

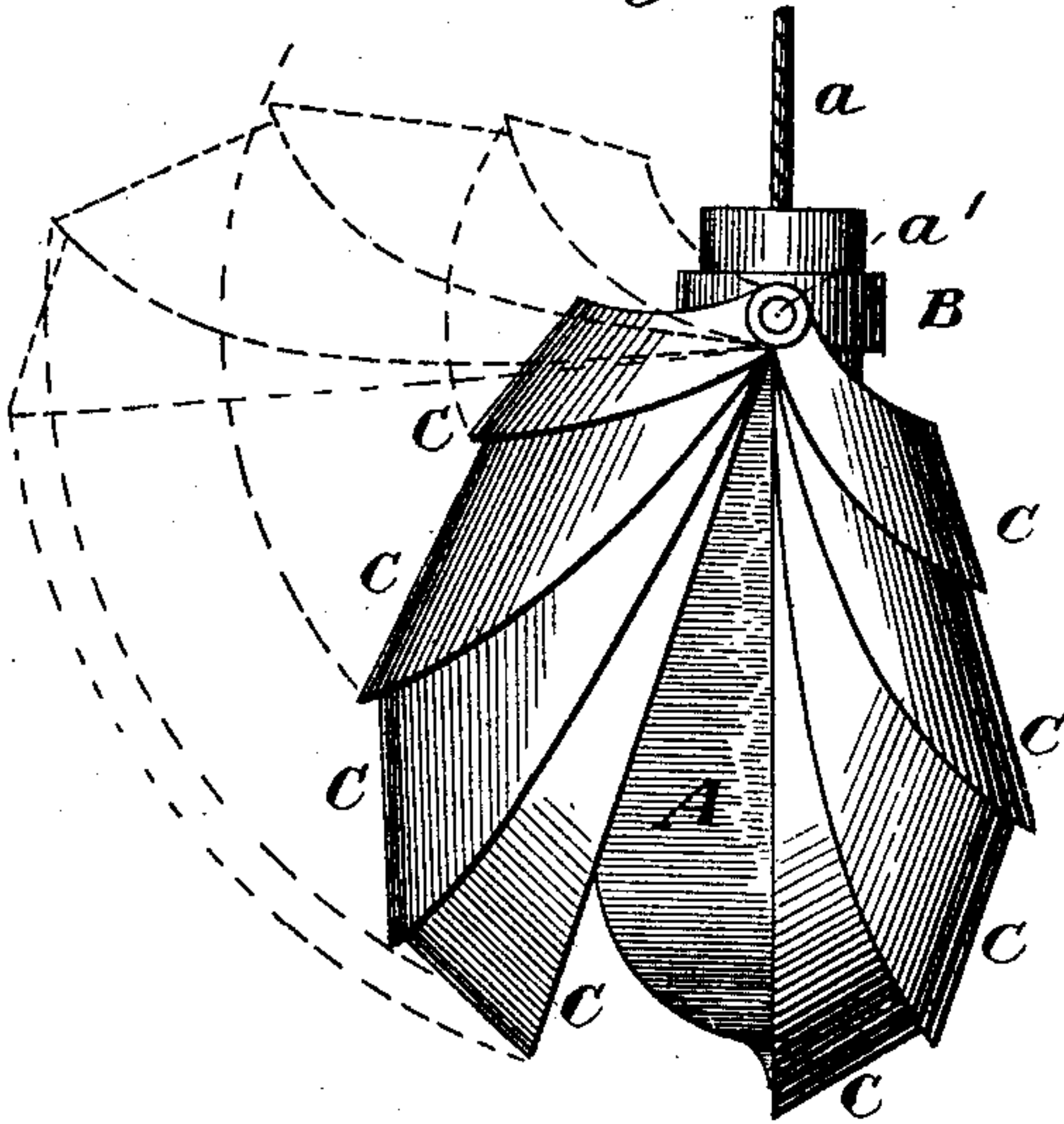
(No Model.)

