

G. E. PURPLE.
SECURING DEVICE FOR LAMP GUARDS.
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1,298,398.

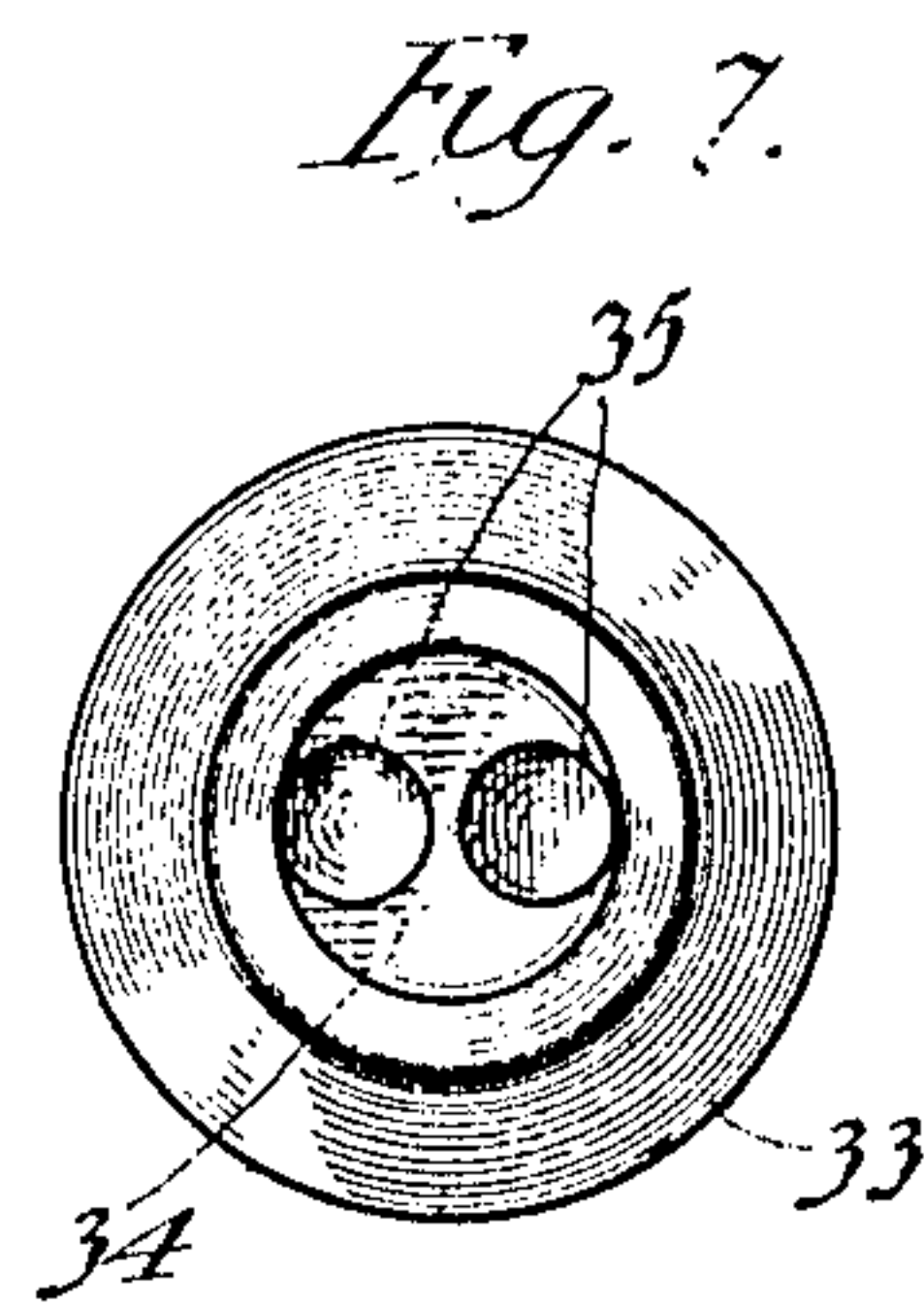
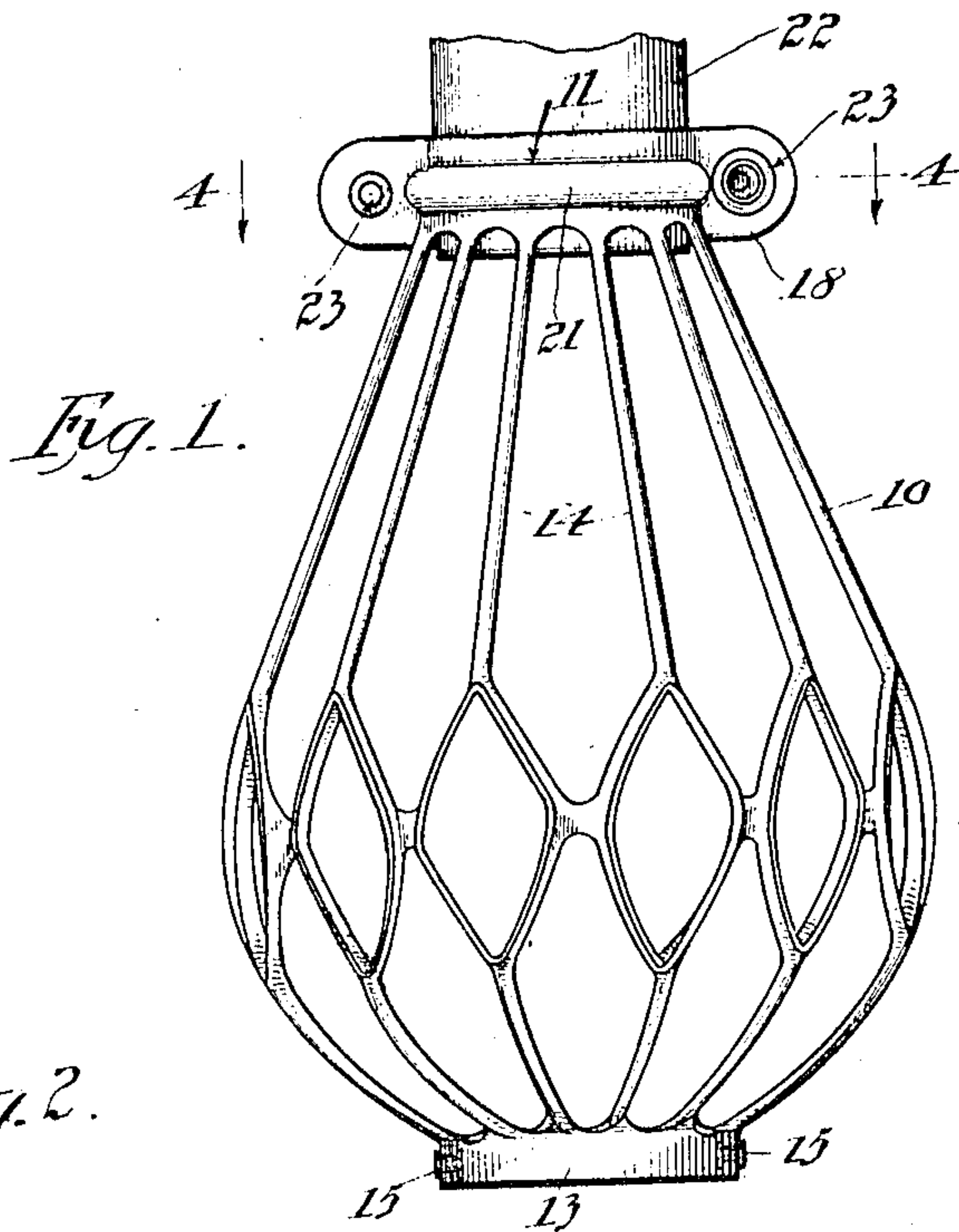
