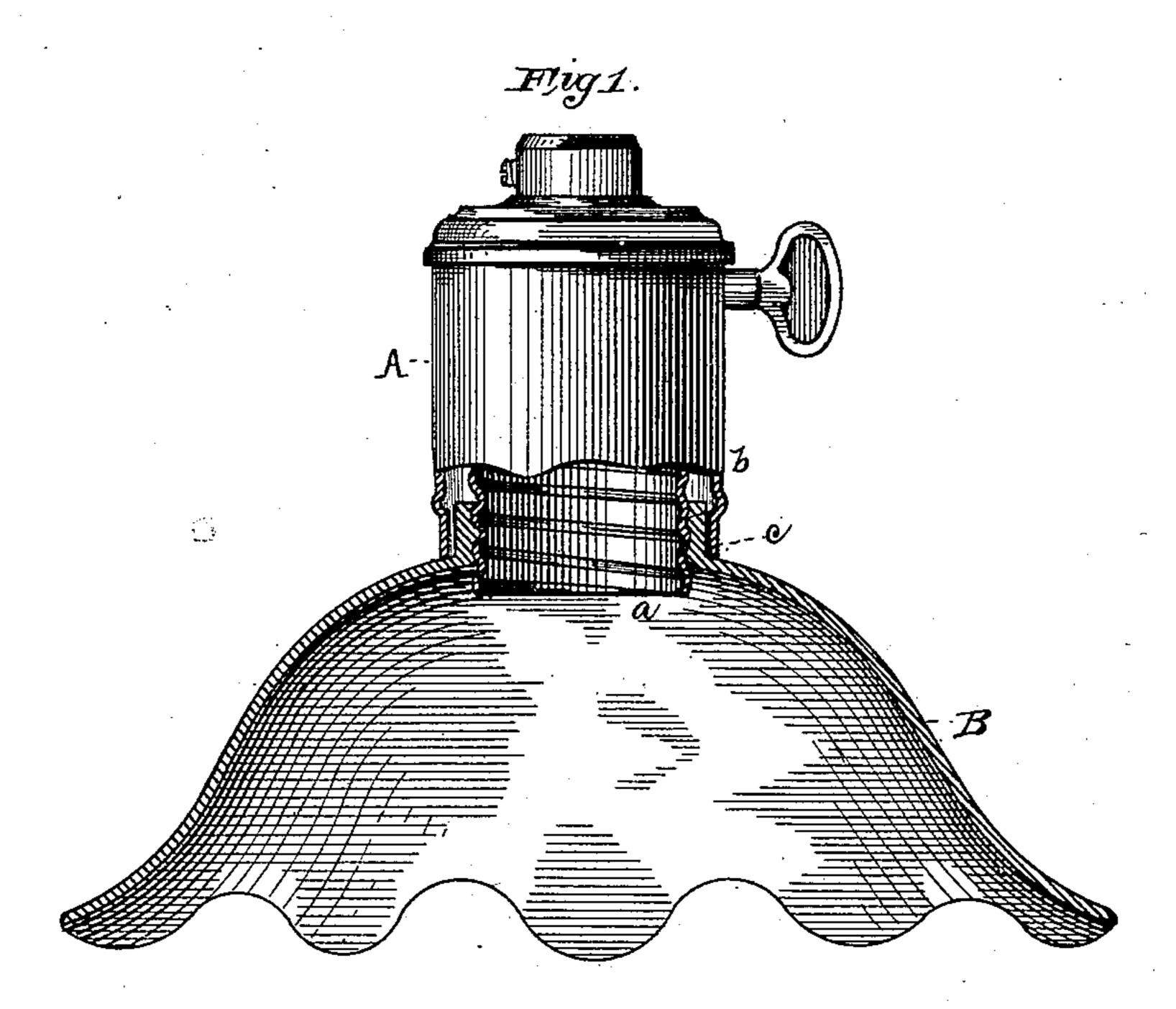
(No Model.)

