(No Model.) 2 Sheets—Sheet 1.

G. W. DEMMICK.

INCANDESCENT LAMP GUARD.

No. 479,791. Patented Aug. 2, 1892.

Fig. 1.

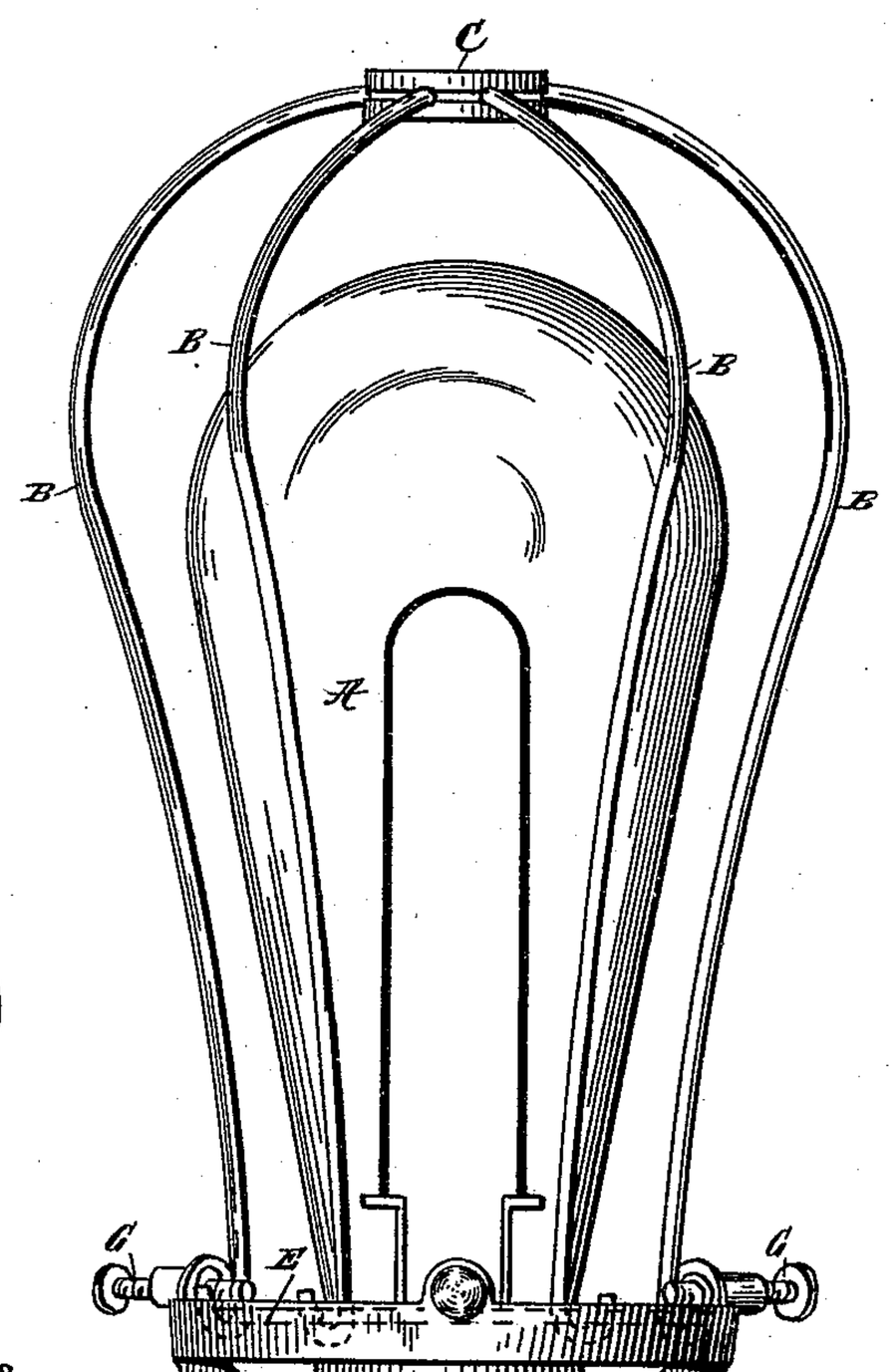


Fig. 5.

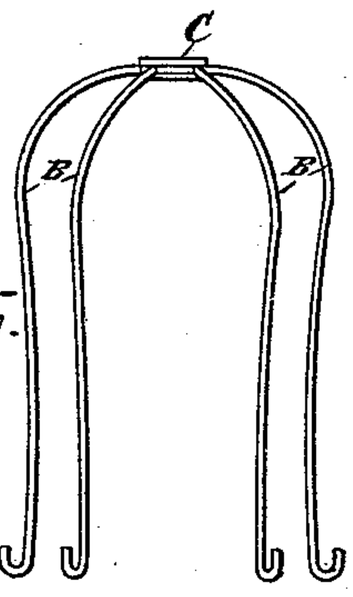


Fig. 2.

