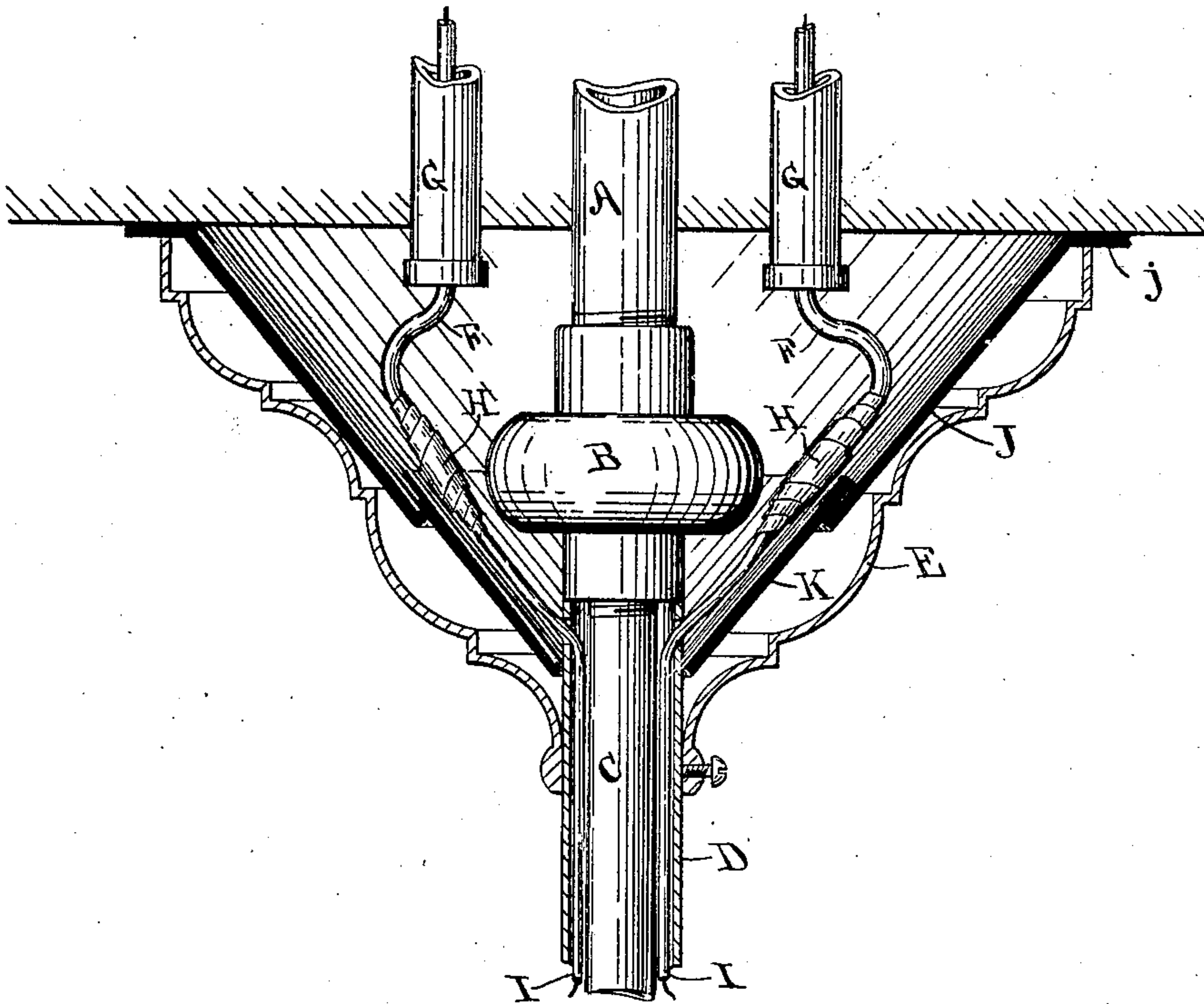


No. 763,237.

PATENTED JUNE 21, 1904.

G. H. YOUNG.
ELECTRIC LIGHT FIXTURE.
APPLICATION FILED APR. 2 1904.

NO MODEL.



WITNESSES:

A. Diven
M. E. Verbeck.

INVENTOR

George H. Young

BY

Eugene Diven
ATTORNEY

UNITED STATES PATENT OFFICE.

GEORGE H. YOUNG, OF ELMIRA, NEW YORK.

ELECTRIC-LIGHT FIXTURE.

SPECIFICATION forming part of Letters Patent No. 763,237, dated June 21, 1904.