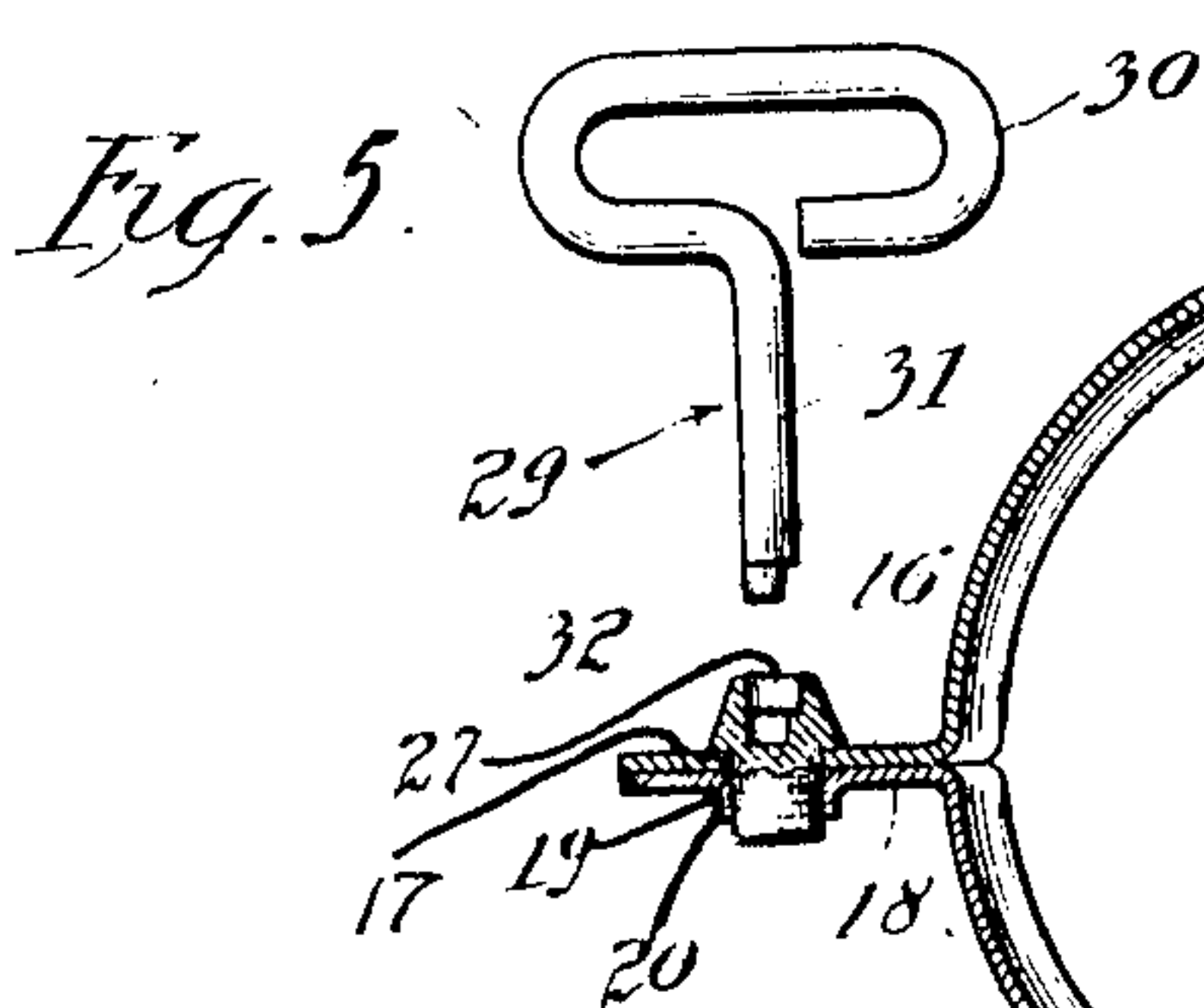
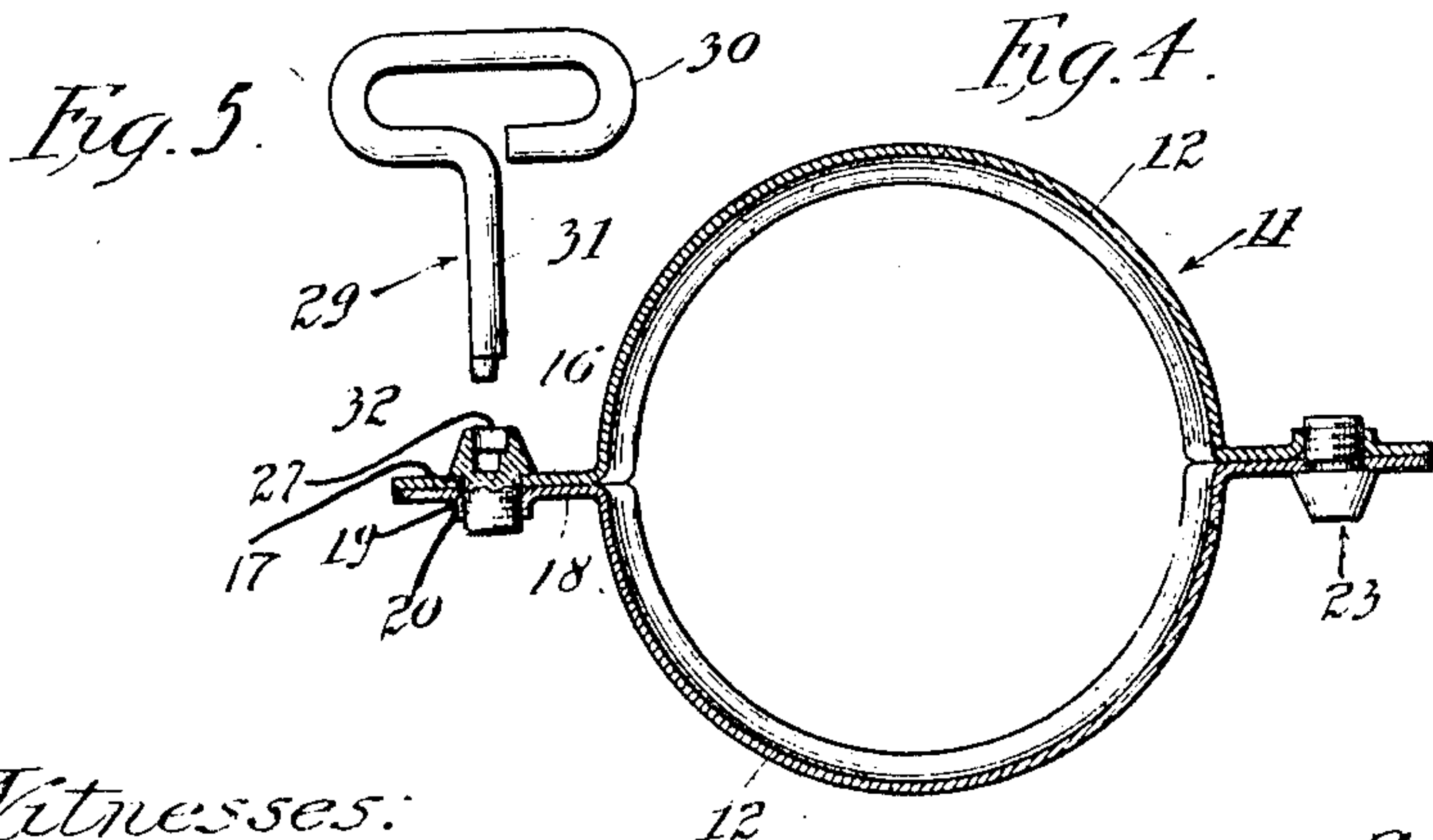
