

No. 673,563.

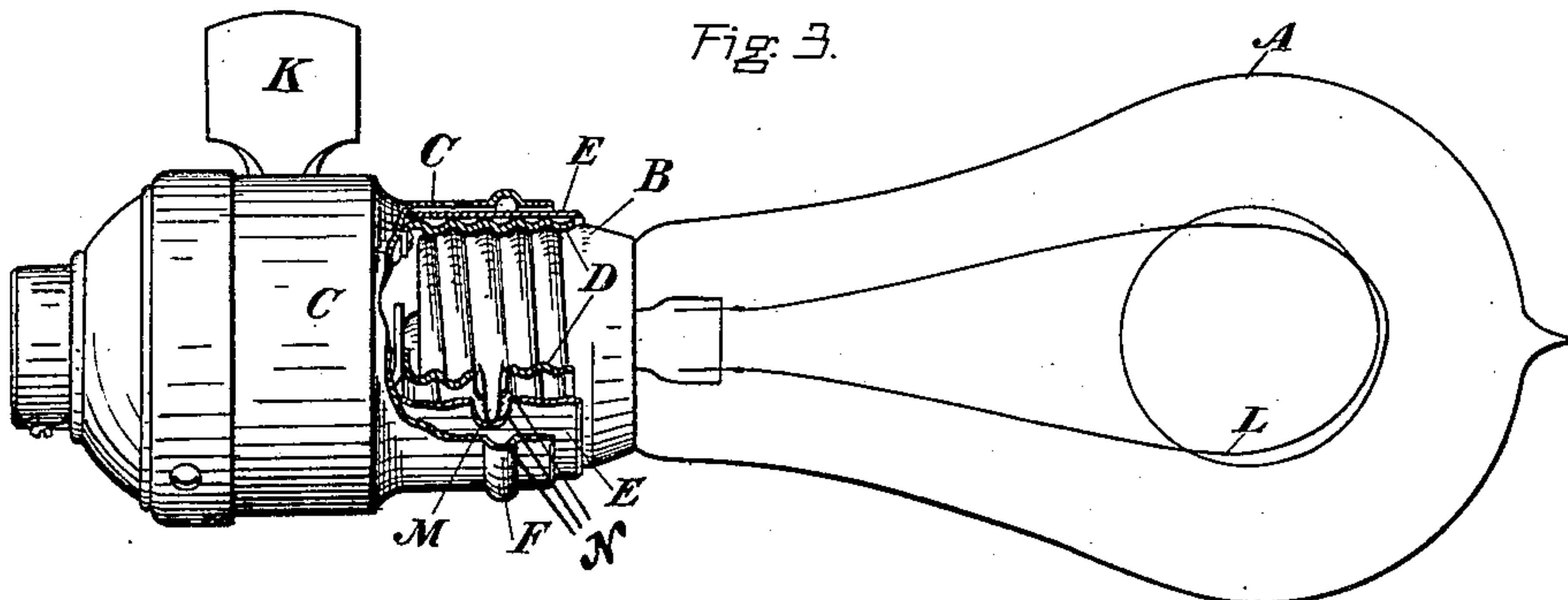
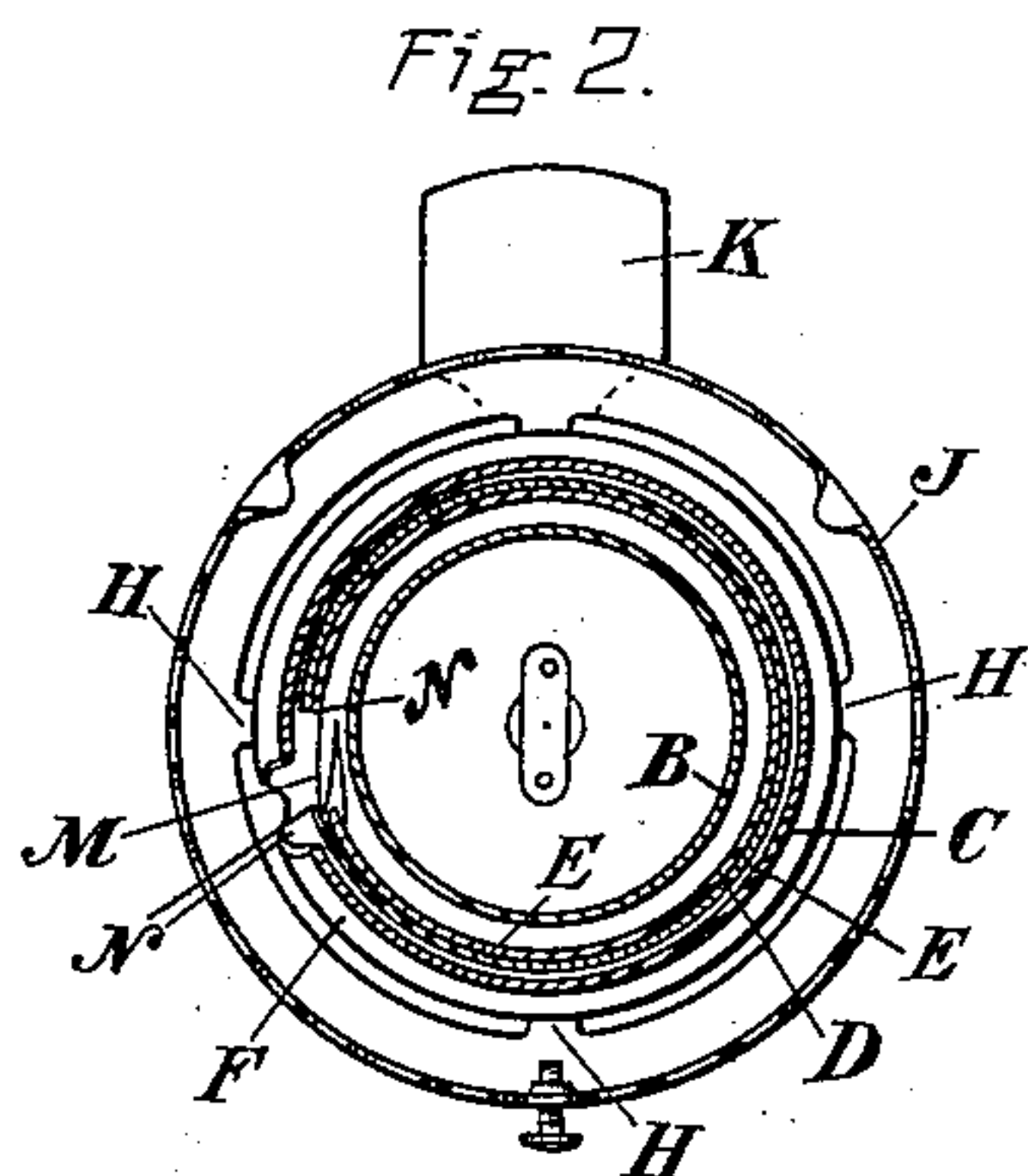