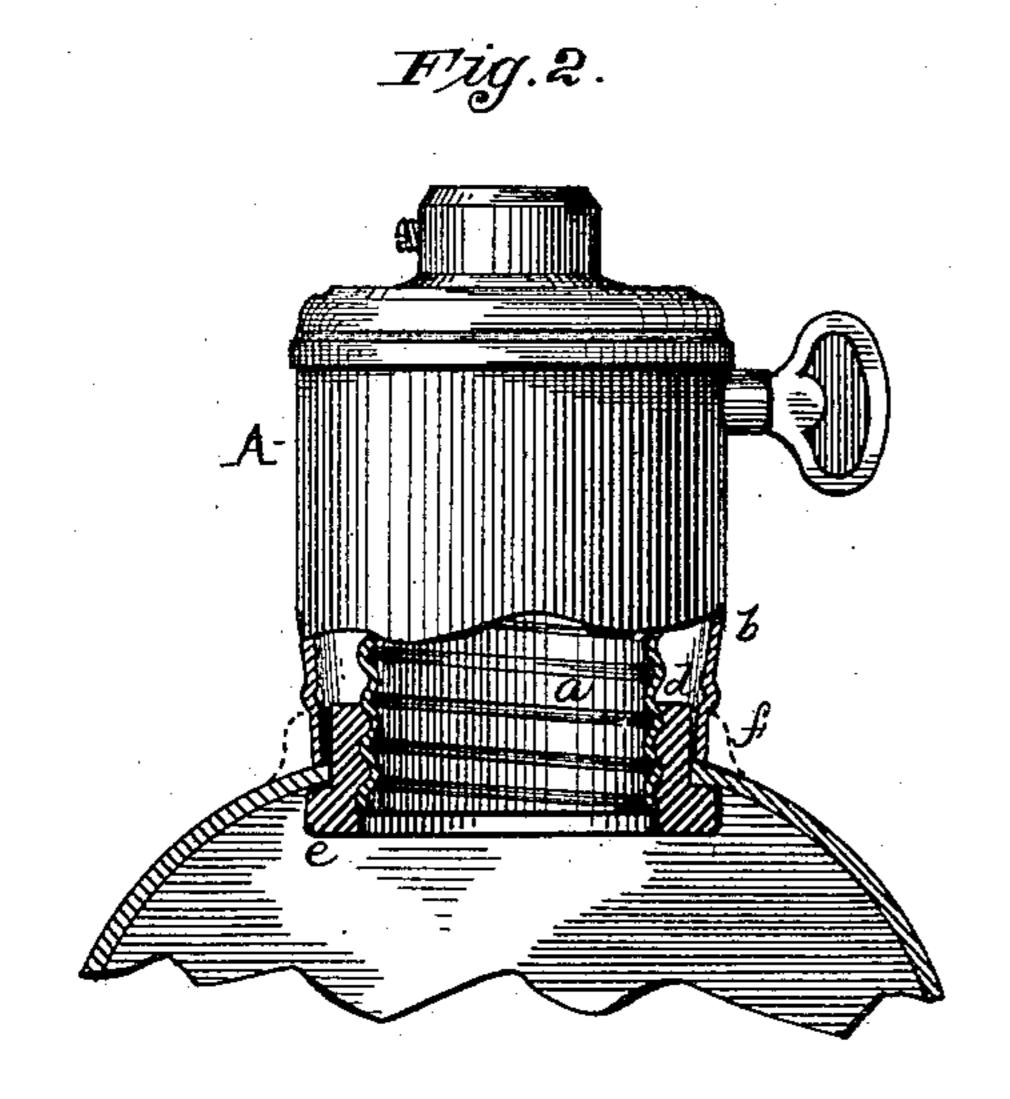
## P. H. KLEIN, Jr.

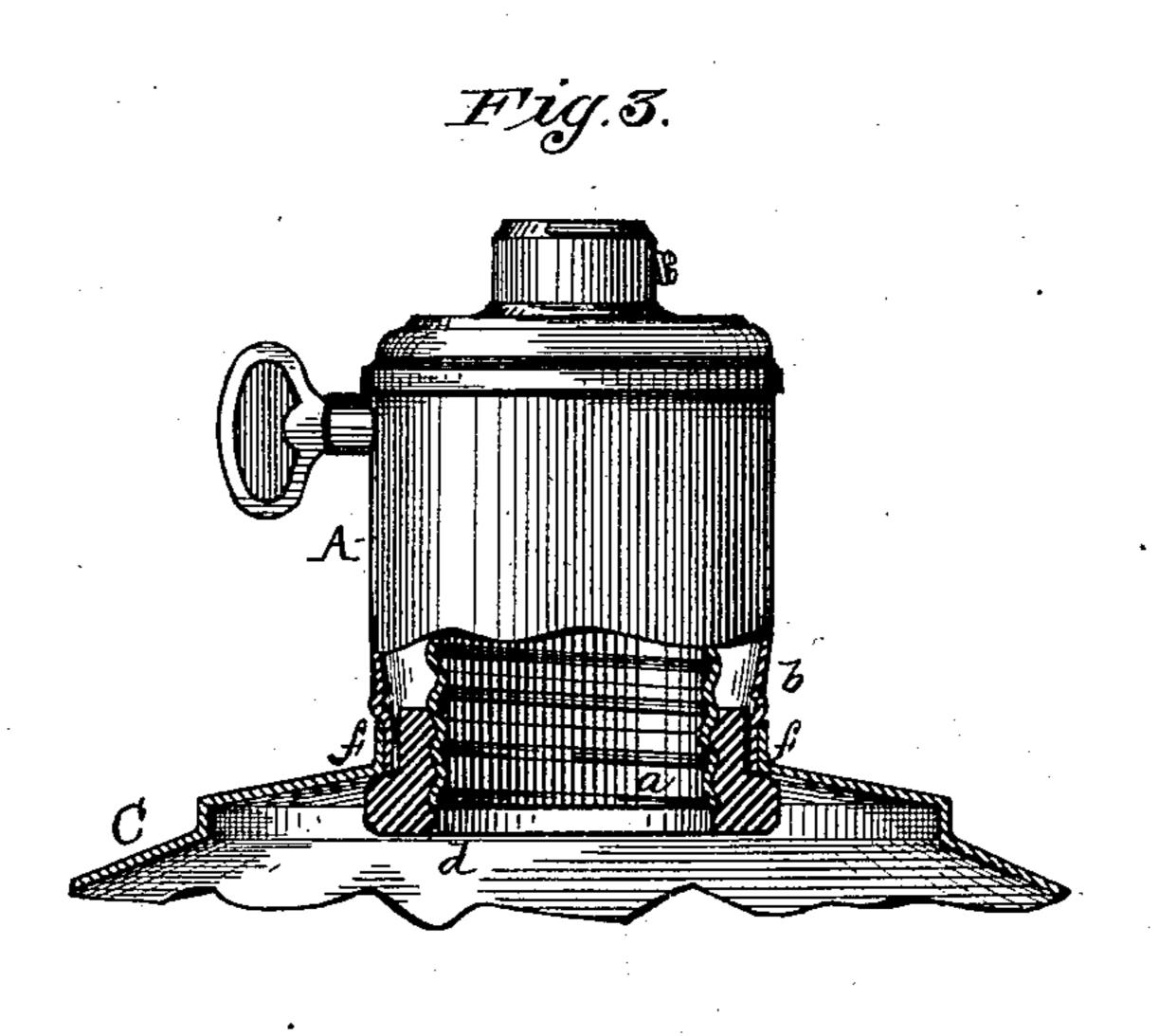
SHADE FOR ELECTRIC LAMPS.