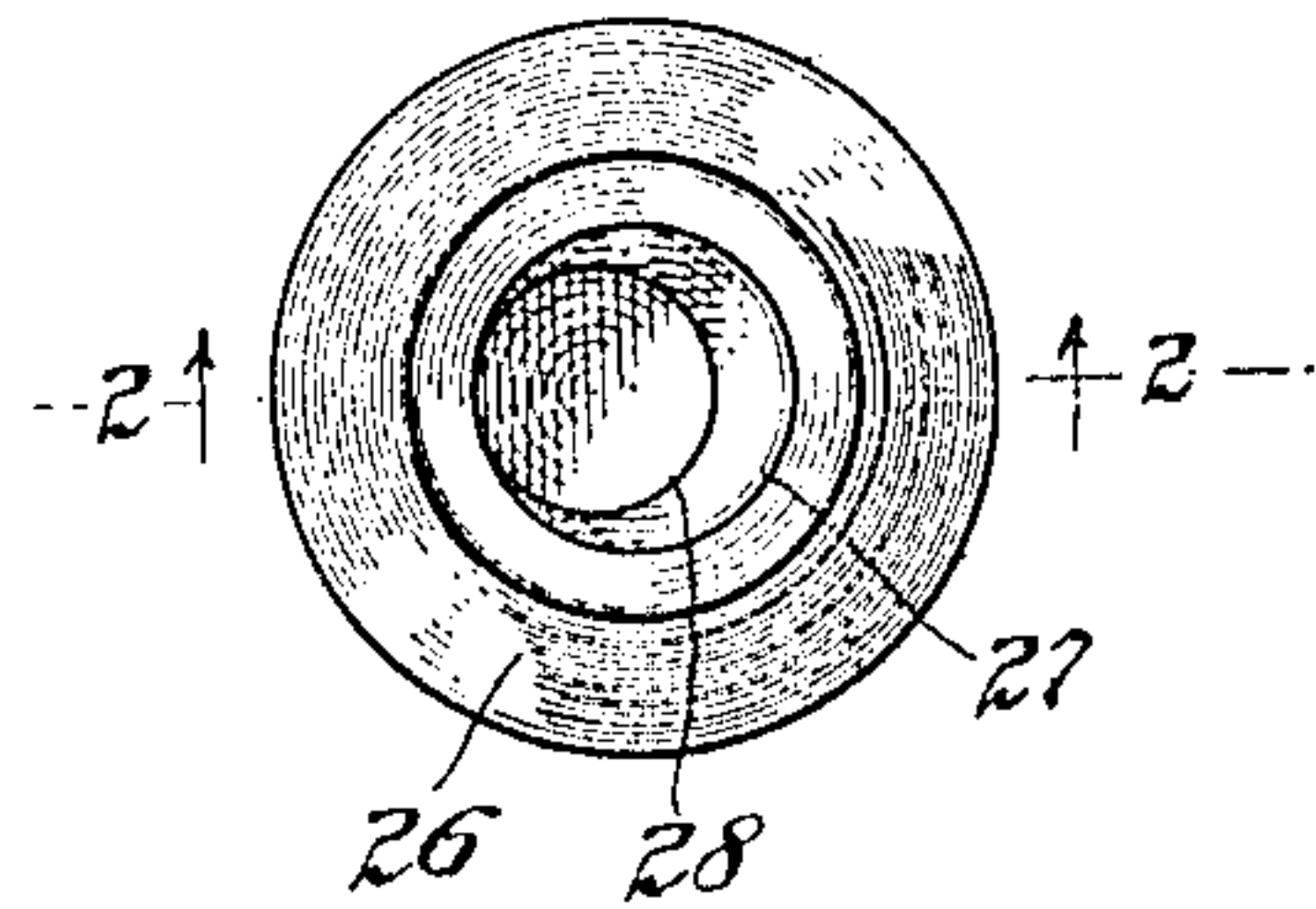
