

No. 737,651.

PATENTED SEPT. 1, 1903.

F. McINTYRE.
ELECTRIC SHADE HOLDER.
APPLICATION FILED MAR. 15, 1902.

NO MODEL.

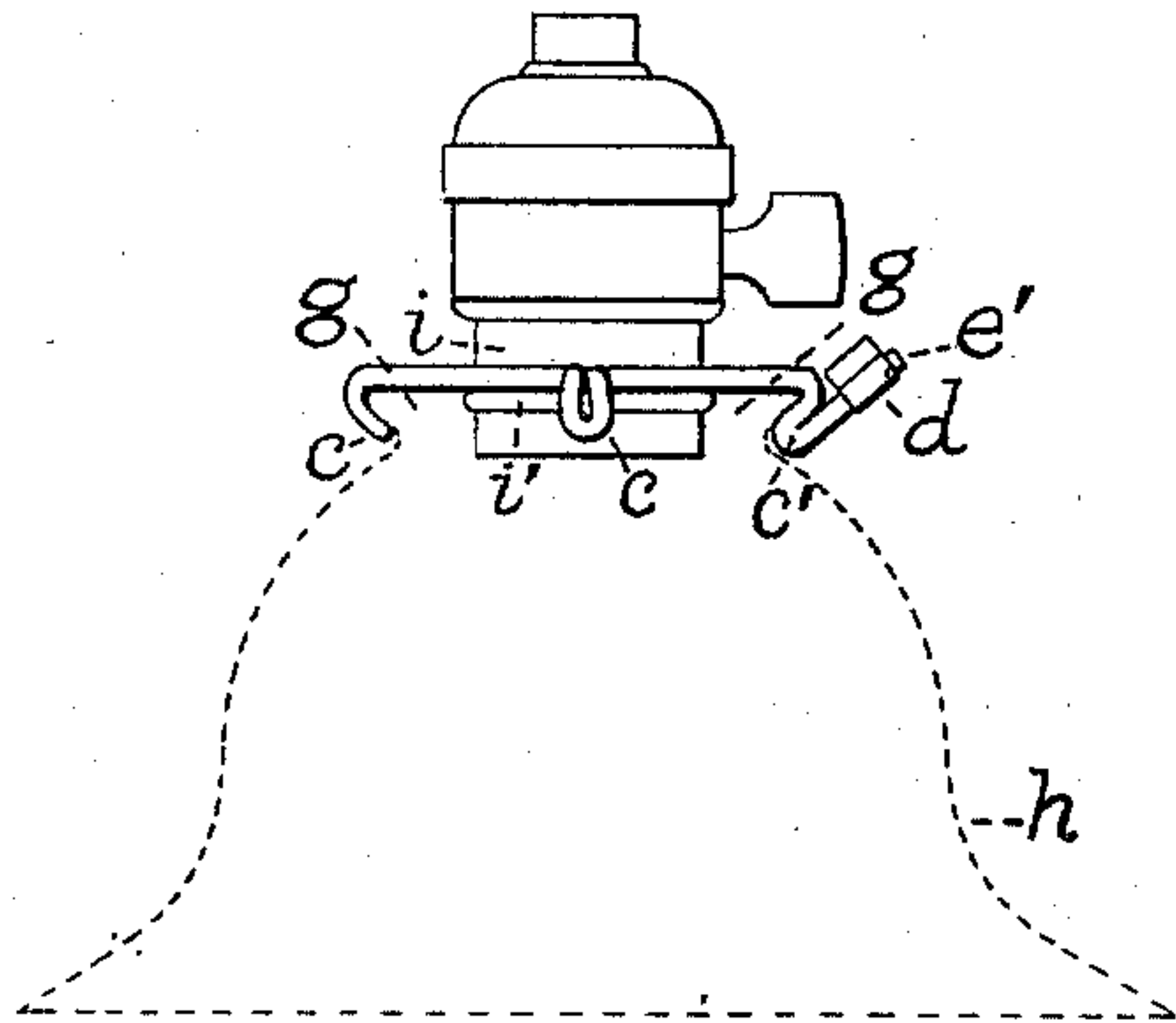


FIG. 1

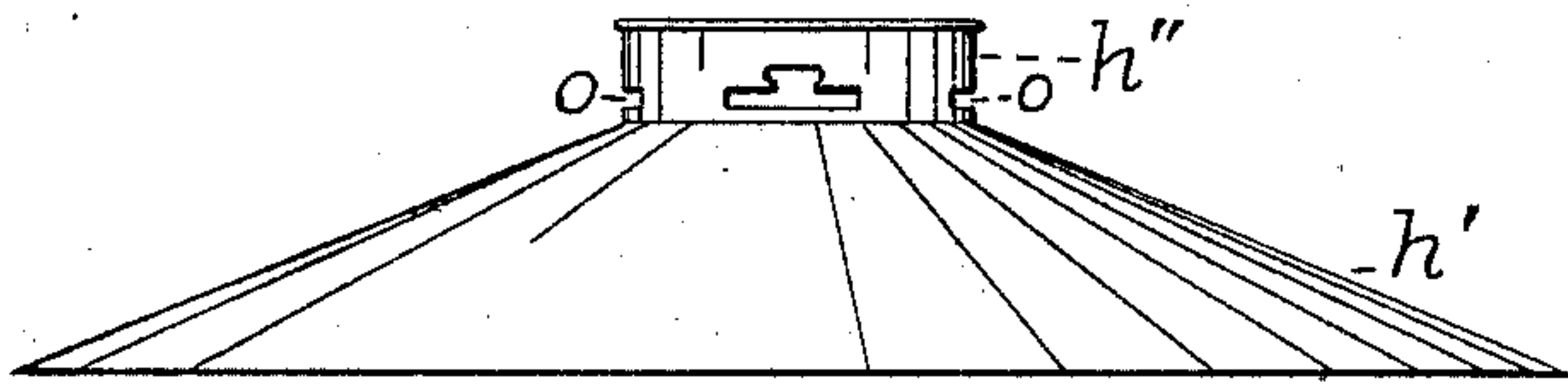


FIG. 3

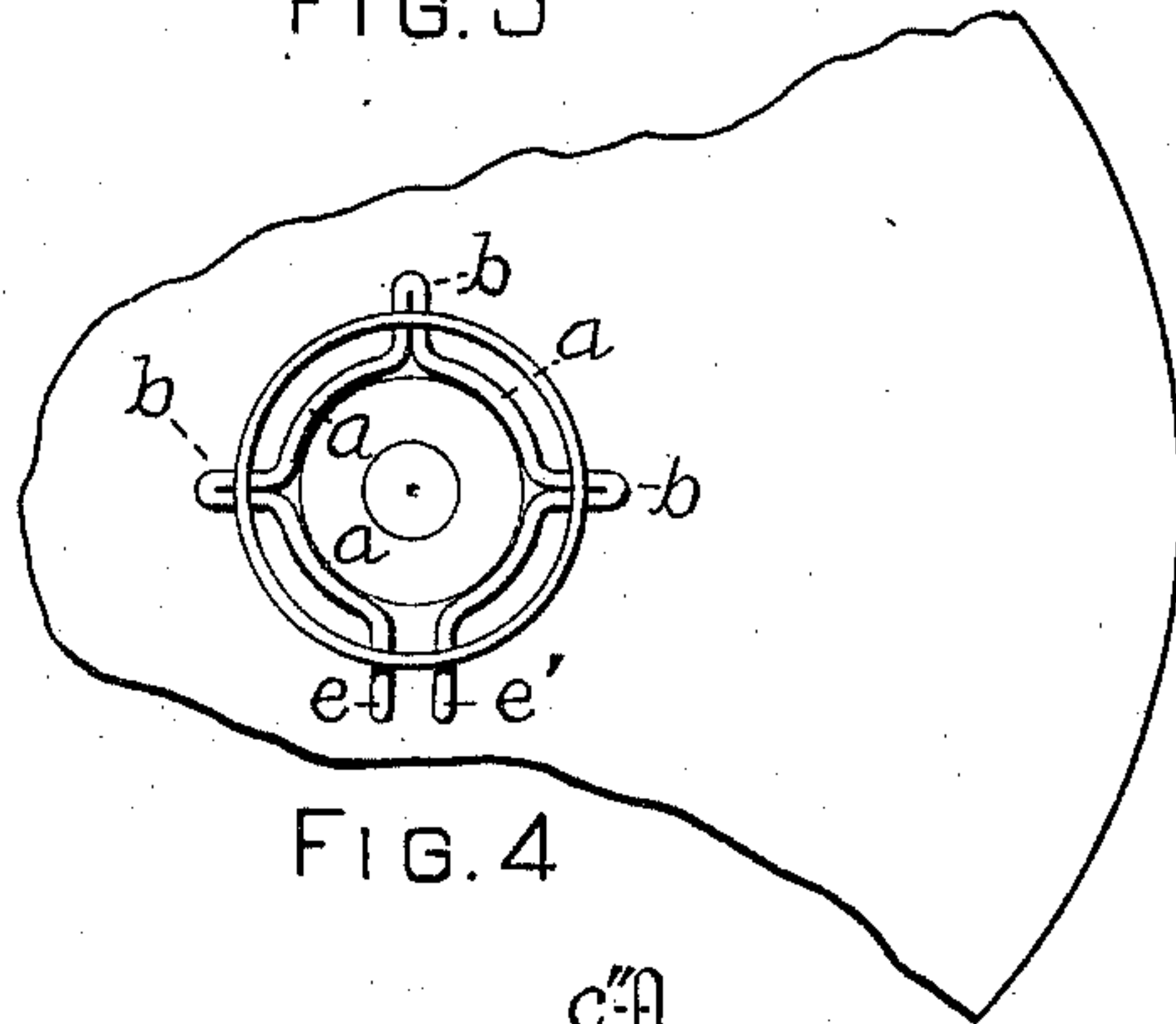


FIG. 4