A. F. GÄRTNER & J. C. HARRIS.  
SHADE FOR INCANDESCENT ELECTRIC LIGHTS.

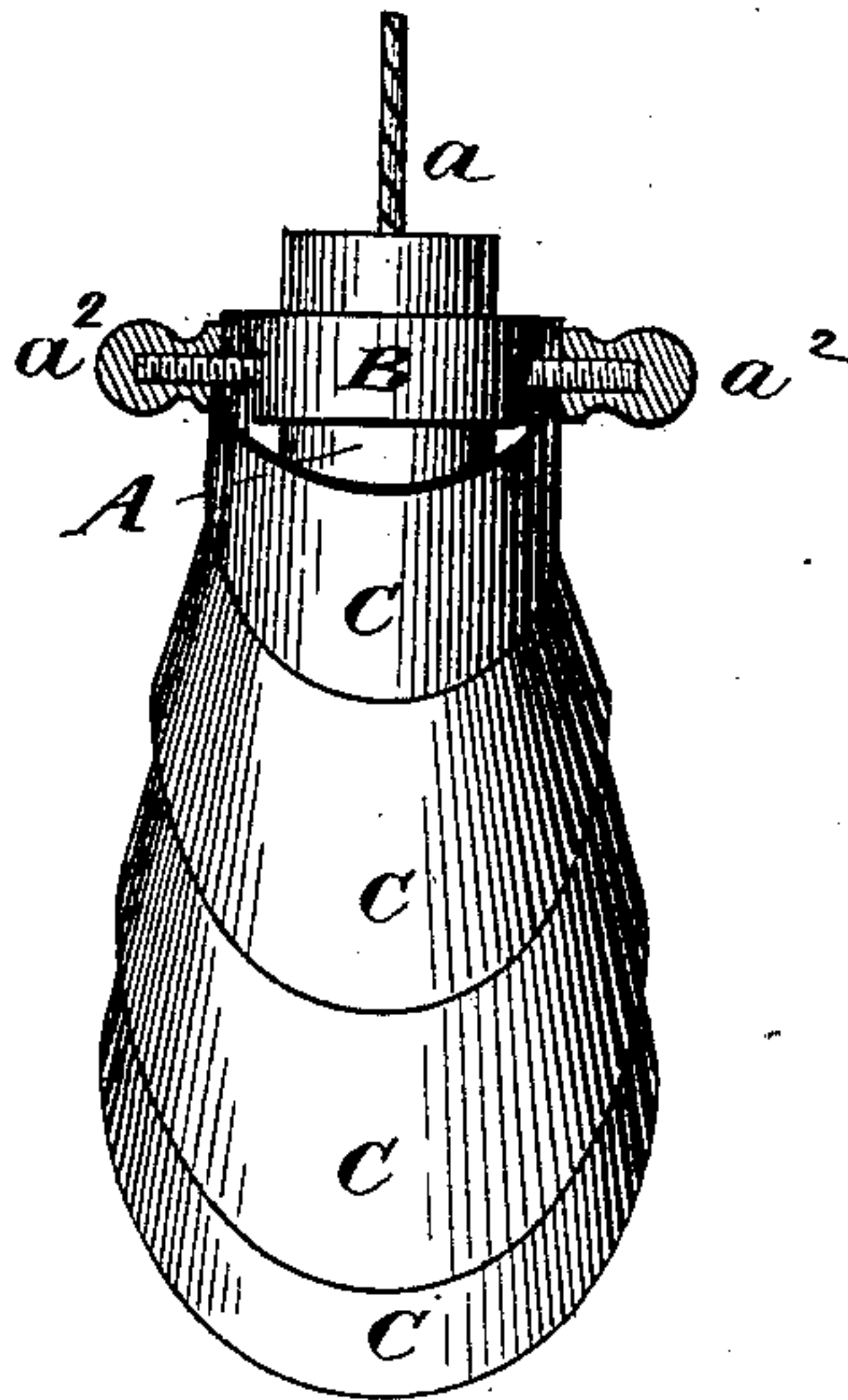
No. 452,701

Patented May 19, 1891.

