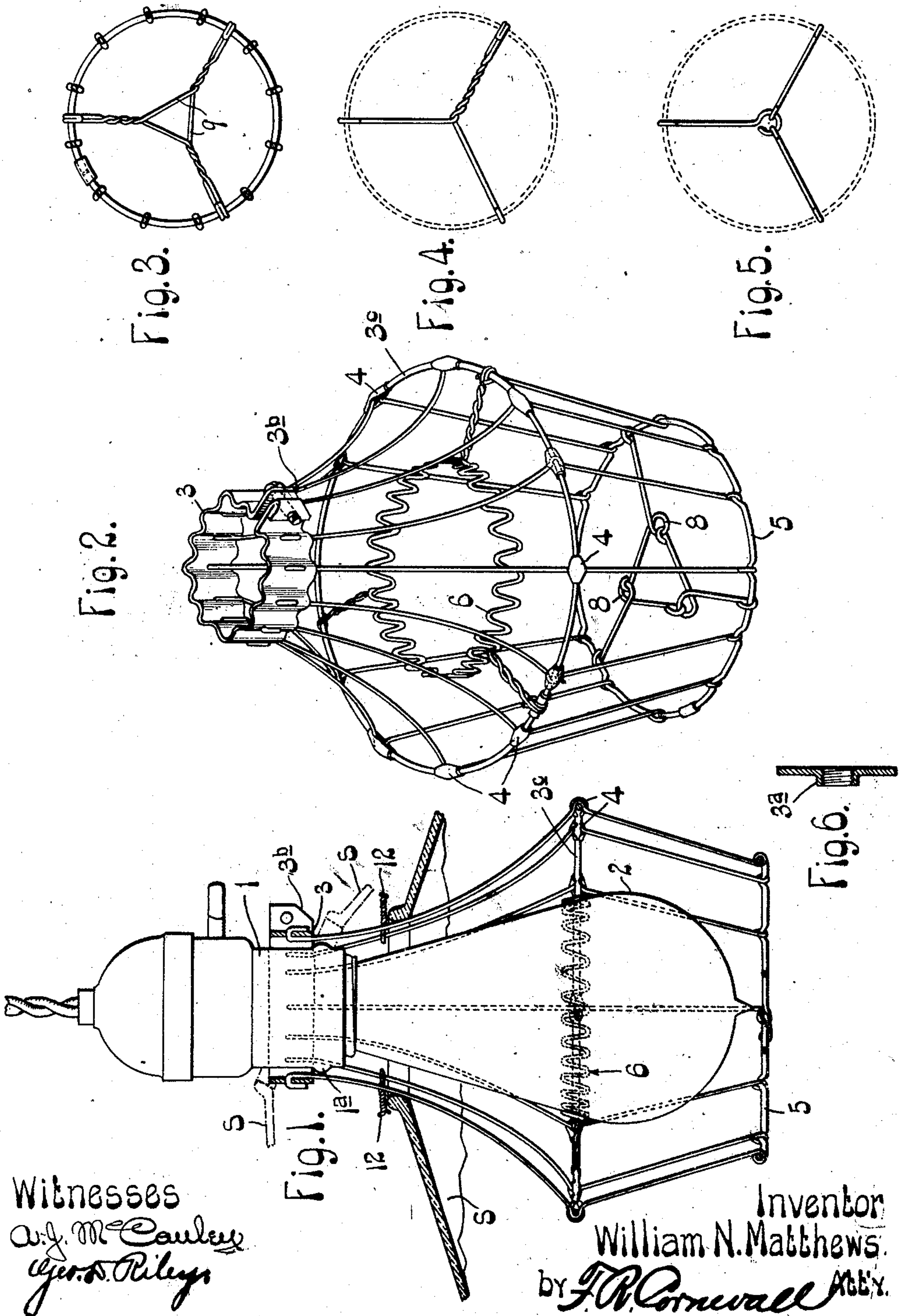


W. N. MATTHEWS.
 INCANDESCENT LAMP GUARD.
 APPLICATION FILED JAN. 11, 1909.

997,460.

Patented July 11, 1911.



Witnesses
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UNITED STATES PATENT OFFICE.

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INCANDESCENT-LAMP GUARD.

997,460.

Specification of Letters Patent.

Patented July 11, 1911.

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To all whom it may concern:

Be it known that I, WILLIAM N. MATTHEWS, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Incandescent-Lamp Guards, 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; reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical sectional view through my improved lamp guard showing the same in position on an incandescent lamp socket. Fig. 2 is a detailed view of the guard detached. Figs. 3, 4 and 5 are detailed views of modified forms of bottom guard wires. Fig. 6 is an enlarged vertical section through the end of the clamping band and showing a modified form of the threaded opening therein.

This invention relates to a new and useful improvement in guards for incandescent lamps, the object being to construct a guard which will be simple and cheap, and one which will prevent the removal of both the guard and the incandescent lamp from the socket except by the use of appropriate tools.