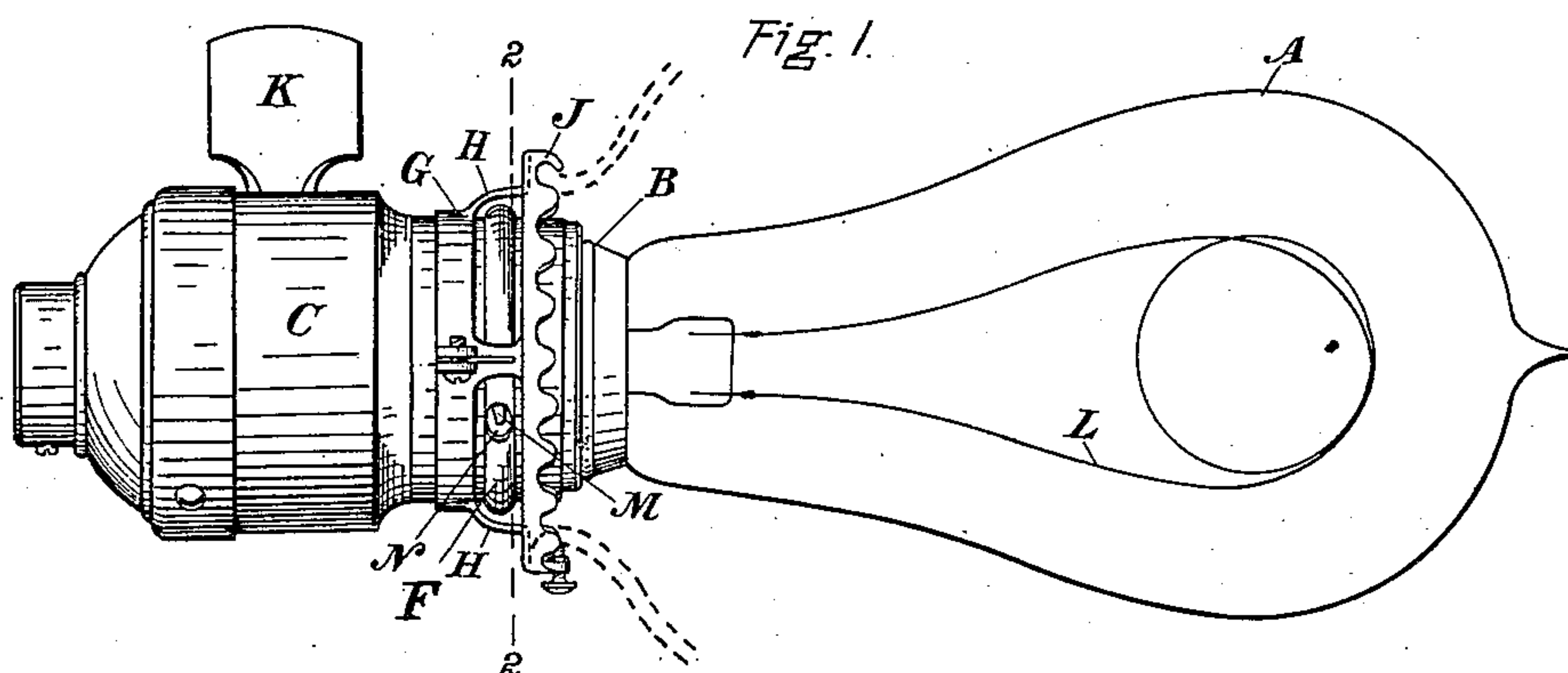
Patented May 7, 1901.