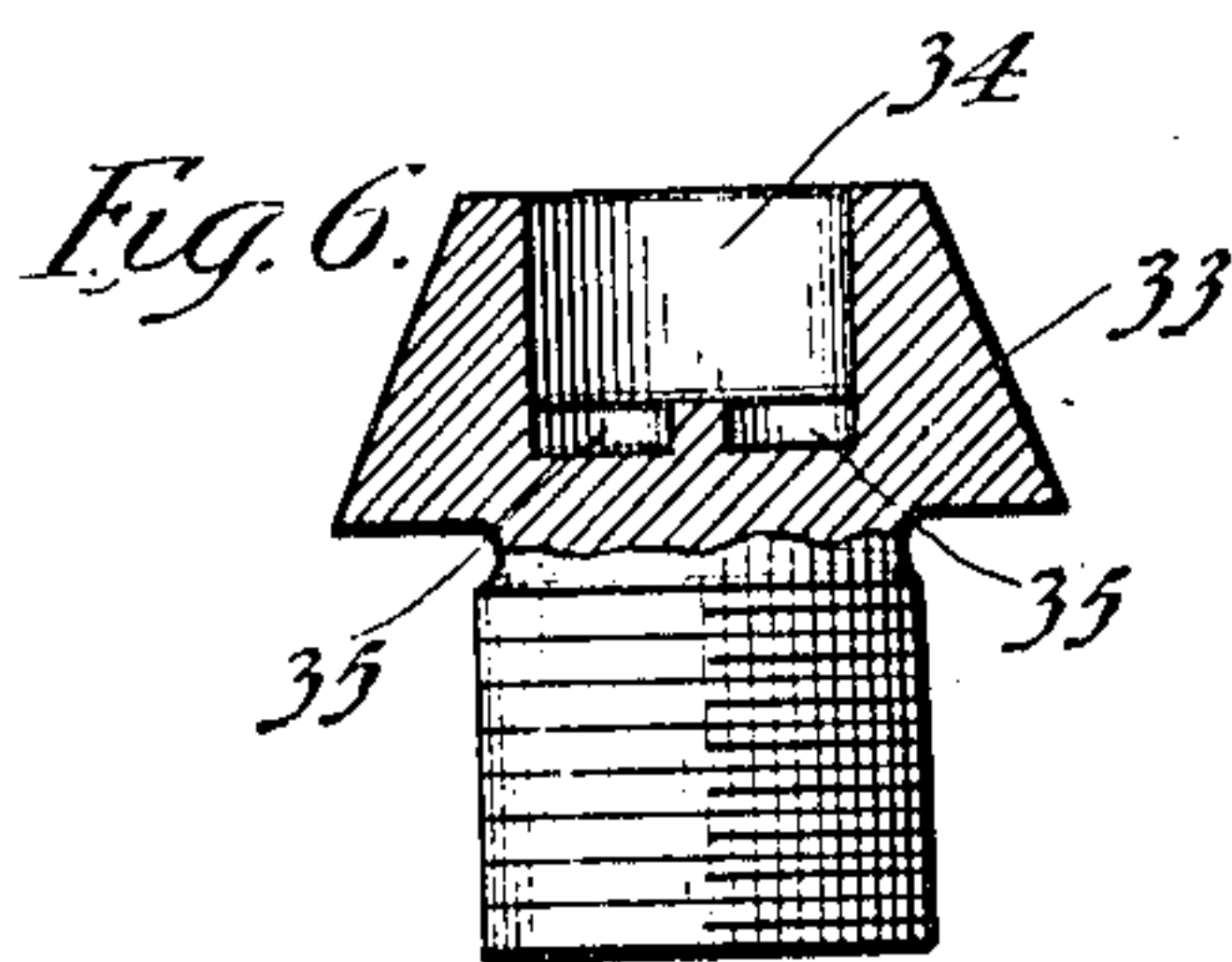
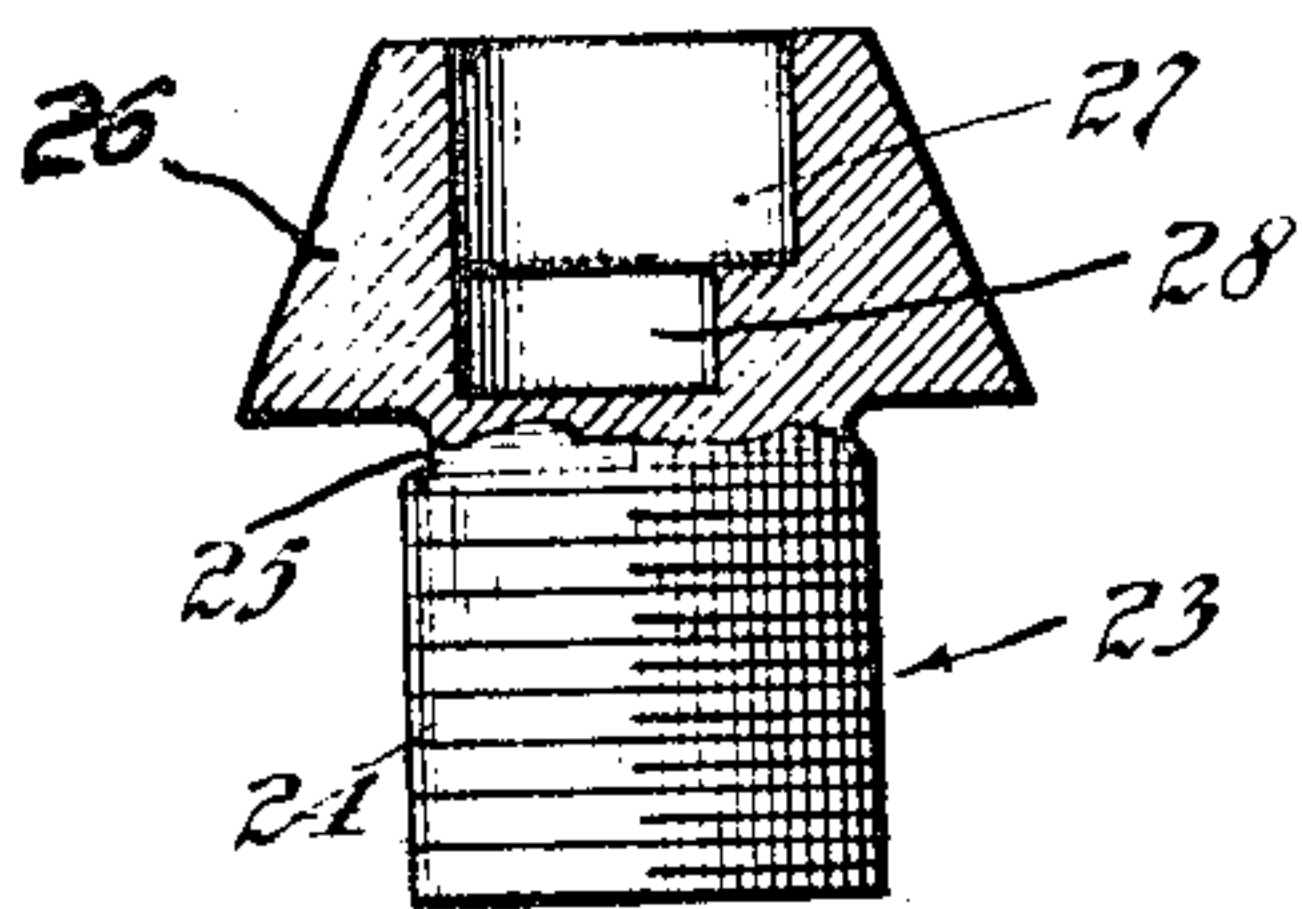