No. 337,336.

Patented Mar. 2, 1886.







ATTEST: Owland Middle. Phieip N. Klein Jr.

## United States Patent Office.

PHILIP H. KLEIN, JR., OF NEW YORK, N. Y., ASSIGNOR TO BERGMANN & COMPANY, OF SAME PLACE.

## SHADE FOR ELECTRIC LAMPS.

SPECIFICATION forming part of Letters Patent No. 337,336, dated March 2, 1886.

Application filed October 16, 1885. Serial No. 180,036. (No model.)

To all whom it may concern:

Be it known that I, PHILIP H. KLEIN, Jr., of New York, in the county and State of New York, have invented a certain new and useful Improvement in Electric-Lamp Shades, of which the following is a specification.

This invention relates to a new mode of supporting a shade or reflector above an incandescing electric lamp. Heretofore various forms of shade-holders have been used for this purpose, the same being attached to the lamp-socket or the fixture. By my invention these devices are done away with, the shade being attached directly to the lamp-socket, whereby, while a secure attachment is provided, a more economical and also a more ornamental construction is attained.

My invention is illustrated in the annexed drawings, in which Figure 1 is a view, partly in section and partly in elevation, of a socket and shade embodying the preferred form of my invention. Figs. 2 and 3 are similar views illustrating modified forms.

A is a lamp-socket of that class in which an internally and externally screw-threaded metal sleeve, *a*, forms one terminal within which the lamp is inserted, while the socket is inclosed by a metal shell, *b*.

In Fig. 1, B is a shade, of porcelain, glass, or other suitable material, which may be of any desired form. At its upper part it is provided with an internally screw-threaded flange, c. This flange is screwed upon the outside of sleeve a, between said sleeve and shell b, and is thereby held securely and is brought close to the lamp, which, it will be understood, is to be screwed into the sleeve a.

It is evident that the shade is readily removable without disturbing the lamp or its connections.

In the form shown in Fig. 2, instead of providing the shade itself with a flange which is screwed upon the socket, a screw-threaded ring, d, is employed, which is screwed upon sleeve a, and which has a flange, e, between 45 which flange and the lower edge of shell b the shade B is held.

As shown in dotted lines, the shade may have a flange at f, which will surround the outside of the socket and additionally secure 50 the shade thereon. Fig. 3 shows this arrangement when a shade, C, of tin or other metal, is used. Such shade has the flange f extending up outside the socket, and the flanged ring d secures the shade and socket together. In 55 these forms also the shade is readily removed by unscrewing ring d.

What I claim is—

1. The combination, with an incandescentelectric-lamp socket having a screw-threaded 60 sleeve, of a shade or reflector secured to said sleeve. substantially as set forth.

2. The combination, with an incandescentelectric-lamp socket having a screw-threaded sleeve, of a shade or reflector having a flange 65 screwed upon said sleeve, substantially as set forth.

This specification signed and witnessed this 14th day of October, 1885.

PHILIP H. KLEIN, JR.

Witnesses:

L. C. T. WADE, A. W. KIDDLE.