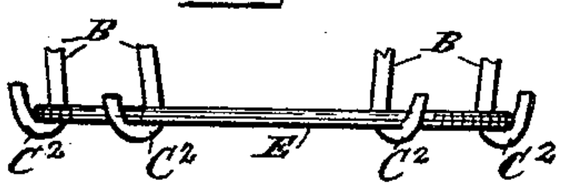


Fig. 3.

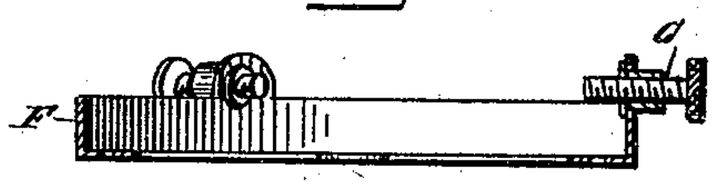
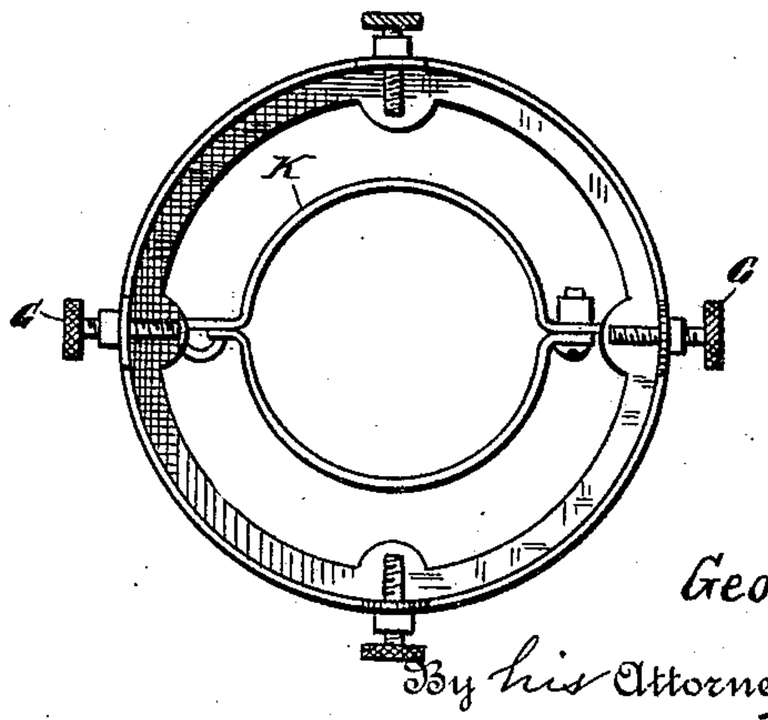


Fig. 4.



Witnesses
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(No Model.) 2 Sheets—Sheet 2.

G. W. DEMMICK.

INCANDESCENT LAMP GUARD.