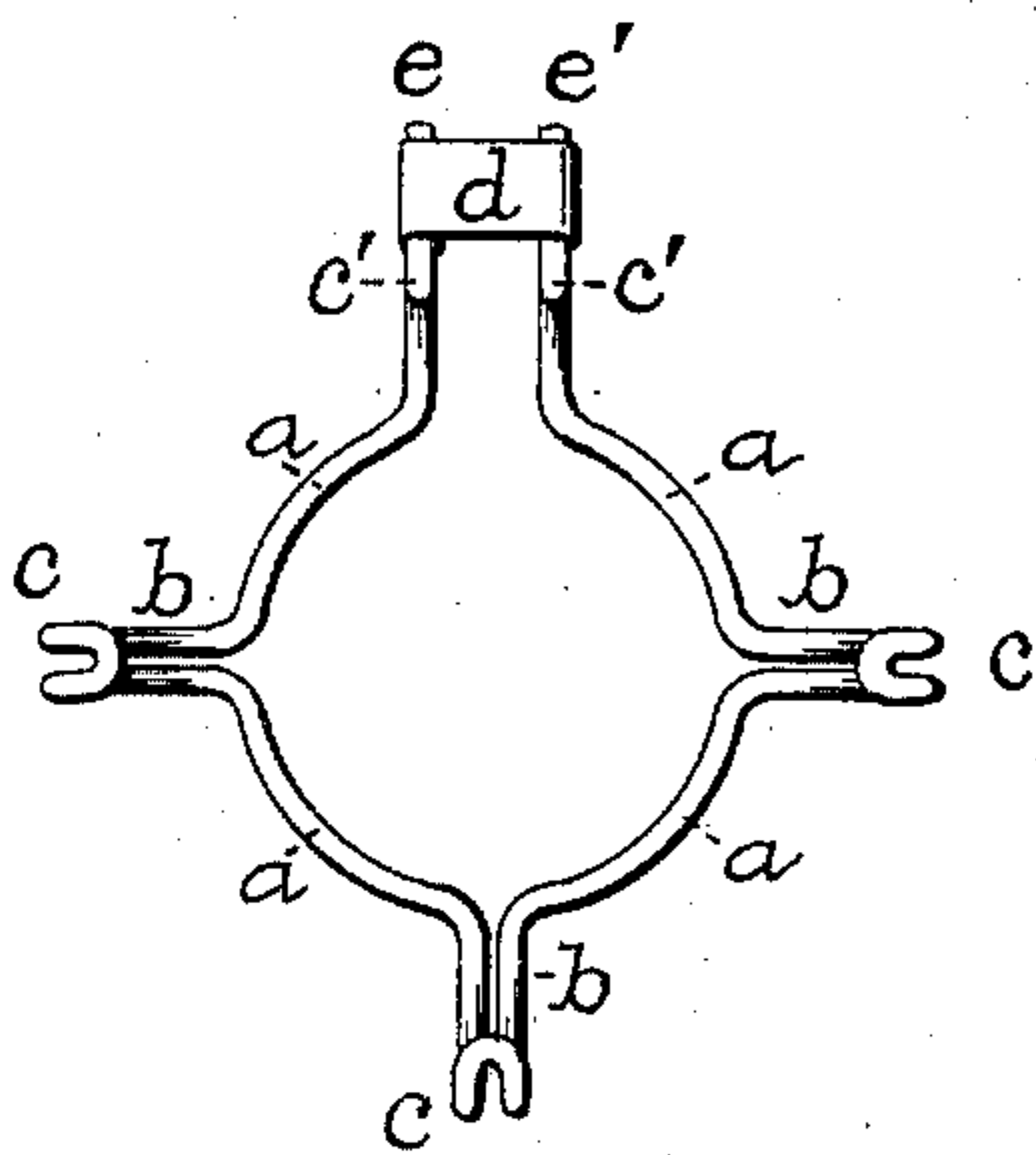


FIG. 2

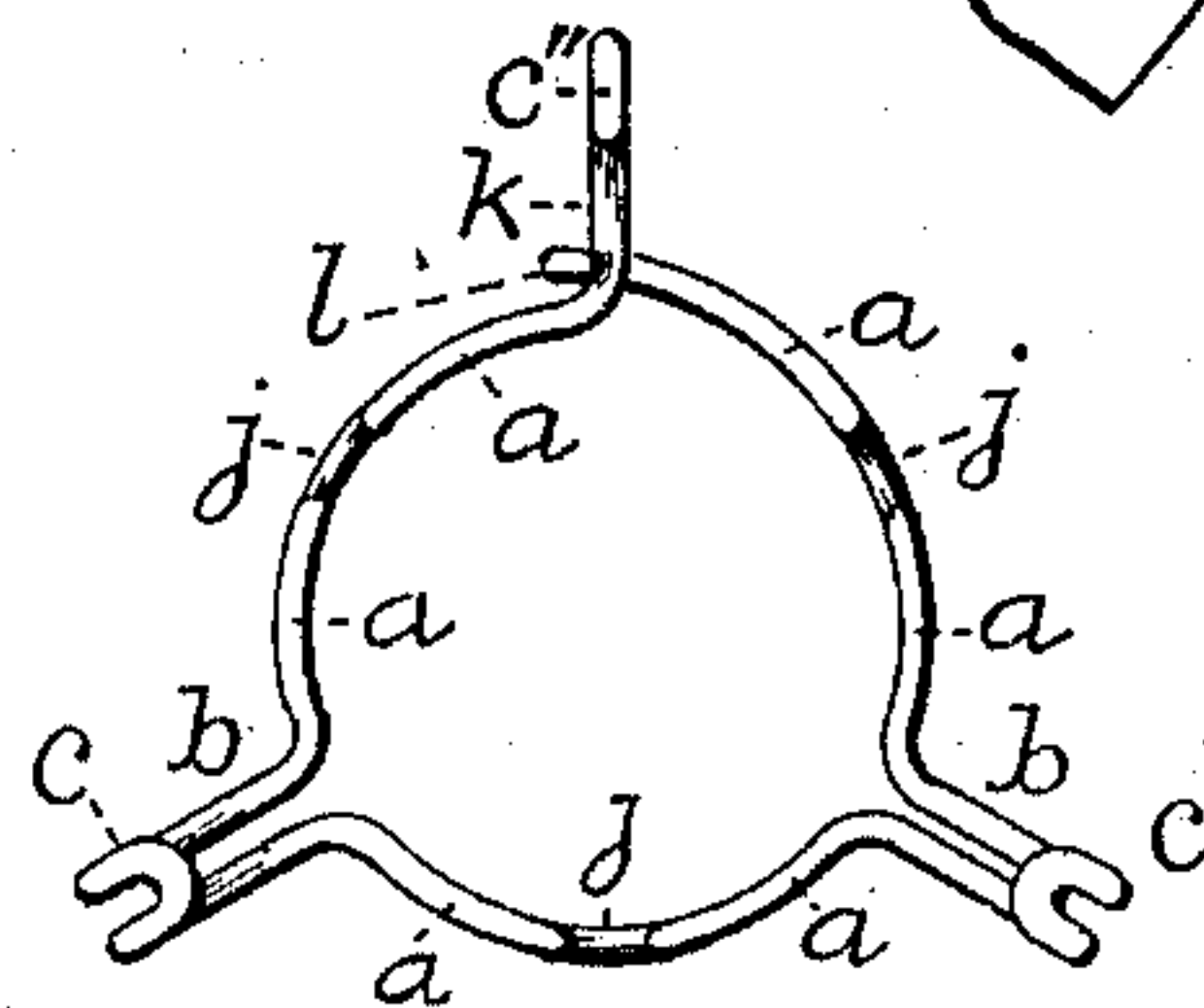


FIG. 6

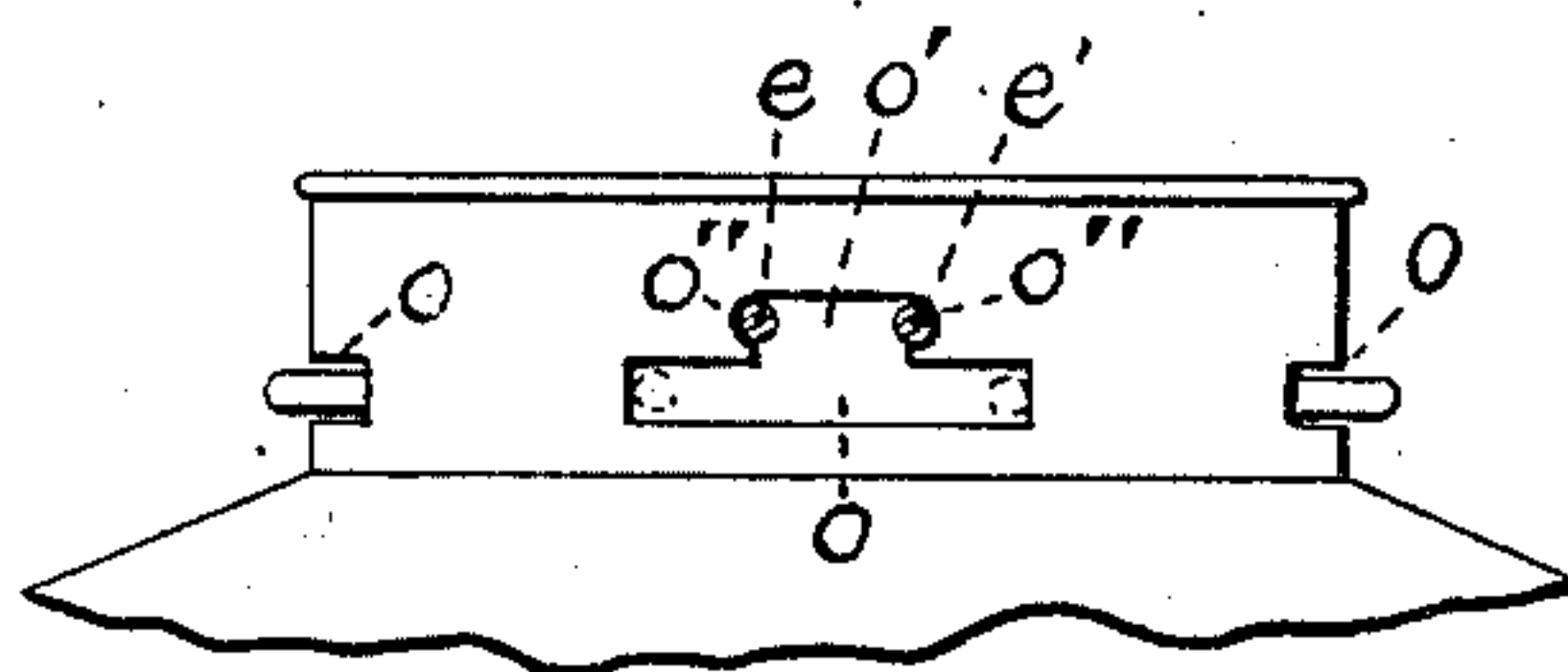


FIG. 5



FIG. 9

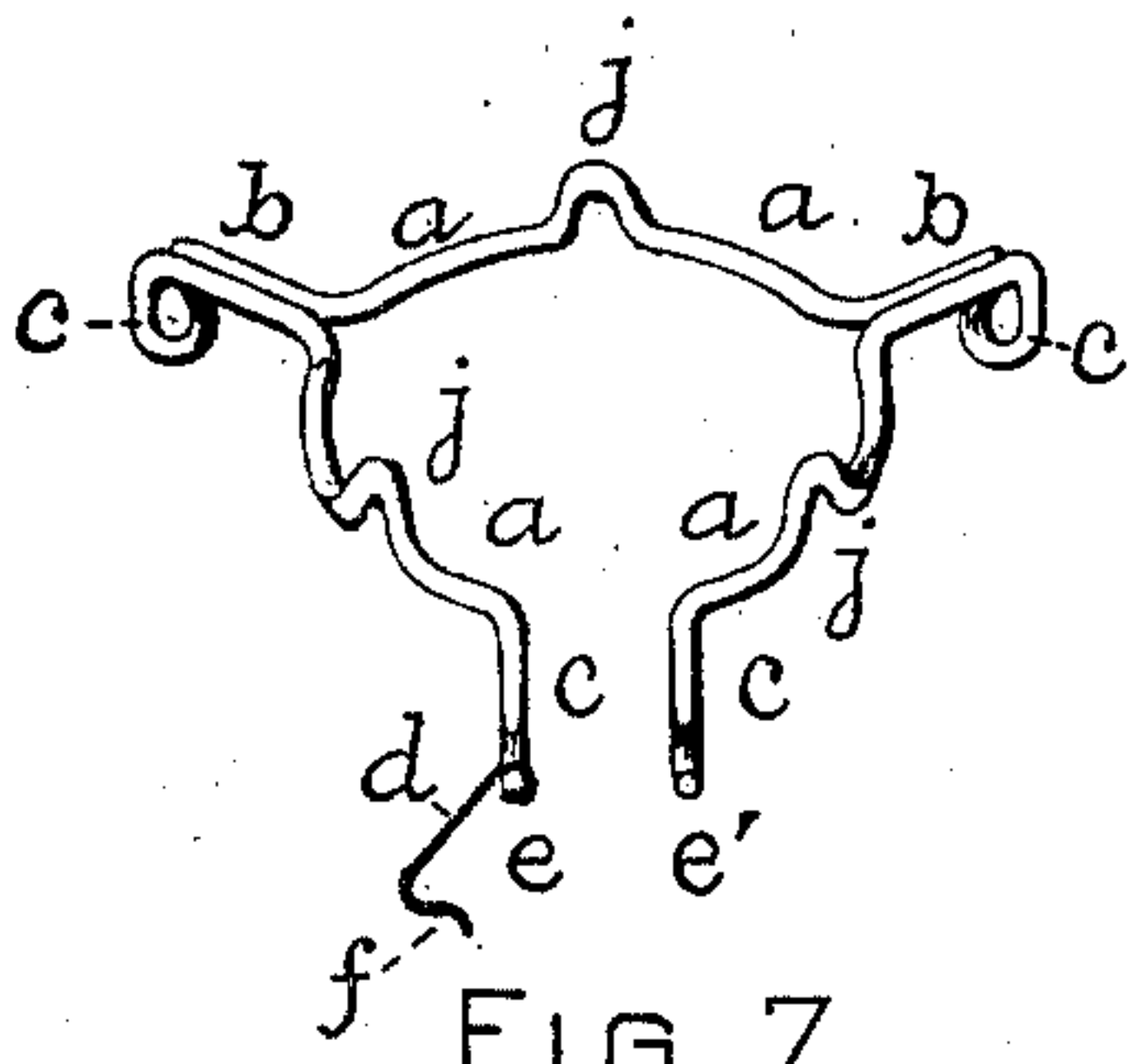


FIG. 7

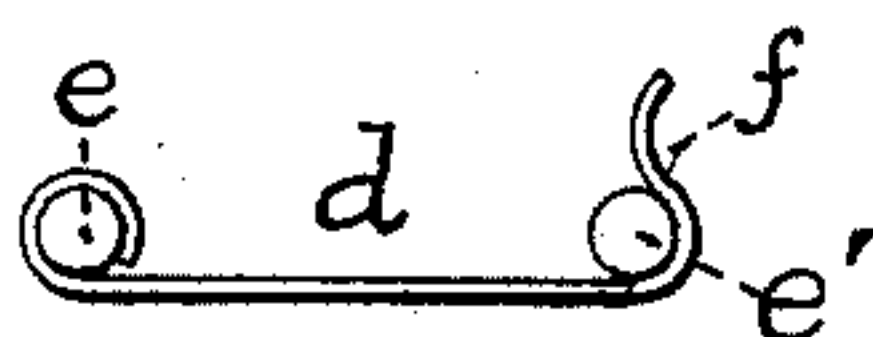


FIG. 8

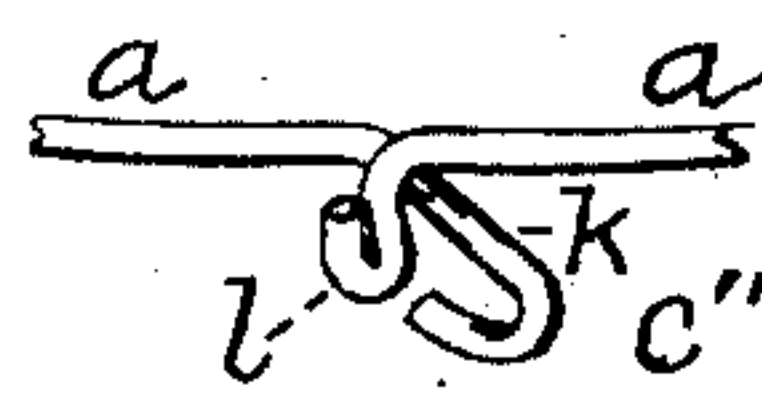


FIG. 10

Witnesses
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UNITED STATES PATENT OFFICE.

FRANK MCINTYRE, OF NEW YORK, N. Y., ASSIGNOR TO THEODORE H. JOSEPH AND JAMES J. EHRENREICH, OF NEW YORK, N. Y.

ELECTRIC SHADE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 737,651, dated September 1, 1903.

Application filed March 15, 1902. Serial No. 98,373. (No model.)

To all whom it may concern:

Be it known that I, FRANK MCINTYRE, a citizen of the United States of America, and a resident of New York, in the county and State of New York, have invented certain new and useful Improvements in Electric Shade-Holders, of which the following is a specification.

My invention relates to a shade-holder especially adapted for attaching shades, reflectors, diffusers, or other light-controlling devices to the sockets of incandescent lamps. In the type now found on the market much valuable time is consumed in equipping, for example, a large modern office building with shades and shade-holders in view of the number of manipulations necessary and the need of tools, such as a screw-driver.