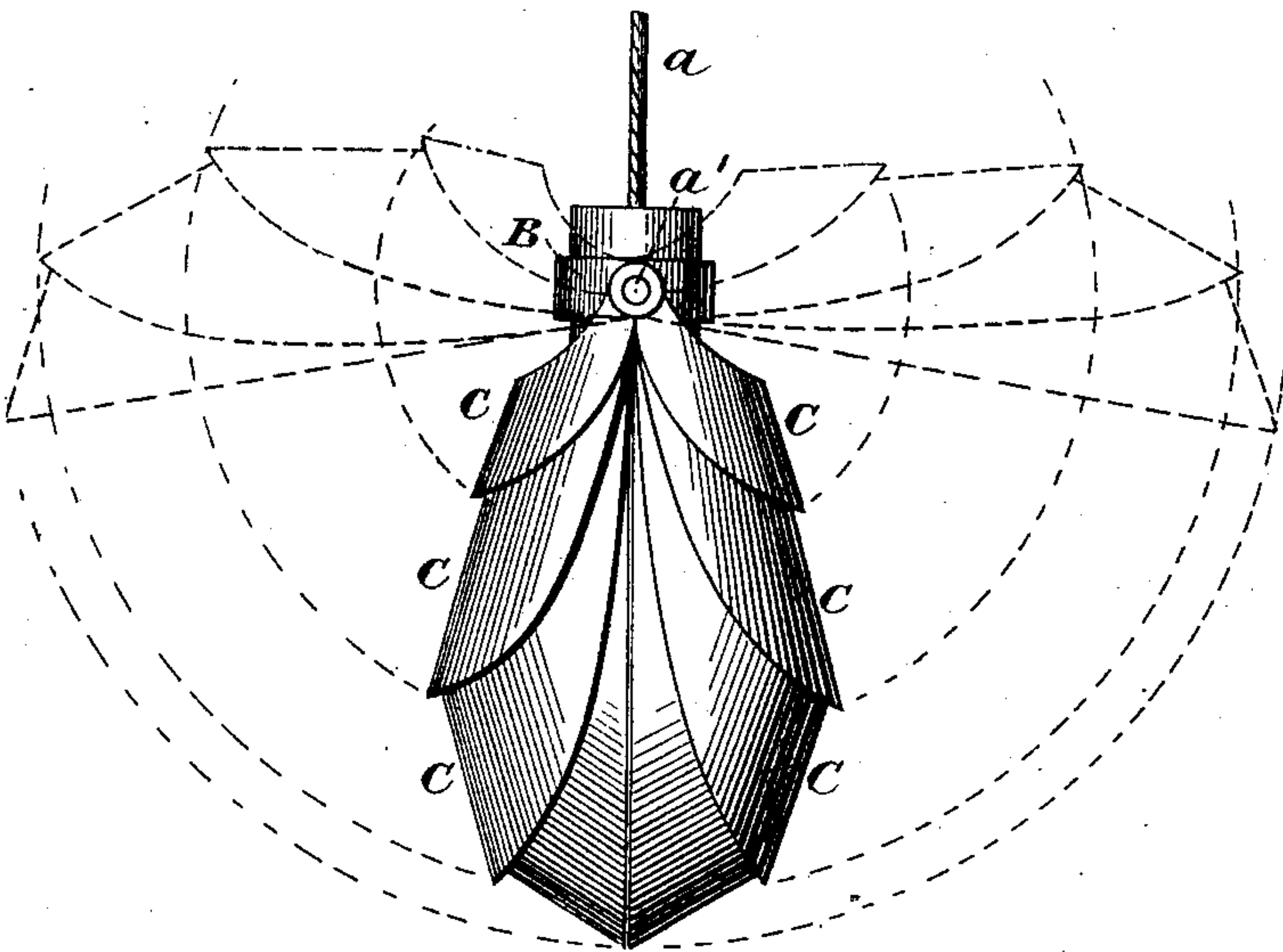
*Fig. 1.*



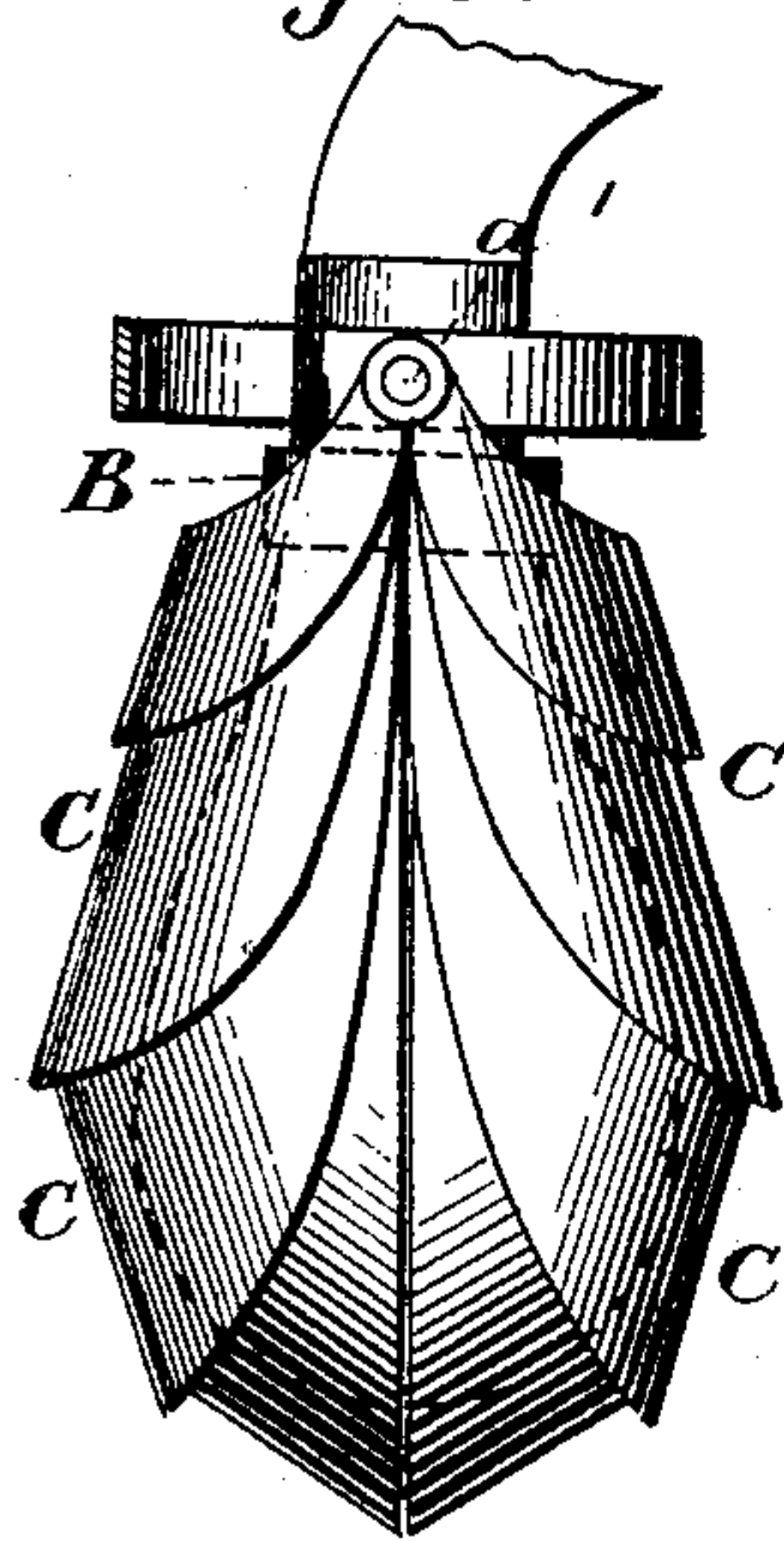
*Fig. 3.*



*Fig. 2.*



*Fig. 4.*



*Witnesses:*  
*A. Ruppert.*  
*Edw. Lense.*

*Inventors:*  
*Albert F. Gärtner,*  
*John C. Harris,*  
*by A. W. T. Howard*  
*attorney.*



# UNITED STATES PATENT OFFICE.

ALBERT F. GÄRTNER AND JOHN C. HARRIS, OF SAVANNAH, GEORGIA.

