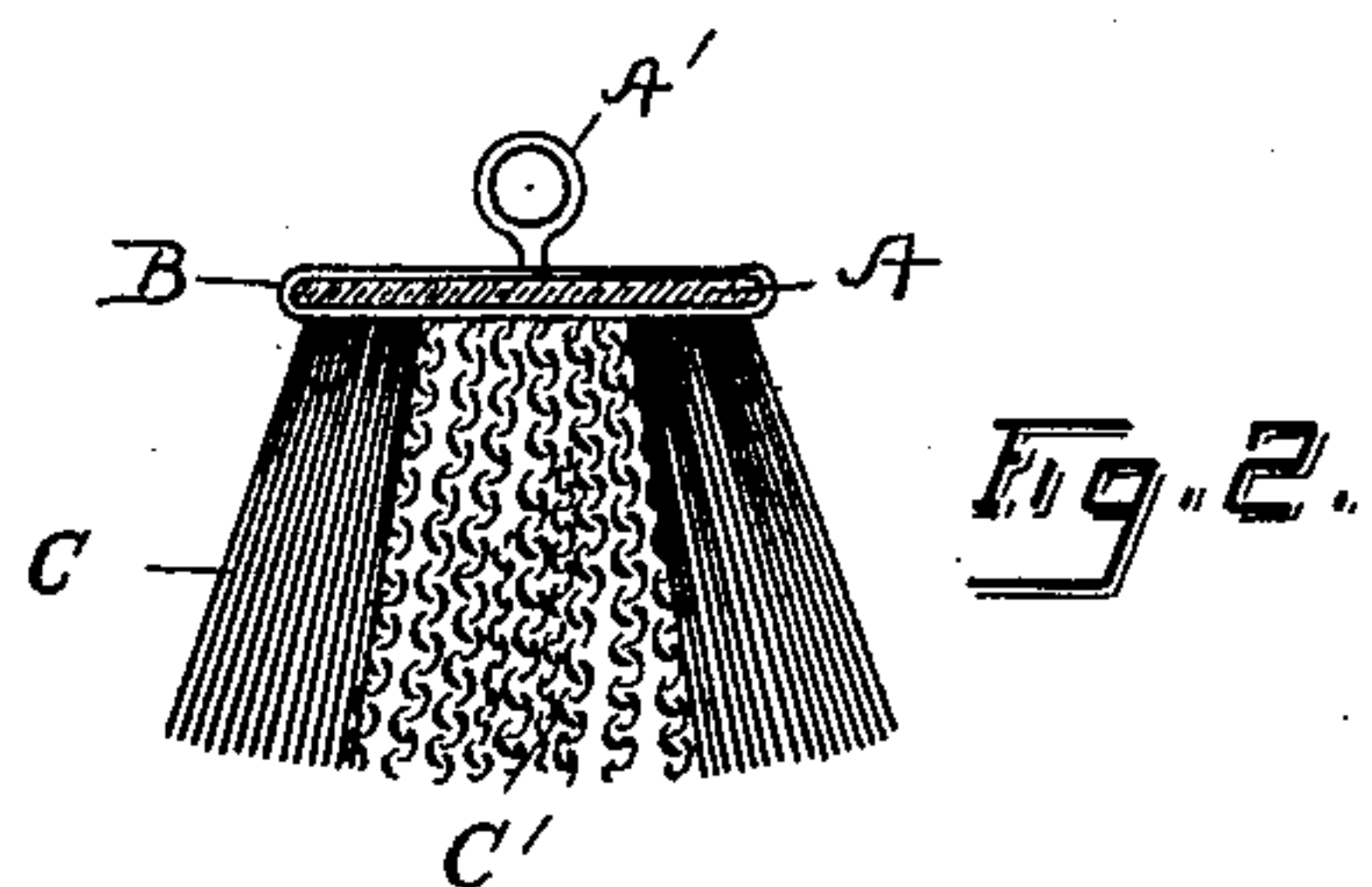