Application filed April 2, 1904. Serial No. 201,293. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. YOUNG, a citizen of the United States, residing at Elmira, in the county of Chemung and State of New York, have invented certain new and useful Improvements in Electric-Light Fixtures, of which the following is a specification.

My invention relates to improvements in the insulation of the canopy which is used in connection with electric-light fixtures to conceal the fixture-support and the wires where they enter the fixture. In this class of fixtures it often happens, either by reason of careless workmanship or defects in the insulating-wrappings, where the joints are made between the service-wires and the fixture-wires, that the current through the wires is either grounded or short-circuited by the inadequately-protected wires coming in contact with the canopy or producing an arc between the wires themselves or between them and the canopy, thereby heating the canopy to such an extent as to endanger the building from fire, or at least to injure the appearance of the canopy and also destroy the effectiveness of the light. This has been avoided in a measure by inserting an insulating-ring between the canopy and the ceiling or wall to which the fixture is attached; but with this method of insulation there still remains the possibility of the wires coming in contact with the canopy, so as to produce a short circuit and extinguish the lights and also to heat the canopy to a dangerous point.

It is my object, therefore, to provide an insulation which shall effectively separate and protect the canopy from the wires—in other words, to provide an insulating-lining for the canopy which will protect it at all points from contact with the wires.

I attain my object by means of a lining or shell of insulating material constructed and arranged substantially in the manner illustrated in the accompanying drawing, in which I have shown a vertical transverse section through a canopy and the portions of the fixture inclosed thereby.

In the illustration I have shown my improved insulation as applied to a combined gas and electric fixture attached to a ceiling;

but it will be understood that the application will be the same if used in connection with electric-light fixtures only and also where the fixtures are applied to side walls as well as to ceilings.

A represents the pendent gas-pipe leading from the service-pipes, to which the pipe C of the fixture is coupled by the usual insulating-joint B.

D represents the ornamental sheathing or tube surrounding the pipe C, and E the canopy.

F F are the feed-wires leading from the service lines through the insulating spools or tubes G. These wires F F are brazed or soldered to the wires I I of the fixture at the points H, said joints and the bared wires at each side being wrapped in the usual manner by insulating-tape to protect the joints. It is these joints at H that are apt to become defective, either by reason of the abrasion or removal of the insulating-cover or by reason of insufficient covering, due to the carelessness of the installation. As there must of necessity be some slack in these wires between the thimbles G and the point where they enter the sheathing D, the joints H will ordinarily rest upon the canopy or in such close proximity thereto as to create danger from short circuits or the production of arcs between the joints and the canopy in case the protective covering becomes defective. In order to obviate this danger, I provide a lining J K of insulating material, preferably of mica, mica-beton, or some other material which shall be not only a non-conductor of electricity, but also fireproof, and I preferably make this lining in the form of a cone in order to provide the necessary room for the wires F and joints H. I furthermore preferably make the lining in two parts, the one, K, fitting inside of the other part, J, so as to make, in effect, a telescopic joint between the two in order that the lining may adapt itself to different lengths in the canopy. The rim of the part J where it comes against the ceiling or wall is provided with a flange j, against which the rim of the canopy rests when secured in place after the joints have been completed. It will be understood that this insulating-lining may be made entirely

of one piece and that also it may be made in different shapes and diameters, so as to conform with different shapes and sizes of canopies, and that I do not, therefore, confine myself to the specific form shown herewith by way of illustration. It will be apparent, however, that it will be preferable to adopt a form and construction which will, by the use of a few standard sizes, fit all the differing sizes and forms of these ornamental canopies.

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

1. In an electric-light fixture, the combination with the canopy, of an insulating lining or shell of substantially the same depth as the canopy and interposed between the canopy and the circuit-wires.

2. In an electric-light fixture, the combination with the canopy, of an adjustable insulating lining or shell interposed between the canopy and the circuit-wires.

3. In an electric-light fixture, the combination with the canopy, of an insulating lining or shell interposed between the canopy and the circuit-wires, said lining having a flange interposed between the rim of the canopy and the ceiling or other support.

4. A lining for canopies of electric-light fixtures comprising a conical shell of insulating material of substantially the same depth as the canopy and adapted to be inserted between the canopy and the circuit-wires.

5. A lining for canopies of electric-light fixtures comprising a two-part shell of insulating material adapted to be inserted between the canopy and the circuit-wires, said parts telescoping, the one within the other.

In testimony whereof I have affixed my signature in presence of two witnesses.

G. H. YOUNG.

Witnesses:

A. S. DIVEN,

M. E. VERBECK.