## SHADE FOR INCANDESCENT ELECTRIC LIGHTS.

SPECIFICATION forming part of Letters Patent No. 452,701, dated May 19, 1891.

Application filed August 30, 1890. Serial No. 363,507. (No model.)

*To all whom it may concern:*

Be it known that we, ALBERT F. GÄRTNER and JOHN C. HARRIS, both of Savannah, in the county of Chatham and State of Georgia, have invented certain new and useful Improvements in Shades for Incandescent Electric Lights, of which the following is a specification, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The object of this invention is to allow the light to be varied, regulated, or shut off entirely, at the will of the user. Without a suitable shade there can be no variation of the light between full brightness and absolute extinction, and as it is impracticable to vary the power of the light itself our invention aims to provide a simple, convenient, and easily-adjusted shade for the purpose in view.

In the accompanying drawings, Figure 1 represents an ordinary suspended incandescent lamp with our improved shade partly open and partly closed, the portion of the shade which is open or raised being shown in two positions--viz., in full and in dotted lines. Fig. 2 shows in full lines the shade closed, and in dotted lines the same entirely open. Fig. 3 shows a detail, and Fig. 4 a modification.

A is the bulb of an ordinary incandescent-light lamp suspended by means of the conducting-wires *a*. The invention is, however, applicable to the bulb, however the lamp may be supported or arranged. Around or upon the neck of the bulb A is slipped a collar B, formed of metal or other substance, the collar being maintained in position by the swell of the bulb.

C C, &c., represents sections of suitable material arranged in two opposite series and so cut or shaped with reference to each other that when closed, as shown in Fig. 2, they will overlap each other and entirely surround and conceal the bulb A. The sections C may be made of any suitable light or thin material, as mica, paper, glass, celluloid, metal, &c. Should the material employed be transparent, it must be suitably prepared for the purpose in view by painting or otherwise making it opaque. Each of the sections is perforated at each end, so that when the two series are adjusted upon the collar B the perforations at each of the respective ends shall register, so that a pin, screw, or other pivotal device may be employed to pivot each system of

overlapping ends to the collar, as shown. If a screw-pivot is used, it may be provided, as seen in Fig. 3, with a boss *a'*, fitting against the outer side of the overlapping ends of the sections, so that they can be tightened upon the collar B and made to preserve the proper relations to said collar and to each other. The sections may be adjusted by hand or by other means not constituting a part of our present invention. The shape of the sections C must of course be varied to suit the shape or contour of the bulb A, the main point to be observed being that the sections shall be of such shape with reference to each other that they shall when closed entirely conceal the bulb.

In Fig. 4 the shade is shown pivoted to a collar attached to the branch from which the lamp is supported and detached from the bulb.

This invention is well adapted to use in offices, sick-rooms, reading or sitting rooms, or in work-shops where the lights are suspended or arranged over work-benches.

The special feature of advantage in our invention is the ease with which light may be graded, deflected, or entirely shut off, and the perfect control which the user has over the device in adjusting it to the special uses required.

Having described our invention, we claim--

1. The combination, with the bulb of an incandescent-light lamp, of a supporting-collar and a shade formed of sections pivoted to said collar, said sections being arranged in two opposite series, and each section being overlapped by that immediately above it, substantially as specified.

2. The combination, with the bulb of an incandescent-light lamp, of a supporting collar and a shade consisting of a number of sections of graduated lengths pivoted at their ends to said collar, said sections being arranged in two opposite series, and each section being overlapped by that immediately above it, substantially as specified.

In testimony whereof we have hereunto set our hands and seals.

ALBERT F. GÄRTNER. [L. S.]

JOHN C. HARRIS. [L. S.]

Witnesses to the signature of A. F. Gärtner:

CHAS. H. FENSTERMACHER,

FRANCIS H. WATERS.

Witnesses to the signature of J. C. Harris:

F. VAN GERPEN,

WM. J. FLOOD.