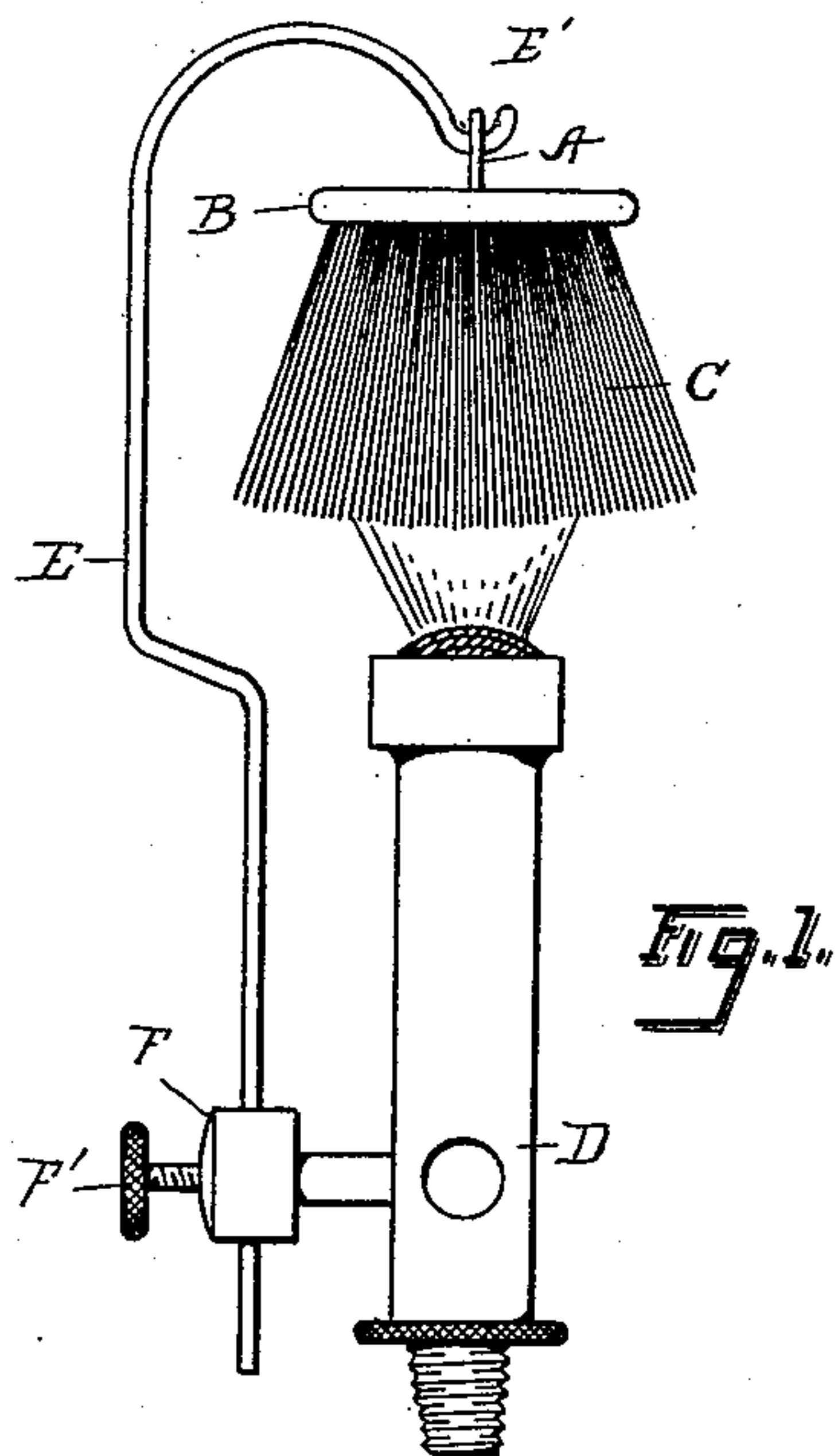