G. B. MILLEN.

SAFETY CATCH FOR INCANDESCENT ELECTRIC LAMPS.

(Application filed July 14, 1900.)

(No Model.)



WITNESSES:

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GEORGE B. MILLEN, OF SAN FRANCISCO, CALIFORNIA.

SAFETY-CATCH FOR INCANDESCENT ELECTRIC LAMPS.

SPECIFICATION forming part of Letters Patent No. 673,563, dated May 7, 1901.

Application filed July 14, 1900. Serial No. 23,664. (No model.)

To all whom it may concern:

Be it known that I, GEORGE B. MILLEN, a citizen of the United States of America, and a resident of the city and county of San Francisco, State of California, have invented a new and useful Safety-Catch for Incandescent Electric Lamps, of which the following is a specification.

The object of my invention is to provide improved means for preventing the accidental loosening or stealthy removal of incandescent electric lamps. I attain this end by the device illustrated in the accompanying drawings, which constitute part of this specification, and wherein like letters of reference indicate like parts in the several figures.

Figure 1 is an elevation of an ordinary incandescent electric lamp provided with my improvement. Fig. 2 is a cross-section along the line 2 2 of Fig. 1. Fig. 3, like Fig. 1, is an elevation of such a lamp, but lacking the shade-band and shade and exposing detail illustrative of my device.

The principle of my invention, as will be seen, is applicable at trivial expense to any of the types of incandescent electric lamps now on the market and requires no preliminary change in the lamp proper or in its fixtures or metallic trimmings; but in order to make the following description more comprehensible I will explain it as applied to one type of lamp only in accordance with the accompanying drawings, thus:

In Figs. 1 and 3, A is the glass bulb of such a lamp, and B in all the figures is the externally-threaded metallic foot-trimming thereof, which parts A and B constitute the lamp proper. This is provided with an internally-threaded socket-piece (seen in all the figures) which comprises, as is usually if not always the case, an electric fixture or casing C, an inner spirally corrugated or threaded shell D, threaded to correspond with trimming B aforesaid as its counterpart, and an intermediate insulator E. F represents a beaded fluting circumferentially disposed around the casing C, convex without and concave within, whose function is to act as a shoulder to hold the usual metallic shade-supporting attachment in position. In Fig. 1 is shown one of these shade-fittings, of which a band or girdle G loosely embraces the fixture C just above

the bead F and is represented in this figure as being integrally connected by radiating branches H with an outer scalloped girdle J, the function of which latter is to grasp and hold the lamp shade or reflector. (Shown in part by dotted lines.) The thumb-piece K (seen in all the figures) is the ordinary switch-key. Now since the parts mentioned above in this paragraph are all old, as are also the coiled filament L and its interconnections with the source of light, my claims will embody none of them as novel features in the invention described herein.

Constructively my invention consists—

First, in separating and pulling out peripherally an inch or less in length, M, of the exterior thread of the lamp-trimming B (best seen in Fig. 3) at a point so disposed that when the lamp has been screwed into electric contact the outwardly-projecting end of the part M so bent out shall lie centrally opposite the concavity of the fluted ring F. This portion M is to be severed at its outer or rearward end and then bent so as to form an outwardly-trending spring stop, catch, or barb, as shown in Fig. 2.

Secondly, in making an aperture N through the walls C D and insulator E of the socket- fixture to admit the end of the stop M at the exact point in the operation of screwing the lamp A B into its socket C when full electric contact has been reached. The function of the aperture in the wall or shell D, as is already manifest, is to oppose a shoulder or bar to the free end of the spring-barb M, thereby affording an automatic stop that will prevent the removal of the lamp in the usual way until the said barb has been forced to resume its position inside of the internal thread of the said shell as a continuous part of the exterior thread of the part B. The function of the opening N in the outer casing C and insulator E is to enable the barb M to be reached by a lead-pencil or other rigid point, so as to allow the lamp to be removed when desired without destroying it. To prevent the danger of short circuit, the stop M is not intended to protrude beyond the insulation E or in possible contact with the outer casing C, and for this reason it is located centrally opposite the bead F, as aforesaid.

My invention, therefore, is an automatic

stop admitting of the removal of the lamp as soon as the catch M has been pushed back by any rigid point, as just stated, to its original position. It will not lock the lamp; but I find
5 that is not necessary and that the automatic catch provided by this invention is sufficient.

Now since the construction of incandescent electric lamps is such as to admit of more or less twisting of the lamp, as is well
10 known, without affecting its electric contact therefore the barb M would not usually be found in a position to be pushed back through the aperture N, and this, coupled with the obstacle opposed by the presence of the shade
15 or reflector and its fittings G H J, would evidently make lamps that are provided with this simple improvement practically thief-proof, and even in the absence of the shade and its fittings the fraudulent removal of such
20 lamps becomes by means of this device virtually inexpedient for even chronic in the profession.

Having described my invention, what I claim, and desire to secure by Letters Patent
25 of the United States, is—

1. In an incandescent electric lamp having an externally-threaded foot arranged to screw into an internally-threaded socket-piece substantially as described, a safety-catch consisting of a barb cut out of the thread of the lamp-
30 foot and adapted as it is screwed in to project into an opening of the socket-piece so the

lamp cannot be unscrewed without first pressing back said barb, substantially as set forth.

2. The combination with an incandescent
35 electric lamp having an externally-threaded foot, a laterally-apertured socket-piece therefor comprising a casing, an inner shell internally threaded to receive the lamp-foot, and an insulator between said casing and shell,
40 of a safety-catch cut out of the thread of the lamp-foot and adapted as it is screwed in to engage the lateral aperture of the shell, within the casing and insulator, substantially as described.
45

3. The combination, with an incandescent electric lamp having an externally-threaded foot, a socket-piece therefor comprising a casing provided with a circumferential beaded fluting, an inner shell internally threaded to
50 receive the lamp-foot, and an intermediate insulator, the said casing, shell, and insulator having corresponding lateral apertures, of a safety-catch cut out of the thread of the lamp-foot and adapted as it is screwed in to
55 engage the opening in said shell, opposite the beaded fluting of said casing, substantially as described.

Signed by me at San Francisco, California, this 29th day of June, 1900.

GEORGE B. MILLEN. [L. S.]

Witnesses:

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J. M. J. PHELAN.