The object is, therefore, in the main to economize the time of the employees of contractors and engineers in installing buildings with lamp-shades, while a second and important aim is to cheapen the cost of manufacture, a reduction of the size of the shade-holder, and the production of a holder that may be manipulated in a simple manner by servants in private houses, where it is often desired to remove the shades for cleaning.

My invention involves all the uses of the device; but I will describe it only in connection with incandescent-lamp sockets.

Figure 1 is a vertical elevation of a socket and shade-holder, the shade being shown by a dotted line. The holder is in a clamped condition. Fig. 2 is an inverted plan of the holder shown in Fig. 1 in a clamped condition. Fig. 3 is a view of a metallic shade so constructed that my invention may be used therewith. Fig. 4 is a plan of a portion of the shade shown in Fig. 3, together with an outline of the socket and the shade-holder applied thereto. Fig. 5 is a side elevation, partly in section, of what is shown in Figs. 3 and 4, showing the holder in its clamped condition; but the socket is removed. Fig. 6 shows one of the preferred forms of holder by a plan view. The holder is inverted as compared with the holder shown in Fig. 1. Fig. 7 is a perspective view of a holder like that in Figs. 1 and 2 as far as the lamp is concerned and like that in Fig. 6 as far as the other features are

concerned. Fig. 8 is a downward view to illustrate the principle of the clamp in the holder shown in Figs. 1, 2, and 7. Fig. 9 is a side view of a portion of a holder, showing the jaws of the clamp open, the clamp being of a modified form. Fig. 10 is a perspective view of the jaws clamped together and modified.

In general the holder consists of a spring-wire so bent as to form clips for holding the shade when the holder is closed, for releasing the shade when the holder is open, and a clamp for maintaining a holder in a closed condition both upon the lamp-socket and upon the shade.

The construction shown in Figs. 1, 2, and 8 is as follows: A wire in one continuous piece is bent into a circle *a*, having three loops *b* extending at right angles from the circle *a* at any suitable distance apart, said loops being bent upon themselves to form clips *c* and *c'*, with the ends of the wire bent to form clips *c'*, the ends being extended outwardly and one carrying a latch *d*, pivoted on one end *e* of the wire and bent to form a clip *f* for clamping the other end *e'* of the wire. The clips *c* and *c'* extend over and inward as regards the lip *g* usually formed at the periphery of a shade *h*. When the clamp *d* is closed upon the end *e'*, the clips are tightly closed under the lip *g* and around and upon the socket *i*, just above the annular projection *i'* formed upon the socket *i*. By releasing the latch *d* the ends *e e'* spring apart because of the elasticity of the wire, and therefore the holder is easily pulled away both from the socket and from the shade. By a reverse operation consisting in applying the lip *g* within the clips *c*, locating the holder around the socket *i* above the projection *i'*, and clamping the end *f* of the latch *d* around the end *e'* the shade and socket are quickly combined and ready for use. Hundreds may be applied by one man in one day.

The construction shown in Fig. 7 is the same as that shown in Figs. 1, 2, and 8, except that the circular portions have loops *j* between the clips perpendicular to the radius of the circular portions *a* for resting against the sides of the sockets *i* and for producing a reaction thereon when there is any tendency of the shade to wobble, as in ships, trolley-cars, and other vehicles, or shaky places.

In the construction shown in Fig. 6 are the same circular portions *a*, the vertical loops *j* therein, two of the clips *c* on the loops *b*, and a clip *c'*, formed on an end *k* of the wire that extends outward radially from the holder. The lock or clamp is formed by a bent-up end *l* against the end *k*. The operation consists in applying the shade and the socket and then pulling the ends *k* and *l* together until the end *l* clasps the end *k*.

In the construction shown in Fig. 9 one of the clips is formed by a loop *b'*, the ends of the wire forming the loops being bent, the one, *m*, radially outward and the other, *m'*, so as to loop over the end *m* when in a closed condition.

Fig. 10 is a view of the clamp of Fig. 6, shown inverted, the rest of the holder being ing omitted.

In the construction shown in Figs. 3, 4, and 5 the shade *h'* is formed with its cylindrical portion *h''* having slots *o*, one of the slots extending upward, as at *o'*, to form shoulders *o''*, against which press the ends *e e'* of the wire of the holder. There are no clips like *c* and *c'*, but only loops *b*, which extend through the other slot *o* when the ends *e* and *e'* are in the slot *o'*—that is, drawn partly together; but when the ends *e* and *e'* are spread apart farther in the slot *o*, which is longer than the slot *o'*, the holder, together with the shade, will slip over the projection *i'*.