(No Model.)

L. HOOKER.
INCANDESCENT GAS LIGHT TASSEL.

No. 605,960.

Patented June 21, 1898.



Witnesses
L. W. Hausman
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UNITED STATES PATENT OFFICE.

LUCY HOOKER, OF SYDNEY, NEW SOUTH WALES.

INCANDESCENT GAS-LIGHT TASSEL.

SPECIFICATION forming part of Letters Patent No. 605,960, dated June 21, 1898.

Application filed September 24, 1897. Serial No. 652,915. (No model.)

To all whom it may concern:

Be it known that I, LUCY HOOKER, a citizen of New South Wales, residing at Sydney, in the Colony of New South Wales, have invented certain new and useful Improvements in Incandescent Gas-Light Tassels; 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.

This invention relates to improvements in gas-burners, and more particularly to incandescent attachments therefor; and it consists in the novel construction, arrangement, and preparation of the parts, as hereinafter set forth.

In the drawings, Figure 1 is a side elevation of a Bunsen gas-burner provided with this invention. Fig. 2 is a vertical section of the invention. Fig. 3 is a perspective view of the invention.

Heretofore the various attachments which have been used on gas-burners and which on becoming heated have arrived at incandescence have generally been subjected to the objection that in their structure they are delicate and easily destroyed by a jar or blow on the fixture to which they are attached. It is the object of the present invention to overcome these objections while providing a larger surface which upon becoming heated becomes incandescent, and thereby produces greater brilliancy and volume of light.

The attachment as constructed by me is formed, preferably, in the shape of a flattened tassel, as shown in the drawings. It is constructed by forming a small circular disk A from asbestos or other suitable material non-destructible by heat. While serving to support the threads of the tassel, this disk also serves the additional purpose of a deflector or disburser of the vertically-ascending heat-rays. By so doing the heat-rays are prevented from rising in a direct line and column from the burner and are deflected laterally and downward among the threads of tassel, thereby to a great extent conserving and utilizing the heat for the purpose of raising the material to incandescence. The shield A is covered with an envelop B, of linen, calico, or other suitable fabric, to which

the threads of the tassel may be attached. When the disk is thus covered, the threads C, which have been previously prepared in suitable lengths from asbestos fiber, hemp, cotton, flax, or any vegetable fiber or threads which will absorb the chemical solution hereinafter set forth, are attached by being sewed or threaded through the envelop B on the under side thereof. Within the center of these threads or to the center of the disk the threads are preferably constructed in the manner of a "chain-stitch" to render them stronger to resist the direct upward impact of the heat-rays from the burner D. In attaching the threads to the envelop they are placed closely together, but without touching. When the attachment has been thus prepared, it is placed within a solution composed of the mixture of the materials and quantities herein set forth, as follows: one ounce of liquid acetate of magnesium, one dram of sulfate of chromium, and 2 drams of calcine magnesia.

The same proportions as herein given for a smaller quantity of the solution are preserved in larger quantities.

The attachment is allowed to remain within the solution from one to two hours, when it will be thoroughly saturated. It is then removed and dried. When dried, it is combed out or the threads thereof separated from one another. It is now in readiness to be placed in position over the burner D.

In mounting this attachment upon the burner D there is no necessity of inclosing it within a chimney or globe to protect it from drafts of air for the reason that the material which causes the incandescence is thoroughly absorbed by the fiber of the threads of the tassel, which is sufficiently strong to maintain them from being broken by such movement.

To attach the device, I have provided a rod E, which is mounted in a suitable guide F, attached to the side of the burner D. The guide F is provided with a vertical perforation to receive the rod E and also with the set-screw F' for binding the rod in position. The rod E is given a suitable form at the top to allow the tassel to hang within it without the threads thereof coming in contact with

the rod, and it is extended over the top of, to the center of, the disk where the end is turned upward to form the hook E'.

5 The disk A may be provided at this time or before the envelop B is placed on it with a small ring or eyelet A', the ends of which or the loop of which is secured firmly to the said disk. This attachment when cool may thus be readily removed and replaced by lift-
10 ing it off the hook E'. In its operation, the heat is generated by the Bunsen burner D, and rising and striking upon the disk A, as before stated, deflects the heat-rays laterally and downward and finally escapes upward
15 around the outer edge of the disk A, in doing which, however, the threads of the tassel have become heated to incandescence, and thereby caused to produce light, the volume of which is proportionate to the amount of
20 material which is incandescent. By reason

of the larger quantity of this material the light produced by the attachment herein described is greater in volume and intensity than that produced by any of the so-called incandescent "hoods" or "mantles."

25 Having thus described this invention, what is claimed is—

An attachment for a gas-burner consisting of a fibrous material saturated with a compound while in solution, consisting of liquid
30 acetate of magnesium, sulfate of chromium, and calcine of magnesia, in the proportion, substantially as described.

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

LUCY HOOKER.

Witnesses:

ROBERT MALLENSON,
WALTER LYMONT.