In the drawings, 1 indicates an incandescent lamp socket, which may be of any ordinary or approved construction, and 2 is the incandescent lamp mounted in said socket; 3 is the clamping band of my lamp guard, which band is provided with vertical crimps or flutes in the outermost walls of which are secured the vertical guard wires, said guard wires having their ends bent down over the outer face of the clamping band. The innermost walls of the clamping band extend inwardly beyond the guard wires so as to engage the bead 1^a of the lamp socket and support the guard in position. The clamping band has its ends bent outwardly and provided with openings to receive a clamping screw. The threaded portion has its length increased by folding back the end of the clamping band as shown in Fig. 2, or the metal may be pressed out as shown at 3^a, Fig. 6, and thus the threads of the screw have a more extended engagement with the clamping band.

3^c is the intermediate spacing ring fitting within jogs or bends in the vertical guard wires, which guard wires are spaced apart,

and likewise the ring is held in position with relation to said guard wires, by means of metal clips 4 which are clamped upon the ring on each side of a guard wire. The lower ends of the guard wire are bent around a bottom ring 5, which bottom ring is preferably provided with jogs or bends at intervals to properly space the guard wires.

In order to cushion the incandescent lamp within the guard, I arrange cushion wires 6 within the guard, said cushion wires consisting preferably of single strands of wire bent into serpentine or zigzag form, the bent portions lying substantially in a vertical plane so that they will engage the incandescent lamp and afford an extended bearing therefor, as shown in Fig. 1. The ends of these cushioning wires may be twisted together and bent around the spacing ring 3^c, or other means may be employed to support the cushioning ring within the guard, if desired.

The guard above described is preferably dipped in solder or galvanizing material, which solders the various wires and parts together. Of course, the threaded opening for the clamping screw is tapped and the clamping screw is introduced after the dipping operation.

To prevent the removal of the lamp except by a person provided with proper tools either to remove the guard, or to cut the guard wires, I provide bottom guard wires as shown in Figs. 2 to 5 inclusive. In Fig. 2 this bottom guard wire consists of three wires formed with intermediate loops 8, to which the ends of adjacent wires are connected, the extremities of said wires being bent around the bottom guard ring. In Fig. 3 the ends of the bottom guard wires are twisted together and bent over the guard ring. In Fig. 4 the bottom guard wire is in one piece twisted along part of its length, the ends being spread apart to engage the bottom guard ring. In Fig. 5 there are three bottom guard wires which are connected together at one end and have their outer ends bent around the bottom guard ring.

The projecting ends of the clamping band are preferably cut away as at 3^b, Figs. 1 and 2, so as to permit the introduction of a reflector or shade S on the guard. The openings in standard-sized shades are such that they cannot ordinarily be introduced

upon the guard but by cutting away the lower part of the projecting ends of the clamping band, as shown at 3^b, the shade may be introduced upon the guard. When
 5 the shade is introduced upon the guard, wires 12 may be twisted around the guard wires to hold the shade in position.

I am aware that changes in the construction and arrangement of the several parts
 10 of my device may be made without in the least departing from the nature and principle of my invention.

Having thus described my invention, what I claim is:

15 1. An incandescent lamp guard, comprising a wire cage adapted to inclose the lamp and a cushioning member within the cage, which cushioning member comprises a series
 20 of wires which wires are bent into zigzag form, the bent portions occupying a vertical plane so as to afford an extended bearing for engaging the surface of the lamp bulb and having lateral extensions attached to a
 25 part of the cage.

2. In a device of the class described, a wire cage adapted to be clamped upon an incandescent lamp socket for inclosing the lamp seated in said socket, there being an
 30 opening in the lower end of the cage for the insertion and removal of the lamp, a bottom guard comprising a center body portion having extensions projecting in different lateral directions therefrom, and
 35 hooks on said extensions which engage the bottom of the cage.

3. In an incandescent lamp guard, a wire

cage for inclosing the lamp bulb, a spacing ring at the lower end of said cage, and a bottom guard for the lower end of the cage, which guard comprises a series of wires
 40 interlooped to form a center portion having extensions projecting laterally therefrom and hooks on said extensions which hooks engage the spacing ring on the bottom of
 45 the cage.

4. In an incandescent lamp guard, a wire cage for inclosing the lamp bulb, a spacing ring at the lower end of said cage, and a bottom guard for the lower end of the cage, which guard comprises two or more wires
 50 interlooped to form a center portion, and laterally projecting hooks to engage the spacing ring on the bottom of the cage.

5. In an incandescent lamp guard, comprising a wire cage adapted to inclose the
 55 lamp, and a cushioning member within the cage which cushioning member comprises a series of wires bent into zigzag form, the bent portions occupying a vertical plane so
 60 as to afford an extended bearing for engaging the surface of the lamp bulb, and having lateral extensions formed by twisting two of the wires around each other to be attached to a part of the cage.

In testimony whereof I hereunto affix my
 65 signature in the presence of two witnesses, this 8th day of January 1909.

WILLIAM N. MATTHEWS.

Witnesses:

F. R. CORNWALL,
 LENORE CLARK.