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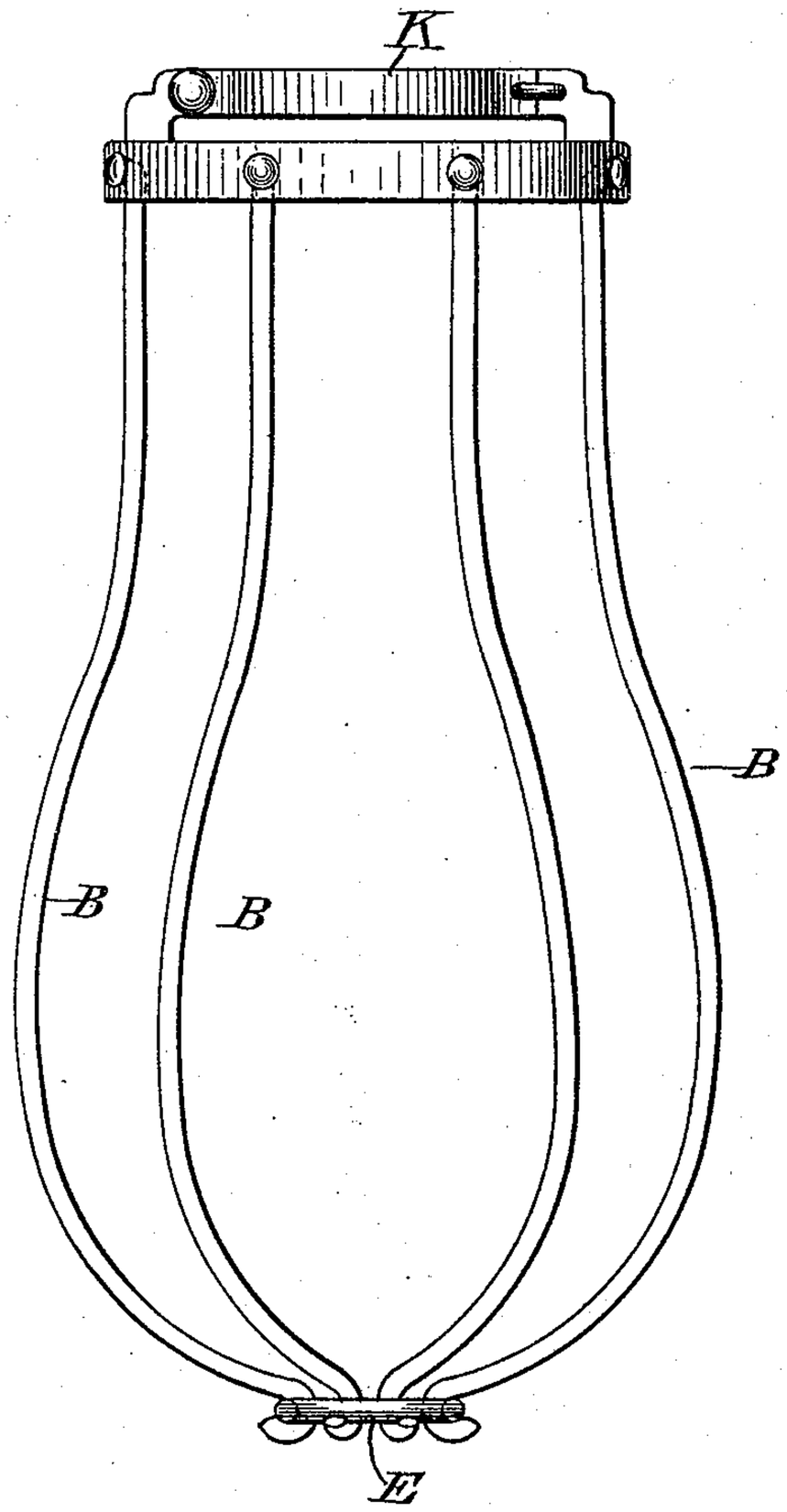
Fig. 6.



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UNITED STATES PATENT OFFICE.

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INCANDESCENT-LAMP GUARD.

SPECIFICATION forming part of Letters Patent No. 479,791, dated August 2, 1892.

Application filed June 22, 1889. Serial No. 315,187. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. DEMMICK, a citizen of the United States, and a resident of Lynn, in the county of Essex and State of Massachusetts, have invented certain new and useful Incandescent-Lamp Guards, of which the following is a specification.

The present invention relates to an open-work lamp-protector or lamp-guard for incandescent lamps, consisting of wires, strips, or rods of metal or other material placed around the lamp-bulb to protect it from blows to which it may be subjected in exposed situations in mills, mining or tunnel work, or in cases where the lamps are attached to a long flexible conductor and are intended to be moved from one position to another, as in vaults, magazines, offices, warehouses, &c. Hitherto guards which conform to the general outline of the lamp have been made with hinges, so that they could be opened and clasped about the lamp; but this is an expensive construction and throws a large shadow.

The object of the invention is to so construct the lamp-guard that it can be readily attached to or removed from the lamp, while the shadow cast is small and the cost of manufacture is low.

To this end my invention consists in constructing the guard from wires, strips, or rods of metal or other suitable, flexible, or elastic material, which are permanently attached together at one end of the guard, but are adapted to be spread or sprung apart at the other to permit the guard to be slipped over the lamp or to permit the lamp to be removed, in combination with a suitable detachable clamp for securing the free ends together after the guard has been disposed over the lamp.

My invention consists, further, in combinations of devices hereinafter described, whereby the guard may be supported, and at the same time effectually secured or locked against accidental release of the wires, rods, or strips at their free ends.

My invention consists, also, in certain details of construction to be hereinafter described, and then claimed.

In carrying out my invention I can secure the wires, rods, or strips permanently together at either end—that is to say, at the end of the guard—where it is supported or attached to any suitable device, or at the opposite end over the lamp-bulb. I prefer generally to leave the ends of the bars, rods, or strips free at the end where the guard is supported or attached to a suitable ring or holder.

In the accompanying drawings, Figure 1 is a side elevation of a guard constructed in accordance with my invention and applied over an incandescent lamp. Fig. 2 is a detail showing the ends of the flexible rods or strips as combined with their clamping-ring. Fig. Fig. 3 is a cross-section through the holder for the guard. Fig. 4 is a plan of the holder. Fig. 5 shows the condition of the guard preparatory to applying it to the lamp. Fig. 6 illustrates a modification in which the wires are secured together at their upper end next the support and are provided with means for holding the free ends together over the apex of the lamp-bulb.