Fig. 2.

Fig. 3.



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UNITED STATES PATENT OFFICE.

GEORGE E. PURPLE, OF LA GRANGE, ILLINOIS, ASSIGNOR TO FLEXIBLE STEEL LACING COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

SECURING DEVICE FOR LAMP-GUARDS.

1,298,398.

Specification of Letters Patent.

Patented Mar. 25, 1919.

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To all whom it may concern:

Be it known that I, GEORGE E. PURPLE, a citizen of the United States, residing at La Grange, in the county of Cook and State of Illinois, have invented new and useful Improvements in Securing Devices for Lamp-Guards, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawing, forming a part of this specification.

My invention relates to securing devices for lamp guards and the like, and more specifically to means for securing two sections of a lamp guard placed on the socket in such a manner that it will be difficult for an unauthorized person to remove the guard from the socket.

One of the objects of my invention is to provide an improved device of this character which shall be simple in construction, efficient in use and easy to manufacture.

Further objects will appear from the description taken in connection with the appended claims.

In the drawings, in which I have shown two embodiments of my invention—

Figure 1 is a side elevation showing a lamp guard secured in place on a socket;

Fig. 2 is a side elevation of one of the securing screws, the head being shown in section on the line 2—2 of Fig. 3;

Fig. 3 is a plan view of the securing screw;

Fig. 4 is a section on the line 4—4 of Fig. 1 showing the manner in which the two sections of the guard are secured together;

Fig. 5 is a detail showing a key used in securing the guard in place on the socket and removing it;

Fig. 6 is an axial section of a modified form of screw; and

Fig. 7 is a plan view of the screw head shown in Fig. 6.