I claim as my invention—

1. A holder for a lamp-shade having an outwardly-projecting lip, and for use with a lamp-socket having an annular projection, consisting of a continuous wire having circular portions, loop portions substantially in the vertical plane of the wire, other loop portions radiating outward, and bent partly upon themselves to form clips adapted to pass under the lip of the shade, the ends of the wire radiating outward to form clips and then upward, and a latch pivoted on one extended end and adapted to extend around and retain the other extended end, said circular portions being adapted to surround the lamp-socket above said annular projection.

2. A holder for a lamp-shade having an outwardly-projecting lip and for a lamp-socket having an annular projection upon a cylindrical portion, consisting of a single continuous wire having circular portions for bearing against the cylindrical portions of said socket, loop portions radiating outward and bent partly upon themselves to form clips adapted to pass under the lip of the shade, and means for clamping the free ends of the wire together tightly around said cylindrical portion of said socket.

3. A holder for a lamp-shade having an outwardly-projecting lip and for a lamp-socket having an annular projection upon a cylindrical portion of said lamp-socket, said holder consisting of a wire in a single piece, having bent portions for gripping the cylindrical portion of said socket, other portions for grip-

ping the lip of said shade, the wire having free ends, and means for clamping the ends together.

4. A holder for a lamp-shade having an outwardly-projecting lip, and for a lamp-socket having an annular projection upon a cylindrical portion thereof, said holder consisting of a wire in one piece having circular portions for bearing against the cylindrical portions of said socket, loop portions bent upward with respect to the radius of said central portions, other loop portions radiating outward and bent partly upon themselves to form clips which are adapted to pass under the lip of the shade, and means for clamping the free ends of the wire together tightly around said cylindrical portion of said socket.

5. A holder for a lamp-shade having an outwardly-projecting lip, and for a lamp-socket having an annular projection upon a cylindrical portion of said socket, said holder consisting of a single continuous wire having circular portions for bearing against the cylindrical portion of said socket, loop portions radiating outward and partly bent upon themselves to form clips adapted to pass under the lip of the shade, an additional clip formed by partly bent-over ends of the wire, said ends being extended beyond the clip portions, and a latch connecting the extended portions.

6. A holder for a lamp-shade having an outwardly-projecting lip, and for a lamp-socket having an annular projection upon a cylindrical portion of said socket, said holder consisting of a single continuous wire having circular portions for bearing against the cylindrical portion of said socket, loop portions radiating outwardly and partly bent upon themselves to form clips adapted to pass under the lip of the shade, an additional clip formed by partly bent-over ends of the wire, said ends being extended beyond the clip portions, and a latch pivoted to one extended end, and having a bent portion which is detachably located around the other extended end of the wire.

7. A holder for a lamp-shade having an outwardly-projecting lip, and for a lamp-socket having an annular projection upon a cylindrical portion of said socket, said holder consisting of a single continuous wire having circular portions for bearing against the cylindrical portion of said socket, loop portions radiating outwardly and partly bent upon themselves to form clips adapted to pass under the lip of the shade, an additional clip formed by partly bent-over ends of the wire, said ends being extended beyond the clip portions, a latch pivoted to one extended end, and having a bent portion which is detachably located around the other extended end of the wire, and loop portions in the circular portions extending at right angles to the radius of the circular portions.

8. A holder for a lamp-shade having an outwardly-projecting lip, and for a lamp-socket having a cylindrical portion, consisting of a wire in a single piece having free ends, bent-

over loops of the wire for gripping the lip of the shade, circular portions between the bent-over loops for gripping the cylindrical portion of said socket, means arranged upon said circular portions for preventing a wabbling motion of the holder upon the socket, and a clamp for holding the ends of the wire detachably together.

9. A holder for a lamp-shade consisting of a spring-wire in a single piece with hook portions for detachably supporting a shade, and means for clamping the free ends of said wire detachably together.

10. A holder for a shade, and for attachment to a lamp-socket, consisting of a single wire with free ends, said holder formed to grip detachably both the shade and the socket, and means for detachably connecting the free ends of the wire together.

11. A holder for a shade, and for attachment to a lamp-socket, consisting of a single wire in a single piece with free ends, with bent portions for gripping both the shade and

the socket, and a latch pivoted to one free end and bent detachably around the other free end of said wire.

12. A holder for a lamp-shade consisting of a wire in a single piece and with free ends, and said wire having portions upon which the shade may be supported, and other portions for gripping said socket, and means for detachably connecting said ends together, said means consisting of a clamp detachably connecting said free ends, forming one of the supports for said shade.

13. A lamp-shade holder consisting of a single wire, so bent that one portion thereof forms a ring, another portion, radial arms terminated by hooks, and a clamp for holding the free ends of the wire together.

Signed this 10th day of March, 1902.

FRANK MCINTYRE.

Witnesses:

THEODORE HAROLD JOSEPH,
JAMES JACOB EHRENREICH.