In the drawings I have shown the parts inverted from the position which they would ordinarily have with a pendent lamp.

B B, &c., are wires, rods, or strips of brass or other suitable flexible or elastic material permanently attached together at the apex C of the guard and provided at their opposite free ends with hooks C^2.

E indicates a ring for clamping or holding the free ends together after application of the guard over the lamp. When the ring or clamp E is removed, the bent end of the guard may have its members spread apart or opened into the form shown in Fig. 5 to permit it to be slipped over the lamp-bulb, after which the ring E, previously placed upon the neck of the lamp, may be made to encircle the free ends to hold them against springing apart.

A support for the guard consists of a cup-shaped ring F, having screws G passing through its sides and adapted to be screwed in over the ring E after the same has been slipped into place in the cup. The cup is itself supported by a collar K, made in two parts and adapted to be fastened upon the neck I of the lamp or other suitable support. When the screws are set, the ring and the hook ends of the wires or strips are all firmly locked together against displacement or detachment from the support.

To remove the guard from the lamp, it is detached from the cup or holder and its free ends are squeezed together to permit the ring E to be disengaged from the hooks. The free ends may be then bent or will spring apart by their own resiliency, and the guard may be slipped over the lamp-bulb without any difficulty. The ring in the meantime may be left upon the lamp on which it will be held, owing to the fact that it is smaller than the bulb of such lamp, or the lamp may be detached from its socket and the ring removed.

I have shown one way in which the guard may be supported; but I do not limit myself to such special device, as any other form of device suitable for holding the guard in position over the lamp might be employed; nor do I limit myself to the employment of the ring E for holding the free ends of the wires or rods together. The means shown, however, will be found convenient in the case of suspended lamps, since the ring after the screws have been turned inward will rest upon such screws and will be prevented from slipping down upon the wires.

It is obvious that the clamping-screw E might be dispensed with in those cases where the guard stands upright, since in such instance the free ends of the wires making up the guard will be held against spreading by the sides of the cup-shaped support. The sides of the cup-shaped support would in that instance form the clamp for holding the ends together.

Where the lamp and guard are pendent, I prefer to use the clamping-ring E, since in such case it forms a convenient means for supporting the guard without the use of separate devices for the individual hooks of the guard-wires.

As before stated, the wires or rods may be fastened together at either end and be permitted to spring apart at the other. In the drawings, Fig. 6, I have shown a modification in which they are secured together at the end where they are attached to the lamp or its support. The free ends may spring apart to permit the removal of the lamp from its socket and without detaching the guard. They may be secured together by a ring E, as shown in this figure, or by any other suitable means. The collar K and attached ring E form a spider, which may be fastened upon the neck of the lamp.

What I claim as my invention is—

1. An incandescent-lamp guard consisting of flexible or elastic wires, strips, or rods permanently secured together at one end and free at their other to permit them to be spread or sprung apart for application to the lamp, in combination with a suitable clamp for holding the free ends together after the guard has been placed over the lamp-bulb.

2. An incandescent lamp-guard consisting of a series of wires B, permanently fastened together at one end and provided at their opposite free ends with hooks, in combination with a fastening ring or clamp for holding them against spreading when the guard is applied in position on the lamp-bulb.

3. The combination, with the lamp-guard composed of wires, strips, or rods attached together at one end and provided at their opposite free ends with hooks, of a ring adapted to encircle the free ends, and a cup-shaped holder for receiving the ring and free ends and provided with suitable fastening-screws.

4. As a new article of manufacture, an incandescent-lamp guard composed of a number of wires fastened together at one end and provided at their opposite free ends with hooks, and a detachable ring encircling the free ends.

5. The combination, with a lamp-guard having hooks on the ends of the wires of which it is composed, of a removable ring encircling the free ends and engaged by the hooks and means for supporting the ring on a suitable holder, as and for the purpose described.

6. The combination, with an electric or other lamp, of a protector consisting of a number of wires, strips, or rods attached together at one end and adapted to be bent apart at the other end, and suitable means for securing and supporting said protector over the lamp, substantially as and for the purpose described.

7. A protector for electric or other lamps, consisting of a ring or spider having wires, strips, or rods supported at its periphery, said wires, strips, or rods being secured together at one end and being adapted to be spread apart at their opposite end, as and for the purpose specified.

Signed at Lynn, in the county of Essex and State of Massachusetts, this 19th day of June, A. D. 1889.

GEORGE W. DEMMICK.

Witnesses:
JOHN W. GIBBONEY,
MERLE J. WIGHTMAN.