Referring now to the drawings in detail I have shown my invention in connection with a lamp guard, indicated in general at 10, comprising two similar sections 11. Each of these sections comprises an upper and lower semi-circular member 12 and 13 respectively, united by ribs 14 which are shaped and positioned so that the two sections, when placed together, will inclose the bulb of an electric lamp. The lower semi-circular members 13 are hingedly secured together in any suitable manner as

shown at 15. Each of the upper semi-circular members 12 is provided with an ear 18 on the opposite end provided with an opening 19 therethrough. The ear 18 is provided with an annular upstanding flange 20 stamped up therefrom and which is internally screw threaded for engagement with the screw which secures the two sections of the guard together. Each member 12 is beaded outwardly as shown at 21 for engagement with a corresponding bead on the lamp socket 22 whereby when the members 12 are drawn together the guard will be securely clamped on the socket and held in place. The members 12 are held together by means of two screws 23 each of which comprises a threaded portion 24 for engagement with the internally threaded flange 20, a smooth reduced neck portion 25 which lies within the opening 17 when the members 12 are clamped together, and a frusto-conical head 26 which engages the ear 16. The head 26 is provided with an axial cylindrical recess 27 and an eccentric cylindrical recess 28 extending from the recess 27, these recesses being provided to receive a suitable key 29 for operating the screw. The key 29 comprises a handle portion 30, a cylindrical stem portion 31, a part of which will fit snugly within the recess 27, and a turned-down cylindrical portion 32 extending from the stem portion 31 which is positioned and proportioned to fit snugly in the recess 28.

The use and operation of my improved device is as follows: The key 29 is inserted so that the cylindrical projection 32 fits in the recess 28 and the key is then turned to remove the screw 23. The two sections 11 are then opened about the hinges 15 and brought into position about the bulb of the lamp and the portions 12 brought into engagement with the socket 22, the bead 21 fitting over the corresponding bead of the socket. The screws 23 are then again threaded into the flanges 20 by means of the key 29 to clamp the members 12 tightly against the socket. The unthreaded apertures 17 in the ears 16 are just large enough to permit the threaded portion 24 of the screw 23 to be threaded therethrough. This construction will prevent the screws from falling out of the ears 16 when they are not threaded into the flange 20. The neck portion 25 of the screw is small enough to per-

mit the screw to rotate freely in the opening 17 after the portion 24 has been threaded therethrough. The head 26 is made frusto-conical (being beveled off at an angle of about 22 and one half degrees to the axis of the screw) in order that it may be very difficult for any one to get a good hold on the head of screw by means of a pair of pliers or the like as the jaws of the pliers will slip off of the inclined surface. Both of the recesses 27 and 28 being circular will afford no hold for an angular instrument such as a three-cornered file or screw driver so that it is almost impossible to remove the screw without having a key which will fit both of the recesses 27 and 28.

In Figs. 6 and 7 I have shown a modified form of locking screw having a frusto-conical head 33 having an axial circular recess 34 from which extends two eccentric circular recesses 35. For operating this lock nut a key is provided having a portion fitting snugly within the recess 34 and portions extending therefrom fitting in the recesses 35. With this form of screw there is no tendency for the key to bend in the axial recess when the key is turned as is the case with the modification of Figs. 1 to 5.

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

1. Means for securing two sections of a lamp guard having registering apertures together comprising a screw for extending through one of said apertures and for threading into the other aperture, said screw having a head having a deep axial recess circular in cross section therein, and a second recess circular in cross section extending

from the bottom of said first recess and eccentric thereto.

2. Means for securing two sections of a lamp guard having registering apertures together comprising a screw for extending through one of said apertures and for threading into the other aperture, said screw having a head having a deep recess therein extending in the same direction as the axis of the screw, and a second recess extending from the bottom of said first recess and eccentric thereto.

3. Means for securing two sections of a lamp guard having registering apertures, together, comprising a screw for extending through one of said apertures and for threading into the other aperture, said screw having a head with a deep recess therein extending in the same direction as the axis of the screw, and a pair of recesses extending from the bottom of said first recess and eccentric thereto.

4. Means for securing together two portions of a lamp-guard having registering apertures, comprising a screw for extending through one of said apertures and threaded into the other aperture, said screw having a high, upwardly-tapering frusto-conical head having a deep axial socket therein for engagement with a key, said socket being provided with a recess extending from the bottom of said socket for preventing rotation of the key in the socket, the slope of said frusto-conical head being such that it cannot be firmly grasped by pliers or the like.

In witness whereof I have hereunto subscribed my name.

GEORGE E. PURPLE.